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

Actuarial Valuation and Review
as of July 1, 2025

Segal

Segal

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September 23, 2025

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 Actuarial Valuation and Review as of July 1, 2025. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year 2025-2026.

This report 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.

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

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

The actuarial calculations were directed under the supervision of Eva Yum, FSA, MAAA, and 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 this 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 encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

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

Sincerely,

Segal

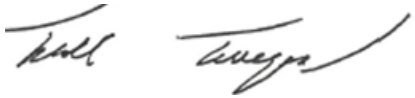

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Table of Contents

Table of Contents

Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present a valuation of The Water and Power Employees' Retirement Plan of the City of Los Angeles ("the Plan") as of July 1, 2025. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Plan, as administered by the Board;
- The characteristics of covered active members, inactive members and retired members and beneficiaries as of March 31, 2025, provided by the Retirement Office;
- The assets of the Plan as of June 30, 2025, provided by the Retirement Office;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the July 1, 2025 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board for the July 1, 2025 valuation; and
- The funding policy adopted by the Board.

Certain disclosure information required by Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 as of July 1, 2025 for the Plan is provided in a separate report.

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

The contribution requirements are determined as a percentage of payroll. The Plan's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities, as applicable. In this valuation, we have applied the funding policy adopted by the Board on May 18, 2000 and most recently amended on November 9, 2022. Details of the funding policy are provided in *Section 4, Exhibit 1* starting on page 55.

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

Valuation highlights

Funding measures

1. The funded ratio (the ratio of actuarial value of assets to the actuarial accrued liability) increased from 97.64% to 100.52%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio increased from 98.81% to 103.57%. These measurements are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for, or the amount of, future contributions. A history of the Plan's funded ratios is provided in *Section 2, Subsection G* on pages 33 and 34.
2. The unfunded/(overfunded) actuarial accrued liability (the difference between the actuarial accrued liability and the actuarial value of assets) decreased from $426.2 million to a surplus of $(98.1) million. This decrease is primarily due to an investment return on the actuarial value of assets (i.e., after asset smoothing) higher than the 6.50% rate assumed in the prior valuation and from contributions made to pay down the UAAL, offset somewhat by individual salary increases greater than expected and actual 7/1/2024 and 7/1/2025 cost-of-living adjustments (COLAs) for retirees and beneficiaries greater than expected. A reconciliation of the Plan's UAAL from the prior year is provided in *Section 2, Subsection E* on page 28.

   A schedule of the current UAAL amortization balances and payments may be found in *Section 3, Exhibit H* starting on page 54. Because the surplus is less than 20%, there is no amortization of the surplus.

Actuarial experience

3. The net actuarial gain of $366.4 million, or 1.95% of the actuarial accrued liability, is due to investment gain of $404.5 million, or 2.15% of actuarial accrued liability, offset to some degree by a net loss from sources other than investments of $38.1 million[1], or 0.20% of the actuarial accrued liability. The loss from sources other than investments was primarily due to greater than expected individual salary increases for actives and greater than expected actual 7/1/2024 and 7/1/2025 COLAs for retirees and beneficiaries.
4. The rate of return on the market value of assets was 10.76% for the year ending June 30, 2025. The return on the actuarial value of assets was 8.81% for the same period due to the recognition of a portion of this year's investment gains and a portion of

[1] Includes $0.3 million from the one-time discretionary Tier 2 COLA granted by the Board, as allowed by the Plan.

prior years' investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 6.50% used in the July 1, 2024 valuation. This actuarial investment gain (after asset smoothing) decreased the average employer contribution rate by 2.48% of payroll when amortized over 15 years.

5. The salaries for continuing actives increased on average by 6.2% from March 31, 2024 to March 31, 2025. Since this increase is greater than the average assumed rate of approximately 5.1%, the plan experienced an actuarial loss from individual salary experience. This loss amounted to $30.0 million for the current year, which increased the aggregate required contribution by 0.18% of payroll when amortized over 15 years. There was also a loss from COLAs for retirees and beneficiaries greater than assumed which amounted to an additional loss of $23.3 million, increasing the aggregate required contribution rate by 0.14% of payroll when amortized over 15 years.

Contributions

6. The Board's funding policy determines the Department's required contribution as the normal cost increased by a UAAL amortization charge. Under this funding policy, the Plan's UAAL is amortized over various 15-year periods, each beginning with the year that each portion or base of the UAAL was first identified and amortized. For this year, the Plan is in a surplus position[1] following a previous unfunded liability position. The previous amortization layers are considered fully amortized (i.e., set to zero). Because the surplus is less than 20%, there is no amortization of the overfunded actuarial accrued liability. The aggregate required contribution rate calculated in this valuation has decreased from 27.97% to 16.00% of payroll. This decrease is primarily due to the net loss layer from the July 1, 2010 valuation being fully amortized based on the amortization schedule, the full amortization of the remaining UAAL layers due to the plan being in surplus, and the investment return on the actuarial value (i.e., after asset smoothing) greater than the assumed rate of 6.50% used in the July 1, 2024 valuation, offset to some degree by greater than expected individual salary increases for actives and greater than expected actual COLAs for retirees and beneficiaries. Under the Plan's funding policy, the required contribution rate continues to be larger than the mandatory 110% matching of the employee contribution for Tier 1. A complete reconciliation of the Plan's aggregate employer rate is provided in *Section 2, Subsection F* on page 29.

7. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the UAAL and the principal balance. The funding policy adopted by the Board meets this standard.

[1] "Surplus" or at least 100% funded for a pension plan means that the plan is on track in funding its liabilities, with ongoing normal costs and continued risks from investment experience and other forms of experience. In this context, "surplus" is **not** the common dictionary definition of "the amount left over after all obligations have been met."

Future expectations

8. The total unrecognized net investment gain (i.e., the difference between the market value of assets and the 'smoothed' actuarial value of assets) as of July 1, 2025 is $574 million as compared to an unrecognized net investment gain of $212 million in the previous valuation. This net deferred gain of $574 million will be recognized in the determination of the actuarial value of assets for funding purposes over the next four years as shown in *Section 2, Subsection B* on page 21.

   The net deferred gain of $574 million represents about 2.9% of the market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the $574 million net market gain is expected to have an impact on the Plan's future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows:

   a. If the net deferred gain was recognized immediately in the actuarial value of assets, the funded percentage would increase from 100.5% to 103.6%.

      For comparison purposes, if the net deferred gain in the July 1, 2024 valuation had been recognized immediately in the July 1, 2024 valuation, the funded percentage would have increased from 97.64% to 98.81%.

   b. If the net deferred gain was recognized immediately in the actuarial value of assets, the aggregate required contribution rate would remain equal to the normal cost of 16.00% of payroll due to the surplus position of the plan as of July 1, 2025[1].

      For comparison purposes, if the net deferred gain in the July 1, 2024 valuation had been recognized immediately in the July 1, 2024 valuation, the aggregate required contribution rate would have decreased from 27.97% to 26.57% of payroll.

Risk

9. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2025. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

10. Because the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition, but have included a brief discussion of some risks that may affect the Plan in *Section 2, Subsection I*, beginning on page 36.

11. The risk assessment in *Section 2, Subsection I* includes the disclosure of a "Low-Default-Risk Obligation Measure" (LDROM). This disclosure, along with commentary on the significance of the LDROM, is a requirement under Actuarial Standard of Practice No. 4 (ASOP 4) for all pension funding actuarial valuation reports and can be found on pages 39-40.

[1] For purposes of this illustration, if the Plan is in an unfunded position, the immediate recognition of the net deferred gain would reduce the aggregate required contribution rate by 3.5% of payroll.

GASB

12. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution (ADC) under the Plan's funding policy and measuring the progress of that funding policy. The net pension liability and pension expense under GASB Statements No. 67 and No. 68, for inclusion in the Plan's and employer's financial statements as of June 30, 2025, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.

Summary of key valuation results

Required Contribution for Plan Year Beginning July 1[1]

Tier	2025 Total Rate	2025 Estimated Annual Dollar Amount	2024 Total Rate	2024 Estimated Annual Dollar Amount
Tier 1	21.75%	$157,704,948	33.30%	$247,346,677
Tier 2	11.66%	111,881,823	23.15%	190,567,265
Tier 1 & Tier 2 Combined (aggregate)	**16.00%**	**$269,586,771**	**27.97%**	**$437,913,942**

[1] Required contributions are assumed to be paid at the middle of every year.

Section 1: Actuarial Valuation Summary

Valuation Results as of July 1

Line Description	2025	2024
Actuarial accrued liability		
• Total actuarial accrued liability	$18,814,378,834	$18,026,936,825
– Retired members and beneficiaries	11,411,484,531	10,860,647,602
– Inactive members[1]	251,876,525	258,226,141
– Active members	7,151,017,778	6,908,063,082
• Normal cost for plan year beginning July 1	399,497,473	375,779,915
Assets		
• Market value of assets (MVA)	$19,486,774,079	$17,812,697,101
• Actuarial value of assets (AVA)	18,912,474,057	17,600,753,628
• Actuarial value of assets as a percentage of market value of assets	97.1%	98.8%
Funded status		
• Unfunded/(overfunded) actuarial accrued liability on MVA basis	$(672,395,245)	$214,239,724
• Funded percentage on MVA basis	103.57%	98.81%
• Unfunded/(overfunded) actuarial accrued liability on AVA basis	$(98,095,223)	$426,183,197
• Funded percentage on AVA basis	100.52%	97.64%
• Amortization period on AVA basis[2]	15 years	15 years
Key assumptions		
• Net investment return	6.50%	6.50%
• Inflation rate	2.50%	2.50%
• Cost-of-living adjustments	Tier 1: 2.75% Tier 2: 2.00%	Tier 1: 2.75% Tier 2: 2.00%

[1] Includes terminated members due a refund of member contributions and members receiving Permanent Total Disability (PTD) benefits.
[2] Changes in unfunded actuarial accrued liability for each valuation are amortized over separate 15-year periods. Surplus in excess of 20% is amortized over a 30-year period.

Section 1: Actuarial Valuation Summary

Demographic Data as of July 1

Demographic Data by Status	2025	2024	Change
Active members			
• Number of members	11,955	11,485	4.1%
• Average age	46.0	46.1	-0.1
• Average service	12.2	12.5	-0.3
• Total projected compensation	$1,684,643,178	$1,565,869,644	7.6%
• Average projected compensation	140,915	136,340	3.4%
Retired members and beneficiaries			
• Number of members	9,935	9,877	0.6%
– Retired	8,027	7,958	0.9%
– Beneficiaries	1,908	1,919	-0.6%
• Average age	74.5	74.4	0.1
• Average monthly benefit[1]	$7,162	$6,845	4.6%
Inactive members			
• Number of members[2]	1,801	1,786	0.8%
• Average age	51.1	51.3	-0.2
Total members	**23,691**	**23,148**	**2.3%**

[1] Includes actual July 2025 COLA for the July 1, 2025 valuation and includes assumed July 2024 COLA for the July 1, 2024 valuation.
[2] Includes terminated members due a refund of member contributions and members receiving PTD benefits.

