East Bay Municipal Utility District Employees' Retirement System

Governmental Accounting Standards Board Statement No. 67 Actuarial Valuation for the Pension Plan as of June 30, 2024

Segal

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January 14, 2025

Ms. Sophia Skoda
Director of Finance
East Bay Municipal Utility District
375 Eleventh Street
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Dear Sophia:

We are pleased to submit this Governmental Accounting Standards Board Statement No. 67 (GASB 67) Actuarial Valuation as of June 30, 2024 for the Pension Plan of the East Bay Municipal Utility District Employees' Retirement System ("EBMUDERS" or "the Plan"). It contains various information that will need to be disclosed in order to comply with GASB 67. Please refer to EBMUDERS' Actuarial Valuation and Review of Pension Plan Benefits as of June 30, 2024, dated January 14, 2025 for the data, assumptions, and plan of benefits underlying these calculations.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Retirement Board (the Board), based upon information provided by the staff of the Plan and the Plan's other service providers.

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; and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary. 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 the actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of EBMUDERS 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 with you and to answering any questions.

Sincerely,

Segal

Andy Yeung   Emily Kl

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

Emily Klare, ASA, MAAA, EA
Senior Actuary

DNA/jl

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board Statement No. 67 (GASB 67) as of June 30, 2024. This report is based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active, inactive, 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 Board for the June 30, 2024 funding valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the June 30, 2024 funding valuation.

General observations on a GASB 67 actuarial valuation

1. The Governmental Accounting Standards Board (GASB) rules only define pension liability and expense for financial reporting purposes, they do not apply to contribution amounts for pension funding purposes. Employers and plans should continue to develop and adopt funding policies under current practices.
2. When measuring pension liability, GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as EBMUDERS uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on the same basis as EBMUDERS' Actuarial Accrued Liability (AAL) measure for funding. We note that the same is true for the service cost for financial reporting shown in this report and the normal cost component of the annual plan cost for funding.
3. The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan Fiduciary Net Position (FNP). The Plan FNP is equal to the fair value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a market value basis.

Highlights of the valuation

1. The reporting date for the Plan is June 30, 2024 and the NPL was measured as of the same date. The TPL was determined based upon the actuarial funding valuation as of June 30, 2024 and the Plan FNP was also valued as of the measurement date.
2. 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 the June 30, 2024 Pension Plan funding valuation report dated January 14, 2025 (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 change in the cost-of-living index 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 NPL decreased from $800 million as of June 30, 2023 to $698 million as of June 30, 2024 primarily due to a return on the market value of assets of 12.57% during fiscal year 2023/2024 that was more than the assumption of 6.75% used in the June 30, 2023 valuation (a gain of about $127 million), offset somewhat by the change in actuarial assumptions and methodology (a loss of about $25 million). Changes in these values during the last two fiscal years can be found in *Section 2, Exhibit 3 - Schedule of changes in Net Pension Liability* on page 18.
4. The discount rate used to measure the TPL and NPL as of June 30, 2024 was 6.75%, following the same assumptions used by EBMUDERS in the actuarial funding valuation as of June 30, 2024. The detailed calculations used in the derivation of the 6.75% discount rate can be found in *Appendix A*. Various other information that is required to be disclosed can be found throughout *Section 2*.

Summary of key valuation results

Line Description	Current Year	Prior Year
Reporting and Measurement Date	June 30, 2024	June 30, 2023
Disclosure elements		
Service cost[1]	$60,312,330	$56,378,319
Total Pension Liability	3,143,728,340	2,994,429,150
Plan Fiduciary Net Position	2,445,611,000	2,194,142,000
Net Pension Liability	698,117,340	800,287,150
Schedule of contributions		
Actuarially determined contributions	$105,111,000	$95,103,000
Actual contributions	105,111,000	95,103,000
Contribution deficiency / (excess)	0	0
Demographic data		
Number of retired members and beneficiaries	2,176	2,117
Number of inactive members[2]	407	381
Number of active members	1,974	1,955
Key assumptions		
Investment rate of return	6.75%	6.75%
Inflation rate	2.50%	2.50%
“Across-the-board” salary increase	0.50%	0.50%
Projected salary increases[3]	1955/1980 Plan: 9.25% to 3.75% 2013 Tier: 9.50% to 3.75%	1955/1980 Plan: 9.25% to 3.75% 2013 Tier: 9.25% to 3.75%
Cost-of-living adjustments	2.75%	2.75%

