

Orange County Employees Retirement System

**Actuarial Valuation and Review
as of December 31, 2024**



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June 6, 2025

Board of Retirement
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of December 31, 2024 for the Orange County Employees Retirement System ("OCERS" or "the Plan" or "the System"). It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year 2026-2027.

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

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 Andy Yeung, ASA, MAAA, FCA 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 of Retirement based upon our analysis and

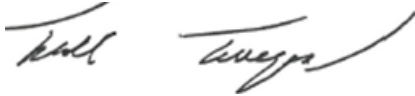
recommendations. In our opinion, the assumptions are reasonable and take into account the experience of OCERS and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

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.

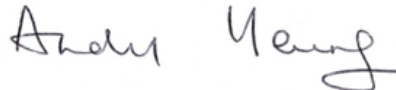
We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal



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Senior Vice President and Actuary



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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present a valuation of the Orange County Employees Retirement System (“OCERS” or “the Plan” or “the System”) as of December 31, 2024. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Plan, as administered by the Board;
- The characteristics of covered active members, inactive members and retired members and beneficiaries as of December 31, 2024, provided by the staff of OCERS;
- The assets of the Plan as of December 31, 2024, provided by the staff of OCERS;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the December 31, 2024 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the December 31, 2024 valuation; and
- The funding policy adopted by the Board of Retirement.

Certain disclosure information required by Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 as of December 31, 2024 for the Plan and the employers, respectively, are provided in separate reports.

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

The contribution requirements are determined as a percentage of payroll. The System’s employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded (upon meeting certain conditions) actuarial accrued liabilities. In this valuation, we have applied the funding policy adopted by the Board in 2014 (reaffirmed in 2018 and revised with some non-substantive changes in 2022 and modified in 2024 to indicate that the Board may exercise discretion in determining whether to delay

Section 1: Actuarial Valuation Summary

or change contribution rates immediately when there is a plan amendment). Details of the funding policy are provided in *Section 4, Exhibit 1* starting on page 106.

As we pointed out during our review of the preliminary results of the December 31, 2024 valuation, we have updated those results to include the adjusted market value of assets (to reflect an increase of \$9.6 million).

The rates calculated in this report may be adopted by the Board of Retirement for the fiscal year that extends from July 1, 2026 through June 30, 2027.

Valuation highlights

Funding measures

1. The funded ratio (the ratio of valuation value of assets to the actuarial accrued liability) increased from 82.63% to 83.83%. 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 80.76% to 84.18%. 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 System's funded ratios is provided in *Section 2, Subsection G* on pages 51 and 52.
2. The unfunded actuarial accrued liability (the difference between the actuarial accrued liability and the valuation value of assets) decreased from \$4,652.8 million to \$4,569.6 million. The decrease in unfunded actuarial accrued liability (UAAL) is primarily due to contributions made to amortize the UAAL and the investment return on the valuation value (i.e., after asset smoothing) greater than the 7.00% return assumption used in the December 31, 2023 valuation, offset somewhat by individual salary increases greater than expected¹ and other experience losses. A reconciliation of the System's UAAL from the prior year is provided in *Section 2, Subsection E* on page 30.

A schedule of the current UAAL amortization balances and payments may be found in *Section 3, Exhibit H* starting on page 89. A graphical projection of the UAAL amortization balances and payments is provided in *Section 3, Exhibit I* starting on page 104.

¹ Active employees in County Safety Rate Groups #6 and #7 received larger than expected salary increases this year while they received lower than expected salary increases last year.

Section 1: Actuarial Valuation Summary

Actuarial experience

3. The net actuarial loss of \$159.4 million, or 0.56% of the actuarial accrued liability, is due to a net loss from sources other than investments of \$294.3 million, or 1.04% of the actuarial accrued liability, partially offset by an investment gain of \$134.9 million, or 0.48% of the actuarial accrued liability. The loss from sources other than investments was primarily due to individual salary increases greater than expected and other actuarial losses.
4. The rate of return on the market value of assets was 10.57% for the year ending December 31, 2024. The return on the valuation value of assets was 7.61% for the same period after recognizing a portion of this year's investment gain and a portion of prior years' investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 7.00% used in the December 31, 2023 valuation. This actuarial investment gain (after asset smoothing) decreased the average employer contribution rate by 0.41% of payroll. A history of the System's investment returns is provided in *Section 2, Subsection B* on page 25.
5. On July 30, 2020, the California Supreme Court issued a decision in the case of Alameda County Deputy Sheriffs' Association et al. v. Alameda County Employees' Retirement Association (ACERA) and Board of Retirement at ACERA. That decision has important implications for OCERS and its members. In particular, the decision requires pension systems like OCERS to exclude certain pay items from a legacy member's compensation earnable. It should be noted that as of December 31, 2024, OCERS has refunded contributions previously paid by certain members in conjunction with such pay items and changed benefit amounts previously determined using those pay items. We have continued to adjust the liabilities in the valuation to reflect modifications in the benefit amounts reported by OCERS.

Contributions

6. The average employer rate calculated in this valuation has decreased from 38.08% to 36.88% of payroll. This decrease is primarily due to amortization payment amounts associated with prior years' UAAL over a larger than expected total payroll and the investment return on the valuation value (i.e., after asset smoothing) greater than the assumed rate of 7.00% used in the December 31, 2023 valuation, partially offset by individual salary increases greater than expected. A complete reconciliation of the System's aggregate employer rate is provided in *Section 2, Subsection F* on page 33.

We note that the impact on contribution rates of the items noted in item 2 (i.e., the investment return on the valuation value (i.e., after asset smoothing) greater than the assumed rate of 7.00% used in the December 31, 2023 valuation and individual salary increases different than expected) is not uniform across the rate groups. That non-uniform impact is dependent on the particular demographics of the members within each rate group (e.g., actual negotiated salary increases for active members covered), as well as the ratio of the payroll to the assets and liabilities within each rate group. That non-uniform impact is exacerbated by the fact that some rate groups had higher than expected total payroll growth while other rate groups have lower than expected total

Section 1: Actuarial Valuation Summary

payroll growth between the December 31, 2023 and the December 31, 2024 valuations. A detailed reconciliation of the employer contribution rate for each rate group is provided in *Section 4, Exhibit 5* starting on page 165. That exhibit is followed by a detailed reconciliation of the UAAL for each rate group provided in *Section 4, Exhibit 6* starting on page 168.

7. The average member rate calculated in this valuation has decreased from 11.63% to 11.61% of payroll due to changes in active member demographics. A complete reconciliation of the System's aggregate member rate is provided in *Section 2, Subsection F* on page 34.

The detailed member rates by cost group are provided in *Section 4, Exhibit 3* starting on page 140.

8. This report reflects the \$15.6 million in additional contributions made by O.C. Fire Authority (OCFA) towards their UAAL.¹ The \$15.6 million of additional contributions made by OCFA has been amortized as a level percent of pay over a period of twenty years effective on December 31, 2024 and used to reduce their UAAL rates for fiscal year 2026-2027.
9. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the UAAL and the principal balance. The funding policy adopted by the Board of Retirement is detailed in *Section 4, Exhibit 1* and meets this standard.

Future expectations

10. The total unrecognized net investment **gain** as of December 31, 2024 is \$100 million as compared to an unrecognized net investment **loss** of \$500 million in the previous valuation. This net deferred gain of \$100 million will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years as shown in *Section 2, Subsection B* on page 23.

The net deferred gain of \$100 million represents about 0.4% of the market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$100 million net market gain is expected to have an impact on the System's future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows:

- a. If the net deferred gain was recognized immediately in the valuation value of assets, the funded percentage would increase from 83.83% to 84.18%.

For comparison purposes, if the net deferred loss in the December 31, 2023 valuation had been recognized immediately in the December 31, 2023 valuation, the funded percentage would have decreased from 82.63% to 80.76%.