Important information about actuarial valuations

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

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

Input Item	Description
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 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 the Plan. 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	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the Plan. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
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 applicable). The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

Section 1: Actuarial Valuation Summary

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

- The actuarial valuation is prepared at the request of the WPERP. 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 the 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 WPERP should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the WPERP upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

Section 2: Actuarial Valuation Results

A. Member information

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

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

Member Population

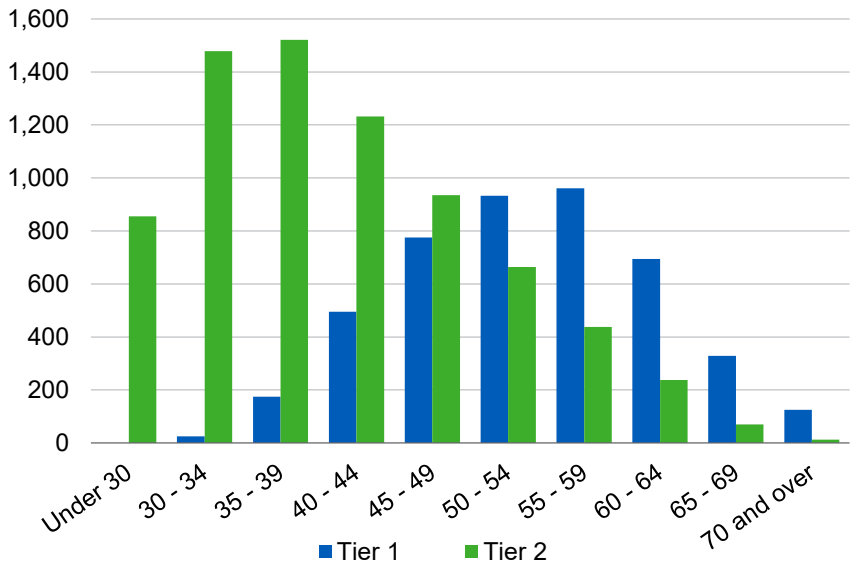
As of July 1	Active Members	Inactive Members[1]	Retired Members and Beneficiaries (Pay Status)[2]	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Pay Status to Actives
2016	9,348	1,612	9,265	10,877	1.16	0.99
2017	9,806	1,648	9,272	10,920	1.11	0.95
2018	10,114	1,728	9,165	10,893	1.08	0.91
2019	10,362	1,663	9,315	10,978	1.06	0.90
2020	10,778	1,690	9,443	11,133	1.03	0.88
2021	10,605	1,708	9,564	11,272	1.06	0.90
2022	10,799	1,735	9,716	11,451	1.06	0.90
2023	11,039	1,765	9,756	11,521	1.04	0.88
2024	11,485	1,786	9,877	11,663	1.02	0.86
2025	11,955	1,801	9,935	11,736	0.98	0.83

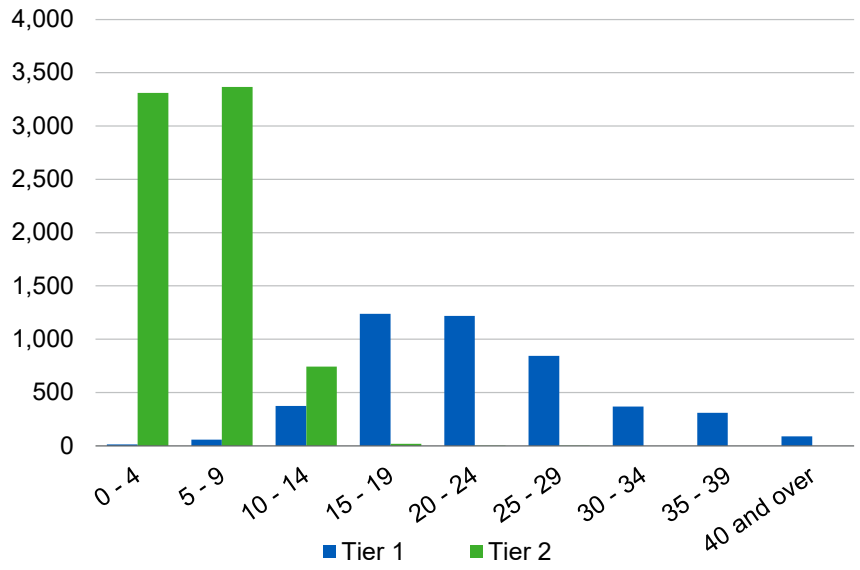
[1] Includes terminated members due a refund of member contributions and members receiving PTD benefits.
[2] Starting in the 2018 valuation, assignee records for Options B and C were combined with the benefit for the corresponding retired members. Before 2018, these assignee records were separate from the corresponding retired member records.

Active members

Demographic Data	As of July 1, 2025	As of July 1, 2024	Change
Active members	11,955	11,485	4.1%
Average age[1]	46.0	46.1	-0.1
Average years of service	12.2	12.5	-0.3
Average compensation	$140,915	$136,340	3.4%

Distribution of Active Members as of July 1, 2025





Inactive members

Demographic Data	As of July 1, 2025	As of July 1, 2024	Change
Inactive members[2]	1,801	1,786	0.8%

[1] Among the active members, there were none with unknown age information.
[2] Includes terminated members due a refund of member contributions and members receiving PTD benefits.

Retired members and beneficiaries

Demographic Data	As of July 1, 2025	As of July 1, 2024	Change
Retired members	8,027	7,958	0.9%
Beneficiaries	1,908	1,919	-0.6%
Average age	74.5	74.4	0.1
Average monthly amount	$7,162	$6,845	4.6%
Total monthly amount	$71,153,997	$67,605,692	5.2%

Distribution of Retired Members and Beneficiaries as of July 1, 2025

By Type and Monthly Amount

By Type and Age

Historical plan population

The chart below demonstrates the progression of the active population over the last 10 years. The chart also shows the growth among the retired population over the same time period.

Historical Member Data

Active Members versus Retired Members and Beneficiaries (Pay Status)

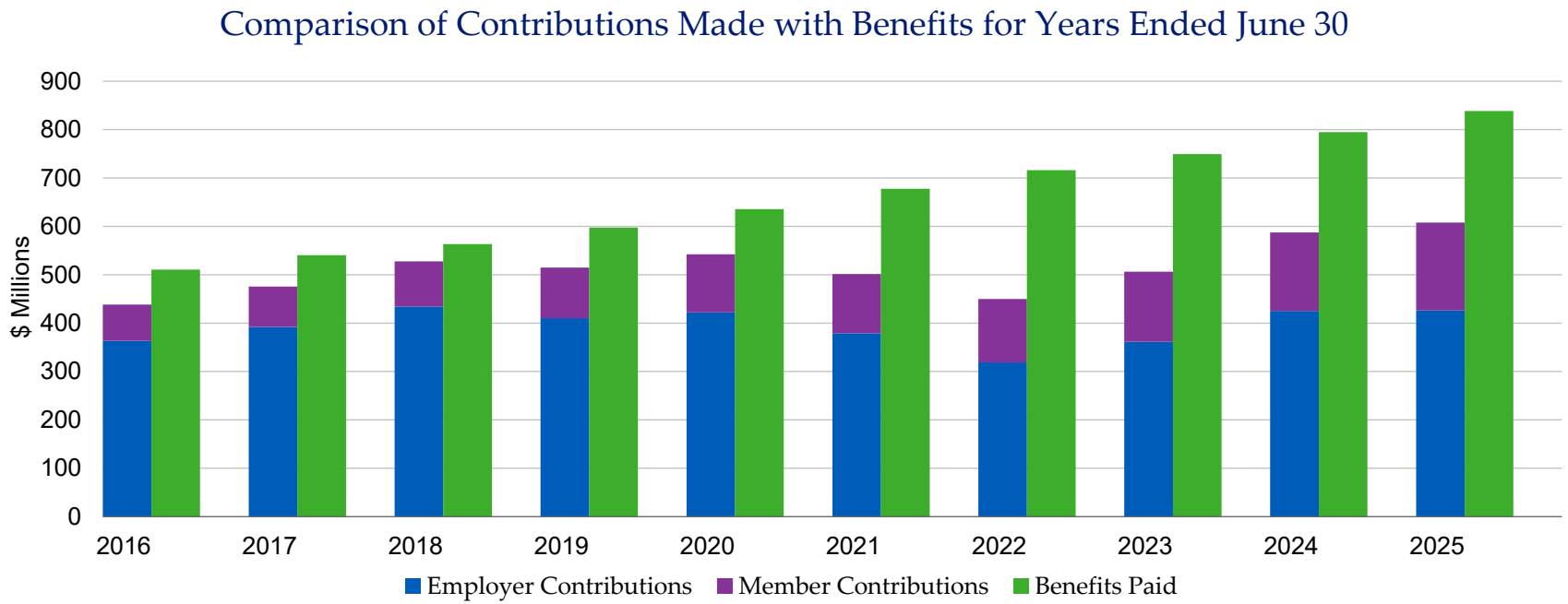
As of July 1	Active Count	Active Average Age	Active Average Service	Pay Status Count	Pay Status Average Age	Pay Status Monthly Amount[1]
2016	9,348	48.0	16.3	9,265	74.4	$4,861
2017	9,806	47.9	15.7	9,272	74.5	4,972
2018	10,114	47.5	15.1	9,165	74.6	5,251
2019	10,362	47.2	14.6	9,315	74.5	5,483
2020	10,778	46.7	13.9	9,443	74.5	5,763
2021	10,605	46.7	13.8	9,564	74.3	6,060
2022	10,799	46.5	13.3	9,716	74.3	6,273
2023	11,039	46.5	13.1	9,756	74.3	6,540
2024	11,485	46.1	12.5	9,877	74.4	6,845
2025	11,955	46.0	12.2	9,935	74.5	7,162

[1] Starting with the 2025 valuation, includes actual July 2025 COLA. Before 2025, reflects assumed July COLA as of the valuation date.

B. Financial information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of transactions for the valuation year, is presented in *Section 3, Exhibits D, E, F and G*.