1 The service cost is based on the previous year’s valuation, meaning the service costs as of the June 30, 2024 and June 30, 2023 measurement dates are based on the valuations as of June 30, 2023 and June 30, 2022, respectively. Both service costs have been calculated using the assumptions shown in the Prior Year column, as there had been no changes in the actuarial assumptions between the June 30, 2023 and June 30, 2022 valuations.

2 Includes inactive members due a refund of member contributions.

3 Includes inflation at 2.50% plus “across-the-board” salary increase of 0.50% plus merit and promotion increases that vary based on time from hire.

Important information about actuarial valuations

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

Input Item	Description
Plan provisions	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 (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan of benefits.
Member information	An actuarial valuation for a plan is based on data provided to the actuary by EBMUDERS. 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.
Financial information	The valuation is based on the fair value of assets as of the measurement date, as provided by EBMUDERS.
Actuarial assumptions	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 any). 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.
Actuarial 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. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

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 Board. 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 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 EBMUDERS upon delivery and review. EBMUDERS should notify Segal immediately of any questions or concerns about the final content.

Section 2: GASB 67 Information

General information about the Pension Plan

Plan administration

The East Bay Municipal Utility District (the District) Employees' Retirement System (EBMUDERS or the System) was established in 1937 to administer a single-employer, contributory, defined benefit pension plan (the Pension Plan). The System provides retirement, disability, survivorship, and post-employment health insurance benefits[1] for eligible directors, officers, and employees of the District. The System is administered by a Retirement Board composed of three members appointed by the Board of Directors of the District, two members elected by and from the active membership, and one (nonvoting) member elected by and from the retired membership of the System. Retirement Ordinance No. 40 (Ordinance) assigns the authority to establish Plan benefit provisions to the District's Board of Directors. It should be noted that there are two systems in EBMUDERS (i.e., Water System and Wastewater System).

The System is exempt from the regulations of the Employee Retirement Income Security Act of 1974. The System is also exempt from federal income taxes and California franchise taxes.

The System is an integral part of the District and the District appoints the majority of the Retirement Board of the System and provides for its funding. Accordingly, the System's operations have been reported as a Pension and Other Employee Benefit Trust Fund in the District's basic financial statements.

Plan membership

All regular full-time employees of the District are members of the Plan, in addition to certain job share and intermittent employees. Eligible employees become members on the first day they are physically on the job. At June 30, 2024, Pension Plan membership consisted of the following:

Membership	Count
Retired members and beneficiaries	2,176
Inactive members[2]	407
Active members	1,974
Total	**4,557**

[1] The liabilities and expenses associated with providing post-employment health insurance benefits are reportable under GASB Statements 74 and 75. They have not been included in this report.

[2] Includes inactive members due a refund of member contributions.

Benefits provided

EBMUDERS provides service retirement, disability, death and survivor benefits to eligible employees.

There are two tiers in effect currently, the 1955/1980 Plan and the 2013 Tier.

- Employees who became members of the Retirement System prior to January 1, 2013, or who have reciprocal membership are in the 1955/1980 Plan.
- Employees who became members on or after January 1, 2013 are in the 2013 Tier.

Members may receive disability retirement benefits prior to age 65 if the member is determined to be physically or mentally incapacitated, provided the member has eight or more years of continuous full-time employment. The allowance for disability retirement is computed by a formula specified in the Ordinance and is based upon compensation earnable during employment, years of continuous service, and date upon which the retiring individual became a member. There is a guaranteed minimum disability benefit equal to the greater of one-third of terminal compensation (final average salary) or the retirement allowance, based on the disability formula.

