



**BOARD OF DIRECTORS  
EAST BAY MUNICIPAL UTILITY DISTRICT**

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375 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

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**Notice of Time Change**

**FINANCE/ADMINISTRATION  
COMMITTEE**

**Tuesday, February 25, 2025**

**8:30 a.m.**

**Boardroom**

**375 11<sup>th</sup> Street**

**Oakland, CA 94607**

Notice is hereby given that the Tuesday, February 25, 2025 Finance/Administration Committee meeting of the Board of Directors has been rescheduled from 10:00 a.m. to 8:30 a.m. The meeting will be held in the Administration Building Boardroom at 375 11th Street, Oakland, California.

Dated: February 20, 2025



Rischa S. Cole

Secretary of the District

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**BOARD OF DIRECTORS  
EAST BAY MUNICIPAL UTILITY DISTRICT**

375 – 11<sup>th</sup> Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

**AGENDA  
Finance/Administration Committee  
Tuesday, February 25, 2025  
8:30 a.m.  
Boardroom  
375 11th Street  
Oakland, CA 94607**

*Committee Members: Directors Andy Katz {Chair}, Valerie D. Lewis, and Jim Oddie*

**\*\*\* Please see appendix for public participation instructions\*\*\***

**ROLL CALL:**

**PUBLIC COMMENT:** The Board of Directors 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.

**DETERMINATION AND DISCUSSION:**

1. Monthly Investment Transactions Report (Skoda)
2. Quarterly Financial Reports: (Skoda)
  - Quarterly Payroll, Disbursement and Real Estate Summary Reports for the Water and Wastewater Systems for Quarter Ended December 31, 2024
  - Quarterly Investment Report — December 31, 2024
3. Fiscal Year 2025 Semi-Annual Budget Performance Report (Skoda)
4. Employees’ Retirement System Fiscal Year 2024 Update, Actuarial Valuations, and Fiscal Year 2026 Employee and Employer Contribution Rates (Skoda)
5. Termination of California Shakespeare Theater Operations (Tognolini)

**ADJOURNMENT:**

**Disability Notice**

*If you require a disability-related modification or accommodation to participate in an EBMUD public meeting, please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.*

**Document Availability**

*Materials related to an item on this Agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD’s Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours, and can be viewed on our website at [www.ebmud.com](http://www.ebmud.com).*



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## Finance/Administration Committee Meeting

*EBMUD Board committee meetings will be conducted in person and accessible via Zoom.  
These meetings are live streamed on the District's website.*

### Online\*

<https://ebmud.zoom.us/j/92433162059?pwd=emM4YjRrQTJtK3M0NnAxTDRoVzh5Zz09>

Webinar ID: 924 3316 2059

Passcode: 282322

### By Phone\*

Telephone: 1 669 900 6833

Webinar ID: 924 3316 2059

Passcode: 282322

International numbers available: <https://ebmud.zoom.us/u/kjdx0Kd06>

\*To familiarize yourself with Zoom, please visit <https://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting>

**Providing public comment** - *The EBMUD Board of Directors 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.*

- Each speaker is allotted 3 minutes to speak; the Board President has the discretion to amend this time based on the number of speakers
- The Secretary will track time and inform each speaker when the allotted time has concluded
- 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
- The Secretary will call each speaker in the order received

### In person

- Fill out and submit a blue speaker card which is available in the meeting room

### Via Zoom

- Use the raise hand feature in Zoom to indicate you wish to make a public comment  
<https://support.zoom.us/hc/en-us/articles/205566129-Raising-your-hand-in-a-webinar>
  - If you participate by phone, press \*9 to raise your hand
- When prompted by the Secretary, please state your name, affiliation if applicable, and topic

### Submitting written comments or materials

- Email written comments or other materials for the Board of Directors to [SecOffice@ebmud.com](mailto:SecOffice@ebmud.com)
- Please indicate the meeting date and agenda item number or non-agenda item in the subject of the email. Contact information is optional.
- **Please email by 4 p.m. the day prior to the scheduled regular meeting;** written comments and other materials submitted to the Board of Directors will be filed in the record.

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**To view the livestream of Board meetings, please visit:**

<https://www.ebmud.com/about-us/board-directors/board-meetings/>

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## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: February 20, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager *CCC*

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

SUBJECT: Monthly Investment Transactions Report

### SUMMARY

In accordance with Policy 4.07 – Investments, staff prepares a monthly transactions report for the Finance/Administration Committee to review and for the Board to consider each month. The Committee will review the January 2025 report at the February 25, 2025 Finance/Administration Committee meeting.

### DISCUSSION

Pursuant to Policy 4.07, staff prepares a monthly report of investment transactions (buys, sales, deposits, withdrawals) as well as transactions that occur as a feature of the securities held (interest, calls, maturities). Information on portfolio performance, balances, and other factors is presented in the quarterly investment report.

In January 2025, the portfolio increased from \$572.9 million to \$587.7 million. Net transactions increased the total by \$13.8 million. Interest received added \$1.0 million to the portfolio. Deposits into short-term liquidity funds totaled \$55.8 million, and the District withdrew \$29.0 million. The District purchased \$20.0 million in securities. No securities matured, and no securities were called or sold. Net transactions at the District's commercial bank resulted in a decrease of approximately \$32.9 million.

### NEXT STEPS

This item will be brought to the Board for consideration at its February 25, 2025 meeting.

CCC:SDS:rlh

Attachment: January 2025 Monthly Investment Transactions Report


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**Monthly Investment Transactions Report**  
**January 2025**

This report is presented to the Board pursuant to Government Code Section 53607 and in accordance with the District's Investment Policy 4.07.

The attached report details transactions in the District's portfolio as follows:

- **Monthly Investment Transactions Summary** **Page 1**
- **Monthly Investment Activity** **Page 2**
  - Buys Page 3
  - Deposits Page 4
  - Matured Page 5
  - Calls Page 6
  - Sales Page 7
  - Withdrawals Page 8
- **Monthly Interest Activity** **Page 9**
  - Interest Received (Transferred to Wells Fargo) Page 10
  - Interest Received (Reinvested) Page 11

  
[Sophia Skoda \(Feb 10, 2025 17:23 PST\)](#)  
Approved by: Sophia D. Skoda, Finance Director

02/10/2025  
Date

SDS:KM:SLS



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Monthly Investment Transactions Summary**  
**January 2025**

Portfolio	Beginning Balance*	Monthly Net Transaction Activity	Monthly Interest Activity	Ending Balance
001 - Water System Consolidated	388,718,484	42,679,992	426,574	431,825,050
007 - Wastewater Consolidated	89,558,214	11,780,008	146,180	101,484,402
049 - Ferc Partnership	2,162,265	-	25,146	2,187,411
009 - BACWA	2,446,173	-	28,447	2,474,620
015 - DERWA	1,081,135	-	12,573	1,093,708
002 - FRWA	1,081,135	-	12,573	1,093,708
014 - IICP	162,711	-	1,894	164,605
010 - UMRWA	69,190	-	805	69,995
003 - Employees Retirement	17,240,952	(7,679,000)	138,155	9,700,108
099 - Wells Fargo**	70,331,027	(32,946,385)	248,380	37,633,022
<b>Total</b>	<b>572,851,285</b>	<b>13,834,615</b>	<b>1,040,727</b>	<b>587,726,628</b>

\* Portfolio balance presented at face value.

\*\*Wells Fargo's month-end available balance per bank statement. Gross amount; not allocated by fund and not included in balances above.  
 A portion of the balance in Wells Fargo is swept to a money market fund to increase investment earnings.

<i>Sherry Sarcos</i>	02/06/2024
Prepared by: Sherry Sarcos, Accounting Technician	Date
<i>Kevin Ma</i>	02/07/2025
Reviewed by: Kevin Ma, Accounting Supervisor	Date
<i>David Glasser</i>	02/07/2025
Approved by: David Glasser, Controller	Date



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Monthly Investment Activity**  
**January 2025**

Portfolio	Buys	Deposits	Matured	Calls	Sales	Withdrawals	Non-Investment Transactions*	Net Transaction Activity
001 - Water System Consolidated	16,000,000	26,679,992	-	-	-	-	-	42,679,992
007 - Wastewater Consolidated	4,000,000	7,780,008	-	-	-	-	-	11,780,008
049 - Ferc Partnership	-	-	-	-	-	-	-	-
009 - BACWA	-	-	-	-	-	-	-	-
015 - DERWA	-	-	-	-	-	-	-	-
002 - FRWA	-	-	-	-	-	-	-	-
014 - IICP	-	-	-	-	-	-	-	-
010 - UMRWA	-	-	-	-	-	-	-	-
003 - Employees Retirement	-	21,308,000	-	-	-	(28,987,000)	-	(7,679,000)
<b>Investment Activity Total</b>	<b>20,000,000</b>	<b>55,768,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(28,987,000)</b>	<b>-</b>	<b>46,781,000</b>
<b>099 - Wells Fargo</b>	<b>(20,000,000)</b>	<b>(55,768,000)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28,987,000</b>	<b>13,834,615</b>	<b>(32,946,385)</b>
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13,834,615</b>	<b>13,834,615</b>

\*Non-investment transactions are net receipts and expenditures in Wells Fargo resulting from activities other than investment and interest transactions detailed in this report.

Reviewed by: Steven Goodman-Leibof 02/07/2025

Principal Mgmt Analyst Date

Robert L. Hannay 02/07/2025

Treasury Manager Date

Approved by: Robert L. Hannay, Treasury Manager



EAST BAY MUNICIPAL UTILITY DISTRICT  
 Monthly Investment Activity  
 January 2025

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
001 - Water System Consolidated	US Treasuries	T-Note 0 5/15/2026	912833LZ1	1/21/2025	1/22/2025	5/15/2026	16,000,000	15,136,139.20	-	15,136,139.20
					Total		16,000,000			
007 - Wastewater Consolidated	US Treasuries	T-Note 0 5/15/2026	912833LZ1	1/21/2025	1/22/2025	5/15/2026	4,000,000	3,784,034.80	-	3,784,034.80
					Total		4,000,000			
							20,000,000	18,920,174	-	18,920,174



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Monthly Investment Activity**  
**January 2025**

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
<b>Deposits</b>										
001 - Water System Consolidated	LAIF	LAIF LGIP	LGIP1001	1/2/2025	1/2/2025	N/A	10,679,992	10,679,992	-	10,679,992
001 - Water System Consolidated	Money Market Mutual Funds	Morgan Stanley MM	MVRXX	1/17/2025	1/17/2025	N/A	8,000,000	8,000,000	-	8,000,000
001 - Water System Consolidated	Money Market Mutual Funds	State Street MM	GVMXX	1/17/2025	1/17/2025	N/A	8,000,000	8,000,000	-	8,000,000
					<b>Total</b>		<b>26,679,992</b>			
007 - Wastewater Consolidated	LAIF	LAIF LGIP	LGIP1001	1/2/2025	1/2/2025	N/A	3,780,008	3,780,008	-	3,780,008
007 - Wastewater Consolidated	Money Market Mutual Funds	Morgan Stanley MM	MVRXX	1/17/2025	1/17/2025	N/A	2,000,000	2,000,000	-	2,000,000
007 - Wastewater Consolidated	Money Market Mutual Funds	State Street MM	GVMXX	1/17/2025	1/17/2025	N/A	2,000,000	2,000,000	-	2,000,000
					<b>Total</b>		<b>7,780,008</b>			
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	1/30/2025	1/30/2025	N/A	4,423,000	4,423,000	-	4,423,000
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	1/30/2025	1/30/2025	N/A	5,637,000	5,637,000	-	5,637,000
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	1/17/2025	1/17/2025	N/A	5,627,000	5,627,000	-	5,627,000
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	1/3/2025	1/3/2025	N/A	5,621,000	5,621,000	-	5,621,000
					<b>Total</b>		<b>21,308,000</b>			
							<b>55,768,000</b>	<b>55,768,000</b>	-	<b>55,768,000</b>



EAST BAY MUNICIPAL UTILITY DISTRICT  
Monthly Investment Activity  
January 2025

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
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Matured

\*No Transactions this Period\*



EAST BAY MUNICIPAL UTILITY DISTRICT  
Monthly Investment Activity  
January 2025

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
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Calls

\*No Transactions this Period\*



EAST BAY MUNICIPAL UTILITY DISTRICT  
Monthly Investment Activity  
January 2025

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
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Sales

\*No Transactions this Period\*



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
 Monthly Investment Activity  
 January 2025

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
<b>Withdrawals</b>										
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	1/30/2025	1/30/2025	N/A	14,527,000	14,527,000	-	14,527,000
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	1/2/2025	1/2/2025	N/A	14,460,000	14,460,000	-	14,460,000
					<b>Total</b>		<b>28,987,000</b>			
099 - Wells Fargo	Cash	WELLS FARGO Cash	CASH2017	1/31/2025	1/31/2025	N/A	32,698,005	32,698,005	-	32,698,005
					<b>Total</b>		<b>32,698,005</b>			

61,685,005      61,685,005      -      61,685,005



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Monthly Interest Activity**  
**January 2025**

Portfolio	Total Interest Received	Interest Transferred to Wells Fargo*	Net Interest Activity (Reinvested)**
001 - Water System Consolidated	593,012	(166,438)	426,574
007 - Wastewater Consolidated	176,154	(29,974)	146,180
049 - Ferc Partnership	25,146	-	25,146
009 - BACWA	40,983	(12,536)	28,447
015 - DERWA	31,068	(18,495)	12,573
002 - FRWA	20,999	(8,426)	12,573
014 - IICP	5,978	(4,085)	1,894
010 - UMRWA	9,231	(8,426)	805
003 - Employees Retirement	138,155	-	138,155
<b>Interest Transactions Total</b>	<b>1,040,727</b>	<b>(248,380)</b>	<b>792,347</b>
<b>099 - Wells Fargo</b>	-	248,380	248,380
<b>Total</b>	<b>1,040,727</b>	-	<b>1,040,727</b>

\*Coupon and other interest received; reinvestment unavailable.

\*\*Coupon and other interest payments reinvested in specific portfolio.

*Sherry Sarcos*

Prepared by: Sherry Sarcos, Accounting Technician

*Kevin Ma*

Reviewed by: Kevin Ma, Accounting Supervisor

*David Glasser*

Approved by: David Glasser, Controller

02/06/2024

Date

02/07/2025

Date

02/07/2025

Date





## EAST BAY MUNICIPAL UTILITY DISTRICT

---

DATE: February 20, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager *CCC*

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

SUBJECT: Quarterly Payroll, Disbursement and Real Estate Summary Reports for the Water and Wastewater Systems for Quarter Ended December 31, 2024

### SUMMARY

File the December 31, 2024 quarterly payroll and disbursement report for the Water and Wastewater Systems with the Board. This report will be presented at the February 25, 2025 Finance/Administration Committee meeting.

### DISCUSSION

As directed by Board Resolution Nos. 32834-94 and 32837-94, attached is a record of the payment of demands. There were no real estate transactions conducted during the quarter October through December 2024.

CCC:SDS:lc

Attachment: Second Fiscal Quarterly Payroll and Disbursement Summary Report

I:\Sec\2025 Board Related Items\Committees 2025\022525 Finance Ctte\FIN - Quarterly Payroll Disbursement Real Estate 022525.docx

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**EAST BAY MUNICIPAL UTILITY DISTRICT  
SECOND FISCAL QUARTERLY PAYROLL AND DISBURSEMENT SUMMARY REPORT**

**PAYROLL SUMMARY  
(RESOLUTION NO. 32834-94)**

	<u>October 2024</u>		<u>November 2024</u>		<u>December 2024</u>		<u>QUARTERLY TOTALS</u>	
<i>District Payments</i>	WSG	WWG	WSG	WWG	WSG	WWG	WSG	WWG
Gross Pay	\$ 19,826,515	\$ 3,280,514	\$ 19,759,932	\$ 3,340,285	\$ 19,774,391	\$ 3,337,433	\$ 59,360,838	\$ 9,958,232
Retirement	\$ 7,964,789	\$ 1,328,321	\$ 7,960,041	\$ 1,342,131	\$ 7,956,121	\$ 1,347,765	\$ 23,880,951	\$ 4,018,217
FICA	\$ 1,363,518	\$ 222,926	\$ 1,278,779	\$ 212,939	\$ 1,154,685	\$ 191,806	\$ 3,796,982	\$ 627,671
Kaiser	\$ 2,620,912	\$ 421,647	\$ 2,633,316	\$ 420,874	\$ 2,645,455	\$ 419,170	\$ 7,899,683	\$ 1,261,691
Sutter Health	\$ 123,607	\$ 22,308	\$ 125,842	\$ 22,101	\$ (14,856)	\$ (3,697)	\$ 234,593	\$ 40,712
Blue Cross	\$ 389,362	\$ 46,018	\$ 395,259	\$ 46,855	\$ 407,628	\$ 50,585	\$ 1,192,249	\$ 143,458
VSP	\$ 29,210	\$ 4,599	\$ 59,058	\$ 9,228	\$ (23)	\$ (13)	\$ 88,245	\$ 13,814
Delta Dental	\$ 252,575	\$ 40,563	\$ 157,278	\$ 23,093	\$ 377,185	\$ 55,874	\$ 787,038	\$ 119,530
Life Insurance	\$ (119,828)	\$ (16,847)	\$ 42,600	\$ 6,947	\$ (119,284)	\$ (16,871)	\$ (196,512)	\$ (26,771)
Long Term Disability	\$ 215,668	\$ 32,384	\$ 52,826	\$ 8,871	\$ -	\$ -	\$ 268,494	\$ 41,255
Unemployment Insurance	\$ 192	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 192	\$ -
<b>TOTAL</b>	<b>\$ 32,666,520</b>	<b>\$ 5,382,433</b>	<b>\$ 32,464,931</b>	<b>\$ 5,433,324</b>	<b>\$ 32,181,302</b>	<b>\$ 5,382,052</b>	<b>\$ 97,312,753</b>	<b>\$ 16,197,809</b>


**DISBURSEMENT SUMMARY  
(RESOLUTION NO. 32837-94)**

	<u>October 2024</u>		<u>November 2024</u>		<u>December 2024</u>		<u>QUARTERLY TOTALS</u>	
Voucher Payments	\$ 59,309,179	\$ 15,652,182	\$ 44,301,004	\$ 6,753,699	\$ 45,894,241	\$ 8,191,011	\$ 149,504,424	\$ 30,596,892
Electronic payments	\$ 550,507	\$ 2,278	\$ 241,038	\$ -	\$ 62,600,090	\$ 8,720,746	\$ 63,391,635	\$ 8,723,024
Peard payments	\$ 1,246,903	\$ -	\$ 1,279,735	\$ -	\$ 1,058,143	\$ -	\$ 3,584,781	\$ -
<b>TOTAL</b>	<b>\$ 61,106,589</b>	<b>\$ 15,654,460</b>	<b>\$ 45,821,777</b>	<b>\$ 6,753,699</b>	<b>\$ 109,552,474</b>	<b>\$ 16,911,757</b>	<b>\$ 216,480,840</b>	<b>\$ 39,319,916</b>

NOTE:

By:   
 Sophia D. Skoda, Director of Finance

01/27/2025  
Date

By:   
 David Glasser, Controller

1/27/25  
Date


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## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: February 20, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager 

FROM: Sophia D. Skoda, Director of Finance 

SUBJECT: Quarterly Investment Report – December 31, 2024

### SUMMARY

In accordance with Section 53646 of the California Government Code, the Treasurer of the District submits to the General Manager, the Internal Auditor, and the Board of Directors the attached December 31, 2024 quarterly investment report. This report will be presented at the February 25, 2025 Finance/Administration Committee meeting.

### DISCUSSION

The investments held by the District as of December 31, 2024 are shown in Attachment A and totaled \$572.9 million. The portfolio is in compliance with the Board's adopted policy regarding District investments and as of December 31, 2024, had an average yield to maturity of 4.30 percent. Investments also reflect the working capital of the District's associated Joint Powers Authorities and the East Bay Municipal Utility District Employees' Retirement System.

Attachment B shows the composition and credit allocation of the District's investment portfolio. It also shows a comparison of the yield of the District's portfolio against the yield on the 90-day Treasury Bill and the Federal Funds Rate. On December 31, 2024, the Federal Funds Rate was 4.50 percent (upper bound) and the yield on the 90-day Treasury Bill was 4.23 percent. Forecasts of the projected cash balances of the Water and Wastewater Systems' General Funds for the six months through June 2025 are also included. In compliance with Section 53646(b)3 of the California Government Code, this report indicates the District will meet expenditure requirements for the next six months from a combination of maturing investments and revenues from budgeted operations.

CCC:SDS:rlh

Attachment: Quarterly Investment Report

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**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Portfolio Management**  
**Portfolio Summary**  
**December 31, 2024**

ATTACHMENT A

Description	Face Amount Shares	Market Value	Book Value	% of Portfolio	YTM @ Cost	Days To Maturity
US Treasuries	312,500,000	311,164,760	311,277,036	54.48	4.23	248
Money Market Mutual Funds	86,022,100	86,022,100	86,022,100	15.06	4.42	1
Cash	70,331,027	70,331,027	70,331,027	12.31	4.01	1
Local Government Investment Pool	40,249,802	40,249,802	40,249,802	7.05	4.73	1
Federal Agency Issues Coupon	40,000,000	39,623,600	39,595,100	6.94	4.58	213
LAIF	23,748,357	23,748,357	23,748,357	4.16	4.40	1
<b>Total / Average</b>	<b>572,851,285</b>	<b>571,139,645</b>	<b>571,223,422</b>	<b>100.00</b>	<b>4.30</b>	<b>150</b>

  
 Sophia Skoda (Jan 15, 2025 12:21 PST)

Sophia D. Skoda \_\_\_\_\_  
 Director of Finance

01/15/2025

\_\_\_\_\_  
 Date

\*LAIF includes Retirement funds of \$17,240,952.49

\*\*A portion of the balance in Wells Fargo is swept to a money market fund to increase investment earnings



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Portfolio Management**  
**Non-Cash Portfolio Holdings by Fund**  
**December 31, 2024**

**ATTACHMENT A**

<b>Water:</b>				
<b>Description</b>	<b>Face Amount Shares</b>	<b>Market Value</b>	<b>Book Value</b>	
US Treasuries	262,500,000	261,576,330	261,556,383	
Money Market Mutual Funds	65,332,287	65,332,287	65,332,287	
Federal Agency Issues Coupon	32,000,000	31,698,880	31,676,080	
Local Government Investment Pool	29,381,401	29,381,401	29,381,401	
LAIF	-495,203	-495,203	-495,203	
	<b>388,718,484</b>	<b>387,493,694</b>	<b>387,450,947</b>	
	<b>Total/Average</b>			

<b>Wastewater:</b>				
<b>Description</b>	<b>Face Amount Shares</b>	<b>Market Value</b>	<b>Book Value</b>	
US Treasuries	50,000,000	49,588,430	49,720,654	
Money Market Mutual Funds	20,689,813	20,689,813	20,689,813	
Local Government Investment Pool	10,868,400	10,868,400	10,868,400	
Federal Agency Issues Coupon	8,000,000	7,924,720	7,919,020	
	<b>89,558,214</b>	<b>89,071,364</b>	<b>89,197,887</b>	
	<b>Total/Average</b>			



EAST BAY MUNICIPAL UTILITY DISTRICT  
Portfolio Management  
Non-Cash Portfolio Holdings by Fund  
December 31, 2024

ATTACHMENT A

JPA:

BACWA	Face Amount Shares	Market Value	Book Value
LAIF Local Government Investment Pool	2,446,173	2,446,173	2,446,173
<b>Total/Average</b>	<b>2,446,173</b>	<b>2,446,173</b>	<b>2,446,173</b>

DERWA

LAIF Local Government Investment Pool	1,081,135	1,081,135	1,081,135
<b>Total/Average</b>	<b>1,081,135</b>	<b>1,081,135</b>	<b>1,081,135</b>

FRWA

LAIF Local Government Investment Pool	1,081,135	1,081,135	1,081,135
<b>Total/Average</b>	<b>1,081,135</b>	<b>1,081,135</b>	<b>1,081,135</b>

IICP

LAIF Local Government Investment Pool	162,711	162,711	162,711
<b>Total/Average</b>	<b>162,711</b>	<b>162,711</b>	<b>162,711</b>

UMRWA

LAIF Local Government Investment Pool	69,190	69,190	69,190
<b>Total/Average</b>	<b>69,190</b>	<b>69,190</b>	<b>69,190</b>



EAST BAY MUNICIPAL UTILITY DISTRICT  
Portfolio Management  
Non-Cash Portfolio Holdings by Fund  
December 31, 2024

ATTACHMENT A

Other:	Employee Retirement System	Face Amount Shares	Market Value	Book Value
	LAIF Local Government Investment Pool	17,240,952	17,240,952	17,240,952
	<b>Total/Average</b>	<b>17,240,952</b>	<b>17,240,952</b>	<b>17,240,952</b>
	<b>FERC</b>			
	LAIF Local Government Investment Pool	2,162,265	2,162,265	2,162,265
	<b>Total/Average</b>	<b>2,162,265</b>	<b>2,162,265</b>	<b>2,162,265</b>
	<b>Cash</b>			
	Wells Fargo	70,331,027	70,331,027	70,331,027
	<b>Total/Average</b>	<b>70,331,027</b>	<b>70,331,027</b>	<b>70,331,027</b>



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Portfolio Management**  
**Portfolio Details by Fund - Investments**  
**December 31, 2024**

Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity
<b>Water:</b>										
<b>US Treasuries</b>										
T-Note 2.75 5/15/2025	91282CEQ0	6/22/2022	72,500,000	72,101,250	72,344,974	71,285,059	Aaa	AA+	3.36	135
T-Note 2.75 5/15/2025	91282CEQ0	8/12/2024	40,500,000	40,277,250	40,223,257	39,934,215	Aaa	AA+	4.64	135
T-Note 4.5 11/15/2025	91282CFW6	3/15/2024	40,000,000	40,074,400	39,905,869	39,820,000	Aaa	AA+	4.78	319
T-Note 2.75 5/15/2025	91282CEQ0	3/11/2024	35,000,000	34,807,500	34,742,460	34,179,688	Aaa	AA+	4.82	135
T-Note 3.625 5/15/2026	91282CHB0	12/15/2023	24,000,000	23,802,000	23,827,075	23,694,960	Aaa	AA+	4.18	500
T-Note 1.75 3/15/2025	91282CED9	3/15/2024	16,000,000	15,919,360	15,897,008	15,492,000	Aaa	AA+	5.05	74
T-Note 4.25 12/31/2025	91282CJS1	12/16/2024	16,000,000	16,004,000	15,999,693	15,999,680	Aaa	AA+	4.25	365
T-Note 4.625 11/15/2026	91282CJK8	1/5/2024	16,000,000	16,104,320	16,131,433	16,200,800	Aaa	AA+	4.15	684
T-Note 2.75 5/15/2025	91282CEQ0	2/21/2023	2,500,000	2,486,250	2,484,614	2,407,227	Aaa	AA+	4.52	135
<b>Subtotal/Average</b>			<b>262,500,000</b>	<b>261,576,330</b>	<b>261,556,383</b>	<b>259,013,628</b>				
<b>Money Market Mutual Funds</b>										
Federated MM	GOFXX	12/16/2021	22,448,329	22,448,329	22,448,329	22,448,329	Aaa	AAA	4.40	1
State Street MM	GVMXX	10/20/2022	22,386,477	22,386,477	22,386,477	22,386,477	Aaa	AAA	4.43	1
Morgan Stanley MM	MVRXX	12/17/2021	20,497,481	20,497,481	20,497,481	20,497,481	Aaa	AAA	4.43	1
<b>Subtotal/Average</b>			<b>65,332,287</b>	<b>65,332,287</b>	<b>65,332,287</b>	<b>65,332,287</b>				
<b>CAMP CA Asset Mgmt Program</b>										
CAMP LGIP	CAMP6035	5/9/2014	29,381,401	29,381,401	29,381,401	29,381,401	NR	AAA	4.73	1
<b>Subtotal/Average</b>			<b>29,381,401</b>	<b>29,381,401</b>	<b>29,381,401</b>	<b>29,381,401</b>				
<b>Federal Agency Issues Coupon</b>										
FFCB 4 9/19/2025	3133ERTZ4	9/19/2024	16,000,000	15,972,640	15,998,392	15,997,760	Aa	AAA	4.01	262
FHLB 0.5 6/13/2025	3130AJKW8	7/2/2024	16,000,000	15,726,240	15,677,688	15,320,000	Aaa	AA+	5.15	164
<b>Subtotal/Average</b>			<b>32,000,000</b>	<b>31,698,880</b>	<b>31,676,080</b>	<b>31,317,760</b>				
<b>LAIF Local Government Investment Pool</b>										
LAIF LGIP	LGIP1001	6/30/2011	-495,203	-495,203	-495,203	-495,203	NR	NR	4.40	1
<b>Subtotal/Average</b>			<b>-495,203</b>	<b>-495,203</b>	<b>-495,203</b>	<b>-495,203</b>				
<b>Total/Average</b>			<b>388,718,484</b>	<b>387,493,694</b>	<b>387,450,947</b>	<b>384,549,872</b>				



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
 Portfolio Management  
 Portfolio Details by Fund - Investments  
 December 31, 2024

Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity
<b>Wastewater:</b>										
<b>US Treasuries</b>										
T-Note 2.75 5/15/2025	91282CEQ0	6/22/2022	9,500,000	9,447,750	9,479,686	9,340,801	Aaa	AA+	3.36	135
T-Note 2.75 5/15/2025	91282CEQ0	8/12/2024	6,500,000	6,464,250	6,455,585	6,409,195	Aaa	AA+	4.64	135
T-Note 3.625 5/15/2026	91282CHB0	12/15/2023	6,000,000	5,950,500	5,956,769	5,923,740	Aaa	AA+	4.18	500
T-Note 1.625 5/15/2026	912828R36	6/30/2022	5,000,000	4,825,950	4,900,894	4,719,531	Aaa	AA+	3.18	500
T-Note 2.75 5/15/2025	91282CEQ0	3/11/2024	5,000,000	4,972,500	4,963,209	4,882,813	Aaa	AA+	4.82	135
T-Note 1.75 3/15/2025	91282CED9	3/15/2024	4,000,000	3,979,840	3,974,252	3,873,000	Aaa	AA+	5.05	74
T-Note 2.25 11/15/2025	912828M56	6/30/2022	4,000,000	3,931,560	3,969,787	3,883,125	Aaa	AA+	3.17	319
T-Note 4.25 12/31/2025	91282CJS1	12/16/2024	4,000,000	4,001,000	3,999,923	3,999,920	Aaa	AA+	4.25	365
T-Note 4.625 11/15/2026	91282CJK8	1/5/2024	4,000,000	4,026,080	4,032,858	4,050,200	Aaa	AA+	4.15	684
T-Note 2.75 5/15/2025	91282CEQ0	2/21/2023	2,000,000	1,989,000	1,987,691	1,925,781	Aaa	AA+	4.52	135
<b>Subtotal/Average</b>			<b>50,000,000</b>	<b>49,588,430</b>	<b>49,720,654</b>	<b>49,008,106</b>				
<b>Money Market Mutual Funds</b>										
State Street MM	GVMXX	10/20/2022	7,081,284	7,081,284	7,081,284	7,081,284	Aaa	AAA	4.43	1
Federated MM	GOFXX	12/16/2021	7,059,232	7,059,232	7,059,232	7,059,232	Aaa	AAA	4.40	1
Morgan Stanley MM	MVRXX	12/17/2021	6,549,297	6,549,297	6,549,297	6,549,297	Aaa	AAA	4.43	1
<b>Subtotal/Average</b>			<b>20,689,813</b>	<b>20,689,813</b>	<b>20,689,813</b>	<b>20,689,813</b>				
<b>CAMP CA Asset Mgmt Program</b>										
CAMP LGIP	CAMP6035	8/19/2016	10,868,400	10,868,400	10,868,400	10,868,400	NR	AAA	4.73	1
<b>Subtotal/Average</b>			<b>10,868,400</b>	<b>10,868,400</b>	<b>10,868,400</b>	<b>10,868,400</b>				
<b>Federal Agency Issues Coupon</b>										
FFCB 4 9/19/2025	3133ERTZ4	9/19/2024	4,000,000	3,993,160	3,999,598	3,999,440	Aa	AAA	4.01	262
FHLB 0.5 6/13/2025	3130A-JKW8	7/2/2024	4,000,000	3,931,560	3,919,422	3,830,000	Aaa	AA+	5.15	164
<b>Subtotal/Average</b>			<b>8,000,000</b>	<b>7,924,720</b>	<b>7,919,020</b>	<b>7,829,440</b>				
<b>Total/Average</b>			<b>89,558,214</b>	<b>89,071,364</b>	<b>89,197,887</b>	<b>88,395,760</b>				



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Portfolio Management**  
**Portfolio Details by Fund - Investments**  
**December 31, 2024**

Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity
<b>JPA:</b>										
<b>BACWA</b>										
LAIF LGIP	LGIP1001	6/30/2011	2,446,173	2,446,173	2,446,173	2,446,173	NR	NR	4.40	1
<b>Subtotal/Average</b>			<b>2,446,173</b>	<b>2,446,173</b>	<b>2,446,173</b>	<b>2,446,173</b>				
<b>DERWA</b>										
LAIF LGIP	LGIP1001	2/1/2017	1,081,135	1,081,135	1,081,135	1,081,135	NR	NR	4.40	1
<b>Subtotal/Average</b>			<b>1,081,135</b>	<b>1,081,135</b>	<b>1,081,135</b>	<b>1,081,135</b>				
<b>FRWA</b>										
LAIF LGIP	LGIP1001	6/30/2011	1,081,135	1,081,135	1,081,135	1,081,135	NR	NR	4.40	1
<b>Subtotal/Average</b>			<b>1,081,135</b>	<b>1,081,135</b>	<b>1,081,135</b>	<b>1,081,135</b>				
<b>IICP</b>										
LAIF LGIP	LGIP1001	6/30/2011	162,711	162,711	162,711	162,711	NR	NR	4.40	1
<b>Subtotal/Average</b>			<b>162,711</b>	<b>162,711</b>	<b>162,711</b>	<b>162,711</b>				
<b>UMRWA</b>										
LAIF LGIP	LGIP1001	6/30/2011	69,190	69,190	69,190	69,190	NR	NR	4.40	1
<b>Subtotal/Average</b>			<b>69,190</b>	<b>69,190</b>	<b>69,190</b>	<b>69,190</b>				



