

The Water and Power Employees' Retirement Plan of the City of Los Angeles

**Governmental Accounting Standards Board
Statement No. 67 (GASB 67) Actuarial Valuation
as of June 30, 2024**



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October 1, 2024

Board of Administration
The Water and Power Employees' Retirement Plan of the City of Los Angeles
111 North Hope Street, Room 357
Los Angeles, CA 90012

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board Statement No. 67 (GASB 67) Actuarial Valuation as of June 30, 2024 for the Water and Power Employees' Retirement Plan of the City of Los Angeles ("WPERP" or "the Plan"). It contains various information that will need to be disclosed in order to comply with GASB 67. Please refer to WPERP's Actuarial Valuation and Review as of July 1, 2024, dated September 9, 2024, 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 Board of Administration (the Board), based upon information provided by the Retirement Office.

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 Eva Yum, FSA, MAAA, 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 the Plan and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is

Board of Administration
October 1, 2024

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



Todd Tauzer, FSA, MAAA, FCA, CERA
Senior Vice President and Actuary



Eva Yum, FSA, MAAA, EA
Vice President and Actuary

ST/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 March 31, 2024, provided by the Retirement Office;
- The assets of the Plan as of June 30, 2024, provided by the Retirement Office;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the July 1, 2024 funding valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the July 1, 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 WPERP uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is generally determined on the same basis as WPERP's Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally 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.

Section 1: Actuarial Valuation Summary

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 AAL from the funding actuarial valuation as of July 1, 2024 and the Plan FNP was also valued as of the measurement date.
2. The June 30, 2024 measurement date results reflect changes in the plan provisions adopted by the Board on August 23, 2023. For members retiring from Permanent Total Disability (PTD) on or after January 1, 2022 who have received PTD benefit consecutively for 10 or more years, their retirement benefit will be the greater of the Formula Pension (based on the member's Monthly Salary Base) or 40% of the member's Monthly Salary Base regardless of Service Credit. The Monthly Salary Base is determined at the time of PTD, increased by the cost-of-living assumptions as adopted for the Plan's valuation applicable for the respective tiers up to the maximum cost of living adjustment specified in the Plan. These plan changes have the effect of increasing the NPL by \$3.9 million.
3. The NPL decreased from \$582.1 million as of June 30, 2023 to \$214.2 million as of June 30, 2024 primarily due to a return on the market value of assets of 9.77% during fiscal year 2023-2024 that was more than the assumption of 6.50% used in the July 1, 2023 valuation (a gain of about \$533 million), partially offset by a liability loss. 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 6.50%, following the same assumptions used by WPERP in the actuarial funding valuation as of July 1, 2024. The detailed calculations used in the derivation of the 6.50% discount rate can be found in *Appendix A*. Various other information that is required to be disclosed can be found throughout *Section 2*.
5. This actuarial valuation is based on Plan data as of March 31, 2024 (adjusted to June 30, 2024 by adding three months of age, service and interest on contribution balance, and increasing benefits by the assumed July 1 COLA for members in pay status) and it does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after March 31, 2024.

Section 1: Actuarial Valuation Summary

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	\$350,358,449	\$322,734,117
Total Pension Liability	18,026,936,825	17,006,868,824
Plan Fiduciary Net Position ²	17,812,697,101	16,424,801,111
Net Pension Liability	214,239,724	582,067,713
Schedule of contributions		
Actuarially determined contributions ³	\$435,599,199	\$372,208,800
Actual contributions	425,303,910	361,585,859
Contribution deficiency / (excess)	10,295,289	10,622,941
Demographic data		
Number of retired members and beneficiaries	9,877	9,756
Number of inactive members ⁴	1,786	1,765
Number of active members	11,485	11,039
Key assumptions		
Investment rate of return	6.50%	6.50%
Inflation rate	2.50%	2.50%
“Across-the-board” salary increase	0.50%	0.50%
Projected salary increases ⁵	4.25% to 10.00%	4.25% to 10.00%
Cost-of-living adjustments	Tier 1: 2.75% Tier 2: 2.00%	Tier 1: 2.75% Tier 2: 2.00%

¹ The service cost is based on the previous year's valuation, meaning the service cost as of the June 30, 2024 and June 30, 2023 measurement dates are based on the valuations as of July 1, 2023 and July 1, 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 July 1, 2023 and July 1, 2022 valuations.

