



Moraga-Orinda Fire District

Board of Directors

CALL AND NOTICE OF A SPECIAL MEETING

October 26, 2023 – 3:00 PM
Orinda Library Garden Room
26 Orinda Way
Orinda, CA 94563

Public Participation

This meeting will be conducted in person only.

For In-person Attendees, face coverings are strongly encouraged and attendees are encouraged to be up-to-date on the COVID-19 vaccine. Social distance should be maintained when practical.

SPEAKER CARDS: Members of the public may comment on any item on the agenda before or during the Board's consideration of the item. If you would like to speak during the public forum or on an item listed on the agenda, you are invited to submit a speaker card to the District Clerk. You will be permitted to speak even if you elect not to submit a speaker card or decline to provide information requested on the card. After the Board of Directors has heard from everyone who submitted speaker cards, anyone electing not to submit a speaker card may form a line at the lectern. Public comment is limited to 3 minutes per speaker per agenda item.

Written Public Comment can be provided via email at info@mofd.org.

- Emails received by **12pm** on the day of the meeting will be forwarded to the Board of Directors. Emails will be made a part of the public record and available to view by 1pm on the day of the meeting by following this link mofd.org/agendas
 - Comments may also be submitted by e-mail during the meeting up until the closure of the public comment period on the relevant agenda item. These will be read into the record by staff at their normal cadence and will be limited to a maximum of 3 minutes.
-

1. **OPENING CEREMONIES**

- Call the Meeting to Order
- Roll Call
- Pledge of Allegiance

2. **PUBLIC COMMENT – ITEMS NOT ON THE AGENDA**

At the beginning of each regular District Board meeting, any member of the public may address the District Board concerning any item not on the Board's agenda but within the subject matter jurisdiction of the Board. Speakers will be limited to three (3) minutes unless otherwise specified by the Presiding Officer. The public will be given an opportunity to speak on each agenda item at the time it is called. The Board may discuss and/or take action regarding any or all of the items listed below. Once the public comment portion of any item on this agenda has been closed by the Board, no further comment from the public will be permitted unless authorized by the Board and if so authorized, said additional public comment shall be limited to the provision of information not previously provided to the Board or as otherwise limited by order of the Presiding Officer or the Board.

3. **CONSENT AGENDA**

3.1 [Approval of GASB 75 OPEB Valuation Report Measured as of June 30, 2023](#)

Staff Recommendation: Approve the GASB 75 OPEB Valuation Report Measured as of June 30, 2023

[Attachment A: MOFD 063023 GASB 75 Report Final.pdf](#)

4. **PUBLIC COMMENT - CLOSED SESSION ITEMS**

5. **CLOSED SESSION**

5.1 **Conference with Labor Negotiator - Local 1230, IAFF** (Government Code Section 54957.6)

Employee Organization: Local 1230, International Association of Firefighters IAFF
Agency Designated Representative: Jonathan Holtzman

5.2 **Conference with Labor Negotiator - MOFCOA**

(Government Code Section 54957.6)

Employee Organization: Moraga-Orinda Fire Chief Officers' Association

Agency Designated Representative: Jonathan Holtzman

5.3 **Conference with Labor Negotiator - Unrepresented Employees**

(Government Code Section 54957.6)

Employee Organization: Unrepresented Employees

Agency Designated Representative: Jonathan Holtzman

6. **RECONVENE THE MEETING**

- Call the Meeting to Order
- Roll Call

7. **REPORT OF CLOSED SESSION ACTION**

8. **ADJOURNMENT**

The Moraga-Orinda Fire Protection District ("District"), in complying with the Americans with Disabilities Act ("ADA"), requests individuals who require special accommodations to access, attend and/or participate in District Board meetings due to a disability, to please contact the District Chief's office, (925) 258-4501, at least one business day prior to the scheduled District Board meeting to ensure that we may assist you.

Any disclosable public records related to an open session item on a Regular meeting agenda and distributed by the Moraga-Orinda Fire District to a majority of members of the Board of Directors less than 72 hours prior to that meeting are available for public inspections at 1280 Moraga Way, Moraga, during normal business hours, and available on our website at www.mofd.org/agendas.

I hereby certify that this agenda in its entirety was posted on October 11, 2023, at the Moraga and Orinda Fire Administration offices, Stations 41, 42, 43, 44, and 45 and electronically at www.mofd.org/agendas. Agenda provided to the Moraga Town Office (Hacienda) and Orinda City Hall.



Marcia Holbrook
District Secretary/Clerk



Moraga-Orinda Fire District

TO: Board of Directors

FROM: Gloriann Sasser, Administrative Services Director

DATE: October 26, 2023

SUBJECT: **Item 3.1 Approval of GASB 75 OPEB Valuation Report Measured as of June 30, 2023**

BACKGROUND

The District provides retiree health insurance benefits to employees. Government Accounting Standards Board Statement No. 75 requires the District to complete an actuarial valuation every two years for the District's other post-employment benefits (OPEB) plan. GovInvest/Precision Actuarial completed a draft valuation report calculating the long-term costs associated with the District's OPEB plan which was presented to the Board on September 20, 2023. No changes to the draft report were directed. The final GASB 75 OPEB Valuation Report Measured as of June 30, 2023 is attached for Board approval (Attachment A.)

The Memorandum of Understanding with Local 1230 provides the District's monthly retiree medical contribution as follows:

- Employees hired prior to April 2014 – Up to \$1,191.87 per month for employee plus 2 or more dependents
- Employees hired April 2014 or after – PEMHCA minimum (currently \$149/month)

The retiree medical and dental contributions are capped at a fixed amount for all labor groups. The benefits caps have been included in the updated OPEB valuation.

At the August 16, 2023 Board meeting, the Board directed use of a rate of return of 6.39% for the assumed investment rate of return based on the most recent long-term, capital market return estimates for asset classes as it pertains to the District's OPEB Plan and use of a discount rate of 6.25% to measure the liability (same assumptions as prior year.) Staff communicated this information to the actuary. The actuary informed staff that the two metrics should be the same rate because if the Trust is projected to be able to pay for all future benefit payments, the discount rate used to discount the liability should be based on the expected rate of return of the Trust. Therefore, the actuary recommends the District use 6.25% for both investment rate of return and discount rate to measure the liability. The report is calculated using this recommendation.

OPEB VALUATION ASSUMPTIONS

The OPEB valuation is based on a number of significant assumptions as follows (page 24-25):

- Amortization period – 20 year closed period (13 years remaining - page 18)
- General inflation – 2.50% annually (page 7)
- Assumed rate of payroll growth – 3% (page 7)
- Healthcare trend rates – 6.5% trending down to 3.94%
- Rate of return on assets – 6.25% (page 7)

- Discount rate for liability - 6.25% (page 7)
- Annually prefund recommended contribution

OPEB VALUATION RESULTS

In 2015 the District established an OPEB trust account. The purpose of the trust account is to accumulate funds for payment of future retiree health insurance obligations. The District has made the annual required contribution every year since FY2015. As a result of the pre-funding and the cap on retiree medical benefits, the District's net OPEB liability has decreased since 2015. The balance in the OPEB trust account as of June 30, 2023 increased from \$2,798,054 to \$3,548,145 due to contributions (\$366,640) and market value increases/earnings less expenses (\$383,451) in the District's equity and fixed income portfolio.

The OPEB valuation measures the net OPEB liability. The net OPEB liability is the total OPEB liability less the OPEB plan fiduciary net position. In other words, the net OPEB liability is the present value of benefits earned to date for both active employees and retirees that are not covered by current plan assets.

The prior actuarial valuation as of June 30, 2022 measured the net OPEB liability at \$11,698,513. As of June 30, 2023, the net OPEB liability is \$11,655,832, a decrease of \$42,681 or 0.4%. The percentage of the plan that is funded increased from 19.30% to 23.3% (page 4).

RECOMMENDATION

Staff Recommendation: Approve the GASB 75 OPEB Valuation Report Measured as of June 30, 2023

ATTACHMENT

[Attachment A: MOFD 063023 GASB 75 Report Final.pdf](#)

Moraga-Orinda Fire Protection District

GASB 75 Disclosures for Fiscal Year Ending June 30, 2023
Based on OPEB Valuation as of June 30, 2023

CONTACT

Evi Laksana, ASA, MAAA
evi@govinvest.com
(424) 877-2393



GovInvest
The Financial Forecasting Authority

Version 1.0

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Actuarial Certification

Ms. Gloriann Sasser
Moraga-Orinda Fire Protection District
1280 Moraga Way
Moraga, CA 94556

GovInvest has been engaged by Moraga-Orinda Fire Protection District to complete an actuarial valuation of the Moraga-Orinda Fire Protection District OPEB Plan as of June 30, 2023 which will be used as the basis of the financial accounting disclosure for fiscal year ending June 30, 2023 in accordance with GASB Statement No. 75 (Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions).

The purpose of this report is to provide the District with recommended contributions as well as required information needed for financial statement disclosure purposes. The use of this report for any other purpose may not be appropriate. The content of this report may not be modified, reproduced, or provided to third parties, either in whole or in part, without our permission. GovInvest is not responsible for usage, inference, or misinterpretation of this report by third parties.

Results presented in this report are based on the census data, substantive plan provisions, and healthcare cost information provided by the District and/or their benefit consultants. All information provided has been reviewed for reasonableness and clarifications or corrections have been requested where appropriate. We have not audited the information at the source, and therefore, do not accept responsibility for the accuracy or completeness of the data on which the information is based. Assumptions made related to missing data have been identified in this report. We are satisfied that the information provided is suitable and sufficient for the purpose of the measurement.

The valuation results were prepared using leased actuarial modeling software that produces results consistent with the purpose of this valuation and meets applicable regulatory requirements. The vendor is responsible for the development, maintenance, and improvement of these models. The models include comprehensive technical documentations that outline how the calculations are performed along with sample life outputs that allow the users to confirm with high degree of accuracy how the programmed benefit is applied to an individual with the proposed decrements and other assumptions. The actuarial team loads the participant data, programs the benefit provisions and proposed assumptions into the model and review sample life outputs and results under the supervision of credentialed actuaries who are proficient users of the software. We are not aware of any material limitations in the model nor any material inconsistencies in the assumptions used within the model.

The discount rate, other economic, and demographic assumptions have been selected by the District with our recommendations and concurrence. We believe each assumption is reasonable based on its own merits and in combination represents reasonable expected experience of the Plan. All calculations have been completed in accordance with generally accepted actuarial principles and practices.

Future actuarial measurements may differ significantly from current measurements due to factors such as actual plan experience that differs from that anticipated by the economic and demographic assumptions as well as changes in future assumptions, substantive plan provisions, and/or applicable law. We have not analyzed the potential range of such differences due to the limited scope of our engagement. To our knowledge, there are no significant events prior to the current year's Measurement Date or as of the date of this report that may materially affect the results presented herein.

The undersigned meets the General Qualification Standards of the American Academy of Actuaries for the purpose of issuing Statement of Actuarial Opinion in the United States. Neither GovInvest nor any of its employees have any relationship with the Plan Sponsor that could impair or appear to impair the objectivity of this report.



Evi Laksana, ASA, MAAA
September 28, 2023

Section 1: Executive Summary

Moraga-Orinda Fire Protection District (the "District") sponsors a single-employer defined benefit OPEB plan that provides medical/prescription drug and dental coverage at retirement. Employees may continue health coverage with the District at retirement for themselves, their spouses, and dependents for life once they meet certain eligibility requirements and as long as required contributions are made.