Death benefits are payable to the estate or beneficiary of a member who dies before retirement. Survivorship benefits are payable to the spouse/domestic partner of a member who dies after retirement, or who was eligible but had not retired from service, provided the spouse/domestic partner was married to/established domestic partnership with the member at the date of retirement and for at least one year prior to the member's death.

EBMUDERS provides an annual cost-of-living benefit to all retirees. The cost-of-living adjustment is capped at 3.0% unless the System is more than 85% funded on a Projected Benefit Obligation (PBO) basis, in which case the cost-of-living adjustment is capped at 5.0%.[1]

1955/1980 Plan member benefits

1955/1980 Plan members may elect voluntary reduced service retirement upon attaining the age of 54 and completing five years of continuous full-time employment. Members may elect voluntary unreduced service retirement upon attaining the age of 62 and completing five years of continuous full-time employment or age 65 without restriction.

Members who continue to work upon attaining the normal retirement age of 65 continue to contribute to the Plan, and at the time they retire, computation of their retirement allowance is based upon their compensation and length of service as of the date of retirement.

[1] Effective October 1, 2000, when the System is 85% funded on a PBO basis and the cost-of-living is less than 4%, withdrawals from the accumulated COLA bank are made to allow cost-of-living increases up to 4%.

Service retirement allowances are computed by formulas specified in the Ordinance and are based on date of employment, length of employment, age at date of retirement, and compensation earned during employment.

2013 Tier member benefits

2013 Tier members may elect voluntary reduced service retirement upon attaining the age of 52 and completing five years of continuous full-time employment. Members may elect voluntary unreduced service retirement upon attaining the age of 67 and completing five years of continuous full-time employment.

Members who continue to work upon attaining the normal retirement age of 67 continue to contribute to the Plan, and at the time they retire, computation of their allowance is based upon their compensation and length of service as of the date of retirement. Service retirement allowances are computed by formulas specified in the Ordinance and are based on length of service, age at retirement, and compensation earned during employment.

Contributions

The East Bay Municipal Utility District contributes to the Pension Plan based upon actuarially determined contribution rates adopted by the Retirement Board. Employer contribution rates are adopted annually based upon recommendations received from EBMUDERS' actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2024 for 2023/2024 (based on contribution rates adopted for the June 30, 2022 valuation) was 39.75% of covered payroll.

All members are required to make contributions to EBMUDERS regardless of the Pension Plan or tier in which they are included. The average member contribution rate as of June 30, 2024 for 2023/2024 (based on the June 30, 2022 valuation) was 8.94% of covered payroll.

Exhibit 1 – Net Pension Liability

Line Description	Current Year	Prior Year
Reporting and Measurement Date	June 30, 2024	June 30, 2023
Components of the Net Pension Liability		
Total Pension Liability	$3,143,728,340	$2,994,429,150
Plan Fiduciary Net Position	(2,445,611,000)	(2,194,142,000)
Net Pension Liability	**$698,117,340**	**$800,287,150**
Plan Fiduciary Net Position as a percentage of the Total Pension Liability[1]	77.79%	73.27%

The NPL for the Plan in this valuation was measured as of June 30, 2024. The Plan FNP was valued as of the measurement date and the TPL was determined based upon the actuarial valuation as of June 30, 2024.

Plan provisions

The plan provisions used in the measurement of the NPL as of June 30, 2024 are the same as those used in EBMUDERS' actuarial funding valuation as of June 30, 2024.

Actuarial assumptions

The TPL as of June 30, 2024 uses the same actuarial assumptions as the actuarial funding valuation as of June 30, 2024. The actuarial assumptions used in that funding valuation were based on the results of an experience study for the period July 1, 2020 through June 30, 2024. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

[1] These funded percentages 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.