- b. If the net deferred gain was recognized immediately in the valuation value of assets, the average employer contribution rate would decrease from 36.88% to 36.58% of payroll.

¹ OCFA has been making additional UAAL contributions since 2013. Those additional contributions have allowed OCFA to achieve a higher funded ratio (97.80%) when compared to other Safety rate groups.

Section 1: Actuarial Valuation Summary

For comparison purposes, if the net deferred loss in the December 31, 2023 valuation had been recognized immediately in the December 31, 2023 valuation, the average employer contribution rate would have increased from 38.09% to 39.77% of payroll.

Risk

11. It is important to note that this actuarial valuation is based on plan assets as of December 31, 2024. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
12. Because the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition and that report will be provided at a later date. We have also included a brief discussion of some risks that may affect the Plan in *Section 2, Subsection I*, beginning on page 54. This discussion of risks is included to satisfy the disclosure required by Actuarial Standard of Practice No. 51 (ASOP 51).
13. The risk assessment in *Section 2, Subsection I* includes the disclosure of a "Low-Default-Risk Obligation Measure" (LDROM). This disclosure, along with commentary on the significance of the LDROM, is a requirement under Actuarial Standard of Practice No. 4 (ASOP 4) for all pension funding actuarial valuation reports and can be found on pages 56-57.

GASB

14. 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 December 31, 2024, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.

Section 1: Actuarial Valuation Summary

Other

15. The balance in the O.C. Sanitation District UAAL Deferred Account has increased from \$16.0 million as of December 31, 2023 to \$17.6 million as of December 31, 2024 to reflect market experience. As of December 31, 2024, there was no transfer required from this account to pay off their UAAL.
16. O.C. Sanitation District (Rate Group #3), Transportation Corridor Agency (Rate Group #9), and O.C. Law Library (Rate Group #12) remain overfunded as of December 31, 2024, and O.C. Law Library (Rate Group #12) is 121.60% funded. Under CalPEPRA, the employer's contribution rate cannot be less than the normal cost unless the funded ratio is over 120% for the total plan and other conditions in CalPEPRA are met. Therefore, their contribution rates are set equal to their normal cost rates.
17. There was one refinement included in our January 1, 2020 through December 31, 2022 Actuarial Experience Study report dated August 11, 2023 that has been deferred to allow for further discussion with OCERS, involving a change in allocation of the normal cost associated with providing COLA benefits for legacy Safety members with 30 or more years of service.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

Average Employer Contribution Calculated as of December 31

Rate Group	2024 Contribution Rate	2024 Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate ²	2023 Annual Amount ¹ (\$ in '000s)
General				
• Rate Group #1 – Plans A, B and U (County and IHSS)	13.46%	\$16,103	13.21%	\$15,807
• Rate Group #2 – Plans I, J, O, P, S, T, U and W (County et al.)	36.95%	547,185	37.76%	559,186
• Rate Group #3 – Plans B, G, H and U (OCSD)	11.47%	10,277	11.51%	10,315
• Rate Group #5 – Plans A, B and U (OCTA)	29.01%	39,934	30.60%	42,115
• Rate Group #9 – Plans M, N and U (TCA)	13.06%	1,113	12.98%	1,106
• Rate Group #10 – Plans I, J, M, N and U (OCFA)	22.28%	8,513	22.81%	8,717
• Rate Group #11 – Plans M and N, future service, and U (Cemetery)	14.19%	302	14.18%	301
• Rate Group #12 – Plans G, H, future service, and U (Law Library)	13.25%	166	13.41%	168
Safety				
• Rate Group #6 – Plans E, F and V (Probation)	60.51%	\$37,570	60.02%	\$37,264
• Rate Group #7 – Plans E, F, Q, R and V (Law Enforcement)	54.55%	195,300	57.88%	207,190
• Rate Group #8 – Plans E, F, Q, R and V (OCFA)	31.92%	57,557	34.04%	61,384
All Categories Combined	36.88%	\$914,020	38.08%	\$943,553

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² For those rate groups with plan specific contribution rates, the total rates shown above have been recalculated by applying the plan specific contribution rates determined in the December 31, 2023 valuation to the corresponding projected payrolls reported as of December 31, 2024.

Section 1: Actuarial Valuation Summary

Average Member Contribution Calculated as of December 31

Rate Group	2024 Contribution Rate	2024 Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate ²	2023 Annual Amount ¹ (\$ in '000s)
General				
• Rate Group #1 – Plans A, B and U (County and IHSS)	10.12%	\$12,106	10.08%	\$12,058
• Rate Group #2 – Plans I, J, O, P, S, T, U and W (County et al.)	9.90%	146,595	9.88%	146,299
• Rate Group #3 – Plans B, G, H and U (OCSD)	10.82%	9,694	10.83%	9,703
• Rate Group #5 – Plans A, B and U (OCTA)	10.88%	14,975	10.84%	14,920
• Rate Group #9 – Plans M, N and U (TCA)	11.07%	943	11.09%	945
• Rate Group #10 – Plans I, J, M, N and U (OCFA)	10.67%	4,077	10.70%	4,089
• Rate Group #11 – Plans M and N, future service, and U (Cemetery)	10.42%	221	10.45%	222
• Rate Group #12 – Plans G, H, future service, and U (Law Library)	12.47%	156	12.53%	157
Safety				
• Rate Group #6 – Plans E, F and V (Probation)	15.57%	\$9,667	15.49%	\$9,618
• Rate Group #7 – Plans E, F, Q, R and V (Law Enforcement)	16.86%	60,358	17.17%	61,467
• Rate Group #8 – Plans E, F, Q, R and V (OCFA)	16.01%	28,871	15.94%	28,745
All Categories Combined	11.61%	\$287,663	11.63%	\$288,223

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² Average December 31, 2023 member contribution rates have been recalculated by applying the individual entry age-based rates determined in the December 31, 2023 valuation to the System membership as of December 31, 2024.

Section 1: Actuarial Valuation Summary

Valuation Results as of December 31 (\$ in '000s)

Line Description	2024	2023
Actuarial accrued liability		
• Total actuarial accrued liability	\$28,258,622	\$26,788,041
– Retired members and beneficiaries	17,668,968	16,903,604
– Inactive members ¹	694,435	624,749
– Active members	9,895,219	9,259,688
• Normal cost for plan year beginning December 31	625,145	583,960
Assets		
• Market value of assets (MVA) ²	\$23,789,296	\$21,635,294
• Actuarial value of assets (AVA) ²	23,688,986	22,135,285
• Actuarial value of assets as a percentage of market value of assets	99.58%	102.31%
• Valuation value of assets (VVA)	\$23,688,986	\$22,135,285
Funded status		
• UAAL on market value of assets ³	\$4,469,326	\$5,152,747
• Funded percentage on MVA basis	84.18%	80.76%
• UAAL on valuation value of assets	\$4,569,636	\$4,652,756
• Funded percentage on VVA basis	83.83%	82.63%
Key assumptions		
• Net investment return	7.00%	7.00%
• Inflation rate	2.50%	2.50%
• Payroll growth	3.00%	3.00%
• Cost-of-living adjustments	2.75%	2.75%

¹ Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

² Excludes County Investment Account (funded by pension obligation bond proceeds held by OCERS), prepaid employer contributions account, O.C. Sanitation District UAAL Deferred Account (after transfer) and non-valuation reserves (if any).

³ Both the UAAL and the funded percentage on MVA basis have been calculated by using the MVA reduced by non-valuation reserves in the amount of \$0 as of both December 31, 2024 and December 31, 2023.

