EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

THROUGH: Laura Acosta, Manager of Human Resources Laura A Acosta

FROM: Lisa Sorani, Manager of Employee Services Lisa Sorani

SUBJECT: Retirement Board Regular Meeting – 11/18/2021

A regular meeting of the Retirement Board will convene at 8:30 a.m. on Thursday, November 18, 2021. This meeting will be conducted via video and teleconference only. Public participation is 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.

Enclosed are the agenda for the November 18, 2021 meeting and the minutes for the September 16, 2021 regular meeting. The package also includes the following: **(1) CONSENT** items: Approval of Minutes of the Retirement Board – Regular meeting of September 16, 2021, Ratifying and Approving Investment Transactions by Retirement Fund Managers for August 2021 and September 2021, Ratifying and Approving Short-Term Investment Transactions for August 2021 and September 2021, Approving Treasurer's Statement of Receipts and Disbursements for August 2021 and September 2021; **(2) ACTION** items: EBMUD Board Approval of Continued Remote Meetings, Approve Revised 2022 Retirement Board Meeting Calendar, Approve Update to Statement of Investment Policy and Procedures Regarding Real Estate Investment Trusts, Declare the Interest Rate on Member Contributions for the Period Ending June 30, 2021, Approve Revision to Proxy Voting Approach; **(3) INFORMATION:** Annual Report on Proxy Voting, Performance Report and Economic Review (Meketa Investment Group), Presentation of Retirement System Audited Financial Report, Review Amendment to Board Rule C-13 Establishing Credit for Prior Service Limited to Active Members, CEM Benchmarking Survey Results for 2020; **(4) REPORTS FROM THE RETIREMENT BOARD**.

LS:jm

Enclosures

AGENDA

EBMUD EMPLOYEES' RETIREMENT SYSTEM
November 18, 2021

In accordance with Government Code Section 54953(e), this meeting will be available for public participation by webinar and teleconference only. A physical location will not be provided for this meeting.

Retirement Board Members: Clifford Chan, Frank Mellon, Marguerite Young, Jae Park, Tim McGowan, and Elizabeth Grassetti will participate via teleconference

Staff to the Retirement Board: Laura Acosta, Sophia Skoda, Lourdes Matthew, Lisa Sorani, Valerie Weekly, Robert Hannay, Steven Goodman-Leibof, Andrea Miller and Karyn Field will participate via teleconference

Consultants & Presenters: Meketa - Eric White, Sarah Bernstein, Eric Larsen; Glass Lewis – Courteney Keatinge, John Wieck; Northern Trust – Tamara Doi Beck, Catherine Moyer

****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.

CLOSED SESSION AGENDA

1. Personnel matters pursuant to Government Code Section 54957:
   a. Application for Disability Retirement of Adam Erlach (R.B. Resolution No. 6936)
2. Significant Exposure to Litigation pursuant to Government Code Section 54956.9: one item

REGULAR BUSINESS MEETING

CONSENT CALENDAR:

1. Approval of Minutes of the Retirement Board – Regular meeting of September 16, 2021

2. Ratifying and Approving Investment Transactions by Retirement Fund Managers for August 2021 and September 2021 (R.B. Resolution No. 6945)

3. Ratifying and Approving Short-Term Investment Transactions for August 2021 and September 2021 (R.B. Resolution No. 6946)

4. Approving Treasurer's Statement of Receipts and Disbursements for August 2021 and September 2021

ACTION:

5. Adopt Resolution to Continue Remote Meetings of the Retirement Board (R.B Resolution No. 6947) – L. Sorani

6. Approve Revised 2022 Retirement Board Meeting Calendar – L. Sorani

7. Approve Update to Statement of Investment Policy and Procedures Regarding Real Estate Investment Trusts (R.B. Resolution No. 6948) – S. Skoda

8. Declare the Interest Rate on Member Contributions for the Period Ending June 30, 2021 (R.B. Resolution No. 6949) – L. Sorani

9. Approve Revision to Proxy Voting Approach – S. Skoda

INFORMATION:

10. Annual Report on Proxy Voting – S. Skoda

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

12. Presentation of Retirement System Audited Financial Report – S. Skoda

13. Review Amendment to Board Rule C-13 Establishing Credit for Prior Service Limited to Active Members – L. Sorani

14. CEM Benchmarking Survey Results for 2020 – S. Skoda

REPORTS FROM THE RETIREMENT BOARD:

15. Brief report on any course, workshop, or conference attended since the last Retirement Board Meeting

ITEMS TO BE CALENDARED:

MEETING ADJOURNMENT:

The next regular meeting of the Retirement Board will be held at 8:30 a.m. on Thursday, January 20, 2022**.**

2022 Retirement Board Meetings

January 20, 2022
March 17, 2022
May 19, 2022
July 21, 2022
September 22, 2022
November 17, 2022

APPENDIX

Retirement Board Meeting
Thursday, November 18, 2021
8:30 a.m.

EBMUD public Retirement Board meeting will be conducted via Zoom.
Please note that Retirement Board meetings are recorded, live-streamed, and posted on the District's website.

To **OBSERVE** 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

There will be a closed session occurring at 8:45am during the November 18, 2021 Retirement Board meeting. The main meeting will begin at 8:30 am, the closed session starts at 8:45am and will end at 9:30am, then the original Zoom meeting will restart after the closed session is completed.

8:30 a.m. Retirement Board Meeting
Please click the link below to join the webinar:

You are invited to a Zoom webinar.
When: Nov 18, 2021 08:30 AM Pacific Time (US and Canada)
Topic: November 18, 2021 Retirement Board Meeting

Please click the link below to join the webinar:
https://ebmud.zoom.us/j/85208546072?pwd=Rk04NVVxS0t4Q1FIclc5OTl0TWY3Zz09
Passcode: 534350
Or One tap mobile :
US: +16699006833,,85208546072# or +12532158782,,85208546072#
Or Telephone:
Dial(for higher quality, dial a number based on your current location):
US: +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799 or +1 312 626 6799 or +1 929 205 6099 or +1 301 715 8592
Webinar ID: 852 0854 6072
International numbers available: https://ebmud.zoom.us/u/kcPAG66XZi

Providing Public Comment

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

If you wish to provide public comment please:

- Use the raise hand feature in Zoom to indicate you wish to make a public comment https://support.zoom/us/hc/en-us/articles/20055661-Raising-your-hand-in-a-webinar
    - If you participate by phone, press *9 to raise your hand
- When prompted by the Asst. Secretary, please state your name, affiliation if applicable, and topic

- The Assistant Secretary will call each speaker in the order received
- Comments on non-agenda items will be heard at the beginning of the meeting
- Comments on agenda items will be heard when the item is up for consideration
- Each Speaker is allotted 3 minutes to speak; The Retirement Board President has the discretion to amend this time based on the number of speakers
- The Assistant Secretary will keep track of time and inform each speaker when time is up.

MINUTES OF THE RETIREMENT BOARD
September 16, 2021

A regular meeting of the Retirement Board convened on Thursday, September 16, 2021 at 8:32 a.m. The meeting was called to order by Marguerite Young.

Due to COVID-19 and in accordance with Alameda County's Health Order 20-10 (issued April 29, 2020), and with the Governor's Executive Order N-29-20 which suspends portions of the Brown Act, **this meeting was conducted via teleconference only.** In compliance with said orders, a physical location was not provided for this meeting. These measures will only apply during the period in which state or local public health officials have imposed or recommended social distancing.

Roll Call – The following Retirement Board Members were present: Clifford Chan, Frank Mellon, Marguerite Young, and Jae Park.

The following staff members were present: Sophia Skoda, Lourdes Matthew, Lisa Sorani, Robert Hannay, Damien Charléty, and Valerie Weekly.

PUBLIC COMMENT

No public comment

CLOSED SESSION

1. Significant Exposure to Litigation pursuant to Government Code Section 54956.9
   a. One item
2. Personnel matters Pursuant to Government Code Section 54957
   a. Application for disability retirement of Adam Erlach (R.B. Resolution No. 6936)

Retirement Board meeting reconvened at 9:33 a.m.

REGULAR BUSINESS MEETING

The regular business meeting reconvened at 9:33 a.m. The following Retirement Board members were present: Clifford Chan, Frank Mellon, Marguerite Young, and Jae Park.

ANNOUNCEMENT FROM CLOSED SESSION:

1. The decision on the application for disability retirement of Adam Erlach will be deferred to the November 18, 2021 meeting.

CONSENT CALENDAR

1-4. **Consent Calendar** – A motion to move the consent calendar was made by Frank Mellon and seconded by Jae Park. The motion carried (4-0) by the following voice vote: AYES (Chan, Mellon, Park, and Young), NOES (none), ABSTAIN (none), ABSENT (McGowan).

ACTION

5. Adopt Correction to Updated Retirement Board Rule C-3 Low Income Adjustment (R.B. Resolution No. 6944) – Lisa Sorani presented this item. Retirement Board Rule C-3 was updated under Resolution 6924 at the November 19, 2020 meeting. Language was being adjusted regarding whether or not social security wages are included in gross wages. After the meeting, an error was discovered in Resolution 6924. Resolution 6944 corrects the error changing the word "adjustment" back to "benefit" in the Total Gross Income Defined section. Clifford Chan made the motion to adopt Resolution 6944 and Frank Mellon seconded the motion. The motion carried (4-0) by the following voice vote: AYES (Chan, Mellon, Park, Young), NOES (none), ABSTAIN (none), ABSENT (McGowan).

INFORMATION

6. Performance Report and Economic Review – Eric White from Meketa reviewed the second quarter 2021 report and the July 2021 performance update. There was a strong performance overall for the plan with the second quarter ending at $2.3 billion. Managers performed in line or exceeded the benchmarks for the second quarter: US equity returned 8.2%, international equity 6.3%, covered calls 5.9%, real estate 7.4% and fixed income 1.3%.

7. Proxy Voting and Other Engagement Activities – Robert Hannay presented this item. Glass Lewis has provided proxy voting services for actively managed accounts since October 2017 when approximately 62% of the portfolio was actively managed. Since 2017, the Retirement Board has transitioned a significant number of actively managed accounts to passively managed. Northern Trust Asset Management handles the proxy voting for the passively managed accounts. The current contract with Glass Lewis expires on December 31, 2021 with three one-year options to renew. Staff plans to bring an action item to the Retirement Board at the November 18, 2021 meeting on whether to extend the contract.

8. International Manager Transition and Rebalance Activity – Robert Hannay presented this item. With the termination of Fisher Investments, staff took the opportunity to review allocations across all asset classes and managers in the portfolio. Based on the review, it was determined there was an over-allocation to domestic and international equity and an under-allocation to fixed income. Staff rebalanced the asset allocations to bring the portfolio closer in line with the Retirement Board's approved target allocations.

9. Working Capital Update – Damien Charléty presented this item. Retirement System benefits continue to be greater than contributions. This is due to the changing mix of members with new retirees drawing benefits under the 1955/1980 plan while most of the new staff is contributing under the 2013 plan. The number of beneficiaries is also growing faster than the number of active members. In order to cover this gap, staff is investing contributions into the Local Agency Investment Fund (LAIF) account and making monthly withdrawals. For FY22, based on projected payments and contributions, the gap is projected to be $21.3 million. Staff will transfer $24 million of investment assets to working capital to cover this gap.

10. **Announcement of 2022 Retirement Board Meeting Calendar** – Valerie Weekly presented this item. The 2022 Retirement Board meetings fall on the third Thursday of the odd month. Marguerite Young requested that Retirement Board meetings do not fall in the same week as regular Board meetings. Frank Mellon requested that the September 15 meeting be moved out one week to September 22. Staff will research if the meeting can be moved and bring this item back to the November 18 meeting.

11. **Benefit Plan Renewals for Calendar Year 2022** – Lisa Sorani presented this item. Open enrollment for active employees and retirees will run from October 18 through November 5. The District offers retirees medical and dental plans. There are medical plans for retirees under 65 which are the same as those for active employees; and there are plans for those over 65 who are required to enroll in Medicare. All retiree health plans for those over 65 are offering savings over the current year premiums. Dental plans will decrease or remain flat for the 2022 plan year.

REPORTS FROM THE RETIREMENT BOARD

12. **Brief report on any course, workshop, or conference attended since the last Retirement Board meeting**

Jae Park attended a webinar on inflation.

ITEMS TO BE CALENDERED / UPCOMING ITEMS

- 2022 Board Meeting Calendar
- Proxy Voting
- Election Procedures
- Low Income Adjustment Survey Results

ADJOURNMENT – Frank Mellon moved to adjourn the meeting at 10:26 a.m. and Clifford Chan seconded the motion; the motion carried (4-0) by the following voice vote: AYES (Chan, Mellon, Park, and Young), NOES (none), ABSTAIN (none), ABSENT (McGowan).

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President

ATTEST: ____________________________
Secretary

11/18/2021

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance SDS

SUBJECT: Investment Transactions by Retirement Fund Managers for August 2021 and September 2021

The attached Investment Transactions by Retirement Fund Managers report for the months of August 2021 and September 2021 is hereby submitted for Retirement Board approval.

Attachment

SDS:AM:MH

INVESTMENT TRANSACTIONS BY RETIREMENT FUND MANAGERS

August 2021

	PURCHASES	SALES	PORTFOLIO VALUE
FIXED INCOME			
C.S. McKee	$68,878,399	$38,798,464	$215,762,443
Federated Bank Loans	$7,936,245	$425,000	$53,434,701
Garcia Hamilton Associates	$22,205,469	$2,727,197	$215,344,148
Mackay Shields - HY	$5,137,714	$835,891	$54,170,262
TOTAL	**$104,157,827**	**$42,786,553**	**$538,711,555**
DOMESTIC EQUITY			
Russell 3000 Index Fund	$0	$37,000,000	$609,987,967
Total Domestic Equity	**$0**	**$37,000,000**	**$609,987,967**
COVERED CALLS			
Parametric (BXM)	$3,253,454	$3,101,887	$158,904,558
Parametric (Delta-Shift)	$1,106,507	$791,657	$179,202,171
Van Hulzen	$13,074,995	$12,665,267	$148,778,106
Total Covered Calls	**$17,434,956**	**$16,558,811**	**$486,884,834**
INTERNATIONAL EQUITY			
ACWI Index fund	$329,847,822	$164,923,911	$596,273,187
Fisher Investments	$145,767,339	$234,261,392	$1,120,243
Global Transition	$0	$867,561	$1,828,964
Total International Equity	**$475,615,160**	**$400,052,863**	**$599,222,394**
REAL ESTATE EQUITY			
RREEF America II	$0	$0	$53,026,906
CenterSquare	$2,254,723	$2,190,694	$67,107,189
Total Real Estate	**$2,254,723**	**$2,190,694**	**$120,134,095**
TOTAL ALL FUND MANAGERS	**$599,462,666**	**$498,588,921**	**$2,354,940,846**

September 2021

	PURCHASES	SALES	PORTFOLIO VALUE
FIXED INCOME			
C.S. McKee	$39,441,421	$28,577,162	$213,968,003
Federated Bank Loans	$0	$375,000	$53,513,149
Garcia Hamilton Associates	$11,860,410	$25,574,808	$214,515,812
Mackay Shields - HY	$2,690,348	$146,061	$54,364,228
TOTAL	**$53,992,179**	**$54,673,031**	**$536,361,191**
DOMESTIC EQUITY			
Russell 3000 Index Fund	$0	$0	$582,711,770
Total Domestic Equity	**$0**	**$0**	**$582,711,770**
COVERED CALLS			
Parametric (BXM)	$2,680,791	$2,532,202	$155,241,461
Parametric (Delta-Shift)	$874,683	$938,395	$172,856,250
Van Hulzen	$8,882,305	$10,217,545	$144,425,811
Total Covered Calls	**$12,437,778**	**$13,688,142**	**$472,523,522**
INTERNATIONAL EQUITY			
ACWI Index fund	$0	$0	$574,770,122
Fisher Investments	$0	$0	$1,337,551
Global Transition	$0	$0	$1,582,520
Total International Equity	**$0**	**$0**	**$577,690,193**
REAL ESTATE EQUITY			
RREEF America II	$0	$0	$53,026,906
CenterSquare	$3,051,084	$2,734,335	$63,560,995
Total Real Estate	**$3,051,084**	**$2,734,335**	**$116,587,901**
TOTAL ALL FUND MANAGERS	**$69,481,041**	**$71,095,508**	**$2,285,874,578**

Prepared By: Matt Houck

Matt Houck, Accountant II

Date: 10-27-2021

R.B. RESOLUTION NO. 6945

RATIFYING AND APPROVING INVESTMENT TRANSACTIONS BY FUND MANAGERS FOR MONTHS OF AUGUST, 2021 AND SEPTEMBER, 2021

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 August, 2021 and September, 2021, in accordance with the provisions of said rule and in securities designated as acceptable by Retirement Board Resolution No. 4974, as amended;

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

President

ATTEST:

Secretary

11/18/2021

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE:	November 18, 2021
MEMO TO:	Members of the Retirement Board
THROUGH:	Sophia D. Skoda, Director of Finance SDS
FROM:	Andrea Miller, Controller A M
SUBJECT:	Short Term Investment Transactions for August 2021

The attached Short Term Investment Transactions report for the month of August 2021 is hereby submitted for Retirement Board approval.

Attachment

SDS:AM:MH

EBMUD EMPLOYEES' RETIREMENT SYSTEM
SHORT TERM INVESTMENT TRANSACTIONS
CONSUMMATED BY THE TREASURER
MONTH OF AUGUST 2021

COST/ FACE VALUE	DESCRIPTION	DATE OF PURCHASE	DATE OF SALE/MATURITY	YIELD (%)
$ 4,466,000.00	Local Agency Investment Fund	11-Aug-21		0.221
4,453,000.00	Local Agency Investment Fund	19-Aug-21		0.221
(11,345,000.00)	Local Agency Investment Fund		30-Aug-21	0.221
(2,500,000.00)	Local Agency Investment Fund		31-Aug-21	0.221
$ (4,926,000.00)	Net Activity for Month			

$ 23,527,246.15	Beginning Balance
(4,926,000.00)	Net Activity for Month
$ 18,601,246.15	Ending Balance

SUBMITTED BY Andrea Miller
Andrea Miller
Controller

DATE 11/1/21

Robert L. Hannay
Treasury Manager

KH
Kirk Hutchins
Acctg. Systems Supvr.

prepared by Mhouck

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

THROUGH: Sophia D. Skoda, Director of Finance SDS

FROM: Andrea Miller, Controller AM

SUBJECT: Short Term Investment Transactions for September 2021

The attached Short Term Investment Transactions report for the month of September 2021 is hereby submitted for Retirement Board approval.

Attachment

SDS:AM:MH

EBMUD EMPLOYEES' RETIREMENT SYSTEM
SHORT TERM INVESTMENT TRANSACTIONS
CONSUMMATED BY THE TREASURER
MONTH OF SEPTEMBER 2021

COST/ FACE VALUE	DESCRIPTION	DATE OF PURCHASE	DATE OF SALE/MATURITY	YIELD (%)
$ 4,468,000.00	Local Agency Investment Fund	2-Sep-21		0.206
4,455,000.00	Local Agency Investment Fund	17-Sep-21		0.206
(11,376,000.00)	Local Agency Investment Fund		30-Sep-21	0.206
$ (2,453,000.00)	Net Activity for Month			

$ 18,601,246.15	Beginning Balance
(2,453,000.00)	Net Activity for Month
$ 16,148,246.15	Ending Balance

SUBMITTED BY Andrea Miller DATE 11/1/21
Andrea Miller
Controller

Robert L. Hannay
Treasury Manager

Kirk Hutchins
Acctg. Systems Supvr.

prepared by Mhouck

R.B. RESOLUTION NO. 6946

RATIFYING AND APPROVING SHORT TERM INVESTMENT TRANSACTIONS BY THE TREASURER FOR AUGUST 2021 AND SEPTEMBER 2021

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 August, 2021 and September, 2021, 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 Exhibit A for August, 2021 and September, 2021 are hereby ratified and approved.

____
President

ATTEST:

____
Secretary

11/18/2021

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

THROUGH: Sophia D. Skoda, Director of Finance SDS

FROM: Andrea Miller, Controller A M

SUBJECT: Statement of Receipts and Disbursements for August 2021

The attached Statement of Receipts and Disbursements report for the month of August 2021 is hereby submitted for Retirement Board approval.

Attachment

SDS:AM:MH

STATEMENT OF RECEIPTS AND DISBURSEMENTS
EMPLOYEES' RETIREMENT FUND
MONTH OF AUGUST 2021

CASH BALANCE at July 31, 2021			$	1,158,353.47
Receipts				
Employees' Contributions	$	1,542,884.58		
District Contributions		7,431,409.11		
LAIF Redemptions		13,845,000.00		
Refunds and Commission Recapture		31,436.20		
TOTAL Receipts				22,850,729.89
Disbursements				
Checks/Wires Issued:				
Service Retirement Allowances	$	10,169,967.75		
Disability Retirement Allowances		154,959.56		
Health Insurance Benefit		991,856.37		
Payments to Retiree's Resigned/Deceased		40,145.99		
LAIF Deposits		8,919,000.00		
Administrative Cost		248,187.45		
TOTAL Disbursements				(20,524,117.12)
CASH BALANCE at August 31, 2021			$	3,484,966.24
LAIF				18,601,246.15
LAIF and CASH BALANCE at August 31, 2021			$	22,086,212.39
Domestic Equity				
Russell 3000 Index Fund	$	609,987,967.46		
Subtotal Domestic Equity		609,987,967.46		
Covered Calls				
Parametric (BXM)	$	158,904,557.86		
Parametric (Delta-Shift)		179,202,170.68		
Van Hulzen		148,778,105.66		
Subtotal Covered Calls		486,884,834.20		
International Equity				
ACWI Index fund	$	596,273,187.01		
Fisher Investments		1,120,242.99		
Global Transition		1,828,963.69		
Subtotal International Equity		599,222,393.69		
Real Estate				
RREEF America REIT II	$	53,026,906.00		
Center Square		67,107,189.22		
Subtotal Real Estate		120,134,095.22		
Fixed Income				
CS Mckee	$	215,762,443.41		
Federated Bank Loans		53,434,701.32		
Garcia Hamilton Associates		215,344,148.27		
Mackay Shields-High Yield		54,170,262.42		
Subtotal Fixed Income		538,711,555.42		
Total for Domestic and International Equities				2,354,940,845.99
MARKET VALUE of ASSETS at August 31, 2021			$	2,377,027,058.38

Respectfully submitted,

Andrea Miller

Andrea Miller
Controller

Robert L. Hannay
Treasury Mgr.

KH

Kirk Hutchins
Acctg Sys Supvr.

prepared by Mhouck

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

THROUGH: Sophia D. Skoda, Director of Finance SDS

FROM: Andrea Miller, Controller AM

SUBJECT: Statement of Receipts and Disbursements for September 2021

The attached Statement of Receipts and Disbursements report for the month of September 2021 is hereby submitted for Retirement Board approval.

Attachment

SDS:AM:MH

STATEMENT OF RECEIPTS AND DISBURSEMENTS
EMPLOYEES' RETIREMENT FUND
MONTH OF SEPTEMBER 2021

CASH BALANCE at August 31, 2021			$	3,484,966.24
Receipts				
Employees' Contributions	$	1,541,025.16		
District Contributions		7,439,484.38		
LAIF Redemptions		11,376,000.00		
Refunds and Commission Recapture		17,140.71		
TOTAL Receipts				20,373,650.25
Disbursements				
Checks/Wires Issued:				
Service Retirement Allowances	$	10,196,747.91		
Disability Retirement Allowances		154,959.56		
Health Insurance Benefit		1,023,249.35		
Payments to Retiree's Resigned/Deceased		10,917.58		
LAIF Deposits		8,923,000.00		
Administrative Cost		288,619.95		
TOTAL Disbursements				(20,597,494.35)
CASH BALANCE at September 30, 2021			$	3,261,122.14
LAIF				16,148,246.15
LAIF and CASH BALANCE at September 30, 2021			$	19,409,368.29
Domestic Equity				
Russell 3000 Index Fund	$	582,711,770.42		
Subtotal Domestic Equity		582,711,770.42		
Covered Calls				
Parametric (BXM)	$	155,241,460.54		
Parametric (Delta-Shift)		172,856,249.73		
Van Hulzen		144,425,811.48		
Subtotal Covered Calls		472,523,521.75		
International Equity				
ACWI Index fund	$	574,770,122.45		
Fisher Investments		1,337,551.15		
Global Transition		1,582,519.84		
Subtotal International Equity		577,690,193.44		
Real Estate				
RREEF America REIT II	$	53,026,906.00		
Center Square		63,560,994.92		
Subtotal Real Estate		116,587,900.92		
Fixed Income				
CS Mckee	$	213,968,003.43		
Federated Bank Loans		53,513,148.59		
Garcia Hamilton Associates		214,515,811.75		
Mackay Shields-High Yield		54,364,227.72		
Subtotal Fixed Income		536,361,191.49		
Total for Domestic and International Equities				2,285,874,578.02
MARKET VALUE of ASSETS at September 30, 2021			$	2,305,283,946.31

Respectfully submitted,

Andrea Miller

Andrea Miller
Controller

Robert L. Hannay
Treasury Mgr.

KH

Kirk Hutchins
Acctg Sys Supvr.

prepared by Mhouck

EAST BAY MUNICIPAL UTILITY DISTRICT
Office of the General Counsel

DATE: November 18, 2021

MEMO TO: Retirement Board

FROM: Lourdes Matthew, Assistant General Counsel Lourdes Matthew

SUBJECT: Adopt a Resolution to Continue Virtual Meetings of the Retirement Board

RECOMMENDATION

Make requisite findings and adopt a resolution to continue to hold meetings of the Retirement Board virtually via teleconference pursuant to Assembly Bill 361 (AB 361) until such time as the State of Emergency declared by the State and the District, resulting from the COVID-19 pandemic, is rescinded and in person gatherings are deemed safe.

DISCUSSION

The Retirement Board has been meeting virtually since the beginning of the COVID-19 pandemic pursuant to Governor Newsom's Executive Orders N-29-20 and N-08-21. These executive orders suspended portions of the Brown Act pertaining to holding public meetings by teleconference. These Executive Orders were set to expire on September 30, 2021.

Prior to the issuance of the Executive Orders, the Brown Act allowed members of a governing body to attend public meetings via teleconference, provided that: (1) the public agency posted the meeting agenda at all teleconference locations; (2) each teleconference location must be identified in the notice of the meeting and agenda; (3) that each teleconference location be accessible to the public; (4) at least a quorum of the members are within the boundaries of the local agency; and (5) the local agency shall provide an opportunity to members of the public to address the legislative body at each teleconference location.

In February 2021, Assembly Bill 361 (AB 361) was introduced to codify certain aspects of the Executive Orders and to suspend the pre-pandemic requirements to meet by teleconferencing under specific circumstances. On September 16, 2021, Governor Newsom signed AB 361 into law and authorized the members of a governing body to continue to participate via teleconferencing provided that:

1. A state of emergency under the California Emergency Services Act has been declared and is in effect; AND
2. State or local officials have imposed or recommended measures to promote social distancing; or

3. The governing body has determined that because of the state-declared emergency, that meeting in person would present imminent risks to the health or safety of meeting attendees.

At this time, the District's social distancing measures remain in place and building capacity continues to be limited due to the continuing pandemic. As such, staff recommends the Retirement Board utilize its authority under AB 361 to authorize the continued use of teleconferencing as a means of holding Retirement Board meetings virtually by adopting Resolution No. 6947: Authorizing the Continued Use of Teleconferencing for Meetings of the East Bay Municipal Utility Retirement Board Pursuant to AB 361.

Adopting Resolution No. 6947 will allow the Retirement Board to meet virtually for the November 2021 meeting. However, AB 361 requires a governing body to re-affirm its basis for continuing to meet virtually every thirty days. Because the Retirement Board meets every other month, the Retirement Board will be required to hold a special meeting in 30 days if it wishes to continue to retain the authority to hold the January 2022 meeting virtually. The special meeting to reaffirm the resolution to continue meeting by teleconference pursuant to AB 361 must be held no later than December 17, 2021. The Retirement Board must also reaffirm the resolution at the January 20, 2022 meeting.

LM:vsh

Attachment: Resolution No. 6947

cc: Clifford C. Chan, General Manager
Derek T. McDonald, General Counsel

R.B. RESOLUTION NO. 6947

AUTHORIZING CONTINUED TELECONFERENCING FOR MEETINGS OF THE EAST BAY MUNICIPAL UTILITY DISTRICT RETIREMENT BOARD PURSUANT TO ASSEMBLY BILL 361 UNTIL SUCH TIME AS THE STATE OF EMERGENCY RESULTING FROM THE COVID-19 PANDEMIC NO LONGER IMPACTS THE ABILITY OF MEETING ATTENDEES TO MEET SAFELY IN PERSON

Introduced by: ; Seconded by:

WHEREAS, on March 4, 2020, Governor Gavin Newsom proclaimed a State of Emergency under the California Emergency Service Act in response to the threat of the COVID-19 pandemic; and

WHEREAS, on June 11, 2021, Governor Newsom issued Executive Order N-08-21, which repealed or modified certain provisions of previously-issued Executive Orders related to the pandemic and extended certain provisions so as to enable the State of California to continue to respond to the COVID-19 pandemic; and

WHEREAS, Paragraph 42 of Executive Order N-08-21 suspended provisions of the Ralph M. Brown Act at California Government Code section 54953 and provided that governing bodies of local public agencies in the State of California could utilize teleconferencing to hold public meetings in place of in-person meetings, subject to certain requirements; and

WHEREAS, Executive Order N-08-21 specified that it would remain in effect through September 30, 2021; and

WHEREAS, on September 16, 2021, Governor Newsom signed Assembly Bill 361 (AB 361) into law; and

WHEREAS, AB 361 provides that a governing body of a local public agency may conduct public meetings via teleconferencing in any of the following circumstances: (A) the governing body holds a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing; or (B) the governing body holds a meeting during a proclaimed state of emergency for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees; or (C) the governing body holds a meeting during a proclaimed state of emergency and has previously determined, by majority vote, that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees; and

WHEREAS, Governor Newsom's March 4, 2020, proclamation of a State of Emergency is still in effect; and

WHEREAS, both the California Department of Industrial Relations, Division of Occupational Safety and Health and the Alameda County Public Health Department are currently recommending measures to promote social distancing at worksites; and

WHEREAS, East Bay Municipal Utility District Retirement Board (Retirement Board) meetings are open to and attended by District Board members, District employees and members of the public; and

WHEREAS, on September 20, 2021, Governor Newsom issued Executive Order N-15-21, which affirmed that Executive Order N-08-21 would remain in effect through September 30, 2021; affirmed that effective October 1, 2021, governing bodies of local public agencies could utilize teleconferencing for public meetings in accordance with the provisions of AB 361; and allowed governing bodies of local public agencies to meet under California Government Code section 54953(e)(1)(B) prior to September 30, 2021 to determine, by majority vote, whether as a result of the State of Emergency, meeting in person would present imminent risks to the health or safety of attendees; and

WHEREAS, this November 18, 2021 meeting is the Retirement Board's first meeting since AB 361 took effect; and

WHEREAS, in accordance with AB 361 and Executive Order N-15-21, and the Retirement Board holds this meeting under California Government Code section 54953(e)(1)(B) and has determined that, as a result of the State of Emergency, meeting in person would present imminent risks to the health or safety of attendees;

NOW, THEREFORE, BE IT RESOLVED that the Retirement Board hereby finds and determines as follows:

1. The Retirement Board has considered the circumstances of the State of Emergency declared by Governor Newsom; and

2. Both State and local officials continue to recommend measures to promote social distancing.

BE IT FURTHER RESOLVED that, pursuant to AB 361 and based on the findings above, all Retirement Board meetings will be held via teleconference in accordance with the provisions of California Government Code section 54953(e).

BE IT FURTHER RESOLVED that the Retirement Board shall, not later than 30 days after November 18, 2021, and every 30 days thereafter, consider the findings above and, if they hold true, adopt them by majority vote, until such time as the State of Emergency is rescinded or the Retirement Board determines the State of Emergency does not directly impact the ability of Retirement Board and meeting attendees to meet safely in person and state or local officials no longer impose or recommend measures to promote social distancing.

ADOPTED this 18th day of November, 2021 by the Retirement Board.

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President

ATTEST:

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Secretary

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

FROM: Lisa Sorani, Manager of Employee Services Lisa Sorani

SUBJECT: Approve Change to Retirement Board Meeting Dates in 2022

ACTION: Vote on approval of Schedule change

RECOMMENDATION:

Approve the rescheduling

DISCUSSION

The Retirement Board holds meetings based on Retirement Board Rule A-1, which states that "the Retirement Board shall schedule meetings for discharging its responsibilities under the Retirement Ordinance and other applicable laws and regulations. Meetings will be held at times and locations to be determined, and shall be announced at least 72 hours in advance."

In 1992, the Retirement Board approved Retirement Board Resolution No. 6631-2 to authorize Retirement Board meetings to be held the Third Thursday every odd-numbered month.

Due to a scheduling conflict in September 2022, there will be a Board of Directors meeting and a Retirement Board meeting scheduled in the same week. The Board discussed moving the September 15, 2022 meeting to September 22, 2022 instead. It is recommended that the Board approve the rescheduling so that all Members can attend the meeting.

LS

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance SDS

SUBJECT: Approve Update to Statement of Investment Policy and Procedures Regarding Real Estate Investment Trusts

SUMMARY

The Retirement System's Statement of Investment Policy and Procedures (the Policy) has provisions for an allocation to the real estate sector. The current target allocation to Real Estate is five percent of the portfolio. The Retirement System's investments in real estate include an account managed by CenterSquare holding a diversified portfolio of publicly traded Real Estate Investment Trusts (REITs) and an allocation to RREEF, a private REIT.

Under the Internal Revenue Code, if the Retirement System owns more than 10 percent of a REIT, the System may be required to treat a portion of the REIT dividends as Unrelated Business Taxable Income (UBTI) and report and pay income taxes on that income. Currently the Retirement System owns far less than 10 percent of any one REIT. While the likelihood of owning more than 10 percent of a REIT in the future is low, provisions should be in place to monitor for the potential generation of UBTI. As such, staff recommends that the Retirement System's Policy be updated to address this.

Staff recommends that the following language be added to Article V, Section D of the Policy:

> If the Retirement System owns more than 10 percent of a Real Estate Investment Trust (REIT), the Retirement System may be required to treat a portion of the REIT dividends as Unrelated Business Taxable Income (UBTI) and report and pay income taxes on that income. Staff and the Investment Consultant shall monitor prospective and existing REIT investments to determine if the Retirement System's ownership in any REIT is greater than 10 percent. If staff and the Investment consultant determine that the Retirement System's ownership of any REIT is greater than 10 percent, staff shall address the potential tax implications.

SDS:RLH

Attachment: Statement of Investment Policy and Procedures

R.B. RESOLUTION NO. 6948

Approve Update to Statement of Investment Policy and Procedures

Introduced by: ; Seconded by:

WHEREAS, the Retirement Board has adopted a Statement of Investment Policy and Procedures (the Policy) to provide a framework for the investment management of the assets of the East Bay Municipal Utility District Employees' Retirement System (EBMUD ERS or Retirement System); and

WHEREAS, the Policy provides for an allocation of the Retirement System's investment assets to the Real Estate sector which includes investments in Real Estate Investment Trusts (REITs); and

WHEREAS, public pension plans investing in REITs may be required to treat a portion of the REIT dividends received as Unrelated Business Taxable Income (UBTI) and report and pay income taxes on that income; and

WHEREAS, the Retirement System intends to amend its Investment Policy to provide for the monitoring for and handling of UBTI related to its REIT investments; and

NOW THEREFORE, BE IT RESOLVED by the Retirement Board that the Statement of Investment Policy and Procedures, attached herein as Exhibit A, is hereby amended and adopted and that the Retirement Board does hereby declare that the following amendment be added to Article V, Section D. as follows:

c. **If the Retirement System owns more than 10 percent of a Real Estate Investment Trust (REIT), the Retirement System may be required to treat a portion of the REIT dividends as Unrelated Business Taxable Income (UBTI) and report and pay income taxes on that income. Staff and the Investment Consultant shall monitor prospective and existing REIT investments to determine if the Retirement System's ownership in any REIT is greater than 10 percent. If staff and the Investment consultant determine that the Retirement System's ownership of any REIT is greater than 10 percent, staff shall address the potential tax implications.**

BE IT FURTHER RESOLVED, that any resolution in conflict herewith is hereby superseded.

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President

ATTEST:

____
Secretary

11/18/2021

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM

Statement of Investment Policy and Procedures

Last Revised ~~March~~ November ~~2019~~ 2021

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East Bay Municipal Utility District
Employees' Retirement System

MISSION

To serve as the fiduciary and responsible steward of the East Bay Municipal Utility District Employees' Retirement System: to deliver promised benefits to members of the retirement system, their survivors and beneficiaries.

INVESTMENT BELIEFS

	The System:
1.	Is a long-term investor
2.	Articulates clear goals
3.	Has well-diversified assets
4.	Considers costs
5.	Ensures accountability
6.	Aims to be a leader, consistent with EBMUD's commitment to excellence and leadership
	The Portfolio:
7.	Is structured based upon strategic asset allocation
8.	Is designed to be fully invested and maintain adequate working capital
9.	Relies on passive management where active management is unlikely to reward
	Recognize that Risk:
10.	Exists in all investment decisions
11.	Should be carefully evaluated
12.	Must be commensurate with return
13.	Cannot be captured solely through quantitative analysis
14.	Can be systemic and emerge over time

I. INTRODUCTION

This document provides a framework for the investment management of the assets of the East Bay Municipal Utility District Employees' Retirement System (the 'System' or "EBMUDERS"). Its purpose is to assist the Board of Administration (the Board' or "Retirement Board") in effectively supervising and monitoring the investments of the System, and achieving its objective of providing adequate retirement, disability, survivorship and other post-employment benefits to eligible Members of the Retirement System in a cost-effective manner. Specifically, it will address:

- The general goals of the investment program;
- Specific asset allocations, rebalancing procedures and investment guidelines;
- Performance objectives; and
- Responsible parties.

This Investment Policy statement includes the provisions of the California Constitution and Statutes and will:

- Set forth investment policies, objectives and procedures which the Retirement Board judges to be appropriate and prudent, in consideration of the needs of the Employees' Retirement System;
- Establish the criteria which the investment management organizations retained by the Retirement System are expected to meet and against which they are to be measured;
- Communicate the investment policies and objectives and performance criteria to the Investment Managers; and
- Serve as a review document to guide the Board's ongoing oversight of the investment of Retirement System's assets.

It is the practice of the Retirement Board to change its policies and objectives in accordance with changing regulatory, economic, financial and administrative conditions as they change over time.

The System is governed by a six-member Retirement Board, with five voting members and one non-voting retired member. In the formation of this investment policy and goal statement, a primary consideration of the Board has been their awareness of the stated purpose of the System. The Board's investment activities are designed and executed in a manner that will fulfill these goals.

This policy statement is designed to allow for sufficient flexibility in the management oversight process to capture investment opportunities as they may occur, while setting forth reasonable parameters to ensure prudence and care in the execution of the investment program.

II. INVESTMENT OBJECTIVES

A. Overall Performance Goals

The System's general investment goals are broad in nature. The following goals, consistent with the above described purpose, are adopted:

1. The overall goal of the System's investment assets is to provide adequate retirement and disability, survivorship and postemployment healthcare benefits to eligible employees in a cost effective manner. This will be accomplished through a carefully planned and executed investment program.

2. A secondary objective is for the System investment assets to achieve a long-term total annual rate of return, including dividends, interest, and capital appreciation which exceeds the assumed actuarial rate of return and a total annual return net of all investment management fees and expenses, which meets or exceeds a weighted average of the asset class benchmarks specified below, where the weights correspond to the System's strategic policy allocation.

3. Environmental, social and governance ("ESG") factors should be considered in portfolio management. Consistent with the System's Mission and Investment Beliefs, the System recognizes that ESG factors can have a material impact on corporate performance over the long term, although the impact can vary by industry. The consideration of ESG factors may affect security selection, proxy voting, engagement, and other areas. The System will consider ESG factors in its proxy voting and other relevant portfolio management activities. ESG factors will be taken into account in selection and ongoing monitoring of the System's investment managers and mandates, and of other service providers as appropriate. The System will leave individual security selection decisions to its investment managers under the assumption that they will make the decisions that are in the best interest of the System incorporating both ESG and non-ESG factors.

4. System investment assets should achieve a real or inflation adjusted return of 4% or more above the nationwide Urban Consumers Price Index.

5. The Retirement System endeavors to achieve the above System investment asset return objectives within a time horizon of three to five years or approximately a full market cycle.

6. System investment assets should remain fully invested.

7. Investment management of System investment assets should recognize that the Retirement System is relatively risk averse and the System's capital should be preserved. Therefore, the goals of the Employees' Retirement System are to be achieved recognizing safety of principal, liquidity and yield in that order.

8. Assets must be diversified by type and issuer.

9. Allocation of assets to Investment Managers shall be determined by the Retirement Board to accommodate changing conditions and laws.

10. The System's investment program shall at all times comply with existing and future applicable local, state, and federal regulations

11. All transactions undertaken will be for the sole benefit of the System's Members and beneficiaries and for the exclusive purpose of providing benefits to them and defraying reasonable administrative expenses associated with the System.

12. All fees and other costs payable to third-party providers of services to the System shall be payable from System assets

13. The System has a long-term investment horizon, and utilizes an asset allocation which encompasses a strategic, long-run perspective of capital markets. It is recognized that a strategic long-run asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of the System's investment performance.

14. Investment actions are expected to comply with "prudent person" standards, meaning:

    "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims."

B. Performance Goals by Asset Class

1. The performance objective of the portfolio's allocation to each asset class in which the System's assets are invested shall be to achieve a total return net of fees and expenses which equals or exceeds the market indexes listed below over a full market cycle as defined by the Board.

Asset Class Performance Benchmarks

ASSET CLASS	**BENCHMARK**
1. *U.S. Equities:*	Russell 3000 Index
2. *Non-U.S. Equities:*	MSCI ACWI x US Index
3. *Core Fixed-Income:*	BBg Aggregate Index
4. *Non-Core Fixed-Income:*	50% ICE BofA Merrill Lynch U.S. Corporates, Cash Pay, BB-B Rated 1-5 Years Index, 30% Credit Suisse Leveraged Loan Index, 20% BBg Short Term Gov/Credit Index
5. *Real Estate:*	50% NCREIF (lagged), 50% FTSE NAREIT All Equity REITs Index
6. Covered Calls:	BXM Covered Calls Index*

*Also known as the CBOE S&P 500 BuyWrite Index

2. Performance results for System investment assets and for each Investment Manager shall be calculated and evaluated quarterly and presented to the Board for review.

3. A special target index will be created and utilized to measure the performance results of the portfolio, serving as a benchmark for the total portfolio. This Total Portfolio Benchmark will be included in evaluation reports presented to the Board for review. The Total Portfolio Benchmark will consist of and be weighted as follows:

Total Portfolio Benchmark

25% Russell 3000 Index

20% BXM Covered Calls Index

25% MSCI ACWI x US

20% BBg Aggregate Index

2.5% ICE BofA Merrill Lynch U.S. Corporates, Cash Pay, BB-B Rated

1-5 Years Index

1% BBg Short Term Gov/Credit Index

1.5% Credit Suisse Leveraged Loan Index

2.5% NCREIF (lagged)

2.5% FTSE NAREIT All Equity REITs index

This target benchmark index reflects the asset allocation goal established by the Retirement Board.

III. DUTIES AND RESPONSIBILITIES

A. Duties of the Board or its Designee(s)

The Retirement Board has the responsibility for administration of the System for the benefit of plan participants, although it is not the intent of the Board of Retirement to become involved in the day-today investment decisions. The Board or its designee(s) will adhere to the following procedures in the management of the Board's assets:

1. The Board develops and approves guidelines for the execution of the Board's investment program.

2. The Board is responsible for selecting qualified Investment Managers, the General Investment Consultant, the Master Custodian, and other service providers.

3. The Board will ensure a formal review of the System's investment structure. An asset-liability study including allocation and financial performance reviews will be conducted every three to five years or as frequently as the need arises. The review will include recommended adjustments to the long-term, strategic asset allocation to reflect any changes in policy, applicable regulations, long-term capital market assumptions, actuarial assumptions and the System's financial condition.

4. The Board may retain investment consultants to provide such services as conducting investment performance reviews, asset-liability studies, asset allocation, Investment Manager reviews, and investment research.

5. The Board will review investments and Investment Managers at least quarterly to ensure that policy guidelines continue to be met.. The Board will monitor investment returns on both an absolute basis and relative to appropriate benchmarks as set forth in this policy, including measurements against benchmarks and key qualitative factors and peer group comparisons. The source of information for these reviews may be staff, the General Investment Consultant, the Investment Managers, and others as appropriate. The Board is responsible for taking appropriate action if investment objectives are not being met or if policies and guidelines are not being followed.

6. The Board will provide oversight to ensure investments in a cost-effective manner subject to Board approval. These costs include, but are not limited to, investment management, consulting and custodial fees, transaction costs and other administrative costs. Costs to administer the System are chargeable to and expected to be paid by the System.

B. Duties of the Administrative-Investment Committee

The Administrative-Investment Committee shall meet as needed. Duties of the Administrative-Investment Committee shall be as follows:

1. Make recommendations as to general investment policies, practices, and procedures to the Retirement Board including, but not limited to, asset mix, portfolio diversification, average maturity, portfolio risk level and rate of return.

2. Review the investment performance of the Retirement System.

3. Confer with the Investment Managers to review investments and current market environment.

4. Review the Statement of Investment Policy and Procedures as adopted by the Retirement Board and make recommendations as to the content thereof.

5. Render advice to the Retirement Board relative to the desirability of and the procedure to retain investment advisors, performance measurement services, and bank custody of securities owned.

6. Select one Committee member to serve as Chair at all meetings scheduled by the Administrative-Investment Committee.

C. Duties of the East Bay Municipal Utility District Staff

The Director of Finance of the East Bay Municipal Utility District shall serve as the Manager of Finance of the System. The Director of Finance and his/her staff provide analysis and recommendations to the Board on a wide variety of investments and investment related matters; oversee and direct the implementation of Board policies, and manage the System's portfolio on a day to day basis.

Pursuant to this policy, the Board has delegated to the Director of Finance:

1. Authority to withdraw assets from assigned managers as necessary to efficiently meet operating needs and to invest the System's cash without requiring the Board's permission but only as set forth in this policy.

2. Responsibility to recommend service providers to the Board, including conducting the search process for the General Investment Consultant, Investment Managers, Master Custodian, and other service providers as requested by the Board.

3. Responsibility for implementation and administration of this policy and of the Board's decisions, including:

    a. Managing the relationships with service providers to the System to ensure that they are providing all the necessary assistance to Board and to staff. Should any service provider fail to do so, the Director of Finance may make changes to the extent consistent his/her authority pursuant to this policy, or recommend appropriate changes to the Board;

    b. Ensuring that Investment Managers conform to the terms of their contracts, appropriate policies and guidelines; and

c. Ensuring that performance monitoring systems are consistent with this policy and provide the Board with as timely, accurate and useful information as possible.

4. Authority to manage portfolio restructuring resulting from portfolio rebalancing or manager terminations, with the assistance of the General Investment Consultant, a transition manager, other consultants, and Investment Managers, as needed.

5. Authority to vote proxies in stocks held by the System. Proxies will be voted with Management unless otherwise directed by the Board.

6. Authority to designate individual staff of the District to carry out his/her responsibilities under this policy.

7. The Director of Finance may rely upon the assistance of the General Investment Consultant as needed to fulfill his/her obligations.

8. The Director of Finance and his/her staff, with assistance from the General Investment Consultant as needed, shall also:

   a. Be responsible for organizing and/or participating in any special research for the Board; and

   b. Advise and keep the Board apprised of any other events of investment significance.

D. Duties of the General Investment Consultant

The Investment Consultant shall be responsible for the following:

1. At the request of the Director of Finance or his/her designee, assist Staff in performance of their duties as listed in this investment policy.

2. Prepare a quarterly performance report and a comprehensive annual report which shall include performance attribution on the Board's Investment Managers and performance of total System assets. Performance results shall be presented to show:

   a. The degree to which portfolios and investment managers have achieved Retirement Board investment objectives;

   b. That the investment managers' strategy has been consistent with their stated philosophies; and

   c. How the total portfolio and the individual managers performed in comparison with other pension funds and peer managers.

   d. These reports shall include, but are not limited to:

i. Performance of System asset portfolio as a whole with respect to this policy, including stated benchmarks and policy objectives, and comparison with other pension funds.

ii. A report on the general economic and investment environment as it affects the System asset portfolio as a whole and the asset allocation categories and Investment Managers individually.

iii. Each Investment Manager's performance on an ongoing basis relative to Board investment objectives as stated in this policy, using investment performance criteria relative to specific benchmarks associated with its asset class and to benchmarks incorporated into its agreement.

iv. A check on each Investment Manager's adherence to its stated investment style and discipline.

v. Any instability of Investment Manager personnel and organization.

vi. Any unusual portfolio activity, trading volume, and execution costs.

vii. Risk and performance characteristics with respect to an individual Investment Manager's portfolio not logically explainable in terms of the published style or out-of-step with manager's style peer group.

viii. Failure by an Investment Manager to comply with all investment guidelines

ix. How the individual managers performed in comparison with other pension funds and peer managers;

x. Documentation and recommendations with respect to implementation of this policy pertaining to Watch Status. Documentation includes material pertaining to the Investment Manager's consideration for Watch Status, placement on Watch Status, removal from Watch Status and/or replacement/termination; and

xi. Any other factors considered by the General Investment Consultant to be of material relevance to the Board in their evaluations of the Investment Managers individually or the performance of the System's asset portfolio as a whole.

3. Make recommendations to the Board regarding investment policy and strategic asset allocation, including managing and interpreting the periodic asset-liability study as requested by the Board.

4. Assist the Board in the implementation of this policy pertaining to Watch Status of individual Investment Managers/portfolios, including documentation of relevant factors and recommendations for individual Board actions.

5. Assist the Board in the selection of qualified Investment Managers, and assist in the review of existing managers, including monitoring changes in personnel, ownership and the investment process.

6. Assist the Board in the selection of a qualified custodian if necessary.

7. Provide topical research and education on investment subjects as requested by the Board or Investment staff.

E. Duties of the Investment Managers

The investment managers shall:

1. Contract by written agreement with the Board to invest within approved guidelines.

2. Provide the Board with proof of liability and fiduciary insurance coverage at the time of execution of engagement contract and annually thereafter until the relationship is terminated.

3. Be a SEC-Registered Investment Advisor under the 1940 Act or an authorized bank or trust, and be recognized as providing demonstrated expertise over a number of years in the management of institutional assets within a defined investment specialty.

4. Adhere to the investment management style concepts and principles for which they were retained, including, but not limited to, developing portfolio strategy, performing research, developing buy, hold and sell lists, and purchasing and selling securities.

5. Obtain best execution for all transactions for the benefit of the System with brokers and dealers qualified to execute institutional orders on an ongoing basis at the best net cost to the System, and, where appropriate, facilitate soft dollar credits and the recapture of commissions for the System's benefit.

6. The Board has determined that Investment Managers should be encouraged to direct approximately 25% of their trades through brokers specified by the Board. This may allow the Retirement System to recapture some of the commission costs. It should be understood that the trades should be executed on a competitive basis to ensure best execution and to limit commission costs.

7. Investment Managers should also recognize that it is the intent of the System to encourage the growth and development of firms eligible for the East Bay Municipal Utility District's Contract Equity Program (CEP) when prudently

possible. Investment Managers are encouraged to execute trades through CEP firms. Such trades must be executed on a competitive basis to ensure best execution and to limit commission costs.

8. Investment Managers are required to reconcile monthly accounting, transaction and asset summary data with custodian valuations, and communicate and resolve any significant discrepancies with the custodian and Staff.

9. Investment Managers are required to report the following at least monthly to General Investment Consultant, and upon request to the Board and Director of Finance or his/her designee:

   a. Transaction and asset summary data reported at cost and fair market value;

   b. Rate of return, which calculation shall include net income, realized gains and losses, and,
   if appropriate, unrealized appreciation and depreciation; and

   c. Managers that invest in derivatives are also required to make quarterly reports on the specific risk exposure to the system.

10. If requested by Staff and/or the General Investment Consultant, Investment Managers are required to provide in writing reasons for underperformance with respect to policy and/or agreement benchmarks

11. Investment Managers are required to maintain frequent and open communication with the Board and Director of Finance or his/her designee(s) on all significant matters pertaining to the Investment program, including, but not limited to, the following:

   a. Major changes in the Investment Manager's investment outlook, investment strategy and portfolio structure;

   b. Significant changes in ownership, organizational structure, financial condition or key or senior personnel;

   c. Any changes in the Portfolio Manager, Relationship Manager or other personnel assigned to the System;

   d. Each client that terminates its relationship whose terminated portfolio account represents at the least one percent of the Investment Manager's aggregate portfolio on the day of notice of termination with the Investment Manager, within 30 days of such termination;

   e. Each client that terminates its relationship when the cumulative terminations for a calendar month equals or exceeds one percent of the Investment Manager's aggregate portfolio as of the first business day of the reporting month; and

f. All pertinent issues which the Investment Manager deems to be of significant interest or material importance.

12. Meet with the Board and the Director of Finance or his/her designee as requested.

F. Duties of the Master Custodian

The Master Custodian shall be responsible to the Board for the following:

1. Provide complete global custody and depository services for the designated accounts.

2. Manage a Short Term Investment Fund (STIF) for investment of any uninvested cash, and ensure that all available cash is invested. If the cash reserves are managed externally, full cooperation must be provided.

3. Provide in a timely and effective manner a monthly report of the investment activities implemented by the Investment Managers.

4. Collect all income and principal realizable and properly report it on the periodic statements.

5. Provide monthly and fiscal year-end accounting statements for the portfolio, including all transactions; these should be based on accurate security values for both cost and market. These should include, where appropriate, records of amortized cost. These reports should be provided within acceptable time frames.

6. Report situations where accurate security pricing, valuation and accrued income is either not possible or subject to considerable uncertainty.

7. Provide assistance to the System to complete such activities as the annual audit, transaction verification or unique issues as required by the Board.