Assumption Type	Assumption
Investment rate of return	6.75%, net of Pension Plan investment expense, including inflation
Inflation rate	2.50%
"Across-the-board" salary increase	0.50%
Projected salary increases	1955/1980 Plan: 9.25% to 3.75% 2013 Tier: 9.50% to 3.75% The above salary increases vary based on time from hire and include inflation and "across-the-board" salary increase.
Cost-of-living adjustments	2.75% For members who have COLA banks, we assume they receive up to 3.00% COLA increases until their COLA banks are exhausted and 2.75% thereafter.
Other assumptions	See analysis of actuarial experience during the period July 1, 2020 through June 30, 2024.

Detailed information regarding all actuarial assumptions can be found in the June 30, 2024 Actuarial Valuation and Review of Pension Plan Benefits.

Exhibit 2 – Discount rate

Determination of discount rate and investment rates of return

The long-term expected rate of return on Pension Plan investments[1] was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation and, beginning with June 30, 2024, any applicable investment management expenses) are developed for each major asset class. These returns are combined to produce the long-term expected arithmetic rate of return for the portfolio by weighting the expected arithmetic real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses (beginning with June 30, 2024 including only investment consulting fees, custodian fees and other miscellaneous investment expenses) and a risk margin. Beginning with June 30, 2024, this portfolio return is further adjusted to an expected geometric real rate of return for the portfolio.

The target allocation (approved by the Board) and projected arithmetic real rates of return for each major asset class (after deducting inflation and applicable investment management expenses), are shown in the following table. This information was used in the derivation of the long-term expected investment rate of return assumption for the actuarial funding valuation as of June 30, 2024. This information will be subject to change every four years based on the results of an actuarial experience study, or every two years based upon an interim economic actuarial assumptions study.

[1] Note that the investment return assumption for funding purposes was developed net of both investment and administrative expenses; however, the same investment return assumption was used for financial reporting purposes, where it is considered gross of administrative expenses. This results in an increase in the margin for adverse deviation when using that investment return assumption for financial reporting.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return[1]
Domestic large cap equity	32.55%	5.80%
Domestic small cap equity	2.45%	6.59%
Developed international large cap equity	18.00%	6.44%
Emerging markets equity	7.00%	8.32%
Core bonds	20.00%	2.27%
High yield bonds	7.50%	4.62%
Bank loans	5.00%	4.43%
Real estate	2.50%	4.54%
Private debt	5.00%	6.63%
Total	**100.00%**	**5.26%**

Discount rate

The discount rate used to measure the TPL was 6.75% as of June 30, 2024.

The projection of cash flows used to determine the discount rate assumes plan member contributions will be made at the current contribution rates and that employer contributions will be made at rates equal to the actuarially determined contribution rates.[2] Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan FNP was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on Pension Plan investments was applied to all periods of projected benefit payments to determine the TPL as of June 30, 2024.

Discount rate sensitivity

The following presents the NPL of EBMUDERS as of June 30, 2024 calculated using the current discount rate of 6.75%, as well as what EBMUDERS' NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current rate.

[1] Arithmetic real rates of return are net of inflation.
[2] For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.

Section 2: GASB 67 Information

Line Description	1% Decrease in Discount Rate (5.75%)	Current Discount Rate (6.75%)	1% Increase in Discount Rate (7.75%)
Net Pension Liability	$1,110,904,700	$698,117,340	$356,956,008