The results presented in this report are based on the June 30, 2023 valuation with liabilities and assets measured as of June 30, 2023, for use in the District's accrual-based financial statement for the fiscal year ending June 30, 2023. The June 30, 2023 valuation uses census data of (a) active employees who will be eligible to receive benefits in the future and (b) existing retirees who are currently receiving these benefits as of June 30, 2023, as well as healthcare cost information effective on January 1, 2023 provided by the Plan Sponsor and/or their healthcare consultant.

The actuarial valuation is based on substantive plan provisions outlined in Section 6. The valuation requires assumptions which are listed in Section 7. Results from the June 30, 2023 valuation may be rolled-forward for use in the Plan Sponsor's accrual-based financial statement disclosure for the fiscal year ending June 30, 2024 assuming that there are no material changes to the substantive plan provisions and/or the covered population.

The Plan Sponsor's next full valuation is as of June 30, 2025 with liabilities and assets measured as of June 30, 2025 for reporting in the Plan Sponsor's accrual-based financial statements for the fiscal year ending June 30, 2025.

Changes Since Prior Valuation

The District's Net OPEB Liability has decreased slightly from \$11,698,513 as of June 30, 2022 to \$11,655,832 as of June 30, 2023, which is attributable to a combination of the following factors:

1. Better actual asset performance compared to expected that contributed to a decrease in the District's Net OPEB Liability.
2. Less favorable actual demographic experience and higher healthcare cost increase than expected that causes a liability increase.
3. Assumption changes as outlined in Section 7 that produce a net liability increase.

Summary of Results

Presented below is the summary of results for the current fiscal year compared to the prior fiscal year.

Fiscal Years	2022/23	2021/22
Valuation Date (VD)	June 30, 2023	June 30, 2021
Measurement Date (MD)	June 30, 2023	June 30, 2022
Membership Data as of Valuation Date		
Inactive employees or beneficiaries currently receiving benefits ¹	93	149
Inactive employees entitled to but not yet receiving benefits	0	0
Active employees	66	66
Total membership	159	215
Discount Rate at Measurement Date		
Municipal Bond Index Rate	3.86%	3.69%
Long-term Expected Asset Return	6.25%	6.14%
Year in which Fiduciary Net Position is projected to be depleted	N/A	N/A
Single Equivalent Discount Rate (SEDR)	6.25%	6.25%
Net OPEB Liability as of Measurement Date		
Total OPEB Liability (TOL)	\$ 15,203,977	\$ 14,496,567
Fiduciary Net Position (FNP)	(3,548,145)	(2,798,054)
Net OPEB Liability (NOL = TOL – FNP)	\$ 11,655,832	\$ 11,698,513
Funded Status (FNP / TOL)	23.3%	19.3%

¹ Prior year inactive employees or beneficiaries currently receiving benefits enrollment includes 91 retirees and surviving spouses and 58 spouses of living retirees. Current year inactive employees or beneficiaries currently receiving benefits enrollment includes 93 retirees and surviving spouses only and exclude spouses of living retirees covered under the plan to comply with GASB requirements on enrollment reporting.

Fiscal Years	2022/23	2021/22
Valuation Date (VD)	June 30, 2023	June 30, 2021
Measurement Date (MD)	June 30, 2023	June 30, 2022
OPEB Expense / (Income) by Fiscal Year	\$ 687,993	\$ 526,745
Balance of unamortized Deferred Inflows at MD	\$ (711,228)	\$ (1,244,828)
Balance of unamortized Deferred Outflows at MD	\$ 487,850	\$ 275,574
Actuarially Determined Contribution by Fiscal Year²	\$ 1,444,236	\$ 1,413,286

² Actuarially Determined Contribution for FY 2022/23 is as shown in the Moraga-Orinda Fire District GASB 75 OPEB Valuation Report for fiscal year ending June 30, 2022 prepared by Precision Actuarial, Inc. dated 9/22/2022. Actuarially Determined Contribution for FY 2021/22 is as shown in the Moraga-Orinda Fire District Annual Comprehensive Financial Report for the fiscal year ended June 30, 2022.

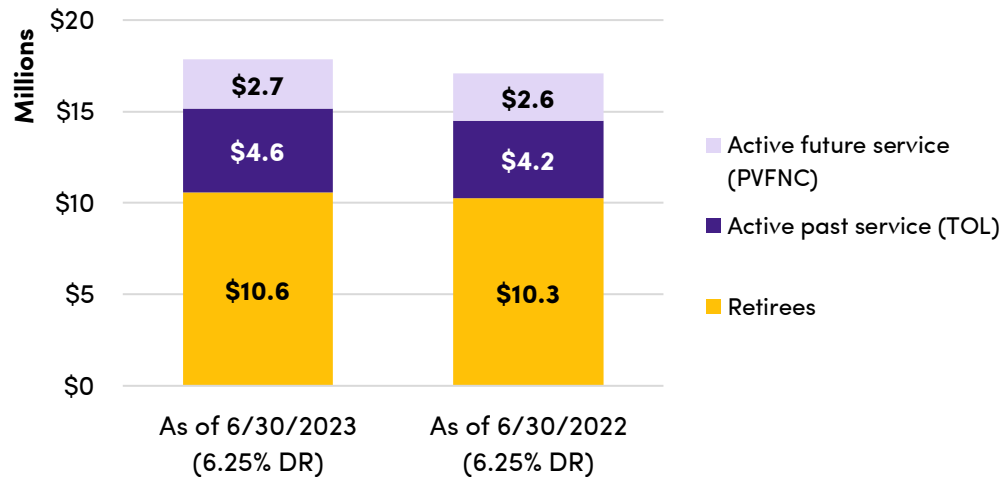
Below is a breakdown of the OPEB liability allocated to past and current service as of the Measurement Date compared to the prior Measurement Date. The liability below includes explicit subsidy (if any) and implicit subsidy. Refer to the Substantive Plan Provisions section for complete information on the District benefit provisions.

Present Value of Future Benefits (PVFB)	As of June 30, 2023	As of June 30, 2022
Active employees	\$ 7,321,066	\$ 6,838,127
Retired employees	10,579,123	10,260,591
Total PVFB	\$ 17,900,189	\$ 17,098,718

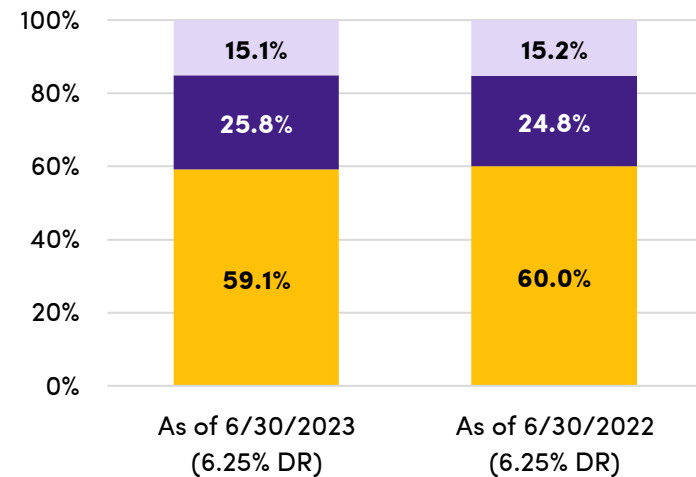
Total OPEB Liability (TOL)	As of June 30, 2023	As of June 30, 2022
Active employees	\$ 4,624,854	\$ 4,235,976
Retired employees	10,579,123	10,260,591
Total TOL	\$ 15,203,977	\$ 14,496,567

	As of June 30, 2023	As of June 30, 2022
Discount Rate	6.25%	6.25%

OPEB Liability Breakdown (\$)



OPEB Liability Breakdown (%)



Section 2: Financial Disclosures

This section provides the necessary accounting disclosures for the District’s financial reports as shown in the following tables:

Table 1: Plan Demographics

Table 2: Brief Summary of Assumptions

Table 3: OPEB Expense

Table 4: Net OPEB Liability Sensitivity (Discount Rate)

Table 5: Net OPEB Liability Sensitivity (Healthcare Trend Rates)

Table 6: Historical Deferred Inflows and Outflows

Table 7: Unamortized Balance of Deferred Inflows and Outflows

Table 8: Schedule of Future Amortization of Deferred Inflows and Outflows

Summary of Membership and Assumptions

The table below shows the number of employees covered by the benefit terms as of June 30, 2023.

Table 1 - Plan Demographics

Inactive employees or beneficiaries currently receiving benefits	93
Inactive employees entitled to but not yet receiving benefits	0
Active employees	66
Total membership	159

The Total OPEB Liability (TOL) as of June 30, 2023 was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified. For a complete list of assumptions, refer to Section 7.

Table 2 - Brief Summary of Assumptions

Inflation	2.50%
Payroll growth	2.50% inflation plus “across the board” real salary increases of 0.50% per year plus merit and promotion increases as shown in the Contra Costa County Employees’ Retirement Association (CCCERA) actuarial valuation as of December 31, 2022
Investment rate of return	6.25%
Discount rate	6.25%
Healthcare trend rates	Based on 2023 Getzen model that reflects actual premium increases from 2023 to 2024 ³ , followed by 6.50% non-Medicare / 5.75% Medicare, decreasing gradually to an ultimate rate of 3.94% in 2075

³ Actual premium increases from 2023 to 2024 used in the valuation are: (a) Non-Medicare: 9.50% actives / 10.50% retirees and (b) Medicare: 11.00% actives / 9.20% retirees.

OPEB Expense

The table below shows a comparison of the OPEB Expense recognized by the District for the current and prior fiscal years.

Table 3 - OPEB Expense

Fiscal Years	2022/23	2021/22
SEDR as of beginning of year	6.25%	6.14%
SEDR as of end of year	6.25%	6.25%
Service Cost	\$ 344,672	\$ 341,584
Interest on TOL and Service Cost	893,418	876,380
Changes of benefit terms	0	0
Active employee contributions	(0)	(0)
Projected earnings on OPEB Plan investments	(189,827)	(181,095)
OPEB Plan administrative expenses net of all revenues	15,947	7,494
Current period recognition of Deferred Inflows / Outflows of Resources		
Difference between expected and actual experience in the TOL	\$ (264,579)	\$ (351,215)
Changes of assumptions or other inputs	(108,529)	(212,027)
Net difference between the projected and actual earnings on OPEB Plan investments	(3,109)	45,624
Other	0	0
Total current period recognition	\$ (376,217)	\$ (517,618)
OPEB Expense	\$ 687,993	\$ 526,745

Schedule of Changes in Net OPEB Liability

Fiscal Year Ending June 30	2023	2022	2021	2020	2019
Measurement Period Ending June 30	2023	2022	2021	2020	2019
Total OPEB Liability (TOL)					
Service Cost	\$ 344,672	\$ 341,584	\$ 374,830	\$ 372,506	\$ 423,862
Interest on TOL and Service Cost	893,418	876,380	1,001,281	999,685	1,076,764
Changes of benefit terms	0	0	0	0	0
Difference between expected & actual experience	183,033	53,343	(1,388,072)	14,954	(274,383)
Changes of assumptions or other inputs	396,197	(151,758)	(558,808)	(188,887)	(23,351)
Benefit payments	(1,109,910) ⁴	(1,109,380)	(1,177,005)	(1,173,061)	(1,205,769)
Net change in TOL	\$ 707,410	\$ 10,169	\$ (1,747,774)	\$ 25,197	\$ (2,877)
TOL – beginning	\$ 14,496,567	\$ 14,486,398	\$ 16,234,172	\$ 16,208,975	\$ 16,211,852
TOL – ending	\$ 15,203,977	\$ 14,496,567	\$ 14,486,398	\$ 16,234,172	\$ 16,208,975
Plan Fiduciary Net Position (FNP)					
Contributions – employer	\$ 1,476,550	\$ 1,413,286	\$ 1,508,638	\$ 1,732,169	\$ 1,613,502
Contributions – employees	0	0	0	0	0
Benefit payments	(1,109,910)	(1,109,380)	(1,177,005)	(1,173,061)	(1,205,769)
Net investment income	399,398	(446,961)	630,935	91,213	73,072
Trust administrative expenses	(15,947)	(7,494)	(13,638)	(8,986)	(4,595)
Net change in Plan FNP	\$ 750,091	\$ (150,549)	\$ 948,930	\$ 641,335	\$ 476,210
FNP – beginning	\$ 2,798,054	\$ 2,948,603	\$ 1,999,673	\$ 1,358,338	\$ 882,128
FNP – ending	\$ 3,548,145	\$ 2,798,054	\$ 2,948,603	\$ 1,999,673	\$ 1,358,338
Net OPEB Liability – ending	\$ 11,655,832	\$ 11,698,513	\$ 11,537,795	\$ 14,234,499	\$ 14,850,637
FNP as % of TOL	23.3%	19.3%	20.4%	12.3%	8.4%
Covered payroll – measurement period	\$ 10,543,616	\$ 10,233,658	\$ 10,381,499	\$ 9,212,842	\$ 8,632,117
NOL as % of covered payroll	110.5%	114.3%	111.1%	154.5%	172.0%

⁴ Based on explicit benefit payment of \$812,956 and estimated implicit subsidy payment of \$296,954.