² Based on preliminary unaudited financial statements as of June 30, 2024.

³ Based on actual covered payroll reported by the Retirement Office.

⁴ Includes terminated members due a refund of member contributions and members receiving PTD benefits.

⁵ Includes inflation at 2.50% plus “across-the-board” salary increase of 0.50% plus merit and promotion increases that vary by service.

Section 1: Actuarial Valuation Summary

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 WPERP. 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 WPERP.
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. The discount rate used for calculating Total Pension Liability is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

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 WPERP 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 WPERP upon delivery and review. WPERP 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 Water and Power Employees' Retirement Plan of the City of Los Angeles (WPERP) was established by the Los Angeles Department of Water and Power in 1938. WPERP is a single employer public employee retirement system whose main function is to provide retirement benefits to employees of the Los Angeles Department of Water and Power.

Under the provisions of the City Charter, the Board of Administration (the "Board") has the responsibility and authority to administer the Plan and to invest its assets. The Board members serve as trustees and must act in the exclusive interest of the Plan's members and beneficiaries. The Board has seven members:

- One member of the Board of Water and Power Commissioners;
- The General Manager;
- The Chief Accounting Employee;
- Three employee members who are elected for three-year terms by active members of the Plan; and
- One retiree who is appointed by the Board of Water and Power Commissioners for a three-year term.

Plan membership¹

At June 30, 2024, pension plan membership consisted of the following:

Membership	Count
Retired members and beneficiaries	9,877
Inactive members ²	1,786
Active members	11,485
Total	23,148

¹ Data used is as of March 31, 2024, adjusted to June 30, 2024 by adding three months of age, service and interest on contribution balance, and increasing benefit by the assumed July 1 COLA for members in pay status.

² Includes terminated members due a refund of member contributions and members receiving PTD benefits.

Section 2: GASB 67 Information

Benefits provided

WPERP provides service retirement, disability, death and survivor benefits to eligible employees. Most employees of the LADWP become members of WPERP effective on the first day of biweekly payroll following employment.

Members employed prior to January 1, 2014 are designated as Tier 1 and those hired on or after January 1, 2014 are designated as Tier 2 (unless a specific exemption applies to employee providing a right to Tier 1 status).

The formula pension benefit the member will receive is based upon age at retirement, monthly average salary base and years of retirement service credit.

- Pension benefits are calculated based on the highest average salary earned during a 12-month period for Tier 1 and are calculated based on the average salary earned during a 36-month period for Tier 2.
- Eligibility for retirement depends on a combination of attained age and either Department Service (DWP service including leave of absence and purchased time) or Qualifying Service (combined years of service between WPERP and LACERS).

The member may elect the full allowance, or choose an optional retirement allowance. The full allowance provides the highest monthly benefit and up to a 50% continuance to an eligible surviving spouse or domestic partner. There are five optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the full allowance in order to allow the member the ability to provide various benefits to a surviving spouse, domestic partner, or named beneficiary.

WPERP provides annual cost-of-living adjustments (COLAs) to retirees that are not considered vested retirement. The cost-of-living adjustments are made each July 1 based on the percentage change in the average of the Consumer Price Index for the Los Angeles-Long Beach-Anaheim--All Items For All Urban Consumers. It is capped at 3.0% for Tier 1 and 2.0% for Tier 2. Tier 2 members may purchase additional 1% COLA protection at full actuarial cost.

Tier 1 benefits

Tier 1 members are eligible to retire once they attain the age of 60 with 5 or more years of Department Service or at age 55 with 10 or more years of Department Service acquired in the last 12 years prior to retirement. A Tier 1 member with 30 years of Department Service is eligible to retire regardless of age. Tier 1 members receiving PTD benefits may retire regardless of age. To be eligible for a formula pension, the employee must have worked or been paid disability four of the last five years immediately preceding eligibility to retire or while eligible to retire.