8. Manage a securities lending program to enhance income if directed by the Board. If the securities lending program is managed externally, full cooperation must be provided.

9. Process class action processing services including tracking class action lawsuits, filing claims on behalf of the System, responding to inquiries from the claims administrators, following up on rejection notices with additional information where appropriate, posting settlement fund distributions to appropriate System accounts, and providing reports on proceeds received.

IV. INVESTMENT POLICIES AND PROCEDURES

A. Asset Allocation — Asset/Liability

1. The Board regularly adopts and implements an asset allocation policy that is predicated on a number of factors, including:

    a. A projection of actuarial assets, liabilities, benefit payments and required contributions;

    b. Historical and expected long-term capital market risk and return behavior;

    c. An assessment of future economic conditions, including inflation and interest rate levels; and

    d. The current and projected funding status of the System.

2. The asset allocation will be determined through appropriate studies undertaken by consultants retained by the Board. The allocation study will include all asset classes deemed prudent and appropriate by the Board. The Board, with the aid of the Director of Finance and the investment consultant, will determine the assumptions and criteria to be used in the asset allocation study. The following assumptions and criteria will be so determined:

    a. The expected return from each asset category.

    b. The expected standard deviation of each asset category.

    c. The minimum and maximum percent to be invested in each asset category.

    d. The correlation relationship between the asset categories.

    e. The minimum acceptable return over a given time period.

    f. The net contribution as a percent of payroll.

    g. The expected payroll growth rate.

3. The resulting asset allocation mixes will be approved by the Board with input from the Director of Finance and the investment consultant and an optimum selection made. The asset allocation study will be performed no less frequently than every five years. Appropriate adjustments to the existing portfolio will then be made in the most expeditious and appropriate manner. The Director of Finance is authorized to retain a Transition Manager to assist with major re-allocations of the portfolio.

4. On a more frequent, periodic basis, the Director of Finance, with assistance from the investment consultant, will analyze the portfolio structure of each asset class. Analysis shall include:

a. appropriateness of asset class and manager benchmarks,

b. alignment structure of individual portfolios with asset class benchmarks based on manager holdings and mandate,

c. evaluation of whether the asset class is structured in such a manner that is consistent with the Boards objectives,

d. analysis of underperforming managers, and

e. overall risk profile of the asset class.

5. Pursuant to the diversification of the investments of the Retirement System so as to minimize the risk of large losses, the assets of the System shall be diversified according to the specified target percentages:

Strategic Policy Allocation (approved May 2018)

Asset Class	2018 Target
US Equity	25%
Non-US Equity	25%
Core Fixed-Income	20%
Non-Core Fixed Income	5%
Covered Calls	20%
Real Estate	5%

6. The System should remain fully invested. The allocation goal recognizes that at any time equity and fixed income Investment Managers may have transactional cash on hand, however available cash held by individual Investment Managers should not exceed 5% of their individual portfolios. Core and Non-Core Fixed-Income Investment Managers can exceed 5% of the portfolio for strategic purposes only. Covered Call managers can exceed 5% in order to avoid leveraging their portfolio or due to the timing of option premium receipt.

7. The District will also maintain enough cash as working capital to effectively meet cash flow demands on the system. These funds are not considered investable System assets. These funds will be invested by Staff in accordance with this policy.

8. Financial derivatives may be used within prudent limits to manage risk, lower transaction costs, or augment returns. Leveraged positions are prohibited.

B. Rebalancing Guidelines

As markets move over time, the actual asset mix of the System's portfolio may diverge from the target allocations established by the Board through the asset allocation process.

1. The Board and staff, with the assistance of the General Investment Consultant, will monitor the portfolio's asset allocation relative to target allocations and ranges at least annually.

2. Staff, with the assistance of the General Investment Consultant, will monitor the volatility of the market at least annually utilizing the CBOE Market Volatility Index (the VIX) and other relevant information to identify and measure Turbulent Market Periods. A Turbulent Market Period is defined as one during which the current VIX level is one standard deviation above its three-year moving average.

3. With respect to each asset class group for which the Board has set a target allocation, the Board, in consultation with Staff and its investment consultant, have establish the rebalancing range limitations illustrated in the table entitled Strategic Policy Allocation Rebalancing Ranges – Non-Turbulent Market Periods, incorporated in this policy. These rebalancing range limitations are to be used during market periods that are not defined as Turbulent.

Strategic Policy Allocation Rebalancing Ranges – Non-Turbulent Market Periods

Asset Class	2018 Target	Range	Min	Max
US Equity	25%	-/+ 5%	20%	30%
Non-US Equity	25%	-/+ 5%	20%	30%
Core Fixed-Income	20%	-/+ 3%	17%	23%
Non-Core Fixed Income	5%	-/+ 2%	3%	7%
Covered Calls	20%	-/+ 3%	17%	23%
Real Estate	5%	-/+ 2%	3%	7%

4. The Board, in consultation with staff and its investment consultant, has established wider rebalancing range limitations to be in effect during a Turbulent Market Period with respect to each asset class group for which the Board has set a target allocation. These ranges are illustrated in the table entitled Strategic Policy Allocation Rebalancing Ranges –Turbulent Market Periods and incorporated in this policy.

Strategic Policy Allocation Rebalancing Ranges – Turbulent Market Periods

Asset Class	2018 Target	Range	Min	Max
US Equity	25%	-6% to +6%	19%	31%
Non-US Equity	25%	-6% to +6%	19%	31%
Core Fixed-Income	20%	-4% to +4%	16%	24%
Non-Core Fixed Income	10%	-3% to +3%	7%	13%
Covered Calls	20%	-4% to +4%	16%	24%
Real Estate	5%	-2% to +2%	3%	7%

5. Whenever an allocation to a particular asset class is above or below target, but within the target range as illustrated in the table Strategic Policy Allocation Rebalancing Ranges – Non-Turbulent Market Periods, the Director of Finance or his/her designee may rebalance partially or fully back to target subject to the considerations below. During Turbulent Market Periods the Director of Finance, in his/her discretion, may move to the wider rebalancing ranges for the major classes (US equity, non-US equity, and fixed-income) as outlined in the table Strategic Policy Allocation Rebalancing Ranges – Turbulent Market Periods. Staff will immediately report any such move to wider rebalancing ranges to the Board at its next meeting.

6. The Director of Finance or his/her designee may rebalance a particular asset class partially or fully back to target if:

   a. The assets are publicly traded;
   b. There is an opportunity to rebalance efficiently utilizing cash inflows and cash balances held by managers; and
   c. Trading opportunities can be utilized to the extent that they permit liquidating or adding to positions while limiting trading costs.

   Staff will immediately report any such rebalancing to the Board at its next meeting.

7. The Director of Finance will not be required to reallocate private market asset classes, given the difficulty in managing the allocations to these less liquid asset classes. If the actual allocation for such assets falls outside the predetermined range Staff, in consultation with the General Investment Consultant, will make a recommendation to the Board for bringing the allocation as close as practicable to the policy target within a reasonable time-frame.

V. ELIGIBLE INVESTMENTS

The Board will utilize the following portfolio components to fulfill the asset allocation targets and total System performance goals established elsewhere in this document.

A. Public Equities Portfolio

The Board expects that over the long run, total returns to equities will be higher than the returns to fixed-income securities, but may be subject to substantial volatility over shorter periods. Public equity holdings may include:

1. U.S. Equities

a. Index Funds / Core Stocks — This component of the portfolio will provide broadly diversified, core exposure through index funds to the U.S. equity market, primarily in large capitalization companies. Index funds provide primary liquidity for asset allocation.

b. Large Cap Stocks — As a more defensive portion of the equity portfolio, value stocks, covering the upper range of market capitalization, are expected to outperform the broad market during periods of flat or declining trends, while underperforming during rising markets. Value stocks typically exhibit higher dividend yield, lower Price/Earnings ratios, and lower Price/Book ratios.

c. Large Cap Growth Stocks — Large cap growth stock allocation provides exposure to stocks of large capitalization, whose valuations are more directly tied to future earnings prospects. Often, growth stocks sell at higher prices relative to expected or historical earnings growth. Growth stock volatility tends to be higher than value stocks, although such stocks generally outperform during rising markets while trailing the market in flat or declining periods.

d. Small Cap Stocks — The principal characteristic of the small value stock component is its emphasis in stocks with a market capitalization generally ranging from $200 million - 1.5 billion that are characterized by faster growth and higher long-term returns during periods of flat or declining trends. Value stocks typically exhibit higher dividend yield, lower Price/Earnings ratios, and lower Price/Book ratios.

e. Small Cap Growth Stocks — The principal characteristic of the small cap growth stock component is its emphasis in stocks with a market capitalization generally ranging from $200 - $1.5 billion that are characterized by faster growth and higher long-term returns during rising markets. Growth stock volatility tends to be higher than for value stocks.

f. The objectives for investment of the US equity portfolio are:

   i. Achieve a total return net of management fees which meets or exceeds the Russell 3000 Index;

   ii. Achieve a minimum long-term rate of return which shall exceed the inflation rate as measured by the nationwide Urban Consumers Price Index by 4%;

   iii. The use of futures and options in the domestic equity accounts may be used for hedging purposes as part of their portfolio management strategy and will be incidental to their securities trading activities; and

   iv. In order to minimize the risk associated with investment in the small cap market, it is expected that over the long term the allocation to small cap stocks should correspond to the weight of small cap stocks within the Russell 3000 Index.

g. The equity portfolio shall be diversified. When fully invested in equities or at its normal level of investment, System investment assets should be invested in a minimum of 20 U.S. Equity securities. At no time may a single equity investment exceed 5% of the value of total System assets. Additionally, at no time may the System own more than 5% of any individual company.

2. Non-U.S. Equities

a. Developed Markets — This category includes broadly diversified equity markets outside the U.S. and consequently plays a significant role in diversifying the portfolio. This segment will concentrate on larger companies in established equity markets around the world utilizing a top/down approach.

b. Emerging Markets — This component is made up of equity positions in companies located in emerging countries around the world. Because these are countries which are typically in the early development stages of economic growth, the returns in these countries tend to be higher and more volatile on a year-to-year basis.

c. The objectives for investment of the non-US equity portfolio are:

   i. Achieve a total return net of management fees which exceeds the Morgan Stanley Capital International (MSCI) ACWI x U.S. Index;

   ii. Achieve a minimum long-term rate of return which shall exceed the inflation rate as measured by the nationwide Urban Consumers Price Index by 5%;

iii. Achieve performance results which will rank in the top third of a peer group of international Investment Managers; and

iv. Currency hedging will be permitted as part of a defensive strategy to protect an international equity portfolio.

d. In order to minimize the risk associated with investment in emerging market securities, it is expected that over the long term the allocation to emerging market securities should correspond to the weight of emerging market securities within the MSCI ACWI x US Index.

e. Each international equity portfolio shall be diversified. When fully invested in Non-U.S. Equities or at its normal level of investment, System investment assets should be invested in a minimum of 20 securities. At no time may a single Non-U.S. Equity investment exceed 5% of the value of the total System assets. Additionally, at no time may the System own more than 5% of any individual company.

B. Fixed-Income Portfolio

The primary role of the fixed-income portfolio is to provide a more stable investment return and to generate income while diversifying the System's investment assets. The fixed-income holdings may be comprised of the following segments:

1. Core Fixed Income

a. The Core Fixed Income component will provide core exposure to the U.S. fixed-income market including Treasury and government agency bonds, corporate debt, mortgages and asset-backed securities. This component will be composed primarily of investment grade issues with duration similar to that of an applicable core bond index.

b. The objectives for investment of the core fixed income component of the Fixed-Income portfolio are:

i. Preserve capital and provide a reasonable level of income on a consistent basis;

ii. Earn an average annual return from income and capital appreciation net of management fees which exceeds 50 basis points of the BBg US Aggregate Bond Index;

iii. Achieve performance results that will rank in the top third of fixed income results achieved by a peer group of Investment Managers and counselors;

iv. Achieve a minimum long-term rate of return which shall exceed the inflation rate as measured by the nationwide Urban Consumers Price Index by 3%; and

v. Achieve the above objectives within a time horizon of a minimum of three to five years or approximately a full market cycle.

c. Holdings of securities issued by the United States Government or any of its agencies need not be diversified. Securities of any one issuer with maturities of more than one year, other than the United States Government or any of its agencies, shall not exceed 5% of the value of the total portfolio. Securities of any one issuer of foreign government issues shall not exceed 10% of the value of the total portfolio at the time of purchase. Fixed income managers have the authority to make international investments, not to exceed 20% of their total portfolio. Investment in U.S. dollar denominated bonds of foreign governments, international organizations, foreign corporations, and U.S. subsidiaries of foreign corporations are permitted, however, shall not exceed 35% of the market value of the portfolio.

d. The use of futures and options in the fixed income accounts may be used as part of their portfolio management strategy and will be incidental to their securities trading activities. The resulting aggregate risk profile (volatility) of the portfolio will not be different from that permissible by using securities only.

e. Short (sold) options positions will generally be hedged, either with current portfolio security holdings, other options or futures options. Mortgage derivatives with significant short option characteristics will not exceed 5% of the portfolio, and will generally be a) offset by positions in other mortgage derivatives, or b) offset by other portfolio positions.

f. No derivatives will be executed which will increase the value at risk of the portfolio by more than 25 basis points of the portfolio's market value.

g. Structured notes with significant short options positions or increasing leverage will not be purchased, and in no case will structured notes exceed 5% of portfolio value. Structured Notes issued by the U.S. Government (Treasuries & Agencies) will be considered allowable investments, and are restricted to 25% of portfolio value.

h. Fixed income managers are authorized to use futures and options contracts to supplement their investment capabilities to provide flexibility in managing the fixed income portfolios and reduce the cost of implementing strategies to respond to changing market conditions without incurring the higher transaction costs associated with buying and selling specific securities. These transactions are authorized to enable the manager to reduce the exposure of the portfolio to interest rate changes by reducing or increasing the duration of the portfolio without selling any of the actual holdings.

i. No more than 5% of the portfolio will be invested in original futures margin and options premiums, exclusive of any in-the-money portion of the premiums.

j. Cash can exceed 5% of the portfolio for strategic purposes only.

2. Non-Core Fixed Income

a. Non-Core Fixed Income will primarily consist of U.S. denominated fixed income securities. It is expected that this component of the Fixed-Income portfolio may have a material allocation to below investment grade securities.

b. The objectives for investment of the non-core fixed income component of the Fixed-Income portfolio are:

   i. Diversify the Fixed-Income portfolio, by reducing exposure to increasing interest rates, provide current income, and to earn, over time, an average annual total rate of return in excess of what can be earned with core fixed income securities;

   ii. Provide a high level of income consistent with capital preservation;

   iii. Minimize exposure to interest rate risk, and

   iv. Achieve the above objectives within a time horizon of a minimum of three to five years or approximately a full market cycle.

c. The non-core fixed income component will include non-investment-grade securities. Noninvestment-grade securities are defined as securities rated non-investment-grade by two or more rating agencies. If a bond is rated by two rating agencies, it must be rated below-investment-grade by at least one rating agency. If only one rating agency rates the bond, then a rating below BBB-or Baa3 is considered non-investment-grade. The portfolio may contain unrated bonds. Unrated and/or SEC Rule 144A high yield fixed income instruments without registration rights must not exceed 25% of the market value of the Non-Core Fixed Income portfolio.

d. In the event of a downgrade below single C, or in the case of a default, Manager(s) must notify staff and the General Investment Consultant of the downgrade within two days of the date that the downgrade occurs. In the event of a downgrade below single C, or in the case of a default, if the Manager(s) elects to retain the bond in the portfolio the Manager(s) must inform Staff and the General Investment Consultant of the downgrade within two days of the date that the downgrade occurs, and provide a rationale for continued retention of the holding.

e. There may be instances when debt issues convert into equity-oriented securities (i.e. preferred stock, common stock or warrants to purchase other equity securities). To handle these situations, fixed income managers are allowed to hold equity-oriented positions when received in exchange for, or conversion or cancellation of debt securities held in the portfolio. The manager(s) is required to inform staff and the General Investment Consultant 30 days prior to the conversion when they intend to hold the resulting equity-oriented positions. Equity-oriented securities can be held in the portfolio no longer than six months. The manager(s) is required to provide 30 days advance notice to extend the holding period beyond the original six-month period. No more than 10% of the portfolio shall be invested in equity-oriented securities resulting from fixed-to-equity exchanges.

f. Permissible securities include corporate bonds, convertible bonds, government bonds, government agency bonds, government-sponsored entity bonds (e.g., FNMA), mortgage bonds, asset-backed bonds, emerging market debt, Eurodollar bonds, Yankee bonds, SEC Rule 144A securities, high yield CMBS securities, REIT bonds, zero coupon bonds, bank loans (rated or unrated), preferred, trade finance related investments, structured notes and financial futures. Allowable emerging countries are those investable markets that are open for foreign investments. Investment in U.S. dollar denominated bonds of foreign governments, international organizations, foreign corporations, and U.S. subsidiaries of foreign corporations are permitted, however, shall not exceed 35% of the market value of the portfolio.

g. Derivatives used for substitution, risk control, and arbitrage strategies are permitted. Use of derivatives for speculation is prohibited. No securities shall be purchased on margin or sold short other than any initial and maintenance margin required in connection with futures transactions which may be used only for risk management purposes.

h. For prudent diversification, the portfolio shall have a minimum of 25 issues. No more than 10% of the lesser of cost or market value of the portfolio will be invested in any one issuer with the exception of U.S. Government, U.S. Government Agency, and bonds of U.S. Government sponsored entities.

i. Cash can exceed 5% of the portfolio for strategic purposes only.

C. Covered Calls Portfolio

The Covered Calls Portfolio is an equity-based asset class that is designed to provide some incremental income during flat to modestly rising markets, while providing some level of downside protection during market selloffs. The Board expects that over the long run, Covered Calls will produce total returns in line with U.S. public equity with less volatility, but will vary markedly from U.S. public equity during market extremes. Under a bull/recovery market scenario, Covered Calls generally underperform U.S. public equity, but still tend to produce substantial upside returns. During a bear/down market scenario, Covered Calls are likely to decline in value, but by a lesser degree than U.S. public equity, providing investors with some principal protection. As a result of these attributes, Covered Calls tend to compound at a smoother rate than U.S. public equity.

a. The objectives for investment of the covered call portfolio are:

  v. For active managers, the performance objective is to outperform the benchmark, net of all fees, over 3-5 years;

  vi. For replication managers, the performance objective is to match the benchmark, gross of fees, over 3-5 years;

vii. The Covered Calls class shall have a benchmark index of the Chicago Board Options Exchange S&P 500 BuyWrite Index (the "BXM Index");

viii. Derivatives used for risk control and income are permitted. However, the notional value of the options may not exceed the total value of the underlying equity portfolio; and

ix. All holdings will be of sufficient size and held in issues that are traded actively enough to facilitate transactions at minimum cost and accurate market valuation.

b. The covered call portfolio should consist of three components:

i. underlying equity,

ii. call options, and

iii. cash.

c. The underlying equity should be designed to gain broad market exposure. This can be accomplished through individual stock ownership, ETFs, or derivatives.

d. No purchase should be made that causes an individual security to exceed 5% of the underlying equity portfolio, where those securities constitute less than 3% of the current market capitalization of the S&P 500 Index, unless an ETF is employed.

e. Call options may be used to provide income and risk control.

f. The notional value of the options may not exceed the total value of the underlying equity portfolio.

g. Call options may only be written on domestic stock indices, broad market or sector ETFs, and individual domestic stocks that are held in the underlying portfolio.

h. Managers may purchase back options in order to close out positions.

i. Cash may exist as an intermediary component from additional funding or option premiums. The balance should not normally exceed 5% of the manager's total portfolio.

j. Leverage may not be used.

D. Real Estate Portfolio

The Real Estate portfolio will consist primarily of public and private real estate interests such as equity (ownership) and/or fixed income participation in commercial, industrial, or residential properties. Investments may include interests in mortgages pools secured by loans of underlying properties. Real estate is expected to provide portfolio diversification due to real estate's low correlation with returns on equities and fixed-income.

a. The objectives for investment of the real estate portfolio are:

   i. Attractive Risk-Adjusted Returns: To obtain superior risk-adjusted returns by taking advantage of the inefficiencies of real estate as compared to other asset classes. Active management, value creation and opportunistic strategies, as well as the prudent use of third-party debt, are approved methods for generating expected returns;

   ii. Increased Program Diversification/Reduced Program Risk: To use real estate to enhance overall Program diversification and, in turn, reduce overall Program risk, given the historically low to negative return correlations that exist between real estate and other asset classes;

   iii. Significant Current Cash Yields: Significant cash return based primarily on current rental income. In general, as a portion of total investment return, higher levels of current income are expected from core and value than opportunistic investments; in contrast, higher levels of appreciation are expected from opportunistic than value and core investments;

   iv. Inflation-Hedge: To make investments primarily in real estate equity investments that are likely to provide a reasonable hedge against price inflation; and

   v. Preservation of Principal: To achieve meaningful risk-adjusted returns without undue exposure to loss of investment principal.

b. The public real estate portfolio shall be diversified. When fully invested in exchange traded Real Estate Investment Trusts (REITs) or at its normal level of investment, a minimum of 20 securities should be held. At no time may a single REIT investment exceed 5% of the value of the total System investment assets.

c. If the Retirement System owns more than 10 percent of a Real Estate Investment Trust (REIT), the Retirement System may be required to treat a portion of the REIT dividends as Unrelated Business Taxable Income (UBTI) and report and pay income taxes on that income. Staff and the Investment Consultant shall monitor prospective and existing REIT investments to determine if the Retirement System's ownership in any REIT is greater than 10 percent. If staff and the Investment consultant determine that the Retirement System's ownership of any REIT is greater than 10 percent, staff shall address the potential tax implications.

~~c.~~d. Due to their limited liquidity, private real estate investments shall be approved by the Board only on a case-by-case basis. Agreements with private real estate Investment Managers shall include specific Investment Objectives and Policies that must be approved by the Board prior to execution of the agreement.

E. Cash

Cash may be invested in:

1. Treasury and Agency instruments with maturities no longer than 90 days;
2. AAA-rated money market funds invested exclusively in Treasury and Agency instruments;
3. Short Term Investment Funds (STIF) managed by the Master Custodian; and
4. Local Agency Investment Fund (LAIF).

VI. INVESTMENT MANAGER POLICY

A. Introduction

1. The Board will retain external Investment Managers to manage portfolios using a specific style and methodology. Managers will have authority for determining investment strategy, security selection, and timing subject to the Policy and Manager Guidelines and legal restrictions or other Board direction. Performance objectives will also be developed for each manager.

2. The performance of each Investment Manager's portfolio will be monitored and evaluated on a regular basis relative to each portfolio component's benchmark return and, if available, relative to a peer group of managers following similar investment styles.

3. Investment actions are expected to comply with "prudent person" standards.

4. Each Investment Manager will be expected to know the practices of the Board and comply with those practices. It is each manager's responsibility to identify policies that have an adverse impact on performance and to initiate discussion with staff toward possible improvement of the practices of the Board.

5. The Board will also review each Investment Manager's adherence to its investment policy, and any material changes in the manager's organization (e.g. personnel changes, new business developments, etc.). The Investment Managers retained by the Board will be responsible for informing the Board by communication with staff of such material changes.

6. All bond and stock business shall be executed seeking best execution. "Best execution" means seeking to achieve the most favorable price and execution available, having in mind the System's best interest, and considering all relevant factors. These factors include price, the size of the transaction, the nature of the market for the security, current market levels and trends, the reputation, experience and financial stability of the broker involved and the quality of service rendered by the broker in other transactions. Where feasible, the stock or bonds trades shall be distributed to brokerage firms where the Administrative-Investment Committee has established a commission recapture directed brokerage program.

B. Manager Selection

The selection of Investment Managers shall be accomplished in accordance with all applicable Local, State and Federal laws and regulations. Each Investment Manager, consultant and custodian shall function under a formal contract that delineates responsibilities and appropriate performance expectations.

C. Manager Authority

The Board's Investment Managers shall direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with this document; Board practices or direction; applicable Local, State and Federal statutes and regulations; and individual management investment plans and executed contracts.

D. Limitations on Concentrations of Single Managers/Firms

In order to minimize any potential risk associated with large concentrations of System investment assets being managed by a single firm, any single manager/firm, when all mandates associated with that manager/firm are aggregated, shall represent no more than 25% of the total System investment assets. Managers of passively-managed, broadly-diversified, mandates may exceed the 25% threshold. If any single manager/firm exceeds this limitation, the Investment Consultant and staff shall provide the Board its solution to reallocate funds from that manager/firm within the portfolio to reduce the concentration within a reasonable time period.

E. Investment Manager Guidelines

In accordance with the Investment Objectives stated above, the Board shall provide each of the System's Investment Managers with a set of investment guidelines as stated in section V. Eligible Securities. These guidelines shall specify eligible investment, minimum diversification standards, and applicable investment restrictions necessary for diversification and risk control. Managers do not have authority to depart from their guidelines.

F. Investment Manager Performance Measurement

1. The Board has the right to evaluate investment performance at any time on an ongoing basis using investment performance criteria relative to specific benchmarks over varying periods of time by asset class. Performance results for each Investment Manager shall be calculated and evaluated at least quarterly.

2. Each Investment Manager shall be evaluated against factors including the following:

    a. Active Investment Managers in each asset class will be expected to:

        i. outperform passive benchmarks listed in this policy in the table titled Asset Class Performance Benchmarks related to both their asset class and their investment style; and

        ii. outperform the median manager in their investment style in the universe employed by the System's investment performance measurement consultant over full market cycles (usually3-5 years).

b. Qualitative indicators will be evaluated such as:

  i. Changes in investment strategy and style;

  ii. Instability of Investment Manager personnel and organization;

  iii. Unusual portfolio activity, trading volume, and execution costs

  iv. Risk and performance characteristics not logically explainable in terms of the published style or out-of-step with manager's style peer group; and

  v. Failure to comply with all investment guidelines.

c. None of the qualitative indicators may be taken as conclusive evidence of inconsistency with this policy. Such a finding would be based upon the facts and circumstances of each situation as described below.

3. Any Investment Manager not meeting performance objectives will be subject to the manager Watch List criteria set forth below.

4. *Watch Status of an Investment Manager/Portfolio*

Watch status serves two basic purposes. First, it is a major decision step the Board takes to begin transitioning from one Investment Manager to another Investment Manager. Second, it allows the Investment Manager on watch status time to take any corrective action (or justify its changing condition) before the Board elects to terminate its existing relationship with the Investment Manager.

a. An Investment Manager/portfolio is placed on "watch" status if at least one of two events occurs:

  i. the portfolio's investment performance does not meet one of the criteria found in the following table; or

  ii. after the Manager Performance has been measured as described above staff and/or the investment consultant recommends to the Board that an Investment Manager is a candidate for watch status.

The Board approves or disapproves placing the Investment Manager/portfolio on "Watch" Status.

b. If the Board approves the recommendation to place a specific Investment Manager on watch status, staff will issue a formal notification to the Investment Manager. This formal notification of watch status will include, but is not necessarily limited to, the following items:

  i. Meeting date when the Board approved the recommendation to place the Investment Manager on watch;

ii. Reason(s) for placing the Investment Manager on watch status; and

iii. Conditions for being released from watch status (see ***Manager "Watch" Criteria*** table below).

c. Typically, once a manager is placed on watch status, it should be able to exhibit improvement within a time frame of twelve to twenty four months, if not sooner.

d. Private Real Estate Funds -- Private real estate funds are primarily invested in assets that are largely illiquid and generally have limited peer sets. In addition, these assets generally have imperfect benchmarks by which performance, according to vintage year and strategy, can be assessed. Funds are closely monitored for factors including, but not limited to:

i. style drift,
ii. key-person and other management/organizational changes,
iii. performance relative to original underwriting,
iv. fees,
v. transparency, and
vi. J-curve impact.

Underperforming fund managers will be brought to the Board's attention as soon as the consultant and staff agree the manager should be placed on watch. The termination and/or replacement of private real-estate managers is commonly more challenging than terminating managers that operate in the public markets. Terminating these types of managers can exacerbate poor performance beyond that which has already been experienced. For example, in many instances the only exit option available is via secondary sales of interests, which are often transacted at an appreciable discount to existing net asset values.

Manager "Watch" Criteria*			
Asset Class	**Short-term (Rolling 12 month periods)**	**Medium-term (Rolling 36 month periods)**	**Long-term (60+ Months)**
U.S. Equity –Active	Portfolio Return[1] < Benchmark Return -3.5%	Portfolio Annualized Return[1, 2] < Benchmark Annualized Return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
U.S. Equity –Passive	Tracking Error[3] > 0.03%	Tracking Error[3] > 0.25% for 6 consecutive months	Portfolio Annualized Return[1, 2] < Benchmark Annualized Return -0.40% for 6 consecutive months
Non-U.S. Equity	Portfolio Return[1] < Benchmark Return -4.5%	Portfolio Annualized Return[1, 2] < Benchmark Annualized Return -2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Covered Calls – Active	Portfolio Return[1] < Benchmark Return -3.5%	Portfolio Annualized Return[1, 2] < Benchmark Annualized Return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Covered Calls – Replication	Portfolio Return[1] < Benchmark Return -3.5%	Portfolio Annualized Return[1, 2] < Benchmark Annualized Return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Fixed-Income – Core – Active	Portfolio Return[1] < Benchmark Return -1.5%	Portfolio Annualized Return[1, 2] < Benchmark Annualized Return-1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months
Fixed-Income – Core – Passive	Tracking Error[3] > 0.25%	Tracking Error[3] > 0.20% for 6 consecutive months	Portfolio Annualized Return[1, 2] < Benchmark Annualized Return -0.30% for 6 consecutive months
Fixed-Income – Non-Core	Portfolio Return[1] < Benchmark Return -4.5%	Portfolio Annualized Return[1, 2] < Benchmark Annualized Return -2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months

*Notes:

- Benchmarks are presented in this policy under table titled **Asset Class Performance Benchmarks.**
- All portfolio returns are gross of manager fees.

Footnotes:

[1] Return discounts from a benchmark return based on 2/3 of the typical tracking error estimates of the specified type of portfolio.

[2] Annualized Return is the average annual return of either the portfolio or its benchmark.

[3] Tracking error is a measure of the volatility of the average annual difference between the portfolio's return and the benchmark's return.

5. *Release from Watch Status*

   a. Investment Managers that show indications of an improvement, as reviewed by the investment consultant and determined by the Board, in one or more of the factors described earlier, may be released from watch status. Examples of improvements warranting a change in status are:

      i. Improved investment performance in approximately twenty four months (or less) from the time of being placed on watch status;

      ii. Investment style characteristics return to, and remain at, levels originally agreed upon; and

      iii. Qualitative factors (such as organizational structure stabilizes, personnel adjustments, compliance requirements, etc.) are satisfactorily addressed.

   b. To release an Investment Manager from watch status, the Board must formally take action to do so. This action should be supported by documentation (produced by the investment consultant) similar in format to the Portfolio Review described above. This document should highlight original reasons for the watch status and discussion of how the Investment Manager has addressed these issues and warrants release from watch status.

6. *Replacement/Termination*

   To terminate and/or replace an Investment Manager, the Board must formally take action to do so. This action should be supported by documentation (produced by staff and/or investment consultant). This document shall highlight original reasons for the watch status and discussion of continued developments during watch status that led to the termination/replacement recommendation.

G. Securities Lending

An agreement may be made with the System's bank custodian or other third-party custodian retained by the Board to loan securities on behalf of the Retirement System. Securities that are loaned shall be fully collateralized in cash or other acceptable securities having at least 102% of the market value of the loaned security.

H. Commingled Group Trusts

Investments may be made in commingled group trusts. When the group trust is tax exempt, to meet the requirements of IRS Ruling 8 1-100 the declaration of trust governing each such group trust shall be deemed adopted as part of EBMUD Employees' Retirement System plan.

I. Derivatives

Investment in "derivatives" is permitted, however, leveraged derivatives or purchase of derivatives on credit is not permitted. Credit risk, market risk and legal risk will be determined by the Administrative-Investment Committee to be appropriate before any investment is made in a derivative product. For these purposes, derivatives shall be defined as securities whose return or market value is derived from another security or market index.

J. Currency Hedging

With the approval of the Administrative-Investment Committee, Investment Managers may hedge the currency risk associated with securities they manage for the Retirement System. Hedging may be accomplished through mechanisms approved by staff, including, but not limited to, currency futures contracts, currency purchases, and currency options. Approval to hedge must be obtained in advance and may be given orally or in writing. Managers need not obtain approval for each individual investment as long as the investment vehicle has been approved.

K. Proxy Voting of Securities

Investment Managers may be given the authority to vote proxies on behalf of the Retirement System. Investment Managers must vote in accordance with Board policy.

L. Transaction with Retirement Board Members, Staff, and Consultants to the Employee Retirement System

Retirement Board Members, staff, and consultants to the System, if any (including but not limited to investment officers, retirement administrators, and legal counsel) are prohibited from selling investment products to the System or any other public retirement system while they are Members of the System Board, or staff, or consultants to the System, and for two years after leaving the Board, or employment with the District, or serving as consultants to the System.

VII. POLICY FOR THE USE OF PLACEMENT AGENTS

In accordance with Sections 20098, 31528, 7508.57513.8 7513.85, 7513.9, and 7513.95 of the Government Code the System shall require the specific and timely disclosure of payments and compensation to Placement Agents[1] in connection with the System's investments. This Policy is intended to apply broadly to all investment contracts made by the System. The goal of this Policy is to help ensure that the System investment decisions are made by the Board solely on the merits of the investment opportunity in accordance with the Board Members' fiduciary responsibility and to avoid the appearance of undue influence on the Board or illegal pay-to-play practices in the award of investment related contracts.

A. Manager Placement Agent Disclosures

1. Each Manager shall provide to the System in writing the required information listed below within 45 days of the initiation of investment discussions between the Manager and the System but in any event prior to contract execution. The Manager must notify the System staff of any changes to any of the information required within 14 calendar days of the Manager knowing of the change(s).

    a. Disclosure of Payments Made to Placement Agents

    i. A written statement of whether the Manager or any of its principals, employees, agents or affiliates has compensated or agreed to compensate any person or entity to act as a Placement Agent in connection with the System's investments;

    ii. The name of the Placement Agent, and resumes of every officer, partner and principal of the Placement Agent. The resumes shall include educational history, professional designations, regulatory licenses and investment and work experience;

    iii. Description of any and all compensation paid or agreed to be paid to the Placement Agent, including payment to employees of the Manager who are retained in order to solicit, or who are paid based in whole or in part upon, an investment from the System;

    iv. Description of the services rendered or the services expected to be performed by the Placement Agent and a list of the prospective clients for which such Placement Agent is utilized;

    v. Copies of all agreements between the Manager and the Placement Agent;

[1] "Placement Agent" includes any person or entity hired, engaged, retained by, acting on behalf of or serving for the benefit of an Investment Manager or on behalf of another Placement Agent as a third-party marketer, finder, solicitor, marketer, consultant, broker, or other intermediary to market, solicit, obtain access to the System, and/or raise money or investments either directly or indirectly from the System. Notwithstanding the foregoing, an individual who is an employee, officer, director, equity holder, partner, member or trustee of an Investment Manager and who spends one-third or more of his or her time, during a calendar year, managing the securities or assets owned, controlled, invested or held by the Investment Manager is not a Placement Agent.

vi. Name of the regulatory agencies the Placement Agent or any of its affiliates are registered with, such as the Securities and Exchange Commission (SEC), the Financial Industry Regulatory Association (FINRA), or any similar regulatory agency; proof and details of such registration shall be included, or an explanation as to why no registration is required; and

vii. A statement as to whether the Placement Agent, or any of its affiliates, is registered as a lobbyist with any state or national government.

b. Disclosure of Relationships to the Board; Campaign Contributions

i. Full disclosure of any connection between the Placement Agent or the Manager and the System, including whether anyone receiving compensation or who will receive compensation with respect to an investment from the System from the Placement Agent or the Manager is: a current or former System Board Member, System employee, or System consultant; a member of the immediate family of anyone connected to or formerly connected to the System;

ii. Full disclosure of the donations made by the Placement Agent or the Manager during the prior 24-month period to any organization (including contributions to political campaign funds and donations to non-profits) in which any person listed in Paragraph 2.a is an officer, employee, or member of the Board or Advisory Board (or similar body). Additionally, any subsequent donations made by the Placement Agent or the Manager to any such organization during the time the Placement Agent or the Manager is receiving compensation in connection with the System's investment shall also be disclosed; and

iii. Full disclosure of the names of any current or former System Board Members, System employees or the System consultants who suggested the retention of the Placement Agent.

2. All Investment Managers must provide written confirmation that they are in compliance with this Policy and complete form as required by EBMUDERS.

B. <u>Responsibilities of Staff and Consultants</u>

1. At the time that investment discussions between a Manager and the System for a prospective investment commence, Staff is responsible for providing Managers and Placement Agents with a copy of this Placement Agent Policy.

2. Staff and Consultants must confirm that the applicable Placement Agent disclosures have been received prior to the completion of due diligence and completion of any recommendation to proceed with the decision to invest with the Manager. For new contracts and amendments to existing contracts, the System will:

a. Stop investment negotiations with a Manager who refuses to disclose the required information.

b. Decline the opportunity to retain or invest with a Manager who has used or intends to use a Placement Agent who is not registered with the SEC, FINRA, or any similar regulatory agency and cannot provide an explanation as to why no registration is required.

3. Staff and Consultants will assist legal counsel as necessary for securing in the final contract terms and side letter agreements between the System and the Manager, including but not limited to, the following:

   a. The Manager's agreement that it has complied with and will continue to comply with this Policy.

   b. The Manager's representation and warranty that it will notify the System Staff of any changes to any of the information required above within 14 calendar days of when the Manager knows or should have known of the change(s).

4. At any meeting where an investment decision with a Manager will be considered, Staff and Consultants must notify the Board of the name(s) of any Placement Agent(s) used by the Manager in connection with the proposed investment, and any campaign contributions or gifts reported by each Placement Agent.

5. Staff must maintain records of all information disclosed to the System in accordance with this policy, and provide the Board with notice of any violation of this policy as soon as practicable.

C. Responsibilities of Counsel

Legal counsel to the System must review the final contract terms and side letter agreements between the System and the Manager, including all requisite agreements and representations and warranties by the Manager, for compliance in accordance with this Policy for the Use of Placement Agents.

D. Responsibilities of the Board

The Board must review all violations of this policy reported by Staff, consider whether each violation is material, and consider whether to prohibit that Manager and/or Placement Agent from soliciting new investments from the System for a period of five years from the date of violation**.** However, the Retirement Board may reduce this prohibition, by majority vote, at a public session upon a showing of good cause that such action is consistent with the Board's fiduciary duties.

Appendix I – GLOSSARY OF INVESTMENT TERMS

144(a) Securities – 144a securities are in concept "semi-private placement securities," that are normally traded by sophisticated institutional investors with limited financial information on the issuing company. SEC rule 144a exempts issuers from SEC registration requirements. While not legally required to file with the SEC, issuers normally do provide some sort of documentation describing the issue and financial information about the issuing company.

Accrual Basis Accounting – As opposed to cash basis accounting, this values assets based upon accrued changes in values, not actual cash flows. For example, dividends are included in the portfolio value (i.e. accrued) as of the ex-dividend date, rather than the payment date (or the declaration date).

Active Management – A form of investment management which involves buying and selling financial assets with the objective of earning positive risk-adjusted returns.

Alpha – A statistical measurement to determine whether a portfolio of securities in which a fund has invested is priced as would be expected, given the fund's beta. If the alpha of a fund is zero, the portfolio is priced as would be expected. If its alpha is greater than zero, the portfolio is priced higher than could be expected, and vice versa.

Alternative Investments – These generally refer to institutional blind pool limited partnerships/LLCs which make private debt and equity investments in privately held companies, as well as hedge funds and other publicly traded derivatives-based strategies.

American Depository Receipts (ADRs) – Financial assets issued by U.S. banks that represent indirect ownership of a certain number of equity shares in a foreign firm. ADRs are held on deposit in a bank in the firm's home country.

American Shares – American shares are securities issued in the US by a transfer agent acting on behalf of a foreign firm.

Asset Allocation – The process of determining the optimal allocation of a fund's portfolio among broad asset classes.

Asset Allocation Risk – The risk that a non-optimal asset allocation will be undertaken which does not meet the fund's return and risk targets.

Balanced Fund – An investment strategy which is a combination of equities and bonds.

Basis Point – 1/100th of 1%.

BBg Aggregate Index (BBg 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.

BBg US 1-3 Yr. Govt/Credit Index – see BC US 1-3 Yr. Govt/Credit Index

BBg 1-5 Yr. US High Yield Cash Pay Index – see BC 1-5 Year US High Yield Cash Pay Index

BBg 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.

BBg 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.

BBg 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.

BBg 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).

BBg US 1-3 Year Government/Credit Index – measures the performance of investment-grade corporate debt and sovereign, supranational, local authority and non-U.S. agency bonds that are U.S. dollar denominated and have a remaining maturity of greater than or equal to one year and less than three years.

BBg 1-5 Year US High Yield Cash Pay Index – A component of the U.S. Corporate High-Yield Bond Index, which covers the universe of fixed-rate, non-investment grade corporate debt that have a remaining maturity of greater than or equal to one year and less than five years.

BBg 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.

Benchmark – The standards against which investment performance is measured. An ideal benchmark is (1) clearly defined; (2) representative of the targeted strategies, opportunities, or activities; (3) investable; and (4) measurable. Good benchmarks meeting these criteria are available for virtually all traditional asset classes.

Benchmark Portfolio – A portfolio against which the investment performance of an investment manager can be compared for the purpose of determining the value-added of the manager. A benchmark portfolio must be of the same style as the manager, and in particular, similar in terms of risk.

Best Execution – This is formally defined as the difference between the strike price (the price at which a security is actually bought or sold) and the "fair market price," which involves calculating opportunity costs by examining the security price immediately after the trade is placed. Best execution occurs when the trade involves no opportunity cost, for example when there is no increase in the price of a security shortly after it is sold.

Beta – A statistical measure of the volatility, or sensitivity, of rates of return on a portfolio or security in comparison to a market index. The beta value measures the expected change in return per one percent change in the return on the market. For example, if the beta of a portfolio is 1.5, a 1 percent increase (decrease) in the return of the market will result, on average, in a 1.5 percent increase (decrease) in the return of the portfolio.

Boardroom Risk – The risk that Trustees will not ride out short term volatility (and therefore wind up altering a sound long-term strategy) due to pressure put on them in their role as Trustees.

Bottom-up Analysis – An approach to valuing securities which first involves analyzing individual companies, then the industry, and finally the economy and overall capital market.

BXM Covered Calls Index – see CBOE S&P 500 Buy Write Index

Capital Asset Pricing Model – An equilibrium model of asset pricing which states that the expected return of a security increases as the security's sensitivity to the market (i.e. beta) increases. That is, as the expected return of a security or portfolio increases (decreases), risk increases (decreases) as well.

Capitalization-weighted Market Index – A method of calculating a market index where the return of a security (or group of securities) is weighted by the market value of the security (or group of securities) relative to total value of all securities.

Cash Sweep Accounts – A money market fund into which all new contributions, stock dividend income and bond interest income is placed ("swept") for a certain period of time. At regular intervals, or when rebalancing is necessary, this cash is invested in assets in line with the asset allocation stipulated in the IPS.

CBOE – Chicago Board Options Exchange – Chicago Board Options Exchange (CBOE), the largest U.S. options exchange and creator of listed options, continues to set the bar for options trading through product innovation, trading technology and investor education. CBOE offers equity, index and ETF options, including proprietary products, such as S&P 500 options (SPX), the most active U.S. index option, and options on the CBOE Volatility Index (VIX), the world's barometer for market volatility.

CBOE S&P 500 Buy Write Index – is a passive total return index based on (1) buying an S&P 500 stock index portfolio, and (2) "writing" (or selling) the near-term S&P 500 Index (SPXSM) "covered" call option, generally on the third Friday of each month. The SPX call written will have about one month remaining to expiration, with an exercise price just above the prevailing index level (i.e., slightly out of the money). The SPX call is held until expiration and cash settled, at which time a new one-month, near-the-money call is written.

CBOE Market Volatility Index (VIX) –measures the market's perceived future volatility (read: risk and uncertainty), most often associated with a fear that the market will drop. More specifically, the VIX measures the market's expectation of future volatility implied by S&P 500 stock index (SPX) option prices. While technically it does not measure the probability that the market is going to drop in the near future, at times it does represent a measure of fear that it will.

CFA Institute – The CFA Institute is the umbrella organization for the two large investment management advisers' groups, the Institute of Chartered Financial Analysts and the Financial Analysts Federation. This organization administers the annual examinations for the CFA designation and also publishes industry guidelines for performance measurement reporting and calculations. The CFA Institute instituted a standardized performance reporting format on January 1, 1993.

Commingled Fund – An investment fund which is similar to a mutual fund in that investors purchase and redeem units that represent ownership in a pool of securities.

Commission Recapture – An agreement by which a plan sponsor earns credits based upon the amount of brokerage commissions paid. These credits can be used for services which will benefit the plan, such as consulting services, custodial fees, or hardware and software expenses.

Convertible Bond – A bond which may, at the holder's option, be exchanged for common stock.

Core Bond – A fixed income investment strategy which constructs portfolios to approximate the investment results of the BC Government/Corporate Bond Index with a modest amount of variability in duration around the index. The objective is to achieve value added from sector or issue selection.

Core Equity – An investment strategy where the portfolio's characteristics are similar to that of the S&P 500 Index, with the objective of adding value over and above the index, typically from sector or issue selection.

Correlation Coefficient – A statistical measure similar to covariance, in that it measures the mutual variation between two variables. The correlation coefficient is bounded by the values -1 and +1.

Covariance – A statistical measure of the mutual variation between two variables.

Current Yield – The annual dollar amount of coupon payments made by a bond divided by the bond's current market price.

Defensive – A fixed income investment strategy where the objective is to minimize interest rate risk by investing only in short to intermediate term securities. The average portfolio maturity is typically two to five years.

Derivative – A financial derivative is a security which derives its value from a more fundamental financial security such as a stock or bond. For example, the value of a stock option depends upon the value from the underlying stock. Because the stock option cannot exist without the underlying stock, the stock option is derived from the stock itself.

Dividend Yield – The current annualized dividend paid on a share of common stock, expressed as a percentage of the stock's current market price.

Duration – A measure of the average maturity of the stream of interest payments of a bond. The value of a given bond is more sensitive to interest rate changes as duration increases, i.e. longer duration bonds have greater interest rate volatility than shorter duration bonds.

Dollar-weighted Measurement – In calculating summary statistics, a process by which performance measures are weighted by the dollar amounts of assets in each time period.

Earnings Per Share – A firm's reported earnings divided by the number of its common shares outstanding.

Economically-targeted Investment – Investments where the goal is to target a certain economic activity, sector or area in order to produce corollary benefits in addition to the main objective of earning a competitive risk-adjusted rate of return.

Efficient Market – A theory which claims that a security's market price equals its true investment value at all times since all information is fully and immediately reflected in the market price.

Efficient Portfolio – A portfolio which offers maximum expected return for a given level of risk or minimum risk for a given level of expected return.

ERISA – The Employee Retirement Security Act, signed into law in September 1974. ERISA established a strict set of fiduciary responsibilities for corporate pension funds, and some states have adopted the ERISA provisions for public plans. It is recommended that public pension plans use the ERISA regulations as guidelines for managing the plan's assets in a procedurally prudent manner.

Eurobond – An international bond denominated in a currency other than that of the country where the bond is issued.

Exchange Traded Funds (ETF's) – ETF's are registered, open-ended unit investment trusts that invest in a basket of stocks designed to track the performance of a given index. However, like a closed-end fund, investors buy shares in ETF's from another shareholder on the open market rather than from a fund company.

Exculpatory – A clause or set of regulations, for example the "safe harbor rules", which generally frees Trustees from responsibility and liability.

Extended Maturity – A fixed income investment strategy where average portfolio maturity is greater than that of the Barclays Capital Government/Corporate Bond Index. Variations in bond portfolio characteristics are made to enhance performance results.

Fiduciary – Indicates the relationship of trust and confidence where one person (the fiduciary) holds or controls property for the benefit of another person. For example, the relationship between a Trustee and the beneficiaries of the trust.

FTSE – is a British provider of stock market indices and associated data services, wholly owned by the London Stock Exchange.

FTSE NAREIT All Equity REITs Index – contains all tax-qualified REITs with more than 50 percent of total assets in qualifying real estate assets other than mortgages secured by real property that also meet minimum size and liquidity criteria.

Funding Risk – The risk that anticipated contributions to the plan will not be made.

Geometric Returns – A method of calculating returns which links portfolio results on a quarterly or monthly basis. This method is best illustrated by an example, and a comparison to *arithmetic returns*, which does not utilize a time link. Suppose a $100 portfolio returned +25% in the first quarter (ending value is $125) but lost 20% in the second quarter (ending value is $100). Over the two quarters the return was 0%, and the method of calculating the geometric return would indicate this. However, the arithmetic calculation would simply average the two returns: (25%)(.5) + (20%)(.5) = +2.5%.

Global Equity – Managers who invest in both foreign and domestic equity securities but excludes regional and index funds.

Growth Equity – Managers who invest in companies that are expected to have above average prospects for long-term growth in earnings and profitability.

High Yield – A fixed income investment strategy where the objective is to obtain high current income by investing in lower rated, higher default-risk fixed-income securities. As a result, security selection focuses on credit risk analysis.

Index Fund – A passively managed investment in a diversified portfolio of financial assets designed to mimic the performance of a specific market index.

Interest Rate Risk – The uncertainty in the return on a bond caused by unanticipated changes in its value due to changes in the market interest rate.

Intermediate – A fixed income investment strategy where the objective is to lower interest rate risk by investing only in intermediate-term securities. The average portfolio maturity is typically five to seven years.

J Curve – The J curve is used to illustrate the historical tendency of private real estate funds to deliver negative returns in early years and investment gains in the outlying years as the portfolio matures. In the early years of the fund, a number of factors contribute to negative returns including management fees, property improvement and maintenance. Over time the fund will begin to experience unrealized gains (through increases in property value) followed eventually by events in which gains are realized (e.g., rising rents, property sells, leveraged recapitalizations). The J-curve impact is larger for value-add and opportunistic funds relative to core funds.

Liquidity – In general, liquidity refers to the ease by which a financial asset can be converted into cash. Liquidity is often more narrowly defined as the ability to sell an asset quickly without having to make a substantial price concession.

Liquidity Risk – The risk that there will be insufficient cash to meet the fund's disbursement and expense requirements.

Lost Opportunity Risk – The risk that through inappropriate market timing strategies a fund's portfolio will miss long-run market opportunities.

Manager Search – The selection of specific managers following the manager structure.

Manager Structure – The identification of the type(s) of managers to be selected within each broad class of assets.

Marked to the Market – The daily process of adjusting the value of a portfolio to reflect daily changes in the market prices of the assets held in the portfolio.

Market Risk – See Systematic Risk.

Market Timing – A form of active management that shifts funds between asset classes based on short-term expectations of movements in the capital markets.

Merrill Lynch 91-Day Treasury Bill Index – This index is computed by linking monthly the return on 91-day Treasury Bills. The Treasury Bill rate is generally accepted as a proxy for the return on a risk-free asset.

Money Markets – Financial markets in which financial assets with a maturity of less than one year are traded.

MSCI – Morgan Stanley Capital International, **-** MSCI Inc. is a US-based provider of equity, fixed income, and hedge fund stock market indexes, and equity portfolio analysis tools. It is best known for publishing the MSCI World and MSCI EAFE Indexes

MSCI ACWI xUS Index – MSCI ACWI (All Country World Index) Free excluding US (gross dividends): is a free-floating adjusted market capitalization index designed to measure equity performance in the global developed and emerging markets. As of April 2002, the index consisted of 49 developed and emerging market country indices.

MSCI Europe, Australia, Far East ("EAFE") Index – The EAFE Index consists of stocks within the world's major equity markets. The EAFE index typically includes the larger companies in each market, around 60% of each market by value and covers over 1000 companies in total. In addition to national price indices, regional indexes (e.g., Europe) and industry indexes (e.g., automobiles) are included. The reports also contain key valuation data for the markets, such as price-to-earnings ratios and dividend yields. The index is based on market capitalization and, as of May 2005, contained 21 countries.

MSCI EAFE plus Canada Index – Is a free float-adjusted market capitalization index that is designed to measure developed market equity performance similar to the MSCI EAFE. This index excludes the US, but includes Canada.

MSCI Emerging Markets Free – This index contains securities of the following countries which are available to all investors regardless of local status: Argentina, Brazil, Chile, Colombia, Greece, India, Indonesia, Israel, Jordan, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Portugal, South Africa, Sri Lanka, Thailand, Turkey and Venezuela.

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 (NPI) – 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.

NCREIF – NCREIF is a not-for-profit trade association that serves its membership, and the academic and investment community's need for improved commercial real estate data, performance measurement, investment analysis, information standards, education, and peer group interaction.

Passive Management – For a given asset class, the process of buying a diversified portfolio which attempts to duplicate the overall performance of the asset class (i.e. the relevant market index).

Performance Attribution – The identification of the sources of returns for a security or portfolio over a particular time period.

Preferred Stock – Preferred stocks actually behaves as a fixed-income investment because the dividend payment is fixed. However, unlike bonds, the dividend payment is not legally binding.

Price-earnings Ratio – A firm's current stock price divided by its earnings per share.

Private Placement – The direct sale of a newly issued security to one or a small number of large institutional investors.

Proxy Voting – A written authorization given by a shareholder to someone else to vote his or her shares at a stockholders annual or special meeting called to elect directors or for some other corporate purpose.

Purchasing Power Risk – The risk that a portfolio will earn a return less than the rate of inflation, i.e., a negative real return.

Real Estate Investment Trust (REIT) – An investment fund whose objective is to hold real estate-related assets, either through mortgages, construction and development loans, or equity interests.

Restatement Third, Trusts (Prudent Investor Rule) – A set of new and more specific standards for the handling of the investment process by fiduciaries. These standards were adopted in 1992 and rely heavily on modern investment theory.

Return On Equity – The earnings per share of a firm divided by the firm's book value per share.

Risk-adjusted Return – The return on an asset or portfolio, modified to explicitly account for the risk of the asset or portfolio.