Schedule of Changes in Net OPEB Liability (Continued)

Fiscal Year Ending June 30	2018	2017
Measurement Period Ending June 30	2018	2017
Total OPEB Liability (TOL)		
Service Cost	\$ 459,818	\$ 446,425
Interest on TOL and Service Cost	946,716	929,839
Changes of benefit terms	0	0
Difference between expected & actual experience	238,065	0
Changes of assumptions or other inputs	0	0
Benefit payments	(1,128,797)	(1,115,290)
Net change in TOL	\$ 515,802	\$ 260,974
TOL – beginning	\$ 15,696,050	\$ 15,435,076
TOL – ending	\$ 16,211,852	\$ 15,696,050
Plan Fiduciary Net Position (FNP)		
Contributions – employer	\$ 1,502,797	\$ 1,371,290
Contributions – employees	0	0
Benefit payments	(1,128,797)	(1,115,290)
Net investment income	36,771	41,863
Trust administrative expenses	(1,576)	(1,367)
Net change in Plan FNP	\$ 409,195	\$ 296,496
FNP – beginning	\$ 472,933	\$ 176,437
FNP – ending	\$ 882,128	\$ 472,933
Net OPEB Liability – ending	\$ 15,329,724	\$ 15,223,117
FNP as % of TOL	5.4%	3.0%
Covered payroll – measurement period	\$ 6,987,356	\$ 7,872,287
NOL as % of covered payroll	219.4%	193.4%

Schedule of Employer Contribution

Fiscal Year Ending	2023	2022	2021	2020	2019
Actuarially Determined Contribution (ADC)	\$ 1,444,236	\$ 1,413,286	\$ 1,579,380	\$ 1,586,650	\$ 1,613,502
Contributions in relation to the ADC	\$ 1,476,550	\$ 1,413,286	\$ 1,508,638	\$ 1,732,169	\$ 1,613,502
Contribution deficiency / (excess)	\$ (32,314)	\$ 0	\$ 70,742	\$ (145,549)	\$ 0
Covered-employee payroll – employer fiscal year	\$ 10,543,616	\$ 10,233,658	\$ 10,381,499	\$ 9,212,842	\$ 8,632,117
Contributions as a % of covered-employee payroll	14.0%	13.8%	14.5%	18.8%	18.7%

Fiscal Year Ending	2018	2017	2016	2015	2014
Actuarially Determined Contribution (ADC)	\$ 1,530,343	\$ 1,485,776	\$ 1,292,000	\$ 1,238,000	\$ 1,187,000
Contributions in relation to the ADC	\$ 1,502,797	\$ 1,371,290	\$ 953,224	\$ 969,770	\$ 896,659
Contribution deficiency / (excess)	\$ 27,546	\$ 114,486	\$ 338,776	\$ 268,230	\$ 290,341
Covered-employee payroll – employer fiscal year	\$ 6,987,356	\$ 7,872,287	\$ 7,288,000	\$ 7,208,000	\$ 6,981,000
Contributions as a % of covered-employee payroll	21.5%	17.4%	13.1%	13.5%	12.8%

Net OPEB Liability Sensitivity

The following presents the Net OPEB Liability of the District, as well as what the District’s Net OPEB Liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate as of June 30, 2023.

Table 4 - Net OPEB Liability Sensitivity (Discount Rate)

	1% Decrease (5.25%)	Discount Rate (6.25%)	1% Increase (7.25%)
Net OPEB Liability / (Asset)	\$ 13,154,816	\$ 11,655,832	\$ 10,364,324

The following presents the Net OPEB Liability of the District, as well as what the District’s Net OPEB Liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates as of June 30, 2023.

Table 5 - Net OPEB Liability Sensitivity (Healthcare Trend Rates)

	1% Decrease	Healthcare Trend Rates⁵	1% Increase
Net OPEB Liability / (Asset)	\$ 11,210,164	\$ 11,655,832	\$ 12,146,282

⁵ Comparison of Baseline, 1% Decrease and 1% Increase in healthcare trend rates assumptions are as shown below. Refer to Section 7 for actual premium increases from 2022 to 2023 used in the valuation.

1% Decrease	Baseline	1% Increase
Actual premium increases from 2023 to 2024 less 1% followed by 5.50% non-Medicare / 4.75% Medicare decreasing to 2.94% ultimate rate by FYE 2075	Actual premium increases from 2023 to 2024 followed by 6.50% non-Medicare / 5.75% Medicare decreasing to 3.94% ultimate rate by FYE 2075	Actual premium increases from 2023 to 2024 plus 1% followed by 7.50% non-Medicare / 6.75% Medicare decreasing to 4.94% ultimate rate by FYE 2075

Deferred Inflows and Deferred Outflows of Resources Related to OPEB

The tables below show changes in the Net OPEB Liability that have not been included in the OPEB expense for the following items:

1. Differences between expected and actual experience of the OPEB plan
2. Changes in assumptions
3. Differences between projected and actual earnings on the OPEB plan investments

The initial amortization base for the first two items above are amortized linearly over the average expected remaining service lives of active and inactive employees. The difference between projected and actual earnings on the OPEB plan investments is amortized linearly over five years.

Table 6 - Historical Deferred Inflows and Outflows

Differences between expected and actual experience

Measurement Period Ending	Fiscal Year Ending	Initial Balance	Initial Amortization Period	Annual Recognition	Recognized in OPEB Expense through June 30, 2023	Unamortized Balance as of June 30, 2023
6/30/2017	6/30/2017	\$ 0	N/A	\$ 0	\$ 0	\$ 0
6/30/2018	6/30/2018	\$ 238,065	4.30	\$ 0	\$ 238,065	\$ 0
6/30/2019	6/30/2019	\$ (274,383)	4.20	\$ (10,551)	\$ (274,383)	\$ 0
6/30/2020	6/30/2020	\$ 14,954	4.20	\$ 3,561	\$ 14,244	\$ 710
6/30/2021	6/30/2021	\$ (1,388,072)	4.40	\$ (315,471)	\$ (946,413)	\$ (441,659)
6/30/2022	6/30/2022	\$ 53,343	4.40	\$ 12,124	\$ 24,248	\$ 29,095
6/30/2023	6/30/2023	\$ 183,033	4.00	\$ 45,758	\$ 45,758	\$ 137,275

Changes in assumptions or other inputs

Measurement Period Ending	Fiscal Year Ending	Initial Balance	Initial Amortization Period	Annual Recognition	Recognized in OPEB Expense through June 30, 2023	Unamortized Balance as of June 30, 2023
6/30/2017	6/30/2017	\$ 0	N/A	\$ 0	\$ 0	\$ 0
6/30/2018	6/30/2018	\$ 0	N/A	\$ 0	\$ 0	\$ 0
6/30/2019	6/30/2019	\$ (23,351)	4.20	\$ (1,111)	\$ (23,351)	\$ 0
6/30/2020	6/30/2020	\$ (188,887)	4.20	\$ (44,974)	\$ (179,896)	\$ (8,991)
6/30/2021	6/30/2021	\$ (558,808)	4.40	\$ (127,002)	\$ (381,006)	\$ (177,802)
6/30/2022	6/30/2022	\$ (151,758)	4.40	\$ (34,491)	\$ (68,982)	\$ (82,776)
6/30/2023	6/30/2023	\$ 396,197	4.00	\$ 99,049	\$ 99,049	\$ 297,148

Differences between projected and actual earnings on OPEB plan investments

Measurement Period Ending	Fiscal Year Ending	Initial Balance	Initial Amortization Period	Annual Recognition	Recognized in OPEB Expense through June 30, 2023	Unamortized Balance as of June 30, 2023
6/30/2017	6/30/2017	\$ (17,334)	5.00	\$ 0	\$ (17,334)	\$ 0
6/30/2018	6/30/2018	\$ 34,101	5.00	\$ 0	\$ 34,101	\$ 0
6/30/2019	6/30/2019	\$ 24,423	5.00	\$ 4,883	\$ 24,423	\$ 0
6/30/2020	6/30/2020	\$ 10,874	5.00	\$ 2,175	\$ 8,700	\$ 2,174
6/30/2021	6/30/2021	\$ (469,322)	5.00	\$ (93,865)	\$ (281,595)	\$ (187,727)
6/30/2022	6/30/2022	\$ 628,056	5.00	\$ 125,612	\$ 251,224	\$ 376,832
6/30/2023	6/30/2023	\$ (209,571)	5.00	\$ (41,914)	\$ (41,914)	\$ (167,657)

The table below shows the unamortized balance of Deferred Inflows and Outflows of Resources as of June 30, 2023 for financial statement disclosure for the fiscal year ending June 30, 2023.

Table 7 - Unamortized Balance of Deferred Inflows and Outflows

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 167,080	\$ (441,659)
Changes in assumptions or other inputs	297,148	(269,569)
Net difference between projected and actual earnings on OPEB plan investments	23,622	0
Employer contribution subsequent to the Measurement Date	0	0
Total	\$ 487,850	\$ (711,228)

Schedule of future annual amortizations of Deferred Inflows and Outflows that will be recognized in future OPEB expense is as shown below.

Table 8 - Schedule of Future Deferred Inflows and Outflows Amortization

Measurement Period Ending	Amounts
2024	\$ (336,307)
2025	\$ (64,712)
2026	\$ 219,556
2027	\$ (41,915)
2028	\$ 0
Thereafter	\$ 0

Section 3: Asset Information

Funding Policy

The District has an OPEB Trust that is invested in Public Agency Retirement Services (PARS) under the Individual Custom investment objective, which is a qualified irrevocable trust. The District intends to contribute 100% of the sum of the service cost and amortization (both with interest) each year until the plan is fully funded, and then contribute the greater of the service cost or the total of the benefit payments and the implicit subsidy.

Asset Breakdown⁶

As of	June 30, 2023	June 30, 2022
Assets		
Cash and cash equivalents	\$ 0	\$ 27,981
Investments		
Equity	\$ 3,122,368	\$ 2,462,288
Fixed income	177,407	111,922
Real Estate	248,370	195,863
Total investments	\$ 3,548,145	\$ 2,770,073
Total assets	\$ 3,548,145	\$ 2,798,054
Liabilities		
Accounts payable	\$ 0	\$ 0
Total liabilities	\$ 0	\$ 0
Net asset available for benefits	\$ 3,548,145	\$ 2,798,054

⁶ Asset breakdown by investment class is based on the target allocation for PARS Individual Custom investment objective for both measurement periods.