Section 1: Actuarial Valuation Summary

Demographic Data as of December 31

Demographic Data by Status	2024	2023	Change
Active members			
• Number of members	23,368	22,782	2.6%
• Average age	44.1	44.2	(0.1)
• Average service	11.3	11.5	(0.2)
• Total projected compensation	\$2,478,139,312	\$2,277,976,151	8.8%
• Average projected compensation	\$106,048	\$99,990	6.1%
Retired members and beneficiaries			
• Number of members	21,740	21,283	2.1%
– Service retired	17,103	16,754	2.1%
– Disability retired	1,645	1,628	1.0%
– Beneficiaries	2,992	2,901	3.1%
• Average age	70.9	70.6	0.3
• Average monthly benefit ¹	\$4,892	\$4,737	3.3%
Inactive members			
• Number of members ²	9,377	8,579	9.3%
• Average age	45.0	45.0	0.0
Total members	54,485	52,644	3.5%

¹ Excludes monthly benefits payable from the Supplemental Targeted Adjustment for Retirees Cost of Living Adjustment (STAR COLA).

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

Section 1: Actuarial Valuation Summary

Important information about actuarial valuations

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

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

Input Item	Description
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 System. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
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 System. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
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 System. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If OCERS is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting or tax advice and is not acting as a fiduciary to the Plan. This valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The System should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by OCERS upon delivery and review. OCERS 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 vested 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 December 31	Active Members	Inactive Members ¹	Retired Members and Beneficiaries	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Retired Members and Beneficiaries to Actives
2015	21,525	5,091	15,810	20,901	0.97	0.73
2016	21,746	5,370	16,369	21,739	1.00	0.75
2017	21,721	5,803	16,947	22,750	1.05	0.78
2018	21,929	6,026	17,674	23,700	1.08	0.81
2019	22,257	6,520	18,420	24,940	1.12	0.83
2020	21,559	6,818	19,419	26,237	1.22	0.90
2021	22,011	7,238	19,826	27,064	1.23	0.90
2022	22,061	7,894	20,678	28,572	1.30	0.94
2023	22,782	8,579	21,283	29,862	1.31	0.93
2024	23,368	9,377	21,740	31,117	1.33	0.93

¹ Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

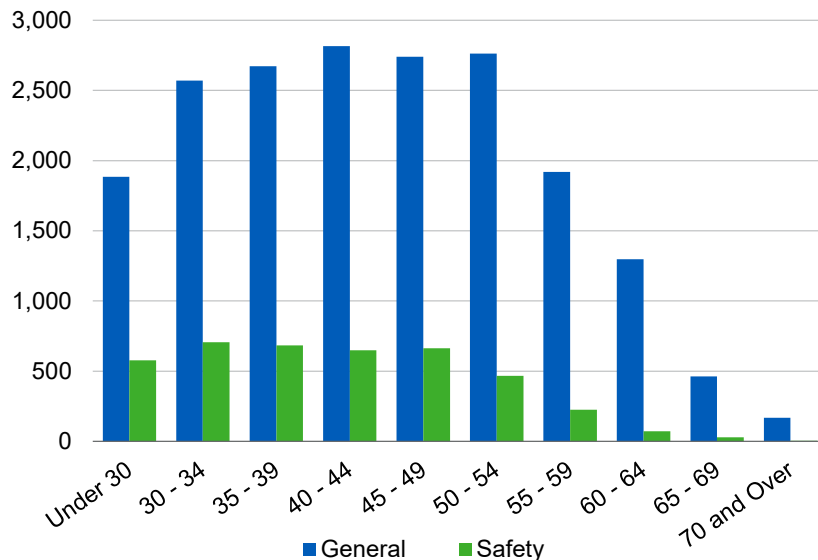
Section 2: Actuarial Valuation Results

Active members

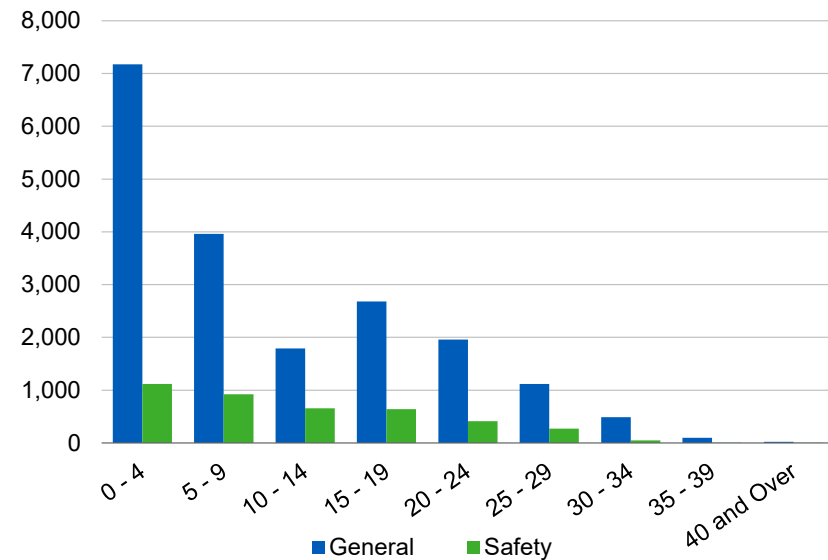
Demographic Data	As of December 31, 2024	As of December 31, 2023	Change
Active members	23,368	22,782	2.6%
Average age ¹	44.1	44.2	(0.1)
Average years of service	11.3	11.5	(0.2)
Average compensation	\$106,048	\$99,990	6.1%

Distribution of Active Members as of December 31, 2024

Actives by Age



Actives by Years of Service



Inactive members

Demographic Data	As of December 31, 2024	As of December 31, 2023	Change
Inactive members ²	9,377	8,579	9.3%

¹ Among the active members, there were none with unknown age information.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