R-squared (R^2) – Formally called the coefficient of determination, this measures the overall strength or "explanatory power" of a statistical relationship. In general, a higher R^2 means a stronger statistical relationship between the variables which have been estimated, and therefore more confidence in using the estimation for decision-making.

Russell 1000 Index – 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 Index – 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 Index – This index contains those Russell 1000 securities with a less-than-average growth orientation. It represents the universe of stocks form which value managers typically select. 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 Index – 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 3000 Index – Represents the largest 3,000 US companies based on total market capitalization, representing approximately 98% of the investable US equity market.

Russell 3000 Growth Index – This index measures the performance of those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth values. The stocks in this index are also members of either the Russell 1000 Growth or the Russell 2000 Growth indexes.

S&P/LSTA Performing Loans Index – A subset of the S&P/LSTA Leveraged Loan Index, and comprises non-investment-grade and non-rated loans. Tracking only performing loans unlike its parent index, it removes defaulted issues at the price they reach directly following the default.

Sharpe Ratio – This statistic is a commonly used measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3 Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken. The higher the Sharpe ratio, the better the fund's historical risk-adjusted performance.

Small Capitalization – Managers who invest in equities of companies with relatively small capitalization. The cut-off point for small capitalization varies from manager to manager, but on average targets firms with capitalization of $200-$600 million.

Socially-targeted Investment – An investment which is undertaken based upon social, rather than purely financial, guidelines.

Soft Dollars – The portion of a plan's commissions expense incurred in the buying and selling of securities that is allocated through a directed brokerage arrangement for the purpose of acquiring goods or services for the benefit of the plan. In many soft dollar arrangements, the payment scheme is effected through a brokerage affiliate of the investment consultant. Broker-investment consultants servicing smaller plans receive commissions directly from the counseled account. Other soft dollar schemes are effected through brokerages that, while acting as the clearing/transfer agent, also serve as the conduit for the payment of fees between the primary parties to the directed fee arrangement.

Specific Risk – The part of a security’s total risk which is not related to movements in the market and therefore can be diversified away.

Standard Deviation – A statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measure how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e. has a bell shaped curve distribution) then approximately 2/3 of the returns would occur within plus or minus one standard deviation from the sample mean.

Standard & Poors 500 Equity Index (S&P 500) – The most widely used U.S. index of the equity market. The S&P 500 is comprised of 500 large, successful U.S. companies and is constructed to represent movements in common stocks. Stocks are chosen so that in aggregate, they represent a broad distribution by industry group, comparable to that of stocks traded on the New York Stock Exchange. Decisions about stocks to be included and deleted are made by the S&P Index Committee. The S&P 500 represents approximately 75% of the cap-weight of all U.S. stocks.

Strategic Asset Allocation – Rebalancing back to the normal mix at specified time intervals (quarterly) or when established tolerance bands (e.g., + and - 10%) are violated

Systematic Risk – The part of a security's total risk that is related to movements in the market and therefore cannot be diversified away.

Tactical Asset Allocation – Closely related to a strategy of market timing, this strategy uses certain indicators to make adjustments in the proportions of a portfolio invested in stocks, bonds, and cash.

Term-to-maturity – The time remaining until a bond's maturity date.

Time-weighted Return – A method of measuring the performance of a portfolio over a particular period of time. It is the cumulative compounded rate of return of the portfolio, calculated on each date that cash flow moves into or out of the portfolio.

Top-down Analysis – An approach to valuing equities which first looks at the economy and overall capital market, then industries, and finally individual firms.

Total fund policy benchmark – The average return of the asset class benchmark indices weighted by asset class benchmark allocations.

Treynor Ratio – The portfolio's average excess return over a specified period divided by the beta relative to its benchmark over the same time frame. This is used to measure the excess return per unit of systematic risk taken.

Turbulent Market Period – A market period during which the current VIX level is one standard deviation above its three-year moving average.

Urban Consumers Price Index (CPI-U) – The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. It is the most widely used measure of inflation. The CPI-U is the CPI value for Urban Consumers, represents the buying habits of the residents of urban or metropolitan areas.

Value Equity – Managers who invest in companies believed to be undervalued or possessing lower than average price/earnings ratios, based on their potential for capital appreciation.

VIX – see CBOE Market Volatility Index

Appendix II –SAMPLE PLACEMENT AGENT QUESTIONNAIRE

East Bay Municipal Utility District Employees' Retirement System (EBMUDERS)

Investment Manager: ______________________________

Contact Person: ______________________________

Investment Type: ☐ Prospective / New Investment

☐ Amendment to an existing Investment

1. Manager acknowledges that it will comply with the *East Bay Municipal Utility District Employees' Statement of Investment Policy and Procedures, VII. Policy for the Use of Placement Agents*

☐ Yes ☐ No

2. Placement Agent Firms used?

☐ Yes ☐ No

If the answer to question #2 is "No", please proceed to the end of this form, sign and return to EBMUDERS. Otherwise, please continue filling out the form.

3. If Yes, please complete:

A. Name of Placement Agent Firm: ______________________________

Primary Contact: ______________________________

B. Name of Placement Agent Firm: ______________________________

Primary Contact: ______________________________

C. Name of Placement Agent Firm: ______________________________

Primary Contact: ______________________________

If additional space is needed, please attach a separate piece of paper.

4. Please provide description of payment/compensation agreement by the investment Manager or any of its principals, employees, agents or affiliates, directly or indirectly, to any person or entity to act as a Placement Agent in connection with EBMUDERS investments:

A. Description of agreement for Placement Agent A.

B. Description of agreement for Placement Agent B.

C. Description of agreement for Placement Agent C.

If additional space is needed, please attach a separate piece of paper.

5. Please attach a resume for each officer, partner, principal of the Placement Agent detailing the person's education, professional designations, regulatory licenses and investment and work experience.

Attachments? ☐ Yes ☐ No

6. Is any such person, described in the response to question number 5 above, a current or former EBMUDERS Board Member, employee or Consultant or a member of the immediate family of any such person?

☐ Yes ☐ No

If yes, please provide the name(s) of the individual(s):

7. Please describe any and all compensation of any kind provided or agreed to be provided to a Placement Agent, including the nature, timing and value thereof.

8. Please describe the services to be performed by the Placement Agent and a statement as to whether the Placement Agent is utilized by the investment.

9. Please attach a copy of any and all agreements with the Placement Agent.

☐ ☐

Attachments? Yes No

10. Is the placement agent, or any of its affiliates, registered with the Securities and Exchange Commission or the Financial Industry?

☐ Yes ☐ No

11. Is the placement agent, or any of its affiliates, registered as a lobbyist with any state or national government?

☐ Yes ☐ No

12. Please list the names of any current or former EBMUDERS Board Members, employees, or Consultants who suggested the retention of the Placement Agent. ☐ N/A

The undersigned represents and warrants the information provided above, and also understands that the provided information must be updated within 14 calendar days that the investment manager knew or should have known of the change in information.

By: ____________________

Name: ____________________

Title: ____________________

Date: ____________________

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

FROM: Lisa Sorani, Manager of Employee Services Lisa Sorani

SUBJECT: Declare the Interest Rate on Member Contributions for the Period Ending June 30, 2021

ACTION: Vote on Resolution No. 6949

RECOMMENDATION

Approve Resolution No. 6948

BACKGROUND

The Retirement Ordinance, Section 4(d), directs the Retirement Board to semi-annually declare the rate of interest to be credited to accumulated Member contributions.

In accordance with Retirement Board Rule B-9, the annual rate of interest credited to Member contributions effective December 31, 2021 will be the lesser of the actuarially assumed rate of return or the five (5) year average rate of return on Retirement System investments for the period ending June 30, 2021. As of June 30, 2021, the actuarially assumed rate of return is 7.0%, and the five-year average rate of return was 11.6%.

Therefore, Resolution No. 6948 declares the annual interest rate of 7.0%. And the rate credited to Member accounts will be prorated to a semi-annual rate of 3.5%. The interest will be credited effective December 31, 2021, to the balance of employee contributions and interest as of June 30, 2021.

LS

R.B. RESOLUTION NO. 6949

DECLARING THE INTEREST RATE

Introduced by: ; Seconded by:

WHEREAS, section 4(d) of Ordinance, as amended, provides that the Retirement Board shall semi-annually declare the rate of interest for the preceding six (6) months to be credited on accumulated contributions of members, which rate shall be based upon criteria to be established by the Retirement Board; and

WHEREAS, the crediting rate be the lesser of the actuarial assumed rate of seven percent (7.0%) as of June 30, 2021 or the actual five (5) year earnings rate of the fund, determined to be eleven and six tenth percent (11.6%), for the period ending June 30, 2021;

NOW THEREFORE, BE IT RESOLVED that the Retirement Board does hereby declare a seven percent (7.0%) annual interest rate. The rate credited to member accounts effective December 31, 2021 will be three and five tenth percent (3.5%) for the balance of employee contributions and interest as of June 30, 2021, in accordance with Rules B-8 and B-9 of Retirement Board.

President

ATTEST:

Secretary

11/18/2021

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance SDS

SUBJECT: Approve Revision to Proxy Voting Approach

SUMMARY

Since 2017, the Retirement System has had an agreement with Glass Lewis directing the firm to provide proxy voting for the System's shares (the Proxy Voting Agreement). This agreement expires on December 31, 2021, with three one-year options to extend. Since 2017, the portion of the Retirement System's assets available for directed proxy voting have decreased significantly as equity assets have been transitioned from active to passive management. In addition, the level of proxy voting engagement from the remaining active investment managers has increased as the investment industry has enhanced its focus on Environmental, Social and Governance (ESG) factors. As an alternative to using Glass Lewis's services directly, the Retirement System can direct investment managers to vote proxies on behalf of the System. Each active manager with equity securities has a strategy for proxy voting that is described herein. With the reduction in the Retirement System's assets available for proxy voting and with the enhanced proxy voting programs at the remaining active managers, staff recommends that the Retirement System revise its approach to proxy voting to direct the investment managers to vote proxies with staff oversight. The funds freed up from this action can be used for more focused engagement in the near future.

DISCUSSION

Proxy Voting Agreement

The Retirement System hired Glass Lewis in October 2017 to provide proxy voting services for the District's actively managed equity accounts. Glass Lewis' agreement has an annual fee of $17,430. The fee was lowered from $19,856 in 2019 in response to the Retirement System's movement of domestic equity assets to passive management. The agreement expires on December 31, 2021, with three one-year options to extend. Staff recently inquired about a potential further reduction in fees now that more assets have moved to passive. Glass Lewis informed staff that at the current voting activity level, the fee would not change for 2022.

Reduced Proxy Voting with Shift to Passive

At the time of hiring Glass Lewis, about 64 percent of the Retirement System's portfolio represented actively managed accounts with equity assets. These accounts were within the domestic equity, international equity, covered calls and real estate sectors. Since the hiring of

Glass Lewis, the Retirement System has significantly reduced its active equity allocation, transitioning much of these assets to passive comingled funds. Currently, the remaining active equity accounts represent about 26 percent of the portfolio. Therefore, the number of meetings and the amount of shares for which Glass Lewis provides proxy voting has decreased significantly.

Investment Manager Proxy Voting Approaches
The Retirement System can direct the investment managers to conduct proxy voting on behalf of the System's shares. With the shift to passive management, the remaining actively managed accounts with proxy voting are Parametric (14.4% of the portfolio), Van Hulzen (6.3%), CenterSquare (2.8%), and RREEF (2.3%). Information on each manager's approach to proxy voting, should we ask them to vote proxies on our behalf, is provided below.

Parametric
The Retirement System has two accounts with Parametric, both within the covered call asset class. Parametric has its own proxy voting policy that is implemented by International Shareholder Services (ISS) data, the other major proxy voting services company similar to Glass Lewis. Representatives from Parametric describe their proxy voting policy as assertive, with Parametric voting against 36 percent of North American management proposals in 2020. As an example of Parametric's engagement approach, the firm has escalated board diversity issues by voting against chairs of nominating committees at US companies with all-male boards in 2020, sending letters explaining why they voted against them. In 2021, Parametric strengthened its voting policy and started voting against the chairs of the nominating committees at US companies that did not have at least 30% of women on the board and at least one ethnically diverse director.

Van Hulzen
Van Hulzen implements a proxy voting policy via Broadridge, an outside vender that votes on their client's behalf if directed to do so. The outside vendor offers the use of Glass Lewis' proxy voting policies, including the Public Pension Policy Guidelines currently used by the Retirement System. Upon request, Van Hulzen will implement this voting approach free of charge to the Retirement System.

CenterSquare
CenterSquare utilizes ISS' Sustainability Proxy Voting Guidelines when voting for shares on behalf of its clients. CenterSquare's internal proxy voting policy incorporates ISS' Guidelines along with provisions to monitor ISS and manage conflicts of interest. The investment manager reports that it has been incorporating ESG considerations into the investment process for over two decades. It views responsible proxy voting as a core part of its ESG approach.

RREEF
RREEF differs from the three managers above because it is a private Real Estate Investment Trust (REIT) rather than a manager of publicly traded assets. As such, RREEF has its own annual board meeting with proxy voting. Currently, the Retirement System has Glass Lewis vote RREEF's proxies on the System's behalf. Alternatively, the Retirement System can perform its

own review and voting of RREEF proxies. Meketa, the Retirement System's investment consultant, would assist in the research and voting. This approach would allow the Retirement System to directly vote at the meetings of its largest single asset.

RECOMMENDATION

In 2017, the Retirement System took an important step toward engagement by hiring Glass Lewis and utilizing the firm's Public Pension Policy Guidelines for proxy voting. Since that time, the portion of the portfolio subject to directed proxy voting has declined with the Retirement System's shift to passive equity investments. In addition, the remaining active managers have increased their focus on ESG, including enhancing their proxy voting programs. At this time, staff recommends allowing the Glass Lewis agreement to expire and moving proxy voting to the remaining active managers where they can implement their policies. In this scenario, staff and Meketa will directly engage with the managers to ensure the Retirement System's views are known. For RREEF, the Retirement System would vote its own proxies with the assistance of Meketa. The funds freed up by allowing the Glass Lewis agreement to expire can be used for more focused engagement in the near future. Staff and Meketa will also be conducting a thorough, holistic review of the Retirement System's passive strategy at a future meeting, including a look at ESG opportunities. Alternatively, the Retirement System can choose to maintain its current approach to proxy voting and renew the agreement with Glass Lewis.

SDS:RLH

MEKETA
INVESTMENT GROUP

2175 NW Raleigh Street
Suite 300A
Portland, OR 97210

503.226.1050
Meketa.com

MEMORANDUM

TO: East Bay Municipal Utility District Employees' Retirement System ("EBMUDERS")
FROM: Meketa Investment Group ("Meketa")
DATE: November 18, 2021
RE: EBMUDERS Proxy Voting Results Overview: July 1, 2020 – June 30, 2021

This item is the third annual overview of EBMUDERS' proxy voting results. In 2017, EBMUDERS revised its approach to proxy voting to have Glass Lewis vote proxies according to the Glass Lewis Public Plan Policy for its securities held in EBMUDERS' separately managed accounts, which represent actively managed equities. In turn, Northern Trust Asset Management (NTAM), votes the EBMUDERS proxies in accordance with the NTAM proxy voting policy in commingled funds, which represent passively managed securities. As EBMUDERS shifted assets from active equity to passive equity, the number of actively managed accounts lessened.

Please find below Meketa's highlights from the 2020-2021 proxy voting season. Glass Lewis conducted additional analysis for the third year in a row to provide EBMUDERS with a coherent summary of all of its votes. This analysis also shows where Glass Lewis and Northern Trust voted differently or the same on proposals where an active equity manager held a security that was also held in EBMUDERS's passive equity accounts. We thank Northern Trust Asset Management for providing their voting information to Glass Lewis and thank Glass Lewis for conducting the analysis.

Highlights

EBMUDERS 2020-2021 Proxy Season Results

- EBMUDERS' 66,015 proxies were voted during the July 1, 2020 – June 30, 2021 year. Overall NTAM voted 65,207 proxies, and Glass Lewis voted 8,247 proxies for EBMUDERS.
- Glass Lewis and NTAM both voted on 7,938 of the same proposals for EBMUDERS, where EBMUDERS active managers held securities that were also held in EBMUDERS passive equity accounts voted by NTAM- Russell 3000 and MSCI ACWI ex US. This overlap accounted for 96% of the proxies voted by Glass Lewis.
- Glass Lewis and NTAM voted differently on 1,641 proposals, or 21% of the 7,938 proposals that they both voted for on behalf of EBMUDERS. This was a small share 2.5% of the total 66,015 proposals voted this proxy season by EBMUDERS.
- GL and NTAM voted differently on 19% of the management proposals that they both voted on behalf of EBMUDERS - the same percentage as in the prior year.
- The difference GL and NTAM in voting on EBMUDERS shareholder proposals of 59% was up slightly from 54% in the prior year.

- The noticeable differences in voting were primarily on management and shareholder proposals where Glass Lewis voted against management when NTAM voted EBMUDERS proxies with management. Thus, 90% of the management proposals that were voted differently were due to GL voting against management in cases where NTAM voted with management. GL showed higher support levels for shareholder proposals, where 82% of shareholder proposals that were voted differently were due to GL support in cases where NTAM did not support.

NTAM Proxy Voting Compared to Market

Overall, there were significant increases in shareholder proposals and votes for particularly climate change related issues, and diversity issues. Within this, NTAM votes supporting shareholder proposals rose, as they adjusted their voting guidelines to better meet investor demands.

For the prior year, (the 2021 report has not yet been issued) the December 2020 report by ShareAction ("Voting Matters 2020 report) showed European asset managers continued to outperform their US counterparts compared to 2019. The top 17 best performers of the 60 total largest managers are all in Europe. Six of these managers voted in favor of 95 per cent of resolutions. There was noticeable improvement by some of the 2019 worst performers, namely, NTAM, JPMorgan Investment Management and Wellington Management Company, but the five worst performers remain in the US. Northern Trust ranked as the top 19th out of the 60 in 2020, and the best performer among the U.S. asset managers. In comparison NTAM ranked among the bottom 10 out of the 57 in 2019, one of the worst performers.

The May 2021 ExxonMobil landmark shareholder votes led by Engine No.1 that brought in three new Board members based on climate change issues is one example. In this one example, among the four proposed new Board members by Engine No.1, Glass Lewis voted for two of the shareholder proposed board members, under its public pension guidelines that EBMUDERS adopted. NTAM voted against four management proposed Board members but did not vote on the four Engine No.1 proposed board members.

Proxy Voting Regulatory Environment Update

Key developments in 2021 that affect proxy voting specifically and, more generally, Environmental, Social, and Governance (ESG) investing, were from the Securities and Exchange Commission (SEC) and the Department of Labor (DOL).

1. On November 3, 2021, the US Securities and Exchange Commission (SEC) said that "going forward" it will not agree to exclude shareholder proposals calling for emissions reductions targets at US companies "so long as the proposals afford discretion to management as to how to achieve such goals". The SEC made the statement in new guidance, published on November 3, 2021, outlining its interpretation on rules - particularly the Ordinary Business rule (Rule 14a-8(i)(7)) - used by companies to petition the SEC for permission to exclude proposals from

investors - often to referred to as 'no action' requests. In its latest 'Staff Legal Bulletin', the SEC rescinds three previous instances of guidance it put out under the Trump Administration - a period in which shareholders found it increasingly difficult to get ESG-orientated proposals - particularly ones calling for climate targets - on the ballot at company annual meetings. The SEC said that the approach outlined in the new bulletin not only conforms more faithfully to the spirit of the rules, but also that they help "avoid the dilemma many proponents faced when seeking to craft proposals with sufficient specificity and direction to avoid being excluded under Rule 14a-8(i) (10), substantial implementation, while being general enough to avoid exclusion for 'micromanagement'."

2. In March 2021, the SEC created a new Climate and ESG Task Force to identify misconduct related to climate and ESG issues in investing and requested comment specifically on how the SEC should regulate climate change disclosures, and broader ESG disclosure. They received a great deal of comment letters. New disclosure regulations are expected likely early in 2022.
3. In September 2021 the SEC proposed new disclosure rules to enhance the information mutual funds, exchange-traded funds ("ETFs"), and certain other funds report annually about their proxy votes and make that information easier to analyze.
4. In October 2021, the Department of Labor (DOL) proposed new rules that would explicitly direct ERISA pension plan fiduciaries to consider that ESG issues could present material business risks or opportunities to companies and create a new presumption that a prudent fiduciary should consider ESG issues when evaluating the risk and return profiles of investment opportunities. This new language clarifies and confirms explicitly that climate change and other ESG factors are no different from other "traditional" material risk-return factors, and that plans should regard these factors on an equal footing in the investment decision-making process. The proposed rules are open for a 60-day comment period that closes on December 13, 2021.

STB/ndb

GLASS LEWIS

EBMUD – Employees' Retirement System

Presenters:

John Wieck – Chief Operating Officer

Courteney Keatinge – Senior Director, ESG Research

November 2021

Agenda

- 2021 Proxy Season Review
  - Key Takeaways
- EBMUDERS 2020-2021 Voting Summary
  - EBMUDERS 2020-2021 Voting Summary
  - Public Pension vs NTAM Policy
- EBMUDERS 2020-2021 Voting Activity

Our Mission: To partner with our customers in driving value creation through solutions that promote good governance and stewardship.

2021 Proxy Season Review

Key Takeaways

Environmental, Social & Governance

Strong Support for Environmental and Social Shareholder Proposals

- Climate change continues to be a pressing issue for many investors
- Popular proposals often deal with human capital or climate-related issues
  - Scope 3 emissions
  - EEO-1/Diversity reporting

Say on Climate

- Investors have mixed views on the use of Say on Climate
- Lack of consistency in proposal requests, disclosure

Continued Focus on Director Elections

- Investors looking for consistent, global policies to manage issues like climate risk and poor stakeholder relations
- Exxon Contested Meeting: Directors being held to account for climate-related issues

Corporate Governance

A Rising Number of Shareholder Meetings

- Over 300 more U.S. meetings held in 2021 so far, vs. Last year (+8% increase)
  - Numerous SPAC mergers and IPOs in late 2020 led to many first-year AGMs
    - Governance policies vary widely amongst these firms
  - Fewer companies delaying meetings due to COVID

Board Diversity Growing Issue for Companies and Investors

- Glass Lewis Diversity Disclosure Assessment
  - 74% of S&P 500 companies disclosed race and ethnicity of directors in 2021, compared to 29% in 2020
- More women being appointed to boards
  - Women now comprise just over 25% of directors, up from 22% in 2020
  - Proportion of women and diverse directors likely to continue given state and listing requirements

Executive Compensation

Pay and Pandemic

- Impacts of COVID-19 were extreme but varied widely across industries, complicating pay and performance alignments
  - Even within industries, prior strategic decisions had major impacts (multichannel vs. brick & mortar retail)
  - Increased focus on stakeholder outcomes in the context of executive pay decisions
- ESG & CSR metrics are on the rise at a time when stakeholder outcomes and executive pay are under viewed in contrasting terms
  - Over 45% of S&P 500 companies with 2021 meetings at least consider ESG or CSR in pay decisions
  - Hyatt – Management diversity targets were a prerequisite for any LTI payouts

EBMUDERS 2020-2021 Voting Summary

EBMUDERS 2020-2021 Voting Summary

2020-2021 Volumes

- 635 Meetings across 28 Countries, 1,225 Ballots, 8,247 Proposals

Management Proposals

- Same overall support levels (80%) in 2020-2021 versus the prior period
- Against votes by proposal type ranged from 0-40%
    - Auditors (40%), Boards (17%), Compensation (17%), Capital Management (8%), Changes to Company Statutes (5%), Meeting Administration (2%), M&A (0%)
    - Main rationales driving against votes were auditor tenure, board independence and diversity issues, pay/performance disconnects, and poor design/disclosure of compensation plans

Shareholder Proposals

- Same overall support levels (80%) in 2020-2021 versus the prior period
- Support ranged from 50-94%: Environmental (50%), Social (65%), Governance (94%)
    - Proposals requesting specific targets and/or operating changes, and "trojan horse" proposals resulted in lower year-over-year support levels for E&S proposals
    - Written consent, independent chair, proxy access, special meeting and majority vote proposals resulted in higher year-over-year support levels for G proposals

Public Pension vs NTAM Policy

2020-2021 Volumes

- 96% of proposals (7,938 out of 8,247) voted by Glass Lewis were also voted by NTAM
  - Overall NTAM voted significantly more proposals (67,351) due to significant x-US holdings

Management Proposals

- Differences on only 19% (1,424 out of 7,570) of proposals, same as the prior period
- 90% (1,280 of 1,424) of the differences were a result of higher against levels under the Public Pension Policy
  - Stricter board diversity, over-boarding, auditor tenure and pay practice requirements accounted for the majority of differences

Shareholder Proposals

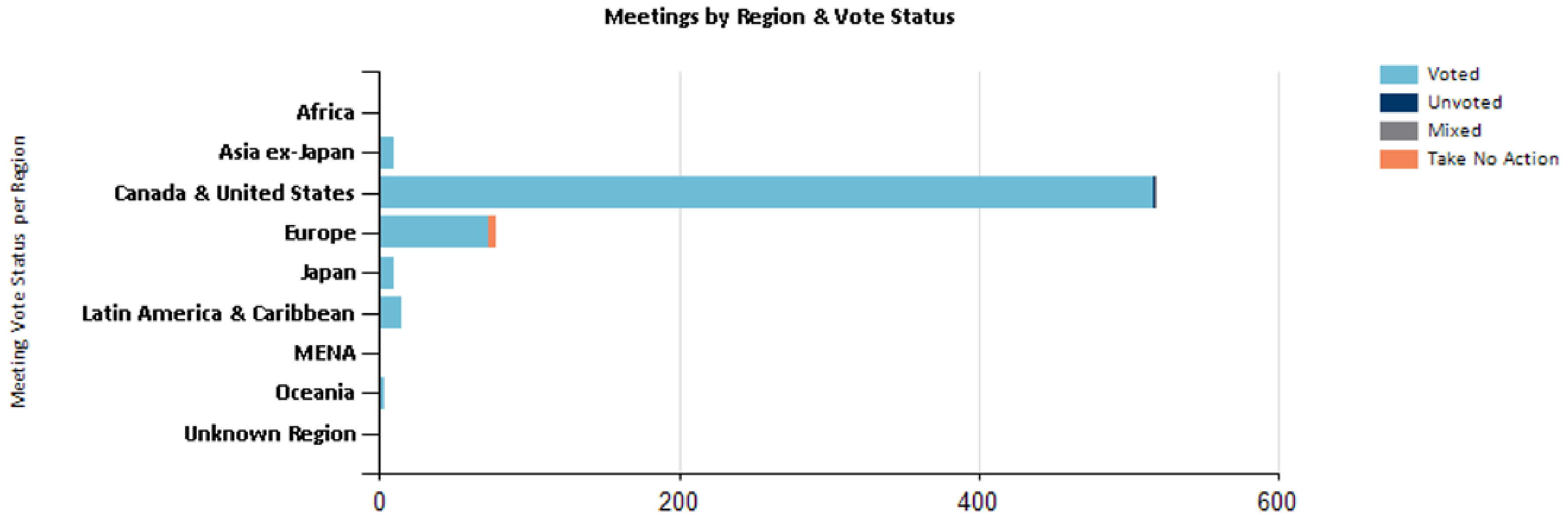
- Differences on 59% (217 out of 368) of proposals versus 54% in the prior period
- 82% (179 out of 217) of differences resulted from higher support levels under the Public Pension Policy
  - Written consent, independent chair, special meeting, proxy access and a variety of E&S reporting proposals accounted for the majority of differences

EBMUDERS 2020-2021 Voting Activity

Voting Statistics - Meetings

Meeting Statistics Report

From 7/1/2020 to 6/30/2021

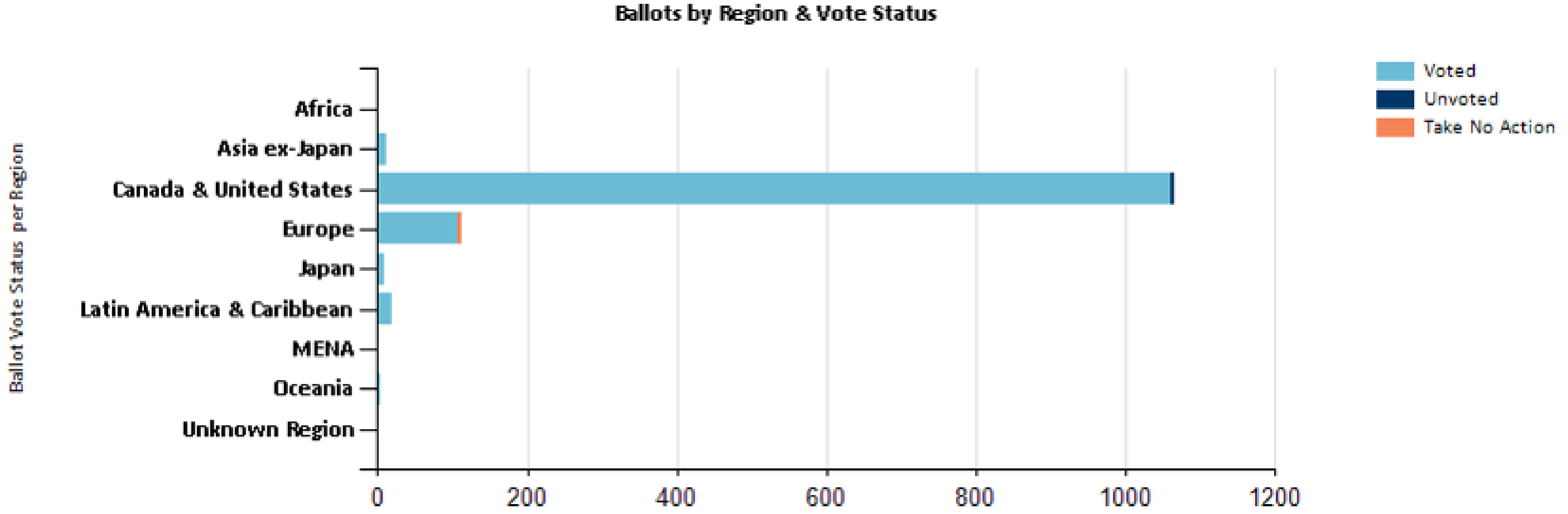


Region	Country Of Origin	Voted	Unvoted	Mixed	Take No Action	Total
Total for all Regions		626	2	1	6	635

Voting Statistics - Ballots

Ballot Statistics Report

From 7/1/2020 to 6/30/2021



Region	Country Of Origin	Voted	Unvoted	Take No Action	Total
Total for all Regions		1214	5	6	1225

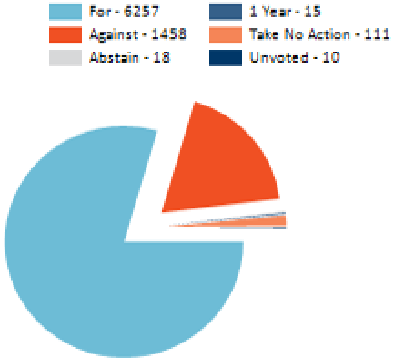
Voting Statistics - Proposals

Proposal Statistics Report

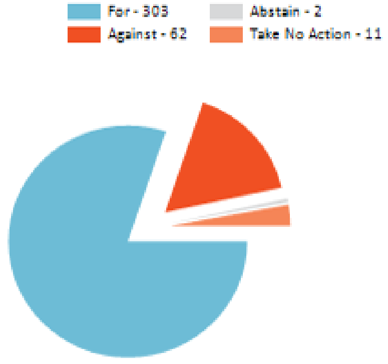
From 7/1/2020 to 6/30/2021

	Mgmt Proposals	SHP Proposals	Total Proposals
For	6257	303	6560
Against	1458	62	1520
Abstain	18	2	20
1 Year	15	0	15
2 Years	0	0	0
3 Years	0	0	0
Mixed	0	0	0
Take No Action	111	11	122
Unvoted	10	0	10
Totals	**7869**	**378**	**8247**

Management Proposals – Votes Cast

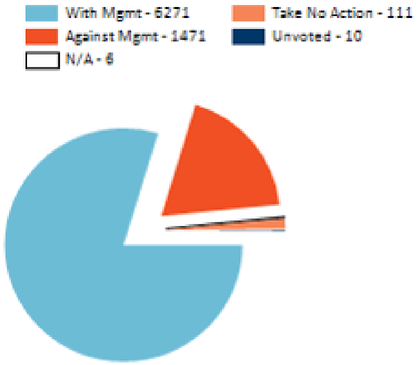


Shareholder Proposals – Votes Cast

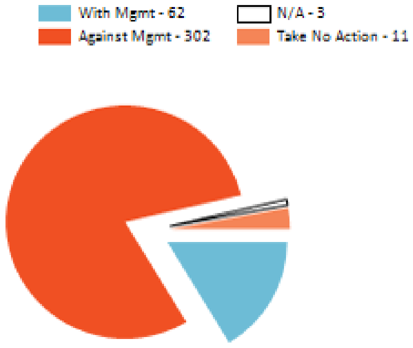


	Mgmt Proposals	SHP Proposals	Total Proposals
With Management	6271	62	6333
Against Management	1471	302	1773
N/A	6	3	9
Mixed	0	0	0
Take No Action	111	11	122
Unvoted	10	0	10
Totals	**7869**	**378**	**8247**

Management Proposals – Votes versus Management



Shareholder Proposals – Votes versus Management



Voting Statistics - Proposal Categories

Proposal Category Report

From 7/1/2020 to 6/30/2021

Proposal Categories - All Votes

Proposal Category Type	For	Against	Abstain	Take No Action	Unvoted	Mixed	1 Year	2 Years	3 Years	Total
Totals	**6560**	**1520**	**20**	**122**	**10**	**0**	**15**	**0**	**0**	**8247**
Audit/Financials	416	292	0	15	0	0	0	0	0	**723**
Board Related	4679	989	15	54	8	0	0	0	0	**5745**
Capital Management	210	19	0	8	0	0	0	0	0	**237**
Changes to Company Statutes	139	6	2	6	1	0	0	0	0	**154**
Compensation	724	150	0	18	0	0	15	0	0	**907**
M&A	35	0	0	0	0	0	0	0	0	**35**
Meeting Administration	38	1	0	8	0	0	0	0	0	**47**
Other	16	1	1	2	1	0	0	0	0	**21**
SHP: Compensation	19	8	0	0	0	0	0	0	0	**27**
SHP: Environment	21	15	0	6	0	0	0	0	0	**42**
SHP: Governance	199	6	0	4	0	0	0	0	0	**209**
SHP: Social	64	33	2	1	0	0	0	0	0	**100**

GLASS LEWIS

Institutional Investors | GROW@glasslewis.com

Corporate Website | Glasslewis.com

Email | Info@glasslewis.com

Social | @glasslewis Glass, Lewis & Co.

ASSET MANAGEMENT

East Bay Municipal Utility District

EBMUD

Prepared by: **Northern Trust Asset Management**

November 18, 2021

NORTHERN TRUST

TABLE OF CONTENTS

ABOUT THE PRESENTERS

Tamara Doi Beck
Director
Asset Management
Northern Trust - Denver

Tamara Doi Beck

Tamara Doi Beck is Director of Public Funds & Taft-Hartley Plans for the Institutional Group at Northern Trust Asset Management. In her role, Tamara delivers investment solutions, including equity, fixed income, and alternative asset classes, for these institutional segments on the West Coast. Tamara has covered this region since 2003 and has 21 years of financial industry experience, all of it developing business and managing client relationships with institutional investment programs.

Tamara joined from Janus Henderson Investors, where she was Managing Director, responsible for new business development with public, corporate, endowment and foundation plans. Previously, she was Director of Business Development for LMCG Investments and Senior Vice President for Neuberger Berman. Tamara also held several roles at Morgan Stanley Investment Management for over six years, most recently as Vice President of Institutional Sales on the Public Funds Team.

Tamara earned a BA from Tufts University and graduated summa cum laude with highest thesis honors. She holds Series 3, 7, 30 and 63 licenses.

Catherine Moyer
Head of North America Stewardship
Asset Management
Northern Trust - Chicago

Catherine Moyer

Catherine is Head of North America Stewardship for Northern Trust Asset Management and her prior work experience includes Institutional Shareholder Services, the Consumer Financial Protection Bureau, the Millennium Challenge Corporation, and the World Bank. She holds an M.P.P. from the University of Maryland College Park, an M.S. from George Mason University, and an M.A. from the University of Malta.

Northern Trust Asset Management Overview

NORTHERN TRUST

PRINCIPLES THAT ENDURE

NORTHERN TRUST

Service

Relentless drive to provide exceptional service.

Expertise

Resolving complex challenges with multi-asset class capabilities.

Integrity

Acting with the highest ethics, utmost honesty and unfailing reliability.

Northern Trust's core principles of service, expertise, and integrity have remained constant for over 125 years, guiding Northern Trust's evolution to a multi-faceted global financial services provider.

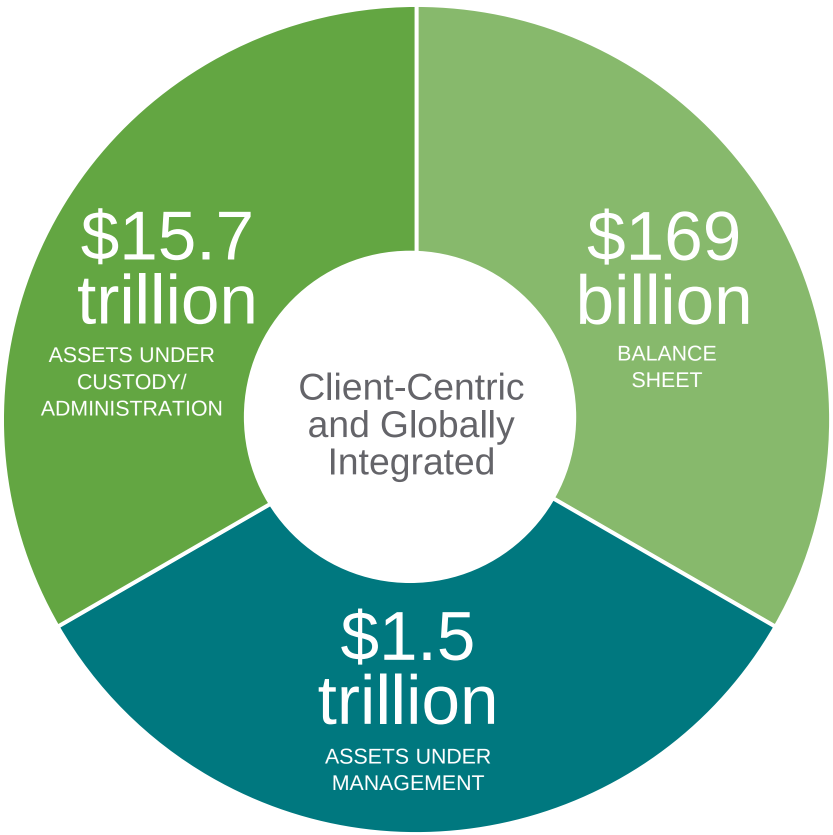
Throughout our history and changing market environments, we have led the financial services industry by aligning our efforts with these guiding principles.

Today, we remain committed to these founding principles which continue to unite and drive our partners around the globe — delivering our clients unparalleled service and expertise, with integrity.

NORTHERN TRUST CORPORATION

Serving the world's most-sophisticated clients – from sovereign entities and the wealthiest individuals, to the largest global corporations and hedge funds.

GLOBAL PLATFORM



AT A GLANCE

- Founded in 1889
- Headquartered in Chicago, IL
- Locations in 26 countries
- 25,000+ global employees
- Diversified revenue streams
- A+ debt rating; well-capitalized[1]

"World's **most admired** companies®

Fortune Magazine[2]
14th consecutive year

100 **most sustainable** companies®

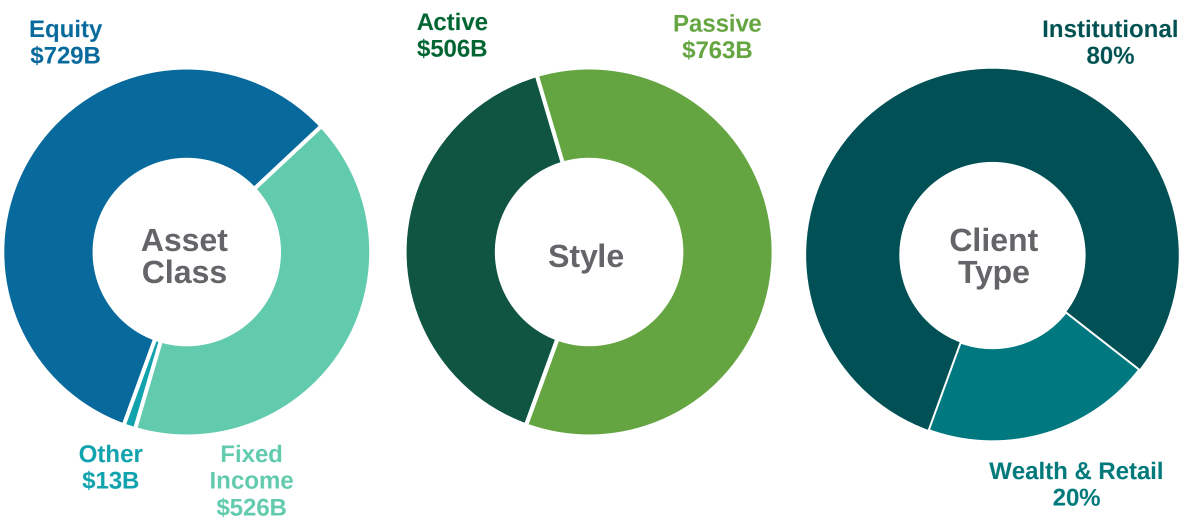
Barron's[2]"

As of September 30, 2021
[1]Standard and Poor's, senior debt as of June 30, 2021
[2]For additional information on these awards, see important information in the Appendix.

NORTHERN TRUST ASSET MANAGEMENT

A leading global investment manager with a client-centric culture rooted in a fiduciary heritage.

TOTAL ASSETS UNDER MANAGEMENT



A TRUSTED PARTNER

Leveraging the strength of Northern Trust

Global network of investment professionals with deep expertise

Demonstrated ability to thrive in various market environments

Progressive thought leadership and unique insights

Solving complex global challenges with innovative solutions

Focused on placing the needs of our clients above all else

$1.2 trillion
TOTAL AUM*

World's **17th largest** asset manager

*Assets under management as of September 30, 2021. For the Northern Trust Asset Management entities included in AUM total, please see disclosure at end of this document. The above rankings are not indicative of future performance. Unless otherwise noted, rankings are based on total worldwide assets under management of $1.1 trillion as of December 31, 2020, by Pensions & Investments magazine's 2021 Special Report on the Largest Money Managers.

INVESTMENT MANAGEMENT EXPERTISE

Investment solutions and asset allocation informed by deep capital markets analysis. Comprehensive asset class capabilities from passive and factor-based, to fundamental active and multi-manager.

Capital Markets Expertise

Equity

Factor-Based
Active
Passive
Tax Advantaged
Multi-Manager

Fixed Income

Active
Passive
Cash Management
Multi-Manager

Alternatives

Hedge Funds
Private Equity
Private Credit
Real Assets
Infrastructure
Real Estate

Solutions

Sustainable/ESG
Retirement
Target Date
Multi-Manager
Investment Advisory
Investment Institute

Asset Allocation

Strategic
Tactical

Forward-looking, historically aware investment approach

GLOBAL PRODUCT VEHICLES

Collective Funds | Common Contractual Funds (CCF) | Common Funds | Exchange Traded Funds (ETFs) | Fonds voor Gemene Rekening (FGR)

Investment Company Variable Capital (ICVC) | Managed Accounts | Mutual Funds | Separate Accounts

A FOUNDATION ROOTED IN SUSTAINABILITY

We believe that the long-term financial success of our clients and shareholders is dependent upon a healthy global environment, a stable society and well-functioning, well-governed companies.

Organizational Commitment

Corporate social responsibility and philanthropy are essential elements of our mission and culture.

- **Reduced carbon emissions by 62%** since 2015 vs. 25% goal *(2020)*
- **3rd consecutive year** in the Bloomberg Gender-Equality Index *(2020)*
- **65%** of NTAM's Executive Committee and **54%** of Northern Trust's Board of Directors **are gender-, racial- and ethnically diverse**

Stewardship

Representing investors' ownership interests by following and applying a thoughtful, disciplined process.

- **A thematic approach** guides our $1 trillion global asset base to drive meaningful change through company engagement
- **Best performing U.S. asset manager —** supported 79% of climate resolutions *(2020)**
- **3,000+** total engagements globally *(2020)*

Industry Leadership

Proudly participating, supporting and contributing to dozens of leading industry groups and initiatives around the globe.

- **Founding signatory** of Climate Action 100+
- **A+ Rated for Strategy and Governance**
  Principles for Responsible Investment; member since 2009
- **TCFD Supporter**
  Task Force on Climate-Related Financial Disclosures
- **SASB Investors Advisory Group Member**
  Sustainability Accounting Standards Board

Expertise

Our history and proven expertise managing sustainable portfolios reflects a longstanding commitment to responsibly serving the needs of our clients.

- **$155 billion**[1] in sustainable strategies AUM
- **30+ years** of expertise and innovation
- **Investment strategies and bespoke solutions** across asset classes and global investment vehicles
- **Proprietary Sustainability Score** offers a forward-looking evaluation of financially material sustainability issues — **first in the industry to integrate SASB and TCFD standards**

Source: Northern Trust, ShareAction. All data is as of December 31, 2020, unless otherwise stated.
*ShareAction 2020 report "Voting Matters" — Northern Trust Asset Management ranked 18th overall globally and 1st among U.S. asset managers. [1]Data as of September 30, 2021.

A FIRM COMMITMENT TO DIVERSITY, EQUITY & INCLUSION

We're committed to fostering a diverse and inclusive culture. That means we lead — and live — by example, creating greater value for our employees, clients, shareholders and communities.

Diverse Talent and Leaders

Recruiting, developing and deploying diverse talent and leadership globally enables us to capitalize on the strength that lies in our differences.

Diverse Leadership — 65% gender-, racial- and ethnically diverse Executive Committee.

11 employee-led councils providing professional development opportunities and amplifying diverse perspectives.

Creating and maintaining a diverse workforce has been **recognized** by many groups, including: *Working Mother* and *Black Enterprise*, as well as the Corporate Equality Index.

100% score in the Disability Equality Index and Disability:IN list of Best Places to Work for Disability Inclusion.[1]

Women's Leadership Development Forum — More than 1,700 high-potential women have participated since 2008.

Investment Programs

Putting our values into action — driving change by developing innovative investment programs and investing in our communities.

Established Minority Brokerage Program (2007):

- Participating firms are majority owned by minorities, women and disabled veterans.
- 15% target for trading commissions executed through minority brokers on equity securities in CITs.[2]

Multi-Manager Program, engaging with diverse managers since 1979.

Developed holistic, 360° framework to assess diversity within public and private investments.

$3.4 billion in community development investments.

$100 million in low-cost funding committed to communities hard hit by the COVID-19 pandemic.[3]

Leadership

Advancing diversity, equity and inclusion through industry and civic leadership and notable dialogue engagements.

Leading organizational sample membership:

- Signatory of Women in Finance Charter
- The Diversity Project
- LGBT Great
- Hiring Our Heroes
- Hispanic Alliance for Career Enhancement (HACE)
- Women in Super
- Financial Services Pipeline Initiative

Encouraging transparent dialogue — Through President's open letters and media engagements.

***Savoy Magazine* named NTAM president Shundrawn Thomas** as one of the "Most Influential Black Executives in Corporate America."[4]

Diversity Champion, *Investment News.*[5]

All data from Northern Trust as of 12/31/2020, unless otherwise noted. [1] American Association of People with Disabilities. [2] Collective investment trusts with trading activity. [3] As of May 2020, Northern Trust announced it had committed to provide US$100 million in low-cost funding to assist Community Development Financial Institutions (CDFIs), which provide loans, investments, financial services and technical assistance to underserved populations and communities. [4] *Savoy Magazine,* March 2020. [5] Excellence in Diversity & Inclusion Awards, *Investment News,* 2018, 2020.

Stability
+ Strength

Opportunity

We’re referred to as the stable institution that people trust—but trust and stability doesn’t mean tired and stationary.

Quite the contrary; trust and stability mean we operate from a position of strength.

And with strength comes the ability to identify, create and seize opportunities for our clients.

EAST BAY MUNICIPAL UTILITY DISTRICT

COLLECTIVE INVESTMENTS

Current collective investments:
Northern Trust Collective Russell 3000 Index Fund – Lending
Inception: July 1, 2018
Market value: $581,641,243.35

Northern Trust Collective All Country World Index (ACWI) ex-US Fund – Lending
Inception: July 1, 2018
Market value: $574,735,904.64

Former collective investments:
Northern Trust Collective Russell 1000 Index Fund – Lending
Inception: July 1, 2006

Northern Trust Collective Russell 2000 Growth Index Fund – Lending
Inception: January 1, 2009

Northern Trust Collective Aggregate Bond Index Fund – Lending
Inception: July 1, 2018

Market values as of 09/30/2021

Sustainable Investing Stewardship at NTAM

November 2021

NORTHERN TRUST

Sheri B. Hawkins, CFA
Global Head of Product
Executive Sponsor for Sustainable Investing & Stewardship

SUSTAINABLE INVESTING & STEWARDSHIP TEAM

Julie Moret
Global Head of Sustainable Investing & Stewardship

CLIENT ENGAGEMENT

Emily Lawrence
Director of Sustainable Investing
Client Engagement, North America

Sharee Hassan
Sustainable Investing Specialist

Valeria Dinershteyn
Director of Sustainable Investing
Client Engagement, EMEA

Rado Georgiev
Sustainable Investing Specialist

PORTFOLIO INTEGRATION & RESEARCH

Jay Eisenhardt
Director of Sustainable Integration

New Open Role
ESG Research Analyst

New Open Role
ESG Research Analyst

STEWARDSHIP – PROXY VOTING & ENGAGEMENT

Catherine Moyer
Head of North America Stewardship

Julia Kochetygova
Head of EMEA Stewardship

Harsh Rakesh Bassi
Proxy & Engagement Specialist

Cynthia Ngarambe
Proxy & Engagement Specialist

Open Role/New
Proxy & Engagement Specialist

STEWARDSHIP - PRINCIPLES AND POLICIES

We have tailored policies targeted at upholding engagement and proxy voting in the best interest of stakeholders and clients.

NORTHERN TRUST
ASSET MANAGEMENT

SUSTAINABLE INVESTING PHILOSOPHY

NORTHERN TRUST

PROXY VOTING POLICIES, PROCEDURES AND GUIDELINES

12/15/2019

These policies and procedures (and the guidelines that follow) apply to the voting of proxies by Northern Trust Corporation affiliates ("Northern Trust") for accounts over which Northern Trust has been granted proxy voting discretion.

NTAC:3NS-20

NORTHERN TRUST
ASSET MANAGEMENT

NORTHERN TRUST ASSET MANAGEMENT ENGAGEMENT POLICY

Since 1889, Northern Trust Asset Management has been guided by our principles of service, expertise and integrity.

At Northern Trust Asset Management, our primary objective as an asset manager is to create long-term value for our clients. This objective applies to all of our portfolio management decisions, including operating as a responsible investor and engaging with company management and boards of directors. Northern Trust Asset Management believes that being an active owner will help portfolio companies produce sustainable value, and that companies' long- term financial returns are connected to their strategic, environmental, social and governance performance.

This policy is designed to provide guidance for engagements with any company we are invested in on behalf of our clients.

GOVERNANCE AND OVERSIGHT

Northern Trust's Proxy Voting Committee is responsible for oversight of the *Northern Trust Asset Management Engagement Policy*.

SCOPE AND OBJECTIVES FOR ENGAGEMENT

We consider engagement to be an open and ongoing dialogue with investee companies and other market participants to encourage adoption and execution of practices consistent with sustainable long-term value creation.

STEWARDSHIP THEMES AND PRIORITIES

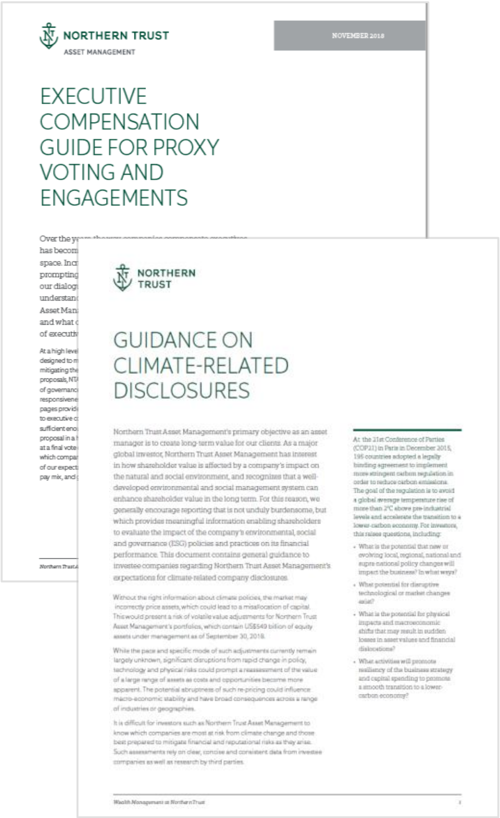
The themes and priorities align with materiality frameworks such as SASB. Northern Trust Asset Management's priority themes for 2021 are shown ***in bold***

Environment	CLIMATE CHANGE	NATURAL RESOURCE MANAGEMENT	WASTE, RECYCLING AND BIODIVERSITY
	Strategic alignment to 1.5°C	Water scarcity, use and pollution	Pollution and waste management
	Climate Lobbying	Deforestation	Recycling opportunities
	TCFD-based disclosure	**Sustainable food and agriculture**	Biodiversity impacts
Social	HUMAN RIGHTS	HUMAN CAPITAL MANAGEMENT	CONDUCT, CULTURE & ETHICS
	Modern slavery	**Occupational health and safety**	Fraud and bribery
	Child labour	Diversity and inclusion	Employee engagement
	Community rights	Recruitment and retention	**Product safety**
Governance	BOARD COMPOSITION AND EFFECTIVENESS	COMPENSATION	SHAREHOLDER RIGHTS
	Independence	**Pay for performance alignment**	Shareholder responsiveness
	Structure and attentiveness	Disclosure	Proxy access
	Diversity		**One share one vote**
Risk Management & Strategy	RISK MANAGEMENT	BUSINESS STRATEGY	
	Financial prudence	Analysis of opportunities	
	Enterprise risk management	Scenario planning	
	Independence of external auditor	Business purpose and mission	

ENGAGEMENT ON OBJECTIVES

Our stewardship model includes time-bound discussions with investee companies on pre-specified objectives that are viewed as being in the long-term interest of investors.