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



Section 2: Actuarial Valuation Results

Determination of Actuarial Value of Assets for Year Ended June 30, 2025

	Step	Actual Return	Expected Return	Investment[1] Gain/(Loss)	Percent Deferred[2]	Amount
1.	Market value of assets					$19,486,774,079
2.	**Calculation of deferred return**					
	a. Year ended June 30, 2021	$3,489,200,333	$928,619,010	$2,560,581,323	0%	$0
	b. Year ended June 30, 2022	(888,348,728)	1,157,440,798	(2,045,789,526)	20%	(409,157,905)
	c. Year ended June 30, 2023	1,153,142,796	1,000,531,438	152,611,358	40%	61,044,543
	d. Year ended June 30, 2024	1,594,129,730	1,060,909,476	533,220,254	60%	319,932,152
	e. Year ended June 30, 2025	1,903,471,529	1,150,369,989	753,101,540	80%	602,481,232
	f. Total deferred return[3]					**$574,300,022**
3.	**Actuarial value of assets: 1 − 2f**					**$18,912,474,057**
4.	Ratio of actuarial to market value: **3 ÷ 1**					97.1%

[1] Actual return minus expected return on a market value basis.
[2] Recognition at 20% per year over five years.
[3] Deferred return as of June 30, 2025 recognized in each of the next four years:

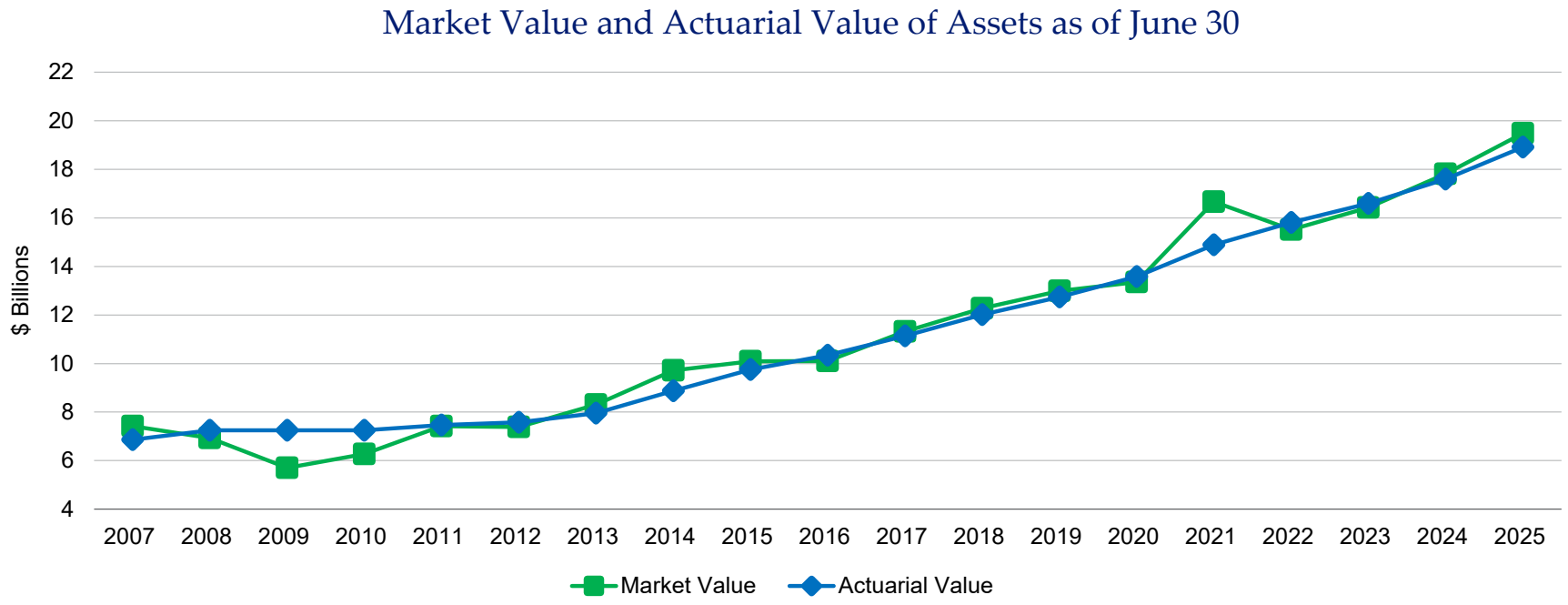
a. Amount recognized on June 30, 2026	$(121,371,276)
b. Amount recognized on June 30, 2027	287,786,631
c. Amount recognized on June 30, 2028	257,264,359
d. Amount recognized on June 30, 2029	150,620,308
e. Total unrecognized return as of June 30, 2025	**$574,300,022**

Asset history

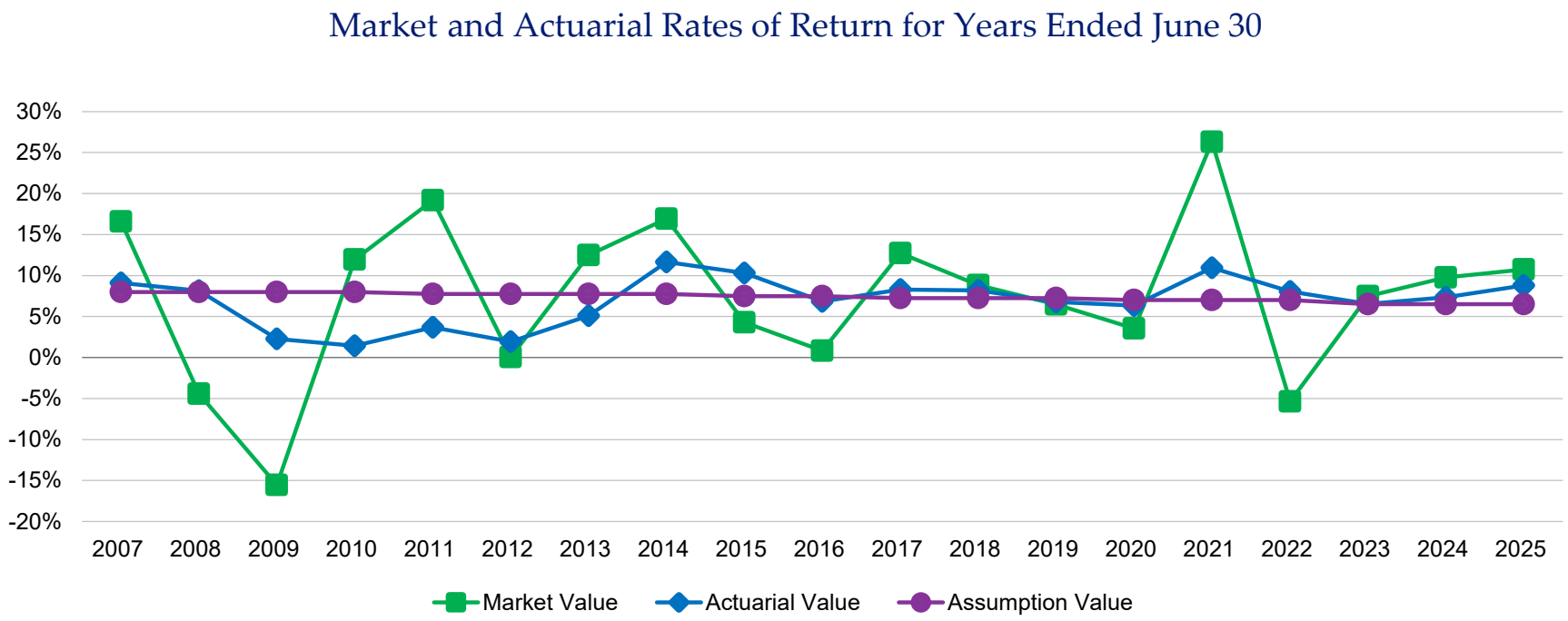
The market value and actuarial value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets.

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

Note that in the chart below, the actuarial value of assets prior to June 30, 2020 are exclusive of a small portion of the General Reserve (and Reserve for Investment Gains and Losses prior to June 30, 2017) while that Reserve is included in the market value of assets.



Historical investment returns



Legend	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Market rate	16.58%	(4.43%)	(15.53%)	11.96%	19.18%	0.07%	12.48%	16.93%	4.30%	0.82%	12.73%	8.84%	6.47%	3.55%	26.30%	(5.37%)	7.49%	9.77%	10.76%
Actuarial rate	9.09%	8.15%	2.28%	1.44%	3.69%	1.92%	5.08%	11.64%	10.30%	6.86%	8.28%	8.20%	6.78%	6.35%	10.95%	8.05%	6.54%	7.35%	8.81%
Assumed rate	8.00%	8.00%	8.00%	8.00%	7.75%	7.75%	7.75%	7.75%	7.50%	7.50%	7.25%	7.25%	7.25%	7.00%	7.00%	7.00%	6.50%	6.50%	6.50%

Average Rates of Return	Market Value	Actuarial Value
Most recent five-year geometric average return	9.33%	8.33%
Most recent 10-year geometric average return	7.85%	7.81%
Most recent 15-year geometric average return	8.68%	7.36%

C. Actuarial experience

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

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

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

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

Actuarial Experience for Year Ended June 30, 2025

	Source	Amount
1.	Net (gain)/loss from investments[1]	$(404,521,317)
2.	Net (gain)/loss from contribution experience[2]	6,715,446
3.	Member contributions towards Additional Annuity Program[3]	(49,655,887)
4.	Net (gain)/loss from other experience[4, 5]	81,056,976
5.	**Net experience (gain)/loss: 1 + 2 + 3 + 4**	**$(366,404,782)**

[1] Details on next page.
[2] Includes member contributions toward service purchases. The increase in liability due to service purchases is included in *(4) Net (gain)/loss from other experience*.
[3] The increase in liability due to Additional Annuity Program contributions is included in *(4) Net (gain)/loss from other experience*.
[4] See *Section 2, Subsection E* for further details. Includes the impact of the July 1, 2025 discretionary COLA for Tier 2 members in pay status of $337,000. See *Section 2, Subsection D* for details.
[5] The net loss from other experience (including the Additional Annuity Program contributions in item 3) is $31.4 million.

Investment experience

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

For valuation purposes, the assumed rate of return on the actuarial value of assets is 6.50% based on the July 1, 2024 valuation. The actual rate of return on an actuarial basis for the 2024-2025 plan year was 8.81% after recognizing a portion of this year's investment gains and a portion of prior years' investment gains and losses. Since the actual return for the year was more than the assumed return, the Plan experienced an actuarial gain during the year ended June 30, 2025 with regard to its investments.

Investment Experience for Year Ended June 30, 2025

	Line Description	Market Value	Actuarial Value
1.	Net investment income	$1,903,471,529	$1,541,114,980
2.	Average value of assets	17,697,999,826	17,486,056,353
3.	Rate of return: **1 ÷ 2**	10.76%	8.81%
4.	Assumed rate of return	6.50%	6.50%
5.	Expected investment income: **2 × 4**	$1,150,369,989	$1,136,593,663
6.	**Investment gain/(loss): 1 − 5**	**$753,101,540**	**$404,521,317**

Contributions

Contributions for the year ended June 30, 2025 totaled $560.8 million (excluding Additional Annuity Program contributions), compared to the projected amount of $567.3 million. This resulted in a loss of $6.7 million for the year due to actual contributions less than expected for the Retirement Plan, when adjusted for interest to the end of the year.

Additional Annuity Program contributions for the year ended June 30, 2025 totaled $48.1 million.

Other experience

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

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among members
- Retirement experience (earlier or later than projected)
- Salary increases (greater or smaller than projected)
- Service increases (greater or smaller than projected)
- Retiree and beneficiary COLAs higher or lower than anticipated
- Increase in liability due to Additional Annuity Program contributions

The net loss from this other experience (including the Additional Annuity Program contributions of $48.1 million and the one-time discretionary Tier 2 COLA effective July 1, 2025) for the year ended June 30, 2025 amounted to $31.4 million, which is 0.2% of the actuarial accrued liability. See *Section 2, Subsection E* for a detailed development of the unfunded actuarial accrued liability.

D. Other changes impacting the actuarial accrued liability

Actuarial assumptions and methods

Effective with the July 1, 2025 valuation, we adjust the benefits for members in pay status by the actual July 1 2025, COLA, instead of the assumed July 1, COLA[1]. This change increased the actuarial accrued liability by about $8.9 million and is reflected as part of actuarial experience in *Section 2, Subsection C* on page 24.

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

Plan provisions

As provided by the Plan, a one-time discretionary COLA of 50% of accumulated CPI excess was granted by the Board on March 26, 2025 for Tier 2 retired members and beneficiaries effective July 1, 2025. This change increased the actuarial accrued liability by about $0.3 million and is reflected as part of actuarial experience in *Section 2 Subsection C* on page 24.