Reconciliation of Assets

Measurement Periods	2022/23	2021/22
Additions		
Contributions received		
Employer	\$ 1,476,550	\$ 1,413,286
Employees	0	0
Total contributions	\$ 1,476,550	\$ 1,413,286
Investment income		
Interest and dividend	\$ 0	\$ 0
Net increase/(decrease) in fair value of investments	399,398	(446,961)
Accrued income	0	0
Investment expense	0	0
Net investment income	\$ 399,398	\$ (446,961)
Total additions	\$ 1,875,948	\$ 966,325
Deductions		
Benefit payments net of retiree contributions	\$ (1,109,910)	\$ (1,109,380)
Administrative expenses	(15,947)	(7,494)
Total deductions	\$ (1,125,857)	\$ (1,116,874)
Change in net position	\$ 750,091	\$ (150,549)
Net position – beginning of year	\$ 2,798,054	\$ 2,948,603
Net position – end of year	\$ 3,548,145	\$ 2,798,054

Section 4: Actuarially Determined Contribution

Actuarially Determined Contribution (ADC) is the recommended contribution that, if paid on an ongoing basis, is expected to provide sufficient resources to fund (a) future normal cost (cost for new service) and (b) the amortized unfunded liabilities (cost for past service). There is no requirement to fund OPEB benefit under GASB 75 and it is up to the Plan Sponsor's discretion to determine the OPEB contributions based on their fiscal situation.

Contribution Years	2023/24	2024/25
Funding discount rate	6.25%	6.25%
Amortization method	Level % of Pay	Level % of Pay
Payroll growth	2.50%	2.50%
Amortization period	13 years	12 years
Actuarial Accrued Liability (AAL) – beginning of year ⁷	\$ 15,203,977	\$ 15,395,887
Actuarial Value of Assets (AVA) – beginning of year ⁸	<u>(3,548,145)</u>	<u>(4,182,248)</u>
Unfunded AAL (UAAL) – beginning of year	\$ 11,655,832	\$ 11,213,639
Normal Cost – end of year	\$ 324,063	\$ 319,454
Amortization of UAAL – beginning of year	<u>1,102,332</u>	<u>1,129,945</u>
Total Normal Cost and amortization of UAAL	\$ 1,426,395	\$ 1,449,399
Interest adjustment for end of year payment	89,150	90,587
Trust administrative expenses	<u>17,741</u>	<u>20,911</u>
Actuarially Determined Contribution (ADC)	\$ 1,533,286	\$ 1,560,897
Expected benefit payments	\$ 1,069,733	\$ 1,132,267

⁷ Fiscal years 2023/24 and 2024/25 AALs as of beginning of year are based on June 30, 2022 OPEB valuation results projected to June 30, 2023 and June 30, 2024 on a "no gain/loss" basis.

⁸ Fiscal year 2023/24 AVA as of beginning of year is based on market value of assets as of June 30, 2023. Fiscal year 2024/25 AVA as of beginning of year is projected from June 30, 2023 market value of asset assuming 6.25% investment income, District contribution equals to the FY 2023/24 ADC through a combination of benefit payment from outside of the Trust and District contribution to the Trust (\$1,533,286 total District contribution), and 0.50% administrative expense applied to beginning of year asset balance.

Section 5: Projected Benefit Payments

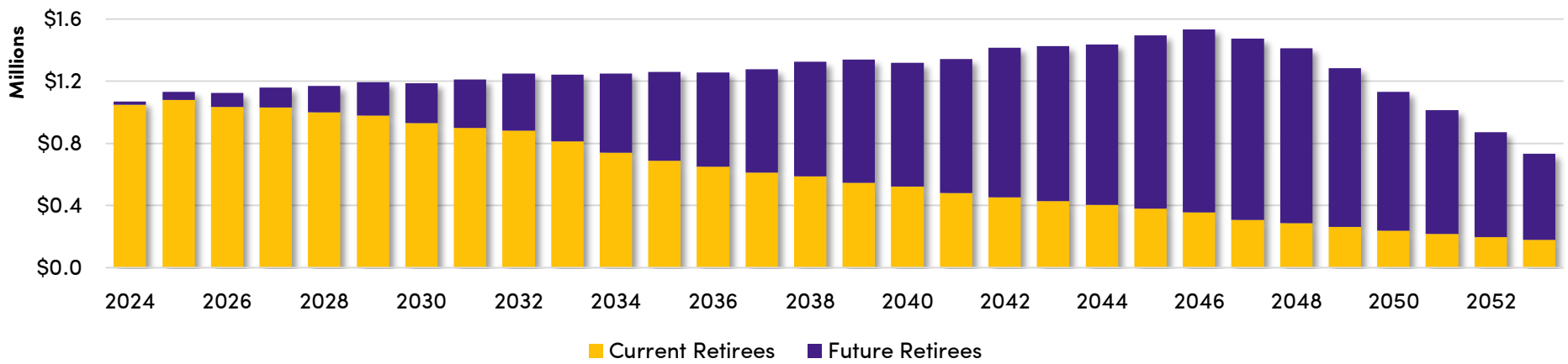
The below table shows the projected benefit payments for the next 30 years for a closed group of participants (both active employees and existing retirees) who are included in the census data as of June 30, 2023. This exhibit is provided for informational purposes only and is not a required disclosure under GASB 75. Projected benefit payments below include both explicit (if any) and implicit subsidies (as applicable).

FYE	Future Retirees	Current Retirees	Total
2024	\$ 21,552	\$ 1,048,181	\$ 1,069,733
2025	\$ 54,075	\$ 1,078,192	\$ 1,132,267
2026	\$ 91,313	\$ 1,035,657	\$ 1,126,970
2027	\$ 128,173	\$ 1,033,453	\$ 1,161,626
2028	\$ 168,015	\$ 1,002,621	\$ 1,170,636
2029	\$ 215,632	\$ 978,959	\$ 1,194,591
2030	\$ 258,893	\$ 930,524	\$ 1,189,417
2031	\$ 308,517	\$ 901,977	\$ 1,210,494
2032	\$ 366,371	\$ 884,372	\$ 1,250,743
2033	\$ 430,366	\$ 813,527	\$ 1,243,893

FYE	Future Retirees	Current Retirees	Total
2034	\$ 512,367	\$ 739,500	\$ 1,251,867
2035	\$ 572,252	\$ 688,746	\$ 1,260,998
2036	\$ 608,751	\$ 650,546	\$ 1,259,297
2037	\$ 666,312	\$ 611,973	\$ 1,278,285
2038	\$ 739,943	\$ 588,052	\$ 1,327,995
2039	\$ 794,864	\$ 546,817	\$ 1,341,681
2040	\$ 800,719	\$ 521,659	\$ 1,322,378
2041	\$ 869,258	\$ 479,008	\$ 1,348,266
2042	\$ 969,408	\$ 453,822	\$ 1,423,230
2043	\$ 1,002,450	\$ 429,155	\$ 1,431,605

FYE	Future Retirees	Current Retirees	Total
2044	\$ 1,040,107	\$ 405,104	\$ 1,445,211
2045	\$ 1,125,276	\$ 380,143	\$ 1,505,419
2046	\$ 1,189,201	\$ 355,801	\$ 1,545,002
2047	\$ 1,178,418	\$ 308,989	\$ 1,487,407
2048	\$ 1,138,196	\$ 285,001	\$ 1,423,197
2049	\$ 1,033,955	\$ 261,823	\$ 1,295,778
2050	\$ 901,169	\$ 239,513	\$ 1,140,682
2051	\$ 805,624	\$ 218,118	\$ 1,023,742
2052	\$ 681,956	\$ 197,679	\$ 879,635
2053	\$ 560,781	\$ 178,233	\$ 739,014

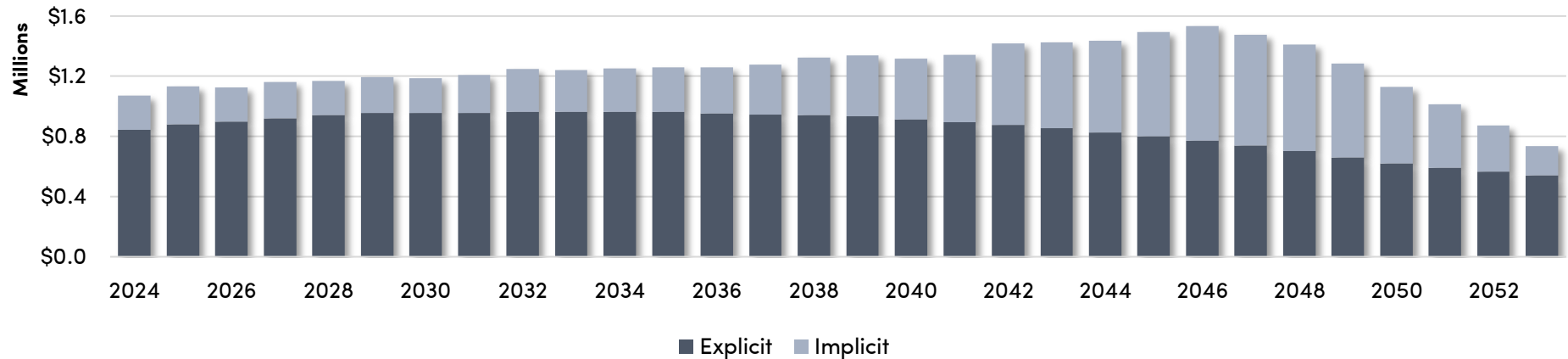
Projected Benefit Payments



The following table splits the projected benefit payments for the next 30 years between the explicit and implicit subsidies for a closed group of participants (both active employees and existing retirees) who are included in the census data as of June 30, 2023.

FYE	Explicit	Implicit	Total	FYE	Explicit	Implicit	Total	FYE	Explicit	Implicit	Total
2024	\$ 843,105	\$ 226,628	\$ 1,069,733	2034	\$ 962,616	\$ 289,251	\$ 1,251,867	2044	\$ 826,291	\$ 618,920	\$ 1,445,211
2025	\$ 881,737	\$ 250,530	\$ 1,132,267	2035	\$ 961,521	\$ 299,477	\$ 1,260,998	2045	\$ 800,060	\$ 705,359	\$ 1,505,419
2026	\$ 900,546	\$ 226,424	\$ 1,126,970	2036	\$ 953,334	\$ 305,963	\$ 1,259,297	2046	\$ 773,392	\$ 771,610	\$ 1,545,002
2027	\$ 920,933	\$ 240,693	\$ 1,161,626	2037	\$ 945,915	\$ 332,370	\$ 1,278,285	2047	\$ 739,191	\$ 748,216	\$ 1,487,407
2028	\$ 945,127	\$ 225,509	\$ 1,170,636	2038	\$ 942,125	\$ 385,870	\$ 1,327,995	2048	\$ 701,534	\$ 721,663	\$ 1,423,197
2029	\$ 956,362	\$ 238,229	\$ 1,194,591	2039	\$ 933,883	\$ 407,798	\$ 1,341,681	2049	\$ 661,201	\$ 634,577	\$ 1,295,778
2030	\$ 954,868	\$ 234,549	\$ 1,189,417	2040	\$ 911,204	\$ 411,174	\$ 1,322,378	2050	\$ 621,371	\$ 519,311	\$ 1,140,682
2031	\$ 956,474	\$ 254,020	\$ 1,210,494	2041	\$ 893,952	\$ 454,314	\$ 1,348,266	2051	\$ 591,389	\$ 432,353	\$ 1,023,742
2032	\$ 962,908	\$ 287,835	\$ 1,250,743	2042	\$ 877,467	\$ 545,763	\$ 1,423,230	2052	\$ 566,049	\$ 313,586	\$ 879,635
2033	\$ 964,316	\$ 279,577	\$ 1,243,893	2043	\$ 854,552	\$ 577,053	\$ 1,431,605	2053	\$ 541,069	\$ 197,945	\$ 739,014

Projected Benefit Payments (Explicit/Implicit)



Section 6: Substantive Plan Provisions

Changes Since Prior Valuation

There are no plan provision changes since the last full valuation.