Exhibit 3 – Schedule of changes in Net Pension Liability

Line Description	Current Year	Prior Year
Reporting and Measurement Date	June 30, 2024	June 30, 2023
Total Pension Liability		
Service cost[1]	$60,312,330	$56,378,319
Interest	201,159,010	190,492,351
Change of benefit terms	0	0
Differences between expected and actual experience	11,736,760	51,868,388
Changes of assumptions	25,307,090	0
Benefit payments, including refunds of member contributions	(149,216,000)	(140,081,000)
Net change in Total Pension Liability	**$149,299,190**	**$158,658,058**
Total Pension Liability — beginning	2,994,429,150	2,835,771,092
Total Pension Liability — ending	**$3,143,728,340**	**$2,994,429,150**
Plan Fiduciary Net Position		
Contributions — employer	$105,111,000	$95,103,000
Contributions — member	23,637,000	21,865,000
Net investment income	274,375,000	214,117,000
Benefit payments, including refunds of member contributions	(149,216,000)	(140,081,000)
Administrative expense	(2,438,000)	(2,214,000)
Net change in Plan Fiduciary Net Position	**$251,469,000**	**$188,790,000**
Plan Fiduciary Net Position — beginning	2,194,142,000	2,005,352,000
Plan Fiduciary Net Position — ending	**$2,445,611,000**	**$2,194,142,000**
Net Pension Liability — ending	**$698,117,340**	**$800,287,150**
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	77.79%	73.27%
Covered payroll[2]	$264,425,972	$246,230,567
Plan Net Pension Liability as percentage of covered payroll	264.01%	325.02%

[1] The service cost is based on the previous year's valuation, meaning the service costs as of the June 30, 2024 and June 30, 2023 measurement dates are based on the valuations as of June 30, 2023 and June 30, 2022, respectively. Both service costs have been calculated using the assumptions shown in the Prior Year column on page 7, as there had been no changes in the actuarial assumptions between the June 30, 2023 and June 30, 2022 valuations.

[2] Covered payroll represents payroll on which contributions to the pension plan are based.

Exhibit 4 – Schedule of employer contributions

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll[1]	Contributions as a Percentage of Covered Payroll
2015	$64,177,000	$64,177,000	$0	$166,886,146	38.46%
2016	65,218,000	65,218,000	0	174,586,444	37.36%
2017	67,096,000	67,096,000	0	182,031,838	36.86%
2018	71,221,000	71,221,000	0	193,717,364	36.77%
2019	74,033,000	74,033,000	0	203,541,207	36.37%
2020	77,645,000	77,645,000	0	215,109,948	36.10%
2021	79,252,000	79,252,000	0	221,809,447	35.73%
2022	91,393,000	91,393,000	0	233,939,981	39.07%
2023	95,103,000	95,103,000	0	246,230,567	38.62%
2024	105,111,000	105,111,000	0	264,425,972	39.75%

See accompanying notes to this schedule on next page.

[1] Covered payroll represents payroll on which contributions to the pension plan are based, as reported by EBMUDERS.

Methods and assumptions used to establish the actuarially determined contribution for the year ended June 30, 2024

Valuation date

Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported (the June 30, 2022 valuation sets the rates for the 2023/2024 fiscal year).

Actuarial cost method

Entry Age Cost Method

Amortization method

Level percent of payroll

Remaining amortization period

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

Asset valuation method

The actuarial value of assets is equal to the market value (or fair value) of assets less unrecognized returns from each of the last five years. The unrecognized return each year is equal to the difference between the actual and expected returns on the market value of assets, recognized over a five-year period. The actuarial value of assets is further adjusted, if necessary, to be within 30% of the market value of assets.

Section 2: GASB 67 Information

Actuarial assumptions

The actuarially determined contribution for the year ended June 30, 2024 is based on the results of the EBMUDERS June 30, 2022 Actuarial Valuation and Review of Pension Plan Benefits. The actuarial assumptions used in that valuation are as follows:

Assumption Type	Assumptions Used in the June 30, 2022 Valuation
Investment rate of return	6.75%, net of Pension Plan investment expense, including inflation
Inflation rate	2.50%
"Across-the-board" salary increase	0.50%
Projected salary increases	9.25% to 3.75% The above salary increases vary by time from hire and include inflation and "across-the-board" salary increase.
Cost-of-living adjustments	2.75% For members who have COLA banks, we assume they receive up to 3.00% COLA increases until their COLA banks are exhausted and 2.75% thereafter.
Mortality	**Healthy:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2020
Other assumptions	Same as those used in the funding actuarial valuation as of June 30, 2022.