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

[1] The actual July 1, 2025 COLA for Tier 1 payees is 3.0% (with 0.30% added to the Tier 1 CPI bank which represents CPI increase in excess of the maximum 3.0% COLA for Tier 1) compared to the assumed COLA of 2.75% under the actuarial assumptions.

E. Unfunded/(overfunded) actuarial accrued liability

Development of Unfunded/(overfunded) Actuarial Accrued Liability for Year Ended June 30, 2025

	Line Description	Amount
1.	Unfunded actuarial accrued liability at beginning of year	$426,183,197
2.	Normal cost at beginning of year	375,779,915
3.	Expected employer and member contributions	(567,342,522)
4.	Interest to end of year (whole year on **1 + 2** and half year on **3**)	33,688,969
5.	**Expected unfunded actuarial accrued liability at end of year**	**$268,309,559**
6.	Changes due to:	
a.	Investment return greater than expected, after asset smoothing	$(404,521,317)
b.	Actual contributions less than expected under funding policy[1]	6,715,446
c.	Individual salary increases greater than expected	29,965,110
d.	2024 and 2025 COLA increases greater than expected[2]	23,338,128
e.	Other experience gain[3]	(21,902,149)
f.	**Total changes**	**$(366,404,782)**
7.	**Unfunded/(overfunded) actuarial accrued liability at end of year: 5 + 6f**	**$(98,095,223)**

Note: The sum of items 6c through 6e equals the sum of the "Member contributions towards Additional Annuity Program" and "Net loss from other experience" shown in *Section 2, Subsection C.*

[1] Includes the impact of the actual payroll during FY 2025 less than expected, offset somewhat by the lag in implementation of the lower required contribution rate determined in the July 1, 2024 valuation. Includes member contributions toward service purchases. The increase in liability due to service purchases is included in *(6e) Other experience gain.*

[2] Starting with this valuation, we have reflected the actual July 1, 2025 COLA (instead of the assumed COLA). Impact of the July 1, 2025 discretionary COLA for Tier 2 members in pay status of $377,000 is also included.

[3] Other differences in actual versus expected experience including (but not limited to) mortality, retirement, disability, termination and service purchases.

F. Required contribution

The required Department contribution is equal to (a) the employer normal cost and (b) the amortization of the unfunded/(overfunded) actuarial accrued liability. For this year, the Plan is in a surplus position following a previous unfunded liability position. The previous amortization layers are considered fully amortized (i.e., set to zero). Because the surplus is less than 20%, there is no amortization of the unfunded/(overfunded) actuarial accrued liability in accordance with the Plan's funding policy.

The Board sets the funding policy used to calculate the required contribution based on layered 15-year[1] amortization periods in equal dollar amounts. See *Section 4, Exhibit 1* for further details on the funding policy. Based on this policy, there is no negative amortization and each amortization layer is fully funded in 15 years.

The current funding policy is intended to fully fund the cost of the benefits and to allocate the cost of benefits reasonably and equitably over time while minimizing the volatility of Department contributions. The normal cost component of the required contribution is expected to remain level as a percent of payroll. The UAAL amortization component of the required contribution is expected to remain level in dollar amount except when any current amortization layer is fully amortized, assuming there are no future actuarial gains or losses. Furthermore, when the Plan is in an unfunded liability position, the funded ratio is expected to increase as the UAAL is methodically funded by employer contributions. The required contribution under the funding policy is a "Reasonable Actuarially Determined Contribution" as required under Actuarial Standard of Practice No. 4 Measuring Pension Obligations and Determining Pension Plan Costs or Contributions.

Aggregate Required Contribution for Year Beginning July 1, 2025

	Line Description	Amount	% of Projected Compensation
1.	Total normal cost	$399,497,473	23.71%
2.	Expected employee contributions	138,396,484	8.22%
3.	Employer normal cost: 1 – 2	$261,100,989	15.49%
4.	Amortization of (overfunded) actuarial accrued liability[2]	0	0.00%
5.	**Total required contribution: 3 + 4, adjusted for timing[3]**	**$269,586,771**	**16.00%**
6.	Projected compensation	$1,684,643,178	

[1] Changes in UAAL due to actuarial gains or losses, changes in actuarial assumptions or methods, and plan amendments for each valuation are amortized over separate 15-year periods.
[2] Because the Plan is in surplus and the funded ratio is less than 120% as of July 1, 2025, there is no amortization of the surplus.
[3] Required contributions are assumed to be paid at the middle of every year.

Reconciliation of aggregate required employer contribution rate

The chart below details the changes in the aggregate required employer contribution rate from the prior valuation to the current year's valuation.

Reconciliation from July 1, 2024 to July 1, 2025

	Item	Contribution Rate	Estimated Annual Dollar Amount[1]
1.	Aggregate required employer contribution as of July 1, 2024	27.97%	$471,195,000
2.	**Changes due to:**		
a.	Investment return greater than expected after asset smoothing	(2.48)%	(41,779,000)
b.	Actual contributions less than expected[2]	0.04%	674,000
c.	Individual salary increases greater than expected	0.18%	3,032,000
d.	2024 and 2025 COLA increases greater than expected[3]	0.14%	2,359,000
e.	Changes in member demographics (including increase in Tier 2 membership) on normal cost	(0.48)%	(8,086,000)
f.	Net other experience gains[4]	(0.13)%	(2,094,000)
g.	Amortizing UAAL over an increased total payroll	(0.81)%	(13,646,000)
h.	UAAL charge layers from the July 1, 2010 valuation being fully amortized	(5.61)%	(94,561,000)
i.	Full amortization of remaining UAAL layers due to surplus position	(2.82)%	(47,507,000)
j.	**Total change**	**(11.97)%**	**$(201,608,000)**
3.	**Aggregate required employer contribution as of July 1, 2025: 1 + 2j**	**16.00%**	**$269,587,000**

[1] Based on June 30, 2025 projected compensation as shown on the following page.

[2] Includes impact of the actual payroll during FY 2025 less than expected, offset somewhat by the lag in implementation of the lower required contribution rate determined in the July 1, 2024 valuation. Includes member contributions toward service purchases. The increase in contribution rates due to service purchases is included in *(2f) Net other experience gains*.

[3] Starting with this valuation, we have reflected the actual July 1, 2025 COLA (instead of the assumed COLA). Impact of the July 1, 2025 discretionary COLA for Tier 2 members in pay status of $337,000 is also included.

[4] Other differences in actual versus expected experience including (but not limited to) mortality, retirement, disability, termination and service purchases.

Required contribution

Aggregate — Required Contribution Rate for Year Beginning July 1

All Tiers Combined (Aggregate)	2025 Amount	2025 % of Payroll	2024 Amount	2024 % of Payroll
1. Total Normal Cost	$399,497,473	23.71%	$375,779,915	24.00%
2. Expected employee contributions	138,396,484	8.22%	125,899,527	8.04%
3. Employer normal cost: **1 − 2**	$261,100,989	15.49%	$249,880,388	15.96%
4. Actuarial accrued liability	18,814,378,834		18,026,936,825	
5. Actuarial value of assets	18,912,474,057		17,600,753,628	
6. Unfunded/(overfunded) actuarial accrued liability: **4 − 5**	$(98,095,223)		$426,183,197	
7. Amortization of unfunded/(overfunded) actuarial accrued liability[1]	$0	0.00%	$174,249,338	11.13%
8. Total required contribution: 3 + 7, adjusted for timing[2]	**$269,586,771**	**16.00%**	**$437,913,942**	**27.97%**
9. Projected compensation	$1,684,643,178		$1,565,869,644	

[1] For 2025, the Plan is in a surplus position following a previous unfunded liability position. The previous amortization layers are considered fully amortized (i.e. set to zero). Because the surplus is less than 20%, there is no amortization of the unfunded/(overfunded) actuarial accrued liability.
For 2024, the Plan was in an unfunded position, so the amortization of the UAAL in accordance with the funding policy was determined as the sum of the amortization amount the separate UAAL amortization layers created in each valuation and amortized over 15-year periods.

[2] Required contributions are assumed to be paid at the middle of every year.

Section 2: Actuarial Valuation Results

Tier 1 — Required Contribution Rate for Year Beginning July 1

	Tier 1	2025 Amount	2025 % of Payroll	2024 Amount	2024 % of Payroll
1.	Total Normal Cost	$196,327,685	27.08%	$201,491,820	27.13%
2.	Expected employee contributions	43,586,815	6.01%	44,586,318	6.00%
3.	Employer normal cost: 1 − 2	$152,740,870	21.07%	$156,905,502	21.13%
4.	Actuarial accrued liability	17,538,317,823		17,034,788,481	
5.	Amortization of unfunded/(overfunded) actuarial accrued liability[1]	0	0.00%	82,655,444	11.13%
6.	**Total required contribution: 3 + 5, adjusted for timing[2]**	**$157,704,948**	**21.75%**	**$247,346,677**	**33.30%**
7.	Employer match (110% of 2), adjusted for timing[2]	49,503,725	6.83%	50,638,911	6.82%
8.	**Greater of employer match 7 or total required contribution 6**	**$157,704,948**	**21.75%**	**$247,346,677**	**33.30%**
9.	Projected compensation	$724,927,659		$742,772,701	