Eligibility

Employees are eligible for lifetime retiree health benefits once they are eligible to retire under Contra Costa County Employees Retirement Association (CCCERA) pension plan.

The earliest eligibility requirements for service retirement are as shown below:

Employee Groups	Eligibility Requirements
Safety Legacy	Age 50 with 5 years of service
Safety PEPRA	Age 57 with 5 years of service
General Legacy	Age 55 with 5 years of service
General PEPRA	Age 67 with 5 years of service

The eligibility requirements for disability retirement are as shown below:

- Ordinary disability: 5 years of service
- Duty disability: immediate eligibility

Spouse Benefits

Employees are allowed to elect spousal coverage at retirement. Retiree medical coverage continues to surviving spouses upon death of retirees as long as the required contributions are made and the retiree elects for the surviving spouse to continue receiving retirement benefit. Upon retiree’s death, surviving spouse is eligible for the same District subsidy for medical benefit but District subsidy ends for dental benefit. There is no surviving spouse coverage upon the death of active employees.

Ancillary Benefits

There is no District-subsidized vision, life insurance, or Medicare Part B reimbursement benefit at retirement.

PEMHCA Minimum

Pursuant to Government Code 22892 of the Public Employees’ Medical and Hospital Care Act (PEMHCA), the District contributes the minimum amount allowed, which is \$151 per month for 2023 and \$157 per month for 2024. The minimum employer contribution increases annually by the CPI medical care component. The amount of District-provided contribution is the same regardless of the retirees’ dependent coverage and health plan choice.

Employer Subsidy

District subsidy vary by Tiers, which are defined as follows:

Retiree Medical Tiers	
Tier 1	Firefighters Local 1230: hired before 4/15/2014 Battalion Chiefs: hired before 7/2/2014 Unrepresented and Local 2700: hired before 7/1/2014
Tier 2	All others

The District subsidizes medical/prescription drug and dental benefits at retirement according to the table below.

Tiers	District Subsidy for Retirees	District Subsidy for Survivors
Tier 1	Monthly premium up to the Retiree Medical and Dental Benefit Caps for both medical and dental benefits	Same benefit as retiree for medical, no District subsidy for dental
Tier 2	PEMHCA minimum for medical and up to the Retiree Dental Cap for dental benefit	PEMHCA minimum for medical, no District subsidy for dental

The monthly Retiree Medical and Dental Benefit Caps are as shown below. These caps are not expected to increase in the future.

Coverage Level	Unrepresented		Represented	
	Medical	Dental	Medical	Dental
Single	\$575.55	\$51.20	\$458.42	\$46.68
Single + 1	\$1,151.10	\$90.12	\$916.82	\$81.00
Family	\$1,496.11	\$136.35	\$1,191.87	\$116.98

Premium Rates

The monthly premium rates used in the valuation effective on January 1, 2023 and 2024 are as shown below.

Regions	Non-Medicare Plans	As of January 1, 2023			As of January 1, 2024		
		Single	2-Party	Family	Single	2-Party	Family
Region 1	Anthem BC Select	\$ 1,128.83	\$ 2,257.66	\$ 2,934.96	\$ 1,138.86	\$ 2,277.72	\$ 2,961.04
	Anthem BC Traditional	\$ 1,210.71	\$ 2,421.42	\$ 3,147.85	\$ 1,339.70	\$ 2,679.40	\$ 3,483.22
	BS Access+ HMO	\$ 1,035.21	\$ 2,070.42	\$ 2,691.55	\$ 1,076.84	\$ 2,153.68	\$ 2,799.78
	Health Net SmartCare ⁹	\$ 1,174.50	\$ 2,349.00	\$ 3,053.70	\$ N/A	N/A	N/A
	Kaiser Permanente	\$ 913.74	\$ 1,827.48	\$ 2,375.72	\$ 1,021.41	\$ 2,042.82	\$ 2,655.67
	PERS Gold	\$ 825.61	\$ 1,651.22	\$ 2,146.59	\$ 914.82	\$ 1,829.64	\$ 2,378.53
	PERS Platinum	\$ 1,200.12	\$ 2,400.24	\$ 3,120.31	\$ 1,314.27	\$ 2,628.54	\$ 3,417.10
Out of State	PERS Platinum	\$ 1,003.90	\$ 2,007.80	\$ 2,610.14	\$ 1,146.86	\$ 2,293.72	\$ 2,981.84

Medicare Plans	As of January 1, 2023			As of January 1, 2024		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Medicare Preferred PPO	\$ 413.59	\$ 827.18	\$ 1,240.77	\$ 405.83	\$ 811.66	\$ 1,217.49
Blue Shield Medicare PPO	\$ 361.90	\$ 723.80	\$ 1,085.70	\$ 392.68	\$ 785.36	\$ 1,178.04
Kaiser Senior Advantage	\$ 283.25	\$ 566.50	\$ 849.75	\$ 324.79	\$ 649.58	\$ 974.37
PERS Platinum Medicare Supplement	\$ 420.02	\$ 840.04	\$ 1,260.06	\$ 448.15	\$ 896.30	\$ 1,344.45
UHC Medicare Advantage PPO	\$ 299.68	\$ 599.36	\$ 899.04	\$ 341.72	\$ 683.44	\$ 1,025.16

The monthly dental premium rates effective on April 1, 2023 are as shown below.

	Single	2-Party	Family
Delta Dental	\$ 55.96	\$ 98.76	\$ 150.74

⁹ Health Net SmartCare plan is no longer offered effective on January 1, 2024. For valuation purposes, participants in this plan are assumed to elect Kaiser Permanente plan in 2024.

Section 7: Actuarial Methods and Assumptions

Changes Since Prior Valuation

The following assumptions have been updated since the prior valuation:

1. Payroll growth, mortality, termination, disability, and retirement rates have been updated from rates used in CCCERA actuarial valuation as of December 31, 2015 to December 31, 2022 actuarial valuation¹⁰, which caused a net decrease in the liability.
2. Health care trend rates have been updated as follows based on the updated Getzen Model of Long-Run Medical Cost Trend and publicly available health care trend rate surveys and medical inflation data. This change caused an increase in the liability.
 - a. Medical/prescription drug: from (a) Getzen 2020 model with an initial rate of 6.50% non-Medicare / 5.50% Medicare decreasing gradually to an ultimate rate of 4.04% by 2075 to (b) Getzen 2023 model that reflects actual premium changes from 2023 to 2024¹¹ followed by 6.50% non-Medicare / 5.75% Medicare decreasing gradually to an ultimate rate of 3.94% by 2075.
 - b. PEMHCA: from 3.00% for all years to 4.00% from 2023 to 2024 followed by 3.50% for all subsequent years.
3. Percentage of active male employees assumed to elect spousal coverage has been increased from 75% to 85% based on actual spousal coverage election for retirees in the June 30, 2023 census data. Percentage of active female employees assumed to elect spousal coverage remains the same at 50%. This change caused an increase in the liability.
4. In the prior valuation, dependent liability was not valued (there is no explicit dependent election assumptions shown in the prior year's report). In this year's valuation, 55% of active employees in Tier 1 are assumed to elect dependent coverage at retirement. Dependent liability is also valued for existing retirees with family coverage. Dependent coverage is assumed to end when the retiree turns 65. These changes caused a slight increase in the liability.

¹⁰ Economic and non-economic assumptions used in the CCCERA December 31, 2022 actuarial valuation are based on those approved by the Board and as recommended by Segal in their triennial Experience Study Report dated 4/15/2022.

¹¹ Actual premium increases from 2023 to 2024 used in the valuation are: (a) Non-Medicare: 9.50% actives / 10.50% retirees and (b) Medicare: 11.00% actives / 9.20% retirees.

Valuation Date	June 30, 2023
Measurement Date	June 30, 2023
Reporting Period	Fiscal year ending June 30, 2023
Discount Rate	<p>For accounting disclosure: 6.25% as of June 30, 2023 and 6.25% as of June 30, 2022</p> <p>For funding purposes (in calculating the Actuarially Determined Contribution): 6.25% for FY 2023/24 and 2024/25 contributions</p> <p>Refer to the Discussion of Discount Rate section for additional information on the discount rate setting.</p>
Actuarial Cost Method	<p>Entry Age Normal Level Percentage of Pay; a method that allocates the actuarial present value of the projected benefits of each individual on a level basis over the earnings of the individual between entry age and assumed exit age(s).</p> <ul style="list-style-type: none"> • The portion allocated to a valuation year is called the Normal Cost. • The portion allocated to past periods is called the Actuarial Accrued Liability (AAL) or Total OPEB Liability (TOL).
Payroll Growth	2.50% inflation plus “across the board” real salary increases of 0.50% per year plus merit and promotion salary increases based on the same assumption used in the CCCERA actuarial valuation as of December 31, 2022. Refer to the Appendix for sample rates.
Census Data	Census information was provided by the District as of June 1, 2023. The District is not expecting significant changes to the active employees and retiree populations between June 1, 2023 and the Valuation Date. We have reviewed this data for reasonableness and no material modification was made to the data.
Mortality	Based on the rates shown in the CCCERA actuarial valuation as of December 31, 2022. Refer to the Appendix for sample rates.
Pre-Retirement	General/Safety Members: Pub-2010 General/Safety Employee Amount-Weighted Above-Median Mortality Table projected generationally with the two-dimensional mortality improvement scale MP-2021

Mortality (Cont'd)

Post-Retirement

Healthy General: Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table, projected generationally with the two-dimensional mortality improvement scale MP-2021

Healthy Safety: Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table increased by 5% for males and decreased by 5% for females, projected generationally with two-dimensional mortality improvement scale MP-2021

Disabled General/Safety: Pub-2010 Non-Safety/Safety Disabled Retiree Amount-Weighted Mortality Table increased by 5% for males and unadjusted for females, projected generationally with two-dimensional mortality improvement scale MP-2021

Beneficiary: Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table increased by 5% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2021

Termination

Based on the rates shown in the CCCERA actuarial valuation as of December 31, 2022. Refer to the Appendix for sample rates.

Disability

Based on the rates shown in the CCCERA actuarial valuation as of December 31, 2022. Refer to the Appendix for sample rates.

Retirement

Based on the rates shown in the CCCERA actuarial valuation as of December 31, 2022. Refer to the Appendix for sample rates.

Participation Rate

The assumed participation rate for active employees at retirement is as shown below and assumed to continue for life.

Condition	Participation Rate
Eligible for Supplemental Benefits	95%
Eligible for PEMHCA Minimum Only	50%

Existing retirees who are currently enrolled in the District’s health plans are assumed to continue coverage until death. Upon retiree’s death, surviving spouses are assumed to continue coverage in the District’s health plans (all of them are assumed to receive contingent pension benefit). Existing retirees who currently waived coverage are not assumed to re-elect in the future.