- Prioritize Topics
- Establish Expectations in Written Guidance
- Engage
- Monitor Progress
- Evaluate
- Take Voting Action



COLLABORATIVE ENGAGEMENT INITIATIVES

Climate Action 100+ has 617 investors representing $55tn AUM. NTAM has co-lead roles at three companies: Valero Energy, Glencore and National Grid. We are supporting investors at 13 more company groups: Exxon, Boeing, GE, GM, Bunge, BHP, Shell, BP, CEZ, PGE, AGL Energy, Origin Energy and South32.

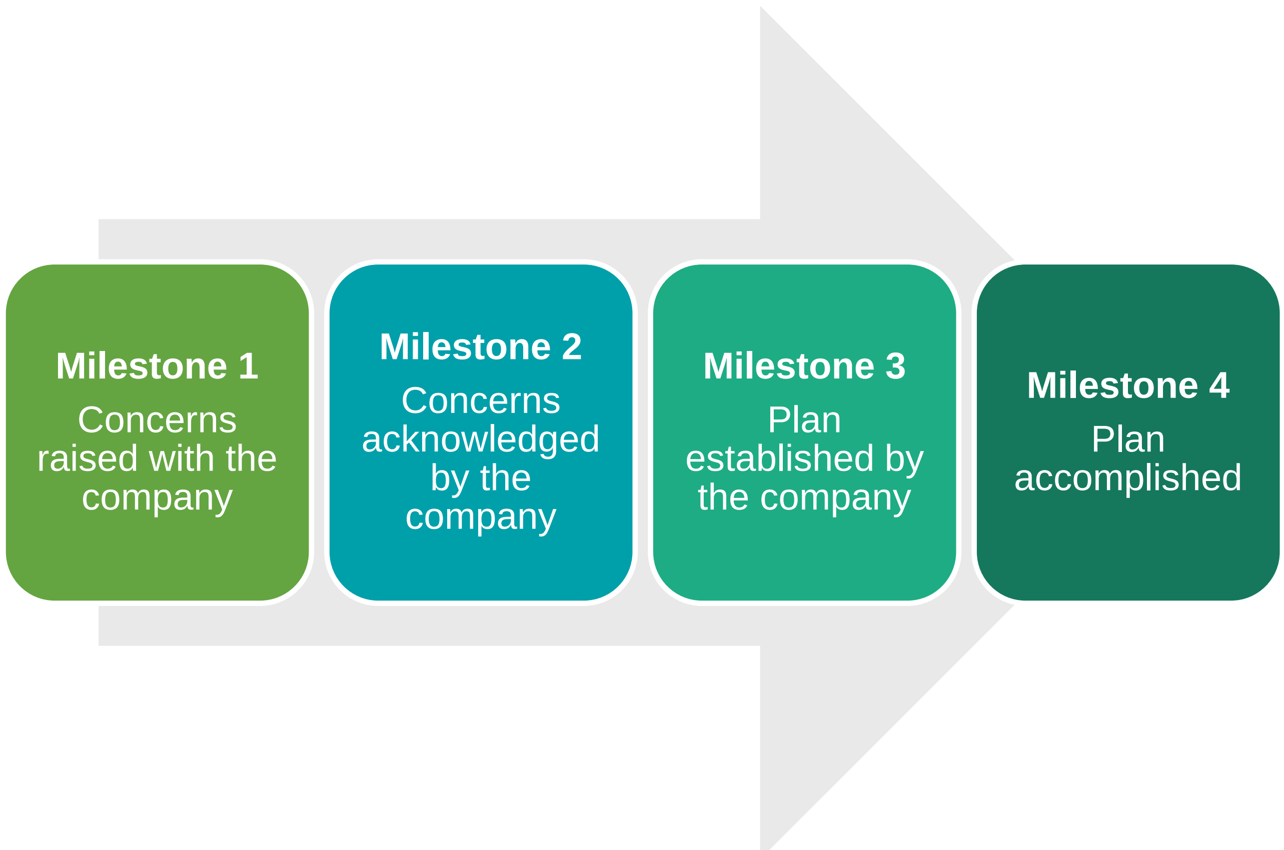
FAIRR (Farm Animal Risk & Return) has 235 investors representing $30tn AUM. We participate in engagement campaigns on animal protein value chains and sustainable proteins. Five companies engaged in 2021: Coles, M&S, Groupe Casino, WM Morrisons, Sainsbury's

Initiative on Content Management in Social Media has 102 investors, representing $7tn AUM. We participate in a global collaboration to encourage Facebook, Alphabet and Twitter to strengthen controls to prevent the livestreaming and dissemination of objectionable content.

SASB Investor Advisory Group has 55 investors with $41tn of assets. It is focusing on promoting materiality-driven ESG disclosures among companies globally.

MEASURING PROGRESS

We measure progress on engagement on objectives through key milestones



PROXY VOTING

We advocate for strong corporate governance practices that we believe will create and sustain long-term value for our clients.

Governance Focus

Board Composition	Board Structure	Contested Director Elections	Shareholder Rights	Compensation	Mergers & Acquisitions	Board and Audit Accountability
May oppose incumbent directors serving on nominating committee where concerns arise as to the composition of the board (skills, independence, tenure, etc). May oppose director nominees who are CEO and sit on more than two public boards, or who are non-CEO and sit on more than four public boards. May oppose incumbent director nominees who attend fewer than 75% of board and board-committee meetings for two consecutive years.	Expect principal board committees (audit, compensation, nomination and governance) to be comprised solely of independent directors; and the board be comprised of a majority independent directors. Support an annual election of directors over staggered board structure. Support appointment of a lead independent director where role of board chair is filled by non-independent director.	Evaluate case-by-case, considering: • Long-term financial performance of the target company relative to peers; • Management's track record; • Qualifications of director nominees (both slates); • Evaluation of each side's objectives, goals and potential motivations; and • Stock ownership positions.	Support shareholder right to call special meetings. Support proxy access. Support elimination of supermajority vote standards to approve charter and bylaw amendments Support shareholder proposals that ask a company to submit its poison pill for shareholder ratification.	Generally supportive of annual frequency of advisory votes on executive compensation. Examine advisory votes concerning the compensation of named executive officers on a case-by-case basis, taking into account pay structure in relation to firm performance, problematic governance practices, and the company's overall transparency and level of responsiveness to shareholder concerns.	Evaluates case-by-case, considering: • Anticipated financial and operating benefits; • Offer Price (cost vs. premium); • Prospects of the combined companies; • How the deal was negotiated; and • Changes in corporate governance and their impact on shareholder rights.	May oppose auditor ratification or re-election of incumbent members of audit committee if non-audit fees are excessive in relation to audit-fees. May oppose one or more directors where the board of directors has failed to adequately respond to: • majority approved shareholder proposal; or • failed management proposal on executive compensation; May oppose one or more directors for failing to adequately guard against or manage ESG risks.

NTAC:3NS-20

PROXY VOTING

We generally encourage reporting that is not unduly costly or burdensome and which does not place the company at a competitive disadvantage, but which provides meaningful information to enable shareholders to evaluate the impact of the company's environmental, social and governance policies and practices on its financial performance.

Environmental and Social Focus

Environmental Impact	GHG Emissions and Fracturing	Energy Efficiency	Product Safety & Animal Welfare	Diversity	Equal Employment Opportunity	Corporate Sustainability
Support requests for increased disclosure regarding the environmental impact of a company's operations and products and initiatives to curtail these risks.	Support disclosure concerning the emission of greenhouse gasses and the use of fracturing in connection with the extraction of natural gasses. Support adoption of GHG reduction targets from products and operations where companies are at higher risk.	Support issuance of reports by a company detailing its energy efficiency plans.	Support reporting or assessment of the safety of a company's products and services and efforts to promote their safe use. Support disclosure and reporting regarding animal treatment issues that may impact a company's operations and products, especially in relation to food production.	Support requests that a company take reasonable steps to ensure women and minority candidates are in the pool from which board nominees are chosen or that request that women and minority candidates are routinely sought as part of every board search the company undertakes. May oppose incumbent directors serving on nominating committee where concerns arise as to the diversity of the board.	Support proposals advocating the elimination of workplace discrimination based on sexual orientation or gender identity. Support disclosure and reporting regarding workforce diversity and diversity initiatives.	Support the issuance of corporate sustainability reports. Support increased disclosure of a company's policies and procedures for managing and mitigating risks related to cyber security and data privacy. Support increased disclosure on a company's supply chain policies and practices and its management of related risks on a case-by-case basis. Support proposals to publish political or lobbying contributions

2020 ANNUAL STEWARDSHIP HIGHLIGHTS

A Year of Stewardship

148,039
Management and shareholder resolutions voted on

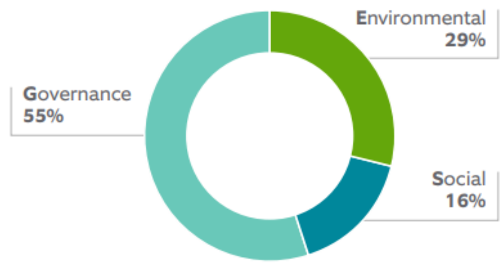
13,728
Resolutions voted against management

15,681
Meetings

6,245
Meetings where we voted against management at least once

3,032
Total engagements*

THEMES OF DIRECT ENGAGEMENTS



There were 222 direct engagements by Northern Trust Asset Management.

Best performing U.S. manager
on environmental and social shareholder resolutions**

Supported
79%
of climate shareholder resolutions in 2020**

- *Total engagements include 222 direct engagements and 2,810 through outside engagement partner Equity Ownership Services (EOS) at Federated Hermes
- **ShareAction *Voting Matters 2020* report, December 2020

THE NORTHERN TRUST ESG VECTOR SCORE ™

A measurement that assesses publicly traded companies in the context of financially relevant ESG related criteria that could impact their operating performance

Magnitude

ESG issues that are reasonably likely to impact financial performance

Northern Trust ESG Vector Score

captures both the magnitude and direction of a company's potential ESG-related business risks.

Direction

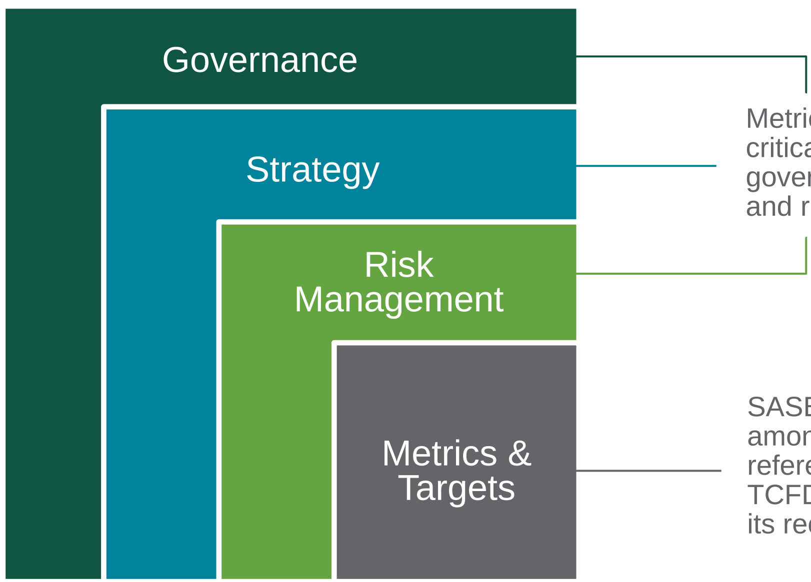
Forward-looking risk assessment framework

Vector** (vec▪tor │ vekter) = a quantity that has both **magnitude** and **direction

Source: Northern Trust Asset Management

BRINGING TOGETHER TWO LEADING INDUSTRY FRAMEWORKS

The Score applies TCFD's anticipatory framework on governance, strategy and risk management – beyond simply climate – to all financially material ESG risks across the SASB Standards



Metrics & Targets are critical to more effective governance strategy and risk management

TCFD

SASB metrics are among the frequently referenced tools cited by TCFD for implementing its recommendations

Source: Northern Trust Asset Management, SASB, TCFD. For Illustrative Purposes Only.

NTAC:3NS-20

KEY BENEFITS

The Score can be used in constructing and managing investment portfolios and stewardship activities

TRANSPARENCY

Enables more intentional and transparent integration of ESG considerations into investment processes

CLARITY

Provides a consistent, transparent methodology to gain greater clarity when building and managing sustainable portfolios

PRECISION

Offers more precision in identifying ESG-related business risks that could impact a company's operating performance

ENGAGEMENT

Assists in prioritizing corporate engagements, further aligning sustainable investments and stewardship

Source: Northern Trust Asset Management

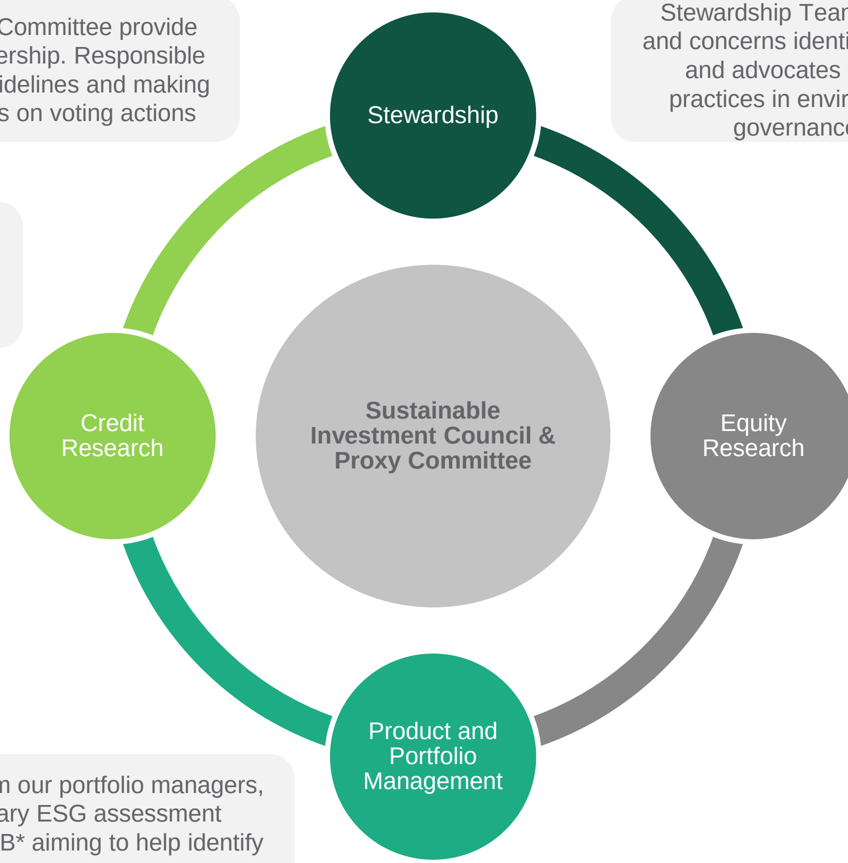
INTEGRATED STEWARDSHIP MODEL

We have an integrated team approach which emphasizes knowledge sharing and collaboration between practice groups.

SI Council and Proxy Committee provide Governance and Leadership. Responsible for defining policies, guidelines and making discretionary decisions on voting actions

Stewardship Team communicates risks and concerns identified by NTAM research and advocates for adoption of best practices in environmental, social and governance management

Fixed Income research team provides market level insights to help measure the level of risk to frame the depth of engagement



Equity research team provides sector and company level insights to help measure the level of risk to frame the depth of engagement

Product team, with input from our portfolio managers, is developing a proprietary ESG assessment framework aligned with SASB* aiming to help identify companies for engagement

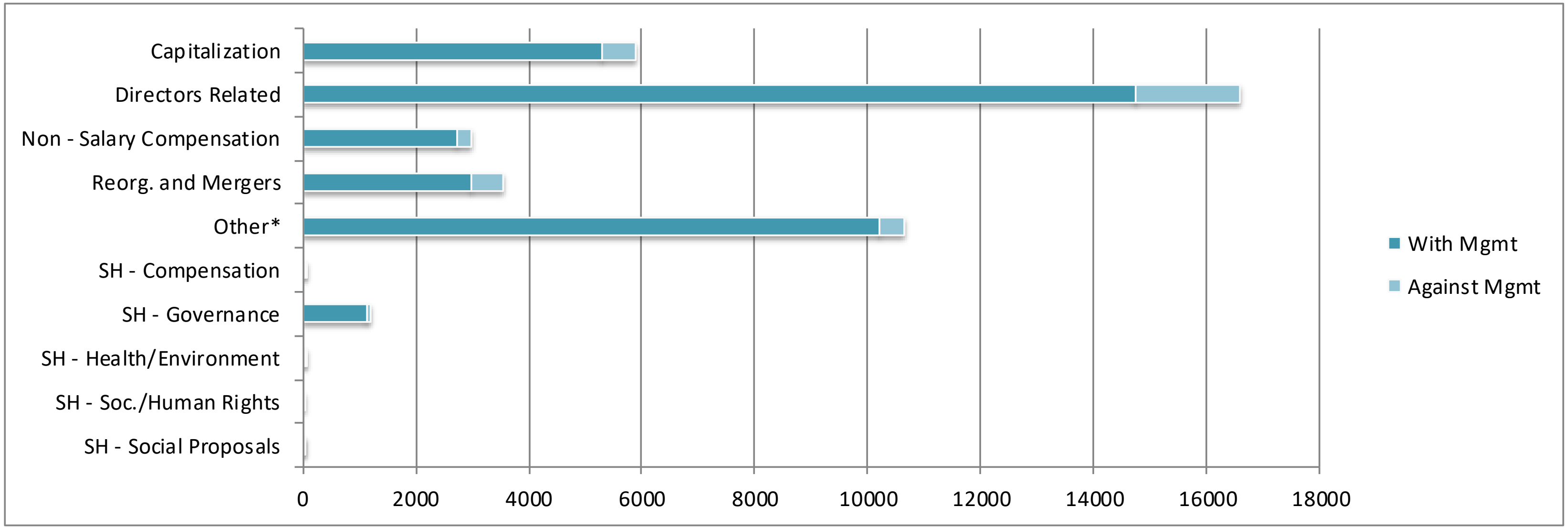
*SASB= Sustainable Accounting Standards Board

Appendices

PROPOSAL CATEGORIES – VOTES VERSE MANAGEMENT

NT Collective All Country World ex-US Index Fund - Lending

Reporting Period: June 30 2020 – June 30 2021



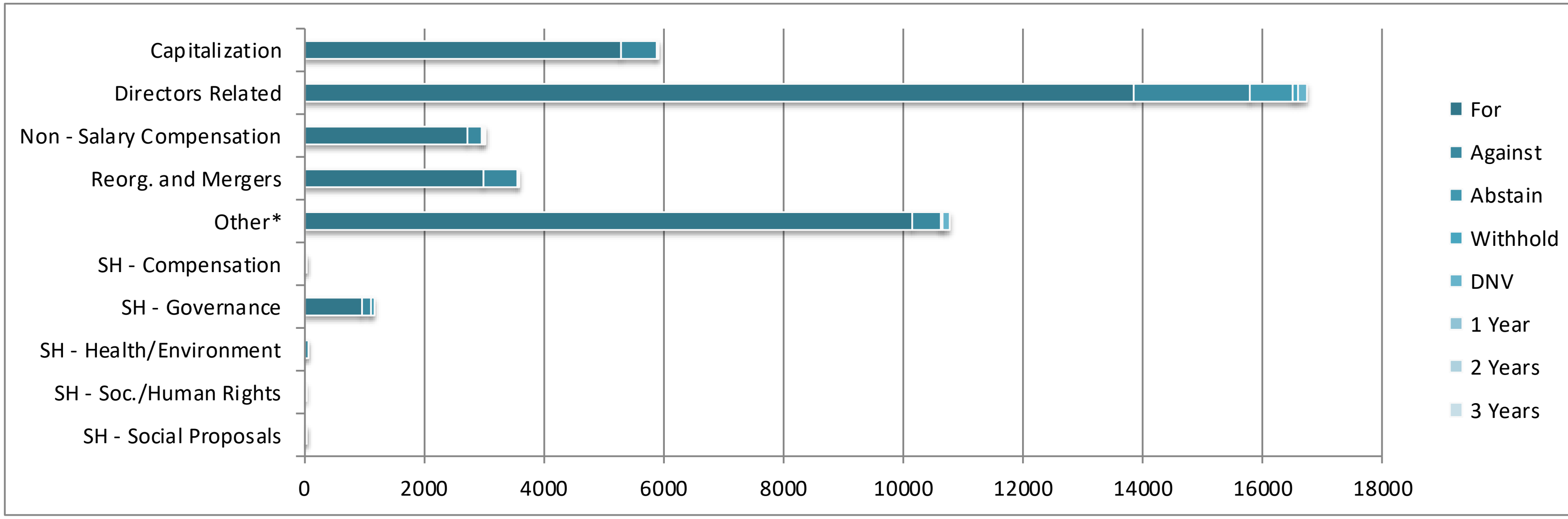
Proposal Category	With Mgmt	Against Mgmt	Total No. Voted	%Voted	%Against Mgmt
SH - Social Proposals	13	1	14	100%	7%
SH - Soc./Human Rights	0	3	3	100%	100%
SH - Health/Environment	58	15	73	100%	21%
SH - Governance	1138	54	1132	95%	5%
SH - Compensation	33	13	46	100%	28%
Other*	10220	432	10640	99%	4%
Reorg. and Mergers	2988	564	3552	100%	16%
Non - Salary Compensation	2744	239	2983	99%	8%
Directors Related	14729	1865	15883	95%	11%
Capitalization	5303	600	5903	99%	10%
Totals for the report	37226	3786	40229	97%	9%

* Other includes Routine/Business, Preferred/Bondholder, Antitakeover Related

PROPOSAL CATEGORIES – ALL VOTES

NT Collective All Country World ex-US Index Fund - Lending

Reporting Period: June 30 2020 – June 30 2021



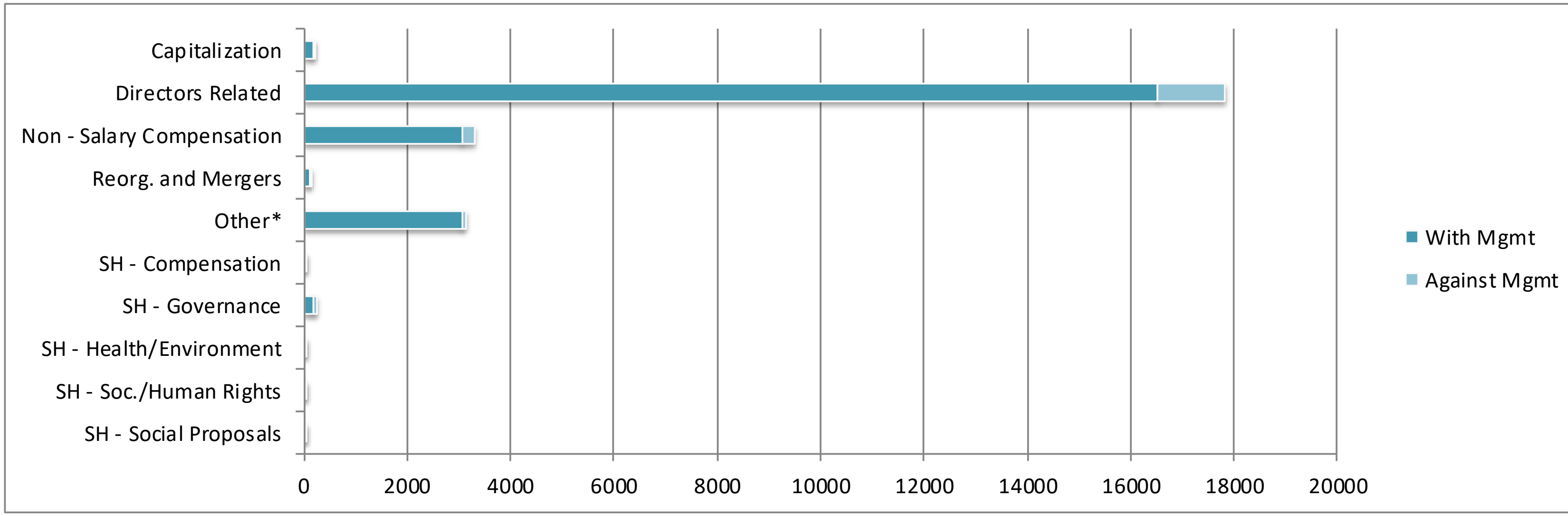
Proposal Category	For	Against	Abstain	Withhold	DNV	1 Year	2 Years	3 Years	Total No. Voted	%Voted
SH - Social Proposals	2	12	0	0	0	0	0	0	14	100%
SH - Soc./Human Rights	3	0	0	0	0	0	0	0	3	100%
SH - Health/Environment	21	52	0	0	0	0	0	0	73	100%
SH - Governance	966	166	60	0	0	0	0	0	1132	95%
SH - Compensation	28	18	0	0	0	0	0	0	46	100%
Other*	10153	487	12	0	140	0	0	0	10640	99%
Reorg. and Mergers	2988	564	0	0	4	0	0	0	3552	100%
Non - Salary Compensation	2736	238	0	0	24	9	0	0	2983	99%
Directors Related	13869	1928	711	86	170	0	0	0	15883	95%
Capitalization	5303	600	0	0	32	0	0	0	5903	99%
Totals for the report	36069	4065	783	86	370	9	0	0	40229	97%

* Other includes Routine/Business, Preferred/Bondholder, Antitakeover Related

PROPOSAL CATEGORIES – VOTES VERSE MANAGEMENT

NT Collective Russell 3000 Index Fund Lending

Reporting Period: June 30 2020 – June 30 2021



Proposal Category	With Mgmt	Against Mgmt	Total No. Voted	%Voted	%Against Mgmt
SH - Social Proposals	11	6	17	142%	35%
SH - Soc./Human Rights	1	7	8	160%	88%
SH - Health/Environment	11	29	40	167%	73%
SH - Governance	189	66	255	360%	76%
SH - Compensation	16	7	23	230%	30%
Other*	3059	96	3155	907%	188%
Reorg. and Mergers	123	5	128	102%	4%
Non - Salary Compensation	3059	259	3318	109%	8%
Directors Related	16524	1292	17816	114%	7%
Capitalization	190	26	216	100%	12%
Totals for the report	23185	1794	24978	112%	7%

* Other includes Routine/Business, Preferred/Bondholder, Antitakeover Related

PROPOSAL CATEGORIES – ALL VOTES

NT Collective Russell 3000 Index Fund Lending

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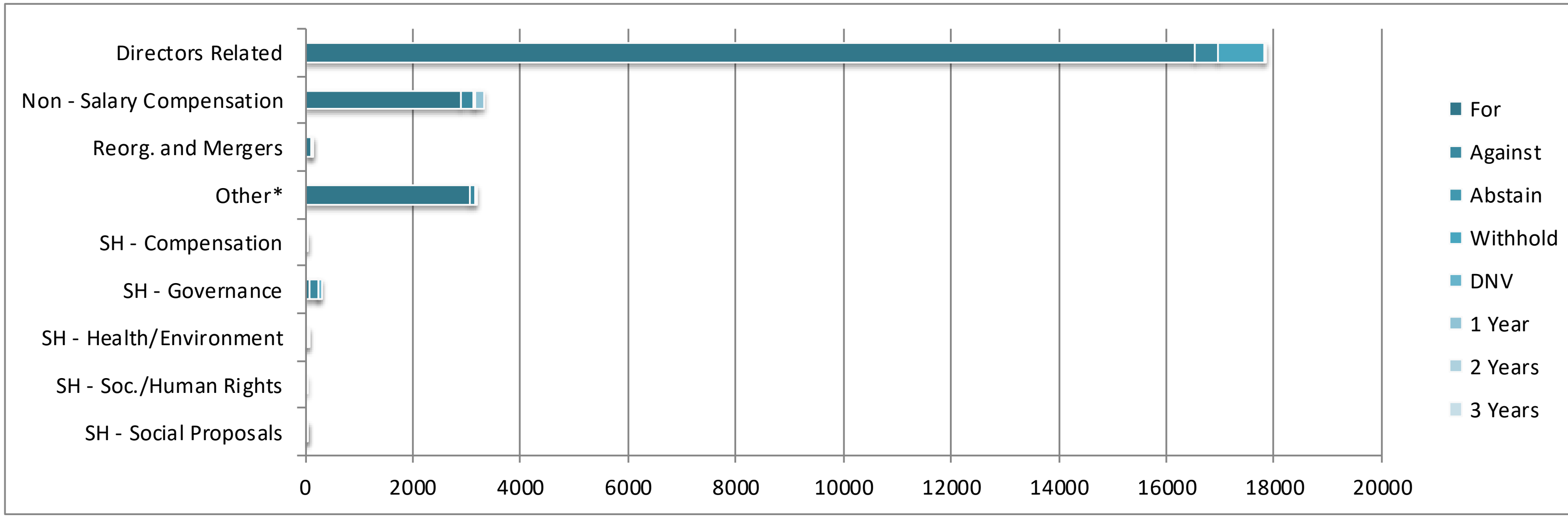

Proposal Category	For	Against	Abstain	Withhold	DNV	1 Year	2 Years	3 Years	Total No. Voted	%Voted
SH - Social Proposals	6	11	0	0	1	0	0	0	17	94%
SH - Soc./Human Rights	8	0	0	0	0	0	0	0	8	100%
SH - Health/Environment	31	9	0	0	2	0	0	0	40	95%
SH - Governance	81	171	0	3	74	0	0	0	255	174%
SH - Compensation	7	16	0	0	0	0	0	0	23	100%
Other*	3061	94	0	0	22	0	0	0	3155	687%
Reorg. and Mergers	123	5	0	0	4	0	0	0	128	97%
Non - Salary Compensation	2906	229	0	0	19	183	0	0	3318	99%
Directors Related	16522	450	0	844	15	0	0	0	17816	100%
Capitalization	190	26	0	0	0	0	0	0	216	100%
Totals for the report	22936	1012	1	847	137	183	0	0	24978	99%

* Other includes Routine/Business, Preferred/Bondholder, Antitakeover Related

EBMUDERS PROXY VOTING OUTCOMES – RESOLUTION TYPE (JUNE 2020 – JUNE 2021)

MANAGEMENT PROPOSALS

Proposal Type	All Country World ex US			Russell 3000		
Auditor Related	**With MGMT**	**Against MGMT**	**% Against MGMT**	**With MGMT**	**Against MGMT**	**% Against MGMT**
Auditor Ratification, Fix Remuneration of Auditors	1659	57	3.3%	2665	19	0.7%
Compensation Related						
Management Say on Pay (MSOP)	792	39	4.7%	2144	104	4.6%
Equity Based	842	72		529	98	15.6%
Advisory Vote on Say on Pay Frequency	7	2	22.2%	151	32	17.5%
Director Related						
Uncontested Director Elections	8611	1325	13.3%	16294	1295	7.4%
Contested Director Elections	-	-	-	-	-	-
Strategic Transactions						
Corporate Transactions	1434	296	17.1%	11	3	21.4%
Mergers & Acquisitions	311	40	11.4%	108	5	4.4%
Capitalization						
Capital Issuance/Capital Increase	1581	402	20.3%	107	12	10.1%
Capital Structure Related	2829	182	6.0%	69	12	14.8%
Climate						
Say on Climate (M)	12	1	7.7%	2	0	0.0%

EBMUDERS PROXY VOTING OUTCOMES – RESOLUTION TYPE (JUNE 2020 – JUNE 2021)

SHAREHOLDER PROPOSALS

Topic	Proposal Type	All Country World ex US			Russell 3000		
Environment		**With MGMT**	**Against MGMT**	**% Against MGMT**	**With MGMT**	**Against MGMT**	**% Against MGMT**
Climate Change	Climate Disclosure	3	3	50.0%	0	7	100.0%
	Climate Lobbying	3	2	40.0%	1	17	94.4%
	Climate Strategy	19	13	40.6%	5	6	54.5%
Natural Resource Management	Deforestation	-	-	-	0	1	100.0%
	Sustainable Food & Agriculture	-	-	-	1	2	66.7%
	Water Scarcity, Use & Pollution	-	-	-	0	1	100.0%
Waste, Recycling & Biodiversity	Biodiversity Impacts	29	1	3.3%	2	1	33.3%
Social							
Conduct, Culture & Ethics	Employee Engagement	1	0	0.0%	0	1	100.0%
	Integrity & Purpose	2	4	66.7%	6	39	86.7%
	Product Safety	0	1	100.0%	2	5	71.4%
Human Capital Management	Diversity, Equity & Inclusion	6	1	14.3%	9	12	57.1%
	Occupational Health & Safety	-	-	-	0	2	100.0%
	Recruitment	0	1	100.0%	0	1	100.0%
	Talent Mangement	18	2	10.0%	0	4	100.0%
Human Rights	Child Labour	-	-	-	0	1	100.0%
	Community Rights	6	1	14.3%	11	9	45.0%
	Modern Slavery	0	2	100.0%	1	1	50.0%
Governance Related							
Board Composition & Effectiveness	Diversity	4	0	0.0%	3	3	50.0%
	Diversity - Employee Representation	-	-	-	11	0	0.0%
	Independence	4	0	0.0%	34	2	5.6%
	Structure & Attentiveness	2	0	0.0%	2	4	66.7%
Compensation	Disclosure	1	5	83.3%	4	1	20.0%
	Pay for Performance Alignment	11	2	15.4%	12	2	14.3%
Shareholder Rights	Majority Vote	0	4	100.0%	3	31	91.2%
	One Share One Vote	0	1	100.0%	0	12	100.0%
	Proxy Access	3	2	40.0%	19	9	32.1%
	Special Meeting Rights	1	2	66.7%	25	10	28.6%
	Written Consent	13	0	0.0%	70	0	0.0%
Risk Management & Strategy							
Business Strategy	Business Purpose & Mission	2	1	33.3%	17	0	0.0%
Risk Management	Enterprise Risk Management	1	0	0.0%	0	1	100.0%

IMPORTANT INFORMATION

2020 One of the World's Most Admired Companies

Fortune's survey partners at Korn Ferry Group start with approximately 1,500 companies comprised of the Fortune 1,000 (the 1,000 largest U.S. companies ranked by revenue) and non-U.S. companies in Fortune's Global 500 database with revenues of $10 billion or more. Korn Ferry then selects the companies with the highest-revenues in 52 industries, surveying a total of 670 companies from 30 countries in 2020. To create the 52 industry lists, Korn Ferry polled executives, directors and analysts to rate companies in their own industry on nine criteria, from investment value to social responsibility. A company's score must rank in the top half of its industry survey to be listed. *http://fortune.com/worlds-most-admired-companies*

Barron's 100 Most Sustainable Companies

Additional information regarding the ranking methodology can be found at: *https://www.barrons.com/articles/barrons-100-most-sustainable-companies-for-2021-51613172493?refsec=top-sustainable-companies*

(click on 'See our methodology and credits')

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IMPORTANT INFORMATION

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NORTHERN
TRUST

MEKETA
INVESTMENT GROUP

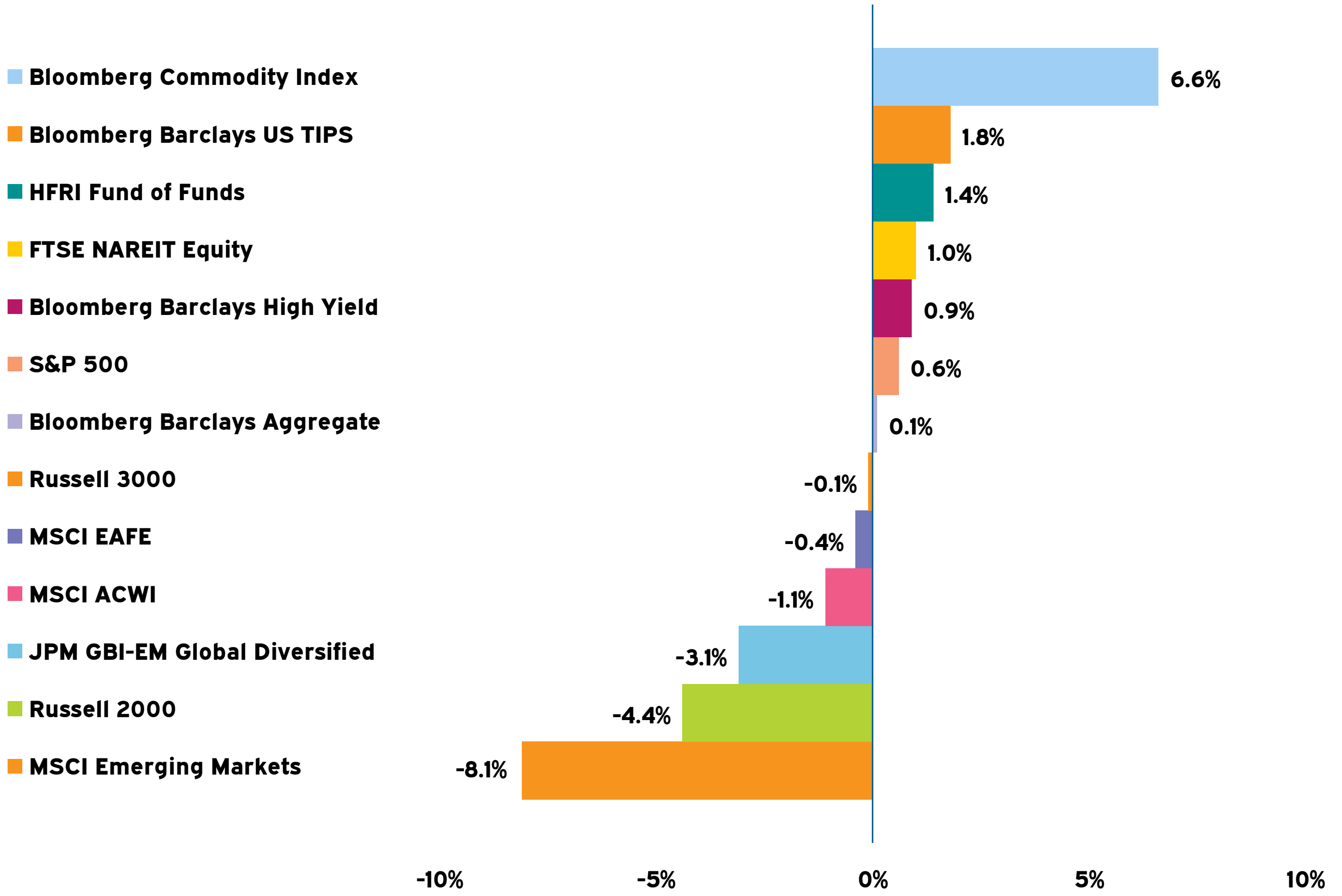
East Bay Municipal Utility District Employees' Retirement System

November 18, 2021

September 2021 Performance Update

The World Markets
Third Quarter of 2021

The World Markets[1]
Third Quarter of 2021



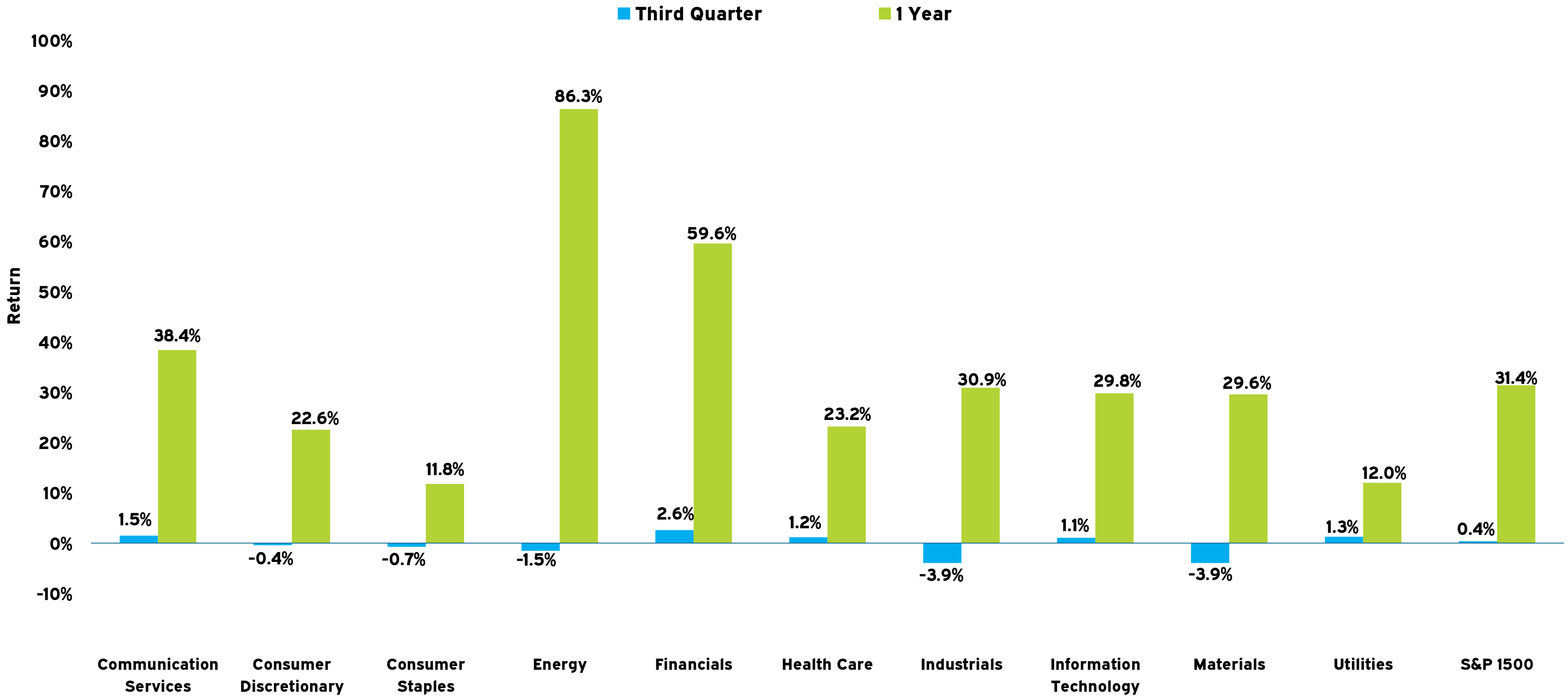
[1] Source: InvestorForce.

Index Returns[1]

	3Q21 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Domestic Equity						
S&P 500	0.6	15.9	30.0	16.0	16.9	16.6
Russell 3000	-0.1	15.0	31.9	16.0	16.9	16.6
Russell 1000	0.2	15.2	31.0	16.4	17.1	16.8
Russell 1000 Growth	1.2	14.3	27.3	22.0	22.8	19.7
Russell 1000 Value	-0.8	16.1	35.0	10.1	10.9	13.5
Russell MidCap	-0.9	15.2	38.1	14.2	14.4	15.5
Russell MidCap Growth	-0.8	9.6	30.4	19.1	19.3	17.5
Russell MidCap Value	-1.0	18.2	42.4	10.3	10.6	13.9
Russell 2000	-4.4	12.4	47.7	10.5	13.4	14.6
Russell 2000 Growth	-5.7	2.8	33.3	11.7	15.3	15.7
Russell 2000 Value	-3.0	22.9	63.9	8.6	11.0	13.2
Foreign Equity						
MSCI ACWI (ex. US)	-3.0	5.9	23.9	8.0	8.9	7.5
MSCI EAFE	-0.4	8.3	25.7	7.6	8.8	8.1
MSCI EAFE (Local Currency)	1.3	14.2	27.2	7.2	9.0	10.1
MSCI EAFE Small Cap	0.9	10.0	29.0	9.0	10.4	10.7
MSCI Emerging Markets	-8.1	-1.2	18.2	8.6	9.2	6.1
MSCI Emerging Markets (Local Currency)	-6.7	0.7	16.9	9.5	10.4	8.7
Fixed Income						
Bloomberg Barclays Universal	0.1	-1.1	0.2	5.6	3.3	3.5
Bloomberg Barclays Aggregate	0.1	-1.6	-0.9	5.4	2.9	3.0
Bloomberg Barclays US TIPS	1.8	3.5	5.2	7.4	4.3	3.1
Bloomberg Barclays High Yield	0.9	4.5	11.3	6.9	6.5	7.4
JPM GBI-EM Global Diversified	-3.1	-6.4	2.6	3.7	2.1	1.1
Other						
FTSE NAREIT Equity	1.0	23.1	37.4	10.0	6.8	11.3
Bloomberg Commodity Index	6.6	29.1	42.3	6.9	4.5	-2.7
HFRI Fund of Funds	1.4	6.4	15.0	6.7	5.9	4.5

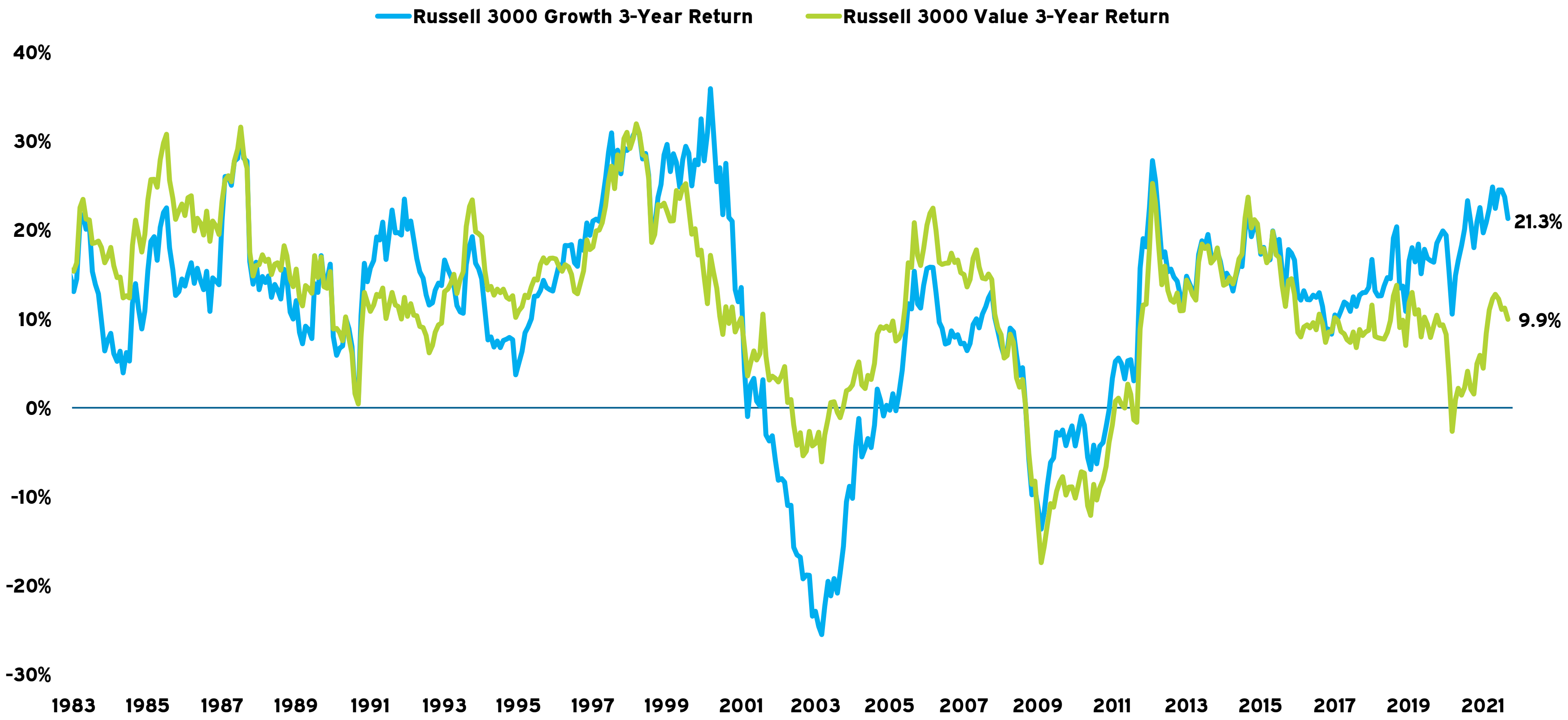
1 Source: InvestorForce.

S&P Sector Returns[1]



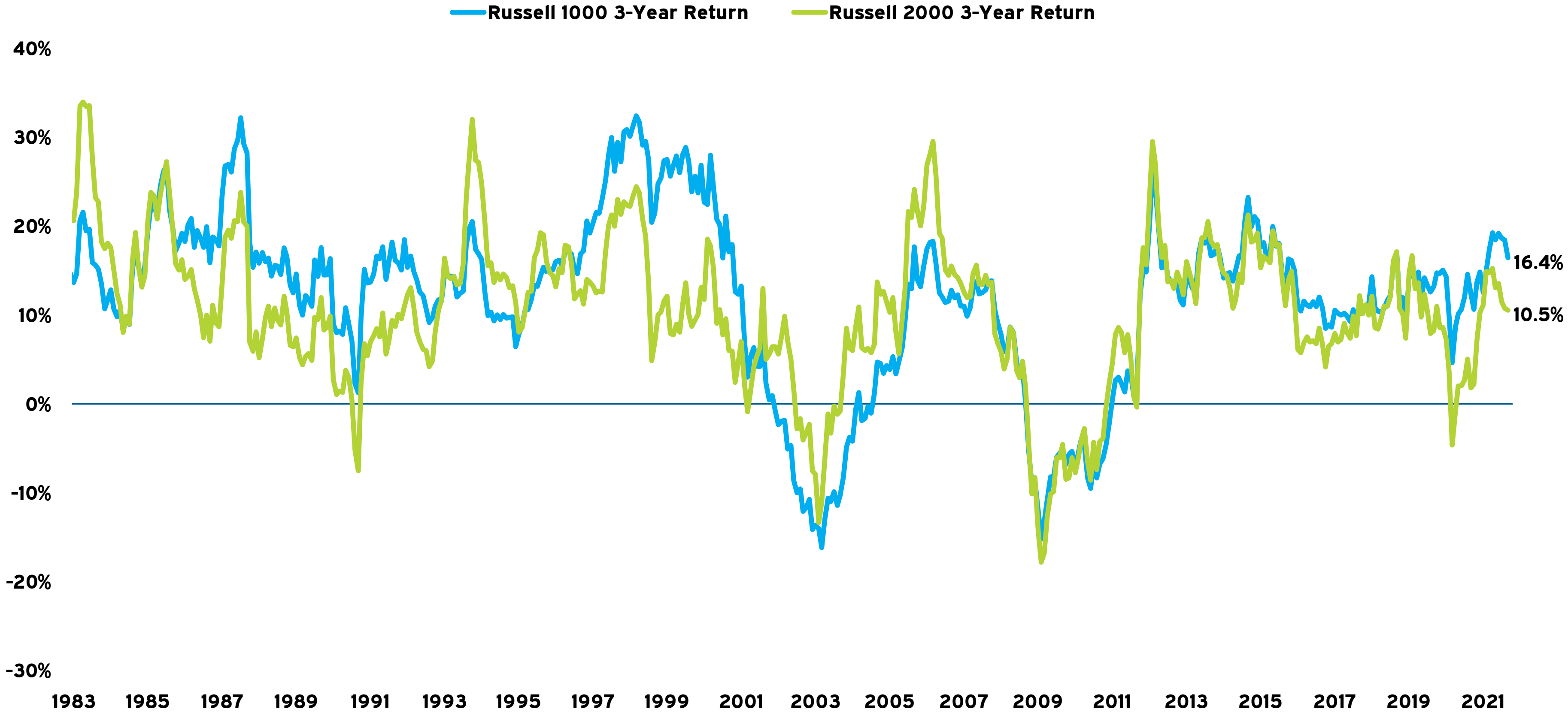
[1] Source: InvestorForce. Represents S&P 1500 (All Cap) data.

Growth and Value Rolling Three Year Returns[1]



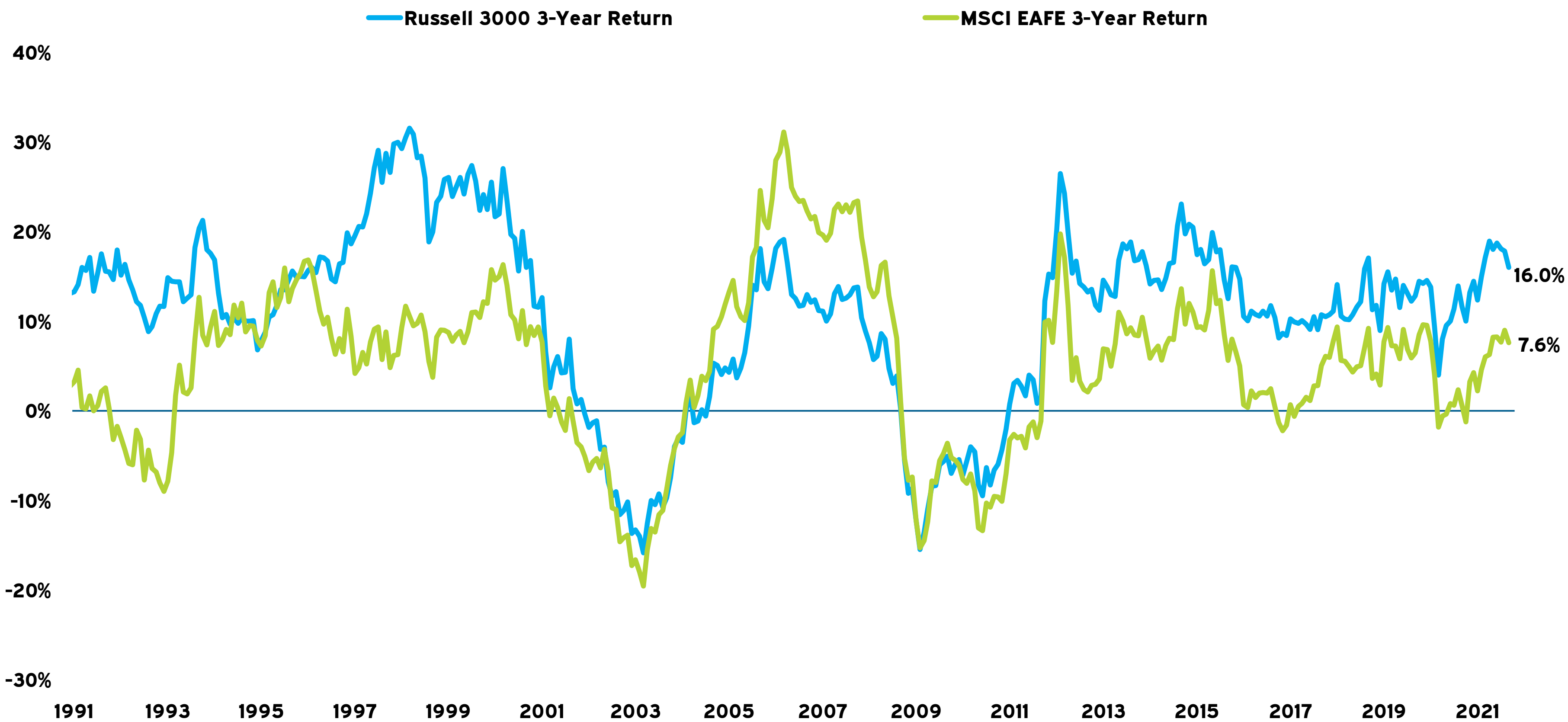
1 Source: InvestorForce.