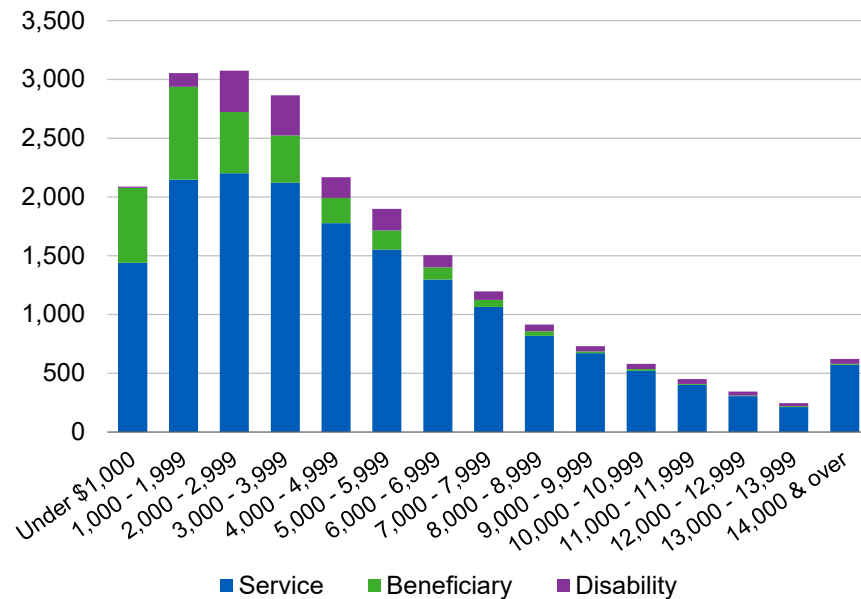
Section 2: Actuarial Valuation Results

Retired members and beneficiaries

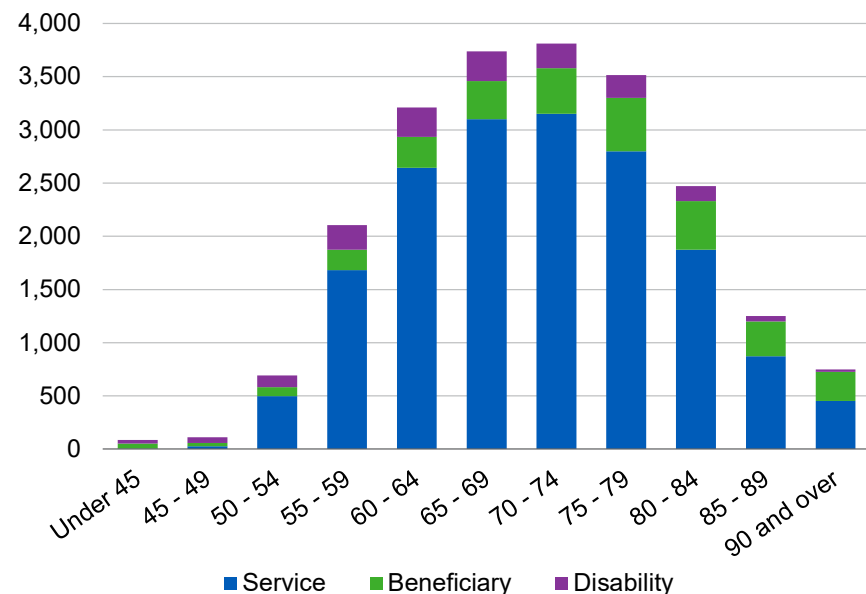
Demographic Data	As of December 31, 2024	As of December 31, 2023	Change
Retired members	18,748	18,382	2.0%
Beneficiaries	2,992	2,901	3.1%
Average age	70.9	70.6	0.3
Average monthly amount ¹	\$4,892	\$4,737	3.3%
Total monthly amount	\$106,360,824	\$100,814,875	5.5%

Distribution of Retired Members and Beneficiaries as of December 31, 2024

By Type and Monthly Amount



By Type and Age



¹ Excludes monthly benefits payable from the STAR COLA.

Section 2: Actuarial Valuation Results

Historical plan population

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

Historical Member Data
Active Members versus Retired Members and Beneficiaries (Pay Status)

As of December 31	Active Count	Active Average Age	Active Average Service	Pay Status Count	Pay Status Average Age	Pay Status Monthly Amount ¹
2015	21,525	45.5	13.1	15,810	69.5	\$3,560
2016	21,746	45.4	12.9	16,369	69.7	3,637
2017	21,721	45.3	12.9	16,947	69.8	3,745
2018	21,929	45.1	12.8	17,674	70.0	3,913
2019	22,257	44.9	12.5	18,420	70.1	4,077
2020	21,559	44.8	12.5	19,419	70.2	4,251
2021	22,011	44.9	12.4	19,826	70.4	4,379
2022	22,061	44.5	12.0	20,678	70.4	4,563
2023	22,782	44.2	11.5	21,283	70.6	4,737
2024	23,368	44.1	11.3	21,740	70.9	4,892

¹ Excludes monthly benefits payable from the STAR COLA.

Section 2: Actuarial Valuation Results

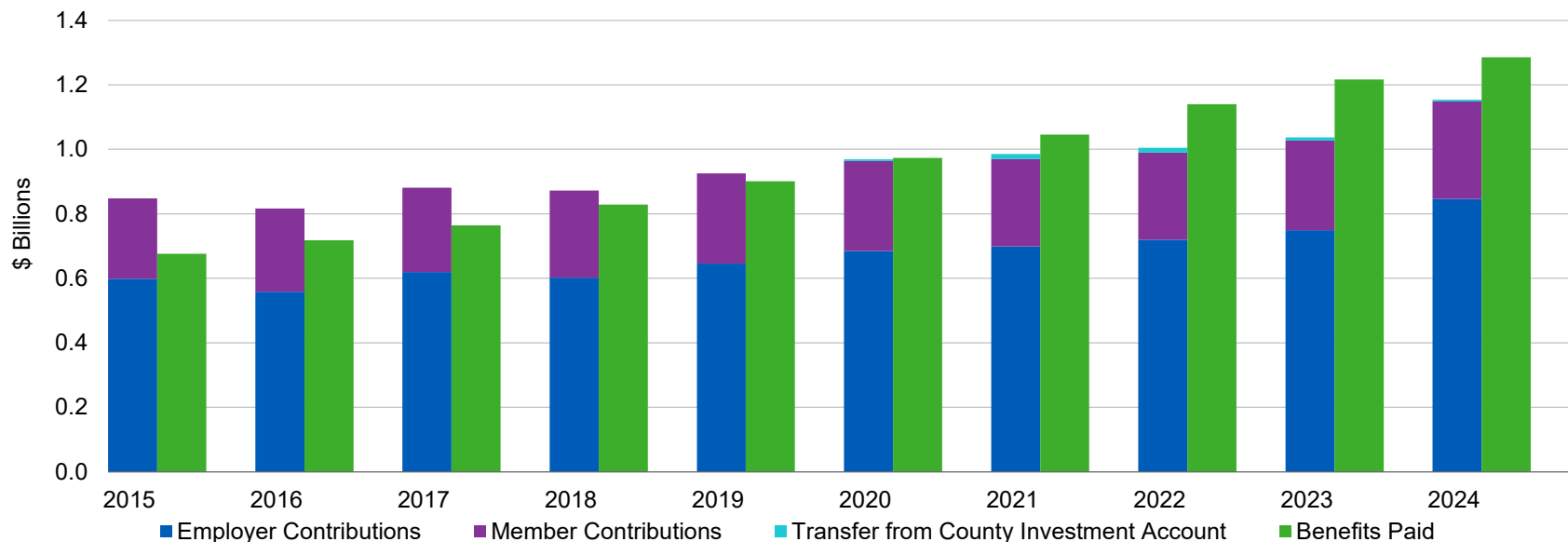
B. Financial information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees and administrative expenses) 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.

Comparison of Contributions Made with Benefits for Years Ended December 31



Section 2: Actuarial Valuation Results

Determination of Actuarial Value and Valuation Value of Assets for Year Ended December 31, 2024

Step	Actual Return	Expected Return	Investment Gain/(Loss)	Percent Deferred	Deferred Amount	Amount
1. Market value of assets ¹						\$23,789,296,000
2. Calculation of unrecognized return						
a. Year ended December 31, 2020	\$1,982,757,000	\$1,155,523,000	\$827,234,000	0%	\$0	
b. Year ended December 31, 2021	3,273,348,000	1,293,495,000	1,979,853,000	20%	395,971,000	
c. Year ended December 31, 2022	(2,106,139,000)	1,518,273,000	(3,624,412,000)	40%	(1,449,765,000)	
d. Year ended December 31, 2023	2,258,475,000	1,361,890,000	896,585,000	60%	537,951,000	
e. Year ended December 31, 2024	2,280,223,000	1,510,032,000	770,191,000	80%	616,153,000	
f. Total deferred return²						\$100,310,000
3. Actuarial value of assets: 1 – 2f						\$23,688,986,000
4. Ratio of actuarial to market value: 3 ÷ 1						99.58%
5. Non-valuation reserves						
a. Unclaimed member deposit						\$0
b. Medicare medical insurance reserve						0
c. Total non-valuation reserves						\$0
6. Valuation value of assets: 3 – 5c						\$23,688,986,000

Note: Results may be slightly off due to rounding.

Consistent with OCERS Actuarial Funding Policy, Segal has reviewed the pattern of recognition of net deferred investment gains or losses provided in footnote (2) and determined, based on our professional judgement that until potentially after the December 31, 2025 valuation, the net deferred investment gains or losses are not relatively small and the pattern of such recognition is not so markedly non-level as to warrant additional study or action by the Board.