Tier 2 — Required Contribution Rate for Year Beginning July 1

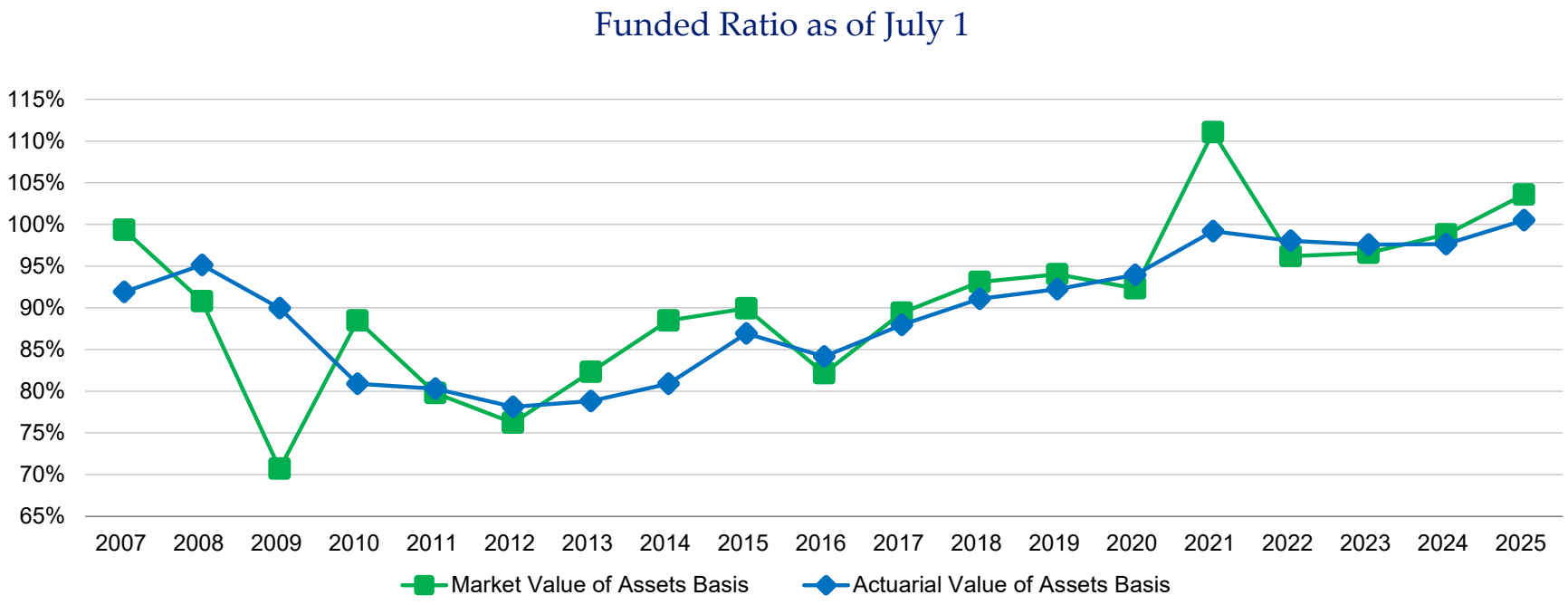
	Tier 2	2025 Amount	2025 % of Payroll	2024 Amount	2024 % of Payroll
1.	Total Normal Cost	$203,169,788	21.17%	$174,288,095	21.17%
2.	Expected employee contributions	94,809,669	9.88%	81,313,209	9.88%
3.	**Employer normal cost: 1 − 2**	$108,360,119	11.29%	$92,974,886	11.29%
4.	Actuarial accrued liability	1,276,061,011		992,148,344	
5.	Amortization of unfunded/(overfunded) actuarial accrued liability[1]	0	0.00%	91,593,894	11.13%
6.	**Total required contribution: 3 + 5, adjusted for timing[2]**	**$111,881,823**	**11.66%**	**$190,567,265**	**23.15%**
7.	Projected compensation	$959,715,519		$823,096,943	

[1] The same UAAL contribution rate is charged to both Tier 1 and Tier 2.
[2] Required contributions are assumed to be paid at the middle of every year.

G. Funded status

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

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



Schedule of Funding Progress

As of July 1	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (overfunded) AAL (UAAL) (b) − (a)	Funded Ratio (%) (a) ÷ (b)	Projected Covered Payroll (c)	UAAL as a %of Projected Covered Payroll [(b) − (a)] ÷ (c)
2016	$10,344,355,801	$12,289,229,001	$1,944,873,200	84.17%	$928,888,680	209.38%
2017	11,133,708,386	12,657,101,266	1,523,392,880	87.96%	991,814,994	153.60%
2018	12,009,999,030	13,187,542,730	1,177,543,700	91.07%	1,073,554,607	109.69%
2019	12,739,144,966	13,811,956,483	1,072,811,517	92.23%	1,141,875,615	93.95%
2020	13,586,120,581	14,465,349,538	879,228,957	93.92%	1,211,798,340	72.56%
2021	14,889,255,775	15,008,817,566	119,561,791	99.20%	1,233,265,179	9.69%
2022	15,812,000,418	16,130,108,757	318,108,339	98.03%	1,309,850,320	24.29%
2023	16,595,320,789	17,006,868,824	411,548,035	97.58%	1,443,732,069	28.51%
2024	17,600,753,628	18,026,936,825	426,183,197	97.64%	1,565,869,644	27.22%
2025	18,912,474,057	18,814,378,834	(98,095,223)	100.52%	1,684,643,178	(5.82)%

H. Actuarial balance sheet

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

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

Actuarial Balance Sheet as of July 1

Line Description	2025	2024
Liabilities		
Present value of benefits for retired members and beneficiaries	$11,411,484,531	$10,860,647,602
Present value of benefits for inactive members	251,876,525	258,226,141
Present value of benefits for active members	11,959,152,737	11,370,005,653
Total liabilities	**$23,622,513,793**	**$22,488,879,396**
Current and Future Assets		
Total actuarial value of assets	$18,912,474,057	$17,600,753,628
Present value of future contributions by members	1,895,222,241	1,709,400,060
Present value of future employer contributions for:		
• Entry age normal cost	2,912,912,718	2,752,542,511
• Unfunded/(overfunded) actuarial accrued liability	(98,095,223)	426,183,197
Total of current and future assets	**$23,622,513,793**	**$22,488,879,396**

I. Risk

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

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

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

Risk assessments

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

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

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

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

  The investment return assumption is a long-term, static assumption for valuation purposes even though in reality market experience can be quite volatile in any given year. That volatility can cause significant changes in the financial condition of the Plan, affecting both funded status and contribution rates. The inherent year-to-year volatility is reduced by smoothing through the actuarial value of assets, however investment experience can still have a sizable impact. As discussed in *Section 2, Subsection J, Volatility Ratios*, on page 41, a 1% asset gain or loss (relative to the assumed investment return) translates to about 11.6% of one-

year's payroll. Since actuarial gains and losses are amortized over 15 years, there would be a 1.2% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss) for the plan that is in an underfunded status.

The year-by-year market value rate of return over the last 10 years has ranged from a low of (5.37)% to a high of 26.30%.

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

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

- **Other Risks**

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

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

Evaluation of historical trends

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

- The funded percentage on the actuarial value of assets basis has increased from 84.2% to 100.5%. This is primarily due to contributions made to amortize the UAAL (i.e., amortizing each layer of UAAL over 15 years in level dollar amounts) and average recent years' investment return on a smoothed basis greater than the assumption. For a more detailed history see *Section 2, Subsection G, Funded status* starting on page 33.
- The average geometric investment return on the actuarial value of assets over the last 10 years was 7.81%. This includes a high of 10.95% and a low of 6.35%. The average over the last five years is 8.33%. For more details see the *Section 2, Subsection B, Historical investment returns* on page 23.
- The primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. In particular, the assumption changes in 2016 changed the discount rate from 7.50% to 7.25% (as well as various other changes) adding $723

million in unfunded liability. The assumption changes in 2019 changed the discount rate from 7.25% to 7.00% (as well as various other changes) adding $9 million in unfunded liability. The assumption changes in 2022 changed the discount rate from 7.00% to 6.50% (as well as various other changes) adding $683 million in unfunded liability.

- The plan's funding policy effectively deals with these unfunded liabilities over time. For this year, the Plan is in a surplus position following a previous unfunded liability position and all prior amortization layers are considered fully amortized.

Maturity measures

In the last 10 years the ratio of members in pay status to active participants has decreased from 0.99 to 0.83. This ratio has fluctuated between 0.83 and 0.99 during the last 10 years but has recently decreased due to increased hiring of active members. An increased ratio indicates that the plan has grown in maturity over time. Unless there will be continued increases in hiring, this is to be expected, but is also informative for understanding plan sensitivity to particular risks. For more details see *Section 2, Subsection A, Member information* on page 16.

As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities. Over the past year, benefits paid were $229 million more than contributions received and benefits paid as of percentage of beginning of year assets is about 4.7%. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return. However, the Plan currently has a relatively low level of negative cash flow and is over-funded (at a 100.5% funded ratio). The level of negative cash flows is expected to increase as the employer contribution has decreased to the normal cost as the Plan is in a surplus position. For more details on historical cash flows see *Section 2, Subsection B, Financial information* on page 20.

A further discussion of plan maturity measures and how they relate to changes in assets and liabilities is included in *Section 2, Subsection J, Volatility ratios* on page 41.

Surplus management considerations

The Plan is in a surplus position as of July 1, 2025. It is important to keep in mind that in an actuarial funding context, surplus differs from the common dictionary definition of "an amount left over after all requirements are met" and instead means that a plan is at or ahead of its funding policy schedule at a specific measured point in time. In other words, surplus indicates that current assets are sufficient to cover all costs associated with members' past service.

The Government Finance Officers Association (GFOA) recommends that every public plan's funding policy include a specific section on surplus, described as a "surplus management policy."[1] This surplus management policy would be "a proactive policy that helps guide the system in the prudent management of potential surplus, including considerations for items such as contribution levels, risk reduction opportunities, stabilization reserves and benefit levels." The Plan's funding policy does anticipate the possibility of surplus and requires any surplus over 120% to be amortized over a rolling 30-year period, which is considered an industry model practice.[2] In addition to the amortization surplus, the following considerations are recommended by the GFOA:

- Consider current actuarial assumptions and the level of risk inherent in those assumptions.
- Evaluate possible risk reduction strategies, including the risk-reward tradeoff in the current asset portfolio, along with the plan's current funding policies.
- Consider how to mitigate contribution rate volatility in surplus, including buffers[3] above 100% funded before amortizing surplus as a credit, and mechanisms such as smoothing in contribution rate reductions related to surplus.
- Work with the employer to ensure an understanding of what surplus is (and is not) and establish clear guard rails around acceptable conditions for possible benefit enhancements, especially permanent ones.

Generally, Segal agrees that reaching 100% funded is an ideal opportunity to consider contribution volatility mitigation and other risk mitigation strategies and is available to work with the Board on any surplus management considerations that may be desired.

Low-Default-Risk Obligation Measure (LDROM)

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

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in June of the measurement period, by The Bond Buyer, is 5.20% for use effective July 1, 2025. This is the rate used to determine the discount rate for valuing reported public pension

[1] See GFOA's Best Practice on "Core Elements of Funding Policy for Governmental Pension and OPEB Plans."
[2] See the Conference of Consulting Actuaries' white paper on "Actuarial Funding Policies and Practices for Public Pension Plans."
[3] As previously mentioned, WPERP's funding policy already includes a buffer of 20% before any surplus can be amortized.

plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or actuarially determined contribution rates. The plan's expected return on assets, currently 6.50%, is used for these calculations.

As of July 1, 2025, the LDROM for the Plan is $22.29 billion[1]. The difference between the Plan's AAL of $18.81 billion and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the Plan's diversified portfolio compared to investing only in low-default-risk securities.

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

[1] For comparison purposes, as of July 1, 2024, the LDROM was $25.59 billion based on a discount rate of 3.93%, while the Plan's actuarial accrued liability was $18.03 billion.

J. Volatility ratios

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

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

The current AVR is about 11.6. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 11.6% of one-year's payroll. For the plan that is in an underfunded status, actuarial gains and losses are amortized over 15 years, so there would be a 1.2% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

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

The LVR also indicates how volatile contributions will be in response to changes in the actuarial accrued liability due to actual experience or to changes in actuarial assumptions. The current LVR is about 11.2. That is about 3% lower than the AVR.