Health Plan Election

Employees are assumed to elect the same health plan option they are currently enrolled in at retirement prior to Medicare eligibility. Upon Medicare eligibility, the pre-Medicare to Medicare health plan mapping assumed is as shown below.

Pre-Medicare Plans	Medicare Plans
Anthem BC Select, Anthem BC Traditional	Anthem Medicare Preferred PPO
BS Access+ HMO	Blue Shield Medicare PPO
Health Net SmartCare, Kaiser Permanente	Kaiser Permanente Senior Advantage
PERS Gold	PERS Gold Medicare Supplement
PERS Platinum	PERS Platinum Medicare Supplement

Existing retirees are assumed to remain in the same health plan option they are currently enrolled in for life, except for those who are under the age of 65 as of the Valuation Date. The assumed Medicare plan option election for these retirees is according to the above table.

Spousal Election

For future retirees, 85% of male and 50% of female employees are assumed to elect spousal coverage at retirement. Husbands are assumed to be three years older than wives.

For existing retirees, spousal coverage and age is based on actual data.

Dependent Election

For future retirees, 55% of active employees in Tier 1 are assumed to elect non-spouse dependent coverage at retirement. Liability is valued for existing retirees who elect non-spouse coverage. Dependent coverage is assumed to end when the retiree turns 65. The assumed annual dependent cost is \$3,460, increasing by 9.70% from 2023 to 2024 followed by the health care trend rates.

Medicare Eligibility

All future and existing retirees (including disabled retirees) are assumed to be eligible for Medicare at age 65.

Per Capita Costs

The valuation projects health care costs for employees who remain enrolled in the District’s benefit plans after retirement. In accordance with Actuarial Standards of Practice No. 6 (ASOP 6), the actuarial development of health care costs should preferably use the health plan experience that is considered the best predictor of future claims experience assuming it is sufficiently credible. In the absence of credible health plan experience data, the actuary may use other methods such as premiums and normative databases to develop the per capita costs.

Per Capita Costs (Cont'd) As medical/prescription drug costs generally vary by age, age-specific costs should be used in the development of initial per capita costs and projection of future benefit costs, except in very limited circumstances defined in ASOP 6 Section 3.7.7(c). The development of the age-specific costs should be based on the demographics of the group being valued and the group’s total expected claims or premiums.

Retiree healthcare costs are, on average, significantly higher than active employees and if the District charges blended premium rates (determined using active employees and retiree claims experience) to the retirees, the District is providing an implicit subsidy for these retirees. Under GASB 75, the implicit subsidy must be included in the post-employment medical benefit obligation. Separate costs should be developed for Medicare-eligible participants due to Medicare being the primary payer for these retirees, which leads to a reduction to the Plan Sponsor’s health plan costs.

In developing the per capita costs, we have used CalPERS health plan premium rates effective on January 1, 2023 and aging factors and subscriber enrollments for HMO and PPO plans combined as published in the CalPERS Health Plan (PEMHCA) Implicit Subsidy Data for Calendar 2021.

The following table shows the sample per capita costs at select ages for 2023/24 plan year used in the valuation. These costs are assumed to increase with health care trend rates. Separate costs were developed for active employees and retirees based on weighted average premium rates based on enrollment.

Age	Active Employees		Retired Employees	
	Male	Female	Male	Female
45	\$8,628	\$10,877	\$9,234	\$11,641
50	\$11,540	\$12,649	\$12,350	\$13,538
55	\$15,094	\$14,665	\$16,154	\$15,695
60	\$19,090	\$17,225	\$20,430	\$18,434
64	\$21,233	\$18,580	\$22,723	\$19,884

We have assumed that CalPERS health premiums for Medicare eligible retirees are based on Medicare eligible retiree claims experience and represent the expected true cost of retiree coverage. As such, we have assumed there is no implicit subsidy for Medicare retirees. The annual costs used on/after age 65 are \$3,758 for active employees and \$4,205 for retirees. These costs are assumed to increase with health care trend rates.

Per Capita Costs (Cont'd) For dental benefit, since the dental premiums exceed the Dental Benefit Cap, we have valued the maximum dental caps in this valuation.

Trend Rates Historically, health care costs have increased more rapidly than the rate of inflation. In estimating the value of retiree health benefits, assumptions must be made on future increases in healthcare costs. The health care trend rates assumption used in this valuation is based on the Getzen Model of Long-Run Medical Cost Trends, which was first designed by T.E. Getzen for the Society of Actuaries (SOA) in 2007. The model is designed to make long-run forecasts and typically used to select medical trend assumptions for retiree medical valuations to present liabilities disclosed under the appropriate accounting standards, or to determine contributions under a funding policy. The long-run baseline projection and input variables were developed under the guidance of the SOA Project Oversight Group. The model is updated annually along with updated documentation and recommended input variables by the author of the model. The baseline assumptions used in the Getzen model are as shown in the table below.

Inflation Rate	2.5%
Real GDP Per Capita Growth	1.4%
Excess Medical Cost Growth	0.8%
Health Share of GDP Resistance Point	19.0%
Year for Limiting Cost Growth to GDP Growth	2075

The output of the Getzen Model of Long-Run Medical Cost Trend Model used in the valuation is as shown below.

Year	Non-Medicare	Medicare	Year	Non-Medicare	Medicare
2023	Actual ¹²	Actual ¹²	2040	4.52%	4.52%
2024	6.50%	5.75%	2050	4.48%	4.48%
2025	6.20%	5.50%	2060	4.45%	4.45%
2030	5.04%	5.04%	2070	4.39%	4.39%
2035	4.57%	4.57%	2075+	3.94%	3.94%

PEMHCA minimum cost is assumed to increase by 4.00% from 2023 to 2024 followed by 3.50% annually. Medical and Dental Benefit Caps are not expected to increase in the future.

¹² Actual premium increases from 2023 to 2024 used in the valuation are: (a) Non-Medicare: 9.50% actives / 10.50% retirees and (b) Medicare: 11.00% actives / 9.20% retirees.

Discussion of Discount Rates

Under GASB 75, the discount rate used in valuing OPEB liabilities as of the Measurement Date is a single rate that reflects:

1. The long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments, to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are expected to be invested using a strategy that will achieve that return.
2. A yield or index rate for 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale), when the conditions in (1) above are not met.

For the current year’s valuation:

1. The expected long-term real rate of return of the OPEB Trust is 6.25% as of June 30, 2023. This rate of return was determined using a building-block method in which best-estimate ranges of expected future real rates of return net of investment expense are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target allocation percentage. The Plan Sponsor’s expected future real rates of return by asset class are as shown below.

Asset Classes	Target Allocation	Projected Real Rates of Return ¹³
Equity	88%	5.35%
Fixed Income	5%	1.84%
Real Estate	7%	4.10%
Total	100%	

2. The municipal bond index as of the prior and current Measurement Dates are as shown below:

Index	June 30, 2023	June 30, 2022
Fidelity 20-Year Municipal GO AA Index	3.86%	3.69%

3. The final equivalent single discount rate used for accounting disclosure is 6.25% with the expectation that the Plan Sponsor will contribute in accordance with the Funding Policy described in Section 3. Under this Funding Policy, the OPEB Trust is not expected to be depleted in the future.

The discount rate used to calculate the Actuarially Determined Contribution for recommended funding contribution is 6.25%.

¹³ The assumed inflation rate of 2.50% is added to the weighted expected future real rate of return to obtain the assumed discount rate. Projected long-term rates of return are geometric returns based on the 2023 Moraga-Orinda Fire Protection District Custom Strategy expected asset return provided by High Mark Capital Management as of June 30, 2023.

Section 8: Participant Summary

Active Employees

Actives with Health Coverage	Single	2-Party	Family	Total	Avg. Age	Avg. Svc	FY 2022/23 Salary
Anthem BC Select			3	3	42.2	16.7	\$ 496,752
BS Access+ HMO	1		6	7	45.2	9.5	\$ 939,744
Health Net SmartCare			1	1	53.7	22.1	\$ 145,236
Kaiser Permanente	9	4	27	40	40.1	10.1	\$ 5,397,552
PERS Gold	1		5	6	50.6	10.3	\$ 806,616
PERS Platinum			1	1	59.3	3.1	\$ 115,836
Total actives with health coverage	11	4	43	58	42.5	10.5	\$ 7,901,736

Actives without Health Coverage	Total	Avg. Age	Avg. Svc	Total Salary
Total actives without health coverage	8	41.8	12.8	\$ 1,075,176

Actives without coverage are assumed to elect coverage at retirement according to the Participation Rate shown on page 26 and Health Plan Election assumptions shown on page 27.

Active Age-Service Distribution

Age	Years of Service with the District										Total	
	<1	1 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40+		
<25	1											1
25 – 29	2	2										4
30 – 34	1	3										4
35 – 39		3	7	7	3							20
40 – 44		3		4	7							14
45 – 49			2		3	4						9
50 – 54		3	1	1	2	3						10
55 – 59		4										4
60 – 64												0
65+												0
Total	4	18	10	12	15	7	0	0	0	0	0	66

Retired Employees

Retirees with Health Coverage	Single	2-Party	Family	Total	Avg. Age
Anthem BC Select			1	1	55.1
Anthem BC Traditional	2	3		5	68.1
BS Access+ HMO	1			1	93.5
Kaiser Permanente	10	21	6	37	71.2
PERS Gold		1	1	2	55.7
PERS Platinum	11	20	3	34	73.3
UHC Medicare Advantage PPO	2	5		7	80.1
Total retirees with health coverage	26	50	11	87	72.3

Enrollments above include retirees enrolled in the corresponding Medicare plans or those with split enrollment in pre-Medicare and Medicare plans.

In addition to the 87 retirees shown above, there are 6 retirees who waived medical coverage but are receiving subsidized dental benefit from the District. These retirees have been included in the valuation.

Age	With Medical	Without Medical	Total
<50			0
50 – 54	3		3
55 – 59	8	2	10
60 – 64	11	1	12
65 – 69	17	1	18
70 – 74	14	2	16
75 – 79	13		13
80 – 84	8		8
85 – 89	10		10
90+	3		3
Total	87	6	93

Comparison of Participant Summary

Below is a comparison of participant summary included in the current valuation and the prior full valuation.

	As of June 30, 2023	As of June 30, 2021
Number of Participants		
Active employees	66	66
Retired employees ¹⁴	93	149
Total	159	215
Averages		
Active average age	42.4	41.2
Active average service	10.7	10.0
Inactive average age	71.8	68.5

¹⁴ The enrollments above include retirees only and exclude spouses and/or dependents who are covered under the District's health plans. Retired employees' enrollment as of June 30, 2021 includes 91 retirees and 58 spouses of living retirees.

Appendix – Projected Contributions

Projected Employer Contributions

The following table shows the projected Actuarially Determined Contributions (ADC) for the next 20 years calculated based on the June 30, 2023 valuation using level % of pay amortization method and 6.25% discount rate. Projection has been completed on an open group basis where static active count is assumed (i.e., as active members decrement, new members are added to maintain the current active population count).