**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Portfolio Management**  
**Portfolio Details by Fund - Investments**  
**December 31, 2024**

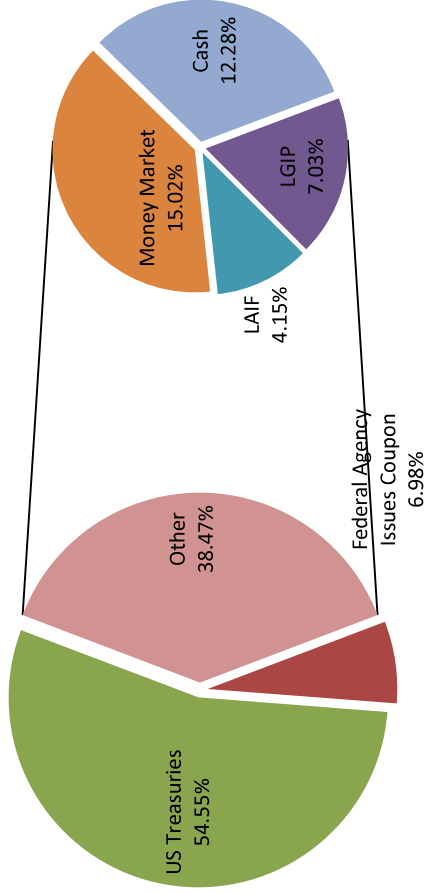
Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity
<b>Other:</b>										
<b>Employee Retirement System</b>										
LAIF LGIP	LGIP1005	6/30/2011	17,240,952	17,240,952	17,240,952	17,240,952	NR	NR	4.40	1
<b>Subtotal/Average</b>			<b>17,240,952</b>	<b>17,240,952</b>	<b>17,240,952</b>	<b>17,240,952</b>				
<b>FERC</b>										
LAIF LGIP	LGIP1001	6/30/2011	2,162,265	2,162,265	2,162,265	2,162,265	NR	NR	4.40	1
<b>Subtotal/Average</b>			<b>2,162,265</b>	<b>2,162,265</b>	<b>2,162,265</b>	<b>2,162,265</b>				
<b>Cash</b>										
WELLS FARGO Cash	CASH2017	4/1/2017	70,331,027	70,331,027	70,331,027	70,331,027	NR	NR	4.01	1
<b>Subtotal/Average</b>			<b>70,331,027</b>	<b>70,331,027</b>	<b>70,331,027</b>	<b>70,331,027</b>				



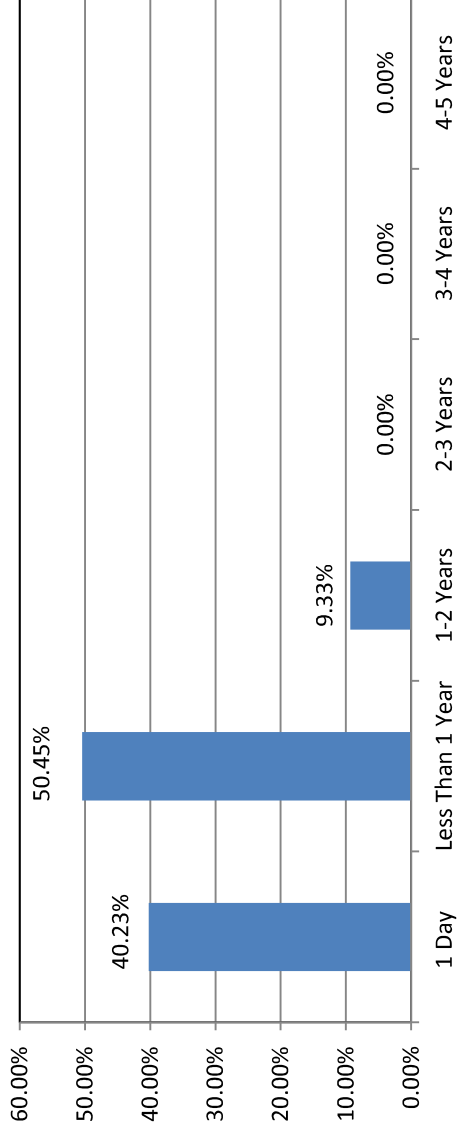
**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Investment Portfolio**  
**Yield and Composition - by Asset Class**  
**December 31, 2024**

ATTACHMENT B-1

**Portfolio Holding Distribution by Asset Class**



**Portfolio Holdings Distribution by Maturity Range**

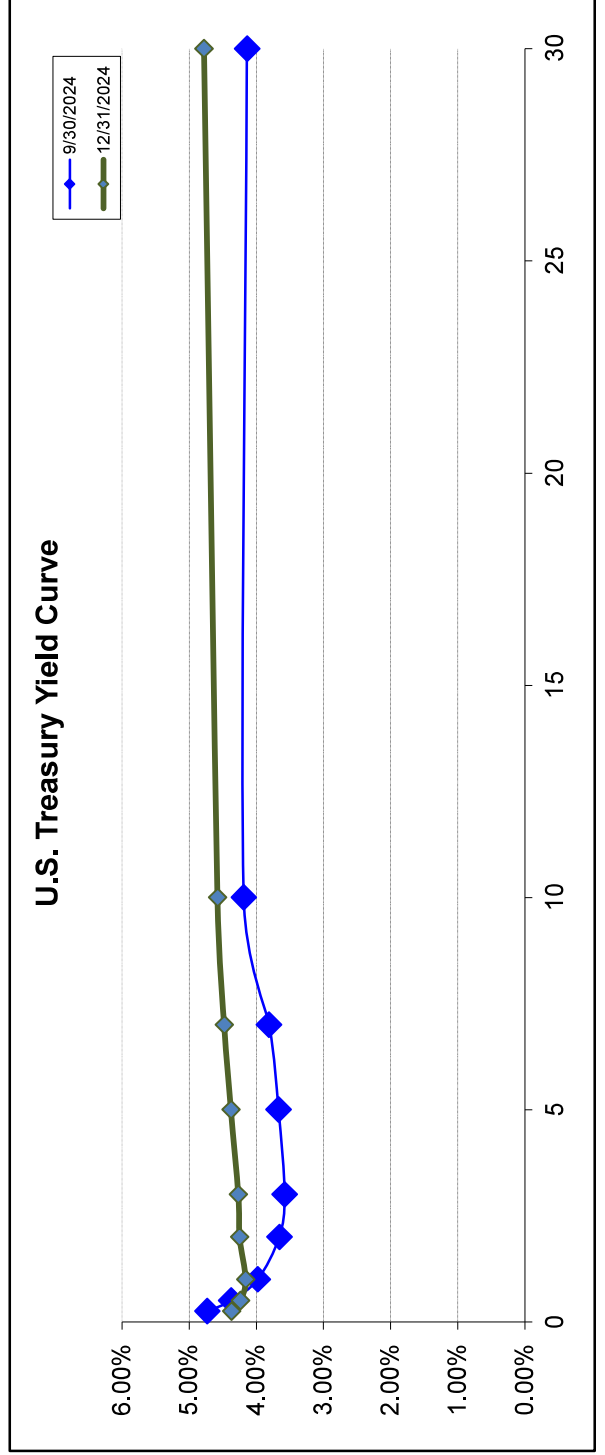
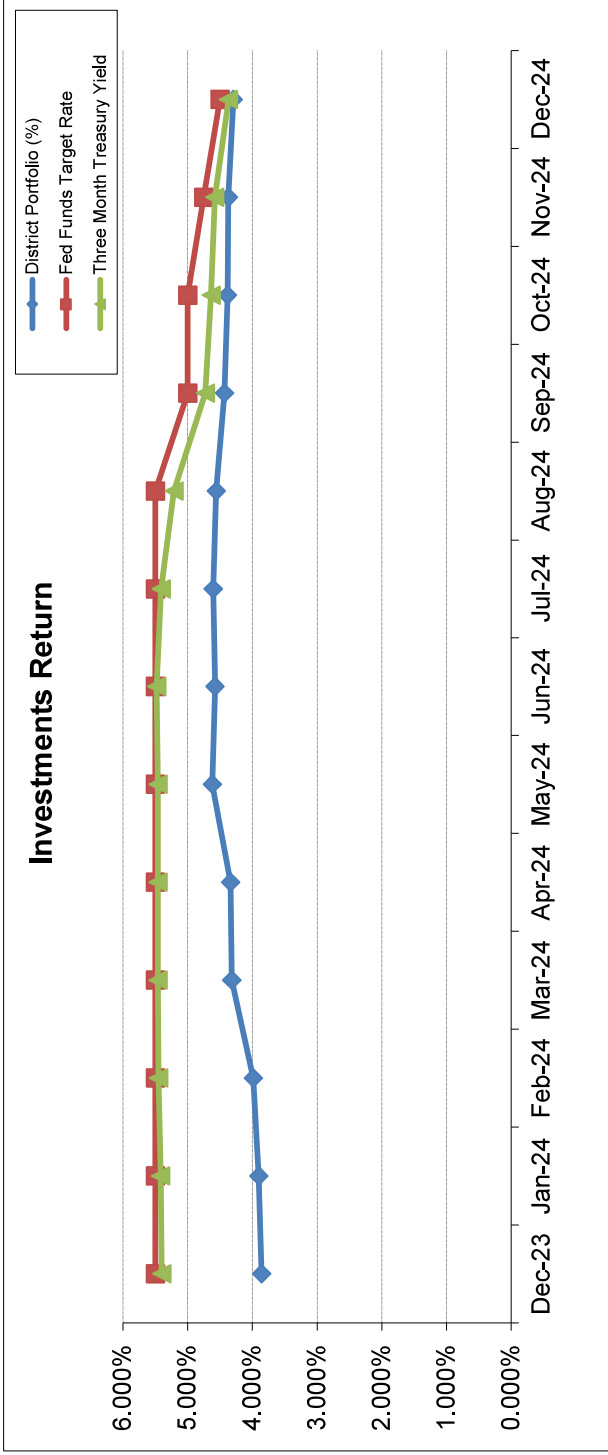


**Ratings & Amounts**

	<u>U.S. Treasuries</u>	
T-Bills	AA+	-
T-Notes	AA+	312,500,000
<u>Agency Bonds</u>		
FAMC	AA+	-
FFCB	AA+	20,000,000
FHLB	AA+	20,000,000
FHLMC	AA+	-
FNMA	AA+	-
<u>Municipal Bonds</u>		
Municipal	AAA category	-
Municipal	AA category	-
<u>Corporate Bonds</u>		
Corporate	AAA category	-
Corporate	AA+ category	-
Corporate	AA- category	-
<u>Overnight Liquidity</u>		
LGIP	AAA-mf	40,249,802
MMF	AAA-mf	86,022,100
LAIF	N/A	23,748,357
Cash	N/A	70,331,027
		<u>\$ 572,851,285</u>



EAST BAY MUNICIPAL UTILITY DISTRICT  
Investment Portfolio  
Yield and Composition of Investment Portfolio  
December 31, 2024





**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Investment Portfolio**  
**Yield and Composition of Investment Portfolio**  
**December 31, 2024**

ATTACHMENT B-3

**Projected Cash Flow (in \$Millions)**

**Water System**

Month End	Matured Investments	Projected			Matured Reinvested
		Receipts	Disbursements	Cash & Investments	
Dec-24				419.3	
Jan-25	0.0	61.6	83.4	397.5	0.0
Feb-25	0.0	58.7	82.8	373.4	0.0
Mar-25	16.0	58.1	84.1	347.4	16.0
Apr-25	0.0	61.3	84.1	324.6	0.0
May-25	150.5	63.8	227.3	161.1	150.5
Jun-25	16.0	95.5	82.8	173.8	16.0

**Wastewater System**

Month End	Matured Investments	Projected			Matured Reinvested
		Receipts	Disbursements	Cash & Investments	
Dec-24				104.7	
Jan-25	0.0	11.1	14.1	101.7	0.0
Feb-25	0.0	11.1	14.1	98.7	0.0
Mar-25	4.0	11.1	14.1	95.7	4.0
Apr-25	0.0	11.1	14.1	92.7	0.0
May-25	23.0	11.1	37.8	66.0	23.0
Jun-25	4.0	11.1	14.1	63.0	4.0

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## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: February 20, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager *CCC*

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

SUBJECT: Fiscal Year 2025 Semi-Annual Budget Performance Report

### SUMMARY

The attached Semi-Annual Budget Performance Report for the period ending December 31, 2024 includes information on total revenues and expenses compared to the six-month budget, a summary of major capital cash flow expenses, and year-end projections. This item will be presented at the February 25, 2025 Finance/Administration Committee meeting.

### DISCUSSION

#### Six-Month Budget Performance

Total Water System revenues for the period July 1, 2024, to December 31, 2024, were \$501.1 million (101 percent of the six-month budget), and total expenses were \$501.4 million (94 percent of the six-month budget). Overall revenues were slightly above the six-month budget primarily due to slightly higher-than-expected water consumption, which resulted in increased water charges revenue. However, capital revenues fell below expectations, primarily due to fewer large-scale development projects occurring in the first half of the fiscal year. As the issuance of new bonds is expected in the last quarter of the fiscal year, debt service expenses are below budget for the six-month period. Operating expenses remained under budget, largely due to lower-than-anticipated non-labor costs. Capital expenses were higher than planned as major infrastructure projects progressed at a faster pace than expected. As a net result, total expenses remained 6 percent below the six-month budget, despite the increase in capital expenditures.

Total Wastewater System revenues for the same period were \$93.9 million (108 percent of the six-month budget), and total expenses were \$88.5 million (99 percent of the six-month budget). Revenues exceeded budgeted expectations primarily due to strong performance in resource recovery revenues, which were significantly higher than projected. Interest income and SD-1 service area capacity charges also outperformed expectations, contributing to the overall revenue surplus. Similar to the Water System, debt service and operating expenses were below budget due to lower-than-expected interest costs and non-labor costs. Additionally, capital expenses were below the six-month budget.

### Year-End Projection

Based on current projections, total Water System revenues are projected to be 1 percent above budget, while total expenses are projected to be 1 percent below budget. As a result, total revenue is projected to slightly exceed total budgetary expenses while water charges are expected to be approximately \$21.8 million greater than budget, reflecting higher-than-anticipated water consumption. Other operating revenues, including power sales and interest income, are also projected to be higher than budgeted, and capital-related revenues, including system capacity charges and capital reimbursements, are expected to be below budget by \$17.2 million, primarily due to lower-than-expected large-scale development activity in the service area.

Operating expenses for the Water System are projected to be \$33.3 million below budget, or 8 percent less than anticipated, due in part to lower-than-budgeted non-labor spending, and increased capital support offsets. Debt service expenses are expected to be slightly below budget as well, reflecting lower interest expenses due to the timing of the bond issuance. Capital expenses are projected to be \$22.9 million above budget, or 104 percent of the full-year budget, as spending on major water treatment plant and pipeline projects continues at a faster pace than originally planned.

For the Wastewater System, total revenues are projected to be 4 percent above budget, while total expenses are projected to be 2 percent below budget, resulting in approximately \$10 million more in revenues than total expenses by year-end. This surplus is largely driven by higher-than-budgeted resource recovery revenue, which has continued to exceed expectations due to strong market demand. Other revenue sources, including capital revenues, are also projected to be above budget, while some revenue categories, such as Wet Weather Facility Charges, are expected to come in slightly below projections.

Operating expenses for the Wastewater System are anticipated to be 3 percent below budget, primarily due to lower-than-expected chemical costs and unspent contingency, though this will be partially offset by higher-than-budgeted labor costs. Debt service expenses are expected to be 6 percent below budget, as bond issuance is expected in the last quarter of the fiscal year, reducing interest costs for the first half of the year. Capital expenses are projected to be slightly above budget, with major spending continuing in Secondary Treatment and other critical work at the Main Wastewater Treatment Plant.

CCC:SDS:SAF

Attachment: Semi-Annual Budget & Performance for Fiscal Year 2025

## Executive Summary

This is the Fiscal Year 2025 (FY 2025) semi-annual budget and performance report for the Water and Wastewater systems. This report details the Water and Wastewater systems budget performance through December 31, 2024, the first six months of FY 2025.

### Water System Overview

- **Operating Revenues:** Operating revenues were \$479.6 million, or \$16.8 million greater than the six-month budget.
- **New Bond Proceeds:** Bond issuance is scheduled for the last quarter of FY 2025.
- **Capital Revenues:** Capital and grant revenues were \$21.4 million, or \$12.2 million less than the six-month budget.
- **Operating Expenses:** Total operating expenses were \$176.1 million, or \$34.5 million less than the six-month budget.
- **Debt Service:** Debt expenses were \$66.5 million, or \$9.7 million less than the six-month budget.
- **Capital Cash Flow Expenses:** Total capital cash flow spending was \$258.8 million, or \$12.8 million more than the six-month budget.
- **Grant Expenses:** Total grant expenses were \$38,000, or \$319,400 less than the six-month budget.

### Wastewater System Overview

- **Operating Revenues:** Total operating revenues were \$90.8 million, or \$5.4 million more than the six-month budget.
- **New Bond Proceeds:** Bond issuance is scheduled for the last quarter of FY 2025.
- **Capital Revenues:** Other capital revenues were \$3.1 million, or \$1.3 million greater than the six-month budget.
- **Operating Expenses:** Total operating expenses were \$52.3 million, or \$46,000 more than the six-month budget.
- **Debt Service:** Debt expenses were \$8.7 million, or \$0.7 million less than the six-month budget.
- **Capital Cash Flow Expenses:** Total capital cash flow spending was \$27.5 million, or \$0.6 million less than the six-month budget.

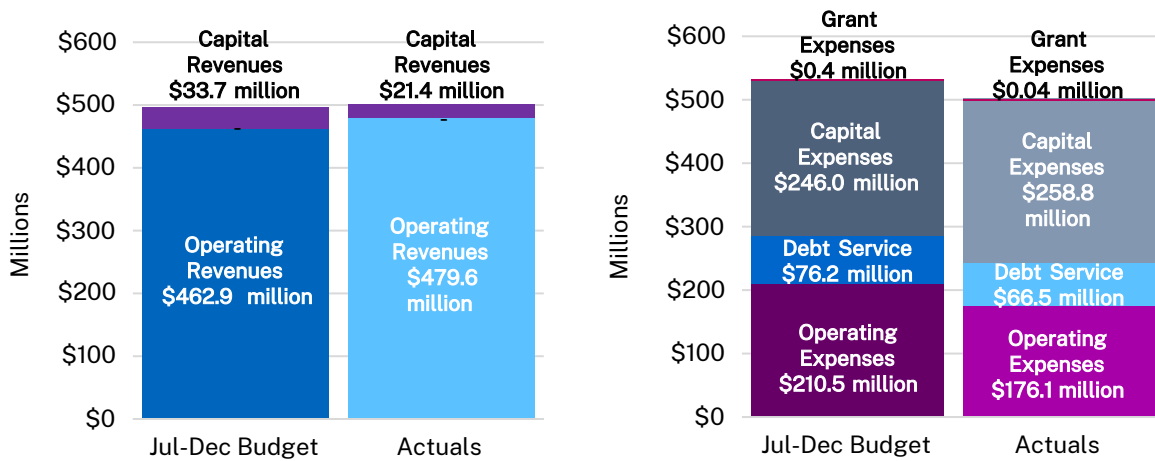
## Water System

### Summary of Revenues and Expenses

The following charts compare the first six months' actuals to a six-month budget for revenues, operating expenses, and capital cash flow expenses.

- Operating revenues totaled \$479.6 million, or 104 percent of the six-month budget.
- Capital and grant revenues totaled \$21.4 million, or 64 percent of the six-month budget.
- Operating expenses totaled \$176.1 million, or 84 percent of the six-month budget.
- Debt service expenses totaled \$66.5 million, or 87 percent of the six-month budget.
- Capital cash flow expenses totaled \$258.8 million, or 105 percent of the six-month budget.
- Grant expenses totaled \$38,000, or 11 percent of the six-month budget.

*Water System All Revenues and Expenses Summary*

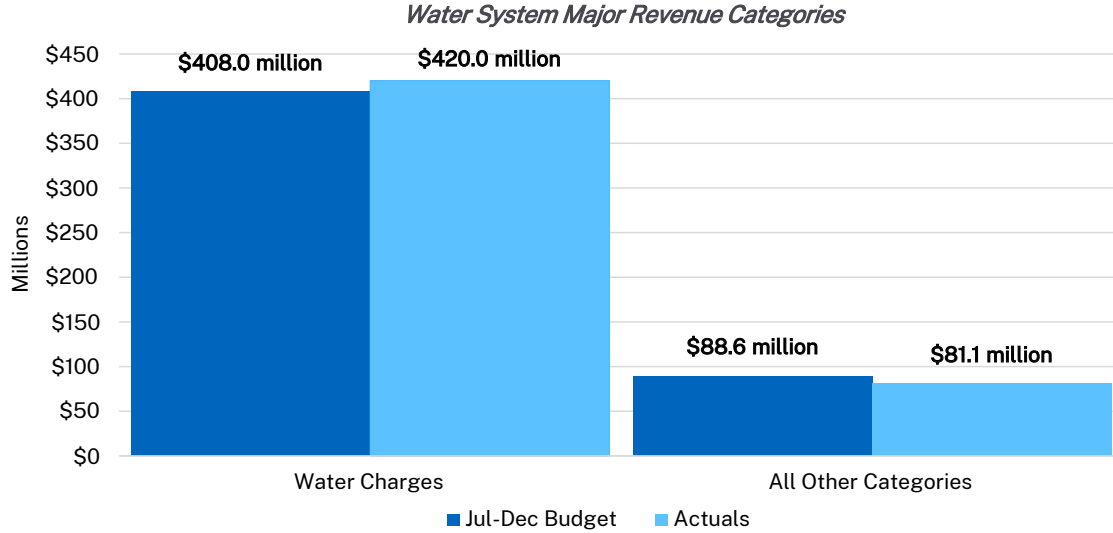


*Water System All Revenues and Expenses Summary*

All Revenues and Expenses Summary (\$ Thousands)				
	Jul-Dec Budget	Actuals	Over / (Under)	%
Operating Revenues	462,863	479,620	16,757	104%
New Bond Proceeds	-	-	-	-
Capital & Grants	33,650	21,436	(12,214)	64%
<b>Total Revenues</b>	<b>496,513</b>	<b>501,056</b>	<b>4,543</b>	<b>101%</b>
Operating Expenses	210,522	176,070	(34,451)	84%
Debt Service	76,189	66,513	(9,676)	87%
Capital Expenses	245,977	258,780	12,803	105%
Grant Expenses	357	38	(319)	11%
<b>Total Expenses</b>	<b>533,045</b>	<b>501,401</b>	<b>(31,644)</b>	<b>94%</b>
<b>Revenues less Expenses</b>	<b>(36,532)</b>	<b>(345)</b>	<b>36,187</b>	

**Water System Revenues**

The following chart shows the major categories of revenue compared to a six-month budget, and the table below the chart shows additional detail. The combined revenues for the first six months were \$501.1 million, which represents 101 percent of the \$496.5 million six-month budget. Details of major revenue variances are explained on the following page.



*Water System Detailed Revenue Summary*

<b>Detailed Revenue Summary (\$ Thousands)</b>				
	<b>Jul-Dec Budget</b>	<b>Actuals</b>	<b>Over / (Under)</b>	<b>%</b>
Water Charges	407,962	419,989	12,028	103%
Property Taxes	22,886	22,600	(286)	99%
Power Sales	6,614	8,886	2,271	134%
Interest Income	7,500	9,524	2,024	127%
Reimbursements	7,200	6,252	(948)	87%
All Other Revenue	10,700	12,368	1,668	116%
<b>Operating Revenues</b>	<b>462,863</b>	<b>479,620</b>	<b>16,757</b>	<b>104%</b>
SCC Revenue	18,100	12,493	(5,607)	69%
New Bond Proceeds	-	-	-	-
Grants	-	129	129	-
Capital Reimbursements	15,550	8,147	(7,403)	52%
Other Capital Revenue	-	667	667	-
<b>Capital Revenues</b>	<b>33,650</b>	<b>21,436</b>	<b>(12,214)</b>	<b>64%</b>
<b>Total Revenues</b>	<b>496,513</b>	<b>501,056</b>	<b>4,543</b>	<b>101%</b>

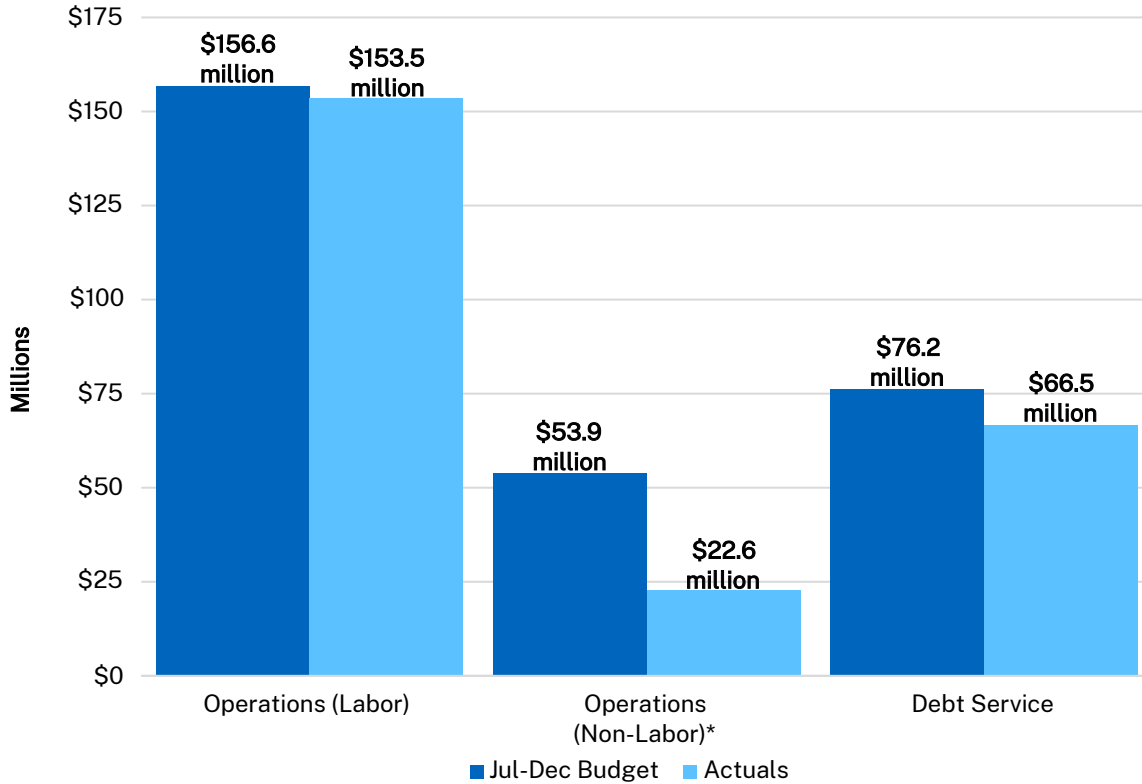
Major revenue variances were:

- **Water Charges** were \$420.0 million, or 103 percent of the six-month budget, which is based on prior years' trend data. Water consumption through December was 166.8 million gallons per day (MGD) as compared to water consumption of 155.1 MGD for the same period in FY 2024, for a year-over-year increase of 7.5 percent. Water Charges were 3 percent above budget due to the higher-than-expected consumption.
- **System Capacity Charges (SCC)** revenue was \$12.5 million, which is 69 percent of the six-month budget. The budget for SCC revenue was projected based on strong building activity continuing from FY 2023. However, in both FY 2024 and FY 2025, there have been fewer large-scale developments that typically yield strong SCC revenue, though small-scale development, including Accessory Dwelling Units, continue to support modest SCC revenue income.
- **Power Sales** were \$8.9 million, which is 134 percent of the six-month budget. This significant performance above budget was driven by higher-than-expected per-unit energy prices, favorable wholesale markets, and strong water supply conditions in the first half of the year.
- **Capital Reimbursements** were \$8.1 million, which is 52 percent of the six-month budget. Similar to SCC revenue, the budget was partly based on past applicant activity for large-scale projects. However, this year most capital reimbursements have been from small-scale projects and require less work and therefore there were lower reimbursements.
- **New Bond Proceeds** were \$0 as bonds have not yet been issued for FY 2025, though issuance is expected before the end of the fiscal year.
- **Grant Revenues** were \$0.1 million from the Department of Water Resources for the Sustainable Groundwater Planning Grant and the California Natural Resources Agency for the Prop 68 - Protecting California's Rivers, Streams, and Watershed Program.

### Water System Operating Expenses

The following chart depicts non-capital expenses in comparison to six-month budgets. Total non-capital expenses totaled \$242.6 million, which is 85 percent of the \$286.7 million six-month budget. Major variances in the three categories are described in further detail below.

*Water System Operating Expense Categories*



\*Includes capital support offsets.

*Water System Operating (Non-Capital) Expense Details*

Operating (Non-Capital) Expense Details (\$ Thousands)				
	Jul-Dec Budget	Actuals	Over / (Under)	%
Operations (Labor)	156,627	153,473	(3,154)	98%
Operations (Non-Labor)*	53,895	22,597	(31,298)	42%
<b>Total Operations Expenses</b>	<b>210,522</b>	<b>176,070</b>	<b>(34,451)</b>	<b>84%</b>
Debt Service	76,189	66,513	(9,676)	87%
<b>Total Non-Capital Expenses</b>	<b>286,710</b>	<b>242,583</b>	<b>(44,127)</b>	<b>85%</b>

\*Includes capital support offsets.

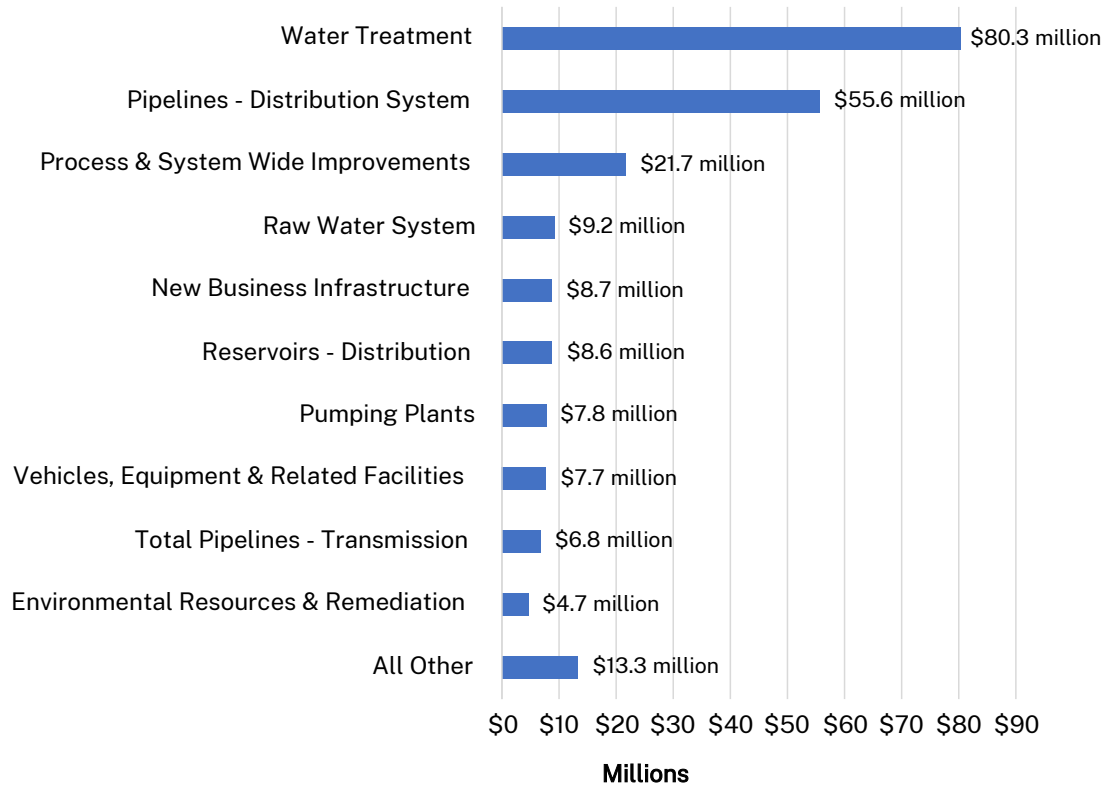
The major variances in spending are attributable to:

- **Operations (Labor):** Operating labor expenses were \$153.5 million, or 2 percent less than the six-month budget. Fringe rates rose significantly in FY 2025 compared to budget expectations, driving labor costs closer to budget. This was offset by savings due to the lead time to recruit for vacant positions and a small shift of operating labor to capital expenses due to ongoing significant capital work as compared to budgeted expectations.
- **Operations (Non-Labor):** Expenditures in most departments' non-labor budgets remained well under budget. This, combined with increased capital support expenses, which relieve the operating budget of expenses associated with managing and supporting the capital program resulted in \$31.3 million in savings compared to budget.
- **Debt Service:** Actuals were 87 percent of the six-month budget, which included interest expense budgeted for new money bonds. The issuance of the new bonds is currently scheduled for this spring, leading to savings in the first half of the fiscal year as compared to budget.

### Water System Capital Cash Flow Expenses

The following chart illustrates the capital cash flow spending for major capital awards in the Water System. Capital cash flow expenditures totaled \$258.8 million. Of this amount, direct capital project costs totaled \$224.4 million and the remaining \$34.4 million represents capital support expenses.