Volatility Ratios

As of July 1	Asset Volatility Ratio	Liability Volatility Ratio
2016	10.9	13.2
2017	11.4	12.8
2018	11.4	12.3
2019	11.4	12.1
2020	11.0	11.9
2021	13.5	12.2
2022	11.8	12.3
2023	11.4	11.8
2024	11.4	11.5
2025	11.6	11.2

Section 3: Supplemental Information

Exhibit A: Table of plan demographics

Total Plan — Demographics as of July 1

Demographic Data by Status	2025	2024	Change
Active members			
• Number	11,955	11,485	4.1%
• Average age	46.0	46.1	-0.1
• Average years of service	12.2	12.5	-0.3
• Total projected compensation	$1,684,643,178	$1,565,869,644	7.6%
• Average projected compensation	140,915	136,340	3.4%
• Account balances	1,807,785,238	1,709,149,292	5.8%
Inactive members[1]			
• Number	1,801	1,786	0.8%
• Average age	51.1	51.3	-0.2
• Average account balances	$68,073	$69,605	-2.2%
Retired members			
• Number	8,027	7,958	0.9%
• Average age	73.2	73.0	0.2
• Average monthly benefit[2]	$7,749	$7,414	4.5%
Beneficiaries			
• Number	1,908	1,919	-0.6%
• Average age	80.2	80.2	0.0
• Average monthly benefit[2]	$4,693	$4,485	4.6%

[1] Includes terminated members due a refund of member contributions and members receiving PTD benefits.
[2] Includes actual July 2025 COLA for the July 1, 2025 valuation and includes assumed July 2024 COLA for the July 1, 2024 valuation.

Tier 1 — Demographics as of July 1

Demographic Data by Status	2025	2024	Change
Active members			
• Number	4,512	4,809	-6.2%
• Average age	54.2	53.7	0.5
• Average years of service	23.2	22.8	0.4
• Total projected compensation	$724,927,659	$742,772,701	-2.4%
• Average projected compensation	160,667	154,455	4.0%
• Account balances	1,293,979,500	1,308,719,399	-1.1%
Inactive members[1]			
• Number	938	1,013	-7.4%
• Average age	57.7	57.2	0.5
• Average account balances	$109,528	$106,462	2.9%
Retired members			
• Number	7,973	7,916	0.7%
• Average age	73.2	73.0	0.2
• Average monthly benefit[2]	$7,792	$7,447	4.6%
Beneficiaries			
• Number	1,904	1,917	-0.7%
• Average age	80.2	80.3	-0.1
• Average monthly benefit[2]	$4,702	$4,490	4.7%

[1] Includes terminated members due a refund of member contributions and members receiving PTD benefits.
[2] Includes actual July 2025 COLA for the July 1, 2025 valuation and includes assumed July 2024 COLA for the July 1, 2024 valuation.

Tier 2 — Demographics as of July 1

Demographic Data by Status	2025	2024	Change
Active members			
• Number	7,443	6,676	11.5%
• Average age	41.0	40.6	0.4
• Average years of service	5.5	5.1	0.4
• Total projected compensation	$959,715,519	$823,096,943	16.6%
• Average projected compensation	128,942	123,292	4.6%
• Account balances	513,805,738	400,429,893	28.3%
Inactive members[1]			
• Number	863	773	11.6%
• Average age	43.9	43.5	0.4
• Average account balances	$23,015	$21,303	8.0%
Retired members			
• Number	54	42	28.6%
• Average age	66.6	65.9	0.7
• Average monthly benefit[2]	$1,374	$1,205	14.0%
Beneficiaries			
• Number	4	2	100.0%
• Average age	69.8	71.7	-1.9
• Average monthly benefit[2]	$751	$437	71.9%

[1] Includes terminated members due a refund of member contributions and members receiving PTD benefits.
[2] Includes actual July 2025 COLA for the July 1, 2025 valuation and includes assumed July 2024 COLA for the July 1, 2024 valuation.

Exhibit B: Distribution of active members

Total Plan

Active Counts & Average Projected Compensation by Age and Years of Service as of July 1, 2025

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	148	146	2	—	—	—	—	—	—	—
	$115,626	$114,578	$192,159	—	—	—	—	—	—	—
25–29	707	549	158	—	—	—	—	—	—	—
	130,705	122,519	159,148	—	—	—	—	—	—	—
30–34	1,503	790	640	72	1	—	—	—	—	—
	134,083	115,912	152,026	$172,801	$218,393	—	—	—	—	—
35–39	1,696	655	739	222	78	2	—	—	—	—
	135,239	115,011	139,407	159,654	$195,821	$146,834	—	—	—	—
40–44	1,727	439	627	257	293	105	6	—	—	—
	143,381	117,087	133,887	152,022	179,155	187,745	$165,791	—	—	—
45–49	1,710	326	489	193	286	299	115	2	—	—
	144,373	117,416	126,727	144,859	160,675	177,524	168,014	$159,594	—	—
50–54	1,597	211	354	147	243	303	278	55	6	—
	144,099	113,536	127,781	134,913	148,771	161,401	157,704	201,378	$188,248	—
55–59	1,399	128	237	124	162	251	234	158	105	—
	149,122	119,697	123,195	139,006	142,190	148,597	152,725	190,994	196,377	—
60–64	931	56	130	74	113	160	136	101	130	31
	148,136	121,364	123,252	133,158	144,724	139,295	144,266	171,095	189,529	$163,264
65–69	399	20	41	22	53	76	56	42	50	39
	137,804	108,864	123,073	144,215	132,740	133,451	145,277	137,261	149,353	154,931
70 and over	138	4	8	6	26	27	19	11	19	18
	131,065	82,318	133,194	108,870	126,021	130,923	123,984	140,626	153,310	134,002
Total	**11,955**	**3,324**	**3,425**	**1,117**	**1,255**	**1,223**	**844**	**369**	**310**	**88**
	$140,915	**$117,074**	**$136,739**	**$148,309**	**$159,195**	**$159,651**	**$154,037**	**$179,307**	**$183,124**	**$153,586**

Tier 1

Active Counts & Average Projected Compensation by Age and Years of Service as of July 1, 2025

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25–29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30–34	25	—	3	21	1	—	—	—	—	—
	$171,943	—	$106,531	$179,076	$218,393	—	—	—	—	—
35–39	175	—	14	81	78	2	—	—	—	—
	180,642	—	146,848	172,701	$195,821	$146,834	—	—	—	—
40–44	495	2	7	91	285	104	6	—	—	—
	176,096	$89,535	108,288	164,154	178,437	186,953	$165,791	—	—	—
45–49	775	1	9	64	286	298	115	2	—	—
	167,855	45,832	122,408	162,575	160,675	177,657	168,014	$159,594	—	—
50–54	933	4	6	42	240	303	277	55	6	—
	158,209	115,054	133,167	138,277	148,868	161,401	157,776	201,378	$188,248	—
55–59	961	2	10	42	160	250	234	158	105	—
	159,940	88,296	109,890	146,367	141,135	148,655	152,725	190,994	196,377	—
60–64	694	—	5	23	108	160	136	101	130	31
	155,724	—	97,389	134,340	144,514	139,295	144,266	171,095	189,529	$163,264
65–69	329	2	3	8	53	76	56	42	50	39
	139,848	69,610	79,022	130,743	132,740	133,451	145,277	137,261	149,353	154,931
70 and over	125	3	—	2	26	27	19	11	19	18
	130,942	62,712	—	70,288	126,021	130,923	123,984	140,626	153,310	134,002
Total	**4,512**	**14**	**57**	**374**	**1,237**	**1,220**	**843**	**369**	**310**	**88**
	$160,667	**$84,933**	**$120,299**	**$158,619**	**$158,876**	**$159,599**	**$154,056**	**$179,307**	**$183,124**	**$153,586**

Tier 2

Active Counts & Average Projected Compensation by Age and Years of Service as of July 1, 2025

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	148	146	2	—	—	—	—	—	—	—
	$115,626	$114,578	$192,159	—	—	—	—	—	—	—
25–29	707	549	158	—	—	—	—	—	—	—
	130,705	122,519	159,148	—	—	—	—	—	—	—
30–34	1,478	790	637	51	—	—	—	—	—	—
	133,443	115,912	152,240	$170,217	—	—	—	—	—	—
35–39	1,521	655	725	141	—	—	—	—	—	—
	130,015	115,011	139,263	152,160	—	—	—	—	—	—
40–44	1,232	437	620	166	8	1	—	—	—	—
	130,236	117,213	134,176	145,372	$204,744	$270,081	—	—	—	—
45–49	935	325	480	129	—	1	—	—	—	—
	124,909	117,636	126,808	136,070	—	137,772	—	—	—	—
50–54	664	207	348	105	3	—	1	—	—	—
	124,272	113,507	127,688	133,567	141,072	—	$137,831	—	—	—
55–59	438	126	227	82	2	1	—	—	—	—
	125,387	120,196	123,781	135,235	226,577	134,203	—	—	—	—
60–64	237	56	125	51	5	—	—	—	—	—
	125,917	121,364	124,286	132,625	149,266	—	—	—	—	—
65–69	70	18	38	14	—	—	—	—	—	—
	128,197	113,225	126,551	151,913	—	—	—	—	—	—
70 and over	13	1	8	4	—	—	—	—	—	—
	132,256	141,136	133,194	128,161	—	—	—	—	—	—
Total	**7,443**	**3,310**	**3,368**	**743**	**18**	**3**	**1**	**—**	**—**	**—**
	$128,942	**$117,210**	**$137,017**	**$143,119**	**$181,147**	**$180,685**	**$137,831**	**—**	**—**	**—**

Exhibit C: Reconciliation of member data

Line Description	Active Members	Inactive Members[1]	Retired Members	Beneficiaries	Total
Number as of July 1, 2024	11,485	1,786	7,958	1,919	23,148
New members	885	N/A	N/A	N/A	885
Terminations with vested rights	(128)	128	N/A	N/A	0
Contribution refunds	(8)	(64)	N/A	N/A	(72)
Retirements	(291)	(49)	340	N/A	0
Rehire	34	(34)	0	0	0
Died with beneficiary	(2)	0	(98)	100	0
Died without beneficiary	(20)	(2)	(173)	(135)	(330)
Data adjustments	0	36[2]	0	24[3]	60
Number as of July 1, 2025	**11,955**	**1,801**	**8,027**	**1,908**	**23,691**

[1] Includes terminated members due a refund of member contributions and members receiving PTD benefits.
[2] Terminated members due a refund of member contributions.
[3] New beneficiaries from either death of retired members or divorce settlements.

Exhibit D: Summary of income and expenses on a market value basis

Statement of Income and Expenses for Years Ended June 30

Line Description	2025	2024
Contribution income		
• Employer contributions	$426,135,547	$425,303,910
• Member contributions	181,754,501	162,160,081
• Net administrative expense contributions	1,041,280	1,019,780
– **Net contribution income**	**$608,931,328**	**$588,483,771**
Investment income		
• Investment, dividends and other income	$415,036,094	$359,237,829
• Asset appreciation	1,565,763,534	1,298,873,433
• Less investment fees	(77,328,099)	(63,981,532)
– **Net investment income**	**$1,903,471,529**	**$1,594,129,730**
Total income available for benefits	**$2,512,402,857**	**$2,182,613,501**
Less benefit payments		
• Benefits paid	$(824,098,940)	$(783,895,839)
• Refund of contributions	(14,226,939)	(10,821,672)
– **Net benefit payments**	**$(838,325,879)**	**$(794,717,511)**
Change in market value of assets	**1,674,076,978**	**1,387,895,990**
Net assets at market value at the beginning of the year	**$17,812,697,101**	**$16,424,801,111**
Net assets at market value at the end of the year	**$19,486,774,079**	**$17,812,697,101**

Note: Results may be slightly off due to rounding.