Large Cap (Russell 1000) and Small Cap (Russell 2000) Rolling Three Year Returns[1]



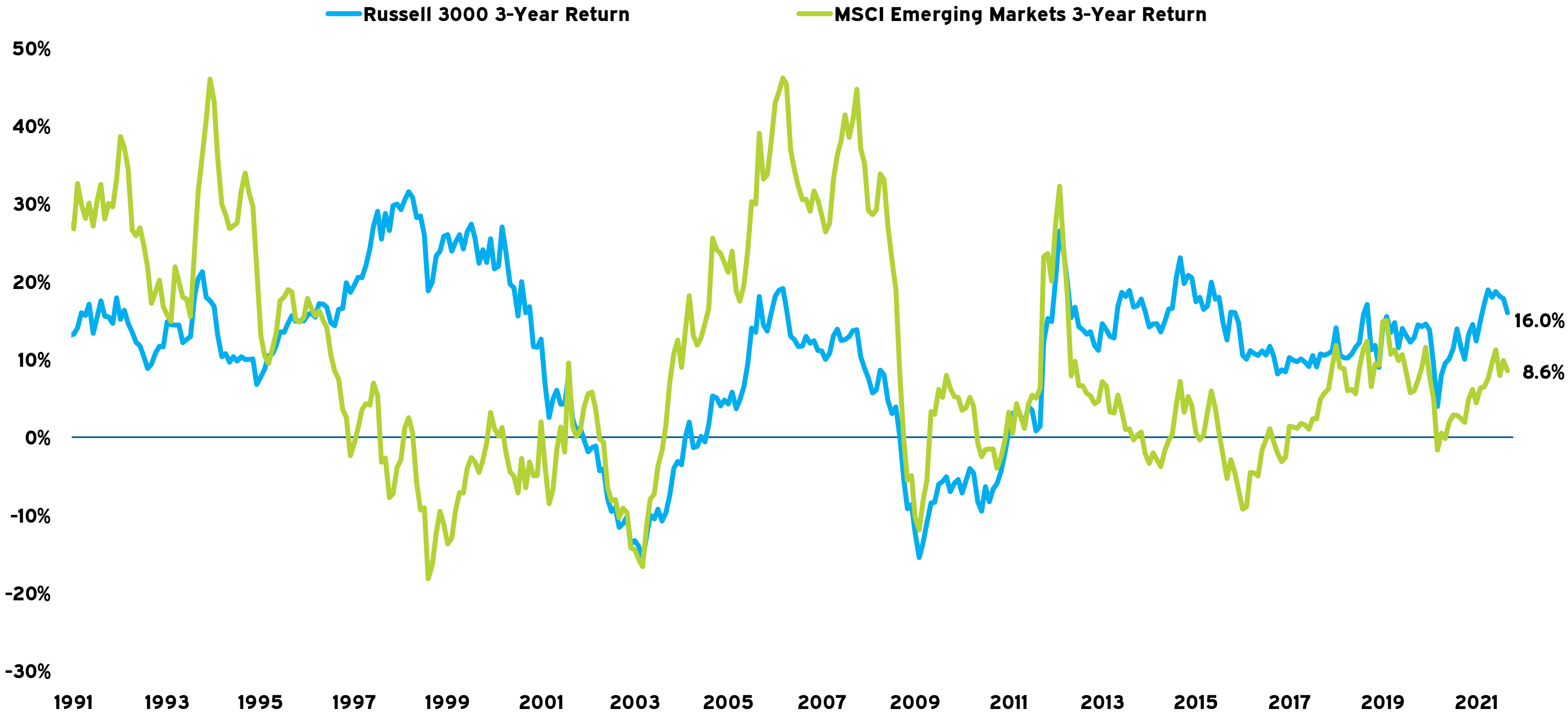
1 Source: InvestorForce.

US and Developed Market Foreign Equity Rolling Three-Year Returns[1]



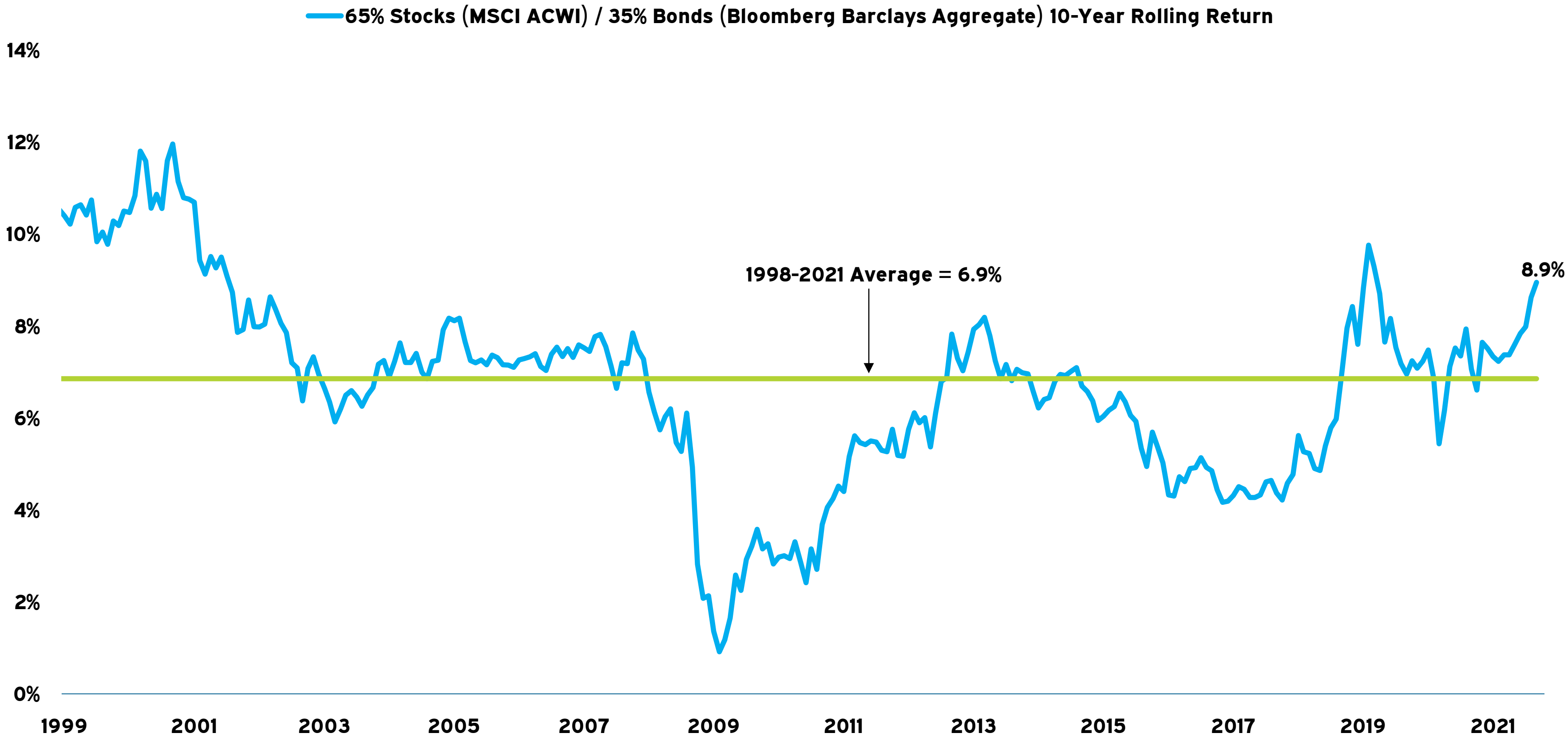
1 Source: InvestorForce.

US and Emerging Market Equity Rolling Three-Year Returns[1]



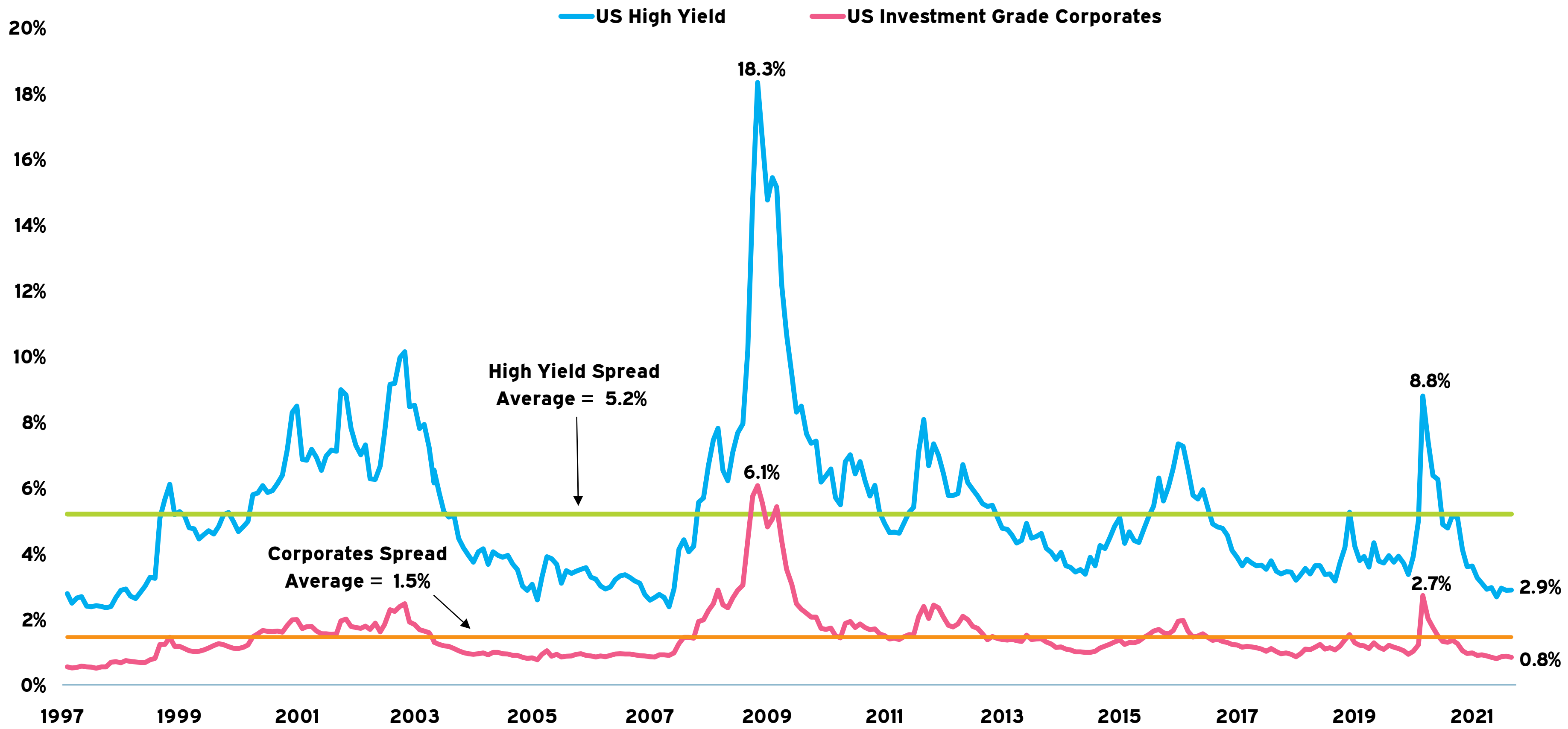
1 Source: InvestorForce.

Rolling Ten-Year Returns: 65% Stocks and 35% Bonds[1]



[1] Source: InvestorForce.

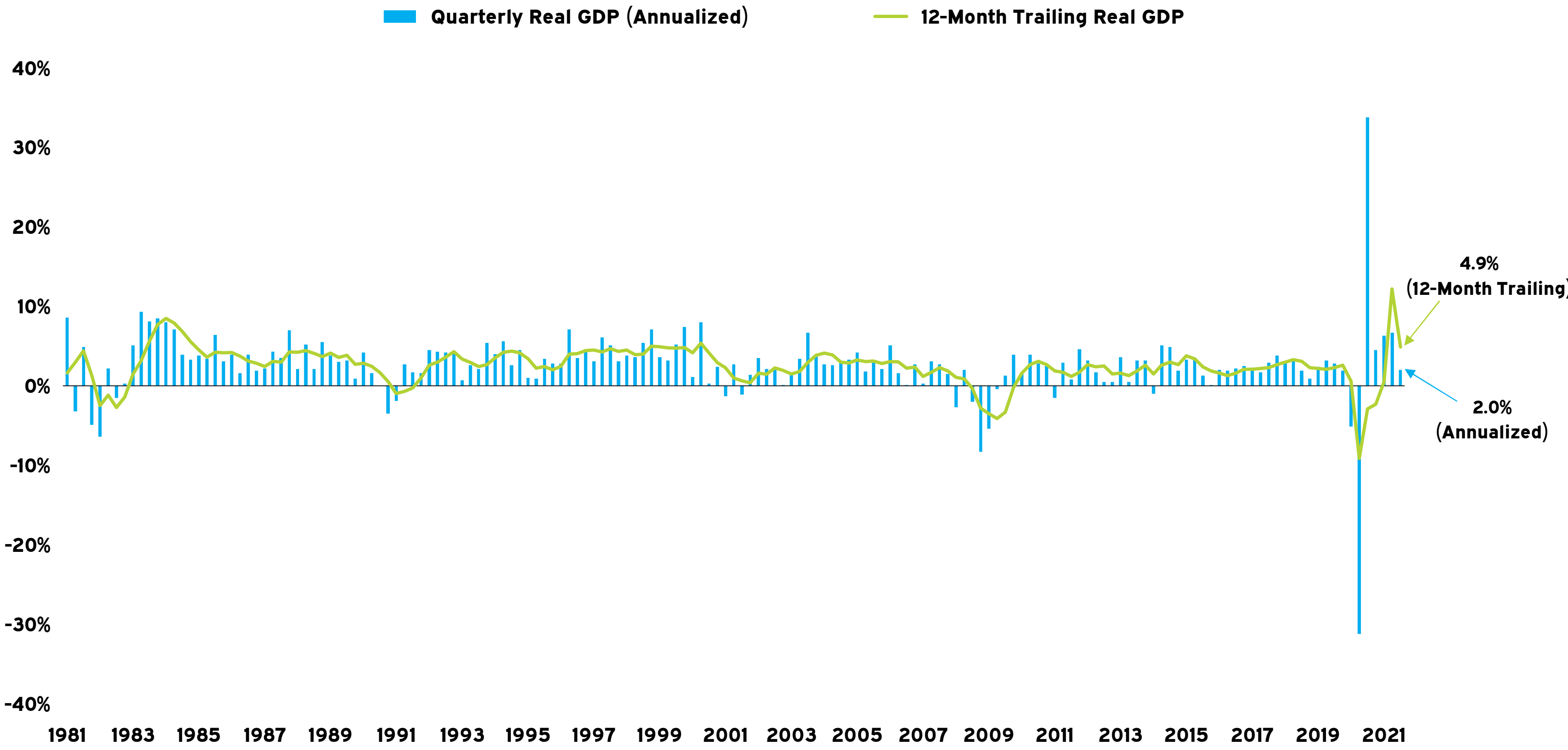
Credit Spreads vs. US Treasury Bonds[1,2]



1 Source: Barclays Live. Data represents the OAS.

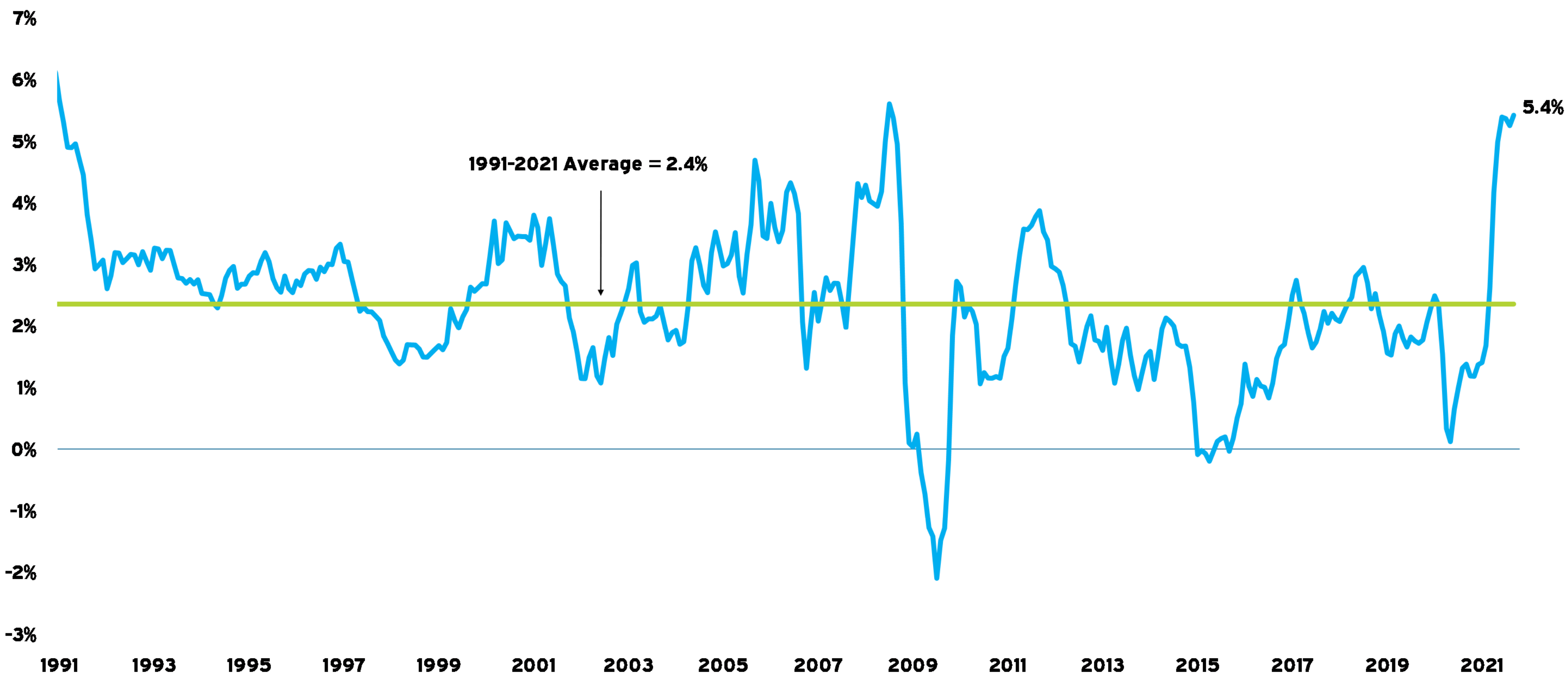
2 The median high yield spread was 4.7% from 1997-2021.

US Real Gross Domestic Product (GDP) Growth[1]



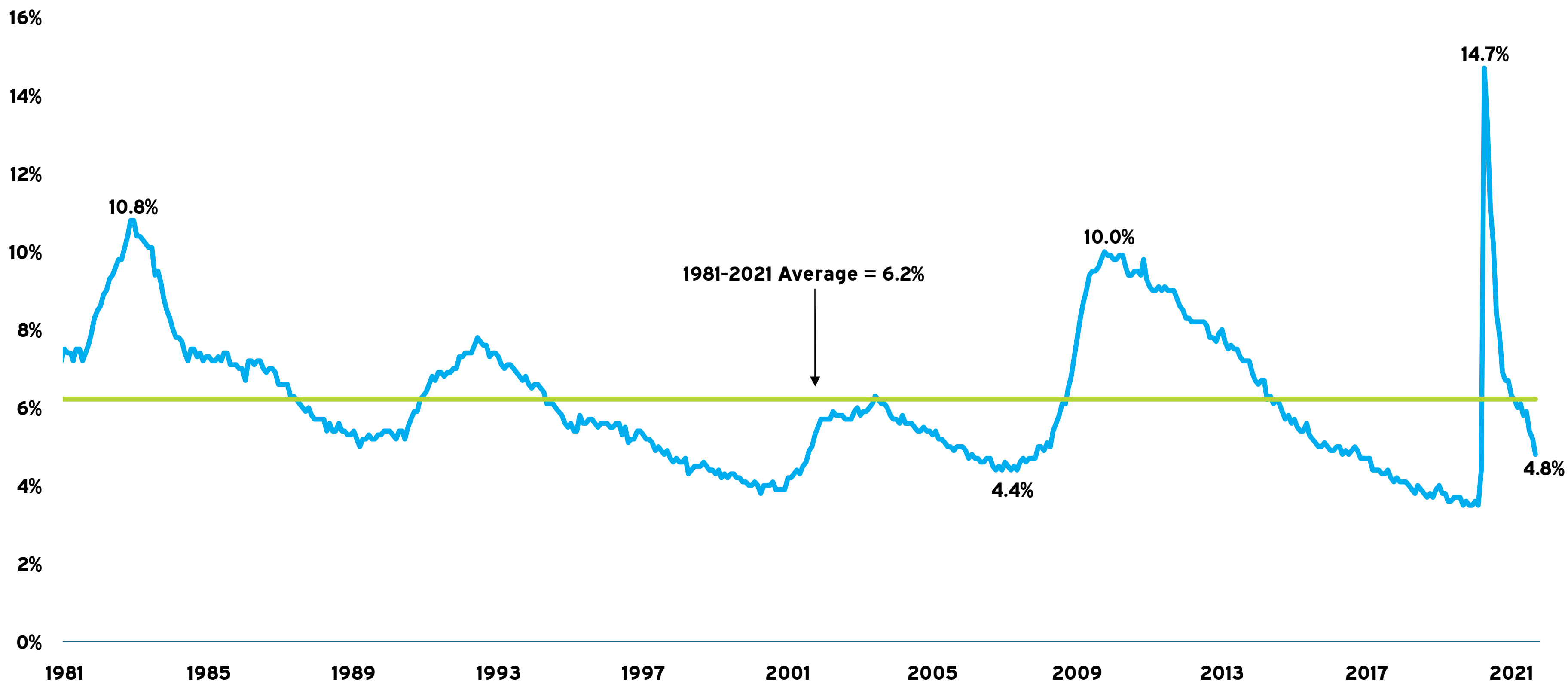
[1] Source: Bureau of Economic Analysis. Data is as of Q3 2021 and represents the first estimate.

US Inflation (CPI)
Trailing Twelve Months[1]



1 Source: Bureau of Labor Statistics. Data is non-seasonally adjusted CPI, which may be volatile in the short-term. Data is as of September 30, 2021.

US Unemployment[1]



[1] Source: Bureau of Labor Statistics. Data is as of September 30, 2021.

September 2021 Performance Update

EBMUDERS Total Plan Composite | As of September 30, 2021

Performance Summary	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)
EBMUDERS Total Plan Composite	**2,302,022,935**	**100.0**	**-0.6**	**19.8**	**9.9**	**10.7**	**11.2**	**8.3**
Total Plan Bench[1]			*-0.4*	*19.3*	*8.8*	*9.7*	*10.4*	*7.8*
US Equity Composite	**584,294,290**	**25.4**	**0.0**	**31.8**	**16.0**	**17.4**	**16.8**	**10.1**
Russell 3000 Hybrid[2]			*-0.1*	*31.9*	*16.0*	*16.9*	*16.6*	*10.2*
NonUS Equity Composite	**576,107,674**	**25.0**	**-3.5**	**24.2**	**7.6**	**8.9**	**8.3**	**7.5**
MSCI ACWI xUS (blend)[3]			*-2.9*	*24.4*	*8.5*	*9.4*	*8.0*	*7.1*
Covered Calls Composite	**472,523,522**	**20.5**	**0.3**	**22.2**	**9.7**	**10.3**	--	--
CBOE S&P 500 BuyWrite USD			*1.2*	*21.0*	*4.4*	*7.1*	--	--
Real Estate Composite	**116,587,901**	**5.1**	**2.3**	**23.0**	**9.7**	**7.9**	**10.8**	--
NCREIF NPI Lag[4]			*2.4*	*21.9*	*8.4*	*6.9*	*9.7*	--
Fixed Income Composite	**536,361,301**	**23.3**	**0.2**	**0.7**	**5.1**	**3.6**	**3.4**	**4.7**
Fixed Income Composite Bench[5]			*0.2*	*0.8*	*4.7*	*3.3*	*3.2*	*4.4*
Cash Composite	**16,148,246**	**0.7**	**0.1**	**0.6**	**1.8**	**1.5**	**0.9**	**1.9**
FTSE T-Bill 3 Months TR			*0.0*	*0.1*	*1.1*	*1.1*	*0.6*	*1.3*

[1] Policy Benchmark consists of 25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 10% BBgBarc US Aggregate TR / 10% BBgBarc US Intermediate Gov/Cred/ 2.5% ICE BofAML US Corp Cash Pay BB -B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD index 12/1/2019 - present; see Appendix for historical Policy Benchmark composition.

[2] Russell 3000 as of 10/1/05. Prior: 30% S&P500, 10% S&P400, 10% Russell 2000 (4/1/05-9/30/05); 33% S&P500, 10% S&P400, 10% Russell 2000 (9/1/98-3/31/05); 30% S&P500, 15% Wilshire 5000 (4/1/96-8/31/98).

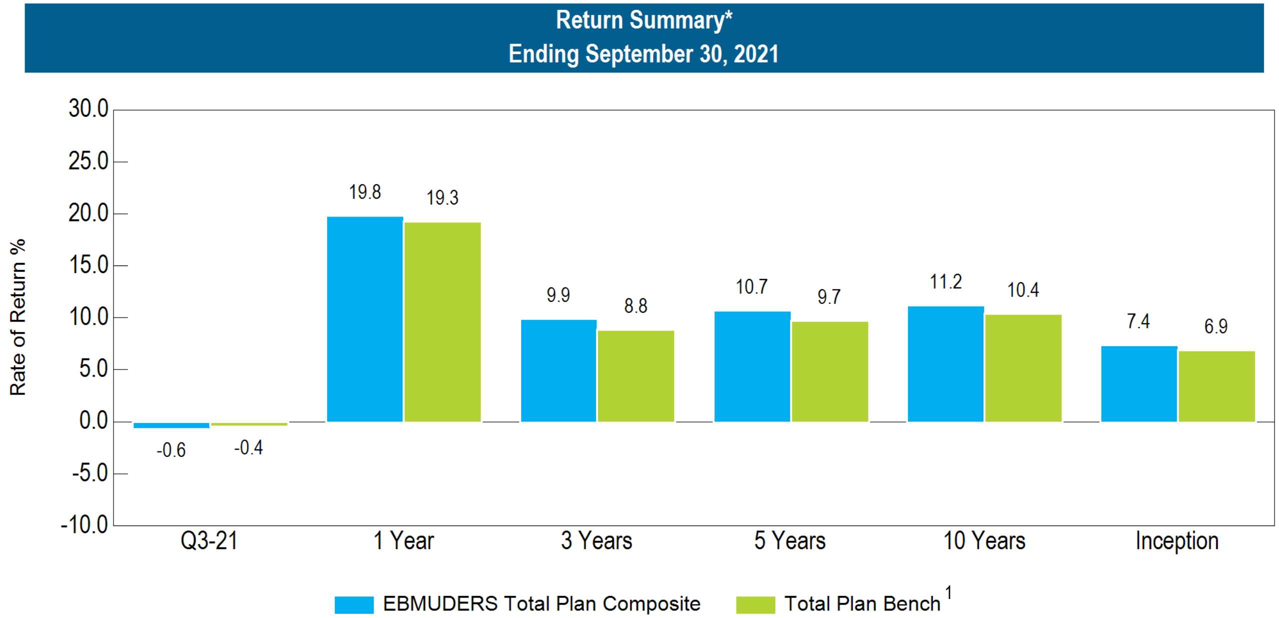
[3] MSCI ACWIxU.S. as of 1/1/07; MSCI EAFE ND thru 12/31/06.

[4] 50% NCREIF (lagged), 50% FTSE NAREIT Equity REITs Index as of 11/1/11; NCREIF (lagged) thru 10/31/11.

[5] 40% BB Aggregate, 40% BBgBarc US Intermediate Gov/Cred, 10% ICE BofA ML U.S. Corp Cash Pay BB-B 1-5 Year, and 10% Blend 60% Credit Suisse Leverage Loan/40% BBg BC Short Term Gov/Corp 12/1/2019-present. See Appendix for historical Composite benchmark.

EBMUDERS Total Plan Composite | As of September 30, 2021

Summary of Cash Flows	Third Quarter	One Year
Beginning Market Value	$2,326,510,277	$1,942,733,470
Net Cash Flow	-$10,124,000	-$23,816,441
Capital Appreciation	-$14,363,342	$383,105,906
Ending Market Value	$2,302,022,935	$2,302,022,935

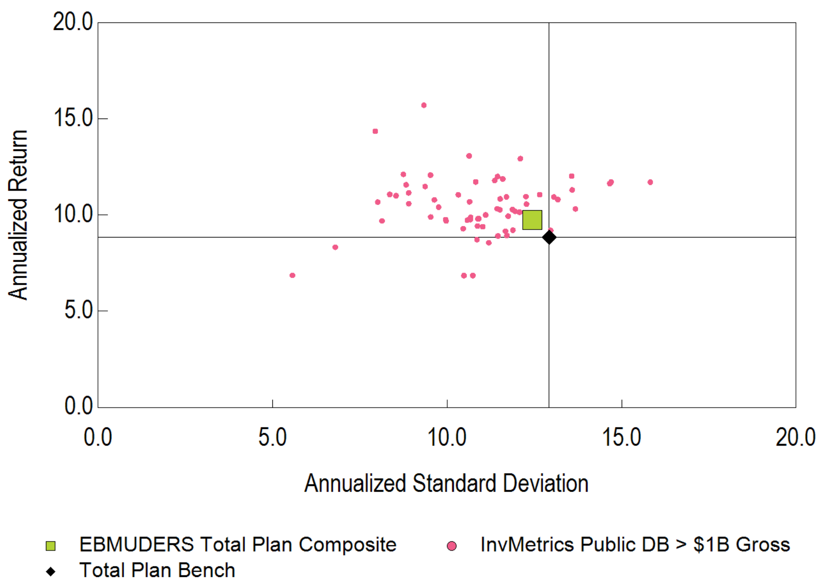


* Performance is gross of fees.

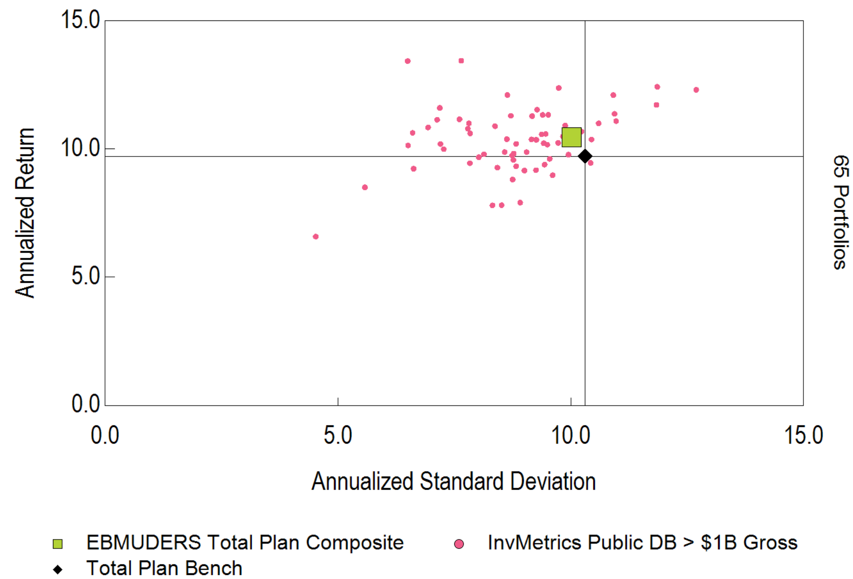
[1] Policy Benchmark consists of 25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 10% BBgBarc US Aggregate TR / 10% BBgBarc US Intermediate Gov/Cred / 2.5% ICE BofAML US Corp Cash Pay BB -B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD index 12/1/2019 - present; see Appendix for historical Policy Benchmark composition.

EBMUDERS Total Plan Composite | As of September 30, 2021

Annualized Return vs. Annualized Standard Deviation
3 Years Ending September 30, 2021



Annualized Return vs. Annualized Standard Deviation
5 Years Ending September 30, 2021



3 Years Ending September 30, 2021

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	9.91%	12.44%	0.71
Total Plan Bench	8.84%	12.92%	0.60

5 Years Ending September 30, 2021

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
EBMUDERS Total Plan Composite	10.68%	10.02%	0.96
Total Plan Bench	9.71%	10.31%	0.84

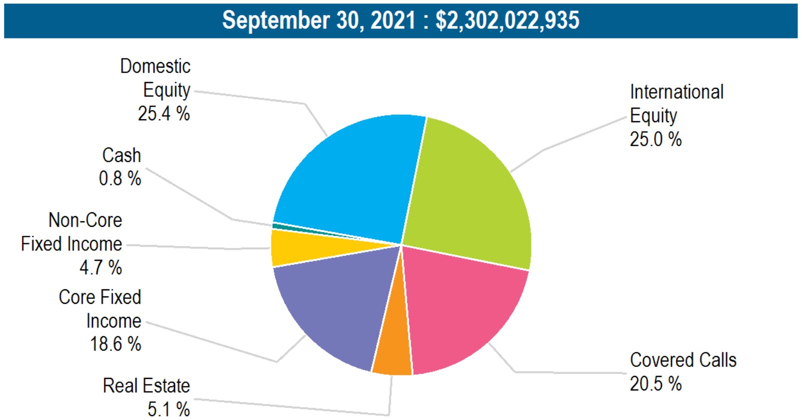
EBMUDERS Total Plan Composite | As of September 30, 2021

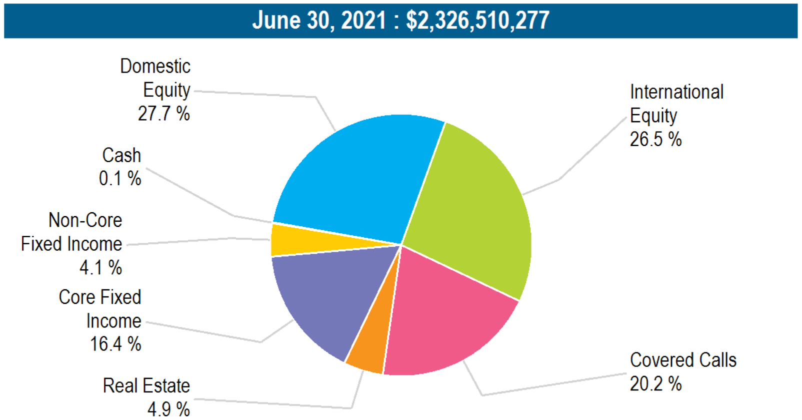
Asset Allocation vs. Target

	Current ($)	Current (%)	Policy[1] (%)	Difference* (%)	Policy Range[2] (%)	Within Range
Domestic Equity	584,294,290	25.4	25.0	0.4	20.0 - 30.0	Yes
International Equity	574,770,122	25.0	25.0	0.0	20.0 - 30.0	Yes
Covered Calls	472,523,522	20.5	20.0	0.5	17.0 - 23.0	Yes
Real Estate[3]	116,587,901	5.1	5.0	0.1	3.0 - 7.0	Yes
Core Fixed Income	428,483,925	18.6	20.0	-1.4	17.0 - 23.0	Yes
Non-Core Fixed Income	107,877,376	4.7	5.0	-0.3	3.0 - 7.0	Yes
Cash	17,485,798	0.8	0.0	0.8	0.0 - 0.0	No
Total	**2,302,022,935**	**100.0**	**100.0**			

*Difference between Policy and Current Allocation

[1]Current policy target allocations elected by the Board in January 2019 took effect March 2019 upon the transition to the new long-term strategic allocation.
[2]Policy rebalancing ranges shown are for non-turbulent market periods. The Plan also has established rebalancing ranges to be in effect during turbulent market periods
[3]RREEF results are lagged 1 quarter





Manager Performance - Gross of Fees | As of September 30, 2021

	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
Domestic Equity	**584,294,290**				
Northern Trust Russell 3000	582,711,770	-0.1	31.8	15.9	--
Russell 3000		*-0.1*	*31.9*	*16.0*	--
International Equity	**574,770,122**				
Northern Trust ACWI ex US	574,770,122	-3.3	23.5	7.9	--
MSCI ACWI ex USA Gross		*-2.9*	*24.4*	*8.5*	--
Covered Calls	**472,523,522**				
Parametric BXM	155,241,461	0.7	21.1	8.2	9.3
CBOE S&P 500 BuyWrite USD		*1.2*	*21.0*	*4.4*	*7.1*
Parametric Delta Shift	172,856,250	0.9	29.8	14.4	14.6
CBOE S&P 500 BuyWrite USD		*1.2*	*21.0*	*4.4*	*7.1*
Van Hulzen	144,425,811	-0.8	15.3	6.1	6.8
CBOE S&P 500 BuyWrite USD		*1.2*	*21.0*	*4.4*	*7.1*
Real Estate	**116,587,901**				
RREEF America II Lag[1]	53,026,906	3.7	6.7	6.2	7.1
NCREIF NPI Mo 1 Qtr Lag		*3.6*	*7.4*	*5.5*	*6.1*
CenterSquare	63,560,995	1.2	37.6	11.7	8.2
FTSE NAREIT Equity REIT		*1.0*	*37.4*	*10.0*	*6.8*

[1]RREEF results are lagged one quarter.

Manager Performance - Gross of Fees | As of September 30, 2021

	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
Core Fixed Income	**428,483,925**				
CS McKee	213,968,113	0.0	-0.8	5.6	3.3
Bloomberg US Aggregate TR		*0.1*	*-0.9*	*5.4*	*2.9*
Garcia Hamilton	214,515,812	0.1	-0.9	--	--
BBgBarc US Intermediate Gov/Cred		*0.0*	*-0.4*	*--*	*--*
Non-Core Fixed Income	**107,877,376**				
MacKay Shields (HY)	54,364,228	0.8	7.9	--	--
ICE BofA ML US Corp Cash Pay BB-B 1-5Yr		*0.6*	*8.4*	*--*	*--*
Federated Investment Counseling (Bank Loans)	53,513,149	0.7	6.3	--	--
60% CredSuisLevLoan/40% BBStGovCorp		*0.7*	*5.1*	*--*	*--*
Cash	**17,485,798**				
Cash LAIF	16,148,246	0.1	0.6	1.8	1.5
FTSE T-Bill 3 Months TR		*0.0*	*0.1*	*1.1*	*1.1*

Benchmark History
As of September 30, 2021

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

EBMUDERS Total Plan x Securities Lending Composite		
12/1/2019	Present	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 10% Bloomberg US Aggregate TR / 10% BBgBarc US Intermediate Gov/Cred / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
3/1/2019	11/30/2019	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
7/1/2018	2/28/2019	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
4/1/2014	6/30/2018	40% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 15% MSCI ACWI ex USA Gross / 10% Bloomberg US Aggregate TR / 5% Bloomberg US Govt/Credit 1-3 Yr. TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
3/1/2014	3/31/2014	40% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 15% MSCI ACWI ex USA Gross / 15% Bloomberg US Aggregate TR / 2.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
11/1/2011	2/28/2014	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Universal TR / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT
1/1/2008	10/31/2011	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Universal TR / 5% NCREIF NPI Mo 1 Qtr Lag
1/1/2007	12/31/2007	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% Bloomberg US Aggregate TR / 5% NCREIF Property Index
10/1/2005	12/31/2006	50% Russell 3000 / 25% Bloomberg US Aggregate TR / 5% NCREIF NPI Mo 1 Qtr Lag / 20% MSCI EAFE
4/1/2005	9/30/2005	30% S&P 500 / 10% S&P 400 MidCap / 10% Russell 2000 / 20% MSCI EAFE / 25% Bloomberg US Aggregate TR / 5% NCREIF NPI Mo 1 Qtr Lag
9/1/1998	3/31/2005	33% S&P 500 / 10% S&P 400 MidCap / 10% Russell 2000 / 17% MSCI EAFE / 30% Bloomberg US Aggregate TR
3/31/1996	8/31/1998	30% S&P 500 / 15% Wilshire 5000 / 15% MSCI EAFE / 30% Bloomberg US Aggregate TR / 5% NCREIF Property Index / 5% FTSE T-Bill 3 Months TR
Public Equity Composite		
1/1/2007	Present	71.43% Russell 3000 / 28.57% MSCI ACWI ex USA Gross
10/1/2005	12/31/2006	28.57% MSCI EAFE / 71.43% Russell 3000
4/1/2005	9/30/2005	42.86% S&P 500 / 14.285% S&P 400 MidCap / 14.285% Russell 2000 / 28.57% MSCI EAFE
9/1/1998	3/31/2005	47.14% S&P 500 / 14.285% S&P 400 MidCap / 14.285% Russell 2000 / 24.29% MSCI EAFE

1/1/1994	8/31/1998	50% S&P 500 / 25% Wilshire 5000 / 25% MSCI EAFE
US Equity Composite		
10/1/2005	Present	Russell 3000
4/1/2005	9/30/2005	60% S&P 500 / 20% S&P 400 MidCap / 20% Russell 2000
9/1/1998	3/31/2005	62.23% S&P 500 / 18.87% S&P 400 MidCap / 18.87% Russell 2000
4/1/1996	8/31/1998	33.3% Wilshire 5000 / 66.6% S&P 500
US Equity Large Cap Composite		
10/1/2005	Present	Russell 1000 Value
6/1/1994	9/30/2005	S&P 500
NonUS Equity Composite		
1/1/2007	Present	MSCI ACWI ex USA Gross
1/1/1970	12/31/2006	MSCI EAFE
NonUSE Developed Markets Composite		
1/1/2007	Present	MSCI ACWI ex USA Gross
1/1/1970	12/31/2006	MSCI EAFE
Covered Calls Composite		
	Present	CBOE S&P 500 BuyWrite USD
Real Estate Composite		
11/1/2011	Present	50% FTSE NAREIT Equity REIT / 50% NCREIF NPI Mo 1 Qtr Lag
10/1/1998	10/31/2011	NCREIF NPI Mo 1 Qtr Lag
4/1/1978	9/30/1998	NCREIF Property Index
Fixed Income Composite		
12/1/2019	Present	40% Bloomberg US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 40% BBgBarc US Intermediate Gov/Cred / 10% 60% CredSuisLevLoan/40% BBStGovCorp
3/1/2019	11/30/2019	60% Bloomberg US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 20% Bloomberg US Govt/Credit 1-3 Yr. TR / 10% 60% CredSuisLevLoan/40% BBStGovCorp

7/1/2018	2/28/2019	60% Bloomberg US Aggregate TR / 10% S&P/LSTA Performing Loan TR USD / 20% Bloomberg US Govt/Credit 1-3 Yr. TR / 10% Bloomberg US High Yield 1-5Yr Cash Pay 2%
4/1/2014	6/30/2018	50% Bloomberg US Aggregate TR / 12.5% S&P/LSTA Performing Loan TR USD / 25% Bloomberg US Govt/Credit 1-3 Yr. TR / 12.5% Bloomberg US High Yield 1-5Yr Cash Pay 2%
3/1/2014	3/31/2014	75% Bloomberg US Aggregate TR / 12.5% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 12.5% S&P/LSTA Performing Loan TR USD
1/1/2008	2/28/2014	Bloomberg US Universal TR
1/1/1976	12/31/2007	Bloomberg US Aggregate TR
Fixed Income Core Fixed Income Composite		
12/1/2019	Present	50% Bloomberg US Aggregate TR / 50% BBgBarc US Intermediate Gov/Cred
Fixed Income Non-Core Fixed Income Composite		
12/1/2019	Present	50% 60% CredSuisLevLoan/40% BBStGovCorp / 50% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
3/1/2019	11/30/2019	25% 60% CredSuisLevLoan/40% BBStGovCorp / 25% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 50% Bloomberg US Govt/Credit 1-3 Yr. TR
3/1/2014	2/28/2019	25% S&P/LSTA Performing Loan TR USD / 25% Bloomberg US High Yield 1-5Yr Cash Pay 2% / 50% Bloomberg US Govt/Credit 1-3 Yr. TR
Cash Composite		
	Present	FTSE T-Bill 3 Months TR

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

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

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

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 PRESENTATION 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 PRESENTATION.

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

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance SDS

SUBJECT: Presentation of Retirement System Audited Financial Report

SUMMARY

Each year staff prepares an audited financial report for the Retirement System and presents the report to the Retirement Board. Attached to this memo are the Letter of Transmittal, Basic Financial Statements, and Supplementary Information for the Retirement System for the year ending June 30, 2021. The report has been audited by Lance, Soll & Lunghard, LLP, the Retirement System's Independent Auditor. The opinion of the Independent Auditor is included in the report.

Attachments

November 18, 2021

The Retirement Board
East Bay Municipal Utility District Employees' Retirement System
375 Eleventh Street
Oakland, CA 94607

Letter of Transmittal: Financial Report of the East Bay Municipal Utility District Employees' Retirement System for the Year Ended June 30, 2021

Dear Board Members:

The financial report of the Employees' Retirement System (Retirement System) for the year ended June 30, 2021, is transmitted herewith as required by Section 9 of the Ordinance establishing the Retirement System. This report consists of the Basic Financial Statements and Supplementary Information for the year ended June 30, 2021 (with the Independent Auditors' report therein) as examined and accompanied by the opinion of Lance, Soll & Lunghard, LLP (LSL CPAs and Advisors).

The Retirement System's net assets as of June 30, 2021 were $2,328.72 million, an increase of $471.11 million (25.36 percent) during the year. As detailed in the Meketa Investment Group report to the Retirement System Board on September 16, 2021, the investment return for Fiscal Year (FY) 2021 was 26.7 percent and the annualized investment return for the five years ending June 30, 2021 was 11.4 percent, or 4.4 percent more than the 7.00 percent actuarial assumed investment rate of return.

During FY 2021, the Retirement Board approved a cost of living adjustment (COLA) benefit of 1.7 percent, effective July 1, 2021.

Review of Schedule and Charts

<u>Chart 1: Membership Activity</u>

As of June 30, 2021, the number of active members (including terminated vested employees) increased by 4 to a total of 2,228, while the number of members receiving retirement, disability retirement, or survivor benefits increased by 77 to 1,975 people. This represents an average increase of 0.18 percent per year over the last 10 years for active members and an average increase of 4.06 percent per year over the last 10 years for retired members and survivors.

<u>Chart 2: Service, Disability, Death and Health Benefits Paid to Retired Members</u>

During FY 2021, $130.20 million was paid to beneficiaries, an increase of 6.82 percent from FY 2020. Pension benefit payments increased by 7.13 percent while health insurance benefit payments increased by 2.90 percent.

<u>Chart 3: Contributions Received</u>

During FY 2021 District and member contributions (net of members' refunds) were $90.62 million and $19.06 million, respectively, for a total of $109.68 million, an increase of 2.36 percent from FY 2020. The District's $90.62 million contribution was 82.62 percent of the total amount contributed to the Plan, an increase of $1.89 million from FY20. The District adopted FY21 contribution rates at the staff recommended levels, 43.18 percent for the 1980 Plan and 36.16 percent for the 2013 Plan. The contribution rates for employees remained unchanged in FY20. For the 1980 Plan, the employee contribution rate remained at 8.75 percent. For the 2013 Plan, the employee contribution rate remained at 8.84 percent. The 2013 Plan employee contribution rate is set at 50 percent of the total normal cost rate and would only be adjusted if a change in assumptions would result in an adjustment to the normal rate of more than 1 percent of payroll.

Chart 4: Sources of Funds

FY21 Retirement System revenue came from three sources: District contributions (15 percent), Members contributions net of refunds (3 percent), and net investment income (82 percent). The District and Member contributions increased in FY 2021 due to the increases in the total number of members and overall payroll. Gross investment income or loss includes interest, dividends, earnings from real estate investments and net realized and unrealized gains or losses on investments, and varies from year to year. To help maintain stable contribution rates, investment returns (or losses) are amortized equally over a 5-year period. Since July 1, 2011 changes in Unfunded Actuarial Accrued Liability (UAAL) are amortized over separate decreasing 15-year periods, assumption changes are amortized over separate decreasing 25-year periods, and experience gains/losses are amortized over separate decreasing 20-year periods.

Chart 5: Net Pension Liability (NPL) and Funded Ratio

The Net Pension Liability is the Plan's liability determined in accordance with GASB 67 and 68 less the fiduciary net position. The June 30, 2021 NPL is based on actuarial valuations measured as of June 30, 2020. During the year ended June 30, 2021, the NPL increased by $173 million to $721.65 million primarily due to (a) the approximate return on the market value of assets was less than the assumption rate, and (b) changes in the actuarial assumptions (change in mortality tables that more accurately reflect experience of the District). The discount rate that is used to calculate the NPL is 7.00 percent. As of June 30, 2021 reporting date, the Net Pension Liability is $721.65 million.

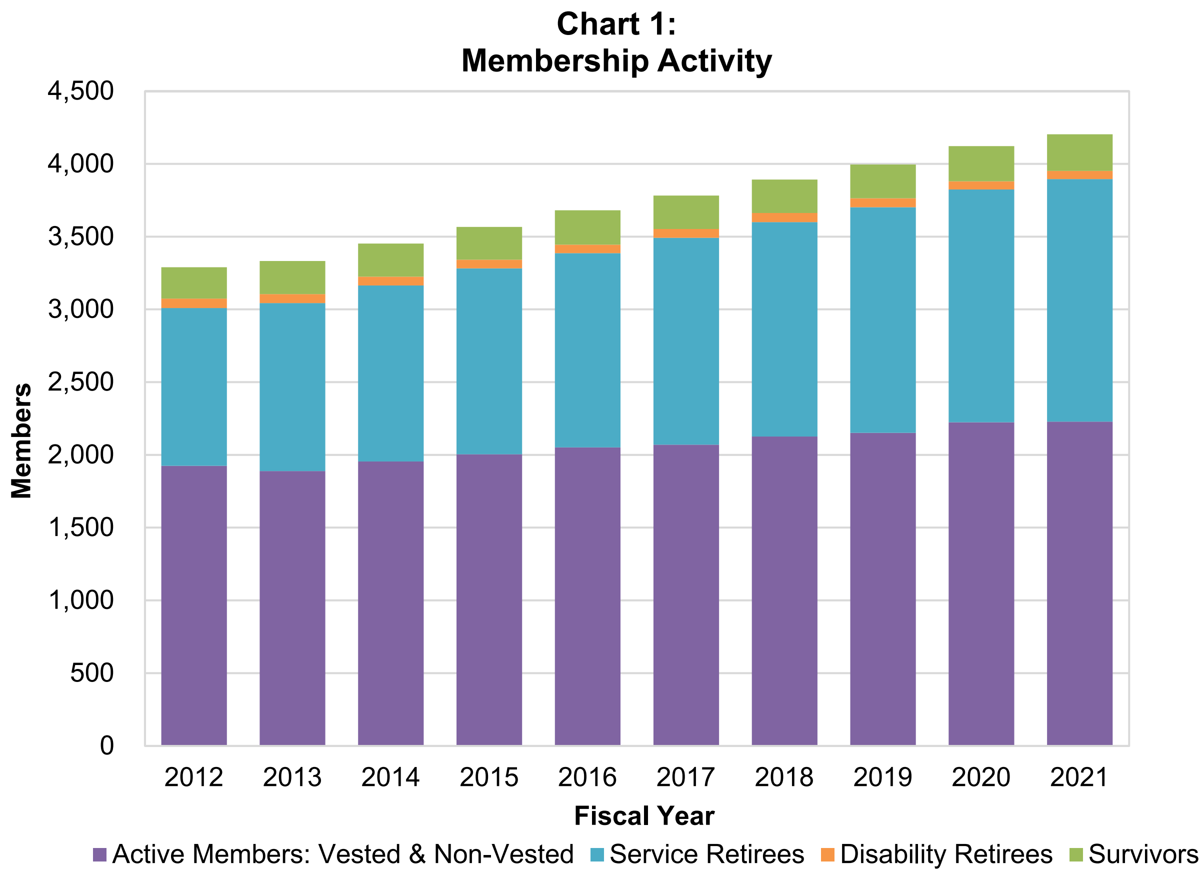
Chart 6: Net OPEB Liability (NOL) and Funded Ratio

The Net OPEB Liability is the Plan's liability determined in accordance with GASB 74 and 75. The June 30, 2021 NOL is based on actuarial valuations measured as of June 30, 2020. During the year ended June 30, 2021, the NOL increased by $18.97 million to $151.84 million primarily a result of the lower blended discount rate. The discount rate that is used to calculate the NOL is 4.40 percent, a blended discount rate reflecting benefits discounted by the Plan investment return assumption rate and the bond rate. As of June 30, 2021 reporting date, the Net OPEB Liability is $151.84 million.