The Tier 1 formula pension is equal to 2.1% times years of service credit times monthly average salary base. In addition, members retiring after attaining age 55 with 30 years of service credit receive an increase in the benefit factor from 2.1% to 2.3%. A reduced early retirement benefit is paid for those members attaining age 55 with 10 years of service or any age (under 55) with 30 years of

Section 2: GASB 67 Information

service. The reduction is 1.5% for each year of retirement age between 60 and 55 and 3.0% for each year of retirement before age 55. The maximum monthly retirement allowance is 100% of monthly average salary base.

Tier 2 benefits

Tier 2 members are eligible to retire once they attain the age of 60 with 5 years of continuous Department Service with the Plan immediately prior to reaching eligibility and made normal contributions to the Plan for those 5 years, or age 60 with 10 or more years of Qualifying Service, or at any age with 30 years of Qualifying Service. Members receiving PTD benefits may retire regardless of age.

Under Tier 2, there are various benefit factors that apply as shown below:

- 1.5% at age 60 with 5 years of continuous Department Service (or 10 years of Qualifying Service)
- 2.0% at age 60 with 30 years of Qualifying Service
- 2.0% at age 55 with 30 years of Service Credit (or any age with 30 years of Qualifying Service)
- 2.0% at age 63 with 5 years of continuous Department Service (or 10 years of Qualifying Service)
- 2.1% at age 63 with 30 years of Qualifying Service

The reduced early retirement benefits for Tier 2 are the same as Tier 1. These are applied to the age 60 benefit for members (with 2.0% formula) who retire before age 60 with less than 30 years of Service Credit. Service Credit with the Department and with LACERS is combined for satisfying this requirement. The maximum monthly retirement allowance is 80% of monthly average salary base.

Contributions

The LADWP contributes to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Administration. Employer contribution rates are adopted annually based upon recommendations received from WPERP's actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2024 (based on the July 1, 2023 valuation) was 31.40% of compensation.

All members are required to make contributions to WPERP regardless of the retirement plan or tier in which they are included. The average member contribution rate as of June 30, 2024 (based on the July 1, 2023 valuation) was 8.11% of compensation. Most Tier 1 members contribute at 6% of compensation and all Tier 2 members contribute at 10% of compensation.

Section 2: GASB 67 Information

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	\$18,026,936,825	\$17,006,868,824
Plan Fiduciary Net Position	(17,812,697,101)	(16,424,801,111)
Net Pension Liability	\$214,239,724	\$582,067,713
Plan Fiduciary Net Position as a percentage of the Total Pension Liability ¹	98.81%	96.58%

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 results of the actuarial valuation as of July 1, 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 WPERP's actuarial funding valuation as of July 1, 2024.

Actuarial assumptions

The TPL as of June 30, 2024 uses the same actuarial assumptions as the actuarial funding valuation as of July 1, 2024. The actuarial assumptions used in that funding valuation were based on the results of an experience study for the period July 1, 2018 through June 30, 2021. 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.

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Assumption Type	Assumption
Investment rate of return	6.50%, net of pension plan investment expense, including inflation
Inflation rate	2.50%
“Across-the-board” salary increase	0.50%
Salary increases	4.25% to 10.00% The above salary increases vary by service and include inflation and “across-the-board” salary increase.
Cost-of-living adjustments	Tier 1: 2.75% Tier 2: 2.00%
Other assumptions	See analysis of actuarial experience during the period July 1, 2018 through June 30, 2021.

Detailed information regarding all actuarial assumptions can be found in the July 1, 2024 Actuarial Valuation and Review.

Section 2: GASB 67 Information

Exhibit 2 – Discount rate

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments was determined in 2022 using a building-block method in which expected future real rates of return (expected returns, net of inflation) 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 and a risk margin.

The target allocation (approved by the Board) and projected arithmetic real rates of return for each major asset class (after deducting inflation but before deducting investment 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 July 1, 2024. This information will be subject to change every three years based on the results of an actuarial experience study.

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Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return ¹
Large cap US equity	21.10%	5.13%
Small cap US equity	2.10%	5.86%
Developed international large cap equity	12.20%	6.01%
Developed international small cap equity	1.80%	5.72%
Global equity	2.70%	5.94%
Emerging market equity	5.10%	8.16%
TIPS	3.50%	(0.23%)
Real estate	7.00%	4.60%
Cash and equivalents	1.00%	(0.77%)
Commodities	1.50%	2.77%
Private equity	10.00%	10.46%
Private credit	2.40%	5.94%
Hedge funds	5.00%	1.85%
Non-core real estate	3.00%	7.14%
Custom fixed income	21.60%	0.68%
Total	100.00%	4.61%

Discount rate

The discount rate used to measure the TPL was 6.50% 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 required 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

¹ Arithmetic real rates of return are net of inflation.