Exhibit E: Summary of plan assets

Statement of Plan Assets as of June 30

Line Description	2025	2024
Cash equivalents	**$11,028,919**	**$15,509,933**
Accounts receivable		
• Accrued investment income	$69,364,295	$55,190,898
• Open investment trades and others	79,369,835	100,937,078
• Department of Water and Power	56,472,761	61,292,543
– **Total accounts receivable**	**$205,206,891**	**$217,420,519**
Investments		
• Fixed income	$4,734,286,411	$4,105,006,980
• Equities	7,684,192,627	7,336,314,932
• Other assets	6,996,855,808	6,319,332,434
– **Total investments at market value**	**$19,415,334,846**	**$17,760,654,346**
Total assets	**$19,631,570,656**	**$17,993,584,798**
• Less accounts payable	$(144,796,577)	$(180,887,697)
Net assets at market value	**$19,486,774,079**	**$17,812,697,101**
Net assets at actuarial value	**$18,912,474,057**	**$17,600,753,628**

Note: Results may be slightly off due to rounding.

Exhibit F: Summary of reserve information

Reserves and Designated Balances as of June 30

	Line Description	2025	2024
1.	Reserve for retirement allowance for retired members	$10,877,522,618	$10,482,680,516
2.	Contribution accounts:		
	a. Members	2,356,811,849	2,186,465,226
	b. Department of Water and Power	(2,506,289,499)	(2,370,948,010)
3.	General Reserve	4,641,286,648	4,092,182,350
4.	**Total**	**$15,369,331,616**	**$14,390,380,082**

Each year the Board adjusts its retired reserves to agree with the value calculated during the valuation. The following table presents the required transfers.

Adjusted Reserves as of June 30

	Adjusted Reserves	2025	2024
1.	Retired reserve balance	$10,877,522,618	$10,482,680,516
2.	Actuarially computed present value	11,411,484,531	10,860,647,602
3.	**Actuarial gain/(loss): 1 − 2**	**$(533,961,913)**	**$(377,967,086)**
4.	Transfer from (to) DWP contribution accounts to (from) retired reserves	533,961,913	377,967,086

Exhibit G: Development of the Plan through June 30, 2025

Year Ended June 30	Employer Contributions	Member Contributions[1]	Other Contributions	Net Investment Return[2]	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2016	$362,359,894	$75,068,523	$791,047	$82,810,914	$510,493,296	$10,097,394,723	$10,344,355,801	102.4%
2017	391,717,359	83,239,105	655,190	1,281,254,293	540,361,335	11,313,899,335	11,133,708,386	98.4%
2018	433,412,569	93,659,240	549,417	998,777,227	563,212,525	12,277,085,263	12,009,999,030	97.8%
2019	410,165,124	104,741,925	826,142	791,832,113	597,563,566	12,987,087,001	12,739,144,966	98.1%
2020	422,017,394	120,299,327	932,870	459,024,099	635,652,595	13,353,708,096	13,586,120,581	101.7%
2021	378,990,511	122,316,256	965,774	3,489,200,333	677,717,014	16,667,463,956	14,889,255,775	89.3%
2022	318,873,759	131,105,102	838,206	(888,348,728)	716,007,901	15,513,924,394	15,812,000,418	101.9%
2023	361,585,859	144,715,315	893,392	1,153,142,796	749,460,645	16,424,801,111	16,595,320,789	101.0%
2024	425,303,910	162,160,081	1,019,780	1,594,129,730	794,717,511	17,812,697,101	17,600,753,628	98.8%
2025	426,135,547	181,754,501	1,041,280	1,903,471,529	838,325,879	19,486,774,079	18,912,474,057	97.1%

[1] Includes member normal contributions, Additional Annuity Program contributions, contributions due to open contracts for purchased service, and member contributions transferred from LACERS.

[2] On a market value basis net of investment fees. Administrative expenses are included as an offset to “other contributions."

Exhibit H: Table of amortization bases

Base Type	Established July 1	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment[1]
Actuarial Surplus[2]	2025	$(98,095,223)	N/A	$(98,095,223)	N/A	$0
Total				**$(98,095,223)**		**$0**

[1] Level dollar amount.
[2] Consistent with the Plan's funding policy, all prior UAAL layers are considered fully amortized due to surplus. Also, because the funded ratio (i.e., the ratio of actuarial value of assets to the actuarial accrued liability) is less than 120% as of July 1, 2025, the surplus is not amortized in accordance with the Plan's funding policy.

Section 4: Actuarial Valuation Basis

Exhibit 1: Actuarial assumptions and methods

Rationale for assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2018 through June 30, 2021 Actuarial Experience Study dated May 20, 2022. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both Tier 1 and Tier 2 members. These assumptions were adopted by the Board.

Net investment return

6.50%; net of investment expenses.

Based on the Actuarial Experience Study referenced above, expected investment expenses represent about 0.40% of the average market value of assets.

Employee contribution, additional annuity and matching account crediting rate

6.50%, based on Plan provisions. The Regular Interest Rate is aligned with the investment return assumption rate as adopted by the Board.

Inflation rate

Increase of 2.50% per year.

Cost of Living Adjustments (COLA)

Retiree COLA increases of 2.75% per year for Tier 1 and 2.00% per year for Tier 2. For members that have COLA banks, they are reflected in projected future COLAs.

Administration expenses

Offset by additional employer contributions.

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

Increase of 2.50% per year from the valuation date.

Salary increases

The annual rate of compensation increase includes:

- Inflation at 2.50%, plus
- "Across-the-board" salary increase of 0.50% per year, plus
- Merit and promotion increase based on years of service:

Merit and Promotion Increases (%)

Years of Service	All Members
Less than 1	7.00
1–2	7.00
2–3	6.50
3–4	5.00
4–5	3.75
5–6	2.75
6–7	2.25
7–8	2.00
8–9	1.90
9–10	1.80
10–11	1.70
11–12	1.45
12–13	1.40
13–14	1.35
14–15	1.30
15–16	1.30
16–17	1.30
17 and over	1.25

Post-retirement mortality

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

- **Service retirees, disability retirees, and beneficiaries not currently in pay status**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Beneficiaries currently in pay status**
  - Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Pre-retirement mortality

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

Pre-Retirement Mortality Rates (%)

Age	Male	Female
25	0.024	0.008
30	0.031	0.013
35	0.041	0.021
40	0.057	0.033
45	0.085	0.051
50	0.129	0.076
55	0.190	0.112
60	0.276	0.169
65	0.405	0.270
70	0.609	0.445

5% of pre-retirement deaths are assumed to be duty related, with the remaining being non-duty related. Note that generational projections beyond the base year (2010) are not reflected in the above mortality rates.

Assumptions for optional form of payment amounts at retirement and conversion of contribution balance to annuities at retirement[1]

Interest Rate

- 6.50%

Mortality Tables

- **Members**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021 associated with a retirement year of 2025, weighted 75% male and 25% female.
- **Beneficiaries**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021 associated with a retirement year of 2025, weighted 25% male and 75% female.

[1] The mortality assumptions used for optional form of payments and conversion of contribution balance to annuities are aligned with the assumptions as adopted by the Board but on a unisex basis.

Disability incidence

Disability Incidence Rates (%)

Age	Male	Female
25	0.006	0.000
30	0.012	0.006
35	0.012	0.036
40	0.018	0.072
45	0.030	0.102
50	0.054	0.138
55	0.126	0.168
60	0.240	0.202

Termination

Total Termination Rates (%)

Years of Service	All Members
Less than 1	9.25
1–2	4.25
2–3	3.25
3–4	3.25
4–5	2.25
5–6	1.75
6–7	1.50
7–8	1.50
8–9	1.50
9–10	1.25
10–15	0.75
15–20	0.70
20 and over	0.50

No termination is assumed after a member is first eligible to retire.

Allocation between ordinary withdrawals and vested terminations

- Ordinary withdrawals are assumed to receive their account balance at termination.
- Vested terminations are assumed to receive a deferred retirement benefit.

Tier 1 Allocation of Termination Rates (%)

Years of Service	Ordinary Withdrawals	Vested Terminations
Less than 1	100	0
1–10	30	70
10 and over	15	85

Tier 2 Allocation of Termination Rates (%)

Years of Service	Ordinary Withdrawals	Vested Terminations
Less than 5	80	20
5–10	25	75
10 and over	15	85

Retirement

Retirement Rates (%)

Age	Tier 1 Under 30 Years of Service	Tier 1 30 or More Years of Service	Tier 2 Under 30 Years of Service	Tier 2 30 or More Years of Service
50	0.00	1.50	0.00	0.00
51	0.00	1.00	0.00	0.00
52	0.00	0.00	0.00	0.00
53	0.00	0.00	0.00	0.00
54	0.00	0.00	0.00	0.00
55	4.50	30.00	0.00	26.00
56	2.50	20.00	0.00	14.00
57	3.00	18.00	0.00	13.50
58	3.50	18.00	0.00	13.50
59	3.50	18.00	0.00	13.50
60	5.25	22.00	5.25	17.50
61	6.75	22.00	3.75	12.00
62	7.00	24.00	2.75	12.00
63	8.50	25.00	20.00	25.00
64	9.50	27.00	11.00	25.00
65	11.50	28.00	11.00	27.00
66	13.50	28.00	12.00	27.00
67	13.50	28.00	12.50	27.00
68	13.50	28.00	12.50	27.00
69	19.00	30.00	16.50	28.00
70	22.00	30.00	40.00	40.00
71	22.00	30.00	40.00	40.00
72	22.00	30.00	40.00	40.00
73	22.00	30.00	40.00	40.00
74	22.00	30.00	40.00	40.00
75 and over	100.00	100.00	100.00	100.00

Retirement age and benefit for inactive vested members

- Tier 1 inactive vested members are assumed to retire at age 60 with a Money Purchase Annuity.
- Tier 2 inactive vested members are assumed to retire at age 63.
- Tier 1 and Tier 2 members receiving Permanent Total Disability benefits are assumed to retire at the earlier of age 65 or age 55 with 30 years of service.

Definition of active members

First day of biweekly payroll following employment.

Form of payment

All active and inactive members are assumed to elect the unmodified option at retirement.

Unknown data for members

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

Data adjustments

Data as of March 31 has been adjusted to June 30 by adding three months of age and, for active employees, three months of service. Contribution account balances were also increased by three months of interest. For members in pay status, we have increased their benefits by the actual July 1 COLA.

Spousal assumptions

Current Active and Inactive Member Spousal Assumptions

Member Gender	% with Spouse at Retirement or Pre-Retirement Death	Spouse Age	Spouse Gender
Male member	80%	3 years younger than member	Female
Female member	55%	2 years older than member	Male

The assumption is also applied for current retirees retired before April 1, 2012 with Options Full, A, B, or C since they are missing this data.

Future benefit accruals

1.0 year of service per year.

Additional service accrual

- Tier 1 members are assumed to purchase an additional 0.04 years of service per year.
- Tier 2 members are assumed to purchase an additional 0.02 years of service per year.

These service purchases exclude those priced at full actuarial cost. The valuation reflects expected future member contributions that are associated with these assumed service purchases.

Actuarial value of assets

The market value of assets less unrecognized returns in each of the last five years. Unrecognized returns are equal to the difference between the actual and expected returns on a market value basis and are recognized over a five-year period.

Actuarial cost method

Entry age actuarial cost method.