Respectfully submitted,

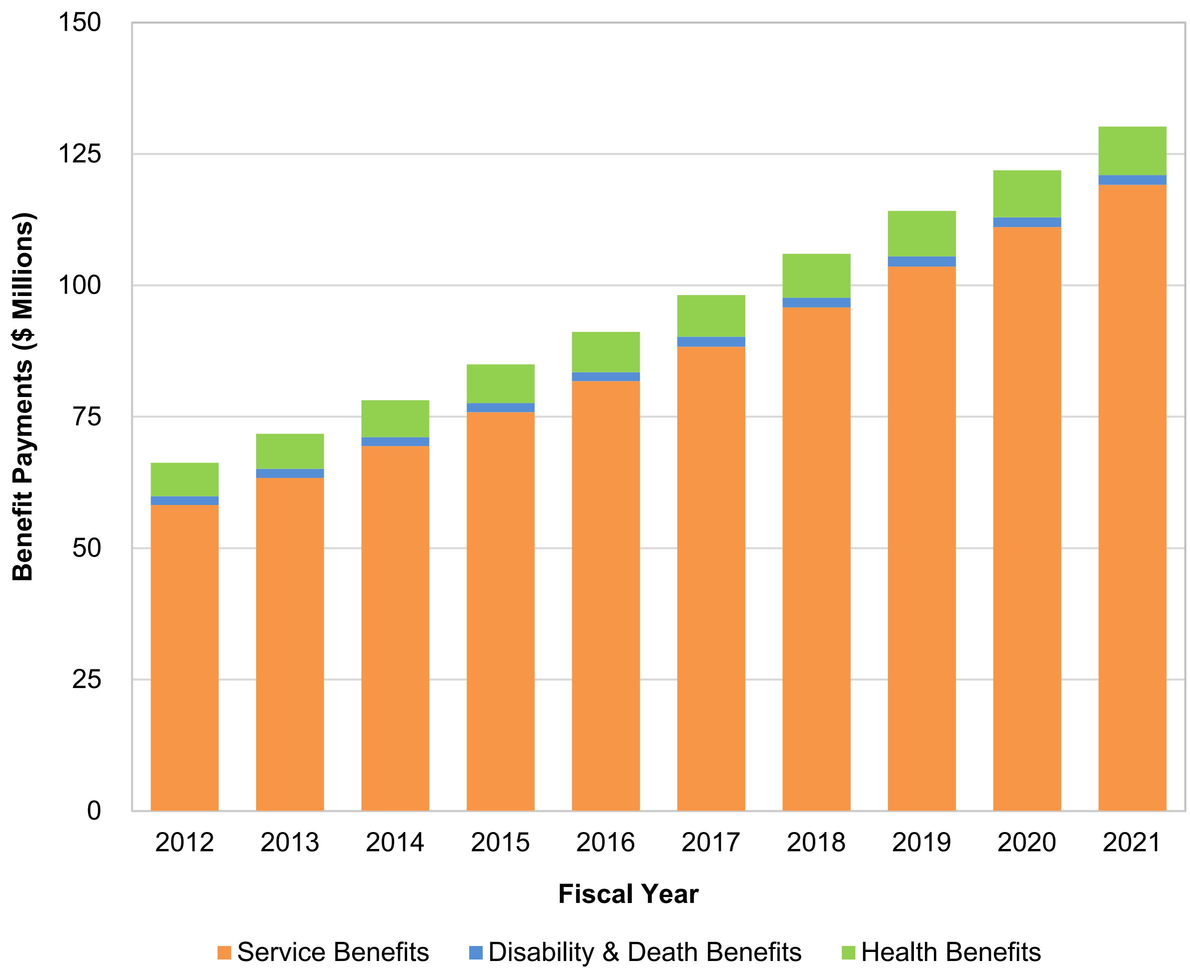
Sophia D. Skoda
Director of Finance – East Bay Municipal Utility District
Treasurer – Employees' Retirement System

AM:LF:ST:DS

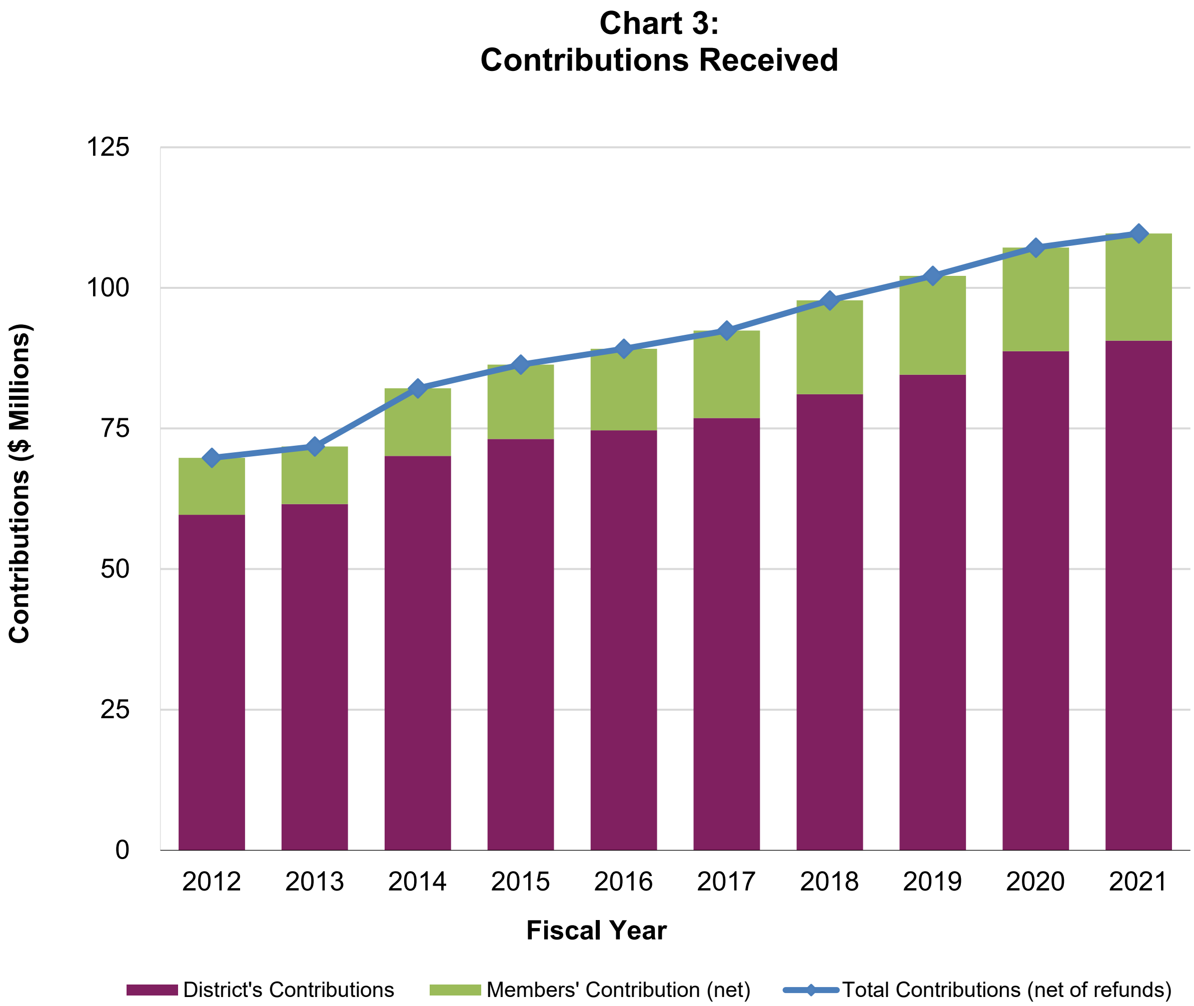


Membership Activity										
Fiscal Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Active: Vested and Non-Vested	1,925	1,889	1,955	2,004	2,051	2,070	2,126	2,152	2,224	2,228
Service Retirees	1,084	1,154	1,209	1,278	1,335	1,422	1,474	1,550	1,600	1,667
Disability Retirees	65	62	61	59	59	60	62	61	56	56
Survivors	216	227	227	226	236	230	230	232	242	252
Total	3,290	3,332	3,452	3,567	3,681	3,782	3,892	3,995	4,122	4,203

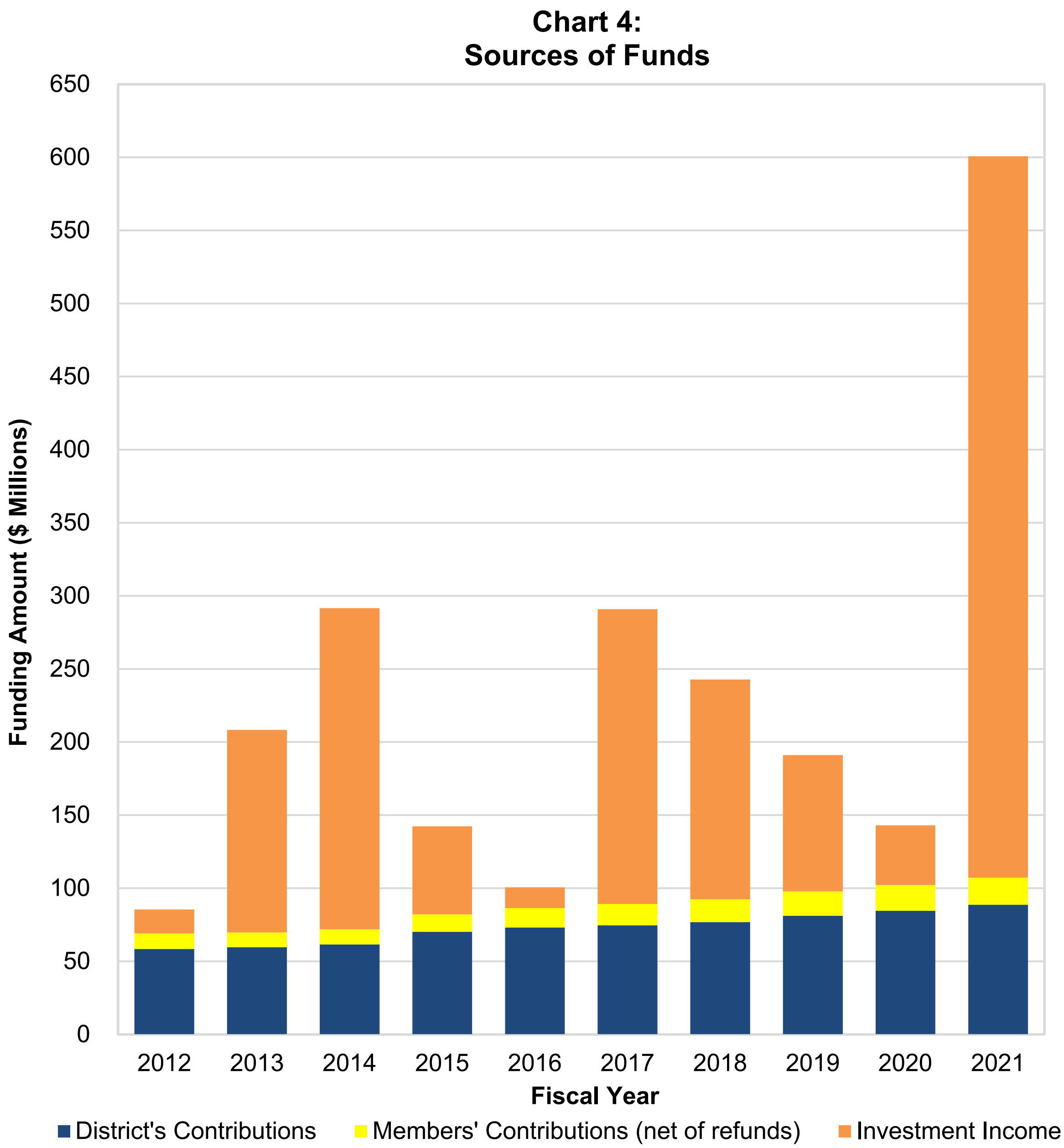
**Chart 2:
Service, Disability, Death & Health Benefits
Paid to Retired Members**



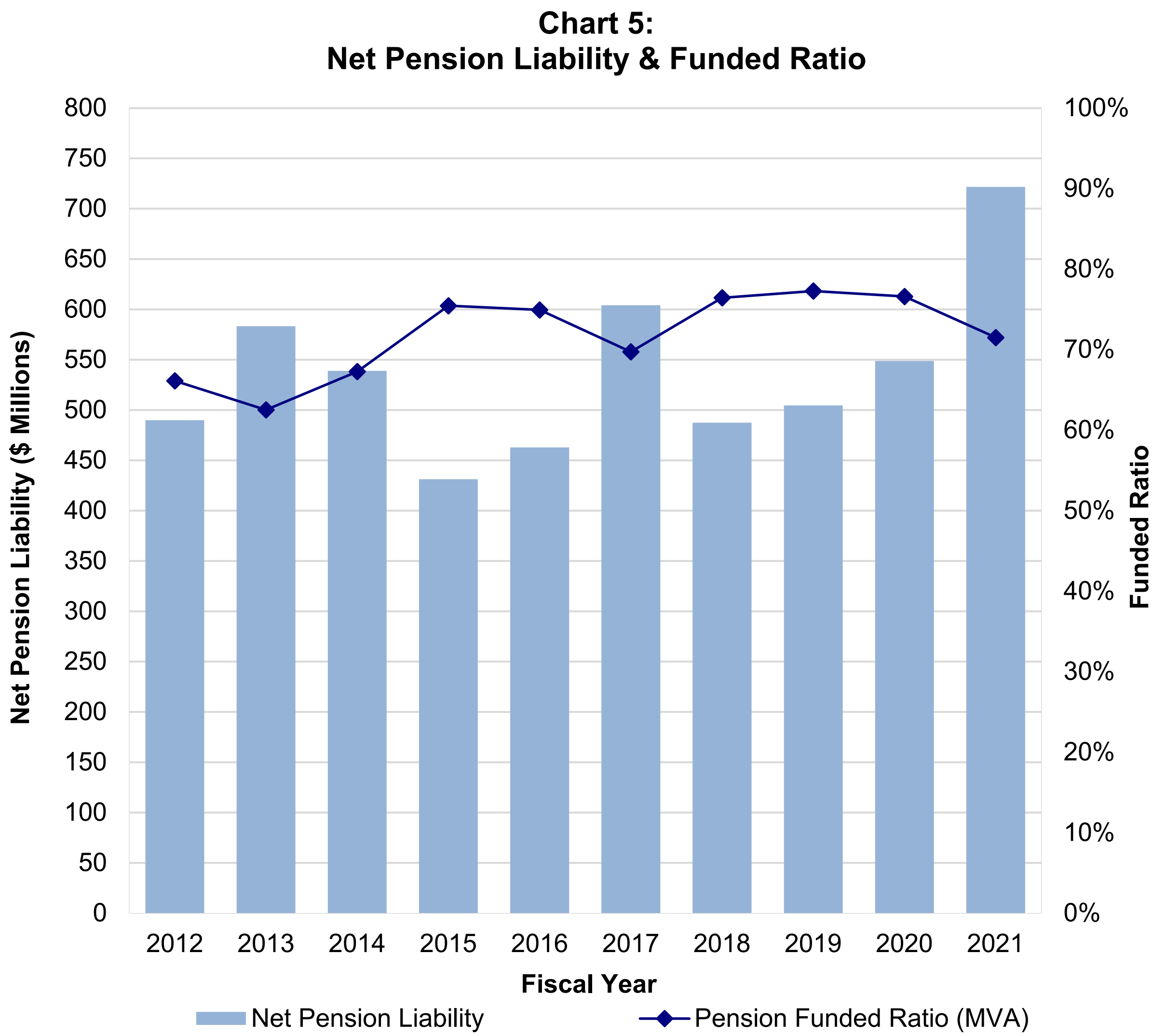
Service, Disability, Death and Health Benefits (in millions)										
Fiscal Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Service Benefits	58.20	63.37	69.40	75.88	81.77	88.32	95.81	103.56	111.07	119.13
Disability and Death Benefits	1.68	1.72	1.72	1.71	1.70	1.92	1.86	1.96	1.86	1.85
Health Benefits	6.37	6.67	7.03	7.39	7.68	7.91	8.31	8.65	8.96	9.22
Total	66.25	71.76	78.15	84.98	91.15	98.15	105.98	114.17	121.89	130.20



Contributions Received (in millions)										
Fiscal Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
District Contributions	59.65	61.57	70.12	73.14	74.67	76.86	81.10	84.55	88.73	90.62
Members Contributions (net)	10.13	10.23	12.02	13.22	14.51	15.55	16.68	17.60	18.42	19.06
Total Contributions (net of refunds)	69.78	71.80	82.14	86.36	89.18	92.41	97.78	102.15	107.15	109.68

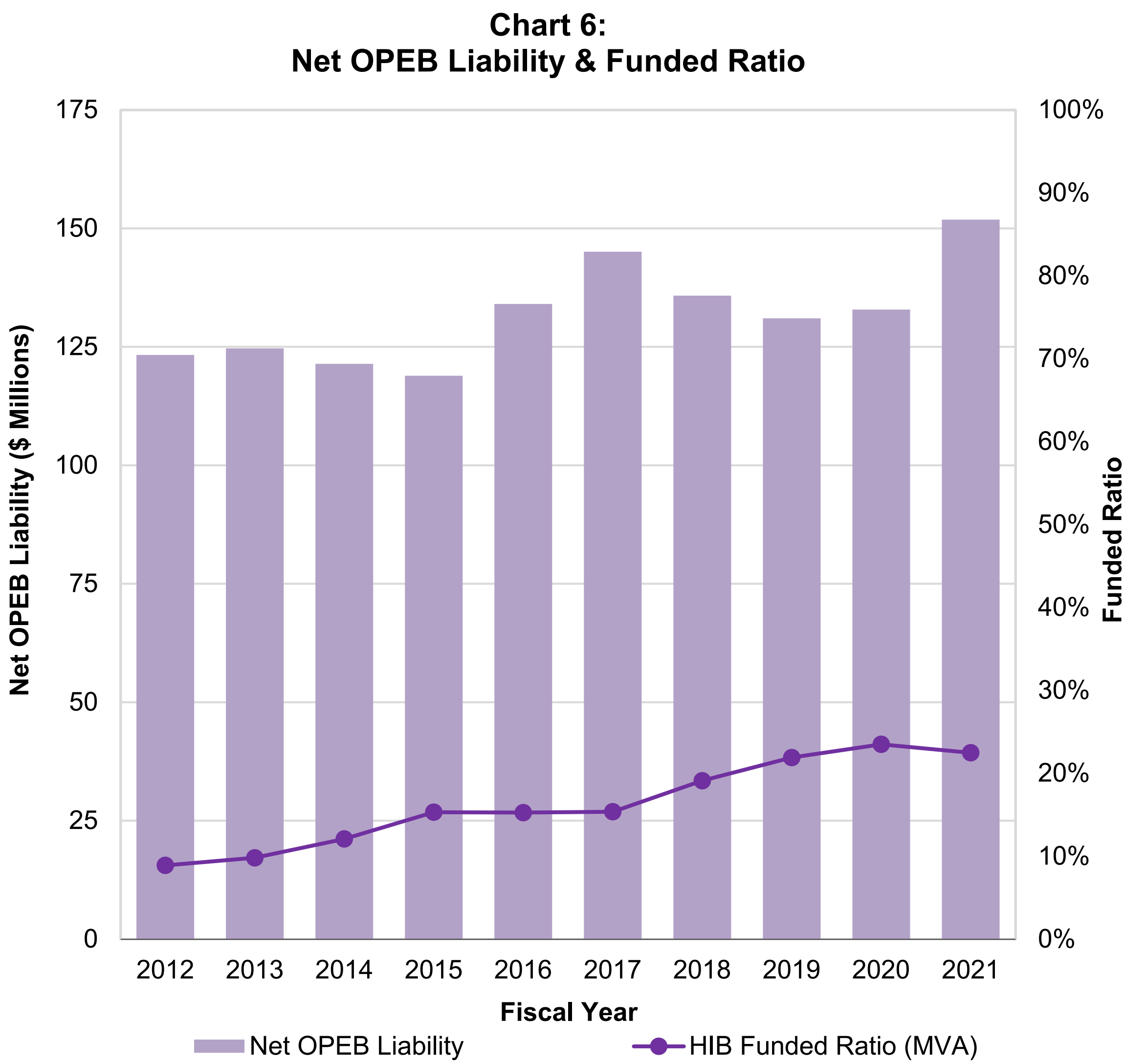


Total Source of Funds (in millions)										
Fiscal Year	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Investment Income	16.29	138.54	219.83	60.23	14.20	201.68	150.35	93.25	40.86	493.55
Members Contributions (net of refunds)	10.13	10.23	12.02	13.22	14.51	15.55	16.68	17.60	18.42	19.06
District Contributions	59.65	61.57	70.12	73.14	74.67	76.86	81.10	84.55	88.73	90.62



Net Pension Liability and Funded Ratio (in millions)										
Fiscal Year (Reporting Year)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Net Pension Liability (1)	489.87	583.29	538.91	431.32	462.86	604.09	487.46	504.50	548.65	721.65
Pension Funded Ratio	66.1%	62.5%	67.3%	75.5%	74.9%	69.7%	76.4%	77.3%	76.6%	71.5%

(1) FY2012 Net Pension Liability (NPL) was calculated based on the Market Value Assets of Pension Plan divided by the Actuarial Accrued Liability of Pension Plan for comparative purpose. Starting FY2013, NPL is calculated in accordance with GASB 67/68. The NPL is the difference between Total Pension Liability and Fiduciary Net Position of the Pension Plan.



Net OPEB Liability and Funded Ratio (in millions)										
Fiscal Year (Reporting Year)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Net OPEB Liability (1)	123.29	124.67	121.42	118.92	134.06	145.09	135.81	131.01	132.87	151.84
HIB Funded Ratio	8.9%	9.8%	12.1%	15.3%	15.3%	15.4%	19.1%	21.9%	23.5%	22.5%

(1) FY2012-FY2014 Net OPEB Liabilities (NOL) were calculated based on the Market Value Assets of HIB Plan divided by the Actuarial Accrued Liability of HIB Plan for comparative purpose. Starting FY2015, NOL is calculated in accordance with GASB 74/75. The NOL is the difference between Total OPEB Liability and Fiduciary Net Position of the HIB Plan.

EAST BAY MUNICIPAL UTILITY DISTRICT EMPLOYEES' RETIREMENT SYSTEM (A COMPONENT UNIT OF THE EAST BAY MUNICIPAL UTILITY DISTRICT)

FOR THE YEAR ENDED JUNE 30, 2021

FINANCIAL STATEMENTS AND SUPPLEMENTARY INFORMATION

Focused on YOU

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM

(A Component Unit of the
East Bay Municipal Utility District)

Financial Statements and Supplementary Information

For the Year Ended June 30, 2021

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM

(A Component Unit of the East Bay Municipal Utility District)

For the Year Ended June 30, 2021

Table of Contents

INDEPENDENT AUDITORS' REPORT

To the Board of Directors
East Bay Municipal Utility District Employees' Retirement System
Oakland, California

Report on the Financial Statements

Opinions

We have audited the accompanying financial statements of the East Bay Municipal Utility District Employees' Retirement System (the System), a component unit of the East Bay Municipal Utility District (District), as of and for the year ended June 30, 2021, and the related notes to the financial statements, as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective plan net position of the East Bay Municipal Utilities District Employees' Retirement System, as of June 30, 2021, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and District and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the date of the financial statements.

To the Board of Directors
East Bay Municipal Utility District Employees' Retirement System
Oakland, California

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with the GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users made on the basis of these financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsible to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate to the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Reporting Responsibilities

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, and other required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

To the Board of Directors
East Bay Municipal Utility District Employees' Retirement System
Oakland, California

Report on Summarized Comparative Information

We have previously audited the System's 2020 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated September 23, 2021. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2020, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated September 23, 2021 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Lance, Soll & Lunghard, LLP

Sacramento, California
September 23, 2021

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM
(A Component Unit of the East Bay Municipal Utility District)

Management's Discussion and Analysis

(Dollars in thousands)

June 30, 2021

This section presents management's analysis of the East Bay Municipal Utility District Employees' Retirement System's (the System) financial condition and activities as of and for the year ended June 30, 2021. Management's Discussion and Analysis (MD&A) is intended to serve as an introduction to the System's basic financial statements. The MD&A represents management's examination and analysis of the System's financial condition and performance.

This information should be read in conjunction with the audited financial statements that follow this section. The information in the MD&A is presented under the following headings:

- Organization and Business
- Overview of the Financial Statements
- Financial Analysis: *Financial Highlights*
- Financial Analysis: *Financial Condition*
- Factors Impacting Future Periods
- Request for Information

Organization and Business

The East Bay Municipal Utility District (the District) is the sponsoring agency of the System and provides for its funding. The System is accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and deferred outflow, all liabilities and deferred inflow associated with operations are included on the statement of plan net position, and revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

The System administers a single-employer, contributory, defined benefit pension plan (the Plan) which provides retirement, disability, survivorship, and postemployment healthcare benefits for eligible directors, officers, and employees of the District. The Plan is administered by a retirement board composed of three members appointed by the District's board of directors, two members elected by and from the active membership of the Plan, and a nonvoting member elected by the retirees of the Plan. Retirement Ordinance Number 40 assigns the authority to establish Plan benefit provisions to the District's board of directors.

All regular full-time employees of the District are members of the Plan. In accordance with the ordinance governing the Plan, eligible employees become members on the first day they are physically on the job. Plan defined benefits vest in part with members after completion of five years of continuous, full-time employment.

For additional information, please see the notes to the basic financial statements.

Overview of the Financial Statements

The basic financial statements include a *statement of plan net position,* a *statement of changes in plan net position,* and *notes to basic financial statements.* The report also contains other required supplementary information in addition to the financial statements.

The system's financial statements include:

The *Statement of Plan Net Position and the Statement of Changes in Plan Net Position* report information to assist readers in determining whether the System's finances as a whole are better off or worse off as a result of the year's activities. These two statements report the net assets of the System and changes in them, respectively.

The *Statement of Plan Net Position* presents information on all assets and liabilities of the System, with the difference between the two reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the System is improving or deteriorating.

The *Statement of Changes in Plan Net Position* presents the results of the System's activities over the course of the fiscal year and information as to how the *net position* changed during the year. This statement measures the results of the System's investment performance as well as the System's income from contributions and expenses, including the payment of benefits, refunds of contributions, and administrative and investment expense. All changes in net position are reported during the period the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods.

The *Notes to the Basic Financial Statements* provide additional information that is essential to a full understanding of the data provided in the basic financial statements. Effective fiscal year 2017, GASB 74 – *Financial Reporting for Postemployment Benefit Plans other than Pension Plans*, requires the System to disclose additional information regarding post-employment health insurance benefits (the OPEB Plan). These disclosures can be found in Note 7. The notes to the basic financial statements can be found on pages 14 to 36 of this report.

Other Information. In addition to the financial statements and accompanying notes, this report also presents certain *required supplementary information* concerning the District's contributions and the System's progress in funding its obligation to provide pension and postemployment healthcare benefits to the employees of the District. The required supplementary information can be found on page 37 to 44 of this report.

Financial Analysis: Financial Highlights

- The total assets of the System exceeded the total liabilities by $2,328,722 as of June 30, 2021 (Table 1). All of the net position is available to meet the System's ongoing obligations to Plan participants and their beneficiaries.
- Net position increased by $471,113 or 25.36% during the fiscal year ended June 30, 2021 compared to the increase of $24,644 or 1.34% of the prior year. The District contributions of $90,624 and employee contributions of $19,336 were offset in part by the cost of pension, health insurance benefits, refunds of contributions, and administrative expenses of $132,394. The net investment income increased $452,684 or 1,107.81% to $493,547.
- As of June 30, 2021, 20.50% of the System's investments were in fixed income securities, 27.70% were in domestic equities, 26.50% were in international equities, 20.20% were in covered calls, 4.90% were in Real Estate, and 0.20% were in cash and cash equivalents. As of June 30, 2020, 26.40% of the System's investments were in fixed income securities, 26.20% were in domestic equities, 21.80% were in international equities, 20.20% were in covered calls, 5.10% was in Real Estate, and 0.20% were in cash and cash equivalents.
- The Plan's funding objective is to meet long-term benefit obligations through contributions and investment income. As of June 30, 2020, the date of the last actuarial valuation, the Pension Plan's funded ratio was 73.70% and the Post-employment Health Care plan funded ratio was 35.90%.
- During the fiscal year ended June 30, 2021, combined District and employee contributions increased by $2,341 or 2.18% to $109,960 (Table 2). For the 1980 Plan, the District's average contribution rate and the employees' contribution rate remained unchanged at 43.18% and 8.75%, respectively. For the 2013 Plan, the District's average contribution rate and the employees' contribution rate remained unchanged at 36.16% and 8.84%, respectively.
- Retirement, Disability, and Survivor Benefit payments increased by $8,049 or 7.13% to $120,975 (Table 3). Cost-of-living increased by 3.00% in July 2020 and monthly benefits paid increased by 4.13% from July 1, 2020 to June 30, 2021 due to net increases in the number of retirees and beneficiaries.
- Health Insurance Benefits increased by $260, or 2.90%, to $9,223 (Table 3), primarily due to the increase in the number of retirees receiving health benefits.
- Refunds of Contributions to terminated or deceased employees decreased by $188, or 40.69%, to $274 (Table 3).
- Administrative expenses (not including Investment Advisors' Fees or Custodial Asset Management Fees) increased by $435, or 29.25%, to $1,922 (Table 3).

(Dollars in thousands)

Financial Analysis: Financial Condition

During the year ended June 30, 2021, the System's net position increased by $471,113 compared to an increase of $24,644 in 2020.

The System's financial condition reflects an increase of $193,873 in the Projected Benefit Obligation (PBO) as of the June 30, 2020 valuation, versus the previous actuarial report of June 30, 2019. Because of the increased contributions and strong market performance, the market value of assets as of June 30, 2020, increased $24,644 during the period of July 1, 2019 to June 30, 2020 based on the actuarial reports. The PBO funded percentage at the end of the previous fiscal year is used to determine the cost-of-living adjustment (COLA) at the end of the current fiscal period. The Funded PBO percentage was 71.20% as of June 30, 2020, versus 75.90% as of June 30, 2019. Whenever the PBO funded percentage is less than 85.00%, the COLA for pension beneficiaries is limited to 3.00%.

The funded ratio for the System decreased from 73.80% to 71.90% as of the June 30, 2020 actuarial report versus the previous actuarial report of June 30, 2019. The component Plans of Pension and Health Insurance Benefit changed from 75.90% to 73.70% and 32.99% to 35.90% funded, respectively.

(Table 1)
Net Position
Years ended June 30, 2021 and 2020

	2021	2020	Variance	%
Other assets *	$ 203,635	$ 147,070	$ 56,565	38.46%
Investments at fair value *	2,289,474	1,806,289	483,185	26.75%
Total assets	2,493,109	1,953,359	539,750	27.63%
Total liabilities	164,387	95,750	68,637	71.68%
Net position	$ 2,328,722	$ 1,857,609	$ 471,113	25.36%

(Table 1)
Net Position
Years ended June 30, 2020 and 2019

	2020	2019	Variance	%
Other assets *	$ 147,070	$ 100,124	$ 46,946	46.89%
Investments at fair value *	1,806,289	1,795,813	10,476	0.58%
Total assets	1,953,359	1,895,937	57,422	3.03%
Total liabilities	95,750	62,972	32,778	52.05%
Net position	$ 1,857,609	$ 1,832,965	$ 24,644	1.34%

* As of June 30, 2019, the recoverable taxes are reclassified from investments at fair value to recoverable taxes receivable which is reported under other assets category.

(Dollars in thousands)

The financial reserves needed to fund retirement and health benefits are accumulated through the collection of employer and employee contributions and through investment earnings. As Table 2 shows, the System experienced net investment gain for 2021.

(Table 2)
Additions to Net Position
Years ended June 30, 2021 and 2020

	2021	2020	Variance	%
Employer contributions	$ 90,624	$ 88,734	$ 1,890	2.13%
Members' contributions	19,336	18,885	451	2.39%
Total contributions	109,960	107,619	2,341	2.18%
Net investment gain/(loss)*	493,547	40,863	452,684	1,107.81%
Total additions, net	$ 603,507	$ 148,482	$ 455,025	306.45%

* Net of investment expenses and net of securities lending transactions of $4,435 for June 30, 2021, and $4,689 for June 30, 2020.

(Table 2)
Additions to Net Position
Years ended June 30, 2020 and 2019

	2020	2019	Variance	%
Employer contributions	$ 88,734	$ 84,551	$ 4,183	4.95%
Members' contributions	18,885	17,865	1,020	5.71%
Total contributions	107,619	102,416	5,203	5.08%
Net investment gain/(loss)*	40,863	93,254	(52,391)	(56.18)%
Total additions, net	$ 148,482	$ 195,670	$ (47,188)	(24.12)%

* Net of investment expenses and borrower's rebates and other agent fees on securities lending transactions of $5,767 for June 30, 2020, and $6,212 for June 30, 2019.

(Dollars in thousands)

As summarized in Table 3, the Plan provides retirement, disability, survivor, and health insurance benefits to qualified members and their beneficiaries. The Plan must also provide refunds of employee contributions with interest to terminated employees who do not choose or are not qualified to vest.

(Table 3)
Deductions in Net Position
Years ended June 30, 2021 and 2020

	2021	2020	Variance	%
Pension benefits paid	$ 120,975	$ 112,926	$ 8,049	7.13%
Health insurance benefits paid	9,223	8,963	260	2.90%
Refunds of contributions	274	462	(188)	(40.69)%
Administrative expenses	1,922	1,487	435	29.25%
Total deductions	$ 132,394	$ 123,838	$ 8,556	6.91%

(Table 3)
Deductions in Net Position
Years ended June 30, 2020 and 2019

	2020	2019	Variance	%
Pension benefits paid	$ 112,926	$ 105,518	$ 7,408	7.02%
Health insurance benefits paid	8,963	8,650	313	3.62%
Refunds of contributions	462	267	195	73.03%
Administrative expenses	1,487	1,510	(23)	(1.52)%
Total deductions	$ 123,838	$ 115,945	$ 7,893	6.81%

(Dollars in thousands)

Beginning fiscal year 2014, the District is required to present the past 10 years of Net Pension Liability (NPL) for the Employees' Retirement System pension plan (excluding Other Post-Employment Benefits) as it becomes available. The District has provided the past three fiscal years from 2019 through 2021 in the footnotes and the past eight fiscal years from 2014 through 2021 in the required supplemental information. The NPL was measured as of June 30, 2020 and 2019 have been determined from the actuarial valuations as of June 30, 2020 and 2019 respectively. As summarized in Table 4, the NPL increased by $172,998 from $548,649 as of June 30, 2020 to $721,647 as of June 30, 2021 primarily due to (a) the approximate return on the market value of assets for the Pension Plan of 2.24% during 2019/2020 that was less than then assumption of 7.00% used in June 30, 2019 valuation (that loss was about $85,000 for the Pension Plan), and (b) changes in the actuarial assumptions (that increase about $105,000).

(Table 4)
Net Pension Liability
Years ended June 30, 2021 and 2020

	2021	2020	Variance	%
Net Pension Liability	$ 721,647	$ 548,649	$ 172,998	31.53%
Plan net position as a percentage of Total Pension Liability	71.54%	76.56%	(5.02)%	(6.56)%

(Table 4)
Net Pension Liability
Years ended June 30, 2020 and 2019

	2020	2019	Variance	%
Net Pension Liability	$ 548,649	$ 504,500	$ 44,149	8.75%
Plan net position as a percentage of Total Pension Liability	76.56%	77.28%	(0.72)%	(0.93)%

(Dollars in thousands)

Beginning fiscal year 2017, the District is required to present the past 10 years of Net OPEB Liability (NOL) for the Employees' Retirement System health benefit plan as it becomes available. The District has provided the past three fiscal years from 2019 through 2021 in the footnotes and the past six fiscal years from 2016 through 2021 in the required supplemental information. The NOL was measured as of June 30, 2020 and 2019 have been determined from the actuarial valuations as of June 30, 2020 and 2019 respectively. As summarized in Table 5, the NOL increased by $18,964 from $132,871 as of June 30, 2020 to $151,835 as of June 30, 2021 primarily a result of the lower blended discount rate.

(Table 5)
Net OPEB Liability
Years ended June 30, 2021 and 2020

	2021	2020	Variance	%
Net OPEB Liability	$ 151,835	$ 132,871	$ 18,964	14.27%
Plan net position as a percentage of Total OPEB Liability	22.48%	23.51%	(1.03)%	(4.38)%

(Table 5)
Net OPEB Liability
Years ended June 30, 2020 and 2019

	2020	2019	Variance	%
Net OPEB Liability	$ 132,871	$ 131,008	$ 1,863	1.42%
Plan net position as a percentage of Total OPEB Liability	23.51%	21.91%	1.60%	7.30%

Request for Information

This financial report is designed to provide viewers with a general overview of the East Bay Municipal Utility District Employees' Retirement System's finances and demonstrate the District's accountability for the monies it manages. If you have any questions about this report or need additional information, please contact: Controller, Accounting Division MS #402, P.O. Box 24055, Oakland, California 94623-1055.

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM
(A Component Unit of the East Bay Municipal Utility District)

STATEMENT OF PLAN NET POSITION
June 30, 2021
(With summarized comparative financial information as of June 30, 2020)
(DOLLARS IN THOUSANDS)

	2021			
	Pension plan benefits	Post-employment healthcare benefits	Total	2020 Total
Assets:				
Cash and cash equivalents, at fair value (Note 5)	$ 36,672	$ 923	$ 37,595	$ 57,852
Invested securities lending collateral	154,057	3,876	157,933	80,731
Prepaid expenses	-	578	578	575
Receivables:				
Brokers, securities sold	184	5	189	475
Employer	2,160	317	2,477	2,246
Plan members	538	-	538	484
Interest, dividends and recoverable taxes	4,219	106	4,325	4,707
Total Receivables	**7,101**	**428**	**7,529**	**7,912**
Investments, at fair value (Note 5):				
U.S. government obligations	247,902	6,237	254,139	143,915
Municipal bonds	648	16	664	705
Domestic corporate bonds	180,422	4,539	184,961	298,975
International bonds	19,747	497	20,244	19,793
Domestic stocks	1,080,371	27,181	1,107,552	849,826
International stocks	593,079	14,922	608,001	397,426
Real estate	111,117	2,796	113,913	95,649
Total Investments	**2,233,286**	**56,188**	**2,289,474**	**1,806,289**
Total Assets	**2,431,116**	**61,993**	**2,493,109**	**1,953,359**
Liabilities:				
Accounts payable and accrued expenses	2,545	64	2,609	2,396
Payables to brokers, securities purchased	3,751	94	3,845	12,623
Securities lending collateral (Note 2B)	154,057	3,876	157,933	80,731
Total Liabilities	**160,353**	**4,034**	**164,387**	**95,750**
Net position restricted for pension benefits and post-employment healthcare benefits	2,270,763	57,959	2,328,722	1,857,609
Total Net Position	**$ 2,270,763**	**$ 57,959**	**$ 2,328,722**	**$ 1,857,609**

See Accompanying Notes to Financial Statements

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM
(A Component Unit of the East Bay Municipal Utility District)

STATEMENT OF CHANGES IN PLAN NET POSITION
For the Year Ended June 30, 2021
(With summarized comparative financial information for the year ended June 30, 2020)
(DOLLARS IN THOUSANDS)

	2021			
	Pension plan benefits	Post-employment healthcare benefits	Total	2020 Total
Additions:				
Contributions:				
Employers	$ 79,252	$ 11,372	$ 90,624	$ 88,734
Plan members	19,136	200	19,336	18,885
Total Contributions	**98,388**	**11,572**	**109,960**	**107,619**
Investment Income:				
From Investment Activities				
Net appreciation (depreciation) in fair value investments:				
Traded securities	461,099	11,137	472,236	13,251
Real estate	(454)	(11)	(465)	688
Interest	11,333	274	11,607	13,263
Dividends	12,305	297	12,602	16,360
Real estate operating income, net	1,955	47	2,002	1,990
Total Investment Income	**486,238**	**11,744**	**497,982**	**45,552**
Less:				
Investment expense	(4,499)	(110)	(4,609)	(4,864)
Net Income from Investment Activities	**481,739**	**11,634**	**493,373**	**40,688**
From Security Lending Activities				
Security lending income	286	7	293	1,078
Borrowers' rebates and other agent fees on securities lending transactions	(116)	(3)	(119)	(903)
Security Lending Activities	**170**	**4**	**174**	**175**
Net Investment Income	**481,909**	**11,638**	**493,547**	**40,863**
Total Additions, net	**580,297**	**23,210**	**603,507**	**148,482**
Deductions:				
Benefits paid (Notes 1C & 1D)	120,975	9,223	130,198	121,889
Refunds of contributions (Note 4)	274	-	274	462
Administrative expenses	1,876	46	1,922	1,487
Total Deductions	**123,125**	**9,269**	**132,394**	**123,838**
Changes in Net Position	**457,172**	**13,941**	**471,113**	**24,644**
Net Position - Beginning of the Year	**1,813,591**	**44,018**	**1,857,609**	**1,832,965**
Net Position - End of the Year	**$ 2,270,763**	**$ 57,959**	**$ 2,328,722**	**$ 1,857,609**

See Accompanying Notes to Financial Statements

NOTE 1 – PLAN DESCRIPTION

A. General

The East Bay Municipal Utility District (the District) Employees' Retirement System (the System) was established in 1937 to administer a single-employer, contributory, defined benefit pension plan (the Pension Plan). The System provides retirement, disability, survivorship, and post-employment health insurance benefits (the OPEB Plan) for eligible directors, officers, and employees of the District. The Pension Plan and the OPEB Plan together are referred to as the Plan. The System is administered by a Retirement Board composed of three members appointed by the Board of Directors of the District, two members elected by and from the active membership, and one non-voting member elected by and from the retired membership of the System. Retirement Ordinance No. 40 (Ordinance) assigns the authority to establish Plan benefit provisions to the District's Board of Directors.

The System is exempt from the regulations of the Employee Retirement Income Security Act of 1974. The System is also exempt from federal income taxes and California franchise taxes.

The System is an integral part of the District and the District appoints the majority of the retirement board of the System and provides for its funding. Accordingly, the System's operations have been reported as a Pension and Other Employee Benefit Trust Fund in the District's basic financial statements.

B. Membership

All regular full-time employees of the District are members of the Plan in addition to certain job share and intermittent employees. In accordance with the ordinance governing the System, eligible employees become members on the first day they are physically on the job. Members become vested in the Plan after five years of continuous full-time employment. Vested members who terminate employment may elect a refund of their contributions or leave them in the Plan until eligible to receive benefits.

The Retirement Board shall semi-annually declare the rate of interest for the preceding six (6) months to be credited on accumulated contributions of members, which rate shall be based upon criteria to be established by the Retirement Board. In accordance with Retirement Board Rule B-9, the annual rate of interest credited to member contributions will be the lesser of the actuarially assumed rate of interest or the five (5) year average rate of return on Retirement System Investments.

For the period ending June 30, 2020, the actuarially assumed rate of interest was 7.00% and the five-year average rate of return as of June 30, 2020 was 6.70%. Therefore, the Board Resolution No. 6927 declares that the interest credited to the balance of member contributions effective June 30, 2020 will be at the annual rate of 6.70%. Interest was credited at a semi-annual rate of 3.35% for the six months ended December 31, 2020.

(Dollars in thousands)

NOTE 1 – PLAN DESCRIPTION (Continued)

For the period ending December 31, 2020, the actuarially assumed rate of interest was 7.00% and the five-year average rate of return as of December 31, 2020 was 10.10%. Therefore, the Board Resolution No. 6941 declares that the interest credited to the balance of member contributions effective June 30, 2021 will be at the annual rate of 7.00%. Interest was credited at a semi-annual rate of 3.50% for the six months ended June 30, 2021.

Membership in the Pension Plan consisted of the following as of June 30, 2020, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits	1,905
Terminated plan members entitled to but not yet receiving benefits	312
Active plan members	1,903
Total	4,120

C. *Retirement Benefits and Allowances*

There are two tiers in effect currently, the 1980 Plan and the 2013 Plan. Employees who became Members of the Retirement System prior to January 1, 2013, or who have reciprocal membership prior to January 1, 2013 are in the 1980 Plan (1980 Plan Members), employees who became Members on or after January 1, 2013, or who have reciprocal membership after January 1, 2013 are in the 2013 Plan (2013 Plan Members).

1980 Plan Members may elect voluntary reduced service retirement upon attaining the age of 54 and completing 5 years of continuous full-time employment. Members may elect voluntary unreduced service retirement upon attaining the age of 62 and completing 5 years of continuous full-time employment or age 65 without restriction. Members who continue to work upon attaining the normal retirement age of 65 continue to contribute to the Plan, and at the time they retire, computation of their retirement allowance is based upon their compensation and length of service as of the date of retirement. Service retirement allowances are computed by formulas specified in the Ordinance and are based on date of employment, length of employment, age at date of retirement, and compensation earned during employment.

2013 Plan Members may elect voluntary reduced service upon attaining the age of 52 and completing 5 years of continuous full-time employment. Members may elect voluntary unreduced service retirement upon attaining the age of 67 and completing 5 years of continuous full-time employment. Members who continue to work upon attaining the normal retirement age of 67 continue to contribute to the Plan, and at the time they retire, computation of their allowance is based upon their compensation and length of service as of the date of retirement. Service retirement allowances are computed by formulas specified in the Ordinance and are based on length of service, age at retirement, and compensation earned during employment.

(Dollars in thousands)

NOTE 1 – PLAN DESCRIPTION (Continued)

D. Disability and Death Benefits and Allowances

Members may receive disability retirement benefits prior to age 65 if the member is determined to be physically or mentally incapacitated, provided the member has 8 or more years of continuous full-time employment. The allowance for disability retirement is computed by a formula specified in the Ordinance and is based upon compensation earnable during employment, years of continuous service, and date upon which the retiring individual became a member. There is a guaranteed minimum disability benefit equal to the greater of one-third of terminal compensation (final average salary) or the retirement allowance, based on the disability formula.

Death benefits are payable to the estate or beneficiary of a member who dies before retirement. Survivorship benefits are payable to the spouse of a member who dies after retirement, or who was eligible but had not retired from service, provided the spouse was married to the member at the date of retirement and for at least one year prior to the member's death.

E. Post-Employment Healthcare Benefits

Post-employment healthcare and similar benefit allowances are provided to Members who retire from the District or to their surviving spouses. As of June 30, 2020, there were 1,701 participants receiving these health care benefits.

Effective July 1, 1996, a 20-year vesting schedule for full benefits was implemented for all new participants. Eligible participants are reimbursed up to $450 per month for service members and up to $550 for members with a spouse or registered domestic partner for any combined health, dental, or long- term care insurance premiums paid by the participant or his/her surviving spouse. Effective July 1, 1999, retirees may be reimbursed up to the designated maximum for the combined health insurance premiums for themselves, their current spouses, or registered domestic partners. The benefits were funded entirely by the District on an actuarial basis up until June 17, 2002. Effective June 18, 2002, a portion of the post-employment healthcare benefit costs is recovered through employee contributions. The actual benefits paid in cash to retirees were $9,223 and $8,963 for the years ended June 30, 2021 and 2020, respectively.

Membership in the OPEB Plan consisted of the following as of June 30, 2020, the measurement date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits	1,701
Terminated plan members entitled to but not yet receiving benefits	312
Active plan members	1,903
Total	3,916

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Accounting and Presentation

The System's activities are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions to the Plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits, refunds, and other liabilities are recognized when due and payable in accordance with the terms of the Plan.

The basic financial statements include partial prior year comparative information. A complete presentation of the prior year information can be found in the System's financial statements for the year ended June 30, 2020.

B. Investments and Fair Value Measurements

Investments are reported at fair value. Securities and bonds traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that have no quoted market price are reported at estimated fair value, which is determined based on yields equivalent for such securities or for securities of comparable maturity, quality, and type as obtained from market makers. Measurement of the fair value of real estate investments is estimated by the investment managers and reflects both internal and independent appraisals of real estate properties.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels based on the extent to which inputs used in measuring fair value are observable in the market.

> Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.
>
> Level 2 inputs are inputs – other than quoted prices included within level 1 – that are observable for an asset or liability, either directly or indirectly.
>
> Level 3 inputs are unobservable inputs for an asset or liability.

If the fair value of an asset or liability is measured using inputs from more than one level of the fair value hierarchy, the measurement is considered to be based on the lowest priority level input that is significant to the entire measurement.

The System presents in the Statements of Changes in Plan Net Position the net change in the fair value of its investments, which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Each of the financial instruments invested in by the System represents a potential concentration of credit risk. However, as the portfolio and the components of the various instruments are diversified and issuers of securities are dispersed throughout many industries and geographical locations, the concentrations of credit risk are limited.

The System invests in a combination of stocks, bonds, fixed income securities, real estate, and other investment securities. These investments are exposed to various risks, such as interest rate and market risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and those such changes could materially affect the amounts reported in the Statement of Plan Net Position.

Retirement Board policies permit the System to use investments of the Plan to enter into securities lending transactions, which are loans of securities to broker-dealers and other entities for collateral with a simultaneous agreement to return collateral for the same securities in the future. The System's securities custodian is an agent in lending the Plan's securities for cash collateral, U.S. government securities, and irrevocable letters of credit of 102% for domestic securities and 105% for international securities lent.

As of June 30, 2021, the System had no credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System. Contracts with the lending agent require them to indemnify the System under certain circumstances if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the System for income distributions by the securities issuers while the securities are on loan. The risk of any loss of collateral or investment of cash collateral (including a loss of income or principal, or loss of market value thereon) lies with the System, except for losses resulting from negligence or intentional misconduct of the agent in performing the duties allocated under the securities lending agreement with respect to collateral. During the year ended June 30, 2021, there were no violations of legal or contractual provisions, and no borrower or lending agent default losses known to the securities lending agent.

In lending securities, cash collateral is invested in the lending agent's short-term investment pool, which as of June 30, 2021, had a weighted average maturity of 30 days. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of the securities loans made by other entities that use the agent's pool, which the System cannot determine. Cash collateral may also be invested separately in term loans, in which case the maturity of the collateral investment generally matches the term of the loan. Noncash collateral cannot be pledged or sold unless the borrower defaults. All securities loans can be terminated on demand by either the lender or the borrower, although the average term of overall loans for the System was approximately 125 days. There are no dividends or coupon payments owing on the securities lent. Cash received as collateral on securities lending transactions is reported as an asset of the System with a corresponding liability.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

As of June 30, 2021, the fair value of securities on loan was $153,705. The total cash and noncash collateral held by the System's custodian to secure these securities on loan was valued at $157,933 (all cash collateral).

C. Allocation of Income and Expenses

Contributions and benefit expenses are booked against the separate trusts as incurred. The recognition of investment income/loss is based on a pro rata share of total income/loss allocated quarterly on the basis of net position held in trust for pension benefits and post-employment healthcare benefits of the previous quarter. General expenses of the trust are allocated consistent with investment income/loss based on asset balances of the previous quarter.

D. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

NOTE 3 – CONTRIBUTION INFORMATION

The System is funded by contributions from its members and from the District. District contribution rates (provided as a percentage of covered compensation) are recommended by the Retirement Board, and employee contribution rates are established by the Board of Directors pursuant to the Retirement Ordinance, giving consideration to actuarial recommendations and prospective changes in factors which affect funding. Each member contributes to the 1980 Plan based upon a percentage of his or her covered compensation, which was 8.75% effective April 18, 2016 and 8.84% for the 2013 Plan Members effective January 1, 2013. The District's contribution is based upon the aggregate amount of members' covered compensation, at an actuarially determined rate.

The individual entry age normal method is used to determine the normal cost for other post-employment benefits (OPEB) and service cost for pension, and the OPEB unfunded actuarial accrued liability (past service liability) is amortized as a level percentage of future payroll over 30 years open period.

(Dollars in thousands)

NOTE 3 – CONTRIBUTION INFORMATION (Continued)

District adopted contribution rates for the year ended June 30, 2021 are as follows:

1980 Plan:	
Pension plan:	
Employer service cost	15.92%
Toward unfunded pension liability	21.94%
Other post-employment benefits:	
Employer normal cost	1.00%
Unfunded actuarial accrued liability	4.32%
2013 Plan:	
Pension plan:	
Employer service cost	9.15%
Toward unfunded pension liability	22.09%
Other post-employment benefits:	
Employer normal cost	0.74%
Unfunded actuarial accrued liability	4.18%

District adopted contribution rates for fiscal year 2021-2022 are as follows:

1980 Plan:	
Pension plan:	
Employer service cost	18.45%
Toward unfunded pension liability	23.92%
Other post-employment benefits:	
Employer normal cost	0.97%
Unfunded actuarial accrued liability	3.82%
2013 Plan:	
Pension plan:	
Employer service cost	9.40%
Toward unfunded pension liability	23.92%
Other post-employment benefits:	
Employer normal cost	0.70%
Unfunded actuarial accrued liability	3.82%

(Dollars in thousands)

NOTE 3 – CONTRIBUTION INFORMATION (Continued)

Contributions for the years ended June 30, 2021, and June 30, 2020, based on the June 30, 2020, actuarial valuation (latest available and includes amounts for post-employment healthcare benefits), were as follows:

	2021			2020
	Pension	Healthcare Benefit Plan	Totals	
Regular contributions:				
District contributions	$ 79,252	$ 11,372	$ 90,624	$ 88,734
Member contributions	19,112	200	19,312	18,856
	98,364	11,572	109,936	107,590
Other contributions:				
Member buybacks	24	-	24	29
	$ 98,388	$ 11,572	$ 109,960	$ 107,619

Regular District and member contributions in fiscal year 2021 represent an aggregate of 40.74% and 8.68% of covered payroll, respectively. The District's contributions include amounts for post-employment healthcare benefits at a rate of 5.11% of covered payroll, determined by the actuarial dated June 30, 2020. The actual payroll for the District employees covered by the Plan for the year ended June 30, 2021, was $222,419 which was 90.98% of the total District payroll of $244,469.

The total District contributions of $90,624 is comprised of the normal cost of $32,108 and the unfunded actuarial accrued liability of $58,516.