Appendix A: Projection of Plan Fiduciary Net Position

Projection of Plan Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2024 ($ in millions)

Year Beginning July 1	Beginning Plan Fiduciary Net Position (a)	Total Contributions (b)	Benefit Payments (c)	Administrative Expenses (d)	Investment Earnings (e)	Ending Plan Fiduciary Net Position (a) + (b) – (c) – (d) + (e)
2023	$2,194	$129	$149	$2	$274	$2,446
2024	2,446	131	162	3	163	2,576
2025	2,576	129	170	3	172	2,704
2026	2,704	133	179	3	180	2,835
2027	2,835	130	188	3	189	2,963
2028	2,963	129	196	3	197	3,089
2029	3,089	130	205	3	205	3,216
2030	3,216	124	213	4	213	3,336
2031	3,336	124	222	4	221	3,456
2032	3,456	122	230	4	229	3,573
2054	3,883	17	334	4	250	3,812
2055	3,812	16 [1]	335	4	245	3,734
2056	3,734	15	335	4	240	3,650
2057	3,650	14 [1]	334	4	234	3,560
2116	1	0 [1,2]	1	0 [2]	0 [2]	1
2117	1	0 [1,2]	0 [2]	0 [2]	0 [2]	0 [2]
2118	0 [2]	0 [1,2]	0 [2]	0 [2]	0 [2]	0 [2]
2119	0 [2]	0 [1,2]	0 [2]	0 [2]	0 [2]	0 [2]
2120	0 [2]	0 [1,2]	0 [2]	0 [2]	0 [2]	0 [2]
2121	0 [2]	0 [1,2]	0 [2]	0 [2]	0 [2]	0 [2]
2122	0 [2]	0 [1,2]	0 [2]	0 [2]	0 [2]	0 [2]

[1] Mainly attributable to employer contributions to fund each year's annual administrative expenses.
[2] Less than $1 million when rounded.

Notes

1. Amounts may not total exactly due to rounding.
2. Amounts shown in the year beginning July 1, 2023 row are actual amounts, based the financial statements provided by EBMUDERS.
3. Various years have been omitted from this table.
4. In preparing the above projections, we have not taken into consideration the one-year delay between the date of the contribution rate calculation and the implementation.
5. **Column (a):** None of the Plan FNP amounts shown have been adjusted for the time value of money.
6. **Column (b):** Projected total contributions include member and employer normal cost contributions based on closed group projections (based on covered active members as of June 30, 2024); plus employer contributions to the UAAL, plus employer contributions to fund each year's annual administrative expenses reflecting a 20-year amortization schedule. Contributions are assumed to occur halfway through the year, on average.
7. **Column (c):** Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive and retired members and beneficiaries as of June 30, 2024. The projected benefit payments reflect the cost-of-living increase assumptions used in the June 30, 2024 valuation report. Benefit payments are assumed to occur halfway through the year, on average.
8. **Column (d):** Projected administrative expenses are calculated as approximately 0.11% of the beginning Plan FNP. The 0.11% was based on the actual fiscal year 2023/2024 administrative expenses as a percentage of the beginning Plan FNP as of July 1, 2023. Administrative expenses are assumed to occur halfway through the year, on average.
9. **Column (e):** Projected investment earnings are based on the assumed investment rate of return of 6.75% per annum and reflect the assumed timing of cashflows, as noted above.
10. As illustrated in this appendix, the Plan FNP was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are **not** covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 6.75% per annum was applied to all periods of projected benefit payments to determine the TPL as of June 30, 2024 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.

Appendix B: Definition of terms

Definitions of certain terms as they are used in GASB Statement No. 67. The terms may have different meanings in other contexts.