Entry age equals attained age less years of service. Normal cost and actuarial accrued liability are calculated on an individual basis and are based on costs allocated as a level percent of salary, with normal cost determined as if the current benefit accrual rate had always been in effect (“replacement life within each tier”).

Amortization policy

The July 1, 2004 unfunded actuarial liability was amortized over a fifteen-year period commencing July 1, 2004 (fully amortized as of July 1, 2019). Any subsequent changes in unfunded actuarial accrued liability are amortized over separate fifteen-year periods. All amortization amounts are determined in equal dollar amounts over the amortization period. The Board may, by resolution, adopt a separate period of not more than thirty years to amortize the change in surplus or unfunded actuarial accrued liability resulting from an unusual event, plan amendment or change in assumptions or methods.

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.

Projected compensation

Projected compensation for the year following the valuation date is calculated by annualizing the bi-weekly pay rate increased by the assumed rate of salary increase. For members with less than one year of service as of the valuation date, no salary increase assumption is applied to their annualized compensation.

Internal Revenue Code Section 415

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

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

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of $160,000 indexed for inflation. That limit is $280,000 for 2025. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

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

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

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

Models

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

Justification for change in actuarial assumptions, methods or models

To adjust the data as of March 31 to June 30, effective with the July 1, 2025 valuation, we have increased the benefits for members in pay status by the actual July 1, COLA, instead of the assumed July 1, COLA.

Exhibit 2: Summary of plan provisions

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

Plan year

July 1 through June 30

Membership

Membership Tier	Membership Tier Plan Provision
Tier 1	All members hired before January 1, 2014. Utility Pre-Craft Trainee, Construction Electrical Helper, or Construction Electrical Mechanic hired before January 1, 2014 and are continuously employed until eligible for membership become Tier 1 members upon membership.
Tier 2	All members hired on or after January 1, 2014.

Final compensation and service for benefit determination

Final Compensation and Service	Final Compensation and Service Plan Provision
Monthly Salary Base	
Tier 1	Equivalent of monthly average salary of highest successive 26 biweekly payroll periods (one year).
Tier 2	Equivalent of monthly average salary of highest successive 78 biweekly payroll periods (three years).

Final Compensation and Service	Final Compensation and Service Plan Provision
Service	
Department Service	Employment history in the Department, including leave of absence and purchased time (includes noncontributory Department Service).
Qualifying Service	Combined Department Service with the Plan and Department Service with LACERS.
Service Credit	Pay period in which contributions are made to the Plan, including any purchased time.

Service retirement benefit

Provision by Tier	Retirement Benefit Plan Provision
Eligibility	
Tier 1	• Age 60 with 5 years of Department Service; or • Age 55 with 10 years of Department Service in the last 12 years; or • Any age with 30 years of Department Service; or • Receiving permanent total disability benefits from the Plan **Note:** To be eligible, 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.
Tier 2	• Age 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 years of Qualifying Service and made normal contributions to the Plan or LACERS for at least 5 years; or • Any age with 30 years of Qualifying Service and made normal contributions to the Plan or LACERS for at least 5 years; or • Receiving permanent total disability benefits from the Plan. **Note:** In lieu of making normal contributions to the Plan for five years, the member can satisfy this requirement if they have received disability payments under the Plan or workers' compensation for any or all of the five years.

Provision by Tier	Retirement Benefit Plan Provision
Formula Pension	
Tier 1	The greater of 2.1% of the Monthly Salary Base or $9.50 per year of Service Credit. For those age 55 or older with 30 or more years of Service Credit the formula is 2.3% of the Monthly Salary Base per year of Service Credit.
Tier 2	Benefit Factor × Monthly Salary Base × Service Credit The Tier 2 benefit factor varies based on various requirements, as shown below.

Tier 2 benefit factors for Formula Pension benefit

Tier 2 Benefit Factor	Tier 2 Requirement
1.5%	Age 60 with 5 years of continuous Department Service and made normal contributions to the Plan for those 5 years; or Age 60 with 10 years of Qualifying Service and made normal contributions to the Plan or LACERS for at least 5 years.
2.0%	Age 60 with 30 years of Qualifying Service and made normal contributions to the Plan or LACERS for at least 5 years; or Any age with 30 years of Qualifying Service and made normal contributions to the Plan or LACERS for at least 5 years. No early retirement factor if age 60 or if age 55 with 30 years of Service Credit (Service Credit with the Department and with LACERS is combined for satisfying this requirement); or Age 63 with 5 years of continuous Department Service and made normal contributions to the Plan for those 5 years; or Age 63 with 10 years of Qualifying Service and made normal contributions to the Plan or LACERS for at least 5 years.
2.1%	Age 63 with 30 years of Qualifying Service and made normal contributions to the Plan or LACERS for at least 5 years.

Provision by Tier	Retirement Benefit Plan Provision
Maximum benefit	
Tier 1	Benefits are limited to 100% of Monthly Salary Base.
Tier 2	Benefits are limited to 80% of Monthly Salary Base.
Money purchase annuity	
Tier 1	A monthly lifetime benefit equal in value to the employee normal contribution account plus Department matching contribution (current service contribution) account at retirement date.
Tier 2	Same as Tier 1 (except no Department matching contribution).
Minimum benefit	
All members	If the money purchase annuity amount exceeds the monthly amount of the formula pension benefit and the retiree meets the eligibility requirements for the formula pension benefit, the amount of the money purchase annuity is paid and the cost-of-living and death after retirement continuance features of the formula pension benefit are also paid.

Early retirement reduction factors

The early retirement factor is determined by the attained age on the effective date of retirement. Every three months of attained age will affect the factor.

Early Retirement Reduction Factors

Attained Age at Actual Retirement	Exact Age	+3 Months	+6 Months	+9 Months
48	.7150	.7225	0.7300	0.7375
49	.7450	.7525	0.7600	0.7675
50	.7750	.7825	0.7900	0.7975
51	.8050	.8125	0.8200	0.8275
52	.8350	.8425	0.8500	0.8575
53	.8650	.8725	0.8800	0.8875
54	.8950	.9025	0.9100	0.9175
55	.9250	.92875	0.9325	0.93625
56	.9400	.94375	0.9475	0.95125
57	.9550	.95875	0.9625	0.96625
58	.9700	.97375	0.9775	0.98125
59	.9850	.98875	0.9925	0.99625
60 and over	1.0000			

The factor is 1.0000 for those retiring at age 55 or later with at least 30 years of Service Credit.

For Tier 2, the early retirement reduction factors 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.

Disability benefits

Membership Tier	Disability Benefit Plan Provision
Tier 1	Disability benefits are paid from the Disability Fund. However, if a member is receiving permanent total disability benefits, the member may elect to retire. Other than a nominal amount, no service credit during disability is earned for the Formula Pension; however, credit is earned during disability toward the $9.50 minimum formula. For members retiring from 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, and 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.
Tier 2	Same as Tier 1 (except no $9.50 minimum formula).

Withdrawal of contributions benefit (ordinary withdrawal)

Refund of employee contributions with interest.

Deferred retirement benefit (vested termination)

Provision by Tier	Deferred Retirement Benefit Plan Provision
Eligibility	
Tier 1	• Age 60 with one year of continuous membership; or • Age 55 with 10 years of contributing membership in the 12 years prior to separation from service.
Tier 2	• Age 60 with five years of Service Credit with the Plan; or • Age 60 with 15 years of Service Credit (Plan and LACERS Service).
Benefit amount	
Tier 1	Value of employee normal contribution account plus Department matching contribution (called current service contribution) account at retirement date. Does not include cost-of-living and death after retirement continuance features of the service retirement benefit.

Tier 2	• 1.5% × Monthly Salary Base x Service Credit at age 60 with five years of Service Credit (or 15 years of Service Credit (Plan and LACERS)); or • 2.0% × Monthly Salary Base x Service Credit at age 63 with five years of Service Credit (or 15 years of Service Credit (Plan and LACERS)). Does not include cost-of-living and death after retirement continuance features of the service retirement benefit.

Pre-retirement death

Basic death benefit

Provision by Tier	Basic Death Benefit Plan Provision
Eligibility	
All members	None.
Benefit amount	
All members	Refund of member contributions with interest.

Survivor's optional death benefit allowance

Provision by Tier	Survivor's Optional Death Benefit Plan Provision
Eligibility	
All members	Any death of a member who is eligible for service retirement or attained 25 years of Qualifying Service.
Benefit amount	
All members	In lieu of the refund of member contributions with interest, the member's spouse or domestic partner may elect an immediate lifetime monthly allowance. The monthly allowance payable to the surviving spouse or domestic partner is the amount the spouse or domestic partner would have received had the member retired and elected a 100% joint and survivor allowance.

Duty death benefit

Provision by Tier	Duty Death Benefit Plan Provision
Eligibility	
All members	Duty death, but prior to service retirement eligibility or attainment of 25 years of Qualifying Service.
Benefit amount	
All members	In lieu of the refund of member contributions with interest, the member's spouse or domestic partner may elect either: 1. A lifetime monthly allowance commencing when the member would have been eligible for a service retirement or attained 25 years of Qualifying Service; or 2. A lifetime monthly allowance calculated with up to five years added to the member's age or Service Credit. This option is only available if the member has attained age 50 or attained 20 years of Qualifying Service. The monthly allowance payable is the amount the spouse or domestic partner would have received had the member retired and elected a 100% joint and survivor allowance.

Post-retirement death

50% of retiree's unmodified allowance continued to eligible spouse or domestic partner (reduced if difference in ages is greater than five years).

Post-retirement cost-of-living benefits for service retirements

Membership Tier	Post-Retirement Cost-of-Living Benefit Plan Provision
Tier 1	Future changes based on the Consumer Price Index to a maximum of 3% per year, excess "banked."
Tier 2	Future changes based on the Consumer Price Index (CPI) to a maximum of 2% per year. Member may purchase additional 1% COLA protection at full actuarial cost.

Effective July 1, 2025, a one-time discretionary COLA of 50% of accumulated CPI excess was implemented for all Tier 2 members and beneficiaries who retired by July 1, 2025.

Member normal contributions

Membership Tier	Member Normal Contribution Plan Provision
Tier 1	If an employee became a plan member after May 31, 1984, the member normal contribution rate is 6% of pay. If an employee became a plan member before June 1, 1984 or transferred from CERS with an entry age contribution rate, member normal contributions vary by entry age. See the table below for sample rates by entry age.
Tier 2	The member normal contribution rate is 10% of pay.

Tier 1 entry age member normal contribution rates

Entry Age	Tier 1 Rate
20	2.601%
25	3.102%
30	3.611%
35	4.161%
40	4.742%
45	5.381%
50	6.042%
55	6.762%
59	7.332%

Department current service contributions

Membership Tier	Department Current Service Contribution Plan Provision
Tier 1	The Department of Water and Power makes actuarially based contributions that are a minimum of 110% of employee contributions.
Tier 2	Same as Tier 1, except that the minimum contribution equal to 110% of employee contributions is not required.

Changes in plan provisions

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

As provided by the Plan, a one-time discretionary COLA of 50% of accumulated CPI excess was granted by the Board on March 26, 2025 for Tier 2 members and beneficiaries effective July 1, 2025.

Appendix A: Definition of Pension Terms

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

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

Appendix A: Definition of Pension Terms

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

Appendix A: Definition of Pension Terms

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

Appendix A: Definition of Pension Terms

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

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