*Water System Cash Flow Expenses by Award Purpose*



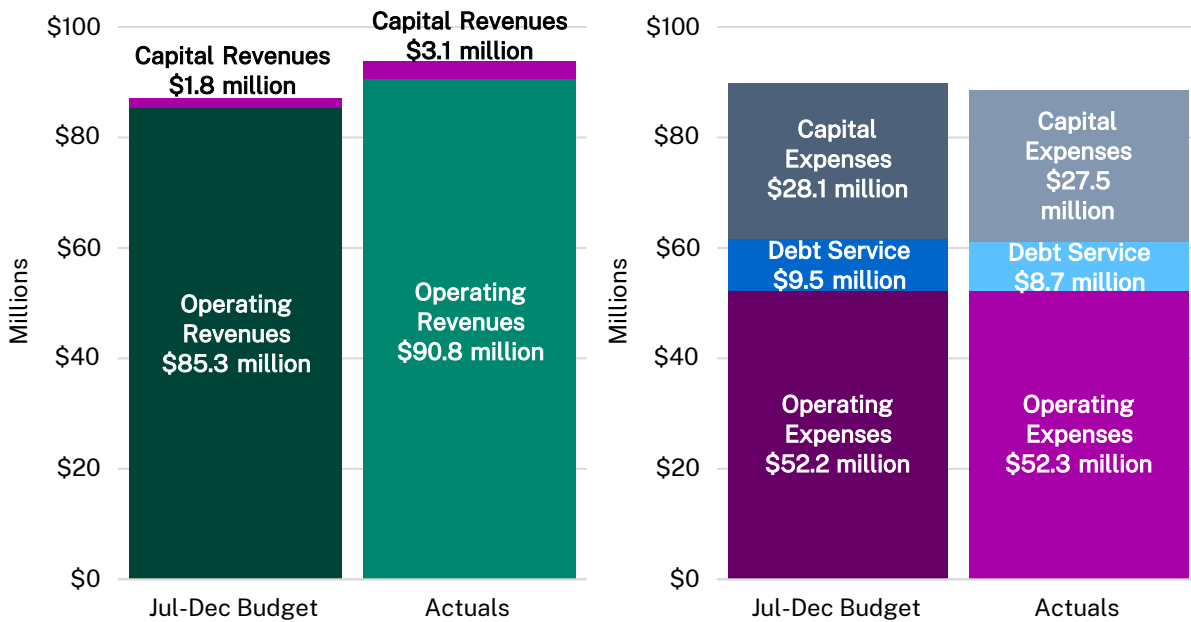
## Wastewater System

### Summary of Revenues and Expenses

The following charts compare the six-month actuals to a six-month budget for total revenues, operating expenses, and capital cash flow expenses.

- Operating revenues totaled \$90.8 million, or 106 percent of the six-month budget.
- Capital and grant revenues totaled \$3.1 million, which is 172 percent of the six-month budget.
- Operating expenses totaled \$52.3 million, or 100 percent of the six-month budget.
- Debt service totaled \$8.7 million, or 92 percent of the six-month budget.
- Capital cash flow expenses totaled \$27.5 million, or 98 percent of the six-month budget.

*Wastewater System Revenues and Expenses Summary*



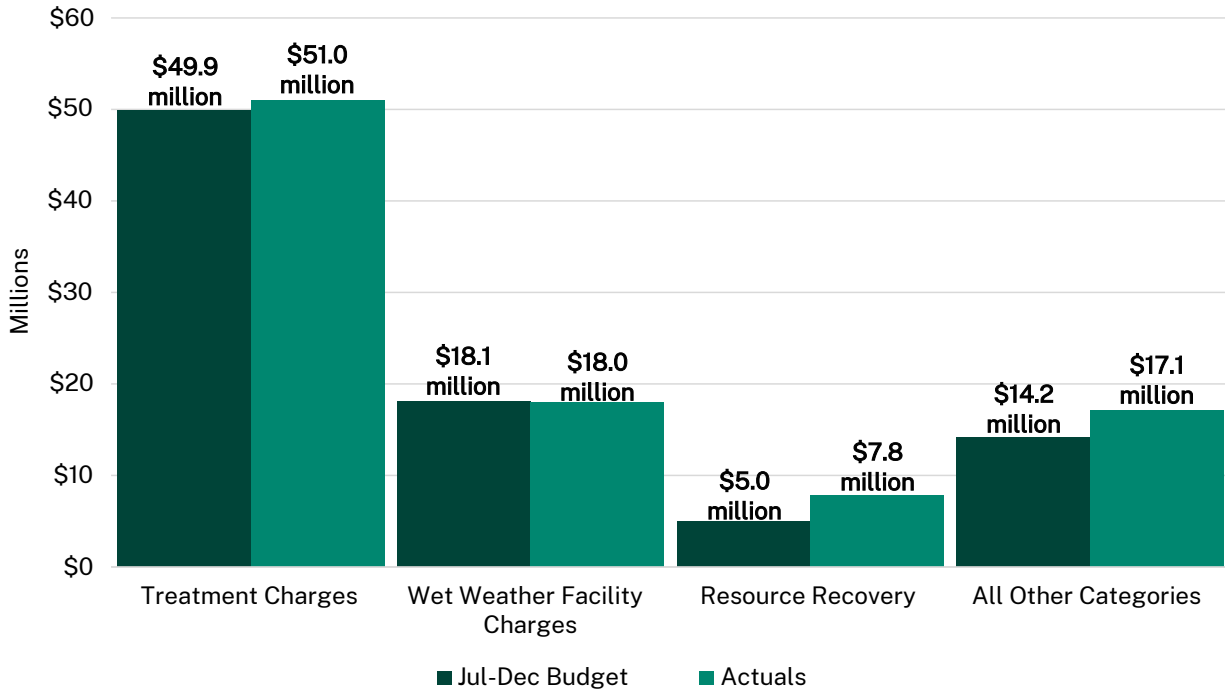
*Wastewater System All Revenues and Expenses Summary*

All Revenues and Expenses Summary (\$ Thousands)				
	Jul-Dec Budget	Actuals	Over / (Under)	%
Operating Revenues	85,327	90,765	5,437	106%
New Bond Proceeds	-	-	-	-
Capital & Grants	1,800	3,097	1,297	172%
<b>Total Revenues</b>	<b>87,127</b>	<b>93,862</b>	<b>6,735</b>	<b>108%</b>
Operating Expenses	52,248	52,295	46	100%
Debt Service	9,469	8,721	(748)	92%
Capital Expenses	28,123	27,490	(633)	98%
<b>Total Expenses</b>	<b>89,840</b>	<b>88,505</b>	<b>(1,335)</b>	<b>99%</b>
<b>Revenues less Expenses</b>	<b>(2,713)</b>	<b>5,357</b>	<b>8,070</b>	

### Wastewater System Revenues

The following chart shows the major sources of revenue compared to a six-month budget, and the table below shows a more detailed breakdown of system revenues. The combined revenues for the six-months were \$93.9 million, which is 108 percent of the \$87.1 million six-month budget. Details of the major revenue variances are discussed below.

*Wastewater System Major Revenue Categories*



*Wastewater System Detailed Revenue Summary*

Detailed Revenue Summary (\$ Thousands)				
	Jul-Dec Budget	Actuals	Over / (Under)	%
Treatment Charges	49,917	50,985	1,068	102%
Wet Weather Facility Charges	18,055	17,982	(73)	100%
Resource Recovery	5,000	7,794	2,794	156%
Property Taxes	3,356	3,794	438	113%
Interest Income	1,600	2,015	415	126%
Laboratory Services	2,500	2,749	249	110%
Reimbursements	950	1,056	106	111%
Permit Fees	850	819	(31)	96%
All Other Revenue	3,100	3,571	471	115%
<b>Operating Revenues</b>	<b>85,327</b>	<b>90,765</b>	<b>5,437</b>	<b>106%</b>
Capacity Charges	1,800	2,484	684	138%
New Bond Proceeds	-	-	-	-
Grants	-	101	101	-
Other Capital Revenues	-	513	513	-
<b>Capital Revenues</b>	<b>1,800</b>	<b>3,097</b>	<b>1,297</b>	<b>172%</b>
<b>Total Revenues</b>	<b>87,127</b>	<b>93,862</b>	<b>6,735</b>	<b>108%</b>

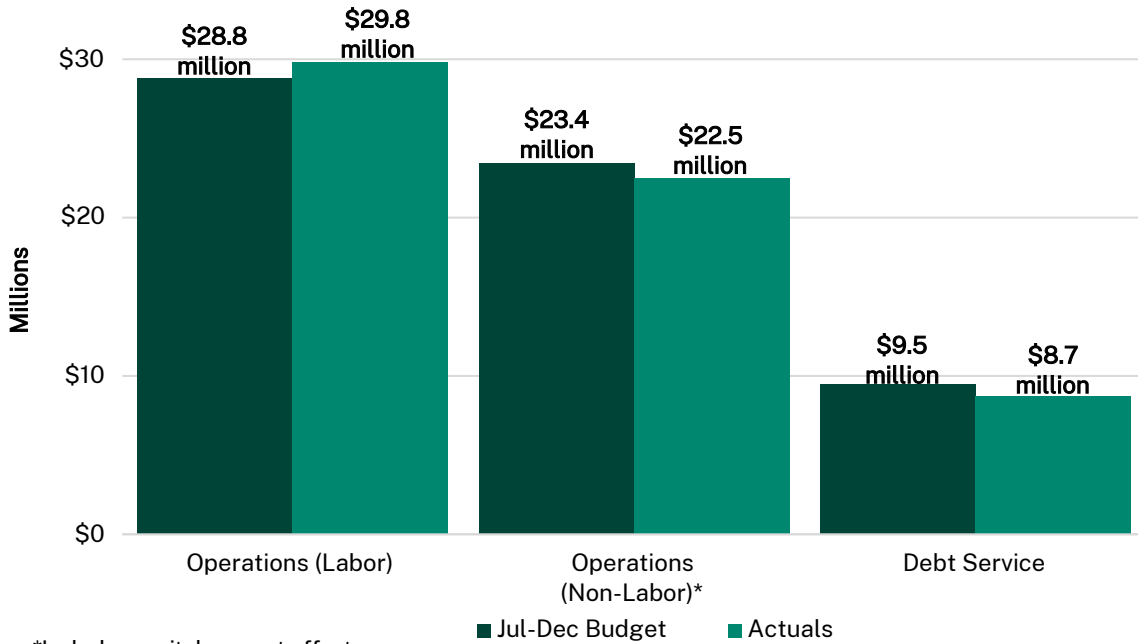
Major revenue variances were:

- **Resource Recovery** revenue totaled \$7.8 million, which is 156 percent of the six-month budget due to a conservative approach to budgeting as this revenue source is driven by and subject to the volatility of market demand.
- **Capacity Charges (Wastewater Capacity Fee)** revenue was \$2.5 million, which is 138 percent of the six-month budget. Unlike for the Water System, Wastewater had several projects that increased collections above budgeted expectations.
- **Interest Income** was \$2.0 million which is 126 percent of the six-month budget due to sustained strong investment returns.
- **New Bond Proceeds** were \$0 as bonds have not yet been issued for FY 2025, though issuance is expected before the end of the fiscal year.

**Wastewater System Operating Expenses**

The following chart and table depict non-capital expenses compared to the six-month budgets. Operating and debt service expenses totaled \$61.0 million, which is 99 percent of the \$61.7 million amended six-month budget.

*Wastewater System Operating Expense Categories*



\*Includes capital support offsets.

*Wastewater System Operating (Non-Capital) Expense Details*

Operating (Non-Capital) Expense Details (\$ Thousands)				
	Jul-Dec Budget	Actuals	Over / (Under)	%
Operations (Labor)	28,815	29,789	974	103%
Operations (Non-Labor)*	23,433	22,505	(928)	96%
<b>Total Operations Expenses</b>	<b>52,248</b>	<b>52,295</b>	<b>46</b>	<b>100%</b>
Debt Service	9,469	8,721	(748)	92%
<b>Total Non-Capital Expenses</b>	<b>61,717</b>	<b>61,015</b>	<b>(702)</b>	<b>99%</b>

\*Includes capital support offsets.

The major variances in spending are attributable to:

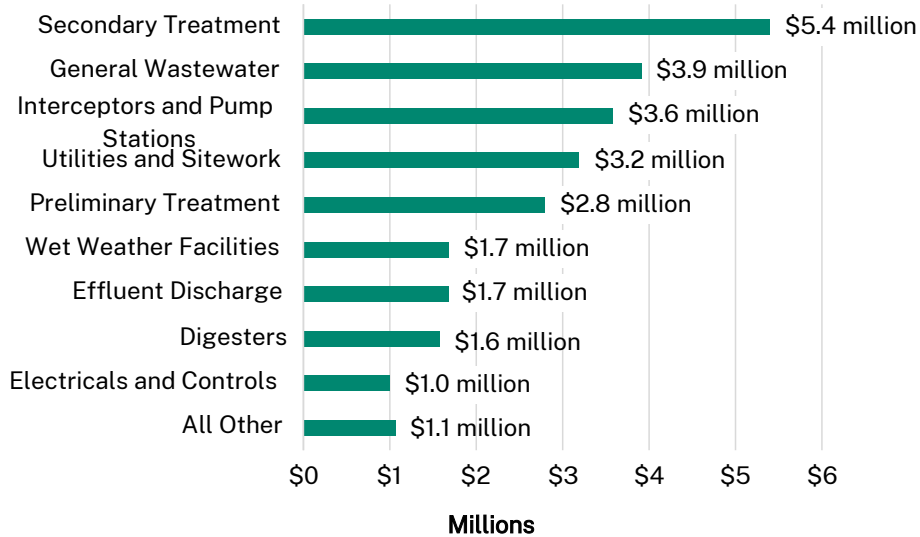
- **Operations (Labor):** Labor expenses were \$29.8 million, or 3 percent greater than the budget due to the large increase in fringe benefit rates, which was not budgeted. Additionally, there has been an increasing amount of work for operating maintenance as compared to work on capital projects, which increased the labor budget.
- **Operations (Non-Labor):** Expenditures overall were under budget by 4 percent, due in part to unspent contingency funds.
- **Debt Service:** Expenses were 92 percent of the amended six-month budget, which included interest expense budgeted for new money bonds. The issuance of the new bonds is currently scheduled for this spring, leading to savings in the first half of the fiscal year.

### Wastewater System Capital Cash Flow Expenses

The following chart illustrates the capital cash flow spending for the capital awards for the Wastewater System. Capital cash flow expenditures totaled \$27.5 million. Of this amount, direct capital project costs totaled \$25.9 million, and the remaining \$1.6 million represents capital support expenses.

Significant spending continues on Secondary Treatment and General Wastewater projects.

*Wastewater System Cash Flow Expenses by Award Purpose*



## Year-End Projection

### Water System

Based on year-end projections, total revenues are projected to be 1 percent above budget, and total expenses are expected to be 1 percent below budget. This is expected to lead to total budgetary expenses being below total revenues by \$0.1 million. Details of the variances compared to budget are discussed below.

*Water System All Revenues and Expenses Year-End Projection*

All Revenues and Expenses Year-End Projection (\$ Thousands)				
	Amended Budget	Year-End Projection	Over / (Under)	%
Water Charges	739,641	761,450	21,809	103%
Property Taxes	51,400	51,400	-	100%
Power Sales	10,200	11,500	1,300	113%
Interest Income	15,000	16,670	1,670	111%
Reimbursements	14,400	12,190	(2,210)	85%
All Other Revenue	21,400	24,120	2,720	113%
Drought Revenues	-	-	-	-
<b>Operating Revenues</b>	<b>852,041</b>	<b>877,330</b>	<b>25,289</b>	<b>103%</b>
SCC Revenue	36,200	27,480	(8,720)	76%
New Bond Proceeds	269,500	275,000	5,500	102%
Grants	-	260	260	-
Capital Reimbursements	31,100	15,480	(15,620)	50%
Other Capital Revenue	-	1,334	1,334	-
<b>Capital Revenues</b>	<b>336,800</b>	<b>319,554</b>	<b>(17,246)</b>	<b>95%</b>
<b>Total Revenues</b>	<b>1,188,841</b>	<b>1,196,884</b>	<b>8,043</b>	<b>101%</b>
Operating Expenses	432,408	399,105	(33,303)	92%
Debt Service	256,318	253,466	(2,852)	99%
Capital Expenses	520,545	543,463	22,918	104%
Grant Expenses	715	715	-	100%
<b>Total Expenses</b>	<b>1,209,985</b>	<b>1,196,748</b>	<b>(13,237)</b>	<b>99%</b>
<b>Revenues less Expenses</b>	<b>(21,144)</b>	<b>136</b>	<b>21,280</b>	

### REVENUES

- Water charges are expected to provide 87 percent of operating revenues and are projected to be \$21.8 million greater than budget, or 3 percent above budget by fiscal year end.
- All other operating revenue items combined are expected to provide an additional \$3.5 million more in revenue than budgeted as most revenue items, particularly power sales, are expected to exceed budget. This is offset in part by reimbursements, which are expected to be below budget due to slower development trends.
- Capital revenues are anticipated to be \$17.2 million less than budget, or 95 percent of the full-year budget, primarily due to receiving less than budgeted capital reimbursements and System Capacity Charges (SCCs).

## EXPENSES

- Operating expenses are projected to be \$33.3 million, or 8 percent, less than budget. This expected savings is primarily driven by increased capital support offsets, unspent contingency, and overall underspending in department non-labor budgets.
- Debt service expenses are anticipated to be \$2.9 million less than budget, or 99 percent of the full-year budget, in part due to reduced interest expenses for the fiscal year. The budget included a new bond issuance at the start of the fiscal year with semi-annual interest payments. New money bonds are expected to be issued in the last quarter of FY 2025. Remaining budgeted funds may be used to retire variable rate commercial paper, depending on fiscal conditions at year end.
- Capital expenses are expected to be \$22.9 million above budget, or 104 percent of the full-year budget. Capital spending is expected to continue progressing at a faster pace than budgeted, similar to the prior year, due in part to significant investments in major water treatment plant and pipeline projects.

## Year-End Projection

### Wastewater System

Based on year-end projections, total revenues are projected to be 4 percent above budget and total expenses are anticipated to be 2 percent under budget, which is expected to result in \$10.0 million more in total revenues than total expenses by year-end. If the projection holds, the District may issue less in revenue bonds to fund capital. The following table shows the year-end projection for the Wastewater System. Details of the variances are discussed below.

*Wastewater System All Revenues and Expenses Year-End Projection*

All Revenues and Expenses Year-End Projection (\$ Thousands)				
	Amended Budget	Year-End Projection	Over / (Under)	%
Treatment Charges	99,834	100,000	166	100%
Wet Weather Facility Charges	36,200	35,960	(240)	99%
Resource Recovery	10,000	15,000	5,000	150%
Property Taxes	7,700	7,700	0	100%
Interest Income	3,200	3,530	330	110%
Laboratory Services	5,000	5,500	500	110%
Reimbursements	1,900	2,010	110	106%
Permit Fees	1,700	1,640	(60)	96%
All Other Revenue	6,200	6,430	230	104%
<b>Operating Revenues</b>	<b>171,734</b>	<b>177,770</b>	<b>6,036</b>	<b>104%</b>
Capacity Charges	3,600	3,850	250	107%
New Bond Proceeds	29,400	30,000	600	102%
Grants	-	200	200	-
Other Capital Revenues	-	1,030	1,030	-
<b>Capital Revenues</b>	<b>33,000</b>	<b>35,080</b>	<b>2,080</b>	<b>106%</b>
<b>Total Revenues</b>	<b>204,734</b>	<b>212,850</b>	<b>8,116</b>	<b>104%</b>
Operating Expenses	114,088	110,950	(3,138)	97%
Debt Service	34,777	32,820	(1,957)	94%
Capital Expenses	58,374	59,100	726	101%
<b>Total Expenses</b>	<b>207,240</b>	<b>202,870</b>	<b>(4,370)</b>	<b>98%</b>
<b>Revenues less Expenses</b>	<b>(2,506)</b>	<b>9,980</b>	<b>12,486</b>	

### REVENUES

- Revenues are projected to be 4 percent above budget primarily due to increased revenue from resource recovery and other capital revenues partially offset by lower than anticipated Wet Weather Facility Charges.

### EXPENSES

- Operating expenses are anticipated to be 3 percent below budget largely driven by lower than anticipated chemical costs and unspent contingency, however, this will be offset by labor costs that will be greater than budgeted.

**FY 2025 Semi-Annual Budget & Performance Report**  
Year-End Projection – Wastewater System

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- Debt service expenses for the full fiscal year are anticipated to be 6 percent less than budget. The budget included a new bond issuance at the start of the fiscal year with semi-annual interest and annual principal payments. New money bonds are expected to be issued in the fourth quarter of FY 2025, resulting in less interest expenses and no principal payment this fiscal year.
- Capital expenses are projected to be \$0.7 million above budget, or 101 percent of the full-year budget. Major spending is expected to continue in Secondary Treatment, among other critical work at the Main Wastewater Treatment Plant.

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## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: February 20, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager *CCC*

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

SUBJECT: Employees' Retirement System Fiscal Year 2024 Update, Actuarial Valuations, and Fiscal Year 2026 Employee and Employer Contribution Rates

### SUMMARY

The pension and retiree healthcare benefits for District employees and retirees are administered by the East Bay Municipal Utility District Employees' Retirement System (the Retirement System). Each year staff provides the Finance/Administration Committee an update on the Retirement System, the annual Actuarial Valuation reports, and the proposed contribution rates for the following fiscal year. This memo provides this information for Fiscal Year (FY) 2024 and the recommended contribution rates for FY 2026. This item will be presented at the February 25, 2025 Finance/Administration Committee meeting.

### DISCUSSION

#### Portfolio Investment Returns

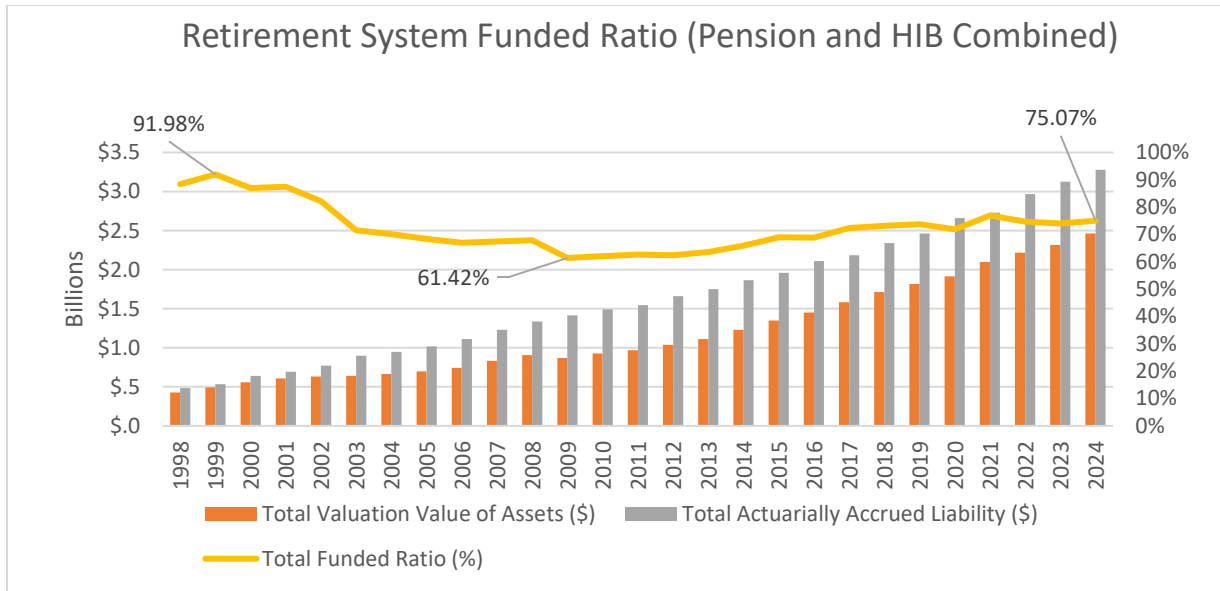
In FY 2024, the Retirement System's portfolio continued a second year of strong results, returning 12.5 percent following a 10.6 percent return in FY 2023. The returns were driven by U.S. equities, with the Retirement System's investment in its Russell 3000 index fund yielding a 23.1 percent return for the year. The portfolio did encounter some headwinds as the real estate portfolio had a weak -1.5 percent return for the year and fixed income returned a modest 3.8 percent. Given the domestic and worldwide geopolitical environment, the markets may be volatile in the coming years, which can positively or negatively affect the Retirement System's returns and funded ratio.

#### Funded Status of the Retirement System

Several factors contributed to a slight increase in funded status of the Retirement System in FY 2024. While strong market return increased the size of the investment portfolio, changes in actuarial assumptions and methodologies increased the Retirement System's unfunded liability. While these changes in assumptions grow the liability, they also make the Retirement System more stable and secure over the long term. The valuation value of the combined pension and

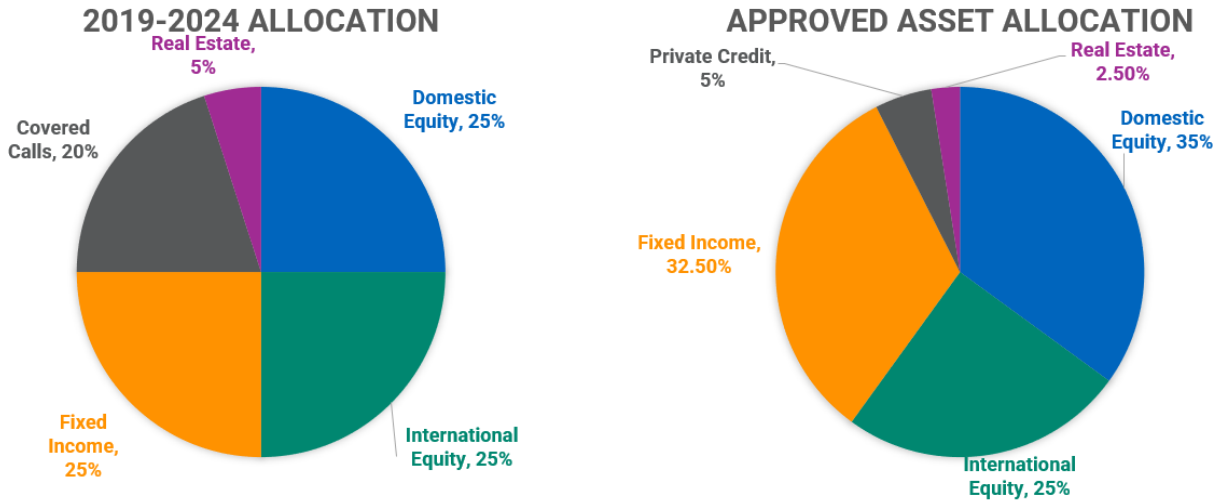
Health Insurance Benefit (HIB) assets increased from \$2.31 billion in FY 2023 to \$2.46 billion in FY 2024, representing growth of 6.3 percent. The Unfunded Actuarial Accrued Liability (UAAL) increased from \$812 million to \$817 million while the combined pension and HIB funded ratio increased from 74.0 percent to 75.1 percent.

Overall, between FY 2023 and FY 2024, the pension funded ratio on a valuation value basis increased from 75.2 percent to 76.1 percent while the HIB funded ratio increased from 47.7 percent to 51.8 percent. After a high of 91.98 percent in 1999 the Retirement System’s funded ratio dropped to a low of 61.42 percent in 2009 after enduring large losses caused by the Dot Com Bubble crash of the early 2000s and the Housing Market Crash of 2008. The Retirement System has made considerable progress on increasing its funded ratio over the last 15 years. The combined pension and HIB funded ratio increased from the low point during the Great Recession to the current 75.1 percent. The chart below shows the historical funded ratio for the Retirement System since 1998.



### Asset Allocation Study

Under its Statement of Investment Policy and Procedures, the Retirement System adopts an updated Asset Allocation Study every five years. This study aims to diversify the Retirement System’s portfolio and minimize portfolio risk by setting allocations to specific asset classes. The Retirement System worked with its investment advisor to undertake a new asset-liability study that was completed at the May 23, 2024 Retirement Board meeting. The Retirement System is eliminating its Covered Calls allocation and increasing its U.S. Equity and Fixed Income allocations. The changes to the portfolio are below:



### Contribution Rates

Under Section 22 of Ordinance No. 40, as amended (the Retirement Ordinance), the District’s Board of Directors commissions actuarial valuations of the pension and HIB funds of the Retirement System and, based on these reports, sets contribution rates to the Retirement System at least once every two years. It has been the practice of the District and Retirement System to adopt actuarial valuations and set rates annually. The Retirement System’s actuary has prepared the attached actuarial valuations. The Retirement Board reviewed and adopted these actuarial valuations at its January 23, 2025 meeting. Additionally, the Retirement Board took action to recommend the Board of Directors adopt employer and employee contribution rates for FY 2026 that are equal to the actuarially determined rates in the valuations.

The actuarial valuations provide the actuarially determined employer contribution rates for both the 1955/1980 and 2013 pension plan tiers and the HIB plan for FY 2026. These rates are presented below along with the rates adopted by the Retirement Board for FY 2025. The supporting actuarial reports are attached.

Actuarially Determined Contribution Rates				
Employer	FY 2026		FY 2025 (Adopted)	
	1955/1980 Plan	2013 Tier	1955/1980 Plan	2013 Tier
Pension	45.43%	35.93%	44.59%	35.80%
HIB	4.43%	4.22%	4.43%	4.27%
<b>Total</b>	<b>49.86%</b>	<b>40.15%</b>	<b>49.02%</b>	<b>40.07%</b>
<b>Member</b>				
Pension	8.66%	10.08%	8.66%	9.41%
HIB	0.09%	0.09%	0.09%	0.09%
<b>Total</b>	<b>8.75%</b>	<b>10.17%</b>	<b>8.75%</b>	<b>9.50%</b>

### **Employer Contribution Rates**

The FY 2026 actuarially determined employer contribution rates for the pension plan in the table above represent increases over those adopted in FY 2025. The increases are due largely to changes to actuarial assumptions and methodology, higher than expected salary increases for active employees, and higher than assumed cost of living adjustments for retirees. The FY 2026 employer contribution rates for the HIB represent a slight decrease from the FY 2025 rate for the 2013 Tier while the 1955/1980 Plan rate stayed the same.

### **Employee Contribution Rates**

For members of the 1955/1980 Plan, the employee contribution rate is set in the Memoranda of Understanding (MOUs) between the District and its employee unions. Under the MOUs, the 1955/1980 Plan employee contribution rate is currently set at 8.75 percent of payroll. Included in this contribution rate is a 0.09 percent contribution to the HIB plan. The employee contribution rate for the 1955/1980 Plan remains unchanged for FY 2026.

For members of the 2013 Tier, the employee rate is calculated based on requirements in the California Public Employees' Pension Reform Act (PEPRA). PEPRA requires employees hired on or after January 1, 2013 (the 2013 Tier) to contribute at least 50 percent of the total Normal Cost to their pension plan. Once the employee contribution rate is set, it is not adjusted until the total Normal Cost rate deviates more than 1 percent (of payroll) from the last established rate. The rate was last changed in FY 2022 as part of the FY 2020 Valuation, when the total Normal Cost rate increased to 18.81 percent and the employee contribution rate increased to 9.41 percent. In this valuation (FY 2024), the total Normal Cost rate for the 2013 Tier has increased to 20.16 percent. Because this represents an increase of greater than 1 percent, the employee contribution rate will increase to 50 percent of the Normal Cost, or to 10.08 percent. The 2013 Tier members contribute an additional 0.09 percent to the HIB plan.

### **Recommendation of the Retirement Board**

At its January 23, 2025 meeting, the Retirement Board took action to adopt the attached actuarial valuations. In addition, the Retirement Board made a recommendation to the Board of Directors to set contribution rates for FY 2026 equal to the actuarially determined rates from the valuations. The table below provides the FY 2026 recommended employer and employee contribution rates, the FY 2026 actuarially determined rates (which match the recommended rates), and the currently adopted FY 2025 rates.

	Staff and Retirement Board Recommended Rates		Actuarially Determined Rates		Adopted Rates	
	FY 2026		FY 2026		FY 2025	
Employer	1955/1980 Plan	2013 Tier	1955/1980 Plan	2013 Tier	1955/1980 Plan	2013 Tier
Pension	45.43%	35.93%	45.43%	35.93%	44.59%	35.80%
HIB	4.43%	4.22%	4.43%	4.22%	4.43%	4.27%
<b>Total</b>	<b>49.86%</b>	<b>40.15%</b>	<b>49.86%</b>	<b>40.15%</b>	<b>49.02%</b>	<b>40.07%</b>
Member						
Pension	8.66%	10.08%	8.66%	10.08%	8.66%	9.41%
HIB	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%
<b>Total</b>	<b>8.75%</b>	<b>10.17%</b>	<b>8.75%</b>	<b>10.17%</b>	<b>8.75%</b>	<b>9.50%</b>

**NEXT STEPS**

Staff will present the FY 2024 actuarial valuations and a recommendation for the Board of Directors to adopt the proposed FY 2026 contribution rates at its February 25, 2025 meeting.

CCC:SDS:SGL

- Attachments: 1. Supplemental Exhibits  
 2. Pension Plan Actuarial Valuation and Review  
 3. HIB Valuation Review of Contribution Rates and Funding Status

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# East Bay Municipal Utility District Employees' Retirement System

**Actuarial Valuation and Review of Pension Plan  
and Health Insurance Benefit Plan  
as of June 30, 2024**

**Supplemental Exhibits**



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**Segal**



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San Francisco, CA 94105-6147  
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T 415.263.8200

January 14, 2025

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

**Re: June 30, 2024 actuarial valuations – supplemental exhibits**

Dear Sophia:

Enclosed please find two exhibits that provide supplemental information to the June 30, 2024 actuarial valuations for the Pension and Health Insurance Benefit (HIB) Plans.

Exhibit A provides a summary of the funding valuation results for both the Pension and HIB Plans. In particular, for the HIB Plan, this information is based on our HIB funding valuation report dated January 14, 2025 that includes a maximum monthly benefit of \$450 (\$550 benefit for a retiree with a spouse or EBMUD domestic partner). It does not include the accounting liability for the “implicit subsidy” associated with the pooling of the health care premium rate for actives and retirees under age 65.