Regular District and member contributions in fiscal year 2020 represent an aggregate of 40.98% and 8.72% of covered payroll, respectively. The District's contributions include amounts for post-employment healthcare benefits at a rate of 5.12% of covered payroll, determined by the actuarial dated June 30, 2019. The actual payroll for the District employees covered by the Plan for the year ended June 30, 2020, was $216,549 which was 91.06% of the total District payroll of $237,803.

The total District contributions of $88,734 is comprised of the normal cost of $31,740 and the unfunded actuarial accrued liability of $56,994.

Member buyback contributions relate to prior years' service credits for Plan participants. The Plan was amended in 1998 for limited temporary construction workers and in 2003 for intermittent employees to allow current members, who previously worked for the District in a status which did not qualify for membership in the System, to establish retirement service credit for prior service with payments over a period of two to eight years.

(Dollars in thousands)

NOTE 3 – CONTRIBUTION INFORMATION (Continued)

Public Employees' Pension Reform Act (PEPRA)

Assembly Bill 340 (AB 340) created the Public Employees' Pension Reform Act (PEPRA) that implemented new benefit formulas and final compensation periods, as well as new contribution requirements for new employees hired on or after January 1, 2013, who meet the definition of a new member under PEPRA. In the System, Members covered under PEPRA are 2013 Plan Members.

The table below provides the details of the 2013 Plan provisions in accordance with PEPRA.

Benefit Formula	2.5% at Age 67
Final Compensation Period	Average of last 3 years
Employer Normal Cost Contribution Rate as a percentage payroll	9.15% of Reportable Compensation
Member Normal Cost Contribution Rate as a percentage of payroll	8.75% of Reportable Compensation

The employer contribution rate listed above was in effect as of June 30, 2021. In accordance with the provisions of AB 340, the member contribution rate shown above was set at 50 percent of the expected total normal cost rate for the benefits that will apply to new members on January 1, 2013. The total normal cost rate used for this calculation is 17.90% of payroll for new members. Under AB 340, the member contributions rate is adjusted when the normal cost deviates by 1% or more from the original PEPRA valuation in 2013.

NOTE 4 – CONTRIBUTION REFUNDS

When a member's District service is terminated, except by death or retirement, and prior to five years of continuous full-time employment, the amount of that member's accumulated contributions, plus interest, is refunded and membership is terminated. After a member has completed five years of continuous full-time employment, upon termination, except death or retirement, the member has the option of (a) ceasing to be a member and receiving the amount of his accumulated contributions, plus interest, or (b) remaining as a member and leaving his accumulated contributions, plus interest, in the Plan. After termination, a member cannot make additional contributions to the Plan.

If a member with fewer than five years of employment terminates employment and within six months becomes a member of the California Public Employees' Retirement System or another reciprocal retirement system, the individual may elect to remain a member, leaving their accumulated contributions, plus interest, in the Plan.

(Dollars in thousands)

NOTE 5 – CASH AND INVESTMENTS

A. Authorized Investment Strategy

The System's Statement of Investment Policy and Procedures authorize the System to invest in financial instruments in three broad investment categories: equity, fixed income, real estate, and covered calls. These financial instruments can include, but are not limited to, corporate bonds, commercial paper, U.S. government securities, common and preferred stock, real estate investment trusts, and mutual funds. Fixed income investments may include futures and options contracts in order to provide added flexibility in managing the fixed income portfolio. The following is a summary of the System's Statement of Investment Policy and Procedures adopted by the System on March 21, 2019.

The Retirement Board is authorized to designate multiple investment managers to manage the assets under their supervision subject to the laws of the State of California and the Investment Guidelines established by the Retirement Board. Allocation of assets to the investment managers are determined by the Retirement Board to accommodate changing conditions and laws.

In March 15, 2018, the System adopted an updated asset allocation, which is shown in the table below.

US Equity	25%
Non-US Equity	25%
Core Fixed-Income	20%
Non-Core Fixed Income	5%
Covered Calls	20%
Real Estate	5%

The Director of Finance is authorized to transfer assets as provided in the System's Statement of Investment Policy and Procedures. The Director of Finance is further authorized to withdraw assets from assigned managers as necessary to efficiently meet operating needs.

The core fixed income target allocation (20% of the total portfolio) will primarily consist of U.S. denominated fixed income securities.

The non-core fixed income target allocation (5% of the total portfolio) will primarily consist of U.S. denominated fixed income securities. It is expected that this allocation may have a material allocation to below investment grade securities.

The domestic equity allocation target (25% of the total portfolio) will consist of the allocation to securities that corresponds to the weight of securities within the Russell 3000 Index.

The covered calls target allocation (20% of the total portfolio) may consist of a combination of Chicago Board Options Exchange S&P 500 BuyWrite Index (the "BXM Index") replication strategy and/or active non-replication strategies and their underlying domestic equity portfolios.

(Dollars in thousands)

NOTE 5 – CASH AND INVESTMENTS (Continued)

The international equity target allocation (25% of the total portfolio) will consist of an allocation to non-US equity securities benchmarked to the MSCI ACWI xUS Index.

The real estate target allocation (5% of the total portfolio) will consist of either equity (ownership) and/or fixed income participation in commercial, industrial, or residential properties. Investments may include interests in mortgages pools secured by loans of underlying properties.

The asset allocation does allow for the fact that at any time equity and fixed income managers may have transactional cash on hand and the District will maintain enough cash as working capital to effectively meet cash flow demands on the system. However, there is no specific allocation for cash as all investable cash is allocated to specific investment mandates.

B. Financial Statement Presentation

Total cash and investments at fair value as of June 30, consisted of the following:

	2021			
	Pension Plan Benefits	Post-Employment Healthcare Benefits	Total	2020
Cash and cash equivalents	$ 36,672	$ 923	$ 37,595	$ 57,852
Invested securities lending collateral	154,057	3,876	157,933	80,731
Investments	2,233,286	56,188	2,289,474	1,806,289
Total cash and investments	$ 2,424,015	$ 60,987	$ 2,485,002	$ 1,944,872

C. Fair Value Hierarchy

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure fair value of the assets. Level 1 inputs are quoted prices in an active market for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. The California Local Agency Investment Fund is exempt from classification for fair value hierarchy.

(Dollars in thousands)

NOTE 5 – CASH AND INVESTMENTS (Continued)

The following is a summary of the fair value hierarchy of investments held by the System as of June 30, 2021:

Investment Type	Level 1	Level 2	Level 3	Total
Investments by Fair Value:				
Asset Backed Securities	$ -	$ 12,605	$ -	$ 12,605
Equities	704,475	-	76	704,551
Bank Loans	-	9,680	-	9,680
Commercial Mortgage-Backed	-	5,987	-	5,987
Corporate Bonds	-	140,645	52	140,697
Corporate Convertible Bonds	-	467	-	467
Govt Agencies	-	22,615	-	22,615
Govt Bonds	-	138,241	-	138,241
Govt Mortgage Backed Securities	-	92,679	-	92,679
Index Linked Govt Bonds	-	1,798	-	1,798
Municipal/Provincial Bonds	-	664	-	664
Other Fixed Income	-	579	-	579
Real Estate-Partnerships	-	-	51,555	51,555
Total Investments at Fair Value	$ 704,475	$ 425,960	$ 51,683	1,182,118
Investments Not Subject to Fair Value Hierarchy:				
Comingled Funds and Other				1,107,356
Total System Investments				2,289,474
Invested Securities Lending Collateral				157,933
Cash and Cash Equivalents:				
California Local Agency Investment Fund				2,289
Cash & Short-term Investments				35,306
Total System Cash and Investments				$ 2,485,002

Investments classified in Level 1 of the fair value hierarchy, valued at $704,475 are valued using quoted prices in active markets. $425,960 of investments classified in Level 2 of the fair value hierarchy, are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Investments totaling $51,683 classified in Level 3 of the fair value hierarchy are valued using appraisals and estimates by investment managers. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank.

(Dollars in thousands)

NOTE 5 – CASH AND INVESTMENTS (Continued)

D. Interest Rate Risk

For fixed income investments, interest rate risk is the risk that changes in market rates will adversely affect the fair value of an investment. Normally, the longer the maturity of a fixed income investment, the greater the sensitivity of its fair value to changes in market interest rates.

Information about the sensitivity of the fair values of the System's investments (including investments held by bond trustees) to market interest rate fluctuations is provided by the following table that shows the distribution of the System's investments by maturity or earliest call date:

Investment Type	Less than 12 Months	12 to 72 Months	72 to 120 Months	More than 120 Months	Maturity not Determined	Total
Asset Backed Securities	$ 1	$ 6,371	$ 1,531	$ 4,702	$ -	$ 12,605
Equity Securities	704,551	-	-	-	-	704,551
Bank Loans	-	3,898	5,782	-	-	9,680
Commercial Mortgage-Backed	288	721	689	4,289	-	5,987
Corporate Bonds	17,499	57,757	42,234	23,207	-	140,697
Corporate Convertible Bonds	-	467	-	-	-	467
Govt Agencies	5,325	8,685	3,505	5,100	-	22,615
Govt Bonds	-	99,298	31,278	7,665	-	138,241
Govt Mortgage Backed Securities	-	-	378	92,301	-	92,679
Index Linked Govt Bonds	-	694	1,104	-	-	1,798
Municipal/Provincial Bonds	-	-	-	664	-	664
Other Fixed Income	-	579	-	-	-	579
Real Estate-Partnerships	-	-	-	-	51,555	51,555
Comingled Funds and Other	-	-	-	-	1,107,356	1,107,356
Total System Investments	$ 727,664	$ 178,470	$ 86,501	$ 137,928	$ 1,158,911	$ 2,289,474

The System's investments include the following investments that are highly sensitive to interest rate fluctuations to a greater degree than already indicated above:

Highly Sensitive Investments	Fair Value at Year End
Government Mortgage - Backed Securities	$ 92,679
Commercial Mortgage - Backed Securities	5,987

(Dollars in thousands)

NOTE 5 – CASH AND INVESTMENTS (Continued)

The System is a participant in the Local Agency Investment Fund (LAIF), which is regulated by California Government Code §16429 under the oversight of the Treasurer of the State of California. The value of the pool shares in LAIF is determined on an amortized cost basis, which is different from the fair value of its position in the pool. The System's investments with LAIF at June 30, 2021 and 2020 included a portion of the pool funds invested in Structured Notes and Asset-Backed Securities. These investments included the following:

- Structured Notes are debt securities (other than asset-backed securities) whose cash-flow characteristics (coupon rate, redemption amount, or stated maturity) depend upon one or more indices and/or that have embedded forwards or options.

- Asset-Backed Securities, the bulk of which are mortgage-backed securities, entitle their purchasers to receive a share of the cash flows from a pool of assets, such as principal and interest repayments from a pool of mortgages (such as Collateralized Mortgage Obligations) or credit card receivables.

As of June 30, 2021 and 2020, the System had investments of $2,289 and $4,518, respectively, invested in LAIF, which had invested 2.31% and 3.37% of the pooled investment funds in Structured Notes and Asset-Backed Securities. The LAIF fair value factor of 1.00008297 and 1.004912795 as of June 30, 2021 and 2020, respectively was used to calculate the fair value of the investments in LAIF.

E. Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair values of an investment or deposit. Presented below in US dollars is the fair market value of the System's foreign investments at June 30, 2021:

Foreign Currency	Market Value
Euro	$ 61,131
British Pound Sterling	17,975
Japanese Yen	21,002
Hong Kong Dollar	8,195
South Korean Won	7,557
Swiss Franc	3,812
Danish Krone	3,196
Canadian Dollar	2,658
Australian Dollar	5,769
Norwegian Krone	1,988
Indonesian Rupiah	2,190
New Zealand Dollar	706
Total	$ 136,179

(Dollars in thousands)

NOTE 5 – CASH AND INVESTMENTS (Continued)

The Fund's investment policy permits investments in Non-US Equity up to 25%. The Fund's current position is 5.95%.

F. *Credit Risk*

For fixed income investments, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization to the fixed income investments. Presented below is the actual rating as of June 30, 2021, for each investment type as provided by Moody's or Standard and Poor's, displayed by using Moody's ratings scale.

Investment Type	Aaa	Aa	A	Baa	Ba	B	Caa	U.S. Government Guaranteed	Not Rated	Total
Asset Backed Securities	$ 3,741	$ 508	$ -	$ 500	$ -	$ -	$ -	$ -	$ 7,856	$ 12,605
Equity Securities	-	-	-	-	-	-	-	-	704,551	704,551
Bank Loans	-	-	-	808	3,465	3,774	-	-	1,633	9,680
Commercial Mortgage - Backed Securities	2,077	-	-	531	-	-	-	-	3,379	5,987
Corporate Bonds	-	11,698	62,811	24,547	16,897	16,869	2,077	-	5,798	140,697
Corporate Convertible Bonds	-	-	-	109	-	358	-	-	-	467
Government Agencies	15,453	-	-	-	-	-	-	5,325	1,837	22,615
Government Bonds	135,168	-	-	1,194	-	-	-	1,879	-	138,241
Government Mortgage - Backed Securities	-	-	-	-	-	-	-	92,469	210	92,679
Index Linked Government Bonds	1,798	-	-	-	-	-	-	-	-	1,798
Municipal Bonds	-	664	-	-	-	-	-	-	-	664
Other Fixed Income	-	-	-	-	-	-	-	-	579	579
Real Estate - Partnerships	-	-	-	-	-	-	-	-	51,555	51,555
Comingled Funds and Other	-	-	-	-	-	-	-	-	1,107,356	1,107,356
Total System Investments	$158,237	$ 12,870	$ 62,811	$ 27,689	$ 20,362	$ 21,001	$ 2,077	$ 99,673	$ 1,884,754	$ 2,289,474

G. *Concentration Risk*

As of June 30, 2021, and June 30, 2020, the District did not have investments in any one organization exceeding 5% of the System's investments.

The District held demand deposits (overdrafts) amounting to $1,221 and $2,874 on behalf of the System as of June 30, 2021 and 2020, respectively. The financial institution which holds these deposits is required by state law to maintain collateral pools against all public deposits they hold.

H. *Custodial Credit Risk*

Custodial credit risk for cash on deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g. broker-dealer) to a transaction, the System will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

(Dollars in thousands)

NOTE 5 – CASH AND INVESTMENTS (Continued)

California Law requires banks and savings and loan institutions to pledge government securities with a market value of 110% of the System's cash on deposit, or first trust deed mortgage notes with a market value of 150% of the deposit, as collateral for these deposits. Under California Law this collateral is held in a separate investment pool by another institution in the System's name and places the System ahead of general creditors of the institution.

The System invests in individual investments and in investment pools. Individual investments are evidenced by specific identifiable securities instruments, or by an electronic entry registering the owner in the records of the institution issuing the security, called the book entry system. In order to increase security, the System employs the Trust Department of a bank or trustee as the custodian of certain System investments, regardless of their form.

As of June 30, 2021 and 2020, the System's brokers/dealers held $0 and $0 respectively, in cash exposed to custodial credit risk.

NOTE 6 – NET PENSION LIABILITY

The net pension liability (the Plan's liability determined in accordance with GASB 67 less the fiduciary net position) as of June 30, is as shown below:

	2021	2020
Total Pension Liability	$ 2,535,238	$ 2,340,773
Plan Fiduciary Net Position	(1,813,591)	(1,792,124)
Employer Net Pension Liability	$ 721,647	$ 548,649
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	71.54%	76.56%
Covered Payroll	$ 215,110	$ 203,541
Liability as a Percentage of Covered Payroll	335.48%	269.55%

The actuarial assumptions used in the June 30, 2020 valuation were based on the July 1, 2016 through June 30, 2020 Actuarial Experience Study report dated November 12, 2020. Actuarial valuation of the ongoing System involves estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The Schedule of Employers' net pension liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The net pension liability was measured as of June 30, 2020 and 2019 and are not adjusted or rolled forward to the June 30, 2021 and 2020 reporting dates, respectively.

(Dollars in thousands)

NOTE 6 – NET PENSION LIABILITY (Continued)

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below:

Valuation date	June 30, 2020
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes, assumption changes, and experience gains/losses prior to July 1, 2011 are amortized over separate decreasing 30-year amortization periods. On or after July 1, 2011, plan changes are amortized over separate decreasing 15-year periods; assumptions changes are amortized over separate decreasing 25 year periods; experience gains/losses are amortized over separate decreasing 20 year periods.
Assets valuation method	Market value of assets less unrecognized returns in each last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Net Investment Return	7.00%, net of investment and administrative expenses.
Average projected salary increases*	Ranges from 4.00% to 9.50% based on years of service*
Inflation rate	2.75%
Cost-of-living adjustments	3.00% per annum
Mortality	Pre-retirement: Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables, projected generationally with the two-dimensional mortality improvement scale MP-2020. Post-retirement: *Healthy Members* - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2020. *Disabled Members*- Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Tables with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2020. *Beneficiaries* - Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Tables with rates increased by 5% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

*Includes inflation of 2.75% plus across the board salary increase of 0.50% plus merit and promotional increases.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

(Dollars in thousands)

NOTE 6 – NET PENSION LIABILITY (Continued)

The target allocation and projected arithmetic real rates of return, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption for each major asset class are summarized below:

Asset Class	Target Allocation	Long-Term Arithmetic Expected Real Rate of Return
Domestic Large Cap Equity	22.5%	5.44%
Domestic Small Cap Equity	2.5%	6.62%
Developed International Large Cap Equity	20.0%	6.71%
Emerging Market Equity	5.0%	8.93%
Core Bond	20.0%	1.07%
High-Yield Bond	2.5%	3.14%
Bank Loan	2.5%	3.55%
Real Estate	5.0%	5.09%
Covered Calls	20.0%	4.12%
Total	100.0%	

The discount rates used to measure the total pension liability was 7.00% as of June 30, 2020 and 7.00% as of June 30, 2019. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Pension Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long- term expected rate of return on Pension Plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of both June 30, 2020 and June 30, 2019.

In accordance with GASB 67 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the following table presents the net pension liability of the Plan as of June 30, 2021, calculated using the discount rate of 7.00% as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1- percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount (7.00%)	1% Increase (8.00%)
Net Pension Liability	$ 1,053,520	$ 721,647	$ 446,814

(Dollars in thousands)

NOTE 7 – NET OPEB LIABILITY

The net OPEB liability (The Plan's liability determined according to GASB 74) as of June 30, is shown below:

	2021	2020
Total OPEB Liability	$ 195,853	$ 173,712
Plan Fiduciary Net Position	(44,018)	(40,841)
Employer Net OPEB Liability	$ 151,835	$ 132,871
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	22.48%	23.51%

The actuarial assumptions used in the June 30, 2020 valuation were based on the July 1, 2016 through June 30, 2020 Actuarial Experience Study report dated November 12, 2020, and the Retiree Health assumptions letter dated December 14, 2020. They are the same as the assumptions used in the June 30, 2020 funding actuarial valuation except the discount rate is calculated as a blend of the investment return on plan assets and municipal bond rate in accordance with GASB 74, and implicit subsidy benefit payments are based on the age-based costs. The net OPEB liability is measured as of June 30, 2020 and 2019 and is not adjusted or rolled forward to the June 30, 2021 and 2020 reporting dates.

(Dollars in thousands)

NOTE 7 – NET OPEB LIABILITY (Continued)

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below:

Valuation date	June 30, 2020
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes, assumption changes, and experience gains/losses prior to July 1, 2011 are amortized over separate decreasing 30-year amortization periods. On or after July 1, 2011, plan changes are amortized over separate decreasing 15-year periods; assumption changes are amortized over separate decreasing 25-year periods; and experience gains/losses are amortized over separate decreasing 20-year periods.
Assets valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Net Investment Return	4.40%, net of investment and administrative expenses.
Average projected salary increases*	Ranges from 4.00% to 9.50% based on years of service*
Inflation rate	2.75%
Health Care Trend	Non-Medicare: 6.625% graded to ultimate 4.50% over 9 years Medicare: 6.125% graded to ultimate 4.50% over 7 years
HIB increases	0.00%
Mortality	*Pre-Retirement- Pub-2010 General Employee Headcount-Weighted Above-Median Mortality Tables, projected generationally with the two-dimensional mortality improvement scale MP-2020.* *Post-Retirement Healthy Members*- Pub-2010 General Healthy Retiree Headcount-Weighted Above-Median Mortality Tables with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2020. *Post-Retirement Disabled Members*- Pub-2010 Non-Safety Disabled Retiree Headcount-Weighted Mortality Tables with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2020. *Beneficiaries*- Pub-2010 Contingent Survivor Headcount-Weighted Above-Median Mortality Tables with rates increased by 5% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

*Includes inflation of 2.75% plus across the board salary increase of 0.50% plus merit and promotional increases.

(Dollars in thousands)

NOTE 7 – NET OPEB LIABILITY (Continued)

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation and subtracting expected investment expenses and a risk margin.

The target allocation and projected arithmetic real rates of return, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption for each major asset class are summarized below:

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Domestic Large Cap Equity	22.5%	5.44%
Domestic Small Cap Equity	2.5%	6.62%
Developed International Large Cap Equity	20.0%	6.71%
Emerging Market Equity	5.0%	8.93%
Core Bond	20.0%	1.07%
High-Yield Bond	2.5%	3.14%
Bank Loan	2.5%	3.55%
Real Estate	5.0%	5.09%
Covered Calls	20.0%	4.12%
Total	100.0%	

The municipal bond rates used to determine the blended discount rate, as discussed below, were 2.21% and 3.50% which are based on the 20-year municipal bond rate for the Bond Buyer 20-Bond GO Index as of June 30, 2020 and June 30, 2019, respectively.

The discount rates used to measure the total OPEB liability were 4.40% and 5.23% as of June 30, 2020 and June 30, 2019, respectively. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates for the $450/$550 HIB Subsidy excluding the implicit subsidy that will continue to be paid on a pay-as-you-go basis. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included.

(Dollars in thousands)

NOTE 7 – NET OPEB LIABILITY (Continued)

Based on those assumptions, the OPEB Plan's fiduciary net position was projected to be available to make projected future benefit payments for current plan members through June 30, 2046. Therefore, the long-term expected rate of return on OPEB Plan investments (7.00%) was applied to periods of projected benefit payments through June 30, 2046, and the 20-year municipal bond rate (2.21%) to determine the total OPEB liability as of June 30, 2021.

In accordance with GASB 74 regarding the disclosure of the sensitivity of the net OPEB liability to changes in the discount rate, the following table presents the net OPEB liability of the Plan as of June 30, 2021, calculated using the discount rate of 4.40% as well as what the Plan's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.40%) or 1-percentage-point higher (5.40%) than the current rate:

	1% Decrease (3.40%)	Current Discount (4.40%)	1% Increase (5.40%)
Net OPEB Liability	$ 173,821	$ 151,835	$ 133,296

Additionally, in accordance with GASB 74 regarding disclosure of the sensitivity of the net OPEB liability to changes in the trend rate (only applied to implicit subsidy and not the $450/$550 cash subsidy), the following table presents the net OPEB liability of the Plan as of June 30, 2021, calculated using the current trend rates as well as what the Plan's net OPEB liability would be if it were calculated using a trend rate that is 1-percentage-point lower or 1- percentage-point higher than the current rate:

	1% Decrease	Current Trend	1% Increase
Net OPEB Liability	$ 148,852	$ 151,835	$ 155,228

NOTE 8 – BENEFIT GUARANTY

A. Pension Plan

The District may, at any time, change or repeal the ordinance governing the Plan. The District's obligations to those members receiving or eligible for a retirement allowance prior to such change or repeal shall continue in full force. The District is obligated to those members neither receiving nor eligible for a retirement allowance at the time of such change or repeal. This allowance will be a retirement allowance at retirement age equal to the actuarial equivalent of the accumulated value of the member's contributions standing to the member's credit at the date of retirement and the accumulated value of the District's contribution for current service to the date of such change or repeal, increased by the accumulation of interest to date of retirement.

NOTE 8 – BENEFIT GUARANTY (Continued)

B. Post-Employment Healthcare Benefits

In addition to retirement benefits, the District provides post-employment health benefits assistance (administered by the Employees' Retirement System) for employees who retire from the District or their surviving spouses. As of June 30, 2020 (date of latest actuarial valuation), there were 1,701 participants receiving these health care benefits.

Effective July 1, 1996, a 20-year vesting schedule for full benefits was implemented for all new participants. Effective January 1, 1999, retired members who had separated from the District prior to their retirement who has at least 10 years of service also became eligible for the post-employment health benefits based on the same sliding scale. The scale provides for 25% of healthcare benefits for service from 5 through 10 years, 50% of healthcare benefits for service from 10 through 15 years, 75% of healthcare benefits for service from 15 through 20 years, and 100% of healthcare benefits for service of 20 years or more. Effective July 1, 2003, the District reimbursed up to $450 per month ($550 per month effective July 1, 2004, for membership of a spouse or registered domestic partner) for any health, dental, or long-term care insurance premiums paid by the retiree for themselves, current spouse, or domestic partner, or any health, dental, or long-term care insurance premiums paid by the eligible surviving spouse of a retiree. These benefits are paid from a separate post-employment healthcare benefits fund which up until June 17, 2002, was advance funded entirely by the District on an actuarially determined basis. Cash reimbursement of these benefits totaled $9,223 in the year ended June 30, 2021. Effective June 18, 2002, a portion of the post-employment healthcare benefits costs is recovered through employee contributions.

Through June 30, 1999, the medical premium subsidy was not a vested benefit and the District reserved the right to modify or terminate the benefit at any time. If the medical subsidy were terminated, assets accumulated from contributions made for the subsidy would be used to provide other pension benefits. Effective July 1, 1999, the medical premium subsidy became a vested benefit to a maximum of $200 per month, was changed effective October 1, 2000, to a maximum of $250 per month, and was changed effective July 1, 2002, to a maximum of $400 per month per month, and was changed effective July 1, 2003, to a maximum of $450 per month, and was changed again effective July 1, 2004, to a maximum of $450 per month and $550 per month for membership of a spouse or registered domestic partner.

NOTE 9 – RELATED PARTY TRANSACTIONS

The District provides the System with accounting, treasury, and other administrative services, which are reimbursed by the System on a monthly basis. Total reimbursements in fiscal years 2021 and 2020 were $1,359 and $999 respectively.

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM
(A Component Unit of the East Bay Municipal Utility District)

Required Supplementary Information

(Dollars in thousands)

For the Year Ended June 30, 2021

(1) Pension Plan

Schedule of Changes in Employer's Net Pension Liability:

Reporting Date	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Measurement Date	*2020*	*2019*	*2018*	*2017*	*2016*	*2015*	*2014*
Total Pension Liability							
Service cost	$ 46,124	$ 44,710	$ 40,636	$ 41,106	$ 37,828	$ 36,791	$ 34,987
Interest	163,114	154,896	149,324	144,392	138,135	131,595	127,558
Differences between expected and actual experience	(6,199)	25,974	48,581	(22,641)	5,278	(1,390)	438
Changes of assumptions	104,814	-	12,484	-	52,596	-	18,421
Benefit payments, including refunds of employee contributions	(113,388)	(105,785)	(98,062)	(90,705)	(83,886)	(77,790)	(71,232)
Net change in total pension liability	**194,465**	**119,795**	**152,963**	**72,152**	**149,951**	**89,206**	**110,172**
Total pension liability - beginning	**2,340,773**	**2,220,978**	**2,068,015**	**1,995,863**	**1,845,912**	**1,756,706**	**1,646,534**
Total pension liability - ending (a)	**$ 2,535,238**	**$ 2,340,773**	**$ 2,220,978**	**$ 2,068,015**	**$ 1,995,863**	**$ 1,845,912**	**$ 1,756,706**
Plan fiduciary net position							
Contributions - employer	$ 77,645	$ 74,033	$ 71,221	$ 67,096	$ 65,218	$ 64,177	$ 61,660
Contributions - employee	18,690	17,681	16,860	15,820	14,741	13,260	11,963
Net investment income	39,973	91,194	147,424	197,977	13,934	59,288	216,601
Benefit payments, including refunds of employee contributions	(113,388)	(105,785)	(98,062)	(90,705)	(83,886)	(77,790)	(71,232)
Administrative expense	(1,453)	(1,477)	(1,521)	(1,403)	(1,289)	(1,269)	(1,233)
Net change in plan fiduciary net	**21,467**	**75,646**	**135,922**	**188,785**	**8,718**	**57,666**	**217,759**
Plan fiduciary net position - beginning	**1,792,124**	**1,716,478**	**1,580,556**	**1,391,771**	**1,383,053**	**1,325,387**	**1,107,628**
Plan fiduciary net position - ending (b)	**$ 1,813,591**	**$ 1,792,124**	**$ 1,716,478**	**$ 1,580,556**	**$ 1,391,771**	**$ 1,383,053**	**$ 1,325,387**
Plan's net pension liability - ending (a) - (b)	**$ 721,647**	**$ 548,649**	**$ 504,500**	**$ 487,459**	**$ 604,092**	**$ 462,859**	**$ 431,319**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

(Dollars in thousands)

(2) Pension Plan

Schedule of Employer's Net Pension Liability:

Reporting Date	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**
Measurement Date	*2020*	*2019*	*2018*	*2017*	*2016*	*2015*	*2014*	*2013*
Total Pension Liability	$ 2,535,238	$ 2,340,773	$ 2,220,978	$ 2,068,015	$ 1,995,863	$ 1,845,912	$ 1,756,706	$ 1,646,534
Plan fiduciary net position	(1,813,591)	(1,792,124)	(1,716,478)	(1,580,556)	(1,391,771)	(1,383,053)	(1,325,387)	(1,107,628)
Net pension liability	$ 721,647	$ 548,649	$ 504,500	$ 487,459	$ 604,092	$ 462,859	$ 431,319	$ 538,906
Plan fiduciary net position as a percentage of total pension liability	71.54%	76.56%	77.28%	76.43%	69.73%	74.93%	75.45%	67.27%
Covered payroll*	$ 215,110	$ 203,541	$ 193,717	$ 182,032	$ 174,586	$ 166,886	$ 159,513	$ 153,707
Plan net pension liability as a percentage of covered payroll	335.48%	269.55%	260.43%	267.79%	346.01%	277.35%	270.40%	350.61%

*In accordance with GASB 82, the covered payroll amounts are defined as the payroll on which contributions to a pension plan are based. The covered payroll amounts for fiscal year 2014 through fiscal year 2016, were updated to adopt the provisions of GASB 82.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM
(A Component Unit of the East Bay Municipal Utility District)

Required Supplementary Information

(Dollars in thousands)

For the Year Ended June 30, 2021

(3) Pension Plan

Schedule of Employer's Contributions:

Year ended June 30	Actuarially determined contributions	Contributions in relation to the actuarially determined contributions	Contributions deficiency (excess)	Covered payroll*	Contributions as a percentage of covered payroll
2010	$ 44,031	$ 44,031	$ -	$ 161,641	27.24%
2011	50,987	50,987	-	160,336	31.80%
2012	52,156	52,156	-	158,481	32.91%
2013	53,795	53,795	-	153,707	35.00%
2014	61,660	61,660	-	159,513	38.66%
2015	64,177	64,177	-	166,886	38.46%
2016	65,218	65,218	-	174,586	37.36%
2017	67,096	67,096	-	182,032	36.86%
2018	71,221	71,221	-	193,717	36.77%
2019	74,033	74,033	-	203,541	36.37%
2020	77,645	77,645	-	215,110	36.10%
2021	79,252	79,252	-	222,419	35.63%

*Derived by dividing the contributions in relation to the actuarial determined contributions by the contributions as a percentage of covered employee payroll. These amounts may be different from the actual payroll of the District. In accordance with GASB 82, the covered payroll is defined as the payroll on which contributions to the pension plan are based. These amounts may be different from the actual payroll of the District. The actuarially determined contributions for the fiscal year ended June 30, 2021 are based on the reporting date. Years preceding fiscal year ended June 30, 2021 are based on the measurement date.

(4) Pension Plan

Schedule of Investment Returns:

Reporting Date	2021	2020	2019	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	26.85%	2.27%	5.37%	9.29%	14.46%	0.91%	4.40%	19.42%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

(Dollars in thousands)

(5) Post-Employment Healthcare Plan

Schedule of Changes in Employer's Net OPEB Liability:

Reporting Date	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**
Measurement Date	*2020*	*2019*	*2018*	*2017*	*2016*	*2015*
Total OPEB Liability						
Service cost	$ 4,864	$ 4,692	$ 4,827	$ 5,276	$ 4,514	$ 4,460
Interest	9,042	9,332	9,265	8,797	9,374	9,159
Differences between expected and actual experience	704	(2,783)	(3,299)	(1,711)	(3,286)	(309)
Changes of assumptions	18,913	5,753	(527)	(6,107)	12,471	-
Benefity payments - cash*	-	-	-	-	(7,685)	(7,394)
Benefit payments- estimated implicit subidy	(11,382)	(11,052)	(10,390)	(9,804)	(2,164)	(2,241)
Net change in total OPEB liability	**22,141**	**5,942**	**(124)**	**(3,549)**	**13,224**	**3,675**
Total OPEB liability - beginning	**173,712**	**167,770**	**167,894**	**171,443**	**158,219**	**154,544**
Total OPEB liability - ending (a)	**$ 195,853**	**$ 173,712**	**$ 167,770**	**$ 167,894**	**$ 171,443**	**$ 158,219**
Plan fiduciary net position						
Employer Contributions - cash	$ 11,089	$ 10,518	$ 9,875	$ 9,764	$ 9,454	$ 8,964
Employer Contributions - estimated implicit subsidy	-	-	-	-	2,164	2,241
Employee Contributions - total	11,089	10,518	9,875	9,764	11,618	11,205
Employee Contributions	195	184	219	198	184	167
Net investment income	890	2,060	2,925	3,706	271	938
Benefity payments - cash*	-	-	-	-	(7,685)	(7,394)
Benefit payments- estimated implicit subidy	(11,382)	(11,052)	(10,390)	(9,804)	(2,164)	(2,241)
Administrative expense	(34)	(33)	(30)	(26)	(22)	(20)
Other	2,419	2,402	2,075	1,892	-	-
Net change in plan fiduciary net position	**3,177**	**4,079**	**4,674**	**5,730**	**2,202**	**2,655**
Plan fiduciary net position - beginning	**40,841**	**36,762**	**32,088**	**26,358**	**24,156**	**21,501**
Plan fiduciary net position - ending (b)	**$ 44,018**	**$ 40,841**	**$ 36,762**	**$ 32,088**	**$ 26,358**	**$ 24,156**
Plan's net OPEB liability - ending (a) - (b)	**$ 151,835**	**$ 132,871**	**$ 131,008**	**$ 135,806**	**$ 145,085**	**$ 134,063**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

*Benefit Payments and Employer Contributions - cash and estimated implicit subsidy report together starting fiscal year 2018.

(Dollars in thousands)

For the Year Ended June 30, 2021

(6) Post-Employment Healthcare Plan

Schedule of Employer's Net OPEB Liability:

Reporting Date	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**
Measurement Date	*2020*	*2019*	*2018*	*2017*	*2016*	*2015*
Total OPEB Liability	$ 195,853	$ 173,712	$ 167,770	$ 167,894	$ 171,443	$ 158,219
Plan fiduciary net position	(44,018)	(40,841)	(36,762)	(32,088)	(26,358)	(24,156)
Net OPEB liability	$ 151,835	$ 132,871	$ 131,008	$ 135,806	$ 145,085	$ 134,063
Plan fiduciary net position as a percentage of total OPEB liability	22.48%	23.51%	21.91%	19.11%	15.37%	15.27%
Covered-employee payroll	$ 215,110	$ 203,541	$ 193,717	$ 182,032	$ 174,586	$ 166,886
Plan net OPEB liability as a percentage of covered-employee payroll	70.58%	65.28%	67.63%	74.61%	83.10%	80.33%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

(Dollars in thousands)

For the Year Ended June 30, 2021

(7) Post-Employment Healthcare Plan

Schedule of Employer's Contributions:

Year ended June 30	Actuarially determined contributions	Contributions in relation to the actuarially determined contributions	Contributions deficiency (excess)	Covered payroll*	Contributions as a percentage of covered payroll
2010	$ 7,725	$ 7,725	$ -	$ 161,641	4.78%
2011	7,494	7,494	-	160,336	4.67%
2012	7,495	7,495	-	158,481	4.73%
2013	7,772	7,772	-	153,707	5.06%
2014	8,457	8,457	-	159,513	5.30%
2015	8,964	8,964	-	166,886	5.37%
2016	9,454	9,454	-	174,586	5.42%
2017	9,764	9,764	-	182,032	5.36%
2018	9,875	9,875	-	193,717	5.10%
2019	10,518	10,518	-	203,541	5.17%
2020	11,089	11,089	-	215,110	5.16%
2021	11,372	11,372	-	222,419	5.11%

*Derived by dividing the contributions in relation to the actuarial determined contributions by the contributions as a percentage of covered payroll. These amounts may be different from the actual payroll of the District. In accordance with GASB 82, the covered payroll is defined as the payroll on which contributions to the pension plan are based. These amounts may be different from the actual payroll of the District. The actuarially determined contributions for the fiscal year ended June 30, 2021 are based on the reporting date. Years preceding fiscal year ended June 30, 2021 are based on the measurement date.

EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM
(A Component Unit of the East Bay Municipal Utility District)

Notes to Required Supplementary Information

(Dollars in thousands)

For the Year Ended June 30, 2021

The pension-related information presented in the required supplementary schedules was determined as part of the Pension actuarial valuation at the date indicated. Additional information as of the latest Pension actuarial valuation is as follows:

Valuation date	June 30, 2018
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes, assumption changes, and experience gains/losses prior to July 1, 2011 are amortized over separate decreasing 30-year amortization periods. On or after July 1, 2011, plan changes are amortized over separate decreasing 15-year periods; assumptions changes are amortized over separate decreasing 25-year periods; and experience gains/losses (including year-to-year health assumption changes) are amortized over separate decreasing 20-year periods.
Assets valuation method	Market value of assets less unrecognized returns in each last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Investment Rate of Return	7.00%, net of investment and administrative expenses
Average projected salary increases*	Ranges from 3.75% to 9.25% based on years of service*
Inflation rate	2.75%
Cost-of-living adjustments	2.75% per annum
Mortality	*Pre-retirement*: Headcount-Weighted RP-2014 Employee Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. *After Service Retirement and All Beneficiaries*: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. *After Disability Retirement:* Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward nine years for males and females.

**Includes inflation of 2.75% plus across the board salary increases of 0.50% plus merit and promotional increases.*

(Dollars in thousands)

For the Year Ended June 30, 2021

The OPEB-related information presented in the required supplementary schedules was determined as part of the OPEB actuarial valuation at the date indicated. Additional information as of the latest OPEB actuarial valuation is as follows:

Valuation date	June 30, 2018
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes, assumption changes, and experience gains/losses prior to July 1, 2011 are amortized over separate decreasing 30-year amortization periods. On or after July 1, 2011, plan changes are amortized over separate decreasing 15-year periods; assumptions changes are amortized over separate decreasing 25-year periods; and experience gains/losses (including year-to-year health assumption changes) are amortized over separate decreasing 20-year periods.
Assets valuation method	Market value of assets less unrecognized returns in each last five years. Unrecognized return is equal to the difference between the actual market return and the of the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Investment Rate of Return	7.00%, net of OPEB Plan investment expense, including inflation
Average projected salary increases*	Ranges from 3.75% to 9.25% based on years of service*
Inflation rate	2.75%
Health care trend	Non-Medicare: 6.625% graded to ultimate 4.50% over 9 years Medicare: 6.125% graded to ultimate 4.50% over 7 years
HIB increases	0.00%
Mortality	*Pre-retirement*: Headcount-Weighted RP-2014 Employee Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. *After Service Retirement and All Beneficiaries*: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. *After Disability Retirement:* Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward nine years for males and females.

**Includes inflation of 2.75% plus across the board salary increases of 0.50% plus merit and promotional increases.*

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL
OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE
WITH *GOVERNMENT AUDITING STANDARDS*

To the Board of Directors
East Bay Municipal Utility District Employees' Retirement System
Oakland, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the East Bay Municipal Utility District Employees' Retirement System (the System), as of and for the year ended June 30, 2021, and the related notes to the financial statements, and have issued our report thereon dated September 23, 2021.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

To the Board of Directors
East Bay Municipal Utility District Employees' Retirement System
Oakland, California

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Lance, Soll & Lunghard, LLP

Sacramento, California
September 23, 2021

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

FROM: Lisa Sorani, Manager of Employee Services Lisa Sorani

SUBJECT: Review Updates to Retirement Board Rule C-13 Establishing Credit for Prior Service Limited to Active Members

BACKGROUND

Staff is requesting that the Retirement Board review and consider an updated Retirement Board Rule C-13 Establishing Credit for Prior Service Limited to Active Members ("Rule C-13"). Rule C-13 was originally adopted March 19, 1998. The IRS has since clarified their rulings on the purchase of service credit and Rule C-13 must be amended to comport with the IRS's rulings.

SUMMARY

March 19, 1998, the Board adopted Board C-13, which specifies that service purchases are made through pre-tax payroll deduction. It is the position of the Internal Revenue Service, that pre-tax payroll deductions towards the purchase of service credits or redeposit do not qualify as pick-up contributions and that pre-tax treatment of those contributions are prohibited. Since allowing the purchase of prior service time by pre-tax payroll deduction towards the purchase of service credit or redeposit puts the Retirement System at risk, Staff recommends a revision to Retirement Board Rule C-13 to reflect the IRS's requirement that payroll deductions for purchase of service or redeposit of accumulated contributions be made on an after-tax basis.

Sections 5(l), 5(m), 5(n), 7(b), and 13(a) of the Retirement Ordinance outline the circumstances under which a member can establish credit for eligible prior service. Sections of the Retirement Ordinance provide for the purchase of eligible prior service through payroll deduction without reference to the pre-tax or after-tax status of those deductions. Since the Ordinance language does not specify the tax status of payroll deductions for service purchases, there is no need for an amendment to the Ordinance. However, because it is expressly provided for in the Retirement Board Rules, Rule C-13 must be amended accordingly to minimize any tax liability moving forward.

Staff will bring this update back to Board Rule C-13 as an action item at the January 20, 2022 Retirement Board meeting.

LS:VW
{00067397;1}

R.B. RESOLUTION NO. 6950

ADDING RULE C-13 REGARDING ESTABLISHING CREDIT FOR PRIOR SERVICE LIMITED TO ACTIVE MEMBERS

Introduced by: ; Seconded by:

WHEREAS, Section 4(b) of the Retirement Ordinance authorizes the Retirement Board to adopt such rules and regulations as are necessary and proper in the administration of the provisions of the Retirement Ordinance; and

WHEREAS, Sections 5(l), 5(m), 5(n), 7(b), and 13(a) Retirement Ordinance provide for circumstances under which a member can establish credit for prior service; and

WHEREAS, the Retirement Ordinance provides for the purchase of eligible prior service through payroll deduction without reference to the pre-tax or after-tax status of those deductions; and

WHEREAS, on March 19, 1998, the Board adopted Board C-13, which allows for purchase of prior service time through pre-tax payroll deduction; and

WHEREAS, the Internal Revenue Service prohibits pre-tax payroll deductions for the purchase of service credit as provided for in Sections 5(l), 5(m), 5(n), 7(b), and 13(a); and

WHEREAS, the Retirement Board wishes to revise Retirement Board Rule C-13 to bring the Plan in compliance with applicable tax laws;

NOW, THEREFORE, BE IT RESOLVED, that Retirement Board Rules shall be amended as follows:

1. **Retirement Board Rule C-13 shall be revised as follows:**

RULE NO. C-13

Establishing Credit for Prior Service Limited to Active Members
Approved by Motion 3/19/1998
Amended by Res. No. 6712 5/20/2010
Amended by Res. No. 6950 xx/xx/xxxx

In accordance with EBMUDERS Ordinance Section 6, as amended, payment to establish service credit will be conducted through pre-tax payroll deductions or transferred from a qualified governmental 457 retirement savings plan. **Provided, however, that elections, made on or after January 20, 2022, to establish service credit in accordance with Sections 5(l), 5(m), 5(n), 7(b), and 13(a) of the Retirement Ordinance, shall be conducted through after-tax payroll deductions or transferred from a qualified governmental 457 retirement savings plan.** No Member other than an active Member may elect to establish service credit for prior service.

ADOPTED this XXth day of January, 2022 by the Retirement Board.

____
President

ATTEST:

____
Secretary

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 18, 2021

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance

SUBJECT: CEM Benchmarking Survey Results for 2020

SUMMARY

For the sixth year, the Retirement System participated in the CEM Benchmarking survey. CEM Benchmarking provides benchmark analysis for pension funds, with a primary focus on investment performance. Participants receive a free, high level report comparing their responses to benchmarks and can also commission more detailed, customized reports for a fee.

Staff provided data to CEM Benchmarking on the Retirement System portfolio from calendar year 2020, the most recently completed year at the time of submittal. The benchmarks in the report this year are based upon 156 U.S. pension funds of differing types, including 48 public funds. The funds vary in size with a median of $10.0 billion in assets. The Retirement System is among the smallest (slightly above the 10th percentile).

The benchmarking analysis is based upon a comparison of the Retirement System to the entire U.S. pension fund database. The results of the report are mixed for the Retirement System, showing:

- The Retirement System’s net total return, including investment costs, was 11.4% which is below the U.S. median of 13.7%. The median was higher due to a greater allocation to asset classes that performed well during 2020, including long-term bonds.
- The Retirement System’s “policy return” was 9.2%, compared to the U.S. median of 13.7%. This is the return that CEM Benchmarking calculates could have been earned by passively indexing investments based on the Retirement System’s investment policy mix. As stated above, the median was higher due to a gerater allocation to asset classes that performed well in 2020.
- The “net value added” provided by active management was 2.2%%, above the 0.3% U.S. median. This is the difference between the net total return and the “policy return.”
- Total investment cost was 25.4 basis points (bps), well below the median of 50.7 bps.
- The Retirement System’s asset risk, a measure of price volatility, was 11.2% compared to the 9.6% U.S. median, and its asset-liability risk was 12.6% compared to the 11.8% U.S. median. As discussed in previous years, Meketa determined that this was because covered calls were categorized as equity rather than an offset to equity, and because the U.S. median allocated over 20% to private investments which appear less volatile due to less frequent valuations.

Attachment

CEM Defined Benefit Survey Results

2020 Investment Benchmarking Analysis for
East Bay Municipal Utility District

This report is being presented to you even though we still have outstanding unanswered questions about the data you provided on the CEM Benchmarking survey. If necessary, default values were substituted for missing or suspect data.

CEM welcomes complete and accurate data: if you would like to respond to our questions and/or make corrections to your data, and receive a new report, please contact Daniel Griffiths at dan@cembenchmarking.com. Thank you.

CEM Benchmarking
What gets measured gets managed

CEM presents your 2020 benchmarking results!

We are pleased to present the 30th edition of the annual CEM Investment Benchmarking results for funds.

In this complimentary PDF report, you will find comparisons of your fund's 2020 investment returns, net value added, policy risk, and costs to the U.S. universe. The report also contains insights into some of the drivers of cost differences such as asset mix and implementation style.

Changes this year to note:

- We removed the previous regression-based benchmark cost calculation from the attached report. As investment strategies have evolved, this benchmarking methodology has become less meaningful.

- You can receive access to an improved benchmark cost calculation for your fund via a trial of the CEM Investment Dashboard, our new interactive online benchmarking service. The Dashboard includes your benchmark cost, calculated based on a custom selected group of similar sized peers, adjusted for other factors that impacts fees, along with many other metrics. CEM Dashboard is our highest standard of fee and performance benchmarking analysis provided through a more cost-effective, self-service channel. Contact us to get 2 weeks of free access to this new service. For a summary of the benchmarking services available through CEM, please see page 6 of this report.

Feel free to contact us, if you have any questions, comments, or want to discuss your results. Our team is here to help you get the most out of benchmarking.

Thank you for your participation. We look forward to working with you again next year.

CEM Investment Benchmarking Team.

Table of Contents

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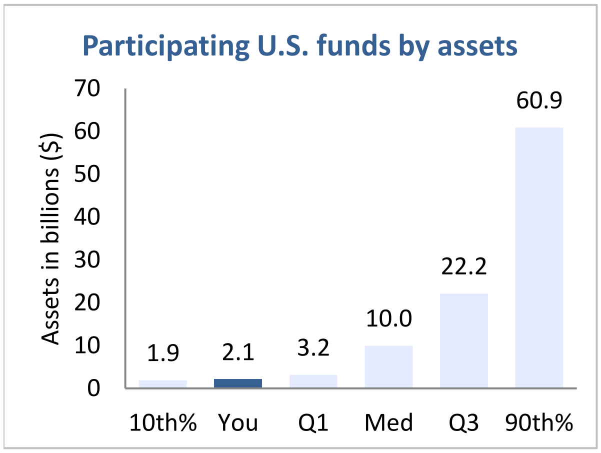
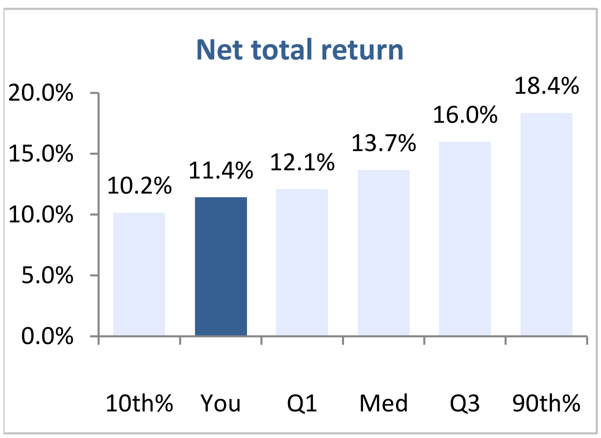
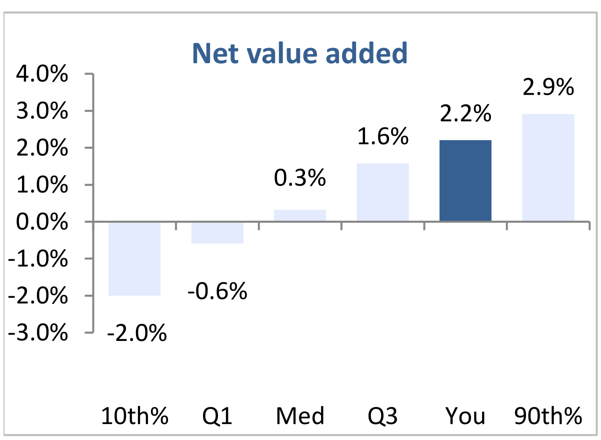
Executive summary



The primary comparisons in this report are to the U.S. universe. It is comprised of 156 funds with plan size ranging between $317 million and $367.3 billion. The median fund was $10.0 billion which compares to your fund's $2.1 billion.

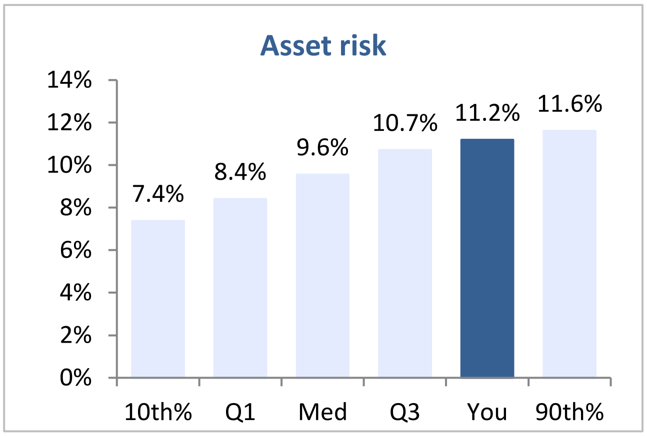


Your fund's 2020 net total return was 11.4%. This was below the U.S. median of 13.7%.



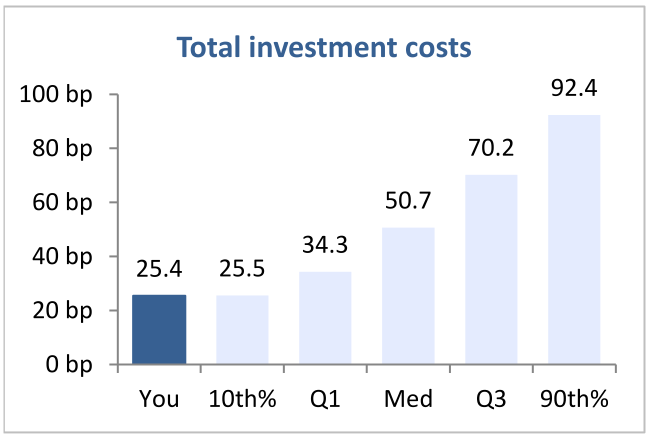
Net value added measures the value produced over what could have been earned by using passive management. It equals net total return minus policy return.

Your 2020 net value added was 2.2%. This was above the U.S. median of 0.3%.



Your asset risk was 11.2%. This was above the U.S. median of 9.6%.

Asset risk is the expected standard deviation of your policy return. It is based on the historical variance of, and covariance between, the asset classes in your policy mix.



Your fund's total investment cost was 25.4 bps. This was below the U.S. median of 50.7 bps.

Total investment costs used in this analysis exclude transaction costs and private asset performance fees.

Comparisons of total investment cost must be interpreted with caution because differences are often due to differences in size and asset mix. To help you truly understand your costs and performance, CEM offers peer-based benchmarking analysis which adjusts for these factors. For a limited time we are offering you access to your fund's peer based analysis through our newly launched online CEM Dashboard. See page 6.

Request a free trial of your CEM Dashboard to experience the benefits of upgrading to our premium benchmarking service

What is CEM Dashboard?

Our new interactive benchmarking service offered through our secure on-line portal. It's a cost effective solution to understanding your costs, performance, risk and how you compare to other asset pool owners.

CEM Dashboard will provide you with:

• A peer-based total fund benchmark cost. This analysis is superior to the regression-based benchmark cost you received in your previous complimentary report.

• Asset class benchmark costs and multi-year performance comparisons. Assess whether your costs are reasonable and whether you generate value relative to others.

• Detailed information on how other funds invest, both strategic asset allocation and their implementation decisions.

• Fiduciary and management information to support strategic decision-making.

CEM Dashboard is an interactive tool giving you the power to:

• Change parameters, e.g. timelines, peers, universes.

• Download data/charts for your own analysis and reporting.

• Drilldown for explanations and underlying data, making it user friendly.