² For this purpose, only employee and employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.

Section 2: GASB 67 Information

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 WPERP as of June 30, 2024 calculated using the current discount rate of 6.50%, as well as what WPERP's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.50%) or 1-percentage-point higher (7.50%) than the current rate.

Line Description	1% Decrease in Discount Rate (5.50%)	Current Discount Rate (6.50%)	1% Increase in Discount Rate (7.50%)
Net Pension Liability	\$2,687,969,901	\$214,239,724	\$(1,818,304,420)

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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	350,358,449	\$322,734,117
Interest	1,102,391,454	1,045,077,316
Change of benefit terms	3,907,622	(82,833,165)
Differences between expected and actual experience	358,127,987	341,242,444
Changes of assumptions	0	0
Benefit payments, including refunds of member contributions	(794,717,511)	(749,460,645)
Other	0	0
Net change in Total Pension Liability	\$1,020,068,001	\$876,760,067
Total Pension Liability — beginning	17,006,868,824	16,130,108,757
Total Pension Liability — ending	\$18,026,936,825	\$17,006,868,824
Plan Fiduciary Net Position		
Contributions — employer ¹	431,968,373	\$368,478,954
Contributions — member	162,160,081	144,715,315
Net investment income	1,594,129,730	1,153,142,796
Benefit payments, including refunds of member contributions	(794,717,511)	(749,460,645)
Administrative expense	(5,644,683)	(5,999,703)
Other	0	0
Net change in Plan Fiduciary Net Position	\$1,387,895,990	\$910,876,717
Plan Fiduciary Net Position — beginning	16,424,801,111	15,513,924,394
Plan Fiduciary Net Position — ending	\$17,812,697,101	\$16,424,801,111
Net Pension Liability — ending	\$214,239,724	\$582,067,713
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	98.81%	96.58%
Covered payroll ²	\$1,403,031,222	\$1,259,245,870
Plan Net Pension Liability as percentage of covered payroll	15.27%	46.22%

¹ Includes contributions towards administrative expenses.

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

Section 2: GASB 67 Information

Exhibit 4 – Schedule of employer contributions

Year Ended June 30	Actuarially Determined Contributions ^{1, 2, 3}	Contributions in Relation to the Actuarially Determined Contributions ^{1, 2}	Contribution Deficiency / (Excess)	Covered Payroll ⁴	Contributions as a Percentage of Covered Payroll
2015	\$387,464,759	\$376,902,022	\$10,562,737	\$839,213,254	44.91%
2016	368,599,924	362,359,894	6,240,030	861,818,854	42.05%
2017	403,780,319	391,717,359	12,062,960	892,332,196	43.90%
2018	425,512,236	433,412,569	(7,900,333)	953,635,670	45.45%
2019	408,750,192	410,165,124	(1,414,932)	1,028,212,002	39.89%
2020	424,375,428	422,017,394	2,358,034	1,130,066,141	37.34%
2021	373,374,390	378,990,511	(5,616,121)	1,121,883,556	33.78%
2022	302,800,123	318,873,759	(16,073,636)	1,178,016,102	27.07%
2023	372,208,800	361,585,859	10,622,941	1,259,245,870	28.71%
2024	435,599,199	425,303,910	10,295,289	1,403,031,222	30.31%

See accompanying notes to this schedule on next page.

¹ Based on actual covered payroll reported by the Retirement Office. For the year ended June 30, 2015, reflects the effect of the phase-in over two years of the contribution rate impact of new actuarial assumptions adopted by the Board effective with the July 1, 2014 valuation. For the year ended June 30, 2017, reflects the effect of the phase-in over two years of the contribution rate impact of new actuarial assumptions adopted by the Board effective with the July 1, 2016 valuation.

² Excludes employer contributions towards administrative expenses.

³ Starting in 2019, the actuarially determined contribution is determined by applying the Tier 1 and Tier 2 contribution rates to their respective payroll.