In Exhibit B, we have included a comparison of the historical Projected Benefit Obligations with the market value of assets for both Plans. We look forward to discussing this information with you and the Board.

Sincerely,

Segal

Handwritten signature of Andy Yeung in black ink.

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

Handwritten signature of Emily Klare in black ink.

Emily Klare, ASA, MAAA, EA  
Senior Actuary

Handwritten signature of Mehdi Riazi in black ink.

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

DNA/jl

## Summary of Significant Valuation Results for the Funding Valuations

Category	June 30, 2024	June 30, 2023	Change
<b>1. Total membership</b>			
a. Active members	1,974	1,955	1.0%
b. Pensioners and beneficiaries	2,176	2,117	2.8%
<b>2. Valuation salary<sup>1</sup></b>			
a. Total projected compensation	\$273,428,306	\$262,272,600	4.3%
b. Average projected compensation	138,515	134,155	3.2%
<b>3. Total System assets</b>			
a. Valuation value of Pension Plan assets	\$2,391,378,364	\$2,251,690,803	6.2%
b. Valuation value of HIB Plan assets	69,836,226	62,769,259	11.3%
<b>c. Total valuation value (actuarial value)</b>	<b>\$2,461,214,590</b>	<b>\$2,314,460,062</b>	<b>6.3%</b>
d. Market value of Pension Plan assets	\$2,445,611,000	\$2,194,142,000	11.5%
e. Market value of HIB Plan assets	71,420,000	61,165,000	16.8%
<b>f. Total market value</b>	<b>\$2,517,031,000</b>	<b>\$2,255,307,000</b>	<b>11.6%</b>
<b>4. Unfunded actuarial accrued liability (UAAL) and funding ratio<sup>2</sup></b>			
a. Pension Plan UAAL	\$752,349,976	\$742,738,347	1.3%
b. Pension Plan funded ratio	76.1%	75.2%	0.9%
c. HIB Plan UAAL	\$64,920,252	\$68,858,196	-5.7%
d. HIB Plan funded ratio	51.8%	47.7%	4.1%
e. Pension Plan and HIB Plan UAAL	\$817,270,228	\$811,596,543	0.7%
f. Pension Plan and HIB Plan funded ratio	75.1%	74.0%	1.1%

Note: The HIB information is based on our HIB funding valuation report that includes a maximum monthly benefit of \$450 (\$550 for a retiree with a spouse or EBMUD domestic partner). It does not include the accounting liability for the "implicit subsidy" associated with the pooling of the health care premium rate for actives and retirees under age 65.

<sup>1</sup> Projected payroll.

<sup>2</sup> Based on valuation value of assets.

## Summary of Significant Valuation Results

Category	June 30, 2024	June 30, 2023	Change
<b>5. Projected benefit obligation (PBO) and funded ratio<sup>1</sup></b>			
a. Pension Plan PBO	\$3,067,277,000	\$2,926,665,000	4.8%
b. Pension Plan funded ratio	79.7%	75.0%	4.7%
c. HIB Plan PBO	\$142,381,000	\$138,464,000	2.8%
d. HIB Plan funded ratio	50.2%	44.2%	6.0%
e. Pension Plan and HIB Plan PBO	\$3,209,658,000	\$3,065,129,000	4.7%
f. Pension Plan and HIB Plan funded ratio	78.4%	73.6%	4.8%

Budget Items <sup>2</sup>	FY 2025–2026 1955/1980 Plan	FY 2025–2026 2013 Tier	FY 2025–2026 Combined <sup>3</sup>	FY 2024–2025 1955/1980 Plan	FY 2024–2025 2013 Tier	FY 2024–2025 Combined <sup>3</sup>	Difference 1955/1980 Plan	Difference 2013 Tier	Difference Combined <sup>3</sup>
<b>A. Pension Plan</b>									
1. Total normal cost	28.24%	20.16%	23.79%	27.83%	19.79%	23.40%	0.41%	0.37%	0.39%
2. Employee contributions	8.66% <sup>4</sup>	10.08%	9.44%	8.66% <sup>4</sup>	9.41%	9.07%	0.00%	0.67%	0.37%
3. Employer normal cost (A1 – A2)	19.58%	10.08%	14.35%	19.17%	10.38%	14.33%	0.41%	-0.30%	0.02%
4. UAAL (paid by employer)	25.85%	25.85%	25.85%	25.42%	25.42%	25.42%	0.43%	0.43%	0.43%
<b>5. Total employer contribution (A3 + A4)</b>	<b>45.43%</b>	<b>35.93%</b>	<b>40.20%</b>	<b>44.59%</b>	<b>35.80%</b>	<b>39.75%</b>	<b>0.84%</b>	<b>0.13%</b>	<b>0.45%</b>
<b>B. HIB Plan</b>									
1. Total normal cost	0.97%	0.76%	0.85%	0.95%	0.79%	0.86%	0.02%	-0.03%	-0.01%
2. Employee contributions	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.00%	0.00%	0.00%
3. Employer normal cost (B1 – B2)	0.88%	0.67%	0.76%	0.86%	0.70%	0.77%	0.02%	-0.03%	-0.01%
4. UAAL (paid by employer)	3.55%	3.55%	3.55%	3.57%	3.57%	3.57%	-0.02%	-0.02%	-0.02%
<b>5. Total employer contribution (B3 + B4)</b>	<b>4.43%</b>	<b>4.22%</b>	<b>4.31%</b>	<b>4.43%</b>	<b>4.27%</b>	<b>4.34%</b>	<b>0.00%</b>	<b>-0.05%</b>	<b>-0.03%</b>
<b>C. Total contribution</b>									
1. Employee contribution (A2 + B2)	8.75%	10.17%	9.53%	8.75%	9.50%	9.16%	0.00%	0.67%	0.37%
2. Employer contribution (A5 + B5)	49.86%	40.15%	44.51%	49.02%	40.07%	44.09%	0.84%	0.08%	0.42%

<sup>1</sup> Based on market value of assets.

<sup>2</sup> Contribution rates, payable at the end of each pay period, are expressed as a percentage of projected payroll.

<sup>3</sup> Aggregated based on June 30, 2024 projected annual payroll.

<sup>4</sup> The rate of 8.66% payable during fiscal years 2024/2025 and 2025/2026 is calculated by taking the total employee rate payable beginning April 18, 2016 (i.e., 8.75%), less the HIB employee contribution rate of 0.09%.

Comparison of Projected Benefit Obligation with the Market Value of Assets  
(\$ in thousands)

Actuarial Valuation Date	Projected Benefit Obligation	Market Value of Assets	Funded Ratio
06/30/2002	\$749,113	\$536,449	71.6%
06/30/2003	880,054	545,527	62.0%
06/30/2004	928,434	640,641	69.0%
06/30/2005	999,231	694,590	69.5%
06/30/2006	1,068,966	763,455	71.4%
06/30/2007	1,160,325	911,104	78.5%
06/30/2008	1,289,236	838,614	65.0%
06/30/2009	1,366,207	668,750	48.9%
06/30/2010	1,444,258	769,052	53.2%
06/30/2011	1,498,879	968,239	64.6%
06/30/2012	1,606,973	986,972	61.4%
06/30/2013	1,699,340	1,124,328	66.2%
06/30/2014	1,815,349	1,346,888	74.2%
06/30/2015	1,907,462	1,407,209	73.8%
06/30/2016	2,061,202	1,418,129	68.8%
06/30/2017	2,137,483	1,612,644	75.4%
06/30/2018	2,292,859	1,753,240	76.5%
06/30/2019	2,413,489	1,832,965	75.9%
06/30/2020	2,607,362	1,857,609	71.2%
06/30/2021	2,675,737	2,328,722	87.0%
06/30/2022	2,908,908	2,058,923	70.8%
06/30/2023	3,065,129	2,255,307	73.6%
06/30/2024	3,209,658	2,517,031	78.4%

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# East Bay Municipal Utility District Employees' Retirement System

**Pension Plan Actuarial Valuation and Review  
as of June 30, 2024**



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**Segal**



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January 14, 2025

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

Dear Sophia:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2024 for only the Pension Plan. The Review of Contribution Rates and Funding Status for the Health Insurance Benefit (HIB) Plan is provided in a separate report. This report summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year 2025/2026.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Retirement Board to assist in administering the Plan. The census information and financial information on which our calculations were based was prepared by the East Bay Municipal Utility District Employees' Retirement System (EBMUDERS). That assistance is gratefully acknowledged.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

Ms. Sophia Skoda  
January 14, 2025

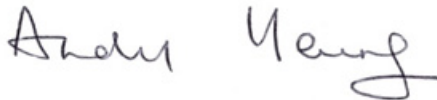
The actuarial calculations were directed under the supervision of Andy Yeung, ASA, MAAA, FCA, EA. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Retirement Board based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of the Plan and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

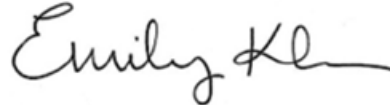
We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal



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



Emily Klare, ASA, MAAA, EA  
Senior Actuary

BTS/jl

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# Section 1: Actuarial Valuation Summary

## Purpose and basis

This report has been prepared by Segal to present a Pension Plan valuation of the East Bay Municipal Utility District Employees' Retirement System ("the System") as of June 30, 2024. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Plan, as administered by the Retirement Board;
- The characteristics of covered active members, inactive members, and retired members and beneficiaries as of June 30, 2024, provided by EBMUDERS;
- The assets of the Plan as of June 30, 2024, provided by EBMUDERS;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Retirement Board for the June 30, 2024 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Retirement Board for the June 30, 2024 valuation; and
- The funding policy adopted by the Retirement Board.

One of the general goals of an actuarial valuation is to establish contributions which fully fund the System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the System's liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the System's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with information from the prior year.

The contribution requirements are determined as a percentage of payroll. The System's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. In this valuation, we have applied the funding

## Section 1: Actuarial Valuation Summary

policy last reviewed and adopted by the Retirement Board on September 22, 2022. Details of the funding policy are provided in *Section 4, Exhibit 1* starting on page 66.

A schedule of current amortization balances and payments may be found in *Section 3, Exhibit G* starting on page 54. A graphical projection of the UAAL amortization balances and payments has been included in *Section 3, Exhibit H* starting on page 56. In the aggregate, the total payment from all the UAAL layers was the same as amortizing the entire UAAL over a period of about 14 years.

The rates calculated in this report may be adopted by the Retirement Board for the fiscal year that extends from July 1, 2025 through June 30, 2026.

## Section 1: Actuarial Valuation Summary

### Valuation highlights

#### Funding measures

1. The results of this valuation reflect the changes in the economic and non-economic actuarial assumptions as well as the methodology used to calculate the normal cost rate for the 2013 Tier as recommended by Segal and adopted by the Board for the June 30, 2024 valuation. These changes were documented in our Actuarial Experience Study Report (dated November 13, 2024) and are also outlined in *Section 4, Exhibit 1* of this report. These changes resulted in an increase in the combined (1955/1980 Plan and 2013 Tier) employer contribution rate of 0.70% of payroll, and employee contribution rate of 0.37% of payroll. (The increase in the 2013 Tier employee rate is 0.67% of payroll.) These changes increased the UAAL by \$25.3 million.
2. The funded ratio (the ratio of valuation value of assets to the actuarial accrued liability) increased from 75.2% to 76.1%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio increased from 73.3% to 77.8%. These measurements are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for, or the amount of, future contributions. A history of the Plan's funded ratios is provided in *Section 2, Subsection G* on pages 35 and 36.

In addition to the type of funded ratios noted above, Section 33 of the Employees' Retirement System Ordinance ("Ordinance") references a funded ratio based on the ratio of the market value of assets to the projected benefit obligation (PBO) for purposes of determining post-retirement cost-of-living adjustments (COLA). As noted in the plan provisions section of this report (*Section 4, Exhibit 2*), the basic minimum COLA benefit is the lesser of 3% and the actual change in the cost-of-living index. Any excess of the actual change in the cost-of-living index over 3% is accumulated in individual retiree COLA banks, and withdrawals from the bank are made in years when the index increases less than 3%. However, increases of up to 5% are granted in years when the Retirement Board determines that the System is more than 85% funded on a PBO basis. In those years when the System is more than 85% funded and the cost-of-living index exceeds 5%, any excess cost-of-living over 5% is accumulated in the COLA bank. Furthermore, effective October 1, 2000, in those years when the system is more than 85% funded on a PBO basis and the cost-of-living is less than 4%, withdrawals from the bank are made to allow cost-of-living increases up to 4%.

For the June 30, 2024 Pension Plan and HIB Plan valuations, we note that the funded ratio on the PBO (and market value) basis is 78.4% for both plans combined, as shown in the Supplemental Exhibits report dated January 14, 2025.

3. The unfunded actuarial accrued liability (the difference between the actuarial accrued liability and the valuation value of assets) increased from \$742.7 million to \$752.3 million. The increase in unfunded actuarial accrued liability (UAAL) is primarily due to changes in actuarial assumptions and methodology, higher than expected salary increases for continuing actives, higher than expected cost-of-living adjustments (COLA), and the anticipated one-year delay in implementing the higher contribution rates

## Section 1: Actuarial Valuation Summary

calculated in the prior valuation, offset somewhat by an investment return on the valuation value (i.e., after asset smoothing) greater than the assumed rate of 6.75% used in the June 30, 2023 valuation. A reconciliation of the System's UAAL from the prior year is provided in *Section 2, Subsection E* on page 29.

A schedule of the current UAAL amortization balances and payments may be found in *Section 3, Exhibit G* starting on page 54. A graphical projection of the UAAL amortization balances and payments is provided in *Section 3, Exhibit H* starting on page 56.

### Actuarial experience

4. The net actuarial loss of \$3.0 million, or 0.10% of actuarial accrued liability, is due to a contribution experience loss of \$2.7 million (or 0.09% of the AAL) and a net experience loss from sources other than investments and contributions of \$9.2 million (0.29% of the AAL), offset somewhat by an investment gain of \$8.9 million (0.28% of the AAL), prior to reflection of assumption and methodology changes, if applicable. The loss from sources other than investment and contribution experience was primarily due to higher than expected salary increases for continuing actives and higher than expected cost-of-living adjustment (COLA) increases for payees, offset somewhat by miscellaneous actuarial gains.
5. The rate of return on the market value of assets was 12.44% for the year ending June 30, 2024. The return on the valuation value of assets was 7.15% for the same period after recognizing a portion of this year's investment gains and a portion of prior years' investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 6.75% used in the June 30, 2023 valuation. This actuarial investment gain (after asset smoothing) decreased the average employer contribution rate by 0.23% of payroll.

### Contributions

6. The aggregate employer rate (if paid at the end of each pay period) calculated in this valuation has increased from 39.75% to 40.20% of payroll. This increase is primarily due to changes in actuarial assumptions and methodology, higher than expected salary increases for continuing actives, higher than expected COLA increases for current retirees and beneficiaries, and the anticipated one-year delay in implementing the higher contribution rates calculated in the prior valuation, offset somewhat by an investment return on the valuation value (i.e., after asset smoothing) greater than the 6.75% used in the June 30, 2023 valuation and higher than expected growth in the total payroll used to amortize the prior year's UAAL contribution amounts. A complete reconciliation of the System's aggregate employer rate is provided in *Section 2, Subsection F* on page 32.
7. There was an increase in the total normal cost rates for both the 1955/1980 Plan and 2013 Tier due to changes in actuarial assumptions and methodology. The portion of the total normal cost paid by 1955/1980 Plan employees remained level at 8.66% since that rate has been set based on bargaining unit contract negotiations in 2013.

## Section 1: Actuarial Valuation Summary

For the June 30, 2023 valuation, the 2013 Tier employee contribution rate remained at 9.41% for the Pension Plan, because the total normal cost rate of 19.79% for this tier as determined in the 2023 valuation remained within 1% of payroll of the total normal cost rate of 18.81% for this tier as determined in the 2020 valuation. (We note that the 2020 valuation was the first time since the initial 2013 CalPEPRA valuation that the change in the total normal rate exceeded the 1% of payroll threshold.)

For the June 30, 2024 valuation, there was an increase in the total normal cost rate for the 2013 Tier to 20.16% due to changes in the assumptions and methodology. As 20.16% has exceeded the 1% of payroll threshold compared to the 18.81%, there is a need to allocate 10.08% (at least 50% of the total normal cost rate) to be paid by the 2013 Tier employees.

8. The aggregate member rate calculated in this valuation has increased from 9.07% to 9.44% of payroll due to the increase in the 2013 Tier employee rate. A complete reconciliation of the System's aggregate member rate is provided in *Section 2, Subsection F* on page 33.
9. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the UAAL and the principal balance. The funding policy adopted by the Retirement Board meets this standard.

### Future expectations

10. The total unrecognized net investment **gain** as of June 30, 2024 is \$55.8 million as compared to an unrecognized net investment **loss** of \$59.2 million in the previous valuation. This net deferred gain of \$55.8 million will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years as shown in *Section 2, Subsection B* on page 22.

The net deferred gain of \$55.8 million represent about 2.2% of the market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$55.8 million net market gain is expected to have an impact on the System's future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows:

- a. If the Pension Plan portion of the net deferred gain was recognized immediately in the valuation value of assets, the funded percentage would increase from 76.1% to 77.8%.  
For comparison purposes, if the Pension Plan portion of the net deferred loss in the June 30, 2023 valuation had been recognized immediately, the funded percentage would have decreased from 75.2% to 73.3%.
- b. If the Pension Plan portion of the net deferred gain was recognized immediately in the valuation value of assets, the average employer contribution rate would decrease from 40.20% to about 38.8% of payroll.  
For comparison purposes, if the Pension Plan portion of the net deferred loss in the June 30, 2023 valuation had been recognized immediately, the average employer contribution rate would have increased from 40.14% to about 41.7% of payroll.

## Section 1: Actuarial Valuation Summary

### Risk

11. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2024. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2024. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
12. Because the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. This potential divergence may have a significant impact on the future financial condition of the plan. We prepared a standalone Risk Assessment report for the Pension Plan dated April 29, 2021 by using membership and financial information as provided in the actuarial valuation as of June 30, 2020. That report includes various deterministic projections of future results under different investment return scenarios based on the assumptions adopted in the quadrennial experience study for the June 30, 2020 valuation.

We understand that the next stand-alone risk assessment report will be performed in 2025 upon the completion of the June 30, 2024 valuation. In the meantime, we have also included a brief discussion of some risks that may affect the Plan in *Section 2, Subsection I*, beginning on page 38.

13. The risk assessment in *Section 2, Subsection I* includes the disclosure of a "Low-Default-Risk Obligation Measure" (LDROM). This disclosure, along with commentary on the significance of the LDROM, is a requirement under Actuarial Standard of Practice No. 4 (ASOP 4) for all pension funding actuarial valuation reports and can be found on page 41.

### GASB

14. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution (ADC) under the System's funding policy and measuring the progress of that funding policy. The Net Pension Liability and Pension Expense under GASB Statements No. 67 and No. 68, for inclusion in the Plan's and employer's financial statements as of June 30, 2024, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.

## Section 1: Actuarial Valuation Summary

### Summary of key valuation results

Average Employer and Member Contributions Calculated as of June 30

Employer and Member Contributions	2024 Contribution Rate	2024 Annual Amount <sup>1</sup>	2023 Contribution Rate	2023 Annual Amount <sup>1</sup>
<b>Employer contribution</b>				
• 1955/1980 Plan	45.43%	\$55,824,550	44.59%	\$54,792,354
• 2013 Tier	35.93%	54,091,875	35.80%	53,896,164
• <b>Combined</b>	<b>40.20%</b>	<b>\$109,916,425</b>	<b>39.75%</b>	<b>\$108,688,518</b>
<b>Member contribution</b>				
• 1955/1980 Plan	8.66% <sup>2</sup>	\$10,641,439	8.66% <sup>2</sup>	\$10,641,439
• 2013 Tier	10.08%	15,175,233	9.41%	14,166,561
• <b>Combined</b>	<b>9.44%</b>	<b>\$25,816,672</b>	<b>9.07%</b>	<b>\$24,808,000</b>

**Note:** Contributions are payable at the end of each pay period.

<sup>1</sup> Estimated based on June 30, 2024 projected annual compensation of \$273,428,306 (that is, \$122,880,363 for the 1955/1980 Plan and \$150,547,943 for the 2013 Tier).

<sup>2</sup> The rate of 8.66% payable during the fiscal years 2024/2025 and 2025/2026 is calculated by taking the total employee rate payable beginning April 18, 2016 (i.e., 8.75%), less the HIB employee contribution rate of 0.09%.

# Section 1: Actuarial Valuation Summary

## Valuation Results as of June 30

Line Description	2024	2023
<b>Actuarial accrued liability</b>		
• Total actuarial accrued liability	\$3,143,728,340	\$2,994,429,150
– Retired members and beneficiaries	2,081,323,619	1,959,982,363
– Inactive members	63,313,175	59,125,354
– Active members	999,091,546	975,321,433
• Normal cost for plan year beginning June 30 <sup>1</sup>	65,051,880	62,314,596
<b>Assets</b>		
• Market value of Pension Plan and HIB Plan assets	\$2,517,031,000	\$2,255,307,000
• Actuarial value of Pension Plan and HIB Plan assets	2,461,214,590	2,314,460,062
• Actuarial value of assets as a percentage of market value of assets	97.8%	102.6%
• Market value of Pension Plan assets (MVA) <sup>2</sup>	2,445,611,000	2,194,142,000
• Valuation value of Pension Plan assets (VVA) <sup>2</sup>	2,391,378,364	2,251,690,803
<b>Funded status</b>		
• Unfunded actuarial accrued liability on market value of assets	\$698,117,340	\$800,287,150
• Funded percentage on MVA basis	77.8%	73.3%
• Unfunded actuarial accrued liability on valuation value of assets	\$752,349,976	\$742,738,347
• Funded percentage on VVA basis	76.1%	75.2%
<b>Key assumptions</b>		
• Net investment return	6.75%	6.75%
• Inflation rate	2.50%	2.50%
• Real across-the-board increase	0.50%	0.50%
• Payroll growth	3.00%	3.00%
• Cost-of-living adjustments	2.75%	2.75%
• Amortization period <sup>3</sup>	20 years	20 years

<sup>1</sup> Adjusted with interest to middle of the year assuming contributions would be paid at the end of each pay period.

<sup>2</sup> Net of HIB Plan assets.

<sup>3</sup> Changes in UAAL as a result of gains or losses for each valuation are amortized over separate 20-year periods. Details on the funding policy are provided in *Section 4, Exhibit 1*.

## Section 1: Actuarial Valuation Summary

### Demographic Data as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number of members	1,974	1,955	1.0%
• Average age	46.9	47.1	-0.2
• Average service	10.9	11.0	-0.1
• Total projected compensation	\$273,428,306	\$262,272,600	4.3%
• Average projected compensation	\$138,515	\$134,155	3.2%
<b>Retired members and beneficiaries</b>			
• Number of members	2,176	2,117	2.8%
– Service retired	1,753	1,704	2.9%
– Disability retired	51	51	0.0%
– Beneficiaries	372	362	2.8%
• Average age	71.7	71.4	0.3
• Average monthly benefit	\$5,930	\$5,752	3.1%
<b>Inactive members</b>			
• Number of members <sup>1</sup>	407	381	6.8%
• Average age	48.0	48.4	-0.4
<b>Total members</b>	<b>4,557</b>	<b>4,453</b>	<b>2.3%</b>

<sup>1</sup> Includes inactive members due a refund of member contributions.

## Section 1: Actuarial Valuation Summary

### Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Input Item	Description
<b>Plan provisions</b>	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
<b>Member information</b>	An actuarial valuation for a plan is based on data provided to the actuary by the System. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
<b>Financial information</b>	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the System. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
<b>Actuarial assumptions</b>	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan members for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of members in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments (if applicable). The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

## Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the System. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If EBMUDERS is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting or tax advice and is not acting as a fiduciary to the Plan. This valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The System should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the System upon delivery and review. The System should notify Segal immediately of any questions or concerns about the final content.

# Section 2: Actuarial Valuation Results

## A. Member information

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups. More detailed information for this valuation year and the preceding valuation can be found in *Section 3, Exhibits A, B, and C.*

### Member Population

As of June 30	Active Members	Inactive Members <sup>1</sup>	Retired Members and Beneficiaries (Pay Status)	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Pay Status to Actives
2015	1,762	239	1,563	1,802	1.02	0.89
2016	1,789	248	1,630	1,878	1.05	0.91
2017	1,802	267	1,713	1,980	1.10	0.95
2018	1,828	284	1,779	2,063	1.13	0.97
2019	1,847	303	1,844	2,147	1.16	1.00
2020	1,903	312	1,905	2,217	1.17	1.00
2021	1,896	327	1,977	2,304	1.22	1.04
2022	1,895	360	2,048	2,408	1.27	1.08
2023	1,955	381	2,117	2,498	1.28	1.08
2024	1,974	407	2,176	2,583	1.31	1.10

<sup>1</sup> Includes inactive members due a refund of member contributions.

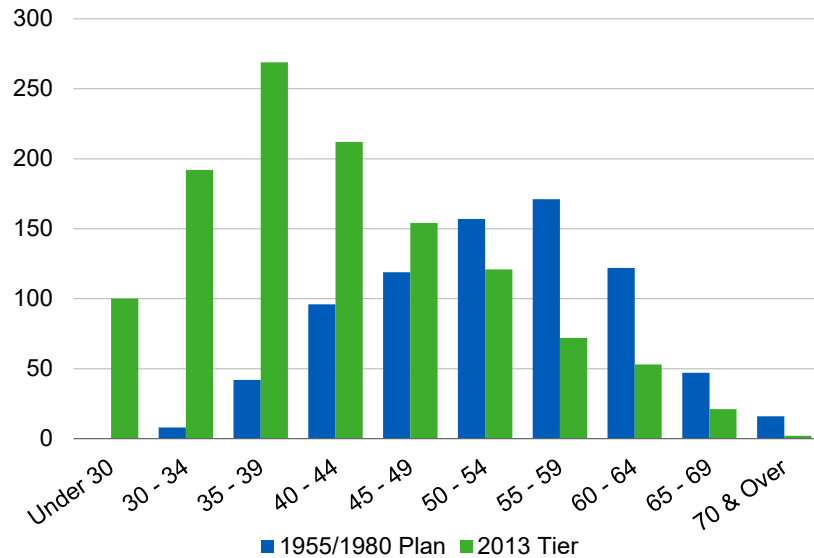
## Section 2: Actuarial Valuation Results

### Active members

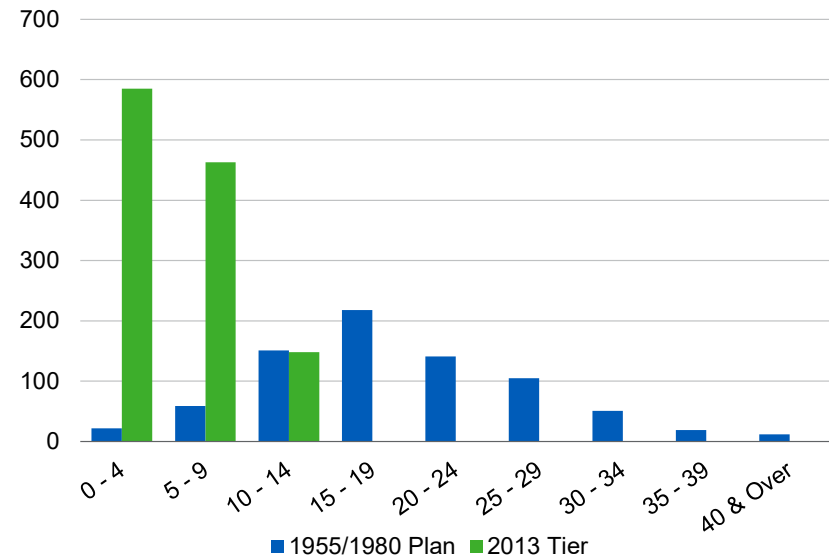
Demographic Data	As of June 30, 2024	As of June 30, 2023	Change
Active members	1,974	1,955	1.0%
Average age <sup>1</sup>	46.9	47.1	-0.2
Average years of service	10.9	11.0	-0.1
Average compensation	\$138,515	\$134,155	3.2%

#### Distribution of Active Members as of June 30, 2024

Actives by Age



Actives by Years of Service



### Inactive members

Demographic Data	As of June 30, 2024	As of June 30, 2023	Change
Inactive members <sup>2</sup>	407	381	6.8%

<sup>1</sup> Among the active members, there were none with unknown age information.

<sup>2</sup> Includes inactive members due a refund of member contributions.

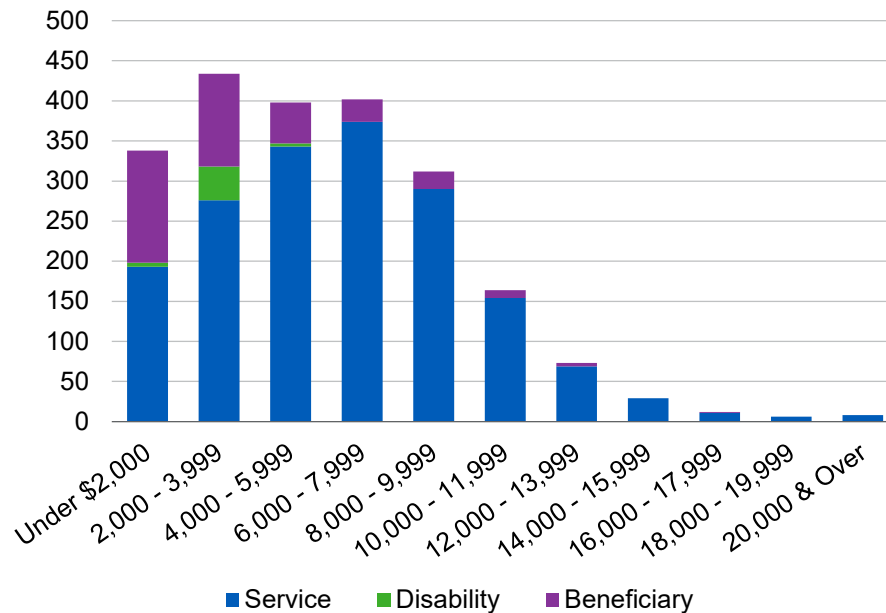
## Section 2: Actuarial Valuation Results

### Retired members and beneficiaries

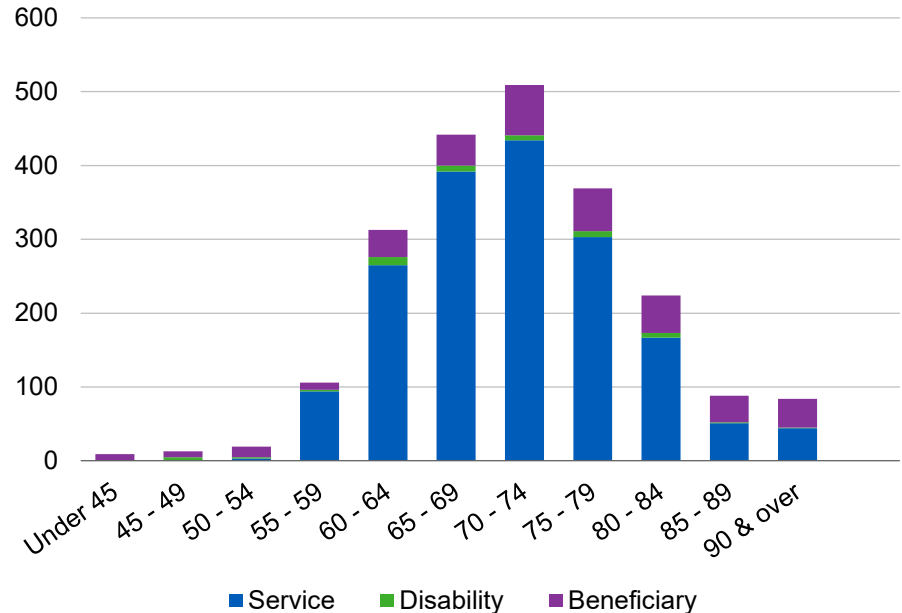
Demographic Data	As of June 30, 2024	As of June 30, 2023	Change
Retired members	1,804	1,755	2.8%
Beneficiaries	372	362	2.8%
Average age	71.7	71.4	0.3
Average monthly amount	\$5,930	\$5,752	3.1%
Total monthly amount	\$12,903,119	\$12,176,254	6.0%

#### Distribution of Retired Members and Beneficiaries as of June 30, 2024

By Type and Monthly Amount



By Type and Age



## Section 2: Actuarial Valuation Results

### Historical plan population

The chart below demonstrates the progression of the active population over the last ten years. The chart also shows the growth among the retired population over the same time period.