¹ Excludes \$155,101,000 in County Investment Account (funded by pension obligation bond proceeds held by OCERS), \$40,624,000 in Prepaid Employer Contributions and \$17,594,000 in O.C. Sanitation District UAAL Deferred Account.

² Total deferred return is equal to the **sum of 2a through 2e**. The total deferred return as of December 31, 2024 is recognized in each of the next four years as follows:

a. Amount recognized on December 31, 2025	\$4,443,000
b. Amount recognized on December 31, 2026	(391,527,000)
c. Amount recognized on December 31, 2027	333,355,000
d. Amount recognized on December 31, 2028	154,039,000

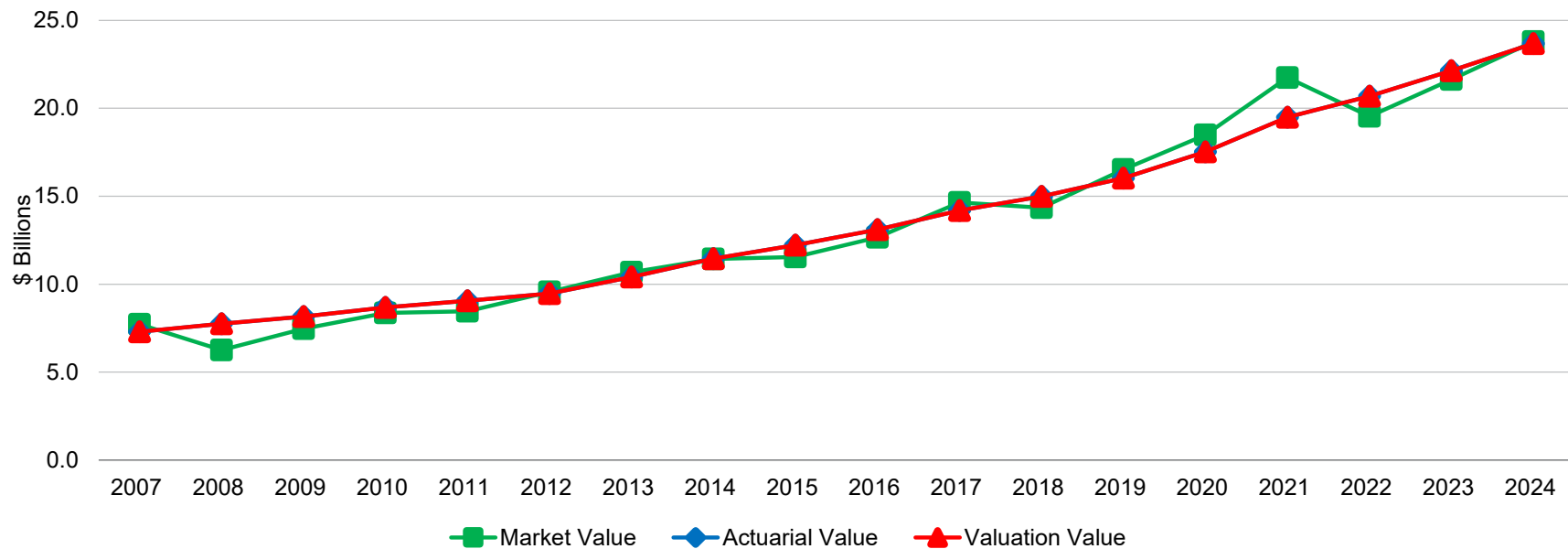
Section 2: Actuarial Valuation Results

Asset history

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

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

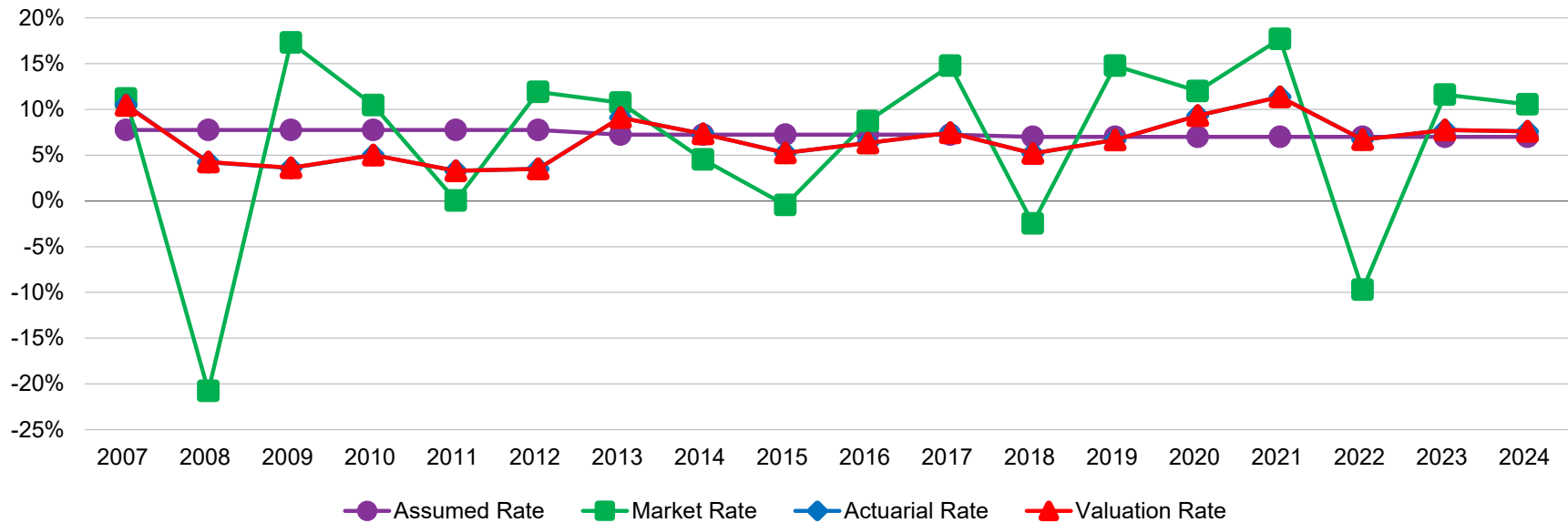
Market Value, Actuarial Value, and Valuation Value of Assets as of December 31



Section 2: Actuarial Valuation Results

Historical investment returns

Market, Actuarial and Valuation Rates of Return for Years Ended December 31



Legend	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market rate	11.18%	(20.76%)	17.32%	10.47%	0.04%	11.92%	10.73%	4.52%	(0.45%)	8.72%	14.79%	(2.46%)	14.79%	12.01%	17.71%	(9.71%)	11.61%	10.57%
Actuarial rate	10.49%	4.23%	3.60%	5.02%	3.28%	3.49%	9.11%	7.34%	5.26%	6.33%	7.44%	5.20%	6.66%	9.31%	11.38%	6.69%	7.77%	7.61%
Valuation rate	10.45%	4.25%	3.62%	5.02%	3.29%	3.49%	9.11%	7.34%	5.26%	6.33%	7.44%	5.20%	6.66%	9.31%	11.38%	6.69%	7.77%	7.61%
Assumed rate	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.25%	7.25%	7.25%	7.25%	7.25%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%

Average Rates of Return	Market Value	Actuarial Value	Valuation Value
Most recent five-year geometric average return:	8.00%	8.54%	8.54%
Most recent 10-year geometric average return:	7.41%	7.35%	7.35%
Most recent 15-year geometric average return:	7.42%	6.77%	6.77%

Section 2: Actuarial Valuation Results

C. Actuarial experience

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

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

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

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

Actuarial Experience for Year Ended December 31, 2024

Source	Amount
1. Net gain from investments ¹	\$(134,890,000)
2. Net gain from contributions	(5,187,000)
3. Net gain from additional UAAL contributions ²	(19,544,000)
4. Net loss from other experience ³	319,062,000
5. Net experience loss	\$159,441,000

¹ Details on next page.