⁴ Covered payroll represents payroll on which contributions to the pension plan are based.

Section 2: GASB 67 Information

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, one year prior to the end of the fiscal year in which contributions are reported (the July 1, 2023 valuation sets the rates for the 2023-2024 fiscal year).

Actuarial cost method

Entry Age Actuarial Cost Method

Amortization method

Level dollar amortization

Remaining amortization period

The July 1, 2004 UAAL is amortized over a 15-year period commencing July 1, 2004 (fully amortized as of July 1, 2019).

Any subsequent changes in UAAL are amortized over separate 15-year periods effective with that valuation.

The funding policy was revised and adopted by the Retirement Board on November 9, 2022. In particular, if the Plan is in a surplus position and the surplus is 20% or greater (i.e., the funded ratio is 120% or greater), the surplus in excess of 20% will be amortized over a 30-year period in equal dollar amounts. In a year where the Plan is in a surplus position following a previous unfunded liability position, or an unfunded liability position following a previous surplus position, the previous amortization layers will be considered fully amortized (i.e., set to zero) and a new series of amortization layers will start.

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.

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 WPERP July 1, 2023 Actuarial Valuation and Review. The actuarial assumptions used in that valuation are as follows:

Assumption Type	Assumption Used in the July 1, 2023 Actuarial Valuation
Investment rate of return	6.50%, net of pension plan investment expense, including inflation
Inflation rate	2.50%
“Across-the-board” salary increase	0.50%
Salary increases	4.25% to 10.00% The above salary increases vary by service and include inflation and “across-the-board” salary increases.
Cost-of-living adjustments	2.75% Actual increases are contingent upon CPI increases with a 3.00% maximum for Tier 1 and a 2.00% maximum for Tier 2.
Other assumptions	Same as those used in the funding actuarial valuation as of July 1, 2023

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)	Investment Earnings (d)	Ending Plan Fiduciary Net Position (a) + (b) – (c) + (d)
2024	\$17,813	\$547	\$882	\$1,147	\$18,624
2025	18,624	427	915	1,195	19,331
2026	19,331	428	961	1,239	20,037
2027	20,037	372	1,006	1,282	20,684
2028	20,684	369	1,049	1,322	21,326
2029	21,326	368	1,094	1,363	21,962
2030	21,962	366	1,141	1,402	22,589
2031	22,589	362	1,189	1,441	23,203
2032	23,203	358	1,238	1,480	23,803
2033	23,803	354	1,287	1,517	24,386
2050	29,932	176	2,092	1,883	29,899
2051	29,899	157	2,144	1,879	29,791
2052	29,791	137	2,196	1,869	29,601
2053	29,601	116	2,247	1,855	29,325
2099	8,337	0	80	539	8,797
2100	8,797	0	61	570	9,306
2101	9,306	0	46	603	9,863
2102	9,863	0	35	640	10,468
2135	77,978	0	0 ¹	5,069	83,047
2136	83,047	0	0 ¹	5,398	88,445
2137	88,445	0	0 ¹	5,749	94,193 ²

¹ Less than \$1 million when rounded.

² The Plan FNP of \$94,193 million has a value of \$72 million as of June 30, 2024 when discounted with interest at the rate of 6.50% per annum.

Appendix A: Projection of Plan Fiduciary Net Position

Notes

1. Amounts may not total exactly due to rounding.
2. Various years have been omitted from this table.
3. **Column (a):** Except for the “discounted value” for 2137 shown in the footnote on the previous page, none of the Plan FNP amounts shown have been adjusted for the time value of money.
4. **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. Contributions are assumed to occur halfway through the year, on average.
5. **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 July 1, 2024 valuation report. Benefit payments are assumed to occur halfway through the year, on average.
6. **Column (d):** Projected investment earnings are based on the assumed investment rate of return of 6.50% per annum and reflect the assumed timing of cashflows, as noted above.
7. Throughout the projection, administrative expenses are not shown as they are expected to be offset by additional employer contributions above those shown in this projection.
8. 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 6.50% 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: <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> 1. The actuarial present value of benefit payments projected to be made in future periods in which: <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> 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	<p>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:</p> <ol style="list-style-type: none"> 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	<p>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.</p>
Total Pension Liability (TPL)	<p>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.</p>