#### Member Data Statistics

##### *Active Members versus Retired Members and Beneficiaries (Pay Status)*

As of June 30	Active Count	Active Average Age	Active Average Service	Pay Status Count	Pay Status Average Age	Pay Status Monthly Amount
2015	1,762	48.8	13.7	1,563	70.1	\$4,360
2016	1,789	48.5	13.3	1,630	70.1	4,499
2017	1,802	48.0	12.8	1,713	70.1	4,649
2018	1,828	47.8	12.4	1,779	70.2	4,841
2019	1,847	47.6	12.0	1,844	70.3	5,024
2020	1,903	47.3	11.7	1,905	70.6	5,211
2021	1,896	47.4	11.6	1,977	70.8	5,376
2022	1,895	47.2	11.4	2,048	71.0	5,592
2023	1,955	47.1	11.0	2,117	71.4	5,752
2024	1,974	46.9	10.9	2,176	71.7	5,930

## Section 2: Actuarial Valuation Results

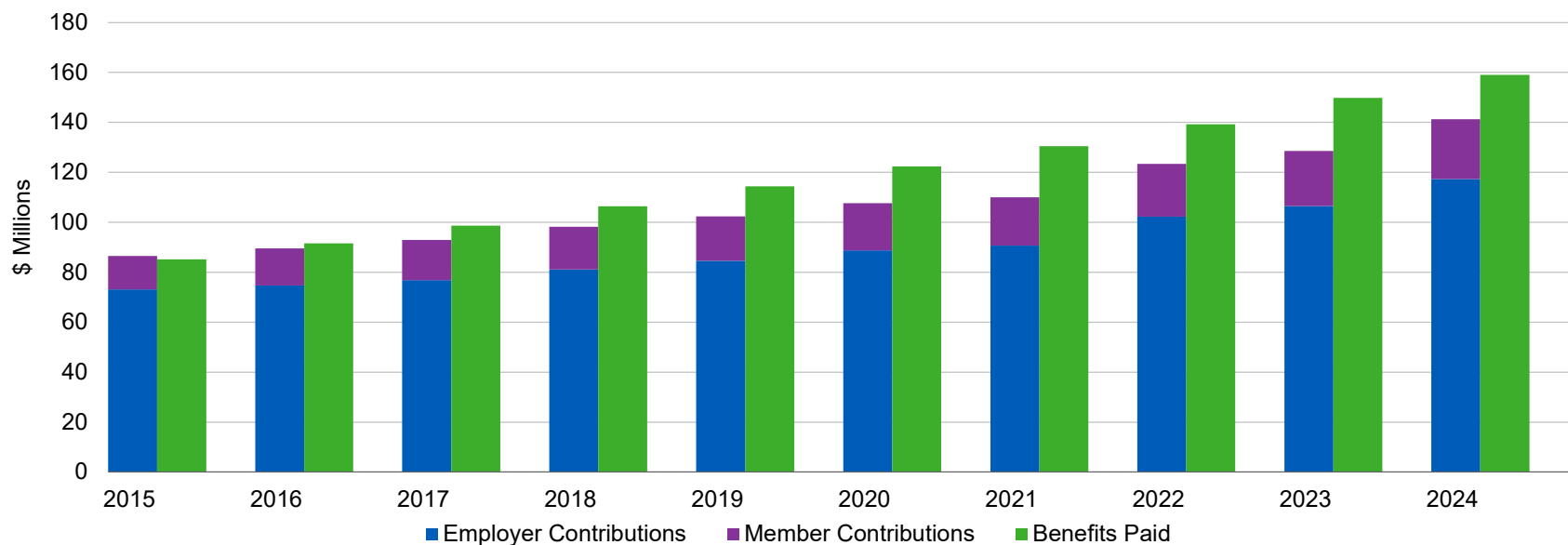
### B. Financial information

Pension plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees) will be needed to cover benefit payments and administrative expenses. Pension plan assets change as a result of the net impact of these income and expense components.

Additional financial information, including a summary of transactions for the valuation year, is presented in *Section 3, Exhibits D, E and F*.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the valuation asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Comparison of Contributions Made with Benefits for Years Ended June 30



## Section 2: Actuarial Valuation Results

### Determination of Actuarial Value and Valuation Value of Assets for Year Ended June 30, 2024

Step	Actual Return	Expected Return	Investment Gain/(Loss)	Percent Deferred	Amount
<b>1. Market value of assets</b>					
a. Pension Plan					\$2,445,611,000
b. HIB Plan					71,420,000
<b>c. Total</b>					<b>\$2,517,031,000</b>
<b>2. Calculation of deferred return</b>					
a. Year ended June 30, 2020	\$39,376,000	\$127,791,930	\$(88,415,930)	0%	\$0
b. Year ended June 30, 2021	491,625,000	129,314,710	362,310,290	20	72,462,058
c. Year ended June 30, 2022	(253,930,000)	162,455,125	(416,385,125)	40	(166,554,050)
d. Year ended June 30, 2023	217,559,000	138,262,646	79,296,354	60	47,577,813
e. Year ended June 30, 2024	279,545,000	151,631,764	127,913,236	80	102,330,589
<b>f. Total deferred return<sup>1</sup></b>					<b>\$55,816,410</b>
<b>3. Preliminary actuarial value of assets: 1c – 2f</b>					<b>\$2,461,214,590</b>
4. Adjustment to be within 30% corridor of market value					0
<b>5. Final actuarial value of assets: 3 + 4:</b>					<b>\$2,461,214,590</b>
<b>6. Actuarial value of assets as a percentage of market value of assets: 5 ÷ 1c</b>					<b>97.8%</b>
<b>7. Valuation value of Pension Plan assets: 1a ÷ 1c × 5</b>					<b>\$2,391,378,364</b>

<sup>1</sup> The total deferred return as of June 30, 2024 is recognized in each of the next four years as follows:

a. Amount recognized on June 30, 2025	\$30,626,951
b. Amount recognized on June 30, 2026	(41,835,107)
c. Amount recognized on June 30, 2027	41,441,918
d. Amount recognized on June 30, 2028	<u>25,582,648</u>
e. Total unrecognized return as of June 30, 2024	\$55,816,410

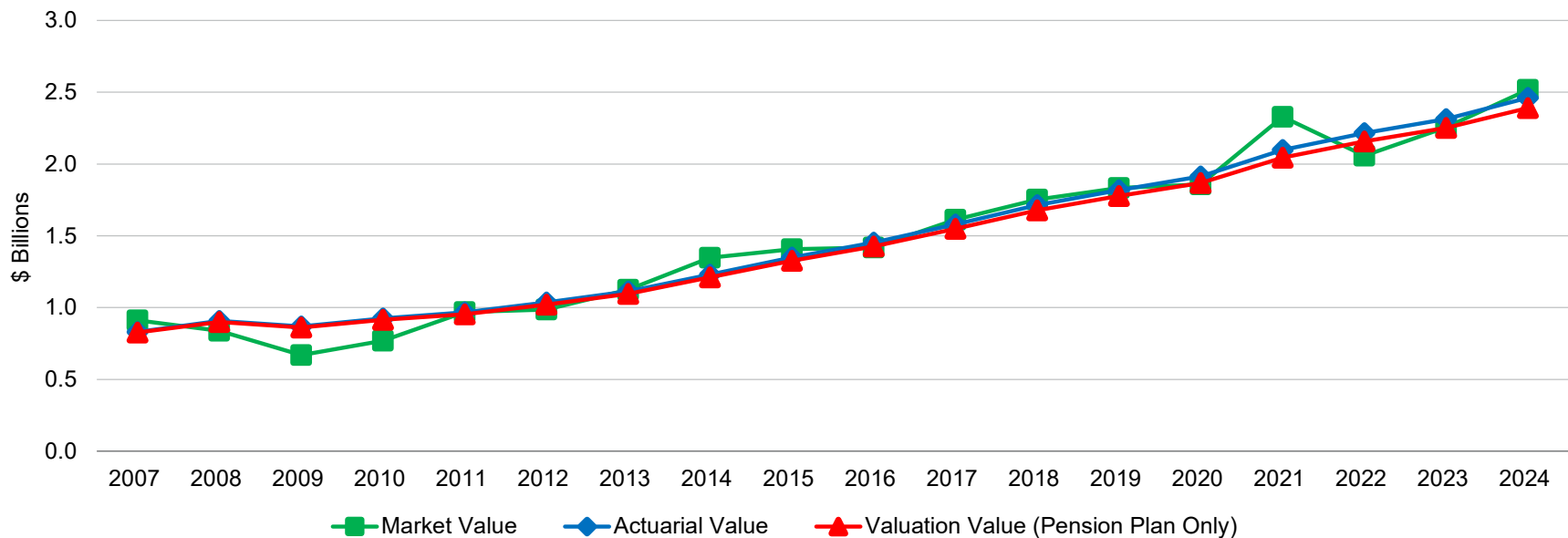
## Section 2: Actuarial Valuation Results

### Asset history

The market value, actuarial value and valuation value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The valuation value of assets is generally the actuarial value, excluding HIB Plan assets.

The valuation value of assets is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

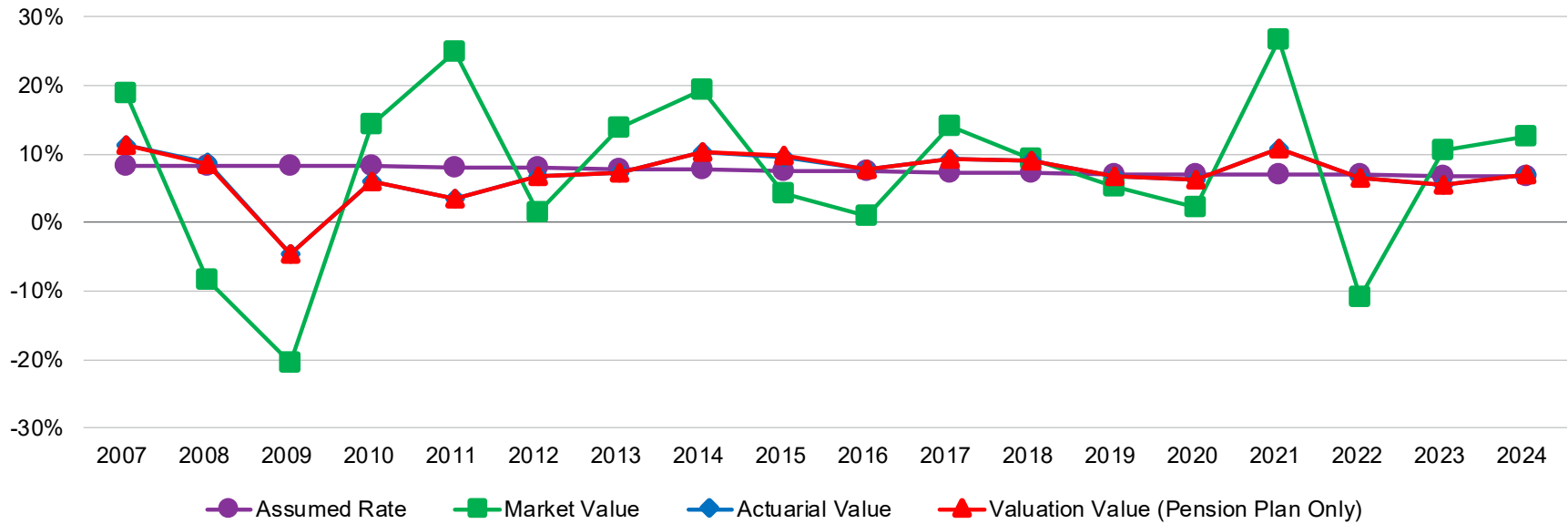
Market Value, Actuarial Value, and Valuation Value (Pension Plan Only) of Assets as of June 30



## Section 2: Actuarial Valuation Results

### Historical investment returns

Market, Actuarial and Valuation Rates of Return for Years Ended June 30



Legend	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
■ Market rate	18.95%	(8.40)%	(20.47)%	14.27%	24.85%	1.57%	13.91%	19.41%	4.37%	0.92%	14.15%	9.25%	5.25%	2.16%	26.61%	(10.94)%	10.62%	12.44%
◆ Actuarial rate	11.31%	8.69%	(4.47)%	5.96%	3.62%	6.76%	7.39%	10.19%	9.67%	7.74%	9.22%	9.00%	6.74%	6.16%	10.71%	6.43%	5.42%	7.14%
▲ Valuation rate	11.33%	8.59%	(4.49)%	5.93%	3.62%	6.75%	7.40%	10.22%	9.68%	7.74%	9.23%	9.01%	6.74%	6.16%	10.74%	6.41%	5.42%	7.15%
● Assumed rate	8.25%	8.25%	8.25%	8.25%	8.00%	8.00%	7.75%	7.75%	7.50%	7.50%	7.25%	7.25%	7.00%	7.00%	7.00%	7.00%	6.75%	6.75%

Average Rates of Return	Market Value	Actuarial Value	Valuation Value
Most recent five-year geometric average return	7.46%	7.16%	7.16%
Most recent 10-year geometric average return	7.07%	7.81%	7.82%
Most recent 15-year geometric average return	9.51%	7.46%	7.46%

## Section 2: Actuarial Valuation Results

### C. Actuarial experience

To calculate any actuarially determined contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the actuarially determined contribution will decrease from the previous year. On the other hand, the actuarially determined contribution will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years. There are no changes in actuarial assumptions reflected in this valuation.

The actuarial experience for the year can be found below and a discussion of the major components can be found on the following pages.

#### Actuarial Experience for Year Ended June 30, 2024

Source	Amount
1. Net gain from investments <sup>1</sup>	\$(8,857,227)
2. Net loss from contributions	2,674,834
3. Net loss from other experience <sup>2</sup>	9,223,629
<b>4. Net experience loss<sup>3</sup></b>	<b>\$3,041,236</b>

<sup>1</sup> Details on next page.

<sup>2</sup> See *Subsection E* for further details. Does not include the effect of plan, method or assumption changes, if any.

<sup>3</sup> The net loss is attributed to actual liability experience from July 1, 2023 through June 30, 2024 compared to the projected experience based on the actuarial assumptions as of June 30, 2023. It does not include the effect of plan or assumption changes as of June 30, 2024, if any.

## Section 2: Actuarial Valuation Results

### Investment experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy.

For valuation purposes, the assumed rate of return on the valuation value of assets is 6.75% based on the June 30, 2023 valuation. The actual rate of return on a valuation basis for the 2023–2024 plan year was 7.15% after recognizing a portion of this year's investment gains and a portion of prior years' investment gains and losses. Since the actual return for the year was more than the assumed return, the Plan experienced an actuarial gain during the year ended June 30, 2024 with regard to its investments.

#### Investment Experience for Year Ended June 30, 2024

Line Description	Valuation Value (Pension Plan assets only)	Actuarial Value (includes Pension and HIB Plan assets)	Market Value (includes Pension and HIB Plan assets)
1. Net investment income	\$160,155,561	\$164,575,528	\$279,545,000
2. Average value of assets	2,241,456,803	2,305,549,562	2,246,396,500
3. Rate of return: $1 \div 2$	7.15%	7.14%	12.44%
4. Assumed rate of return	6.75%	6.75%	6.75%
5. Expected investment income: $2 \times 4$	\$151,298,334	\$155,624,595	\$151,631,764
<b>6. Investment gain/(loss): <math>1 - 5</math></b>	<b>\$8,857,227</b>	<b>\$8,950,933</b>	<b>\$127,913,236</b>

## Section 2: Actuarial Valuation Results

### Contributions

In last year's valuation report, expected contributions for the year ended June 30, 2024 were based on the contribution rates from the June 30, 2023 valuation. However, due to the anticipated one-year delay in implementing the higher contribution rates calculated in that valuation, actual contributions for fiscal year 2023/2024 were based on the contribution rates from the June 30, 2022 valuation. This anticipated delay resulted in a contribution loss of \$2.7 million for the year, when adjusted for timing.

### Other experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among members
- Retirement experience (earlier or later than projected)
- The number of disability retirements (more or fewer than projected)
- Salary increases (greater or smaller than projected), and
- Cost-of-living adjustments (COLAs; higher or lower than anticipated)

The net loss from this other experience for the year ended June 30, 2024 amounted to \$9.2 million, which is 0.29% of the actuarial accrued liability. This loss was mainly due to the effect of higher than expected individual salary increases for actives and higher than anticipated COLA increases for current retirees and beneficiaries. See *Section 2, Subsection E* for a detailed development of the unfunded actuarial accrued liability.

## Section 2: Actuarial Valuation Results

### D. Other changes impacting the actuarial accrued liability

#### Actuarial assumptions and methods

This report reflects assumption and method changes based on the Actuarial Experience Study (dated November 13, 2024) covering the period July 1, 2020 through June 30, 2024.

- The changes in actuarial assumptions and method increased the actuarial accrued liability by \$25.3 million (a 0.81% increase) and increased the total normal cost by \$1.2 million (a 1.85% increase). The changes resulted in an increase in the combined (1955/1980 Plan and 2013 Tier) employer contribution rate of 0.70% of payroll and employee contribution rate of 0.37% of payroll (payable at the end of each pay period.) There was an increase in the 2013 Tier member rate of 0.67% of payroll (payable at the end of each pay period).

Details on actuarial assumptions and methods are in *Section 4, Exhibit 1*.

#### Plan provisions

There were no changes in plan provisions since the prior valuation.

A summary of plan provisions is in *Section 4, Exhibit 2*.

## Section 2: Actuarial Valuation Results

### E. Unfunded actuarial accrued liability

#### Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2024

Line Description	Amount
1. Unfunded actuarial accrued liability at beginning of year	\$742,738,347
2. Total normal cost at beginning of year	60,312,330
3. Expected employer and member contributions at beginning of year	(124,828,990)
4. Interest to end of year	45,779,963
<b>5. Expected unfunded actuarial accrued liability at end of year</b>	<b>\$724,001,650</b>
<b>6. Changes due to:</b>	
a. Investment return greater than expected, after asset smoothing	\$(8,857,227)
b. Anticipated one-year delay in implementing the higher contribution rates calculated in the prior valuation	2,674,834
c. Individual salary increases greater than expected	3,546,248
d. Loss due to higher than expected COLA increases for current retirees and beneficiaries	6,707,822
e. Other gains on demographic experience	(1,030,441)
f. Increase due to change in actuarial assumptions	25,307,090
<b>g. Total changes</b>	<b>\$28,348,326</b>
<b>7. Unfunded actuarial accrued liability at end of year: 5 + 6g</b>	<b>\$752,349,976</b>

**Note:** The “net loss from other experience” of \$9,223,629 from *Subsection C* is equal to the sum of items 6c, 6d and 6e.

## Section 2: Actuarial Valuation Results

### F. Recommended contribution

The recommended contribution is equal to the employer normal cost payment and a payment on the unfunded actuarial accrued liability. As of June 30, 2024, the average recommended employer contribution is 40.20% of payroll.

The Board sets the funding policy used to calculate the recommended contribution based on layered 20-year<sup>1</sup> amortization periods as a level percentage of payroll. See *Section 4, Exhibit 1* for further details on the funding policy. Based on this policy, there is no negative amortization<sup>2</sup> and each amortization layer is fully funded in 20 years. As shown in the graphical projection of the UAAL amortization balances and payments found in *Section 3, Exhibit H*, before taking into consideration the deferred investment gains and/or losses that will be recognized in the next several valuations, the UAAL of the Plan is expected to be fully amortized by 2045,<sup>3</sup> assuming all assumptions are realized and contributions are made in accordance with the funding policy.

The current funding policy is intended to fully fund the cost of the benefits and to allocate the cost of benefits reasonably and equitably over time while minimizing the volatility of employer contributions. The recommended contribution is expected to remain level as a percent of payroll, except when any current amortization layer is fully amortized and assuming there are no future actuarial gains or losses. Furthermore, the funded ratio is expected to increase as the UAAL is methodically funded by employer contributions.

The contribution requirement as of June 30, 2024 is based on the data previously described, the actuarial assumptions and plan provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions.

<sup>1</sup> Changes in UAAL as a result of actuarial gains or losses or as a result of changes in actuarial assumptions or methods (on or after July 1, 2021) for each valuation are amortized over separate 20-year periods. Changes in UAAL as a result of plan changes are amortized over separate 15-year periods.

<sup>2</sup> Negative amortization means that the amortization payment towards the UAAL is less than the interest on the UAAL and therefore the outstanding balance of the UAAL would increase.

<sup>3</sup> The UAAL is expected to be fully amortized later than the 20-year amortization period because of a prior change in assumptions base that was originally established with a 25 year amortization period and which has 21 years remaining as of June 30, 2024.

## Section 2: Actuarial Valuation Results

### Average Recommended Employer Contribution Calculated as of June 30

Line Description	2024 Amount	2024 % of Projected Compensation	2023 Amount	2023 % of Projected Compensation
1. Total normal cost	\$65,051,880	23.79%	\$62,314,596	23.76%
2. Expected member normal cost contributions	25,816,672	9.44%	23,708,690	9.04%
3. Employer normal cost: <b>1 – 2</b>	\$39,235,208	14.35%	\$38,605,906	14.72%
4. Actuarial accrued liability	3,143,728,340		2,994,429,150	
5. Valuation value of assets	2,391,378,364		2,251,690,803	
6. Unfunded actuarial accrued liability: <b>4 – 5</b>	\$752,349,976		\$742,738,347	
7. Payment on UAAL	70,681,217	25.85%	66,669,695	25.42%
<b>8. Average recommended employer contribution: 3 + 7</b>	<b>\$109,916,425</b>	<b>40.20%</b>	<b>\$105,275,601</b>	<b>40.14%</b>
9. Projected payroll	\$273,428,306		\$262,272,600	

**Note:** Contributions are assumed to be paid at the end of each pay period.

## Section 2: Actuarial Valuation Results

### Reconciliation of average recommended employer contribution rate

Reconciliation from June 30, 2023 to June 30, 2024

Item	Contribution Rate	Estimated Annual Dollar Amount <sup>1</sup>
1. Average recommended employer contribution as of June 30, 2023	39.75%	\$108,688,518
<b>2. Changes due to:</b>		
a. Investment return greater than expected after asset smoothing	(0.23)%	(628,885)
b. Effect of anticipated one-year delay in implementing the higher contribution rates calculated in the prior valuation	0.07%	191,400
c. Individual salary increases greater than expected	0.09%	246,085
d. Amortizing prior year's UAAL over a larger than expected total payroll	(0.30)%	(820,285)
e. Higher than expected COLA increases for current retirees and beneficiaries	0.17%	464,828
f. Change in member demographics and other net experience gains	(0.05)%	(139,234)
g. Effect of changes in actuarial assumptions and methodology	0.70%	1,913,998
<b>h. Total change</b>	<b>0.45%</b>	<b>\$1,227,907</b>
<b>3. Average recommended employer contribution as of June 30, 2024: 1 + 2h</b>	<b>40.20%</b>	<b>\$109,916,425</b>

<sup>1</sup> Based on June 30, 2024 projected compensation of \$273,428,306.

## Section 2: Actuarial Valuation Results

### Reconciliation of average recommended member contribution rate

Reconciliation from June 30, 2023 to June 30, 2024

Item	Contribution Rate	Estimated Annual Dollar Amount <sup>1</sup>
1. Average recommended member contribution as of June 30, 2023	9.07%	\$24,808,000
<b>2. Changes due to:</b>		
a. Change in member demographics and effect of changes in actuarial assumptions and methodology <sup>2</sup>	0.37%	1,008,672
<b>b. Total change</b>	<b>0.37%</b>	<b>\$1,008,672</b>
<b>3. Average recommended member contribution as of June 30, 2024: 1 + 2b</b>	<b>9.44%</b>	<b>\$25,816,672</b>

<sup>1</sup> Based on June 30, 2024 projected compensation of \$273,428,306.

<sup>2</sup> There is no change in the 1955/1980 Plan member rate. There is an increase in the 2013 Tier member rate of 0.67% or \$1,008,672.

## Section 2: Actuarial Valuation Results

### Recommended employer contribution rate

Recommended Employer Contribution Calculated as of June 30  
 (% of Payroll; Payable at End of Each Pay Period)

Employer and Member Contributions	2024 Contribution Rate	2024 Estimated Annual Amount <sup>1</sup>	2023 Contribution Rate	2023 Estimated Annual Amount <sup>1</sup>
<b>1955/1980 Plan</b>				
Total normal cost	28.24%	\$34,701,415	27.83%	\$34,197,605
Expected employee contributions	-8.66%	-10,641,439	-8.66%	-10,641,439
Employer normal cost	19.58%	\$24,059,976	19.17%	\$23,556,166
UAAL	25.85%	31,764,574	25.42%	31,236,188
<b>Total employer contribution</b>	<b>45.43%</b>	<b>\$55,824,550</b>	<b>44.59%</b>	<b>\$54,792,354</b>
<b>2013 Tier</b>				
Total normal cost	20.16%	\$30,350,465	19.79%	\$29,793,438
Expected employee contributions	-10.08%	-15,175,233	-9.41%	-14,166,561
Employer normal cost	10.08%	\$15,175,232	10.38%	\$15,626,877
UAAL	25.85%	38,916,643	25.42%	38,269,287
<b>Total employer contribution</b>	<b>35.93%</b>	<b>\$54,091,875</b>	<b>35.80%</b>	<b>\$53,896,164</b>
<b>Combined</b>				
Total normal cost	23.79%	\$65,051,880	23.40%	\$63,991,043
Expected employee contributions	-9.44%	-25,816,672	-9.07%	-24,808,000
Employer normal cost	14.35%	\$39,235,208	14.33%	\$39,183,043
UAAL	25.85%	70,681,217	25.42%	69,505,475
<b>Total employer contribution</b>	<b>40.20%</b>	<b>\$109,916,425</b>	<b>39.75%</b>	<b>\$108,688,518</b>

<sup>1</sup> Amounts are based on the following June 30, 2024 projected annual payroll:

Projected Annual Payroll

Plan	Amount
1955/1980 Plan	\$122,880,363
2013 Tier	150,547,943
<b>Combined</b>	<b>\$273,428,306</b>

## Section 2: Actuarial Valuation Results

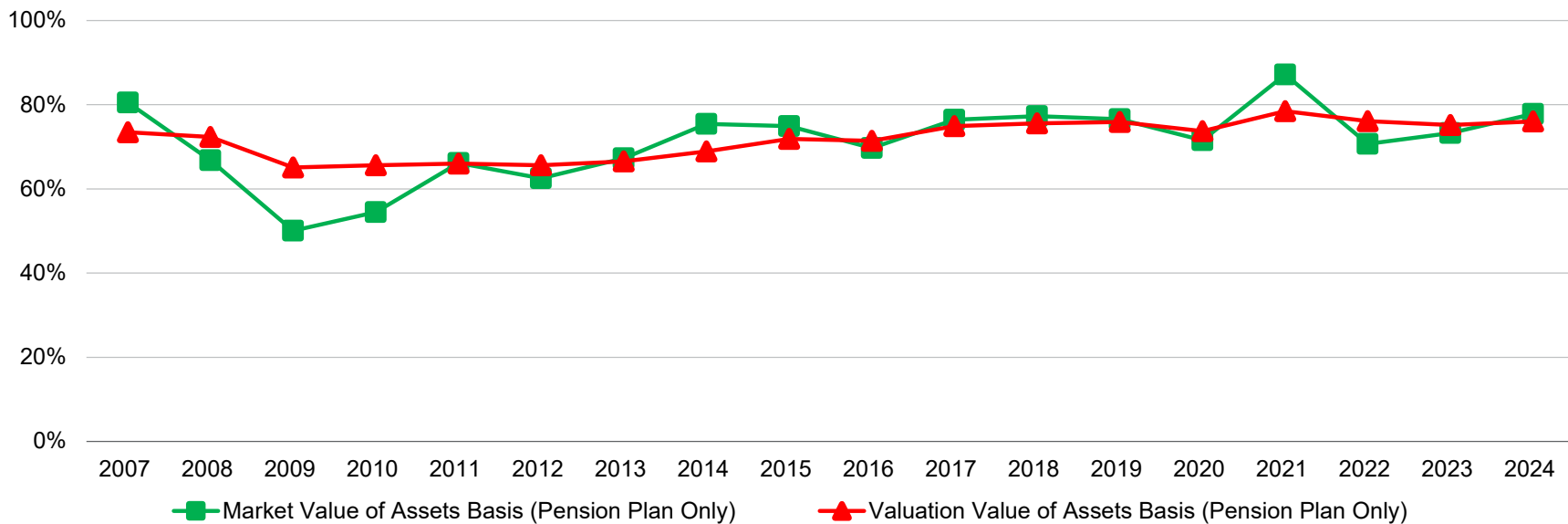
### G. Funded status

A commonly reported piece of information regarding the Plan's financial status is the funded ratio. These ratios compare the market and valuation value of assets to the actuarial accrued liability of the Plan. Higher ratios indicate a relatively well-funded plan while lower ratios may indicate recent changes to actuarial assumptions, funding of the plan below actuarial requirements, poor asset performance, or a variety of other causes.

The chart below depicts a history of the funded ratio for the Plan. The chart on the next page shows the Plan's schedule of funding progress for the last ten years.

The funded status measures shown in this valuation are appropriate for assessing the need for or amount of future contributions. However, they are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. As the chart below shows, the measures are different depending on whether the market or valuation value of assets is used.

Funded Ratio as of June 30



## Section 2: Actuarial Valuation Results

### Schedule of Funding Progress (Dollars in Thousands)

As of June 30	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a) ÷ (b)	Projected Compensation (c)	UAAL as a % of Projected Compensation [(b) – (a)] ÷ (c)
2015	\$1,327,113	\$1,845,912	\$518,799	71.9%	\$174,899	296.6%
2016	1,425,785	1,995,863	570,078	71.4	183,971	309.9
2017	1,549,213	2,068,015	518,802	74.9	184,859	280.6
2018	1,678,417	2,220,977	542,560	75.6	202,995	267.3
2019	1,777,065	2,340,773	563,708	75.9	212,351	265.5
2020	1,868,917	2,535,238	666,321	73.7	224,412	296.9
2021	2,045,503	2,605,614	560,111	78.5	224,392	249.6
2022	2,158,463	2,835,771	677,308	76.1	241,538	280.4
2023	2,251,691	2,994,429	742,738	75.2	262,273	283.2
2024	2,391,378	3,143,728	752,350	76.1	273,428	275.2

## Section 2: Actuarial Valuation Results

### H. Actuarial balance sheet

An overview of the Plan's funding is given by an actuarial balance sheet. In this approach, first the amount and timing of all future payments that will be made by the Plan for current members is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the "liability" of the Plan.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

#### Actuarial Balance Sheet as of June 30

Line Description	2024	2023
<b>Liabilities</b>		
Present value of benefits for retired members and beneficiaries	\$2,081,323,619	\$1,959,982,363
Present value of benefits for inactive members	63,313,175	59,125,354
Present value of benefits for active members	1,562,679,932	1,507,682,199
<b>Total liabilities</b>	<b>\$3,707,316,726</b>	<b>\$3,526,789,916</b>
<b>Current and future assets</b>		
Total valuation value of assets	\$2,391,378,364	\$2,251,690,803
Present value of future contributions by members	249,278,982	216,963,727 <sup>1</sup>
Present value of future employer contributions for:		
• Entry age normal cost	314,309,404	315,397,039 <sup>1</sup>
• Unfunded actuarial accrued liability	752,349,976	742,738,347
<b>Total of current and future assets</b>	<b>\$3,707,316,726</b>	<b>\$3,526,789,916</b>

<sup>1</sup> The present value of future contributions by members has been adjusted to exclude the 0.09% of payroll employee contributions allocated to the HIB Plan. The present value of future employer contributions for entry age normal cost has been adjusted accordingly so that the total of these two items remains unchanged. This reallocation of amounts is for display purposes only and has no effect on the employee and employer contribution rates developed in the June 30, 2023 valuation.

## Section 2: Actuarial Valuation Results

### I. Risk

Because the actuarial valuation results are dependent on a fixed set of assumptions and data as of a specific date, there is risk that emerging results may differ, perhaps significantly, as actual experience is fluid and will not exactly track current assumptions. This potential divergence may have a significant impact on the future financial condition of the plan.

This report does not contain a detailed analysis of the potential range of future measurements but does include a concise discussion of some of the primary risks that may affect the Plan's future financial condition. We recommend a more detailed assessment of the risks to provide the Board with a better understanding of the risks inherent in the Plan that can inform both financial preparation and future decision making. This assessment would enable us to work with the Board to highlight and illustrate particular risks or potential future outcomes they may be interested in discussing and could include scenario testing, sensitivity testing, stress testing and stochastic modeling. As noted in the valuation highlights section of this report the results of our more detailed risk assessment will be provided in a separate stand-alone report.

This section provides descriptions and basic assessments of the primary risks that are likely to have an ongoing influence on the Plan's financial health, as well as a discussion of historical trends and maturity measures:

### Risk assessments

- **Asset/Liability Mismatch Risk** (the potential that future plan experience does not affect asset and liability values in the same way, causing them to diverge)

The most significant asset/liability mismatch risk to the Plan is investment risk, as discussed below. In fact, investment risk has the potential to impact asset/liability mismatch in two ways. The first is evident in annual valuations; when asset values deviate from assumptions they are typically independent from liability changes. The second can be caused when systemic asset deviations from assumptions may signal the need for an assumption change, which causes liability values and contribution rates to move in the opposite direction from any change in the expected experience of asset growth rates.

Asset/liability mismatch can also be caused by demographic assumption risk such as longevity, which affects liabilities but has no impact on asset levels. This risk is also discussed below.

- **Investment Risk** (the risk that investment returns will be different than expected)

The investment return assumption is a long-term, static assumption for valuation purposes even though in reality market experience can be quite volatile in any given year. That volatility can cause significant changes in the financial condition of the Plan, affecting both funded status and contribution rates. The inherent year-to-year volatility is reduced by smoothing through the valuation value of assets, however investment experience can still have a sizable impact. As discussed in *Section 2, Subsection J*,

## Section 2: Actuarial Valuation Results

*Volatility Ratios*, on page 42, a 1% asset gain or loss (relative to the assumed investment return) translates to about 8.9% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.6% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The year-by-year market value rate of return over the last 10 years has ranged from a low of (10.94)% to a high of 26.61%.

- **Longevity Risk** (the risk that mortality experience will be different than expected)

The actuarial valuation includes current life expectancy assumptions and an expectation of future improvement in life expectancy, which are significant assumptions given the relatively long duration of liabilities for pension plans. Emerging plan experience that does not match these expectations will result in increases or decreases in the actuarially determined contribution over time. This risk can be reduced by using tables appropriate for the Plan (public experience tables) that are weighted by benefit levels, and by using generational mortality projections. The Board has adopted mortality tables based on this methodology.

- **Other Risks**

In addition to longevity, the valuation includes a variety of other assumptions that are unlikely to match future experience exactly. One example is projected salary scales over time. As salary is central to the determination of benefits paid in retirement, deviations from the projected salary scales could have a material impact on the benefits anticipated for each member. Examples of other demographic assumptions include retirement, termination and disability assumptions, and will likely vary in significance for different plans.

Some plans also carry significant contribution risk, defined as the potential for actual future contributions deviating from expected future contributions. However, the employer has a proven track-record of making at least the the actuarially determined contributions based on the Board's Actuarial Funding Policy, so contribution risk is minimal.