² Includes additional UAAL contributions from OCFA and scheduled payments from DOE and U.C.I.

³ See *Subsection E* for further details. Does not include the effect of plan, method or assumption changes, if any.

Section 2: Actuarial Valuation Results

Investment experience

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

For valuation purposes, the assumed rate of return on the valuation value of assets is 7.00% based on the December 31, 2023 valuation. The actual rate of return on a valuation basis for the 2024 plan year was 7.61% after recognizing a portion of this year's investment gain and a portion of prior years' investment gains and losses. Since the actual return for the year was greater than the assumed return, the Plan experienced an actuarial gain during the year ended December 31, 2024 with regard to its investments.

Investment Experience for Year Ended December 31, 2024

Line Description	Market Value	Actuarial Value	Valuation Value
1. Net investment income	\$2,280,223,000	\$1,679,922,000	\$1,679,922,000
2. Average value of assets	\$21,571,890,000	\$22,071,881,000	\$22,071,881,000
3. Rate of return: $1 \div 2$	10.57% ¹	7.61%	7.61%
4. Assumed rate of return	7.00%	7.00%	7.00%
5. Expected investment income: 2×4	\$1,510,032,000	\$1,545,032,000	\$1,545,032,000
6. Investment gain/(loss): $1 - 5$	\$770,191,000	\$134,890,000	\$134,890,000

¹ Return on market value was calculated using a modified dollar-weighted approach based on pension plan assets net of accounting liabilities. Actual investment income on net pension plan assets was \$2,280,223,000 during 2024 after including both the administrative expenses and discount for prepaid contributions while excluding the amount credited to County Investment Account and O.C. Sanitation District UAAL Deferred Account. Without these adjustments, the actual investment income was \$2,332,245,000.

Section 2: Actuarial Valuation Results

Contributions

Contributions for the year ended December 31, 2024 totaled \$1,159.2 million, compared to the projected amount of \$1,135.3 million. This resulted in a gain of \$24.7 million¹ for the year, when adjusted for timing.

Other experience

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

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

The net loss from this other experience for the year ended December 31, 2024 amounted to \$319.1 million, which is 1.1% of the actuarial accrued liability. See *Section 2, Subsection E* for a detailed development of the UAAL.

¹ Includes additional UAAL contributions from OCFA and scheduled payments from DOE and U.C.I. Without those amounts, the gain would have been about \$5 million.

Section 2: Actuarial Valuation Results

D. Other changes impacting the actuarial accrued liability

Actuarial assumptions and methods

Nonbinary member assumptions were introduced with this valuation, which uses blended mortality tables and spousal assumptions for those members who self-report as nonbinary. The impact of this change on the valuation results is de minimis and is therefore not identified separately in this report.

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

Plan provisions

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

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

Section 2: Actuarial Valuation Results

E. Unfunded actuarial accrued liability

Development of Unfunded Actuarial Accrued Liability for Year Ended December 31, 2024

Line Description	Amount
1. Unfunded actuarial accrued liability at beginning of year	\$4,652,756,000
2. Normal cost at middle of year	583,960,000
3. Expected employer and member contributions	(1,135,277,000)
4. Interest to end of year	308,756,000
5. Expected unfunded actuarial accrued liability at end of year	\$4,410,195,000
6. Changes due to:	
a. Investment return greater than expected, after asset smoothing	\$(134,890,000)
b. Actual contributions more than expected under funding policy	(5,187,000)
c. Additional UAAL contributions from OCFA, and scheduled payments ¹ from DOE and U.C.I.	(19,544,000)
d. Individual salary increases greater than expected	298,367,000
e. COLA increases greater than expected in 2025 ²	15,757,000
f. Other net experience loss ³	4,938,000
g. Total changes	\$159,441,000
7. Unfunded actuarial accrued liability at end of year: 5 + 6g	\$4,569,636,000

Note: The sum of items 6d, 6e and 6f equals the “Net (gain)/loss from other experience” shown in *Section 2, Subsection C*.

¹ Segal provided separate letters for DOE and U.C.I. with regard to their required UAAL contributions based on the Board's Declining Employer Payroll policy. These contributions have not been reflected in the contribution rates developed in this valuation. Segal also provided separate letters for O.C. Vector Control and Cypress Recreation and Parks (CRPD) with regard to their updated withdrawal liabilities based on the Board's Withdrawing Employer Policy, although no contributions were required to be made by O.C. Vector Control and CRPD during the past calendar year. CRPD and O.C. Vector Control both had no withdrawal liability as of December 31, 2023.

² Actuarial loss from payment of COLAs higher than the 2.75% COLA assumption (based on actual CPI of 3.50%, 3.00% COLA expected to be paid April 1st 2025, 2026 and 2027, for members without COLA Banks as of April 1, 2025).

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

Section 2: Actuarial Valuation Results

F. Recommended contribution

The recommended contribution is equal to the employer normal cost payment and a payment on the UAAL. As of December 31, 2024, the average recommended employer contribution is 36.88% of payroll.

The Board sets the funding policy used to calculate the recommended contribution based on layered 20-year¹ amortization periods as a level percentage of payroll. See *Section 4, Exhibit 1* for further details on the funding policy. Based on this policy, there is no negative amortization and each amortization layer is fully funded in 20 years. A more detailed projection of the UAAL, funded status and employer contribution rates will be provided in a separate report.

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

The recommended 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.

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 20-year periods.

Section 2: Actuarial Valuation Results

Average Recommended Employer Contribution Calculated as of December 31

Line Description	2024 Amount (\$ in '000s)	2024 % of Projected Compensation	2023 Amount (\$ in '000s)	2023 % of Projected Compensation
1. Total normal cost	\$625,145	25.23%	\$583,960	25.63%
2. Expected member normal cost contributions	287,663	11.61%	267,501	11.74%
3. Employer normal cost: 1 – 2	\$337,482	13.62%	\$316,459	13.89%
4. Actuarial accrued liability	\$28,258,622		\$26,788,041	
5. Valuation value of assets	23,688,986		22,135,285	
6. UAAL: 4 – 5	\$4,569,636		\$4,652,756	
7. Payment on UAAL	576,538	23.26%	551,317	24.20%
8. Average recommended employer contribution: 3 + 7	\$914,020	36.88%	\$867,776	38.09%
9. Projected payroll	\$2,478,139		\$2,277,976	

Note: Contributions are assumed to be paid at the middle of the year.

Section 2: Actuarial Valuation Results

Reconciliation of average recommended employer contribution rate

Reconciliation from December 31, 2023 to December 31, 2024

Item	Contribution Rate	Estimated Annual Dollar Amount (\$ in '000s) ¹
1. Average recommended employer contribution as of December 31, 2023	38.08%	\$943,553
2. Changes due to:		
a. Investment return greater than expected after asset smoothing	(0.41%)	\$(10,160)
b. Actual contributions greater than expected ²	(0.02%)	(496)
c. Additional UAAL contributions for OCFA	(0.05%)	(1,239)
d. Individual salary increases greater than expected	0.88%	21,808
e. Amortizing prior year's UAAL over a (larger) than expected total payroll	(1.50%)	(37,172)
f. COLA increases greater than expected in 2025 ³	0.05%	1,239
g. Other net experience gain ⁴	(0.15%)	(3,513)
h. Total change	(1.20%)	\$(29,533)
3. Average recommended employer contribution as of December 31, 2024: 1 + 2h	36.88%	\$914,020

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² Includes impact of difference between actual and expected normal cost and UAAL contributions due to actual payroll different than expected during 2024.

³ Actuarial loss from payment of COLAs higher than the 2.75% COLA assumption (based on actual CPI of 3.50%, 3.00% COLA expected to be paid April 1st 2025, 2026 and 2027, for members without COLA Banks as of April 1, 2025).