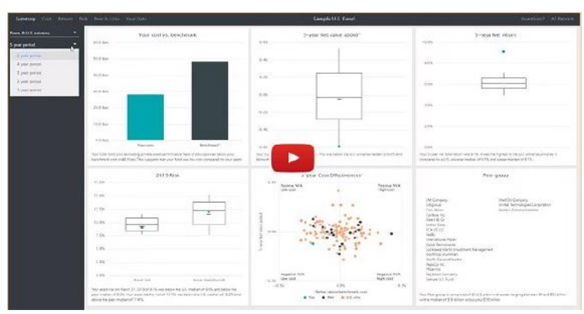
You now have two upgrade options:

1. CEM Dashboard

2. CEM Comprehensive Benchmarking Report & Service, which includes the Dashboard.

	Dashboard	Comprehensive
Access to CEM Dashboard	✓	✓
CEM's proprietary peer based benchmark cost analysis	✓	✓
Comparisons against your choice of universe & peers	✓	✓
Comprehensive results and insights in a 100+ page PDF report		✓
In-person meeting and presentation		✓
Virtual access to CEM for research, questions and help	limited	unlimited

Click on the video below to learn more:



To request your 2-week trial contact:

Daniel Griffiths

dan@cembenchmarking.com

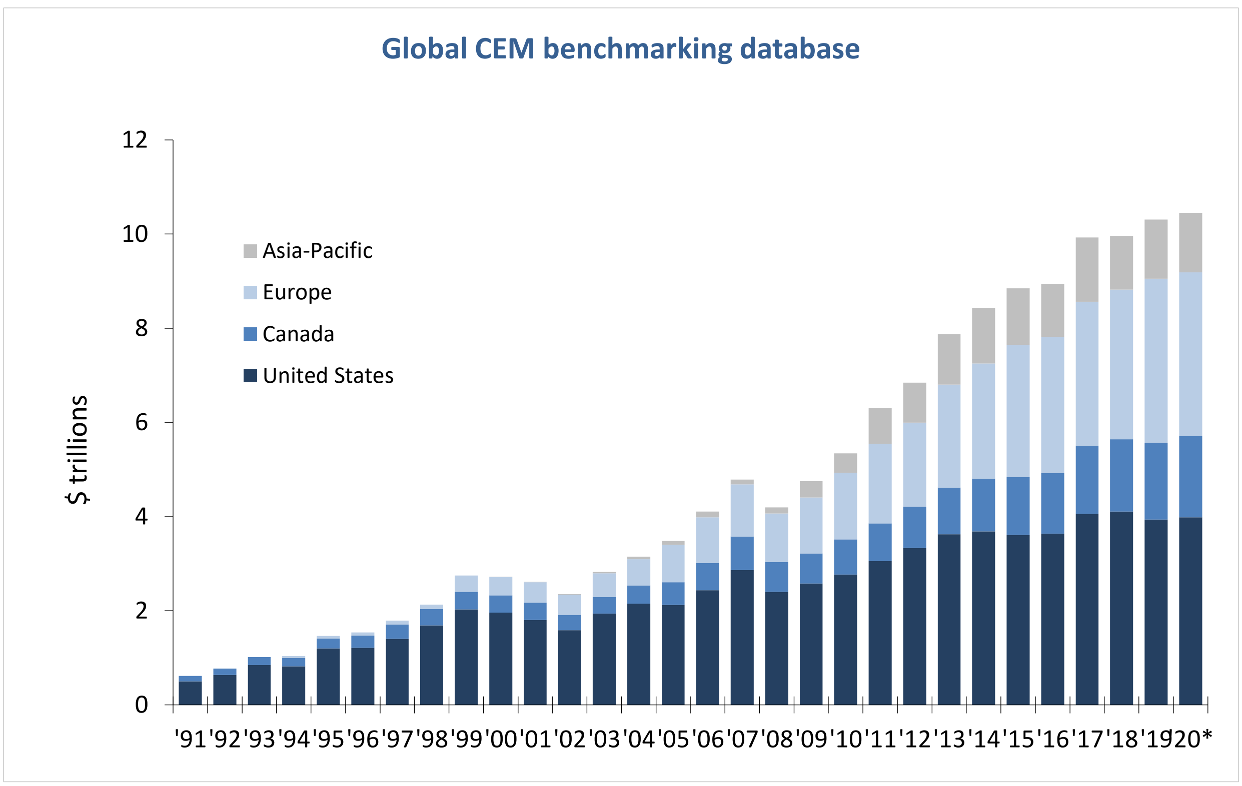
2

The benchmarking database

CEM's global benchmarking database

CEM has been providing cost benchmarking solutions since 1991. The 2020 survey universe is comprised of 254 funds representing $9.9 trillion in assets. The breakdown by region is as follows:

- 156 U.S. pension funds with aggregate assets of $4.0 trillion.
- 64 Canadian pension funds with aggregate assets of $1.7 trillion.
- 26 European pension funds with aggregate assets of $3.5 trillion. Included are funds from the Netherlands, Norway, Sweden, Finland, Denmark, the UK, and Ireland.
- 8 Asia-Pacific and Gulf pension funds with aggregate assets of $1.3 trillion.



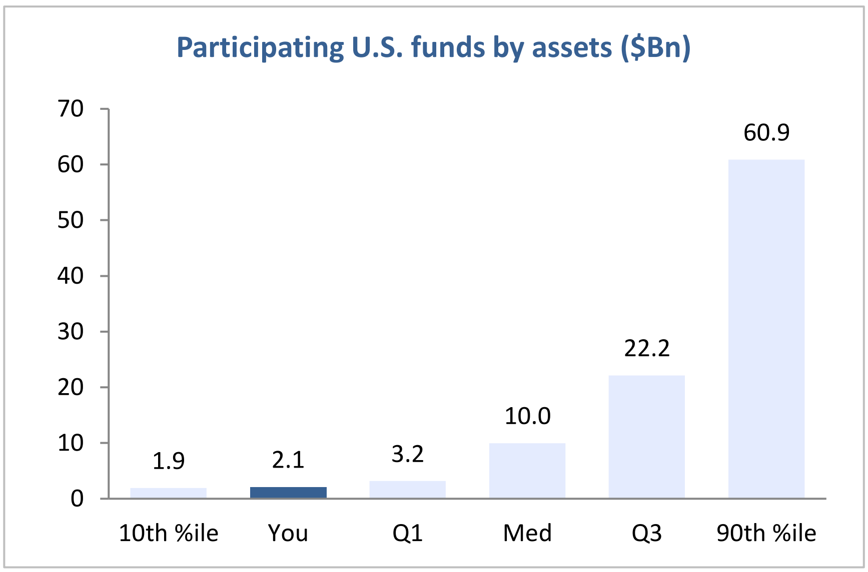
*2020 assets include both received and expected data.

Characteristics of the U.S. survey universe

In this report, your fund's results are compared to the 2020 U.S. survey universe.

The U.S. universe is comprised of 156 pension funds:

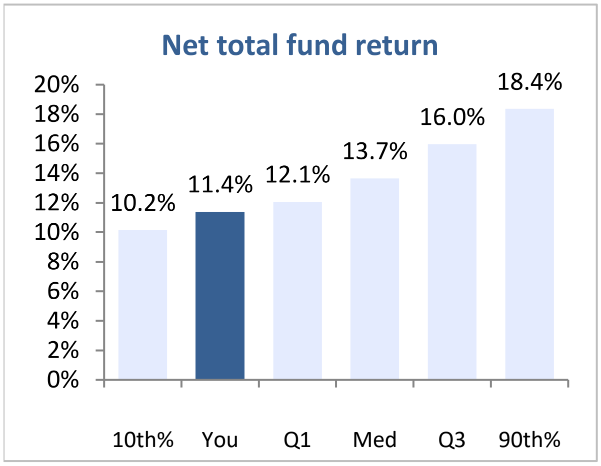
- Combined the funds had aggregate assets of $4.0 trillion.
- The funds range in size between $317 million and $367 billion.
- The median size was $10.0 billion (versus your $2.1 billion).
- 100 are corporate funds, 48 are public, and 8 are other.
- The median membership was 56,884 members (versus your 4,120 members). The median assets per member was $151,112 (versus your $515,264).



3

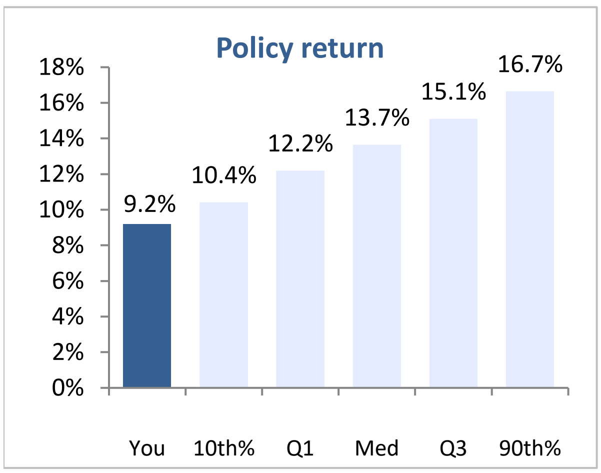
Returns, value added and risk

Net returns, policy returns and net value added

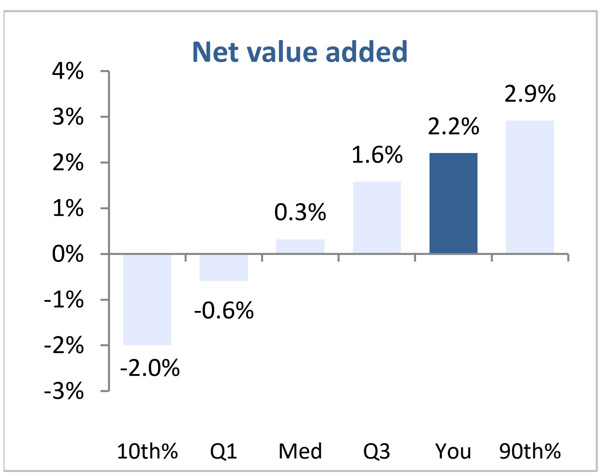


Your 2020 net total fund return was 11.4%. This was below the U.S. median of 13.7%.

Net return is a good indicator of a fund's performance. However, comparisons of total return do not help you understand the reasons behind relative performance. Therefore, we separate total return into its more meaningful components: policy return and net value added.



Policy return is the return you could have earned passively by indexing your investments according to your policy mix. Your 2020 policy return was 9.2%. This is below the U.S. median of 13.7%.



Your 2020 net value added was 2.2%. This was above the U.S. median of 0.3%.

Policy asset mix

Differences in policy return are caused by differences in policy asset mix. Policy asset mix is a fund's long-term asset mix policy or target asset weights. Policy weights are usually established by an investment committee or board and are determined by long-term considerations, such as liability structure, risk tolerance and long-term capital market expectations.

2020 Policy asset mix by asset class

Asset Class	Your Fund	U.S. Average
Stock		
Employer Stock	0.0%	0.0%
U.S. Broad/All	25.0%	6.7%
U.S. Large Cap	0.0%	7.1%
U.S. Mid Cap	0.0%	0.4%
U.S. Small Cap	0.0%	1.3%
EAFE	0.0%	4.0%
Emerging	0.0%	2.1%
Global	0.0%	10.3%
Other	20.0%	1.2%
ACWI x U.S.	25.0%	4.5%
Stock - Total	70.0%	37.7%
Fixed Income		
U.S.	20.0%	9.1%
U.S. Gov't	0.0%	1.8%
U.S. Credits	0.0%	1.5%
EAFE	0.0%	0.0%
Emerging	0.0%	0.8%
Global	0.0%	0.8%
Inflation Indexed	0.0%	0.8%
High Yield	5.0%	1.4%
Other	0.0%	1.0%
Cash	0.0%	0.1%
Long Bonds	0.0%	22.2%
Bundled LDI	0.0%	3.2%
Convertibles	0.0%	0.0%
Fixed Income - Total	25.0%	42.8%
Real Assets		
Commodities	0.0%	0.3%
Infrastructure	0.0%	0.6%
REITs	2.5%	0.6%
Natural Resources	0.0%	0.3%
Real Estate ex-REITs	2.5%	4.9%
Other Real Assets	0.0%	0.4%
Real Assets - Total	5.0%	7.1%
Hedge Funds	0.0%	3.7%
Risk Parity	0.0%	0.6%
Funded TAA	0.0%	0.9%
Private Equity		
Diversified Private Equity	0.0%	5.1%
Venture Capital	0.0%	0.1%
LBO	0.0%	0.7%
Other Private Equity	0.0%	0.1%
Private Equity - Total	0.0%	6.0%
Private Debt		
Mortgages	0.0%	0.1%
Private Credit	0.0%	1.1%
Private Debt - Total	0.0%	1.2%
Total	100.0%	100.0%

Calculation of your policy return and net value added

Calculation of 2020 policy return and value added for East Bay Municipal Utility District					
Asset class	Policy weight	Net return*	Benchmark description	Benchmark return	Net value added
Stock					
U.S. Broad/All	25.0%	20.8%	Russell 3000	20.9%	-0.1%
ACWI x U.S.	25.0%	13.5%	MSCI ACWI xUS gross	11.1%	2.4%
Other	20.0%	7.9%	CBOE BXM	-2.8%	10.7%
Fixed Income					
U.S.	20.0%	7.1%	BBg US Aggregate Index+BBg US Intremediate Gov/Cred ($weighted)	6.9%	0.1%
High Yield	5.0%	6.6%	"2.5% ICE BofA Merrill Lynch U.S. Corporates, Cash Pay, BB-B Rated 1-5 Years Index, 1.5% Credit Suisse Leveraged Loan Index, 1% BBg Short Term Gov/Credit Index" ($weighted)	3.1%	3.5%
Cash		1.5%	US 90 day T bill	0.7%	0.8%
REITs	2.5%	-4.2%	Your REIT benchmark	-8.0%	3.8%
Real Estate ex-REITs	2.5%	2.2%	NCREIF Property Index	2.0%	0.2%
Total	100.0%				
Net total fund return					11.4%
Policy return					9.2%
Net value added (Net return - policy return)					2.2%

* If you were unable to provide full year net returns the default is to set the unavailable return equal to the benchmark return.

Your 2020 net value added was 2.2%. This was determined by subtracting your policy return of 9.2% from your net return of 11.4%.

- Policy return is the return a fund would have earned if it had passively implemented its policy mix through its benchmark indices. Your policy return equals the sum of your policy weights multiplied by your benchmarks for each asset class.
- Net value added equals your net return minus your policy return. It primarily reflects the contribution of active management.

Returns and value added by asset class

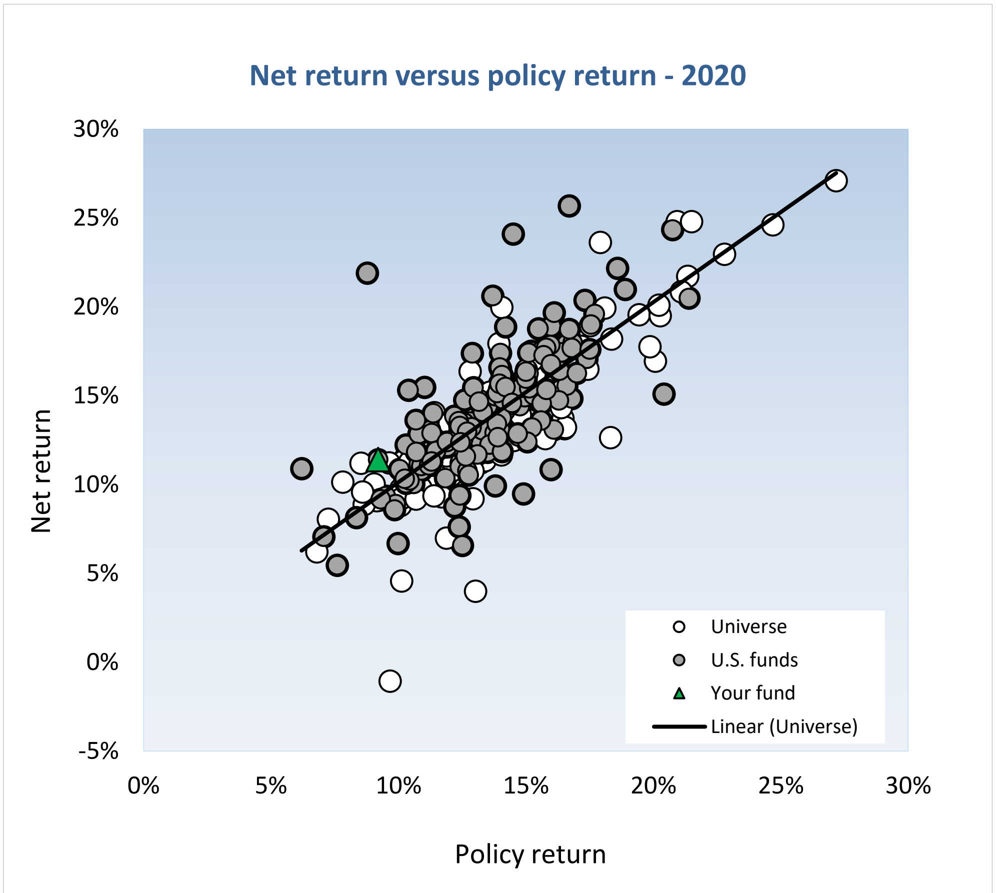
The table below compares your fund's net returns, benchmark returns and net value added by asset class to the U.S. median.

2020 Returns and net value added by asset class						
	Your fund			U.S. median		
Asset class	Net return[1]	Bench-mark return	Net value added[2]	Net return	Bench-mark return	Net value added[2 3]
Stock						
U.S. Broad/All	20.8	20.9	-0.1	20.7	20.9	-0.1
ACWI x U.S.	13.5	11.1	2.4	13.2	10.9	1.9
Other	7.9	-2.8	10.7	6.7	10.1	5.1
Total Stock	14.6	10.6	4.0	16.6	16.3	0.4
Fixed Income						
U.S.	7.1	6.9	0.1	8.6	7.5	0.6
High Yield	6.6	3.1	3.5	6.0	6.3	-0.3
Cash	1.5	0.7	0.8	0.6	0.7	0.0
Total Fixed Income	6.7	6.2	0.5	14.2	13.2	0.8
REITs	-4.2	-8.0	3.8	-5.3	-8.0	2.4
Real Estate ex-REITs	2.2	2.0	0.2	0.4	1.2	-0.8

1. Net return shown on this page equals the asset-weighted average of internal passive, internal active, external passive and external active actual returns for each asset class.
2. Net value added equals net return minus benchmark return. Net returns are calculated as reported gross return minus management fees, internal costs and performance fees for public assets.
3. Median net return minus benchmark return will not total median net value added because the median fund is not the same for each part.

The correlation between net returns and policy returns

The primary reason for differences in total fund return is usually differences in asset mix policy. But asset mix policy matters more in some years than others. This plot of net return versus policy return demonstrates the extent to which investment policy explained differences in investment returns in 2020.

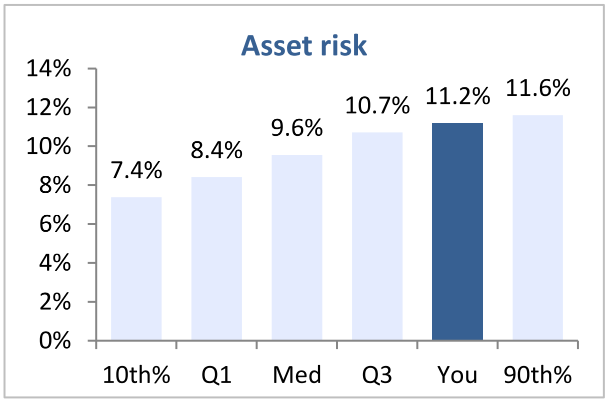


The R^2 of the regression of policy returns versus net returns in 2020 was 61%. This means that, on average, 61% of differences in net return for 2020 can be explained by differences in investment policy.

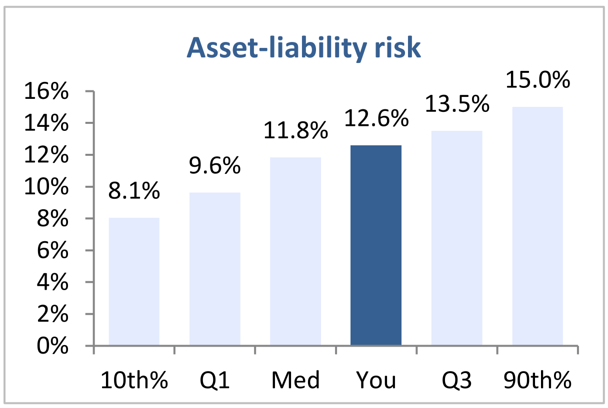
Generally, in any given year, the greater the difference between stock and bond returns, the more differences in net return can be explained by differences in policy return.

Risk analysis

When assessing returns and value added it is important to also consider investment risk. Two important risk measures are asset risk and asset-liability risk.



Asset risk is the expected volatility of your plan's policy returns. Your asset risk at the end of 2020 was 11.2%, which was above the U.S. median of 9.6%.



Your asset-liability risk was 12.6%. This was above the U.S. median of 11.8%.

Asset-liability risk is the expected volatility of funded status caused by market factors. It is a function of the expected standard deviations of your asset risk, your marked-to-market liabilities and the correlation between the two.

In calculating risk levels, CEM does not use your specific policy benchmarks. Standard asset class proxies are used for each given asset class.

4

Cost and cost effectiveness

Your 2020 investment costs

Your 2020 total investment cost was 25.4 basis points. It is comprised of asset management fees and costs plus oversight, custodial and other costs. It excludes transaction costs, private asset performance fees and non-investment pension costs such as actuarial costs and benefit administration.

Your 2020 investment management costs in $000's

	Internal & Co-Inv.		External Passive		External Active				
Asset Category	Passive	Active	Fees	Monitoring & Other	Base Fees	Under-lying	Perf. Fees[1]	Monitoring & Other	Total
Stocks									
U.S. Broad/All			85						85
ACWI x U.S.			67		1,095				1,163
Other					946				946
Fixed Income									
U.S.					633				633
High Yield					403				403
Real Assets									
REITs					130		218		348
Real Estate ex-REITs - LP*					706				706
Total asset management costs excluding private asset performance fees									4,284

Your 2020 oversight, custodial & other asset related costs ($000s)[2]

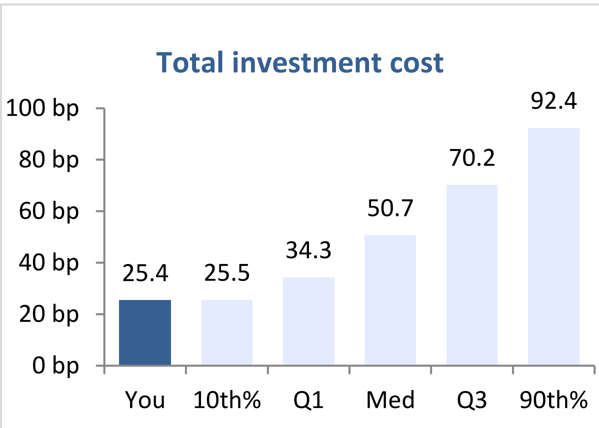
Oversight of the fund*	278
Custodial	417
Consulting and performance measurement	177
Audit	8
Other	n/a
Total oversight, custodial & other asset related costs	880

Total investment cost (excluding private asset performance fees and transaction costs)	5,164
	25.4 bp

1. Total cost excludes carry/performance fees for infrastructure, natural resources, real estate, and private assets. Performance fees are included for all other asset classes.
2. Excludes non-investment costs, such as PBGC premiums, actuarial fees, and preparing checks for retirees.
* Default costs applied. Refer to Appendix C.

Total investment cost

Your plan's total investment cost, excluding transaction costs and private asset performance fees, was $5.2 million or 25.4 bps. This was below the U.S. median of 50.7 bps.



Your total investment cost consists of asset management costs and oversight, custodial and other costs. A breakdown of these costs can be found on page 17.

Total investment cost excludes transaction costs, private asset performance fees and actuarial costs.

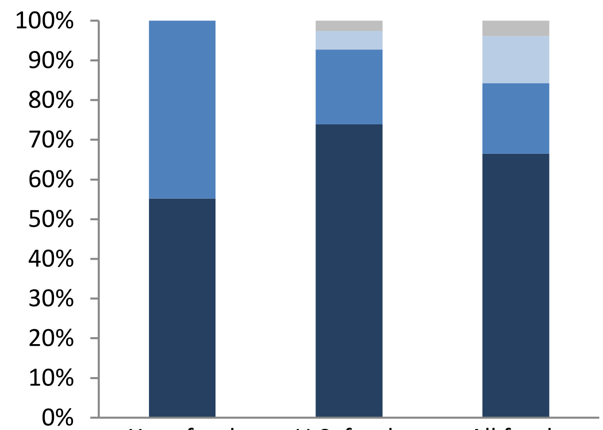
Comparisons of total investment cost must be interpreted with caution because differences are often due to differences in size and asset mix. To help you truly understand your costs and performance, CEM offers peer-based benchmarking analysis which adjusts for these factors. For a limited time we are offering you access to your fund's peer based analysis through our newly launched online CEM Dashboard. See page 6.

Implementation style

One reason why funds are high (or low) cost compared to their benchmark cost is differences in implementation style. Implementation style is defined as the way in which you implement your asset allocation. It includes internal, external, active, passive and fund-of-funds styles.

- Internal: managed by in-house investment managers.
- External: managed by outside or external investment managers.
- Passive: managed with the aim of replicating an index, immunizing liabilities, etc.
- Active: managed with the intention of outperforming an index.

Implementation style



	Your fund	U.S. funds	All funds
Internal passive	0.0%	3%	4%
Internal active	0.0%	5%	12%
External passive	44.8%	19%	18%
External active	55.2%	74%	67%

The greatest cost impact is usually caused by differences in the use of either:

- External active management – External active management tends to be much more expensive than either passive or internal management. Your fund was 55% externally actively managed. This was below the U.S. average of 74%.

- Fund of funds usage - Fund of funds tend to be the most expensive type of external active management because costs include the management fee of the fund of fund manager plus the management fees to the managers of each of the underlying funds invested in by the fund of fund manager. Your fund used fund of funds for 0% of its hedge funds, real estate and private equity investments. This was less than the U.S. universe average of 15%.

Comparison of asset management costs by asset class

Comparisons of your costs to the universe must be interpreted with caution, given the breadth of the universe, which encompasses funds with widely varying size and asset mix. Peer-based analysis is needed to truly understand where you are paying more and where you are paying less on a comparable basis. For a limited time we are offering you access to your fund's peer based analysis through our newly launched online CEM Dashboard. See Page 6.

2020 Asset management costs in basis points

	Your fund						U.S. average					
	Internal		External				Internal		External			
Asset class	Passive	Active	Passive	Active	LP	FoF[1]	Passive	Active	Passive	Active	LP	FoF[1]
Stock												
Employer Stock							0.0		3.0	2.0		
U.S. Broad/All			1.6				1.9	4.9	2.3	48.2		
U.S. Large Cap							1.6	9.4	1.6	33.0		
U.S. Mid Cap							1.0	18.0	3.2	52.0		
U.S. Small Cap							1.6	15.6	5.3	65.5		
EAFE							4.2	21.5	4.0	48.1		
ACWI x U.S.			2.3	49.9			3.7	21.2	9.6	46.4		
Emerging							2.5	27.0	7.5	68.3		
Global							1.6	36.9	4.5	50.5		
Other				23.1			4.1	5.0	13.5	92.7		
Fixed Income												
U.S.				16.5			3.6	5.1	3.1	19.8		
U.S. Gov't							1.1	1.9	3.6	10.9		
U.S. Credits								2.1		26.0		
Long Bonds							1.5	7.4	4.8	17.2		
EAFE										25.6		
Emerging							5.0	25.5	6.8	49.0		
Global								3.3	1.8	31.6		
Global Gov't												
Global Credit												
Inflation Indexed							2.4	2.0	2.3	16.5		
High Yield				58.3				9.7	35.0	40.4		
Absolute Return Bonds												
Bundled LDI									14.7	16.3		
Convertibles										40.4		
Other								19.9	19.8	56.0		
Cash				0.0				5.7		13.7		
Commodities							2.9	15.3	12.4	92.2		
Infrastructure[2]								11.6		90.0	168.6	204.2
Natural Resources[2]								6.6		71.8	148.6	157.3
REITs				70.8			8.2	17.5	9.7	56.1		
Real Estate ex-REITs[2]					136.0			24.9		88.0	139.1	180.2
Other Real Assets[2]										127.5	130.0	
Hedge Funds Total*										247.0		332.4
• Base fees top layer										123.4		61.8
• Perf. Fees top layer										120.9		51.9
• Underlying base & perf												217.0
Risk Parity								3.4		39.9		
Funded TAA								16.4		85.2		
Diversified Private Equity[2]								13.9			159.7	217.1
Venture Capital[2]											153.3	201.3
LBO[2]											185.5	197.2
Other Private Equity[2]								7.8			97.8	
Mortgages[2]								9.8		35.6		
Private Credit[2]								11.0		75.5	146.8	181.9
Total before overlays						21.1						51.1
Overlay management costs												1.0
Total direct investment management cost						21.1						51.5

1. FoF stands for Fund of Funds. Fund of funds costs include management fees paid to the fund of fund's manager plus fees paid to the manager of each of the underlying funds selected by the fund of funds manager.
2. External performance fees are excluded from private asset costs. Costs are as a percentage of the amount fees are based on; usually the committed amount during the commitment period, and unreturned invested capital afterwards.
* Averages will not add to the total because internal costs of oversight and selection are not shown.

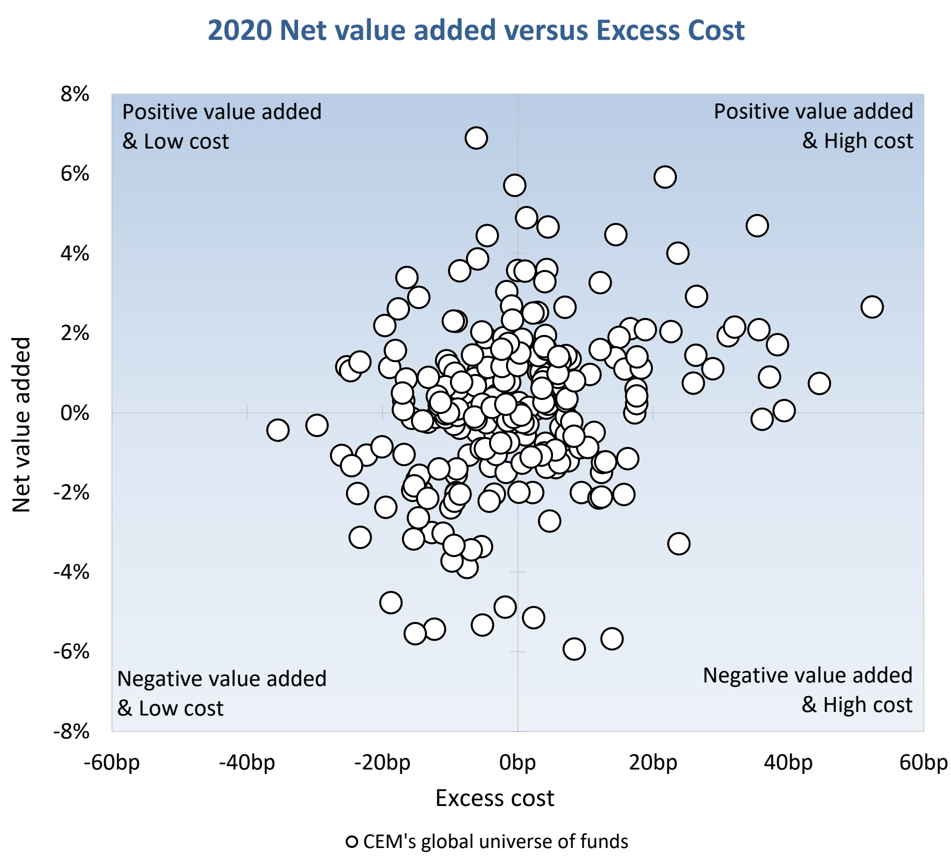
Comparison of oversight, custodial and other investment costs

Oversight, custodial and other costs	You	U.S. average
Oversight	1.4 bps	1.5 bps
Custodial	2.1 bps	1.0 bps
Consulting, performance measurement	0.9 bps	1.3 bps
Audit	0.0 bps	0.2 bps
Other		1.1 bps
Total	4.3 bps	5.1 bps

Cost effectiveness - Does paying more get you more?

Being high or low cost is neither good nor bad. The more important question is, are you receiving sufficient value for your excess cost? CEM's premium benchmarking provides insight into this question by combining value added and excess cost. The scatter chart below shows the snapshot of the 2020 cost effectiveness accross all survey participants.

In an ideal world, the more you pay (i.e., the higher your excess cost) the more you would get (i.e., the higher your value added). If this were true, you would see an upward sloping trend in this scatter chart. Clearly, this is not the case. Our research over the past 30 years shows no consistent relationship between excess costs and the net value added they achieve.



5

Plan data

Investment and plan structures

Performance-based fees

Were any of your external stock or fixed income mandates subject to performance fees in 2020?

	# of funds with data	% Yes	% No
Your fund	1		No
U.S.	132	52%	48%

Type of plans

	# funds with data	Flat benefit	Career average	Final average	Other (or multiple)
Your fund	1	-	-	Yes	-
U.S.	151	15%	16%	79%	32%

Plan liabilities

Indexation of retired members' benefits

To what extent are your retired members' benefits indexed to inflation?

	Average contractual[1] indexation as % of CPI	% of Funds with contr. indexation > 0 where indexation is subject to a cap
Your fund	100%	-
U.S.	22%	95%

1. Several funds had contractual inflation protection subject to caps (ranging from 2% to 8%). Most of these funds have had close to 100% inflation protection during the last 5 years of low inflation and this is how we have recorded their inflation protection. However, in high inflation environments, we will have grossly overestimated their true inflation protection.

Plan membership

	# of Funds with data	Average # members	% Active	% Retired	% Other	Avg Assets per Member
Your fund	1	4,120	46%	46%	8%	515,264
U.S.	146	160,607	41%	39%	20%	200,090

Actuarial fees

	# of Funds with data	Average Fees ($000s)	% of Total assets
Your fund	1	296	1.5bp
U.S.	133	845	1.3bp

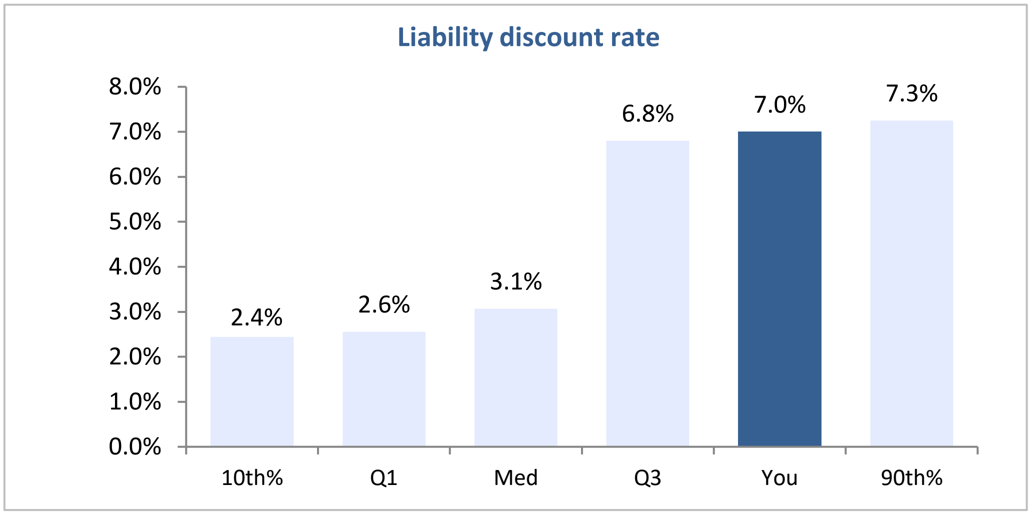
Other plan data - Plan liabilities

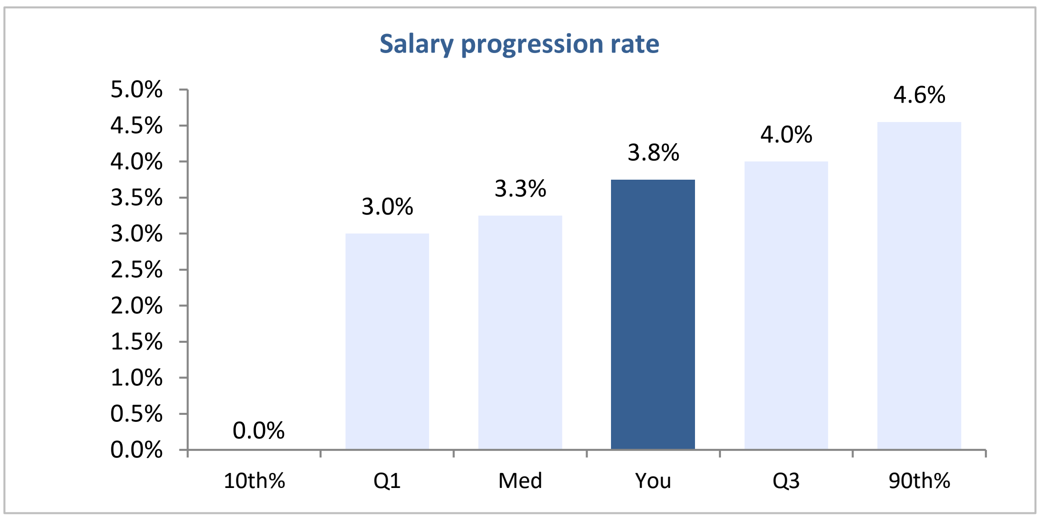
What % of the plan's liabilities are in respect to retired members?

	# of Funds with data	% Plan liabilities for retired members
Your fund	1	63%
U.S.	126	53%

2020 Valuation assumptions

Actuarial assumptions for funding purposes during 2020.





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Appendices

Appendix A - Glossary of terms

Average - All averages are fund weighted (i.e., each fund is given equal weight, regardless of size).

Benchmark cost - Can be thought of as the predicted operating cost for a fund given its asset mix and size. It is included in CEM's premium benchmarking service.

Benchmark return - Rate of return on an index of investable assets (such as the S&P500) designated as the benchmark portfolio against which the fund measures its own performance for that asset class.

Category benchmarks - Policy-weighted average of passive and active benchmarks given for each asset class.

Direct investment management costs -
a) For externally managed assets, it is the sum of all investment management fees, participation fees, commitment and carrying fees and should include all hidden fees netted from commingled asset pools.
b) For internally managed assets, it is the costs directly traceable to internally managed investments and should include: compensation and benefits of investment employees and support staff, related overhead (office rent, telephone, computer systems, etc.) and associated costs (conference, research, travel, subscriptions and memberships, etc.).

Excess cost - Difference between actual cost and benchmark cost.

Oversight, custodial and other costs, the sum of:
a) Oversight costs which are (i) the salaries and benefits of executives and their assistants and clerical staff, carrying out duties directly associated with the oversight of plan assets, (ii) fees/salaries of Board of Trustees or Investment Committee based on the amount of time spent in this capacity, and (iii) office overhead (rent, utilities, telephone, office, computer systems, etc.) and associated costs (travel, subscriptions, memberships, etc.) all of which should be allocated on a pro rata governance and administration.
b) Custodial costs before any reductions relating to securities lending. Note that custodial costs for preparing benefit checks or relating to other asset pools should not be included.
c) Consulting and performance.
d) Audit and other measurements costs.

Operating costs - Sum of overlay, direct investment management and oversight, custodial and other costs.

Overlay - Derivative-based program, that is unfunded other than margin requirements.

Passive - Assets managed passively, i.e., indexed to broad capital market benchmarks or dedicated to matching a specific set of liabilities.

Policy mix - Reflects long term policy or target asset weights. Policy mix is often established by an investment committee or board and is determined by such long-term considerations as liability structure, risk tolerance and long-term capital markets prospects. If asset mix policy is expressed in ranges, our default is the midpoint of those ranges.

Policy return - The return a fund would have earned if it had passively implemented its policy mix through its benchmark indices. Policy return equals the sum of policy weights multiplied by benchmarks for each asset class.

Value Added - Difference between actual return and policy return.

Appendix B - Data quality

We recognize that the value of the information contained in these reports is only as good as the quality of the data we receive. Our procedures for checking and improving the data include:

• **Constant improvement in survey clarity** - Years of feedback from survey participants has led to improved definitions and survey clarity.

• **Client confirmation** - Each participant received a complete summary of their respective data for confirmation prior to their data being included in our database. Your data is summarized in Appendix C (which begins on the following page).

• **Automated & manual checks** - We compare responses to norms for the survey universe and to each sponsor's prior year data when available. This typically results in questions that we email back to each survey respondent and follow up on by phone.

In addition, the quality of our data continues to improve as the universe of participants grows. Our confidence in the results improves with universe size as unbiased errors tend to average themselves out.

Appendix C - Your data

Your data is summarized on the following pages. As discussed with you or the person who provided the data for your fund during the data confirmation process, there may be changes to your original survey responses for the following reasons:

1. **Returns not available** - We requested that you enter no value if full year returns for an asset class were unavailable. The default for an unavailable return is to set it equal to your benchmark return for the same asset class, thereby effectively neutralizing that asset class when determining your in-category value added.

2. **Costs not given** - The costs of non-traditional assets and real estate are often buried in commingled funds and may not be worth the effort to obtain if their asset value is immaterial relative to your total fund. Therefore, if you report assets but do not report costs/fees we impute a figure using industry data. See the last page of Appendix C for any defaults used for your fund.

Appendix C - Your Data

East Bay Municipal Utility District

Plan info	2020	2019
Contact	Sophia Skoda	Sophia Skoda
Type of fund (corporate, public, other)	Public	Public
Total fund size (Millions)	2,136	1,941
Are assets provided year end or average?	Year End	Year End
Total return for year ended	11.4%	19.2%
Is the return net or gross?	Net of all investment costs	Net of all investment costs
Do you have costs for selecting and monitoring external managers?	No	No
Total fund policy or benchmark return	9.2%	19.3%
Was your effective asset mix different from your physical asset mix?	No	No
External stock or fixed income mandates subject to performance fees?	No	Yes

Ancillary data	2020	2019
What is your hedging policy for:		
Foreign non-U.S. Holdings?		
What were your actuarial fees in 000s?	295.8	208.8
How many plan members/beneficiaries do you have:		
Active - accruing benefits	1,903	1,847
Active - not accruing benefits	0	0
Retired - receiving benefits	1,905	1,844
Inactive - entitled to future benefits	312	303
What type of plans do you have?	Final Average	Final Average
To what extent are your retired members' benefits indexed to inflation?		
Contractual %	100.0%	100.0%
If the indexation is subject to a cap, describe the cap	3% (<85%) or 5% (>=85%) funding level on a Projected Benefit Obligation basis	3% (<85%) or 5% (>=85%) funding level on a Projected Benefit Obligation basis
What % of the plan's liabilities pertain to retired members?	63%	63%
Most recent actuarial assumptions:		
Discount rate	7.0%	7.0%
Expected rate of return on assets	7.0%	7.0%
Salary increase rate	3.8%	3.8%

Appendix C - Your data: Policy weights and benchmarks

East Bay Municipal Utility District

Asset class	Year	Policy weight	Benchmark description	Return
Stock - U.S. Broad/All	2020	25.0	Russell 3000	20.9
	2019	25.0	Russell 3000	31.0
	2018	25.0	Russell 3000	-5.2
Stock - ACWI x U.S.	2020	25.0	MSCI ACWI xUS gross	11.1
	2019	25.0	MSCI ACWI xUS gross	22.1
	2018	25.0	MSCI ACWI xUS gross	-13.8
Stock - Other	2020	20.0	CBOE BXM	-2.8
	2019	20.0	CBOE BXM	16.6
	2018	20.0	CBOE BXM	-4.8
Fixed Income - U.S.	2020	20.0	BBg US Aggregate Index+BBg US Intremediate Gov/Cred ($weighted)	6.9
	2019	22.5	BBg US Aggregate Index	8.7
	2018	22.5	67% BC Aggregate; 22% BC US 1-3 year Govt/Credit; 11% S&P/LSTA Performing Loans	0.7
Fixed Income - High Yield	2020	5.0	"2.5% ICE BofA Merrill Lynch U.S. Corporates, Cash Pay, BB-B Rated 1-5 Years Index, 1.5% Credit Suisse Leveraged Loan Index, 1% BBg Short Term Gov/Credit Index" ($weighted)	3.1
	2019	2.5	"2.5% ICE BofA Merrill Lynch U.S. Corporates, Cash Pay, BB-B Rated 1-5 Years Index, 1.5% Credit Suisse Leveraged Loan Index, 1% BBg Short Term Gov/Credit Index"	9.0
	2018	2.5	BC US 1-5 Year US High Yield Cash Pay	0.1
Cash	2020	0.0	US 90 day T bill	0.7
	2019	0.0	US 90 day T bill	2.3
	2018	0.0	US 90 day T bill	1.9
REITs	2020	2.5	Your REIT benchmark	-8.0
	2019	2.5	Your REIT benchmark	26.0
	2018	2.5	Your REIT benchmark	-4.6
Real Estate ex-REITs	2020	2.5	NCREIF Property Index	2.0
	2019	2.5	NCREIF Property Index	2.6
	2018	2.5	NCREIF Property Index	7.2

Appendix A Data Summary - Assets, Returns and Costs: Public Market

East Bay Municipal Utility District

				Cost ($000)				Cost (bps)			
Asset Class/Style	Year	Asset ($millions)	Return %	Internal & Other	Base Fees	Perf Fees	Total	Internal & Other	Base Fees	Perf Fees	Total
Stock - U.S. Broad/All											
External Passive	2020	559.0	20.80		85		85		1.6		1.6
	2019	502.4	30.90		75		75		1.7		1.7
	2018	384.6	-5.24		58		58		3.0		3.0
Stock - U.S. Large Cap											
External Passive	2020										
	2019										
	2018										
	2017	303.7	21.70		62		62		2.2		2.2
	2016	256.8	12.10		73		73		3.0		3.0
External Active	2020										
	2019										
	2018										
	2017	389.4	23.60		994	93	1,088		28.2	2.6	30.8
	2016	315.8	10.80		856	60	917		28.3	2.0	30.2
Stock - U.S. Small Cap											
External Passive	2020										
	2019										
	2018										
	2017	32.9	22.40		19		19		6.4		6.4
	2016	26.9	11.90		18		18		6.9		6.9
External Active	2020										
	2019										
	2018										
	2017	39.4	8.60		19	1	20		5.0	0.3	5.3
	2016	36.3	24.00		16	2	18		4.8	0.5	5.4
Stock - ACWI x U.S.											
External Passive	2020	392.5	10.10		67		67		2.3		2.3
	2019	184.2	21.80		74		74		4.4		4.4
	2018	151.2	-13.77		61		61		8.0		8.0
External Active	2020	169.9	17.94		1,095		1,095		49.9		49.9
	2019	269.0	21.60		1,555		1,555		63.3		63.3
	2018	222.2	-16.10		1,314		1,314		57.5		57.5
	2017	234.3	27.10		1,298	0	1,298		61.9	-	61.9
	2016	185.4	2.70		1,120	0	1,120		61.0	-	61.0
Stock - Other											
External Active	2020	419.6	7.90		946		946		23.1		23.1
	2019	398.5	19.20		989		989		27.0		27.0
	2018	334.6	-3.80		848		848		24.4		24.4
	2017	359.5	14.30		805	0	805		23.9	-	23.9
	2016	315.4	9.40		773	0	773		25.6	-	25.6
Fixed Income - U.S.											
External Passive	2020										
	2019										
	2018	154.4	0.00		27		27		3.5		3.5
External Active	2020	387.3	7.09		633		633		16.5		16.5
	2019	380.9	8.40		568		568		17.6		17.6
	2018	262.3	1.20		611		611		24.2		24.2
	2017	243.6	3.20		535	0	535		22.3	-	22.3
	2016	236.5	3.70		527	0	527		22.7	-	22.7
Fixed Income - High Yield											
External Active	2020	48.2	6.60		403		403		58.3		58.3
	2019	89.9	8.50		413		413		68.1		68.1
	2018	31.5	0.00		126		126		39.9		39.9
	2017	31.6	5.30		125	0	125		40.4	-	40.4
External Active (cont'd)	2016	30.2	9.20		113	0	113		39.2	-	39.2
Cash											

Appendix A Data Summary - Assets, Returns and Costs: Public Market

East Bay Municipal Utility District

Asset Class/Style	Year	Asset ($millions)	Return %	Cost ($000) Internal & Other	Cost ($000) Base Fees	Cost ($000) Perf Fees	Cost ($000) Total	Cost (bps) Internal & Other	Cost (bps) Base Fees	Cost (bps) Perf Fees	Cost (bps) Total
External Active	2020	45.0	1.50		0		0		-		-
	2019	14.3	2.50		0		0		-		-
	2018	16.1	1.90		0		0		-		-
	2017	9.6	0.80		0	0	0		-	-	-
	2016	6.9	0.50		0	0	0		-	-	-
REITs											
External Active	2020	51.7	-4.20		130	218	348		26.5	44.3	70.8
	2019	46.6	27.20		149	152	301		31.6	32.4	64.0
	2018	47.3	-4.70		130	51	181		19.3	7.6	26.9
	2017	87.3	7.20		471	40	511		55.6	4.8	60.4
	2016	82.0	9.40		450	173	623		55.3	21.2	76.5

Appendix A Data Summary - Assets, Returns and Costs: Hedge Funds and Private Market

East Bay Municipal Utility District

(Default costs are highlighted with blue shading. See page 36 for more details)

Asset Class/Style	Year	Asset ($millions)	Fee basis ($millions)	Return %	Cost ($000) Internal & Other	Base Fees	Perf Fees	Underlying fees Base	Underlying fees Perf	Total excl. perf	Total incl. perf
Real Estate ex-REITs											
LP	2020	50	50	2.20		706	394			706	1,100
	2019	54	54	5.70		601	365			601	967
	2018	39	39	9.60		353	114			353	466

2. LP' style is alternatively named 'Fund (LP, Value Add)' on the survey. This category typically includes value-add or opportunistic funds having a pre-defined term and a GP/LP structure. Typically, the investment period is less than 12 years. They are operated by an external manager who invests in opportunities where a large part of the expected return is capital gains due to repositioning or redevelopment.

Appendix A Data Summary - Costs in bps: Hedge Funds and Private Market

East Bay Municipal Utility District

(Default costs are highlighted with blue shading. See page 36 for more details)

		Cost on NAV (bps)							Cost on fee basis (bps)						
		Internal	Base	Perf	Underlying fees		Total		Internal	Base	Perf	Underlying fees		Total	
Asset Class/Style	Year	& Other	Fees	Fees	Base	Perf	excl. perf	incl. perf	& Other	Fees	Fees	Base	Perf	excl. perf	incl. perf
Real Estate ex-REITs															
LP	2020		136.0	76.0			136.0	212.0		136.0	76.0			136.0	212.0
	2019		130.0	79.0			130.0	209.0		130.0	79.0			130.0	209.0
	2018		183.2	59.0			183.2	242.2		183.2	59.0			183.2	242.2

Appendix C - Your Data: Oversight, custodial and other costs

East Bay Municipal Utility District

Oversight, custodial and other costs		000s	bps
Oversight of the fund assets[1]	2020	278.3	1.4bp
	2019	252.6	1.4bp
	2018	248.0	1.5bp
Custodial total	2020	416.8	2.1bp
	2019	424.2	2.4bp
	2018	349.6	2.1bp
Consulting / performance measurement	2020	176.9	0.9bp
	2019	197.3	1.1bp
	2018	206.9	1.2bp
Audit	2020	7.5	0.0bp
	2019	7.5	0.0bp
	2018	18.7	0.1bp
Total	2020	879.5	4.3bp
	2019	881.6	4.9bp
	2018	823.2	4.9bp

1. Oversight includes the salaries and benefits of executives and their staff responsible for overseeing the entire fund or multiple asset classes and the fees / salaries of the board or investment committee. All costs associated with the above including fees / salaries, travel, director's insurance and attributed overhead should be included.

Summary of total investment costs[2]		000s	bps
Investment management costs	2020	4,284.4	21.1bp
	2019	4,575.7	25.5bp
	2018	3,578.1	21.2bp
Oversight, custodial & other costs	2020	879.5	4.3bp
	2019	881.6	4.9bp
	2018	823.2	4.9bp
Total	2020	5,164.0	25.4bp
	2019	5,457.3	30.5bp
	2018	4,401.3	26.1bp

2. Total investment cost excludes transaction costs and performance fees for private assets.

Appendix A - Data Summary: Comments and defaults

East Bay Municipal Utility District

As discussed with you during the data confirmation process, the following defaults and footnotes are applicable to your data:

• 2020 - Real Estate ex-REITs - LP: A default of 136 bps was applied to the LP base fee because you did not provide support for the unusually low cost of 91 bps (0.5 million).

• 2020 - Real Estate ex-REITs - LP: A default of 76 bps (on NAV) was applied to the LP performance fee to enable comparisons of the total cost of different implementation styles. This default is not included in your total fund cost or in benchmark analysis.

• 2020 - Oversight: A default of 1.4 bps was applied to oversight because it was not provided.

• 2019 - Real Estate ex-REITs - LP: A default of 130 bps was applied to the LP base fee because you did not provide support for the unusually low cost of 96 bps (0.4 million).

• 2019 - Real Estate ex-REITs - LP: A default of 79 bps (on NAV) was applied to the LP performance fee to enable comparisons of the total cost of different implementation styles. This default is not included in your total fund cost or in benchmark analysis.

• 2019 - Oversight: A default of 1.4 bps was applied to oversight because it was not provided.

• 2018 - Real Estate ex-REITs - LP: A default of 59 bps (on NAV) was applied to the LP performance fee to enable comparisons of the total cost of different implementation styles. This default is not included in your total fund cost or in benchmark analysis.

• 2018 - Oversight: A default of 1.5 bps was applied to oversight because it was not provided.

• 2017 - Oversight: A default of 1.6 bps was applied to oversight because it was not provided.

• 2016 - Oversight: A default of 1.3 bps was applied to oversight because it was not provided.