### Evaluation of historical trends

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past ten years:

- The funded percentage on the valuation value of assets basis has increased from 71.9% to 76.1%. This is primarily due to contributions made to amortize the UAAL under the Board's actuarial funding policy and average recent years' investment return on a smoothed basis greater than the assumption. For a more detailed history see *Section 2, Subsection G, Funded status* starting on page 35.
- The average geometric investment return on the actuarial value of assets over the last 10 years was 7.81%. This includes a high of 10.71% and a low of 5.42%. The average over the last five years is 7.16%. For more details see *Section 2, Subsection B, Historical investment returns* on page 24.

## Section 2: Actuarial Valuation Results

- The primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. For example, the assumption changes in:
  - 2016 included a change in the discount rate from 7.50% to 7.25%, adding \$52.6 million in unfunded liability;
  - 2018 included a change in the discount rate from 7.25% to 7.00%, adding \$12.5 million in unfunded liability;
  - 2020 included the use of amount-weighted mortality tables projected generationally to better reflect future mortality improvement, adding \$104.8 million in unfunded liability;
  - 2022 included a change in the discount rate from 7.00% to 6.75%, adding \$72.1 million in unfunded liability; and
  - 2024 includes changes in demographic assumptions and methodology, adding \$25.3 million in unfunded liability.
- The plan's funding policy effectively deals with these unfunded liabilities over time.<sup>1</sup> This can be seen most clearly in *Section 3, Exhibit H, Projection of UAAL balances and payments* starting on page 56.

### Maturity measures

In the last 10 years the ratio of members in pay status to active participants has increased from 0.89 to 1.10. An increased ratio indicates that the plan has grown in maturity over time. This is to be expected, but is also informative for understanding plan sensitivity to particular risks. For more details see *Section 2, Subsection A, Member information* on page 17.

As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities. Over the past year, benefits paid were \$20.5 million more than contributions received.<sup>2</sup> Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return. However, the Plan currently has a low level of negative cash flow. For more details on historical cash flows see *Section 2, Subsection B, Financial information* on page 21.

A further discussion of plan maturity measures and how they relate to changes in assets and liabilities is included in *Section 2, Subsection J, Volatility ratios* on page 42.

<sup>1</sup> In addition, during the last ten years, the Board had on five occasions elected to continue to carry over the higher employer contribution rates in a previous valuation even though the employer contribution rates would have come down in the absence of such action. The Board made that election for the purpose of accelerating the payment of the UAAL.

<sup>2</sup> Under the Retirement Board's actuarial funding policy, current assets plus the present value of future (employer and member) contributions will always be equal to the present value of benefits expected to be paid by the System. Based on the understanding that the present value of future contributions includes both the amounts required to pay the ongoing normal cost and any unfunded liabilities, it appears that the minimum contribution limit pursuant to Section 12335 of the Public Utilities Code does not apply.

## Section 2: Actuarial Valuation Results

### Low-Default-Risk Obligation Measure (LDRM)

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDRM) when performing a funding valuation. The LDRM presented in this report is calculated using the same methodology and assumptions used to determine the AAL used for funding, except for the discount rate. The LDRM is required to be calculated using “a discount rate...derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future.”

The LDRM is a calculation assuming a plan’s assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in June of the measurement period, by The Bond Buyer, is 3.93% for use effective June 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDRM is not used to determine a plan’s funded status or actuarially determined contribution rates. The plan’s expected return on assets, currently 6.75%, is used for these calculations.

As of June 30, 2024, the LDRM for the Plan is \$4.560 billion.<sup>1</sup> The difference between the Plan’s AAL of \$3.144 billion and the LDRM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the Plan’s diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDRM with respect to the funded status of the plan, plan contributions, and the security of member benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the actuarially determined contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.

<sup>1</sup> For comparison purposes, as of June 30, 2023, the LDRM was \$4.515 billion based on a discount rate of 3.65%, while the Plan’s actuarial accrued liability was \$2.994 billion.

## Section 2: Actuarial Valuation Results

### J. Volatility ratios

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the market value of assets divided by total projected compensation, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measurement since it is based on the current level of assets.

The current AVR is about 8.9. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 8.9% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.6% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The Liability Volatility Ratio (LVR), which is equal to the actuarial accrued liability divided by total projected compensation, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities. For example, if a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

The LVR also indicates how volatile contributions will be in response to changes in the actuarial accrued liability due to actual experience or to changes in actuarial assumptions. The current total Plan LVR is about 11.5. This is about 29% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.

## Section 2: Actuarial Valuation Results

### Volatility Ratios

*Asset Volatility Ratio (AVR) versus Liability Volatility Ratio (LVR)*

<b>As of June 30</b>	<b>Asset Volatility Ratio</b>	<b>Liability Volatility Ratio</b>
2015	7.9	10.6
2016	7.6	10.8
2017	8.6	11.2
2018	8.5	10.9
2019	8.4	11.0
2020	8.1	11.3
2021	10.1	11.6
2022	8.3	11.7
2023	8.4	11.4
2024	8.9	11.5

# Section 3: Supplemental Information

## Exhibit A: Table of plan demographics

### Total Plan – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	1,974	1,955	1.0%
• Average age	46.9	47.1	-0.2
• Average years of service	10.9	11.0	-0.1
• Total projected compensation	\$273,428,306	\$262,272,600	4.3%
• Average projected compensation	\$138,515	\$134,155	3.2%
• Account balances	\$263,198,027	\$248,277,401	6.0%
• Total active vested members	1,367	1,338	2.2%
<b>Inactive members<sup>1</sup></b>			
• Number	407	381	6.8%
• Average age	48.0	48.4	-0.4
<b>Retired members</b>			
• Number	1,753	1,704	2.9%
• Average age	71.4	71.0	0.4
• Average monthly benefit	\$6,531	\$6,332	3.1%
<b>Disabled members</b>			
• Number	51	51	0.0%
• Average age	68.0	67.4	0.6
• Average monthly benefit	\$2,699	\$2,653	1.7%
<b>Beneficiaries</b>			
• Number	372	362	2.8%
• Average age	73.9	73.8	0.1
• Average monthly benefit	\$3,538	\$3,456	2.4%

<sup>1</sup> Includes inactive members due a refund of member contributions.

## Section 3: Supplemental Information

### 1955/1980 Plan — Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	778	856	-9.1%
• Average age	53.6	53.3	0.3
• Average years of service	19.5	18.9	0.6
• Total projected compensation	\$122,880,363	\$129,488,164	-5.1%
• Average projected compensation	\$157,944	\$151,271	4.4%
• Account balances	\$193,280,838	\$192,745,940	0.3%
• Total active vested members	756	825	-8.4%
<b>Inactive members<sup>1</sup></b>			
• Number	204	211	-3.3%
• Average age	53.2	52.9	0.3
<b>Retired members</b>			
• Number	1,742	1,694	2.8%
• Average age	71.4	71.1	0.3
• Average monthly benefit	\$6,564	\$6,363	3.2%
<b>Disabled members</b>			
• Number	51	51	0.0%
• Average age	68.0	67.4	0.6
• Average monthly benefit	\$2,699	\$2,653	1.7%
<b>Beneficiaries</b>			
• Number	372	362	2.8%
• Average age	73.9	73.8	0.1
• Average monthly benefit	\$3,538	\$3,456	2.4%

<sup>1</sup> Includes inactive members due a refund of member contributions.

## Section 3: Supplemental Information

### 2013 Tier — Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	1,196	1,099	8.8%
• Average age	42.5	42.2	0.3
• Average years of service	5.3	4.9	0.4
• Total projected compensation	\$150,547,943	\$132,784,436	13.4%
• Average projected compensation	\$125,876	\$120,823	4.2%
• Account balances	\$69,917,190	\$55,531,461	25.9%
• Total active vested members	611	513	19.1%
<b>Inactive members<sup>1</sup></b>			
• Number	203	170	19.4%
• Average age	42.8	42.8	0
<b>Retired members</b>			
• Number	11	10	10.0%
• Average age	68.3	67.0	1.3
• Average monthly benefit	\$1,345	\$1,161	15.8%
<b>Disabled members</b>			
• Number	N/A	N/A	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit	N/A	N/A	N/A
<b>Beneficiaries</b>			
• Number	N/A	N/A	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit	N/A	N/A	N/A

<sup>1</sup> Includes inactive members due a refund of member contributions.

## Section 3: Supplemental Information

### Exhibit B: Distribution of active members

#### Total Plan

#### Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	17	17	—	—	—	—	—	—	—	—
	\$95,015	\$95,015	—	—	—	—	—	—	—	—
25–29	83	73	10	—	—	—	—	—	—	—
	\$118,065	\$116,341	\$130,656	—	—	—	—	—	—	—
30–34	200	112	65	22	1	—	—	—	—	—
	\$125,758	\$118,413	\$133,340	\$139,771	\$147,299	—	—	—	—	—
35–39	311	148	116	38	9	—	—	—	—	—
	\$128,717	\$117,927	\$135,430	\$145,286	\$149,669	—	—	—	—	—
40–44	308	93	103	65	42	5	—	—	—	—
	\$138,227	\$120,859	\$132,681	\$151,553	\$163,223	\$192,326	—	—	—	—
45–49	273	65	75	56	46	27	4	—	—	—
	\$145,812	\$127,820	\$135,455	\$148,048	\$162,874	\$174,479	\$211,352	—	—	—
50–54	278	50	69	47	36	42	29	5	—	—
	\$145,307	\$129,936	\$135,238	\$144,821	\$153,319	\$161,144	\$158,640	\$174,461	—	—
55–59	243	27	43	35	47	31	35	22	3	—
	\$148,692	\$124,808	\$137,068	\$150,130	\$156,276	\$157,776	\$148,482	\$165,963	\$176,631	—
60–64	175	16	29	28	31	20	25	14	10	2
	\$147,640	\$128,639	\$127,037	\$151,811	\$158,148	\$149,833	\$159,750	\$139,135	\$150,810	\$247,520
65–69	68	5	11	8	4	14	5	9	5	7
	\$141,532	\$127,131	\$112,632	\$127,912	\$159,069	\$126,289	\$137,188	\$167,201	\$170,771	\$182,479
70 and over	18	1	1	—	2	2	7	1	1	3
	\$136,767	\$119,998	\$151,446	—	\$146,926	\$127,415	\$135,316	\$137,201	\$147,690	\$136,525
<b>Total</b>	<b>1,974</b>	<b>607</b>	<b>522</b>	<b>299</b>	<b>218</b>	<b>141</b>	<b>105</b>	<b>51</b>	<b>19</b>	<b>12</b>
	<b>\$138,515</b>	<b>\$120,350</b>	<b>\$133,733</b>	<b>\$147,400</b>	<b>\$158,436</b>	<b>\$158,519</b>	<b>\$154,950</b>	<b>\$159,086</b>	<b>\$159,976</b>	<b>\$181,831</b>

## Section 3: Supplemental Information

### 1955/1980 Plan

#### Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

Age	Total	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40 Years and Over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25-29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30-34	8	—	2	5	1	—	—	—	—	—
	\$142,055	—	\$120,369	\$149,680	\$147,299	—	—	—	—	—
35-39	42	4	10	19	9	—	—	—	—	—
	\$151,383	\$134,794	\$160,138	\$151,078	\$149,669	—	—	—	—	—
40-44	96	5	11	33	42	5	—	—	—	—
	\$162,206	\$153,018	\$139,612	\$165,270	\$163,223	\$192,326	—	—	—	—
45-49	119	5	12	25	46	27	4	—	—	—
	\$166,422	\$200,639	\$144,393	\$160,788	\$162,874	\$174,479	\$211,352	—	—	—
50-54	157	4	15	26	36	42	29	5	—	—
	\$156,569	\$191,066	\$142,703	\$150,617	\$153,319	\$161,144	\$158,640	\$174,461	—	—
55-59	171	3	7	23	47	31	35	22	3	—
	\$157,969	\$164,364	\$179,802	\$158,570	\$156,276	\$157,776	\$148,482	\$165,963	\$176,631	—
60-64	122	1	2	17	31	20	25	14	10	2
	\$156,774	\$238,871	\$140,608	\$162,485	\$158,148	\$149,833	\$159,750	\$139,135	\$150,810	\$247,520
65-69	47	—	—	3	4	14	5	9	5	7
	\$151,046	—	—	\$124,292	\$159,069	\$126,289	\$137,188	\$167,201	\$170,771	\$182,479
70 and over	16	—	—	—	2	2	7	1	1	3
	\$136,897	—	—	—	\$146,926	\$127,415	\$135,316	\$137,201	\$147,690	\$136,525
<b>Total</b>	<b>778</b>	<b>22</b>	<b>59</b>	<b>151</b>	<b>218</b>	<b>141</b>	<b>105</b>	<b>51</b>	<b>19</b>	<b>12</b>
	<b>\$157,944</b>	<b>\$172,895</b>	<b>\$148,999</b>	<b>\$157,555</b>	<b>\$158,436</b>	<b>\$158,519</b>	<b>\$154,950</b>	<b>\$159,086</b>	<b>\$159,976</b>	<b>\$181,831</b>

## Section 3: Supplemental Information

### 2013 Tier

#### Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

Age	Total	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40 Years and Over
Under 25	17	17	—	—	—	—	—	—	—	—
	\$95,015	\$95,015	—	—	—	—	—	—	—	—
25-29	83	73	10	—	—	—	—	—	—	—
	\$118,065	\$116,341	\$130,656	—	—	—	—	—	—	—
30-34	192	112	63	17	—	—	—	—	—	—
	\$125,079	\$118,413	\$133,751	\$136,856	—	—	—	—	—	—
35-39	269	144	106	19	—	—	—	—	—	—
	\$125,178	\$117,458	\$133,099	\$139,493	—	—	—	—	—	—
40-44	212	88	92	32	—	—	—	—	—	—
	\$127,369	\$119,031	\$131,852	\$137,406	—	—	—	—	—	—
45-49	154	60	63	31	—	—	—	—	—	—
	\$129,886	\$121,752	\$133,753	\$137,774	—	—	—	—	—	—
50-54	121	46	54	21	—	—	—	—	—	—
	\$130,694	\$124,621	\$133,165	\$137,644	—	—	—	—	—	—
55-59	72	24	36	12	—	—	—	—	—	—
	\$126,659	\$119,863	\$128,758	\$133,955	—	—	—	—	—	—
60-64	53	15	27	11	—	—	—	—	—	—
	\$126,617	\$121,290	\$126,032	\$135,315	—	—	—	—	—	—
65-69	21	5	11	5	—	—	—	—	—	—
	\$120,240	\$127,131	\$112,632	\$130,084	—	—	—	—	—	—
70 and over	2	1	1	—	—	—	—	—	—	—
	\$135,722	\$119,998	\$151,446	—	—	—	—	—	—	—
<b>Total</b>	<b>1,196</b>	<b>585</b>	<b>463</b>	<b>148</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
	<b>\$125,876</b>	<b>\$118,373</b>	<b>\$131,788</b>	<b>\$137,039</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

## Section 3: Supplemental Information

### Exhibit C: Reconciliation of member data

Line Description	Active Members	Inactive Members <sup>1</sup>	Retired Members	Disabled Members	Beneficiaries	Total
Number as of June 30, 2023	1,955	381	1,704	51	362	4,453
New members	151	0	0	0	25	176
Terminations with vested rights	-44	44	0	0	0	0
Contribution refunds	-14	-15	0	0	0	-29
Retirements	-71	-10	81	0	0	0
New disabilities	0	-1	0	1	0	0
Return to work	2	-2	0	0	0	0
Died with or without beneficiary	-4	-1	-32	-1	-15	-53
Data adjustments	-1	11 <sup>2</sup>	0	0	0	10
<b>Number as of June 30, 2024</b>	<b>1,974</b>	<b>407</b>	<b>1,753</b>	<b>51</b>	<b>372</b>	<b>4,557</b>

<sup>1</sup> Includes inactive members due a refund of member contributions.

<sup>2</sup> These 11 members were hired and terminated during fiscal year 2023/2024.

## Section 3: Supplemental Information

### Exhibit D: Summary of income and expenses on a market value basis for all Pension Plan and HIB Plan assets

Line Description	Year Ended June 30, 2024	Year Ended June 30, 2023
<b>Contribution income</b>		
• Employer contributions	\$117,342,000	\$106,523,000
• Member contributions	23,877,000	22,088,000
– <b>Net contribution income</b>	<b>\$141,219,000</b>	<b>\$128,611,000</b>
<b>Investment income</b>		
• Interest, dividends and other income	\$44,490,000	\$38,553,000
• Asset appreciation	247,042,000	187,897,000
• Less investment and administrative fees	(11,987,000)	(8,891,000)
– <b>Net investment income</b>	<b>\$279,545,000</b>	<b>\$217,559,000</b>
<b>Total income available for benefits</b>	<b>\$420,764,000</b>	<b>\$346,170,000</b>
<b>Less benefit payments</b>		
• Benefits paid	\$(157,771,000)	\$(149,102,000)
• Refund of contributions	(1,269,000)	(684,000)
– <b>Net benefit payments</b>	<b>\$(159,040,000)</b>	<b>\$(149,786,000)</b>
<b>Change in market value of assets</b>	<b>\$261,724,000</b>	<b>\$196,384,000</b>
<b>Net assets at market value at the beginning of the year</b>	<b>\$2,255,307,000</b>	<b>\$2,058,923,000</b>
<b>Net assets at market value at the end of the year</b>	<b>\$2,517,031,000</b>	<b>\$2,255,307,000</b>

**Note:** Results may be slightly off due to rounding.

## Section 3: Supplemental Information

### Exhibit E: Summary statement of plan assets

Line Description	Year Ended June 30, 2024	Year Ended June 30, 2023
<b>Cash equivalents</b>	<b>\$28,791,000</b>	<b>\$27,677,000</b>
<b>Accounts receivable</b>		
• Brokers, securities sold	\$2,068,000	\$2,854,000
• Employer and member contributions	5,584,000	4,493,000
• Interest, dividends and recoverable taxes	5,115,000	4,833,000
– <b>Total accounts receivable</b>	<b>\$12,767,000</b>	<b>\$12,180,000</b>
<b>Investments</b>		
• Equities	\$1,824,973,000	\$1,581,310,000
• Fixed income investments	533,117,000	515,694,000
• Real estate	118,857,000	122,000,000
• Securities lending collateral	106,561,000	77,906,000
• Capital assets	4,240,000	1,692,000
• Prepaid expenses	598,000	575,000
– <b>Total investments at market value</b>	<b>\$2,588,346,000</b>	<b>\$2,299,177,000</b>
<b>Total assets</b>	<b>\$2,629,904,000</b>	<b>\$2,339,034,000</b>
<b>Accounts payable</b>		
• Accounts payable and accrued expenses	\$(2,772,000)	\$(3,224,000)
• Payables to brokers, securities purchased	(3,540,000)	(2,597,000)
• Securities lending collateral	(106,561,000)	(77,906,000)
– <b>Total accounts payable</b>	<b>\$(112,873,000)</b>	<b>\$(83,727,000)</b>
<b>Net assets at market value</b>	<b>\$2,517,031,000</b>	<b>\$2,255,307,000</b>
<b>Net assets at actuarial value</b>	<b>\$2,461,214,590</b>	<b>\$2,314,460,062</b>
<b>Net assets at valuation value (Pension Plan only)</b>	<b>\$2,391,378,364</b>	<b>\$2,251,690,803</b>

**Note:** Results may be slightly off due to rounding.

## Section 3: Supplemental Information

### Exhibit F: Development of the Plan through June 30, 2024 for all Pension Plan and HIB Plan assets

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return <sup>1</sup>	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2015	\$73,141,000	\$13,427,000	\$58,937,000	\$85,184,000	\$1,407,209,000	\$1,350,292,296	96.0%
2016	74,672,000	14,925,000	12,894,000	91,571,000	1,418,129,000	1,452,786,717	102.4%
2017	76,860,000	16,018,000	200,254,000	98,617,000	1,612,644,000	1,580,665,009	98.0%
2018	81,096,000	17,079,000	148,798,000	106,377,000	1,753,240,000	1,714,363,843	97.8%
2019	84,551,000	17,865,000	91,744,000	114,435,000	1,832,965,000	1,817,562,986	99.2%
2020	88,734,000	18,885,000	39,376,000	122,351,000	1,857,609,000	1,914,278,036	103.1%
2021	90,624,000	19,336,000	491,625,000	130,472,000	2,328,722,000	2,097,712,454	90.1%
2022	102,285,000	21,127,000	(253,930,000)	139,281,000	2,058,923,000	2,216,123,725	107.6%
2023	106,523,000	22,088,000	217,559,000	149,786,000	2,255,307,000	2,314,460,062	102.6%
2024	117,342,000	23,877,000	279,545,000	159,040,000	2,517,031,000	2,461,214,590	97.8%

<sup>1</sup> On a market value basis, net of investment and administrative expenses.

## Section 3: Supplemental Information

### Exhibit G: Table of amortization bases

Base Type	Date Established: June 30	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Experience Gain	2000	\$(10,871,830)	30	\$(7,758,087)	6	\$(1,411,304)
Change in Assumptions	2000	8,629,891	30	6,158,253	6	1,120,272
Plan Amendments	2000	13,607,265	30	9,710,082	6	1,766,398
3.5% Retiree COLA Assumption	2000	27,057,441	30	19,308,070	6	3,512,405
Experience Loss	2001	2,292,281	30	1,800,708	7	285,645
Experience Loss	2002	26,232,251	30	22,224,749	8	3,137,959
Plan Amendments	2002	5,111,914	30	4,330,964	8	611,498
Experience Loss	2003	43,692,270	30	39,305,164	9	5,017,415
Plan Amendments	2003	67,138,578	30	60,397,241	9	7,709,879
Experience Loss	2004	32,731,232	30	30,882,544	10	3,608,382
New Assumption / Domestic Partners	2004	(9,812,646)	30	(9,258,421)	10	(1,081,774)
Experience Loss	2005	26,910,233	30	26,367,324	11	2,848,088
Remove Limit Pension Base	2005	27,315,928	30	26,643,190	11	2,877,885
Experience Loss	2006	14,160,133	30	14,291,138	12	1,438,799
Experience Gain	2007	(3,098,126)	30	(3,198,741)	13	(302,231)
Experience Gain	2008	(7,800,585)	30	(8,191,579)	14	(730,610)
Change in Assumptions	2008	51,413,374	30	53,990,404	14	4,815,426
Experience Loss	2009	114,894,458	30	122,105,337	15	10,332,058
Experience Loss	2010	3,039,098	30	3,254,596	16	262,405
Change in Assumptions	2010	8,098,499	30	8,672,752	16	699,249
Experience Loss	2011	4,428,038	30	4,763,753	17	367,368
Experience Gain	2012	(15,668,764)	20	(11,397,941)	8	(1,609,299)

<sup>1</sup> Calculated as a level percentage of payroll, payable at the beginning of the year.

## Section 3: Supplemental Information

Base Type	Date Established: June 30	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Change in Assumptions	2012	\$53,400,521	25	\$50,171,332	13	\$4,740,406
Experience Loss	2013	10,858,322	20	8,413,720	9	1,074,035
Experience Gain	2014	(26,406,581)	20	(21,529,181)	10	(2,515,515)
Change in Assumptions	2014	18,421,049	25	17,926,571	15	1,516,874
Experience Gain	2015	(28,955,525)	20	(24,652,243)	11	(2,662,832)
Experience Gain	2016	(1,408,751)	20	(1,242,271)	12	(125,069)
Change in Assumptions	2016	52,595,760	25	52,346,541	17	4,036,827
Experience Gain	2017	(50,022,788)	20	(45,416,385)	13	(4,291,138)
Experience Loss	2018	14,053,082	20	13,060,113	14	1,164,837
Change in Assumptions	2018	12,484,391	25	12,557,625	19	894,604
Experience Loss	2019	26,728,885	20	25,359,871	15	2,145,849
Experience Loss	2020	5,281,313	20	5,093,424	16	410,662
Change in Assumptions	2020	104,813,640	25	105,919,511	21	7,045,774
Experience Gain	2021	(97,336,901)	20	(95,058,879)	17	(7,330,690)
Experience Loss	2022	56,034,517	20	55,227,826	18	4,087,400
Change in Assumptions	2022	72,119,593	20	71,081,335	18	5,260,715
Experience Loss	2023	80,817,915	20	80,341,240	19	5,723,504
Experience Loss	2024	3,041,236	20	3,041,236	20	209,106
Change in Assumptions	2024	25,307,090	20	25,307,090	20	1,740,040
<b>Total</b>				<b>\$752,349,976</b>		<b>\$68,401,302</b>

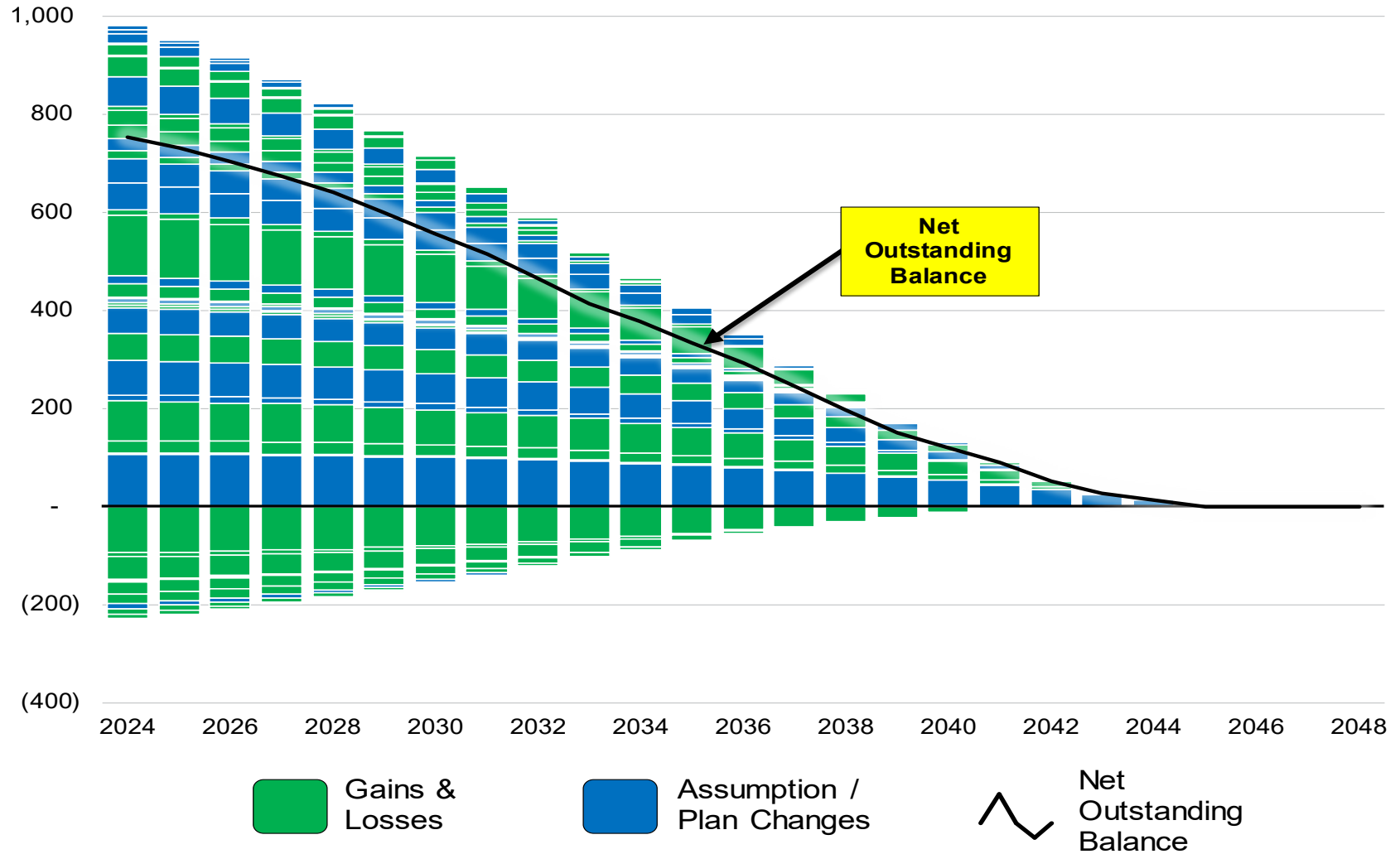
**Note:** The equivalent single amortization period is about 14 years.

<sup>1</sup> Calculated as a level percentage of payroll, payable at the beginning of the year.

## Section 3: Supplemental Information

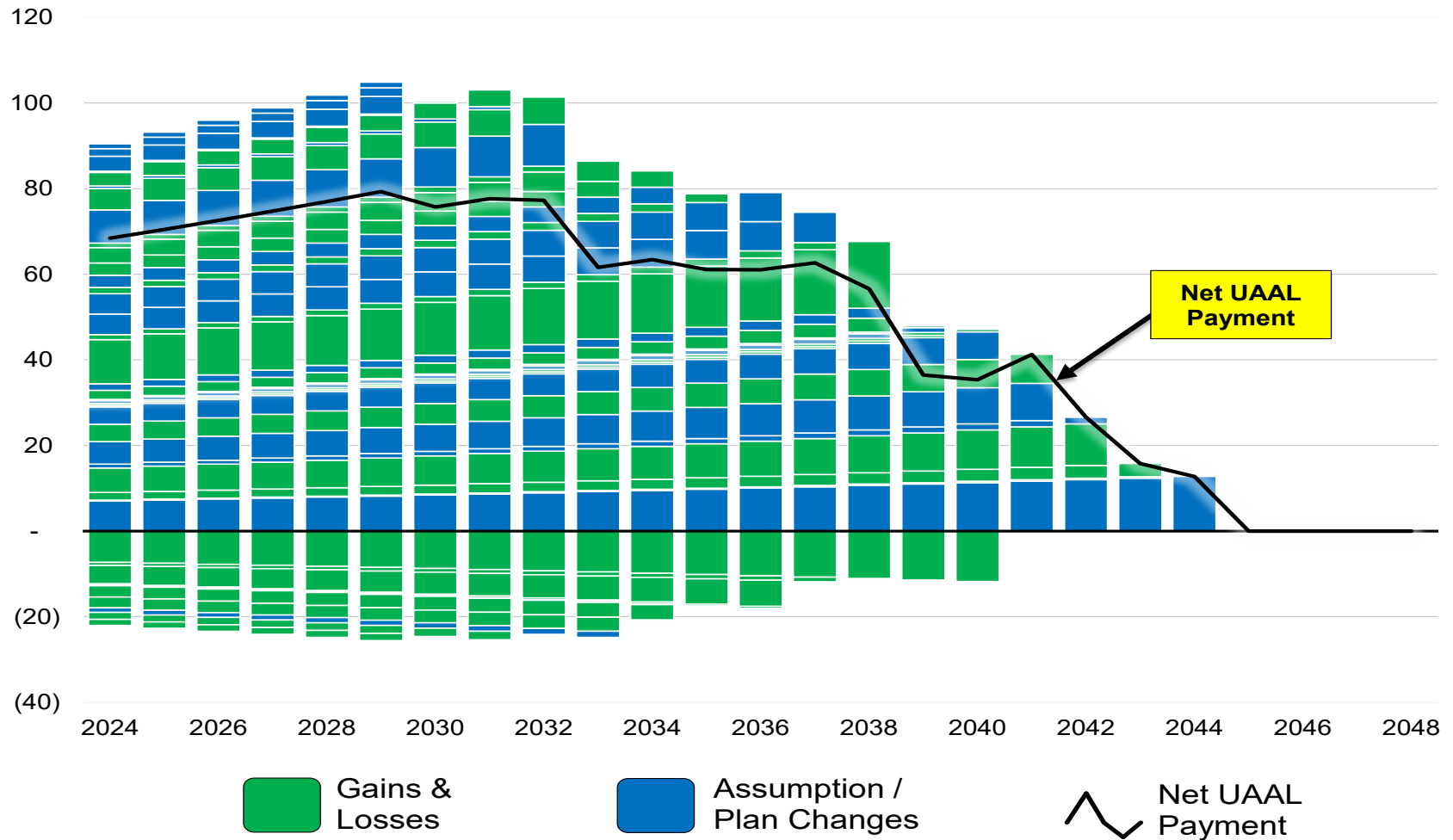
### Exhibit H: Projection of UAAL balances and payments

Outstanding Balance of \$752.3 Million in Net UAAL as of June 30, 2024  
 (\$ in Millions)



## Section 3: Supplemental Information

Annual Payments Required to Amortize \$752.3 Million in Net UAAL as of June 30, 2024  
 (\$ in Millions)



Note: Starting in 2030, the contribution rate for the UAAL would be expected to be somewhat non-level due to the pattern of recognition of the various layers of UAAL payments. We intend to bring back to EBMUDERS in the future a proposal that might be considered by the Board to levelized such UAAL payments.

# Section 4: Actuarial Valuation Basis

## Exhibit 1: Actuarial assumptions, methods and models

### Rationale for assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2020 through June 30, 2024 Actuarial Experience Study report dated November 13, 2024. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both tiers. These assumptions were adopted by the Board.

### Net investment return

6.75%; net of administrative and investment expenses.

Based on the Actuarial Experience Study referenced above, expected administrative and investment expenses represent about 0.15% of the beginning of year actuarial value of assets.

### Employee contribution crediting rate

6.75%, compounded semi-annually.

### Inflation

Increase of 2.50% per year.

### Cost-of-Living Adjustment (COLA)

Retiree COLA increases of 2.75% per year. For members with a sufficient COLA bank, withdrawals from the bank can be made to increase the retiree COLA up to 3.00% per year.

### Payroll growth

Inflation of 2.50% per year plus real “across-the-board” salary increase of 0.50% per year. The payroll growth assumption is used to amortize the unfunded actuarial accrued liability as a level percentage of payroll.

## Section 4: Actuarial Valuation Basis

### Increase in Internal Revenue Code Section 401(a)(17) compensation limit

Increase of 2.50% per year from the valuation date.

### Increase in California Government Code Section 7522.10 compensation limit

Increase of 2.50% per year from the valuation date.