⁴ Includes an adjustment to reflect 18-month delay between date of valuation and date of rate implementation (-0.14%) and the effect of changes in member demographics on normal cost (-0.05%), partially offset by a net experience UAAL loss (+0.03%) and the effect of adjusting the rate to normal cost for Rate Groups that are fully funded as of December 31, 2024 (+0.01%).

Section 2: Actuarial Valuation Results

Reconciliation of average recommended member contribution rate

Reconciliation from December 31, 2023 to December 31, 2024

Item	Contribution Rate	Estimated Annual Dollar Amount (\$ in '000s) ¹
1. Average recommended member contribution as of December 31, 2023 ²	11.63%	\$288,223
2. Changes due to:		
a. Change in member demographics on normal cost	(0.02%)	\$(560)
3. Average recommended member contribution as of December 31, 2024: 1 + 2a	11.61%	\$287,663

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² Rates have been recalculated by applying the individual entry age-based rates determined in the December 31, 2023 valuation to the System membership as of December 31, 2024.

Section 2: Actuarial Valuation Results

Recommended employer contribution rate

Rate Group #1 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans A and B (2.0% @ 57 and 1.64% @ 57 – County and IHSS)				
Normal cost	10.39%	\$2,975	10.39%	\$2,975
UAAL ²	3.01%	862	2.93%	839
Total contribution	13.40%	\$3,837	13.32%	\$3,814
Plan U (2.5% @ 67 PEPRA)³				
Normal cost	10.47%	\$9,527	10.25%	\$9,327
UAAL ²	3.01%	2,739	2.93%	2,666
Total contribution	13.48%	\$12,266	13.18%	\$11,993
Plans A, B and U Combined				
Normal cost	10.45%	\$12,502	10.28%	\$12,302
UAAL ²	3.01%	3,601	2.93%	3,505
Total contribution	13.46%	\$16,103	13.21%	\$15,807

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Applicable for members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

Rate Group #2 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans I and J (2.7% @ 55 – non-Children and Families Commission)²				
Normal cost	15.29%	\$99,399	15.29%	\$99,399
UAAL ³	25.96%	168,763	26.78%	174,094
Total contribution	41.25%	\$268,162	42.07%	\$273,493
Plans I and J (2.7% @ 55 – Children and Families Commission)				
Normal cost	15.29%	\$77	15.29%	\$77
UAAL ^{3,4,5}	5.63%	28	5.46%	28
Total contribution	20.92%	\$105	20.75%	\$105
Plans O and P (1.62% @ 65)				
Normal cost	6.68%	\$1,018	6.54%	\$997
UAAL ³	25.96%	3,957	26.78%	4,082
Total contribution	32.64%	\$4,975	33.32%	\$5,079
Plan S (2.0% @ 57)				
Normal cost	16.00%	\$220	16.79%	\$231
UAAL ³	25.96%	358	26.78%	369
Total contribution	41.96%	\$578	43.57%	\$600
Plan T (1.62% @ 65 PEPR)⁶				
Normal cost	7.37%	\$49,104	7.34%	\$48,905
UAAL ³	25.96%	172,965	26.78%	178,428
Total contribution	33.33%	\$222,069	34.12%	\$227,333

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² For Orange County Employees Retirement System (the employer) with future service only benefit improvements under 2.7% @ 55, refer to the employer rates on page 48.

³ UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

⁴ UAAL rate has been adjusted to reflect future service only benefit improvement under 2.7% @ 55.

⁵ Unlike the non-Children & Families employers, the decrease in the employer UAAL rate due to total payroll growth greater than expected for the amortization layers established prior to December 31, 2024 for Children & Families was not large enough to offset the rate increases due to changes in the experience losses established in the December 31, 2024 valuation.

⁶ Applicable for members hired on or after January 1, 2013 except for County Attorneys, SJC members, OCERS management members, Superior Court members, and Children and Families members.

Section 2: Actuarial Valuation Results

Rate Group #2 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plan U (2.5% @ 67 PEPRA – non-Children and Families Commission)^{2,3}				
Normal cost	9.09%	\$13,226	9.15%	\$13,314
UAAL ⁴	25.96%	37,773	26.78%	38,967
Total contribution	35.05%	\$50,999	35.93%	\$52,281
Plan U (2.5% @ 67 PEPRA – Children and Families Commission)⁵				
Normal cost	9.09%	\$143	9.15%	\$144
UAAL ^{4,6,7}	5.63%	89	5.46%	86
Total contribution	14.72%	\$232	14.61%	\$230
Plan W (1.62% @ 65 PEPRA)⁸				
Normal cost ⁹	9.27%	\$17	7.88%	\$15
UAAL ⁴	25.96%	48	26.78%	50
Total contribution	35.23%	\$65	34.66%	\$65
Plans I, J, O, P, S, T, U and W Combined				
Normal cost	11.02%	\$163,204	11.01%	\$163,082
UAAL ⁴	25.93%	383,981	26.75%	396,104
Total contribution	36.95%	\$547,185	37.76%	\$559,186

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² Applicable for County Attorneys, SJC members, OCERS management members, and Superior Court members hired on or after January 1, 2013.

³ For Orange County Employees Retirement System (the employer) with future service only benefit improvements under 2.7% @ 55, refer to the employer rates on page 48.

⁴ UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

⁵ Applicable for Children and Family members hired on or after January 1, 2013.

⁶ UAAL rate has been adjusted to reflect future service only benefit improvement under 2.7% @ 55.

⁷ Unlike the non-Children & Families employers, the decrease in the employer UAAL rate due to total payroll growth greater than expected for the amortization layers established prior to December 31, 2024 for Children & Families was not large enough to offset the rate increases due to the experience losses established in the December 31, 2024 valuation.

⁸ Applicable for SJC members hired on or after January 1, 2016 and not electing Plan U.

⁹ The increase in the employer normal cost rate from last year to this year is primarily due to the change in the average entry age from 43.2 for two employees to 58.0 for one employee.

Section 2: Actuarial Valuation Results

Rate Group #3 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans G and H (2.5% @ 55 – OCSD)				
Normal cost	14.03%	\$4,025	14.05%	\$4,031
UAAL ^{2,3}	0.00%	0	0.00%	0
Total contribution	14.03%	\$4,025	14.05%	\$4,031
Plan B (1.64% @ 57 – OCSD)				
Normal cost	13.25%	\$942	13.09%	\$931
UAAL ^{2,3}	0.00%	0	0.00%	0
Total contribution	13.25%	\$942	13.09%	\$931
Plan U (2.5% @ 67 PEPR A)⁴				
Normal cost	9.87%	\$5,310	9.95%	\$5,353
UAAL ^{2,3}	0.00%	0	0.00%	0
Total contribution	9.87%	\$5,310	9.95%	\$5,353
Plans B, G, H and U Combined				
Normal cost	11.47%	\$10,277	11.51%	\$10,315
UAAL ^{2,3}	0.00%	0	0.00%	0
Total contribution	11.47%	\$10,277	11.51%	\$10,315

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Under CalPEPRA, the employer's contribution rate cannot be less than the normal cost unless the funded ratio of the total plan is over 120% and other conditions in CalPEPRA are met.

⁴ Applicable for members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

Rate Group #5 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans A and B (2.0% @ 57 and 1.64% @ 57 – OCTA)				
Normal cost	12.53%	\$8,982	12.60%	\$9,033
UAAL ²	16.71%	11,979	18.31%	13,126
Total contribution	29.24%	\$20,961	30.91%	\$22,159
Plan U (2.5% @ 67 PEPRA)³				
Normal cost	12.06%	\$7,953	11.95%	\$7,881
UAAL ²	16.71%	11,020	18.31%	12,075
Total contribution	28.77%	\$18,973	30.26%	\$19,956
Plans A, B and U Combined				
Normal cost	12.30%	\$16,935	12.29%	\$16,914
UAAL ²	16.71%	22,999	18.31%	25,201
Total contribution	29.01%	\$39,934	30.60%	\$42,115

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Applicable for members hired on or after January 1, 2015.