Term	Definition
Active employees	Individuals employed at the end of the reporting or measurement period, as applicable.
Actual contributions	Cash contributions recognized as additions to the Plan Fiduciary Net Position.
Actuarial present value of projected benefit payments	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial valuation	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial valuation date	The date as of which an actuarial valuation is performed.
Actuarially determined contribution	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad hoc cost-of-living adjustments (Ad Hoc COLAs)	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad hoc postemployment benefit changes	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Agent employer	An employer whose employees are provided with pensions through an agent multiple-employer defined benefit pension plan.
Agent multiple-employer defined benefit pension plan (agent pension plan)	A multiple-employer defined benefit pension plan in which pension plan assets are pooled for investment purposes but separate accounts are maintained for each individual employer so that each employer's share of the pooled assets is legally available to pay the benefits of only its employees.
Automatic cost-of-living adjustments (Automatic COLAs)	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Automatic postemployment benefit changes	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).

Appendix B: Definition of terms

Term	Definition
Closed period	A specific number of years that is counted from one date and declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth.
Contributions	Additions to the Plan Fiduciary Net Position for amounts from employers, non-employer contributing entities (for example, state government contributions to a local government pension plan), or employees. Contributions can result from cash receipts by the pension plan or from recognition by the pension plan of a receivable from one of these sources.
Cost-of-living adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-sharing employer	An employer whose employees are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan.
Cost-sharing multiple employer defined benefit pension plan (Cost-sharing pension plan)	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered payroll	Payroll on which contributions to a pension plan are based.
Deferred retirement option program (DROP)	A program that permits an employee to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The employee continues to provide service to the employer and is paid for that service by the employer after the DROP entry date; however, the pensions that would have been paid to the employee (if the employee had retired and not entered the DROP) are credited to an individual employee account within the defined benefit pension plan until the end of the DROP period.
Defined benefit pension plans	Pension plans that are used to provide defined benefit pensions.
Defined benefit pensions	Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of GASB Statement No. 67.)
Defined contribution pension plans	Pension plans that are used to provide defined contribution pensions.

Appendix B: Definition of terms

Term	Definition
Defined contribution pensions	Pensions having terms that: 1. Provide an individual account for each employee; 2. Define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and 3. Provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.
Discount rate	The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following: 1. The actuarial present value of benefit payments projected to be made in future periods in which: a. The amount of the Plan Fiduciary Net Position is projected (under the requirements of GASB Statement No. 67) to be greater than the benefit payments that are projected to be made in that period, and b. Pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments. 2. The actuarial present value of projected benefit payments not included in 1., calculated using the municipal bond rate.
Entry age actuarial cost method	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability.
Inactive employees	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
Measurement period	The period between the prior and the current measurement dates.
Multiple-employer defined benefit pension plan	A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
Net Pension Liability (NPL)	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit pension plan.
Non-employer contributing entities	Entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities.

Appendix B: Definition of terms

Term	Definition
Other postemployment benefits	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Pension plans	Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed and benefits are paid as they come due.
Pensions	Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.
Plan members	Individuals that are covered under the terms of a pension plan. Plan members generally include: 1. Employees in active service (active plan members), and 2. Terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).
Postemployment	The period after employment.
Postemployment benefit changes	Adjustments to the pension of an inactive employee.
Postemployment healthcare benefits	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.
Projected benefit payments	All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.
Public employee retirement system	A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.
Real rate of return	The rate of return on an investment after adjustment to eliminate inflation.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Single employer	An employer whose employees are provided with pensions through a single-employer defined benefit pension plan.
Single-employer defined benefit pension plan (Single-employer pension plan)	A defined benefit pension plan that is used to provide pensions to employees of only one employer.

Appendix B: Definition of terms

Term	Definition
Special funding situations	Circumstances in which a non-employer entity is legally responsible for making contributions directly to a pension plan that is used to provide pensions to the employees of another entity or entities and either of the following conditions exists: 1. The amount of contributions for which the non-employer entity legally is responsible is not dependent upon one or more events or circumstances unrelated to the pensions. 2. The non-employer entity is the only entity with a legal obligation to make contributions directly to a pension plan.
Termination benefits	Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.
Total Pension Liability (TPL)	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB Statement No. 67.

5923724v5/10419.007