### Salary increases

The annual rate of compensation increase includes:

- Inflation at 2.50%, plus
- “Across-the-board” salary increase of 0.50% per year, plus
- Merit and promotion increase based on time from hire:

#### Merit and Promotion Increases (%)

Time from Hire (Years)	1955/1980 Plan	2013 Tier
Less than 1	6.25	6.50
1–2	6.00	6.25
2–3	5.00	5.25
3–4	3.75	4.25
4–5	2.50	2.75
5–6	1.50	1.75
6–7	1.25	1.25
7–8	1.25	1.25
8–9	1.25	1.25
9–10	1.25	1.25
10–11	1.00	1.00
11–12	1.00	1.00
12–13	0.75	0.75
13–14	0.75	0.75
14–15	0.75	0.75
15 and over	0.75	0.75

## Section 4: Actuarial Valuation Basis

### **Post-retirement mortality rates**

The Pub-2010 mortality tables and adjustments as shown below reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

#### **Healthy**

Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.

#### **Disabled**

Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.

#### **Beneficiary**

##### ***Not in pay status at the valuation***

Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.

##### ***In pay status at the valuation***

Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

## Section 4: Actuarial Valuation Basis

### Pre-retirement mortality rates

Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.

#### Pre-Retirement Mortality Rates (%) – Before Generational Projection from 2010

Age	Male	Female
20	0.04	0.01
25	0.02	0.01
30	0.03	0.01
35	0.04	0.02
40	0.06	0.03
45	0.09	0.05
50	0.13	0.08
55	0.19	0.11
60	0.28	0.17
65	0.41	0.27

## Section 4: Actuarial Valuation Basis

### Disability

#### Disability Incidence Rates (%)

Age	Rate
25	0.000
30	0.006
35	0.016
40	0.080
45	0.126
50	0.136
55	0.146
60	0.156
65	0.166
70	0.170

Disabilities rates are applicable after eight years of service.

## Section 4: Actuarial Valuation Basis

### Termination

#### Termination Rates (%)

Years of Service	1955/1980 Plan	2013 Tier
Less than 1	11.30	8.00
1–2	6.00	4.00
2–3	6.00	3.75
3–4	3.00	3.25
4–5	3.00	3.00
5–6	2.50	2.70
6–7	2.50	2.60
7–8	2.50	2.50
8–9	2.50	2.30
9–10	1.80	2.20
10–11	1.80	2.10
11–12	1.80	2.00
12–13	1.80	1.90
13–14	1.80	1.80
14–15	1.60	1.70
15–16	1.60	1.60
16–17	1.60	1.60
17–18	1.60	1.60
18–19	1.60	1.60
19–20	1.60	1.60
20 and over	1.60	1.60

No termination is assumed after a member is eligible for retirement (as long as a retirement rate is assumed).

## Section 4: Actuarial Valuation Basis

### Retirement rates

#### Retirement Rates (%)

Age	1955/1980 Plan: Unreduced Pension <sup>1</sup>	1955/1980 Plan: Reduced Pension	2013 Tier
52	0.00	0.00	2.00
53	0.00	0.00	2.00
54	50.00	7.00	2.00
55	16.00	7.00	3.00
56	16.00	7.00	3.00
57	16.00	8.00	4.00
58	16.00	8.00	4.00
59	16.00	8.00	6.00
60	16.00	10.00	6.00
61	16.00	10.00	6.00
62	20.00	N/A <sup>2</sup>	10.00
63	20.00	N/A	10.00
64	20.00	N/A	10.00
65	20.00	N/A	20.00
66	24.00	N/A	20.00
67	24.00	N/A	20.00
68	24.00	N/A	20.00
69	24.00	N/A	20.00
70	40.00	N/A	35.00
71	40.00	N/A	35.00
72	40.00	N/A	35.00
73	40.00	N/A	35.00
74	40.00	N/A	35.00
75 and over	100.00	N/A	100.00

<sup>1</sup> For example, a 1955/1980 Plan member age 54 with 30 or more years of service would receive the full 2.60% per year of service accrual.

<sup>2</sup> For ages 62 and over, all 1955/1980 Plan members who are eligible for retirement receive the full 2.60% per year of service accrual.

## Section 4: Actuarial Valuation Basis

### **Retirement age for inactive members**

For current and future inactive vested members, the retirement age assumption is 59.

1955/1980 Plan non-reciprocal members who are currently terminated with less than five years of service and are not vested are assumed to retire at age 65 if they decide to leave their contributions on deposit.

### **Reciprocity**

15% of members who terminate with a vested benefit are assumed to enter a reciprocal system. For reciprocals, 3.75% compensation increases are assumed per annum.

### **Future benefit accruals**

1.0 year of service per year of employment, plus 0.040 years of additional service to anticipate conversion of unused sick leave for each year of employment. As directed by EBMUDERS, this assumption has been applied to active members in the 1955/1980 Plan and the 2013 Tier.

### **Unknown data for members**

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.

### **Percent married/domestic partnership**

For all active and inactive members, 85% of male members and 65% of female members are assumed to be married or with domestic partner at pre-retirement death or retirement.

### **Age and gender of spouse/domestic partner**

For all active and inactive members, male members are assumed to have a female spouse who is 2 years younger than the member and female members are assumed to have a male spouse who is 3 years older than the member.

Since birth dates for non-spouse/non-domestic partner contingent beneficiaries are not provided by EBMUDERS, the age differences noted above also apply to assumed contingent beneficiaries of retired members who chose an optional form of payment at retirement.

## Section 4: Actuarial Valuation Basis

### Form of payment

At retirement, members with spouses or domestic partners are assumed to elect the following form of payment (single members are assumed to elect the Unmodified option):

#### Election Percentage

Form of Payment	Election Percentage
Unmodified or Option 1	55%
Option 2 (100% Continuance)	10%
Option 3 (50% Continuance)	20%
Option 4 (25% Continuance)	15%

### Actuarial cost method

Entry age cost method. Entry age is the age at the member's hire date. Normal cost and actuarial accrued liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation, as if the current benefit formula for each individual has always been in effect (i.e., "replacement life within a tier").

### Actuarial value of assets

Market value of assets (MVA) less unrecognized returns in each of the last five years. Unrecognized returns are equal to the difference between the actual market returns and the expected returns on the market value, and are recognized over a five-year period. The actuarial value of assets (AVA) is limited by a 30% corridor; the AVA cannot be less than 70% of MVA, nor greater than 130% of MVA.

### Valuation value of assets

The proportion of the actuarial value of assets allocated to the Pension Plan, based on the proportion of the MVA attributable to the Pension Plan.

## Section 4: Actuarial Valuation Basis

### Amortization policy

Prior to July 1, 2011, the UAAL from plan changes, assumption changes, and experience gains/losses were amortized over separate decreasing 30-year periods.

On or after July 1, 2011, any new UAAL resulting from plan changes are amortized over separate decreasing 15-year periods; assumption and method changes are amortized over separate decreasing 25-year periods (prior to July 1, 2021); and experience gains/losses are amortized over separate decreasing 20-year periods.

On or after July 1, 2021, assumption and method changes are amortized over separate decreasing 20-year periods.

### Employer contributions

The recommended employer contributions are provided in *Section 2, Subsection F* and consist of two components:

#### Normal Cost

The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution rate is expressed as a level percentage of the member's compensation.

#### Contribution to the Unfunded Actuarial Accrued Liability (UAAL)

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative UAAL) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the System) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual rate of 3.00% (i.e., 2.50% inflation plus 0.50% across-the-board salary increase).

The amortization policy is described above.

## Section 4: Actuarial Valuation Basis

### Member contributions

The member contribution rates are provided in *Section 2, Subsection F*. Accumulation for all members includes crediting of interest at the assumed investment earnings rate.

#### 1955/1980 Plan Members

Employee contribution rates for 1955/1980 Plan members are prescribed in the Ordinance. Effective April 17, 2006, the rate of member retirement contributions is 6.83%, and 6.74% of that rate is allocated to pay pension benefits. The rest, or 0.09%, is used to pay HIB benefits. The Board of Directors may adjust the employee rates solely pursuant to the terms of a negotiated collective bargaining agreement or memorandum of understanding with employee bargaining units.

Based on bargaining unit contract negotiations in 2013, members are contracted to pay the following employee rates (as a percentage of pay) beginning April 22, 2013:

Member Rate			
Effective Date	(a) Total	(b) HIB Plan	(c) = (a) – (b) Pension Plan
April 17, 2006 <sup>1</sup>	6.83% <sup>1</sup>	0.09%	6.74%
April 22, 2013	7.33%	0.09%	7.24%
April 21, 2014	7.83%	0.09%	7.74%
April 20, 2015	8.33%	0.09%	8.24%
April 18, 2016	8.75%	0.09%	8.66%

#### 2013 Tier Members

Pursuant to Section 7522.30(a) of the California Government Code, 2013 Tier members are required to contribute at least 50% of the Normal Cost rate. In addition, Section 7522.30(c) requires that the initial employee contribution rate be rounded to the nearest quarter of 1 percent, unless a greater contribution rate has been agreed to pursuant to Section 7522.30(e). In preparing the initial Normal Cost rates, we assumed that exactly 50% of the Normal Cost would be paid by the new members and we took into account only the requirements of Section 7522.30(c), but not requirements of Section 7522.30(e). In particular, the total Normal Cost rate of 17.56% was determined in the first CalPEPRA valuation, and this total rate has been used through the June 30, 2019 valuation to determine the 50% of the Normal Cost (rounded to one quarter of 1 percent) paid by the employees, or 8.75%.

<sup>1</sup> Pursuant to the Ordinance.

## Section 4: Actuarial Valuation Basis

Pursuant to Section 7522.30(d), each year we have compared the total Normal Cost rates between the current valuation and the initial CalPEPRA valuation since a rate increase (or decrease) of less than 1% of payroll would result in no change to the members' rate. Effective with the June 30, 2020 valuation, the total Normal Cost rate was determined to be 18.81%, which is a change of more than 1% of payroll compared to the rate of 17.56% that was determined in the first CalPEPRA valuation. This was the first time since the first CalPEPRA valuation that the change in the total Normal Cost rate has exceeded the 1% of payroll threshold. Consequently, the member contribution rate for 2013 Tier members was increased to 9.41%, which is 50% of the total Normal Cost rate.

For the June 30, 2024 valuation, the 2013 Tier member contribution rate has increased to 10.08% for the Pension Plan, because the total Normal Cost rate for this tier of 20.16% has exceeded 1% of payroll of the new 18.81% threshold noted above.

As stated in our Actuarial Experience Study Report dated November 12, 2020, once the 1% threshold has been exceeded an adjustment to the members' rate is required as was the case in the June 30, 2020 valuation. Upon consulting with the Retirement System, the final member contribution rate determined in that valuation was calculated without the quarter of 1 percent rounding based on the Retirement System's direction that the rounding does not apply after the initial calculation. However, the rate paid by the employee was rounded to the nearest one/one hundredth of one percent (two decimals) consistent with the rounding methods used throughout the June 30, 2020 valuation report to ensure that the employees would pay at least 50% of the Normal Cost. This practice has been followed for the adjustment in this valuation.

### Internal Revenue Code Section 415

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active members could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$275,000 for 2024. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits for members in the non-CalPEPRA plan in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

## Section 4: Actuarial Valuation Basis

Contribution rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

### Models

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

### Justification for change in actuarial assumptions, methods or models

Based on the July 1, 2020 through June 30, 2024 Actuarial Experience Study, the following actuarial assumptions were changed. Previously, these assumptions were:

#### Salary increases

The annual rate of compensation increase includes:

- Inflation at 2.50%, plus
- “Across-the-board” salary increase of 0.50% per year, plus
- Merit and promotion increase based on time from hire:

## Section 4: Actuarial Valuation Basis

### Merit and Promotion Increases (%)

Time from Hire (Years)	Rate (%)
Less than 1	6.25
1–2	6.00
2–3	5.00
3–4	3.75
4–5	2.50
5–6	1.50
6–7	1.25
7–8	1.25
8–9	1.00
9–10	1.00
10 and over	0.75

### Post-retirement mortality rates

The Pub-2010 mortality tables and adjustments as shown below reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

#### *Healthy*

Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2020.

#### *Disabled*

Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2020.

## Section 4: Actuarial Valuation Basis

### *Beneficiary*

Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

### **Pre-retirement mortality rates**

Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020.

#### Pre-Retirement Mortality Rates (%) – Before Generational Projection from 2010

<b>Age</b>	<b>Male</b>	<b>Female</b>
20	0.04	0.01
25	0.02	0.01
30	0.03	0.01
35	0.04	0.02
40	0.06	0.03
45	0.09	0.05
50	0.13	0.08
55	0.19	0.11
60	0.28	0.17
65	0.41	0.27

## Section 4: Actuarial Valuation Basis

### Disability

#### Disability Incidence Rates (%)

Age	Rate (%)
25	0.000
30	0.006
35	0.022
40	0.084
45	0.150
50	0.170
55	0.182
60	0.220
65	0.288

Disabilities rates are applicable after eight years of service.

## Section 4: Actuarial Valuation Basis

### Termination

#### Less Than Five Years of Service

Years of Service	Rate (%)
Less than 1	6.75
1–2	4.25
2–3	4.00
3–4	3.50
4–5	2.50

#### Five or More Years of Service

Age	Rate (%)
25	2.34
30	2.24
35	2.14
40	2.04
45	1.85
50	1.60
55	1.35
60	1.10

No termination is assumed after a member is eligible for retirement (as long as a retirement rate is assumed).

## Section 4: Actuarial Valuation Basis

### Retirement rates

#### Retirement Rates (%)

Age	1955/1980 Plan: Unreduced Pension <sup>1</sup>	1955/1980 Plan: Reduced Pension	2013 Tier
52	0.00	0.00	1.75
53	0.00	0.00	1.75
54	55.00	7.00	2.75
55	16.00	7.00	4.75
56	16.00	7.00	5.75
57	16.00	7.00	5.75
58	16.00	7.00	5.75
59	16.00	7.00	7.75
60	16.00	7.00	7.75
61	16.00	12.00	10.25
62	16.00	N/A <sup>2</sup>	18.00
63	16.00	N/A	15.00
64	16.00	N/A	9.00
65	16.00	N/A	23.75
66	27.00	N/A	23.75
67	27.00	N/A	32.50
68	27.00	N/A	35.00
69	27.00	N/A	38.75
70 and over	100.00	N/A	100.00

<sup>1</sup> For example, a 1955/1980 Plan member age 54 with 30 or more years of service would receive the full 2.60% per year of service accrual.

<sup>2</sup> For ages 62 and over, all 1955/1980 Plan members who are eligible for retirement receive the full 2.60% per year of service accrual.

## Section 4: Actuarial Valuation Basis

### Future benefit accruals

1.0 year of service per year of employment, plus 0.038 years of additional service to anticipate conversion of unused sick leave for each year of employment. As directed by EBMUDERS, this assumption has been applied to active members in the 1955/1980 Plan and the 2013 Tier.

### Percent married/domestic partnership

For all active and inactive members, 85% of male members and 60% of female members are assumed to be married or with domestic partner at pre-retirement death or retirement.

### Form of payment

At retirement, members with spouses or domestic partners are assumed to elect the following form of payment (single members are assumed to elect the Unmodified option):

#### Election Percentage

Form of Payment	Election Percentage
Unmodified or Option 1	50%
Option 2 (100% Continuance)	10%
Option 3 (50% Continuance)	20%
Option 4 (25% Continuance)	20%

## Section 4: Actuarial Valuation Basis

### Exhibit 2: Summary of plan provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions. If the System should find the plan summary not in accordance with the actual provisions, the System should alert the actuary so they can both be sure the proper provisions are valued.

#### Plan year

July 1 through June 30

#### Census date

June 30

#### Membership eligibility

Membership Tier	Plan Provision
1955/1980 Plan	All employees who first become members before January 1, 2013.
2013 Tier	All employees who first become members on or after January 1, 2013.

#### Final compensation and service for benefit determination

Final Compensation and Service	Plan Provision
<b>Final average compensation</b>	
1955/1980 Plan	Highest two consecutive years of compensation earnable (FAS2).
2013 Tier	Highest thirty-six consecutive months of pensionable compensation (FAS3).
<b>Compensation limit</b>	
1955/1980 Plan	IRC Section 401(a)(17) compensation limit applies to all employees who began membership in EBMUDERS on or after January 1, 1996.
2013 Tier	\$151,446 for 2024

## Section 4: Actuarial Valuation Basis

### Final Compensation and Service

### Plan Provision

#### Service

All members

Years of service (Yrs) are generally based on a member's employment during a period of time in which retirement contributions are deducted from their compensation.

## Normal retirement benefits

### Eligibility for unreduced benefits

Tier	Age and Service Requirement
1955/1980 Plan	Age 65; Age 62 with 5 years of service; Age 59 with 20 years of service; Age 54 with 30 years of service; Other combinations of age and service between ages 54 and 59.
2013 Tier	Age 67 with 5 years of service

## Section 4: Actuarial Valuation Basis

### Unreduced benefit formula

Tier	Benefit formula
<b>1955/1980 Plan</b>	
1955 Formula	2.42% (2.82% if member is credited with District Service on or after January 1, 2004) times Final Compensation per year of service including all service extension credit.
1955/80 Formula	<ul style="list-style-type: none"> <li>• 2.42% (2.82% if member is credited with District Service on or after January 1, 2004) times Final Compensation per year of service up to August 1, 1980 including all service extension credit, plus</li> <li>• 2.20% (2.60% if member is credited with District Service on or after January 1, 2004) times Final Compensation per year of service after August 1, 1980.</li> </ul> <p>Applies to members who elected to convert to the 1980 Formula in 1980.</p>
1955/90 Formula	<ul style="list-style-type: none"> <li>• 2.42% (2.82% if member is credited with District Service on or after January 1, 2004) times Final Compensation per year of service up to January 1, 2000 including all service extension credit, plus</li> <li>• 2.20% (2.60% if member is credited with District Service on or after January 1, 2004) times Final Compensation per year of service after January 1, 2000.</li> </ul> <p>Applies to members who elected to convert to the 1980 Formula in 1989.</p>
1980 Formula	<ul style="list-style-type: none"> <li>• 2.20% (2.60% if member is credited with District Service on or after January 1, 2004) times Final Compensation per year of service including all service extension credit.</li> </ul> <p>Applies to all members hired on or after January 1, 1980.</p>
Service Extension Credit	<ul style="list-style-type: none"> <li>• 2.42% (2.82% if member is credited with District Service on or after January 1, 2004) for members with any service under the 1955 Formula times Final Compensation per year of Service Extension Credit., <b>or</b></li> <li>• 2.20% (2.60% if member is credited with District Service on or after January 1, 2004) for members with service only under the 1980 Formula times Final Compensation per year of Service Extension Credit.</li> </ul> <p>Service extension credit is the number of unused sick leave days credited to a member at the time of retirement converted on a 260-day basis. The number of such days is then doubled for the benefit calculation and for service retirements to meet the early retirement provision of the Ordinance.</p>
<b>2013 Tier</b>	$2.50\% \times \text{FAS3} \times \text{Yrs}$

## Section 4: Actuarial Valuation Basis

### Eligibility for early/reduced benefits

Tier	Age and Service Requirement
1955/1980 Plan	Age 54 with 5 years of service.
2013 Tier	Age 52 with 5 years of service.

### Reductions to benefit formula for early retirement

Tier and Retirement Age	Reduction to benefit formula
<b>1955/1980 Plan</b>	Reduced by 3% per year under the age of eligibility for an unreduced benefit, based on service at retirement, for retirements before age 63 (before age 62 commencing November 1, 2000). Effective July 1, 1999, Service Extension Credit is included in the years of service calculation of service for determining eligibility for unreduced retirement.
<b>2013 Tier</b>	
Age 52	$1.00\% \times \text{FAS3} \times \text{Yrs}$
Age 55	$1.30\% \times \text{FAS3} \times \text{Yrs}$
Age 60	$1.80\% \times \text{FAS3} \times \text{Yrs}$
Age 62	$2.00\% \times \text{FAS3} \times \text{Yrs}$
Age 65	$2.30\% \times \text{FAS3} \times \text{Yrs}$

### Disability benefits

Provision by Tier	Disability Benefit Plan Provision
<b>Eligibility</b>	
All members	Eight years of service (not available for Directors).
<b>Benefit amount</b>	
All members	Greater of: <ul style="list-style-type: none"> <li>• 1.5% times Final Compensation per year of service.</li> <li>• One-third of Final Compensation.</li> </ul>

## Section 4: Actuarial Valuation Basis

### Vesting

Five years of service; must leave contributions on deposit, reciprocal service counts for vesting purposes.

### Pre-retirement death benefits

Provision by Vesting	Pre-Retirement Death Benefit Plan Provision
<b>Eligibility</b>	
All members	None.
Vested members	Eligible for retirement.
<b>Benefit amount</b>	
All members	Lump sum payment of accumulated retirement contributions.
Vested members	50% of the unmodified service retirement benefit to eligible surviving spouse/surviving domestic partner plus the lump sum payment of accumulated retirement contributions.

### Post-retirement death benefit

50% of the unmodified service retirement benefit to surviving spouse or registered domestic partner (tied to the implementation of the AB 205 legislation).

### Post-retirement cost-of-living benefits

Payable July 1 of each year, the basic minimum COLA benefit is the lesser of 3% and the actual change in the cost-of-living index.

Excess of the actual change of cost-of-living index over 3% is accumulated in individual retiree COLA banks.

Withdrawals from the bank are made in years when the index increases less than 3%.

Increases of up to 5% are granted in years when the Retirement Board determines that the System is more than 85% funded on a Projected Benefit Obligation basis. In those years when the System is more than 85% funded and the cost-of-living index exceeds 5%, any excess cost-of-living over 5% is accumulated in the COLA bank.

Effective October 1, 2000, in those years when the system is more than 85% funded on a Projected Benefit Obligation basis and the cost-of-living is less than 4%, withdrawals from the bank are made to allow cost-of-living increases up to 4%.

## Section 4: Actuarial Valuation Basis

### Member contributions

Provision by Tier	Plan Provision
1955/1980 Plan	Effective April 17, 2006, retirement system members contribute at a rate of 6.83% of pay, as prescribed in the Ordinance. Effective April 22, 2013, members are contracted to pay the employee rates (as a percentage of pay) as shown in the table below, based on bargaining unit contract negotiations in 2013
2013 Tier	Initial member contribution rate is set at 50% of the total 2013 Tier Normal Cost rate, rounded to the nearest quarter of 1%. Once established, the member contribution rate will be adjusted annually to reflect the change in the 2013 Tier Normal Cost rate, but only if the change is more than 1% of payroll. Effective with the June 30, 2024 valuation, the member contribution rate for the Pension Plan is 10.08% of pay.

### 1955/1980 Plan schedule of member contribution rates

Effective Date	(a) Total	(b) HIB Plan	(c) = (a) – (b) Pension Plan
April 17, 2006 <sup>1</sup>	6.83% <sup>1</sup>	0.09%	6.74%
April 22, 2013	7.33%	0.09%	7.24%
April 21, 2014	7.83%	0.09%	7.74%
April 20, 2015	8.33%	0.09%	8.24%
April 18, 2016	8.75%	0.09%	8.66%

### Changes in plan provisions

There have been no changes in plan provisions since the prior valuation.

<sup>1</sup> Pursuant to the Ordinance.

# Appendix A: Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Term	Definition
Actuarial accrued liability for actives	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial accrued liability for retirees and beneficiaries	Actuarial present value of lifetime benefits to existing retirees and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial cost method	A procedure allocating the actuarial present value of future benefits to various time periods; a method used to determine the normal cost and the actuarial accrued liability that are used to determine the actuarially determined contribution.
Actuarial gain or loss	A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates. To the extent that actual experience differs from that assumed, actuarial accrued liabilities emerge which may be the same as forecasted or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield actuarial liabilities that are larger than projected.
Actuarially equivalent	Of equal actuarial present value, determined as of a given date and based on a given set of actuarial assumptions.
Actuarial present value	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

## Appendix A: Definition of Pension Terms

Term	Definition
Actuarial present value of future benefits	The actuarial present value of benefit amounts expected to be paid at various future times under a particular set of actuarial assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The actuarial present value of future benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial valuation	The determination, as of a valuation date, of the normal cost, actuarial accrued liability, actuarial value of assets, and related actuarial present values for a plan. An actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Actuarially Determined Contribution (ADC) and the Net Pension Liability (NPL).
Actuarial value of assets	The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution.
Actuarially determined	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.
Actuarially determined contribution	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The actuarially determined contribution consists of the employer normal cost and the amortization payment.
Amortization method	A method for determining the amortization payment. The most common methods used are level dollar and level percentage of payroll. Under the level dollar method, the amortization payment is one of a stream of payments, all equal, whose actuarial present value is equal to the unfunded actuarial accrued liability. Under the level percentage of pay method, the amortization payment is one of a stream of increasing payments, whose actuarial present value is equal to the unfunded actuarial accrued liability. Under the level percentage of pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization payment	The portion of the pension plan contribution, or actuarially determined contribution, that is intended to pay off the unfunded actuarial accrued liability.

## Appendix A: Definition of Pension Terms

Term	Definition
Assumptions or actuarial assumptions	The estimates upon which the cost of the Fund is calculated, including: <b>Investment return</b> — the rate of investment yield that the Fund will earn over the long-term future; <b>Mortality rates</b> — the rate or probability of death at a given age for employees and retirees; life expectancy is based on these rates; <b>Retirement rates</b> — the rate or probability of retirement at a given age or service; <b>Disability rates</b> — the rate or probability of disability retirement at a given age; <b>Withdrawal rates</b> — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; <b>Salary increase rates</b> — the rates of salary increase due to inflation, real wage growth and merit and promotion increases.
Closed amortization period	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc. See “open amortization period.”
Decrements	Those causes/events due to which a member’s status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined benefit plan	A retirement plan in which benefits are defined by a formula based on the member’s compensation, age and/or years of service.
Defined contribution plan	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan’s earnings are allocated to each account, and each member’s benefits are a direct function of the account balance.
Employer normal cost	The portion of the normal cost to be paid by the employer. This is equal to the normal cost less expected member contributions.
Experience study	A periodic review and analysis of the actual experience of the Plan that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified based on recommendations from the Actuary.
Funded ratio	The ratio of the valuation value of assets to the actuarial accrued liability. Plans sometimes also calculate a market funded ratio, using the market value of assets, rather than the valuation value of assets.
GASB 67 and GASB 68	Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.

## Appendix A: Definition of Pension Terms

Term	Definition
Investment return	The rate of earnings of the Fund from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Negative amortization	Negative amortization is a result of an increase in the unfunded actuarial accrued liability when the amortization payment is less than the interest accrued on the unfunded actuarial accrued liability.
Net pension liability	The net pension liability is equal to the total pension liability minus the plan fiduciary net position.
Normal cost	The portion of the actuarial present value of future benefits and expenses, if applicable, allocated to a valuation year by the actuarial cost method. Any payment with respect to an unfunded actuarial accrued liability is not part of the normal cost (see “amortization payment”). For pension plan benefits that are provided in part by employee contributions, normal cost refers to the total of member contributions and employer normal cost unless otherwise specifically stated.
Open amortization period	An open amortization period is one which is used to determine the amortization payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the amortization period.
Plan fiduciary net position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total pension liability	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded actuarial accrued liability	The excess of the actuarial accrued liability over the valuation value of assets. This value may be negative, in which case it may be expressed as a negative unfunded actuarial accrued liability, also called the funding surplus or an overfunded actuarial accrued liability.
Valuation date or actuarial valuation date	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date.
Valuation value of assets	The actuarial value of assets reduced by the value of non-valuation reserves.

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East Bay Municipal Utility District  
Employees' Retirement System

**Health Insurance Benefit Valuation**

**Review of Contribution Rates and Funding Status  
as of June 30, 2024**



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**Segal**



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January 14, 2025

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

Dear Sophia:

We are pleased to submit our Health Insurance Benefit (HIB) Valuation as of June 30, 2024 for the prefunded \$450 (\$550 for a retiree with a spouse or EBMUD domestic partner) monthly health insurance subsidy. The Governmental Accounting Standards Board (GASB) requires employers, such as EBMUD, that pool health insurance premium rates for actives and retirees under age 65 to also calculate the liability associated with such pooled premiums for retirees under age 65 on an accrual basis. While that liability referred to as the implicit subsidy has to be disclosed, it is not required to be prefunded. The contribution rate developed in this report only includes the prefunding requirement for the \$450/\$550 benefit. The obligation required for financial disclosure purposes under GASB Statements No. 74 (plan reporting) and 75 (employer reporting) will be provided in separate reports.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the East Bay Municipal Utility District (EBMUD), based upon information provided by EBMUD.

This valuation is based on financial statements and census data furnished by East Bay Municipal Utility District Employees' Retirement System (EBMUDERS). Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

Ms. Sophia Skoda  
January 14, 2025

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

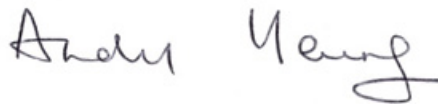
The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, EA and Mehdi Riazi, FSA, MAAA, FCA, EA. The health care trend and other related medical assumptions have been reviewed by Mary Kirby, FSA, MAAA, FCA. We, the undersigned, are members of the American Academy of Actuaries and we meet the qualification requirements to render the actuarial opinion contained herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. The assumptions used in this valuation were those adopted by the Retirement Board based on the results of the recent Actuarial Experience Study (Segal report dated November 13, 2024). We have also applied the medical trend assumptions as recommended in our letter dated November 14, 2024. In our opinion, the combined effect of these assumptions is expected to have no significant bias.

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal



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



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



Mary Kirby, FSA, MAAA, FCA  
Senior Vice President and Chief Health Actuary

TTT/jl

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# Section 1: Actuarial Valuation Summary

## Contribution recommendations and funding status

1. The funded ratio measured on a valuation value of assets basis increased from 47.7% as of June 30, 2023 to 51.8% as of June 30, 2024. The funded ratio increased from 46.5% to 53.0% if measured on a market value of assets basis. The Unfunded Actuarial Accrued Liability (UAAL) decreased from \$68.86 million as of June 30, 2023 to \$64.92 million as of June 30, 2024, on a valuation value of asset basis. This valuation reflects the various assumptions that were adopted by the Retirement Board based on the results of the recent Actuarial Experience Study (Segal report dated November 13, 2024) for experience during the period July 1, 2020 through June 30, 2024. We have also applied the medical trend assumptions as recommended in our letter dated November 14, 2024. The new actuarial assumptions produced a relatively small increase in liabilities of \$1.4 million and an increase in the employer's contribution rate of 0.04% of payroll. Overall, the results of the June 30, 2024 valuation were consistent with the June 30, 2023 valuation results. On a net basis, the increase to the funded ratio and the reduction to the UAAL were both in-line with the expected changes based on the plan's funding policy, as contributions continue to pay down the UAAL.
2. The recommended aggregate employer contribution rate is 4.31% based on the June 30, 2024 valuation. The new rate is 0.03% lower than the 4.34% aggregate rate developed in the June 30, 2023 valuation. The decrease in the contribution rate was mainly attributable to higher payroll growth than expected. Note, the 4.34% aggregate/blended rate has been restated based on projected June 30, 2024 payrolls, which is why it is slightly lower than the 4.35% aggregate rate shown in the June 30, 2023 valuation. We have maintained the allocation of 0.09% of the member contribution to the HIB plan used in last year's valuation.
3. As indicated in Section 2, Subsection B of this report, the total unrecognized investment gain as of June 30, 2024 is \$55.8 million for the assets for the pension and HIB plans (in the previous valuation, this item was a deferred loss of \$59.2 million). This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years. This implies that earning the assumed rate of investment return of 6.75% per year (net of expenses) on a market value basis will produce investment gains on the actuarial value of assets after June 30, 2024. The deferred gains of \$55.8 million represent 2.2% of the market value of assets as of June 30, 2024. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$55.8 million market gains is expected to have an impact on the System's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:
  - If the HIB plan portion of the deferred gains were recognized immediately and entirely in the valuation value of assets, the funded percentage would increase from 51.8% to 53.0%.
  - If the HIB plan portion of the deferred gains were recognized immediately and entirely in the valuation value of assets, the aggregate recommended employer rate would decrease from 4.31% to about 4.27% of payroll.

## Section 1: Actuarial Valuation Summary

4. This report assumes the HIB subsidy limit will remain at the current levels of \$450/\$550. Future increases in the HIB subsidy limit will increase the cost of the plan as a percent of pay.
5. The following tables summarizes the contribution rate recommendations for the employer and the employee:

Employer	June 30, 2024 Total Rate <sup>1</sup>	June 30, 2024 Estimated Annual Amount <sup>2</sup>	June 30, 2023 Total Rate <sup>1</sup>	June 30, 2023 Estimated Annual Amount <sup>2</sup>
1955/1980 Plan	4.43%	\$5,440,000	4.43%	\$5,444,000
2013 Tier	4.22%	6,351,000	4.27%	6,428,000
<b>Combined</b>	<b>4.31%</b>	<b>\$11,791,000</b>	<b>4.34%</b>	<b>\$11,872,000</b>

Member	June 30, 2024 Total Rate <sup>1</sup>	June 30, 2024 Estimated Annual Amount <sup>2</sup>	June 30, 2023 Total Rate <sup>1</sup>	June 30, 2023 Estimated Annual Amount <sup>2</sup>
1955/1980 Plan	0.09%	\$111,000	0.09%	\$111,000
2013 Tier	0.09%	135,000	0.09%	135,000
<b>Combined</b>	<b>0.09%</b>	<b>\$246,000</b>	<b>0.09%</b>	<b>\$246,000</b>

6. The following table compares the valuation value of assets and liabilities for the Health Insurance Benefit as of June 30, 2024 and June 30, 2023:

	June 30, 2024	June 30, 2023
1. Valuation Value of Assets	\$69,836,226	\$62,769,259
2. Actuarial Accrued Liabilities:		
a. Current Recipients	100,354,837	97,330,438
b. Future Recipients	34,401,641	34,297,017
c. Total	\$134,756,478	\$131,627,455
3. Liabilities minus Valuation Value of Assets: (2) – (1)	\$64,920,252	\$68,858,196
4. Funding Ratio (1) ÷ (2)	51.82%	47.69%

<sup>1</sup> Payable at the end of each pay period.