FYE June 30	BOY AAL	BOY Asset	BOY Unfunded AAL (UAAL)	BOY Normal Cost	Amort. Period	Amortization of UAAL	Interest to end of year	Trust Admin Expense ¹⁵	ADC
2024	\$ 15,203,977	\$ (3,548,145)	\$ 11,655,832	\$ 324,063	13	\$ 1,102,332	\$ 89,150	\$ 17,741	\$ 1,533,286
2025	15,395,887	(4,182,248)	11,213,639	319,454	12	1,129,945	90,587	20,911	1,560,897
2026	15,526,212	(4,815,900)	10,710,312	309,399	11	1,157,804	91,700	24,080	1,582,983
2027	15,654,076	(5,513,513)	10,140,563	300,621	10	1,185,699	92,895	27,568	1,606,783
2028	15,739,173	(6,239,336)	9,499,837	294,215	9	1,213,463	94,230	31,197	1,633,105
2029	15,807,885	(7,023,993)	8,783,892	288,674	8	1,240,920	95,600	35,120	1,660,314
2030	15,844,430	(7,856,398)	7,988,032	281,902	7	1,267,757	96,854	39,282	1,685,795
2031	15,874,872	(8,767,649)	7,107,223	276,156	6	1,293,433	98,099	43,838	1,711,526
2032	15,872,598	(9,735,522)	6,137,076	271,483	5	1,317,168	99,291	48,678	1,736,620
2033	15,816,748	(10,742,926)	5,073,822	264,448	4	1,337,619	100,129	53,715	1,755,911
2034	15,749,011	(11,834,953)	3,914,058	255,127	3	1,351,837	100,435	59,175	1,766,574
2035	15,649,614	(12,992,638)	2,656,976	243,034	2	1,352,353	99,712	64,963	1,760,062
2036	15,510,915	(14,201,480)	1,309,435	229,964	1	1,309,435	96,212	71,007	1,706,618
2037	15,339,843	(15,428,753)	(88,910)	220,975	1	(88,910)	8,254	77,144	217,463
2038	15,117,150	(15,218,587)	(101,437)	214,954	1	(101,437)	7,095	76,093	196,705
2039	14,811,254	(14,925,373)	(114,119)	211,032	1	(114,119)	6,057	74,627	177,597
2040	14,456,278	(14,583,214)	(126,936)	208,323	1	(126,936)	5,087	72,916	159,390
2041	14,084,671	(14,224,259)	(139,588)	207,439	1	(139,588)	4,241	71,121	143,213
2042	13,650,656	(13,803,007)	(152,351)	208,009	1	(152,351)	3,479	69,015	128,152
2043	13,101,007	(13,266,397)	(165,390)	209,884	1	(165,390)	2,781	66,332	113,607

¹⁵ Assumed to be 0.50% of beginning of year asset balance.

Projected Employer Contributions (Continued)

In the following table we have assumed that the District will contribute the net cost above the ADC to the Trust annually until FYE June 30, 2036 as shown in the Net Trust Contribution column. Beginning in FYE June 30, 2037, the District is expected to contribute the Normal Cost and pay for the retiree healthcare expenses from the Trust. Projection has been completed on an open group basis where static active count is assumed (i.e., as active members decrement, new members are added to maintain the current active population count).

FYE June 30	BOY Asset	Employer Contributions ¹⁶	Benefit Payments	Trust Expense	Investment Income (6.25%)	EOY Asset	FYE June 30	Net Trust Contribution
2024	\$ 3,548,145	\$ 1,533,286	\$ (1,069,733)	\$ (17,741)	\$ 188,291	\$ 4,182,248	2024	\$ 463,553
2025	4,182,248	1,560,897	(1,132,235)	(20,911)	225,901	4,815,900	2025	428,662
2026	4,815,900	1,582,983	(1,126,862)	(24,080)	265,572	5,513,513	2026	456,121
2027	5,513,513	1,606,783	(1,161,395)	(27,568)	308,003	6,239,336	2027	445,388
2028	6,239,336	1,633,105	(1,170,234)	(31,197)	352,983	7,023,993	2028	462,871
2029	7,023,993	1,660,314	(1,193,962)	(35,120)	401,173	7,856,398	2029	466,352
2030	7,856,398	1,685,795	(1,188,500)	(39,282)	453,238	8,767,649	2030	497,295
2031	8,767,649	1,711,526	(1,209,228)	(43,838)	509,413	9,735,522	2031	502,298
2032	9,735,522	1,736,620	(1,249,068)	(48,678)	568,530	10,742,926	2032	487,552
2033	10,742,926	1,755,911	(1,241,733)	(53,715)	631,564	11,834,953	2033	514,178
2034	11,834,953	1,766,574	(1,249,134)	(59,175)	699,420	12,992,638	2034	517,440
2035	12,992,638	1,760,062	(1,257,593)	(64,963)	771,336	14,201,480	2035	502,469
2036	14,201,480	1,706,618	(1,255,117)	(71,007)	846,779	15,428,753	2036	451,501
2037	15,428,753	217,463	(1,273,223)	(77,144)	922,738	15,218,587	2037	0
2038	15,218,587	196,705	(1,321,961)	(76,093)	908,135	14,925,373	2038	0
2039	14,925,373	177,597	(1,334,594)	(74,627)	889,465	14,583,214	2039	0
2040	14,583,214	159,390	(1,314,190)	(72,916)	868,761	14,224,259	2040	0
2041	14,224,259	143,213	(1,338,963)	(71,121)	845,619	13,803,007	2041	0
2042	13,803,007	128,152	(1,412,829)	(69,015)	817,082	13,266,397	2042	0
2043	13,266,397	113,607	(1,420,193)	(66,332)	783,400	12,676,879	2043	0

¹⁶ Employer contributions are assumed to be deposited at the end of the fiscal year.

Appendix – Sample Decrement Rates

Mortality Rates

Mortality rates used in the valuation are based on Pub-2010 General Employee/Healthy Retiree/Disabled Retiree Amount-Weighted Above-Median Mortality Table, Safety Employee/Healthy Retiree/Disabled Retiree Amount-Weighted Above-Median Mortality Table, and Pub-2010 Contingent Survivor Amount-Weighted Above Median Mortality Table projected fully generationally using Scale MP-2021. Sample base mortality rates before any adjustments or application of mortality improvement scale are as shown below.

Age	General						Safety						All	
	Employee		Healthy Retiree		Disabled Retiree		Employee		Healthy Retiree		Disabled Retiree		Survivor	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
20	0.00036	0.00012	0.00036	0.00012	0.00412	0.00233	0.00039	0.00015	0.00039	0.00015	0.00121	0.00053	0.00039	0.00015
25	0.00024	0.00008	0.00024	0.00008	0.00278	0.00164	0.00032	0.00017	0.00032	0.00017	0.00110	0.00065	0.00032	0.00017
30	0.00031	0.00013	0.00031	0.00013	0.00354	0.00257	0.00036	0.00023	0.00036	0.00023	0.00122	0.00089	0.00036	0.00023
35	0.00041	0.00021	0.00041	0.00021	0.00458	0.00401	0.00040	0.00031	0.00040	0.00031	0.00138	0.00121	0.00040	0.00031
40	0.00057	0.00033	0.00057	0.00033	0.00645	0.00629	0.00051	0.00043	0.00051	0.00043	0.00174	0.00164	0.00051	0.00043
45	0.00085	0.00051	0.00085	0.00051	0.01007	0.00985	0.00071	0.00058	0.00103	0.00081	0.00242	0.00223	0.00549	0.00262
50	0.00129	0.00076	0.00267	0.00212	0.01605	0.01483	0.00103	0.00079	0.00164	0.00141	0.00353	0.00304	0.00701	0.00320
55	0.00190	0.00112	0.00387	0.00275	0.02114	0.01742	0.00151	0.00107	0.00262	0.00243	0.00480	0.00461	0.00824	0.00439
60	0.00276	0.00169	0.00552	0.00371	0.02503	0.01956	0.00228	0.00145	0.00438	0.00419	0.00735	0.00699	0.01012	0.00596
65	0.00405	0.00270	0.00820	0.00595	0.03044	0.02256	0.00353	0.00198	0.00763	0.00724	0.01186	0.01061	0.01337	0.00839
70	0.00609	0.00445	0.01381	0.01032	0.03901	0.02862	0.00660	0.00393	0.01350	0.01251	0.01907	0.01610	0.02058	0.01272
75	0.00949	0.00736	0.02437	0.01827	0.05192	0.04003	0.01234	0.00783	0.02419	0.02159	0.03241	0.02443	0.03272	0.02037
80	0.01498	0.01211	0.04391	0.03260	0.07348	0.06007	0.02305	0.01557	0.04344	0.03729	0.05598	0.03962	0.05190	0.03410
85	0.07965	0.06019	0.07965	0.06019	0.10815	0.09331	0.07731	0.06439	0.07731	0.06439	0.09213	0.06842	0.08473	0.06075
90	0.13712	0.11139	0.13712	0.11139	0.16253	0.13665	0.13344	0.11119	0.13344	0.11119	0.15860	0.11815	0.13984	0.10979

Salary Increases

The productivity and merit salary increases used in the valuation are based on the rates shown in the CCCERA actuarial valuation as of December 31, 2022. Sample rates are as shown below.

Service	General	Safety
0	0.1400	0.1100
1	0.0950	0.0900
2	0.0900	0.0700
3	0.0625	0.0500
4	0.0625	0.0400
5	0.0500	0.0350
6	0.0450	0.0300
7	0.0400	0.0250
8	0.0375	0.0250
9	0.0375	0.0200
10	0.0350	0.0200
11	0.0325	0.0200
12	0.0275	0.0200
13	0.0250	0.0180
14	0.0250	0.0160
15	0.0225	0.0150
16	0.0225	0.0140
17	0.0200	0.0130
18	0.0200	0.0120
19	0.0150	0.0100
20	0.0150	0.0050

Termination Rates

This assumption is used to project terminations (voluntary and involuntary) prior to meeting the minimum eligibility requirements to retire. The rates are as shown in the CCCERA actuarial valuation as of December 31, 2022. Sample rates are as shown below.

Service	General	Safety
0	0.1400	0.1100
1	0.0950	0.0900
2	0.0900	0.0700
3	0.0625	0.0500
4	0.0625	0.0400
5	0.0500	0.0350
6	0.0450	0.0300
7	0.0400	0.0250
8	0.0375	0.0250
9	0.0375	0.0200
10	0.0350	0.0200
11	0.0325	0.0200
12	0.0275	0.0200
13	0.0250	0.0180
14	0.0250	0.0160
15	0.0225	0.0150
16	0.0225	0.0140
17	0.0200	0.0130
18	0.0200	0.0120
19	0.0150	0.0100
20	0.0150	0.0050

Disability Rates

The disability rates used in the valuation are based on the rates shown in the CCCERA actuarial valuation as of December 31, 2022. Sample rates are as shown below.

Attained Ages	General Tier 1	General PEPRATier 4	Safety
20	0.0001	0.0001	0.0006
25	0.0002	0.0002	0.0016
30	0.0004	0.0003	0.0032
35	0.0008	0.0005	0.0046
40	0.0022	0.0007	0.0056
45	0.0036	0.0009	0.0096
50	0.0052	0.0012	0.0288
55	0.0060	0.0016	0.0400
60	0.0060	0.0018	0.0430
65	0.0060	0.0018	0.0450
70	0.0060	0.0018	0.0450

Retirement Rates

Retirement rates used in the valuation are based on the rates shown in the CCCERA actuarial valuation as of December 31, 2022. Sample rates are as shown below.