<sup>2</sup> Based on June 30, 2024 projected annual payroll of:

1955/1980 Plan	\$122,880,363
2013 Tier	<u>150,547,943</u>
Combined	\$273,428,306

## Section 1: Actuarial Valuation Summary

### Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of an OPEB plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Input Item	Description
<b>Plan of benefits</b>	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may provide health benefits to post-65 retirees that coordinates with Medicare. If so, changes in the Medicare law or administration may change the plan's costs without any change in the terms of the plan itself. It is important for the System to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
<b>Participant data</b>	An actuarial valuation for a plan is based on data provided to the actuary by the System. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a “perfect” result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
<b>Assets</b>	This valuation is based on the market value of assets as of the valuation date, as provided by the System. For funding purposes, the System uses an “Actuarial Value of Assets” that differs from the market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
<b>Actuarial assumptions</b>	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. To determine the future costs of benefits, Segal collects claims, premiums, and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost trend rates to project increases in costs in future years. This forecast also requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan's benefits for each of those events. The forecasted benefits are then discount to a present value based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model necessarily uses approximations and estimates that may lead to significant changes in our results but will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

## Section 1: Actuarial Valuation Summary

Input Item	Description
<b>Models</b>	<p>Segal results are based on proprietary actuarial modeling software. The valuation models generate a comprehensive set of liability and cost calculations that are presented to meet actuarial standards and client requirements. Our Actuarial Technology and Systems unit, comprising both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.</p> <p>Our claims costs assumptions are based on proprietary modeling software as well as models that were developed by others. These models generate per capita claims cost calculations that are used in our valuation software. Our Health Technical Services Unit, comprised of actuaries and programmers, is responsible for the initial development and maintenance of our health models. They are also responsible for testing models that we purchase from other vendors for reasonableness. The client team inputs the paid claims, enrollments, plan provisions and assumptions into these models and reviews the results for reasonableness, under the supervision of the responsible actuary.</p>

## Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared for use by the Board. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- If the Board is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- An actuarial valuation is a measurement at a specific date – it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
- Sections of this report include actuarial results that are not rounded, but that does not imply precision.
- Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in plan enrollment, emerging claims experience, health care trend, and investment losses, not just the current valuation results.
- Segal does not provide investment, legal, accounting, or tax advice and is not acting as a fiduciary to the Plan. This valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the System upon delivery and review. The System should notify Segal immediately of any questions or concerns about the final content.

# Section 2: Actuarial Valuation Results

## A. Introduction

Pursuant to Section 36 of the Ordinance, the Retirement Board is authorized to administer a Health Insurance Benefit (HIB) through an IRC Section 401(h) account. The HIB may be used for the payment of sickness, accident, hospitalization, and medical expenses as permitted under the IRC and as authorized by the Retirement Board. In particular, the Retirement Board has authorized the use of the HIB towards the payment of medical insurance premiums.

This report does not provide information required for disclosure under GASB Statements 74 and 75. Such information will be provided in separate reports.

In this valuation, we have used a layered amortization approach to determine the contribution rate to fund the Unfunded Actuarial Accrued Liability (UAAL).

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, through June 30, 2021, plan changes are amortized over separate decreasing 15-year periods; assumption changes from the experience study 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. On or after July 1, 2021, assumption changes from the experience study or interim review of the economic assumptions are amortized over 20 years. The above payments would continue to be expressed as a level percent of a growing payroll base.

The cost of the HIB is funded by both employer and employee contributions. The contribution rates for the employer are calculated to provide for the ongoing normal cost, plus any amounts necessary to fund any shortfall between the valuation value of assets and the actuarial accrued liabilities.

A summary of the Health Insurance Benefit provisions is displayed in Section 4, Exhibit 2.

## Section 2: Actuarial Valuation Results

### B. Determination of actuarial value of assets

To minimize volatility in the calculation of the Actuarially Determined Contribution, the Board has approved an asset valuation method that gradually adjusts to market value over a five-year period. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

#### Determination of Actuarial Value of Assets for Year Ended June 30, 2024 (for Pension and HIB plans)

Items	Actual Return	Expected Return	Investment Gain / (Loss)	Percent Deferred	Return
<b>1. Market value of assets</b>					
<b>a. Pension plan</b>					<b>\$2,445,611,000</b>
<b>b. HIB plan</b>					<b>71,420,000</b>
<b>c. Total</b>					<b>\$2,517,031,000</b>
<b>2. Calculation of unrecognized return</b>					
a. Year ended June 30, 2020	\$39,376,000	\$127,791,930	\$(88,415,930)	0%	\$0
b. Year ended June 30, 2021	491,625,000	129,314,710	362,310,290	20%	72,462,058
c. Year ended June 30, 2022	(253,930,000)	162,455,125	(416,385,125)	40%	(166,554,050)
d. Year ended June 30, 2023	217,559,000	138,262,646	79,296,354	60%	47,577,813
e. Year ended June 30, 2024	279,545,000	151,631,764	127,913,236	80%	102,330,589
f. Total unrecognized return <sup>1</sup>					\$55,816,410
<b>3. Preliminary actuarial value: (1c) - (2f)</b>					<b>\$2,461,214,590</b>
4. Adjustment to be within 30% corridor of market value					0
<b>5. Final actuarial value of assets for pension and HIB plans: (3) + (4)</b>					<b>\$2,461,214,590</b>
6. Actuarial value as a percentage of market value: (5) ÷ (1c)					97.8%
<b>7. Valuation value of HIB plan assets: (1b) x (5) ÷ (1c)</b>					<b>\$69,836,226</b>

<sup>1</sup> Deferred return as of June 30, 2024 that will be recognized in each of the next four years (amounts may not total exactly due to rounding):

(a) Amount recognized on June 30, 2025	\$30,626,951
(b) Amount recognized on June 30, 2026	(41,835,107)
(c) Amount recognized on June 30, 2027	41,441,918
(d) Amount recognized on June 30, 2028	<u>25,582,647</u>
(e) Total unrecognized return as of June 30, 2024	\$55,816,410

## Section 2: Actuarial Valuation Results

### C. Funding status

The funding of the Health Insurance Benefit comes from the following sources:

1. The valuation value of HIB assets, which equals \$69,836,226 as of June 30, 2024;
2. Contributions from the employer; and
3. Contributions from the employees.

The following table provides the funding status of the Health Insurance Benefit as of June 30, 2024 and June 30, 2023:

Item	June 30, 2024	June 30, 2023
1. Valuation Value of Assets	\$69,836,226	\$62,769,259
2. Actuarial Accrued Liabilities:		
• Current Recipients	100,354,837	97,330,438
• Future Recipients	34,401,641	34,297,017
• Total	\$134,756,478	\$131,627,455
3. Liabilities minus Valuation Value of Assets: (2) – (1)	\$64,920,252	\$68,858,196
4. Funding Ratio (1) ÷ (2)	51.82%	47.69%

The contribution requirements are determined based on the Entry Age Funding Method. The excess of the actuarial accrued liability over assets (Item 3 in the above table) is amortized as a level percentage of payroll for current active members. The employer contribution rates are derived on the following page.

## Section 2: Actuarial Valuation Results

### D. Recommended contribution

The amount of annual contribution required to fund the HIB is comprised of a net employer normal cost payment and a payment on the unfunded actuarial accrued liability. This total amount is then divided by the projected payroll for active members to determine the contribution rate of 4.31% of payroll for this year's valuation compared to 4.34% of payroll recommended for last year's valuation. The 4.34% aggregate rate from June 30, 2023 has been restated based on projected June 30, 2024 payrolls, which is why it is slightly lower than the 4.35% aggregate rate shown in the June 30, 2023 valuation.

#### Recommended Contribution (% of Payroll) Calculated as of June 30

Item	2024 1955/1980 Plan	2024 2013 Tier	2024 Combined <sup>1</sup>	2023 1955/1980 Plan	2023 2013 Tier	2023 Combined <sup>1</sup>
1. Total Normal Cost	0.97%	0.76%	0.85%	0.95%	0.79%	0.86%
2. Expected employee contributions	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%
<b>3. Employer normal cost: (1) - (2)</b>	<b>0.88%</b>	<b>0.67%</b>	<b>0.76%</b>	<b>0.86%</b>	<b>0.70%</b>	<b>0.77%</b>
4. Unfunded actuarial accrued liability	3.55%	3.55%	3.55%	3.57%	3.57%	3.57%
<b>5. Total recommended contribution, end of each pay period</b>	<b>4.43%</b>	<b>4.22%</b>	<b>4.31%</b>	<b>4.43%</b>	<b>4.27%</b>	<b>4.34%</b>

<sup>1</sup> Based on June 30, 2024 projected annual payroll of:

1955/1980 Plan	\$122,880,363
2013 Tier	<u>150,547,943</u>
Combined	\$273,428,306

## Section 2: Actuarial Valuation Results

### E. Reconciliation of recommended employer contribution

The chart below details the changes in the recommended employer contribution from the prior valuation to the current year's valuation. The 4.34% aggregate rate from June 30, 2023 has been restated based on projected June 30, 2024 payrolls, which is why it is slightly lower than the 4.35% aggregate rate shown in the June 30, 2023 valuation.

Item	Contribution Rate
<b>Average Recommended Employer Contribution Rate as of June 30, 2023</b>	<b>4.34%</b>
Effect of actuarial experience during fiscal 2023/2024	
1. Effect of investment gain/loss (after smoothing) <sup>1</sup>	0.00%
2. Effect of higher than expected growth in total payroll to amortize the prior years' UAAL	(0.06)%
3. Effect of one-year lag in implementing contribution rates	(0.02)%
4. Effect of assumption changes	0.04%
5. Effect of demographic experience, including change to average HIB subsidy paid and HIB subsidy trend assumptions	0.01%
Total change	(0.03)%
<b>Average Recommended Employer Contribution Rate as of June 30, 2024</b>	<b>4.31%</b>

<sup>1</sup> The rate of return on the valuation value of assets was 6.90% for the OPEB and 7.15% for the Pension plans. While the 6.90% return was greater than the 6.75% net investment return assumption, the gain was not sufficient to reduce the employer's contribution rate by 0.01% of payroll.

## Section 2: Actuarial Valuation Results

### F. Table of amortization bases

This schedule of funding progress presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Type	Date Established	Initial Years	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Initial HIB Base	6/30/1997	30	\$15,829,000	\$6,728,135	3	\$2,323,373
Combined Base	6/30/1998	30	(195,000)	(104,236)	4	(27,473)
Combined Base	6/30/1999	30	6,467,754	4,076,666	5	874,664
Combined Base	6/30/2000	30	5,543,694	3,955,952	6	719,642
Combined Base	6/30/2001	30	794,097	623,805	7	98,954
Combined Base	6/30/2002	30	18,413,242	15,600,252	8	2,202,633
Combined Base	6/30/2003	30	6,628,441	5,962,885	9	761,179
Combined Base	6/30/2004	30	1,942,176	1,878,459	10	219,483
Combined Base	6/30/2005	30	8,019,739	7,690,871	11	830,736
Combined Base	6/30/2006	30	(1,769,952)	(1,786,324)	12	(179,843)
Experience Loss	6/30/2007	30	2,878,105	2,971,577	13	280,768
Combined Base	6/30/2008	30	12,125,015	12,732,764	14	1,135,640
Combined Base	6/30/2009	30	(1,240,538)	(1,318,393)	15	(111,557)
Combined Base	6/30/2010	30	463,026	495,860	16	39,979
Combined Base	6/30/2011	30	(60,151)	(64,711)	17	(4,990)
Experience Gain	6/30/2012	20	(1,251,821)	(910,613)	8	(128,571)
Assumption Changes	6/30/2012	25	3,374,832	3,170,751	13	299,586
Experience Gain	6/30/2013	20	(1,155,658)	(895,478)	9	(114,310)
Experience Loss	6/30/2014	20	21,287	17,356	10	2,028
Assumption Changes	6/30/2014	25	2,555,790	2,487,185	15	210,455
Experience Gain	6/30/2015	20	(810,969)	(690,447)	11	(74,579)

<sup>1</sup> Beginning of year payment, reflecting level percentage of payroll.

## Section 2: Actuarial Valuation Results

Type	Date Established	Initial Years	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Assumption Changes	6/30/2016	25	\$2,459,846	\$2,448,190	17	\$188,798
Experience Gain	6/30/2016	20	(1,569,600)	(1,384,110)	12	(139,349)
Assumption Changes	6/30/2017	25	(403,768)	(404,594)	18	(29,944)
Experience Gain	6/30/2017	20	(664,072)	(602,921)	13	(56,967)
Experience Gain	6/30/2018	20	(2,295,237)	(2,133,059)	14	(190,248)
Assumption Changes	6/30/2018	25	2,931,560	2,948,755	19	210,069
Experience Gain	6/30/2019	20	(504,689)	(478,841)	15	(40,518)
Assumption Changes	6/30/2020	25	1,899,682	1,919,725	21	127,700
Experience Gain	6/30/2020	20	(542,065)	(522,780)	16	(42,150)
Experience Gain	6/30/2021	20	(6,818,716)	(6,659,133)	17	(513,535)
Assumption Changes	6/30/2022	20	3,202,074	3,155,976	18	233,573
Experience Loss	6/30/2022	20	2,976,293	2,933,446	18	217,104
Experience Loss	6/30/2023	20	1,323	1,315	19	94
Assumption Changes	6/30/2024	20	1,350,349	1,350,349	20	92,846
Experience Gain	6/30/2024	20	(274,382) <sup>1</sup>	(274,382)	20	(18,866)
<b>Total</b>				<b>\$64,920,252</b>		<b>\$9,396,404</b>

Note: The equivalent single amortization period is about 8 years.

<sup>1</sup> The 2024 experience gain of \$274,382 or 0.2% of AAL was the result of gains due to (1) contributions being higher than expected, (2) actual FYE24 benefit payments being lower than expected, and (3) new starting costs and trends. The impact of these gains was mostly offset by a demographic loss of roughly 0.8% of AAL.

# Section 3: Supplemental Information

## Exhibit A: Summary of participant data

Participants	June 30, 2024	June 30, 2023
<b>Retired Members</b>		
• Number	1,693	1,653
• Average age	71.6	71.1
<b>Surviving Spouses</b>		
• Number	222	217
• Average age	79.1	78.9
<b>Eligible for Deferred Benefit</b>		
• Number <sup>1</sup>	407	381
• Average age	48.0	48.4
<b>Active Participants</b>		
• Number	1,974	1,955
• Average age	46.9	47.1
• Average years of service	10.9	11.0
• Average expected retirement age	63.4	62.4

<sup>1</sup> Includes inactive members due a refund of Pension Plan member contributions.

# Section 4: Actuarial Valuation Basis

## Exhibit 1: Actuarial assumptions and methods

### Rationale for Assumptions and Methods:

The information and analysis used in selecting each assumption and method that has a significant effect on this actuarial valuation is shown in the July 1, 2020 through June 30, 2024 Actuarial Experience Study report dated November 13, 2024, the Retiree Health assumptions letter dated November 14, 2024, and the Actuarial Funding Policy review letter dated September 14, 2022. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both tiers.

### Economic Assumptions:

#### Net Investment Return

6.75%, net of investment and administrative expenses.

#### Inflation

2.50%

#### Across the Board Salary Increases

0.50%

#### Payroll Growth

Inflation of 2.50% per year plus real “across the board” salary increases of 0.50% per year, used to amortize the Unfunded Actuarial Accrued Liability as a level percentage of payroll.

## Section 4: Actuarial Valuation Basis

### Salary Increases

The annual rate of compensation Increase includes inflation at 2.50%, plus “across the board” salary increases of 0.50% per year, plus the following merit and promotional increases:

<b>Years of Service</b>	<b>1955/1980 Plan Rates (%)</b>	<b>2013 Tier Rates (%)</b>
Less than 1	6.25	6.50
1 – 2	6.00	6.25
2 – 3	5.00	5.25
3 – 4	3.75	4.25
4 – 5	2.50	2.75
5 – 6	1.50	1.75
6 – 7	1.25	1.25
7 – 8	1.25	1.25
8 – 9	1.25	1.25
9 – 10	1.25	1.25
10 – 11	1.00	1.00
11 – 12	1.00	1.00
12 – 13	0.75	0.75
13 – 14	0.75	0.75
14 – 15	0.75	0.75
15 & Over	0.75	0.75

## Section 4: Actuarial Valuation Basis

### Demographic Assumptions:

#### Mortality

- **Pre-Retirement:**
  - Pub-2010 General Employee Headcount-Weighted Above-Median Mortality Tables (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Post-Retirement Healthy Members:**
  - Pub-2010 General Healthy Retiree Headcount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Post-Retirement Disabled Members:**
  - Pub-2010 Non-Safety Disabled Retiree Headcount-Weighted Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Beneficiaries:**
  - In pay status at time of valuation: 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-2021.
  - If not in pay status at time of valuation: same tables as for Post-retirement Healthy Members.

The Pub-2010 mortality tables and adjustments as shown above, with generational projection to the ages of members as of the measurement date, reasonably reflect the mortality experience of the Plan as of the measurement date. The additional generational projection is a provision made to reflect future mortality improvement.

## Section 4: Actuarial Valuation Basis

### Retirement

Age	1955/1980 Plan Unreduced Pension <sup>1</sup> Rates (%)	1955/1980 Plan Reduced Pension Rates (%)	2013 Tier Rates (%)
52	0.00	0.00	2.00
53	0.00	0.00	2.00
54	50.00	7.00	2.00
55	16.00	7.00	3.00
56	16.00	7.00	3.00
57	16.00	8.00	4.00
58	16.00	8.00	4.00
59	16.00	8.00	6.00
60	16.00	10.00	6.00
61	16.00	10.00	6.00
62	20.00	N/A <sup>2</sup>	10.00
63	20.00	N/A	10.00
64	20.00	N/A	10.00
65	20.00	N/A	20.00
66	24.00	N/A	20.00
67	24.00	N/A	20.00
68	24.00	N/A	20.00
69	24.00	N/A	20.00
70	40.00	N/A	35.00
71	40.00	N/A	35.00
72	40.00	N/A	35.00
73	40.00	N/A	35.00
74	40.00	N/A	35.00
75 & Over	100.00	N/A	100.00

<sup>1</sup> For example, a 1955/1980 Plan member age 54 with 30 or more years of service would be eligible for an unreduced pension benefit.

<sup>2</sup> For ages 62 and over, all 1955/1980 Plan members who are eligible for retirement are eligible for an unreduced pension benefit.

## Section 4: Actuarial Valuation Basis

### Disability Incidence

Disability rates are applicable after eight years of service.

Age	Rate (%)
25	0.000
30	0.006
35	0.016
40	0.080
45	0.126
50	0.136
55	0.146
60	0.156
65	0.166
70	0.170

## Section 4: Actuarial Valuation Basis

### Termination

Years of Service	1955/1980 Plan Rates (%)	2013 Tier Rates (%)
Less than 1	11.30	8.00
1 – 2	6.00	4.00
2 – 3	6.00	3.75
3 – 4	3.00	3.25
4 – 5	3.00	3.00
5 – 6	2.50	2.70
6 – 7	2.50	2.60
7 – 8	2.50	2.50
8 – 9	2.50	2.30
9 – 10	1.80	2.20
10 – 11	1.80	2.10
11 – 12	1.80	2.00
12 – 13	1.80	1.90
13 – 14	1.80	1.80
14 – 15	1.60	1.70
15 & Over	1.60	1.60

No termination is assumed after a member is eligible for retirement (as long as a retirement rate is assumed).

## Section 4: Actuarial Valuation Basis

### Unknown Data for Participants

Same as those exhibited by members are similar known characteristics. If not specified, members are assumed to be male.

### Retirement Age for Inactive Vested Participants

59

### Percent Married/Domestic Partnership

For all active and inactive vested participants: 75% of male members and 50% of female members are assumed to elect spouse/domestic partner HIB coverage at retirement.

For retired participants: Actual data included in census.

Based on past practice this is not necessarily the same as the percent married/domestic partnership assumption used in the pension valuation. Some of those members may not elect HIB spouse/domestic partner coverage upon retirement due to the additional cost to the member.

### Age of Spouse/Domestic Partner

For all active and inactive vested participants, male participants are assumed to have a female spouse who is 2 years younger than the participant and female participants are assumed to have a male spouse who is 2 years older than the participant.

### Future Benefit Accruals

1.0 year of service per year.

We have not applied the 0.040 years of additional service for each year of employment, applied in the pension valuation to anticipate conversion of unused sick leave, based on our understanding of the HIB plan provisions.

## Section 4: Actuarial Valuation Basis

### Actuarial Funding Policy:

#### Actuarial Cost Method

Entry Age Cost Method. Entry Age is the age at the member's hire date. Actuarial Accrued Liability is calculated on an individual basis and is based on costs allocated as a level percentage of compensation. The Normal Cost is calculated on an individual basis where the Entry Age Normal Cost is calculated as the sum of the individual Normal Costs.

#### Actuarial Value of Assets

Market value of assets (MVA) less unrecognized returns in each of the last five years. Unrecognized returns are equal to the difference between the actual market returns and the expected returns on the market value, and are recognized over a five-year period. The actuarial value of assets (AVA) is limited by a 30% corridor; the AVA cannot be less than 70% of MVA, nor greater than 130% of MVA.

#### Valuation Value of Assets

The proportion of the Actuarial Value of Assets allocated to the HIB plan, based on the proportion of the MVA attributable to the HIB plan.

#### 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, through June 30, 2021, plan changes are amortized over separate decreasing 15-year periods; assumption changes are amortized over separate decreasing 25-year periods; and experience gains/losses and retiree health assumption changes are amortized over separate decreasing 20-year periods. On or after July 1, 2021, assumption changes from the experience study or interim review of the economic assumptions are amortized over 20 years.

## Section 4: Actuarial Valuation Basis

### Retiree Health Assumptions

#### Participation

95% of future eligible retirees are assumed to enroll in the HIB plan.

All current pensioners and beneficiaries with a retiree health insurance cash subsidy were valued.

For deferred vested members, we assume an election equal to 65% of the future retiree election percent.

#### Average HIB Subsidy

The enrollment percent of 70% is used to estimate the proportion of future retirees expected to participate in the EBMUD medical insurance plans (Kaiser, Blue Cross, Sutter Health Plus<65, and UHC Medicare Advantage PPO 65+). The difference between the 95% of all future retirees expected to be provided with an HIB subsidy and 70% (i.e. 25%) is what we used to anticipate future retirees who receive reimbursement for medical expenses through the HIB plan without being enrolled in an EBMUD medical insurance plan. The HIB subsidy may be used to defray any other allowed health benefits (e.g., Medicare Part B premiums, dental costs) in addition to medical premiums. For current retirees, we have used the HIB on record. For the expected 95% future retirees who received an HIB, we have assumed, based on the average HIB on record for current retirees at 100% vesting level, that:

- Retirees at 100% vesting level under age 65 with single HIB coverage will receive an average \$439 monthly benefit as of July 1, 2024,
- Retirees at 100% vesting level under age 65 with spouse HIB coverage will receive an average \$520 monthly benefit as of July 1, 2024,
- Retirees at 100% vesting level age 65 and over with single HIB coverage will receive an average \$439 monthly benefit as of July 1, 2024, and
- Retirees at 100% vesting level age 65 and over with spouse HIB coverage will receive an average \$539 monthly benefit as of July 1, 2024.

The maximum (100% vesting level) monthly HIB subsidy is \$450 for a retiree with single coverage and \$550 for a retiree with spouse/domestic partner coverage.

#### Projected HIB Subsidy Increase

We have projected the HIB medical benefit to increase with medical trend until it reaches the limits described in the Summary of Plan Provisions. The benefit limits are projected to remain unchanged at the current levels of \$450/\$550.

## Section 4: Actuarial Valuation Basis

### Health Care Cost Trend Rates

Trend is to be applied to premium for shown fiscal year to calculate next fiscal year's projected premium.

First Fiscal Year (July 1, 2024 through June 30, 2025):

Plan	Anthem Blue Cross PPO, Under Age 65	Sutter Health Plus HMO, Under Age 65	Kaiser HMO Under Age 65	Kaiser Senior Advantage	UHC Medicare Advantage PPO
Trend rate to be applied to 2024-2025 Fiscal Year premium	8.56%	10.50%	5.81%	9.08%	14.69%

The fiscal year trend rates are based on the following calendar year trend rates:

Approximate Trends for Fiscal Year	Trend Rates Applied to Premium for Calendar Year	
	Non-Medicare Trend Rate (%)	Medicare Trend Rate (%)
2025-2026	7.125	6.875
2026-2027	6.875	6.625
2027-2028	6.625	6.375
2028-2029	6.375	6.125
2029-2030	6.125	5.875
2030-2031	5.875	5.625
2031-2032	5.625	5.375
2032-2033	5.375	5.125
2033-2034	5.125	4.875
2034-2035	4.875	4.625
2035-2036	4.625	4.500
2036 and later	4.500	4.500

## Section 4: Actuarial Valuation Basis

### Medical Carrier Election

Medical Carrier	Election (%)
<b>Non-Medicare Medical Carrier</b>	
• Kaiser HMO	70
• Anthem Blue Cross PPO	25
• Sutter Health Plus HMO	5
<b>Medicare Medical Carrier</b>	
• Kaiser Senior Advantage HMO (High Option)	67
• UHC Medicare Advantage PPO	33

### Assumption Changes Since Prior Valuation:

The following assumptions were changed since the prior valuation:

- Salary scales, retirement rates, termination rates, disability rates, and mortality rates were updated per the 2024 experience study.
- The percentage of male participants who elect HIB coverage for their spouses/domestic partners was increased from 70% to 75%, while that for female participants was increased from 35% to 50%.
- The spouse age difference for male participants and their female spouses/domestic partners was decreased from 3 years to 2.
- The participation election for current vested terminated participants was increased from 50% to 65%.
- The average HIB subsidy for future retirees was updated.
- The future trend for projecting medical costs below the subsidy limit were updated.

Collectively, these assumption changes increased the Actuarial Accrued Liability by 0.94%.

Per the plan's funding policy, the impact of the year-to-year retiree healthcare assumption changes (such as updates to the average HIB subsidy and future trend assumptions) are amortized as part of the annual experience gain/loss.

## Section 4: Actuarial Valuation Basis

### Exhibit 2: Summary of plan

This exhibit summarizes the major benefit provisions as included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

#### Normal or Unreduced Retirement Eligibility:

- **1955/1980 Plan**
  - Age 65;
  - Age 62 with 5 years of service;
  - Age 59 with 20 years of service;
  - Age 54 with 30 years of service;
  - Other combinations of age and service between ages 54 and 59.
- **2013 Tier**
  - Age 67 with 5 years of service (for unreduced benefit)

#### Early Retirement Eligibility:

- **1955/1980 Plan**
  - Age 54 with 5 years of service.
- **2013 Tier**
  - Age 52 with 5 years of service.

#### Covered Members:

All members with at least 5 years of service.

#### Member Contribution Rate:

0.09%

## Section 4: Actuarial Valuation Basis

### Employer Contribution Rate:

100% of total cost net of the 0.09% rate paid by the employee.

### Benefit Formula:

For members entering the System prior to July 1, 1996, a monthly allowance of up to \$450 (\$550 for married retirees and retirees with EBMUD domestic partners) is paid to retirees with at least five years of full-time service to reimburse member-paid medical expenses.

For members entering the System after June 30, 1996, the members shall receive the full monthly allowance multiplied by the applicable percentage below based on years of full-time service.

Effective January 1, 1999, retired members who had separated from the District prior to their retirement and who had at least five years of service also become eligible for the post-employment healthcare benefits based on the same vesting schedule.

Years of Full-time Service	Percent of HIB
Less than 5	0%
5-9	25%
10-14	50%
15-19	75%
20 or more	100%

An eligible surviving spouse/domestic partner may receive a Health Insurance Benefit of up to \$450 per month.

### Changes in Plan Provisions:

None since the prior valuation.

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## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: February 20, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager 

FROM: Michael T. Tognolini, Director of Water and Natural Resources 

SUBJECT: Termination of California Shakespeare Theater Operations

### SUMMARY

After over 30 years of operation on Orinda watershed land leased from EBMUD, the California Shakespeare Theater (Cal Shakes) has dissolved due to financial insolvency. The Bruns Amphitheater performing arts venue and associated on-site facilities was returned to the District at the end of January 2025. As discussed with and supported by the Planning Committee, a request for proposal (RFP) will be developed to identify interested parties with the ability to continue operating the venue as a performing arts space and to be used for educational activities to support the District's mission. This item will be presented at the February 25, 2025 Finance/Administration Committee meeting.

### DISCUSSION

Cal Shakes was a theater company founded in 1974. Originally producing Shakespearean plays for free in outdoor parks, the non-profit company grew to become a regional theater. In 1991, Cal Shakes constructed a permanent performing arts venue on land leased from EBMUD in Siesta Valley of the Orinda watershed (located at 100 California Shakespeare Theater Way in Orinda). Due to financial insolvency, Cal Shakes ceased all operations in November 2024. Cal Shakes was unable to honor their lease agreement with EBMUD and return the site to its original natural state, and the site is left with substantial structures and facilities on EBMUD property. The final turnover of the facility keys and assets was completed at the end of January 2025.

The remaining facilities consist of the centralized stage and amphitheater, a paved plaza near permanent restrooms, a building with café and kitchen space, indoor meeting space and kitchenette, adjacent grounds with multiple picnic areas, a landscaped walking path, an access road, and parking area for 200 cars. The site plan and facilities map is attached.

Rolling natural hills serve as the backdrop for the terraced outdoor amphitheater and stage. The amphitheater has an audience capacity of approximately 540. The indoor space, called the Green Room, can accommodate 20+ people for workshops and meetings. The site does not have water

or wastewater service connections. Potable water needs to be trucked to the site and stored in a 50,000-gallon tank. A 37.4 kilowatt DC electric solar system provides supplemental power to the site. Restrooms are connected to a septic tank that will require pumping after venue use by the tenant.

## **FISCAL IMPACT**

Remediation of the site to remove physical assets and return to a natural state is estimated to be in excess of \$1 million. Continued leased occupancy of the venue is desirable to provide for security and maintenance of the facility and prevent unauthorized and unsanctioned activities on the property that may compromise protection of the watershed. The new operator of the facility would be required to assume all the costs for operating the facility resulting in no cost to the District.

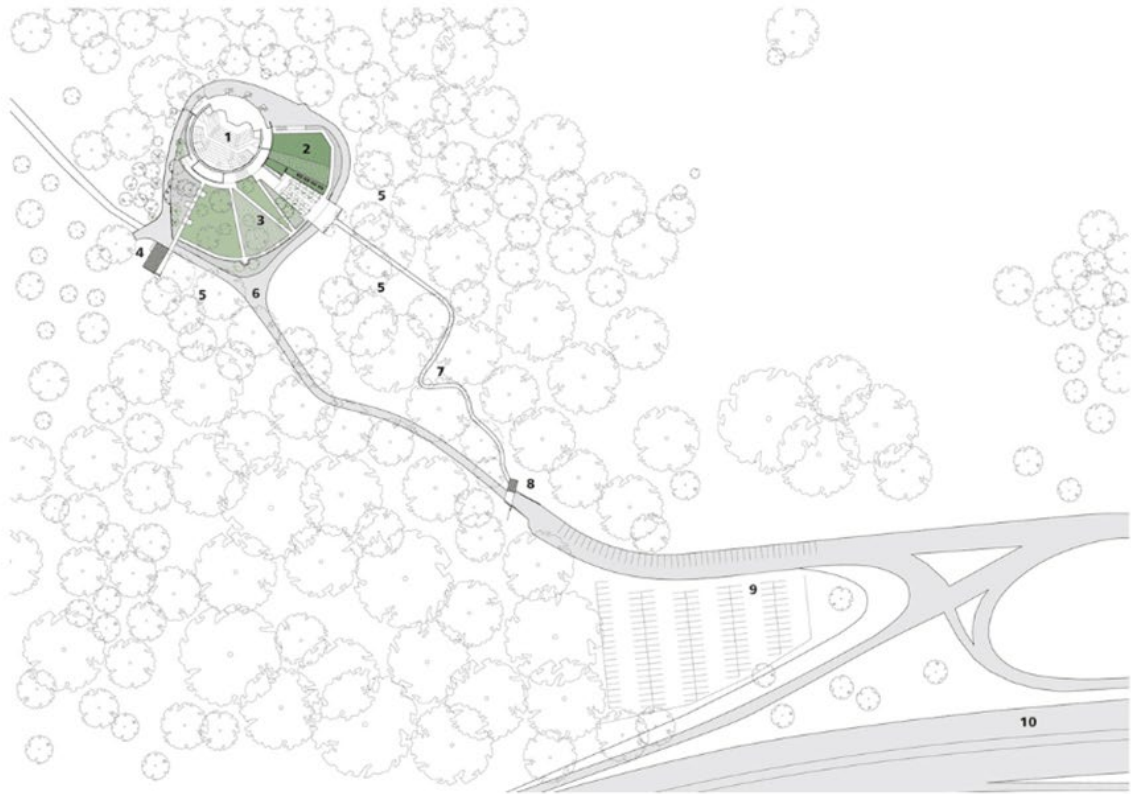
## **NEXT STEPS**

With support from the Finance/Administration Committee, staff will prepare an RFP to identify potential parties qualified to secure, operate, and maintain a venue of this size. Input from community liaisons, including local elected officials, will be solicited as part of the evaluation process. Staff will negotiate a lease with a new tenant before summer 2025 and will bring the agreement to the Board for consideration in late spring or early summer. Lease terms will include use of the facility by the District for education, meetings, and events.

CCC:MTT:dec

Attachment:        Site Plan and Facilities Maps

Figure 1. Site Plan and Facilities



**SITE PLAN**

- 1. Amphitheater
- 2. Sharon Simpson Center (includes Cafe, Restrooms, and Green Room)
- 3. Landscaped Meadows, Paths, and Plaza
- 4. Secondary Stage
- 5. Picnic Groves
- 6. Road
- 7. Walking Path
- 8. Ticket Booth
- 9. Parking
- 10. CA Highway 24

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