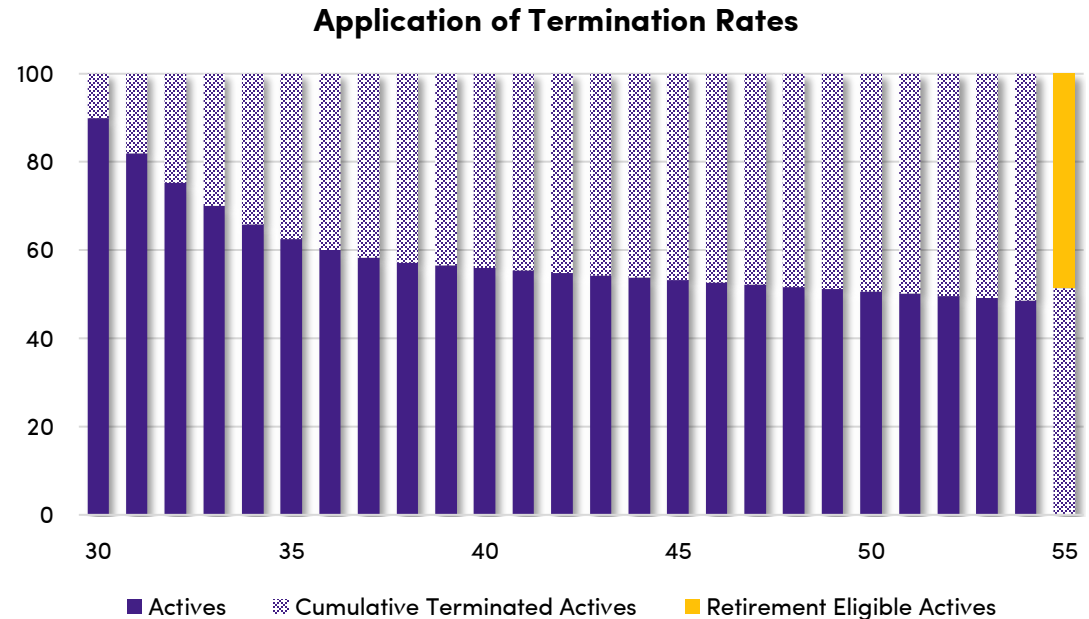
Age	General		
	Tier 1 Enhanced		PEPRA Tier 4
	Service <30	Service 30+	
50	0.0400	0.1000	0.0000
51	0.0400	0.1000	0.0000
52	0.0400	0.1000	0.0200
53	0.0400	0.1000	0.0300
54	0.1000	0.1600	0.0300
55	0.1500	0.2400	0.0400
56	0.1500	0.2400	0.0500
57	0.1500	0.2400	0.0600
58	0.1500	0.2200	0.0600
59	0.1800	0.2200	0.0800
60	0.2000	0.2000	0.0800
61	0.2000	0.2000	0.1200
62	0.2500	0.3000	0.1500
63	0.2500	0.3000	0.1700
64	0.2500	0.3000	0.2000
65	0.3500	0.3500	0.2500
66	0.4000	0.4000	0.2500
67	0.4000	0.4000	0.2500
68	0.4000	0.4000	0.2500
69	0.4000	0.4000	0.2500
70	0.4000	0.4000	0.3500
75	1.0000	1.0000	1.0000

Age	Safety		
	Tier A Enhanced		PEPRA Tier D
	Service <30	Service 30+	
45	0.0700	0.0700	0.0000
46	0.0500	0.0500	0.0000
47	0.0700	0.0700	0.0000
48	0.1000	0.3000	0.0000
49	0.2200	0.3000	0.0000
50	0.2200	0.3000	0.0500
51	0.2200	0.2200	0.0400
52	0.1600	0.2000	0.0400
53	0.1600	0.2200	0.0500
54	0.1600	0.2400	0.0600
55	0.1600	0.3000	0.1500
56	0.1800	0.3000	0.1500
57	0.1800	0.3000	0.1500
58	0.2000	0.3500	0.1500
59	0.2000	0.3500	0.2000
60	0.2000	0.3500	0.2000
61	0.2000	0.3500	0.2000
62	0.2000	0.3500	0.2000
63	0.2500	0.3500	0.2000
64	0.3500	0.3500	0.2500
65	1.0000	1.0000	1.0000

Decrements Illustration

The table below illustrates how decrements are applied in the valuation and how the decrements affect the liabilities valued. Assuming the Plan Sponsor has 100 employees aged 30 as of the valuation date, only 48.6 employees will be projected to be employed at age 55 (assumed retirement eligibility age) using the assumed illustrative termination rates.

Age	# Actives BOY	Annual Termination %	# Terminated Actives / Year
30	100.0	10%	10.0
31	90.0	9%	8.1
32	81.9	8%	6.6
33	75.3	7%	5.3
34	70.1	6%	4.2
35	65.9	5%	3.3
36	62.6	4%	2.5
37	60.1	3%	1.8
38	58.3	2%	1.2
39	57.1	1%	0.6
40	56.5	1%	0.6
41	56.0	1%	0.6
42	55.4	1%	0.6
43	54.9	1%	0.5
44	54.3	1%	0.5
45	53.8	1%	0.5
46	53.2	1%	0.5
47	52.7	1%	0.5
48	52.2	1%	0.5
49	51.6	1%	0.5
50	51.1	1%	0.5
51	50.6	1%	0.5
52	50.1	1%	0.5
53	49.6	1%	0.5
54	49.1	1%	0.5
55	48.6	0%	0.0



Notes:

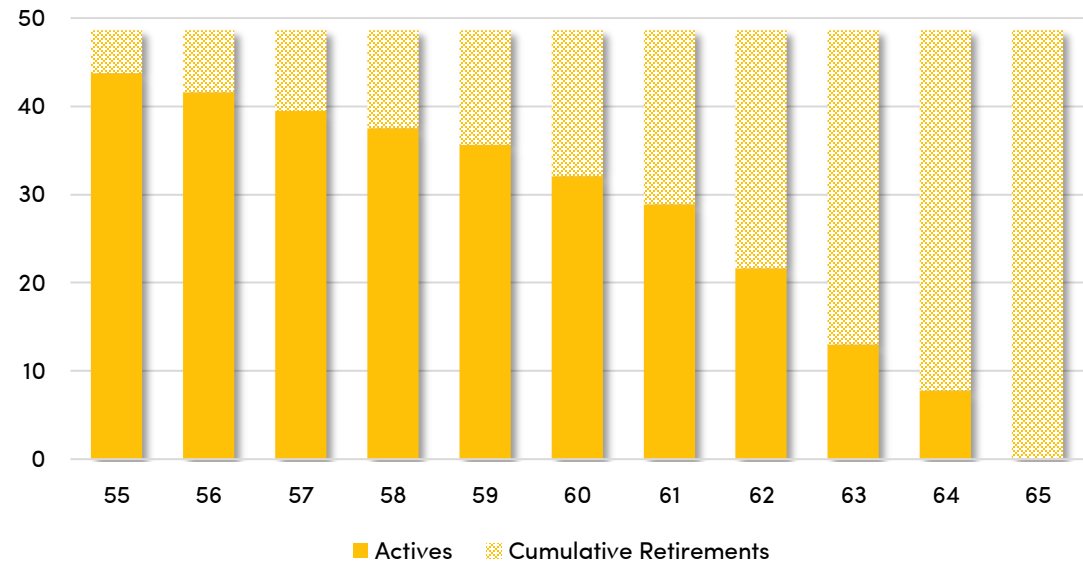
1. The annual termination percentages shown in the table are for illustrative purposes only, not the actual termination rates used in the valuation.
2. For simplification, only termination decrement is assumed to be applicable while actively employed. Actuarial valuation typically applies pre-retirement death decrement during employment as well.

Decrements Illustration (Continued)

The table below illustrates the number of active employees assumed to retire at each age based on the illustrative retirement rates.

Age	# Actives BOY	Annual Retirement %	# Retirements / Year
55	48.6	10%	4.9
56	43.8	5%	2.2
57	41.6	5%	2.1
58	39.5	5%	2.0
59	37.5	5%	1.9
60	35.6	10%	3.6
61	32.1	10%	3.2
62	28.9	25%	7.2
63	21.7	40%	8.7
64	13.0	40%	5.2
65	7.8	100%	7.8

Application of Retirement Rates



Notes:

1. The annual retirement percentages shown in the table are for illustrative purposes only, not the actual retirement rates used in the valuation.
2. For simplification, only retirement decrement is assumed to be applicable once the employee is retirement eligible. Actuarial valuation typically applies pre-retirement death decrement once an employee is eligible to retire.
3. The illustration above assumes that all active employees who are projected to be employed at age 55 elect health coverage with the Plan Sponsor at retirement.

| Appendix – Glossary

1. **Active Employees** – Individuals employed at the end of the reporting or measurement period, as applicable.
2. **Actuarial Cost Method** – A method to allocate the Actuarial Present Value of Future Benefits into portions attributed to past service (Total OPEB Liability) and future service (Normal Cost).
3. **Actuarial Present Value of Future Benefits** – Projected benefit payments estimated to be payable through the OPEB plan to current active and inactive employees as a result of their past service and their expected future service, discounted to reflect the expected effects of time value (present value) of money and the probabilities of payment (which is contingent on events such as death, termination, retirement, etc). In other words, this is the amount that would have been invested as of the Valuation Date so that it is sufficient to pay for benefit payments when due.
4. **Deferred Inflows** – Gains in the Total OPEB Liability and Fiduciary Net Position (for funded plan only) due to be recognized in the future.
5. **Deferred Outflows** – Losses in the Total OPEB Liability and Fiduciary Net Position (for funded plan only) due to be recognized in the future.
6. **Defined Benefit OPEB** – OPEB for which the benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The OPEB may be stated as (a) a specified dollar amount; (b) an amount that is calculated
7. **Entry Age Actuarial Cost Method** – A method that allocates the actuarial present value of the projected benefits of each individual on a level basis over the earnings or service of the individual between entry age and assumed exit age(s).
 - The portion allocated to a valuation year is called the Normal Cost.
 - The portion allocated to past periods is called the Total OPEB Liability.
 - The portion allocated to future periods after the valuation date is called the Present Value of Future Normal Costs.
8. **Fiduciary Net Position** – OPEB plan assets in a secure Trust that meet the following criteria:
 - Contributions from employers to the OPEB plan and earnings on those contributions are irrevocable.
 - OPEB plan assets are dedicated to providing OPEB to plan members in accordance with the benefit terms.
 - OPEB Plan assets are legally protected from the creditors of employers, OPEB plan administrator, and creditors of the plan members.
9. **Funded Ratio** – The value of the asset expressed as a percentage of the Total OPEB Liability.

10. **Healthcare Cost Trend Rates** – The rates of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
11. **Inactive Employees** – Individuals no longer employed by an employer in the OEPB plan or the beneficiaries of those individuals. Inactive employees also include individuals who have accumulated benefits under the terms of an OPEB plan but are not yet receiving benefit payments and individuals currently receiving benefits.
12. **Net OPEB Liability** – The difference between the Total OPEB Liability and the Fiduciary Net Position.
13. **Payroll Growth** – An actuarial assumption on the rate of future increase in the total coverage payroll attributable to wage inflation and productivity increase; used in the Actuarial Cost Method to determine the Total OPEB Liability.
14. **Plan Members** – Individuals covered by the terms of the OPEB plan, which would typically include employees in active service, terminated employees who have terminated service but are not yet receiving benefit payments, and retired employees who are currently receiving benefits.
15. **Other Postemployment Benefits (OPEB)** – Benefits such as death benefits, life insurance, disability, and long-term care, as well as healthcare benefits (medical, prescription drug, dental, vision, and other health-related benefits), that are paid in the period after employment and that are provided separately from a pension plan regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.
16. **Service Cost (Normal Cost)** – The portion of actuarial present value of projected benefit payments that are attributed to a 12-month period after a valuation date as determined by the Actuarial Cost Method.
17. **Total OPEB Liability** – The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service as of the valuation date as determined by the Actuarial Cost Method.



GovInvest

The Financial Forecasting Authority

8605 Santa Monica Blvd PMB 52465, West Hollywood, CA 90069-4109
info@govinvest.com