Section 2: Actuarial Valuation Results

Rate Group #9 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans M and N (2.0% @ 55 – TCA)				
Normal cost	16.08%	\$471	16.17%	\$473
UAAL ^{2,3}	0.00%	0	0.00%	0
Total contribution	16.08%	\$471	16.17%	\$473
Plan U (2.5% @ 67 PEPRAs)⁴				
Normal cost	11.48%	\$642	11.32%	\$633
UAAL ^{2,3}	0.00%	0	0.00%	0
Total contribution	11.48%	\$642	11.32%	\$633
Plans M, N and U Combined				
Normal cost	13.06%	\$1,113	12.98%	\$1,106
UAAL ^{2,3}	0.00%	0	0.00%	0
Total contribution	13.06%	\$1,113	12.98%	\$1,106

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Under CalPEPRA, the employer's contribution rate cannot be less than the normal cost unless the funded ratio of the total plan is over 120% and other conditions in CalPEPRA are met.

⁴ Applicable for members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

Rate Group #10 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans I and J (2.7% @ 55 – OCFA)				
Normal cost	15.54%	\$1,279	15.56%	\$1,281
UAAL ²	10.08%	830	10.51%	865
Total contribution	25.62%	\$2,109	26.07%	\$2,146
Plans M and N (2.0% @ 55 – OCFA)				
Normal cost	17.84%	\$902	17.88%	\$904
UAAL ²	10.08%	510	10.51%	531
Total contribution	27.92%	\$1,412	28.39%	\$1,435
Plan U (2.5% @ 67 PEPR)³				
Normal cost	9.95%	\$2,480	10.10%	\$2,517
UAAL ²	10.08%	2,512	10.51%	2,619
Total contribution	20.03%	\$4,992	20.61%	\$5,136
Plans I, J, M, N and U Combined				
Normal cost	12.20%	\$4,661	12.30%	\$4,702
UAAL ²	10.08%	3,852	10.51%	4,015
Total contribution	22.28%	\$8,513	22.81%	\$8,717

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Applicable for members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

Rate Group #11 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans M and N, future service (2.0% @ 55 – Cemetery)				
Normal cost	12.96%	\$149	12.88%	\$148
UAAL ²	1.72%	20	1.57%	18
Total contribution	14.68%	\$169	14.45%	\$166
Plan U (2.5% @ 67 PEPR)³				
Normal cost	11.91%	\$116	12.26%	\$120
UAAL ²	1.72%	17	1.57%	15
Total contribution	13.63%	\$133	13.83%	\$135
Plans M, N and U Combined				
Normal cost	12.47%	\$265	12.61%	\$268
UAAL ²	1.72%	37	1.57%	33
Total contribution	14.19%	\$302	14.18%	\$301

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Applicable for members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

Rate Group #12 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans G and H, future service (2.5% @ 55 – Law Library)				
Normal cost	14.39%	\$128	14.54%	\$129
UAAL ^{2,3,4}	0.00%	0	0.00%	0
Total contribution	14.39%	\$128	14.54%	\$129
Plan U (2.5% @ 67 PEPRAs)⁵				
Normal cost	10.52%	\$38	10.67%	\$39
UAAL ^{2,3,4}	0.00%	0	0.00%	0
Total contribution	10.52%	\$38	10.67%	\$39
Plans G, H, future service, and U Combined				
Normal cost	13.25%	\$166	13.41%	\$168
UAAL ^{2,3,4}	0.00%	0	0.00%	0
Total contribution	13.25%	\$166	13.41%	\$168

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ UAAL rate has been adjusted to reflect future service only benefit improvement under 2.5% @ 55.

⁴ Under CalPEPRA, the employer's contribution rate cannot be less than the normal cost unless the funded ratio of the total plan is over 120% and other conditions in CalPEPRA are met.

⁵ Applicable for members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

Rate Group #6 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans E and F (3% @ 50 – Probation)				
Normal cost	23.97%	\$11,904	23.81%	\$11,825
UAAL ²	38.12%	18,932	37.76%	18,753
Total contribution	62.09%	\$30,836	61.57%	\$30,578
Plan V (2.7% @ 57 PEPRAs)³				
Normal cost	16.07%	\$1,997	16.05%	\$1,994
UAAL ²	38.12%	4,737	37.76%	4,692
Total contribution	54.19%	\$6,734	53.81%	\$6,686
Plans E, F and V Combined				
Normal cost	22.39%	\$13,901	22.26%	\$13,819
UAAL ²	38.12%	23,669	37.76%	23,445
Total contribution	60.51%	\$37,570	60.02%	\$37,264

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Applicable for members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

Rate Group #7 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans E and F (3% @ 50 – Law Enforcement)				
Normal cost	26.64%	\$30,046	26.65%	\$30,058
UAAL ²	33.32%	37,581	36.26%	40,897
Total contribution	59.96%	\$67,627	62.91%	\$70,955
Plans Q and R (3% @ 55 – Law Enforcement)				
Normal cost	23.69%	\$14,849	23.84%	\$14,943
UAAL ²	33.32%	20,885	36.26%	22,728
Total contribution	57.01%	\$35,734	60.10%	\$37,671
Plan V (2.7% @ 57 PEPRAs)³				
Normal cost ⁴	17.05%	\$31,121	17.74%	\$32,380
UAAL ²	33.32%	60,818	36.26%	66,184
Total contribution	50.37%	\$91,939	54.00%	\$98,564
Plans E, F, Q, R and V Combined				
Normal cost	21.23%	\$76,016	21.62%	\$77,381
UAAL ²	33.32%	119,284	36.26%	129,809
Total contribution	54.55%	\$195,300	57.88%	\$207,190

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Applicable for members hired on or after January 1, 2013.

⁴ A significant number of members in this tier received significant salary increases in excess of 20% in this valuation. Many of these members are now projected to reach the PEPRAs salary limit prior to retirement, which limits the increase in their projected accrued benefits and in turn decreases the normal cost as a percentage of pay.

Section 2: Actuarial Valuation Results

Rate Group #8 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Plans E and F (3% @ 50 – OCFA)				
Normal cost	25.09%	\$19,434	25.38%	\$19,659
UAAL ²	10.60%	8,211	12.62%	9,775
Total contribution	35.69%	\$27,645	38.00%	\$29,434
Plans Q and R (3% @ 55 – OCFA)				
Normal cost	26.20%	\$6,625	26.38%	\$6,670
UAAL ²	10.60%	2,680	12.62%	3,191
Total contribution	36.80%	\$9,305	39.00%	\$9,861
Plan V (2.7% @ 57 PEPR)³				
Normal cost	15.96%	\$12,383	15.85%	\$12,298
UAAL ²	10.60%	8,224	12.62%	9,791
Total contribution	26.56%	\$20,607	28.47%	\$22,089
Plans E, F, Q, R and V Combined				
Normal cost	21.32%	\$38,442	21.42%	\$38,627
UAAL ²	10.60%	19,115	12.62%	22,757
Total contribution	31.92%	\$57,557	34.04%	\$61,384

¹ Based on December 31, 2024 projected annual compensation as shown on page 47.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

³ Applicable for members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

Total Plan – Recommended Employer Contribution Calculated as of December 31

Component	2024 Contribution Rate	2024 Estimated Annual Amount ¹ (\$ in '000s)	2023 Contribution Rate	2023 Estimated Annual Amount ¹ (\$ in '000s)
Rate Groups #1 – #12 Combined				
Normal cost	13.62%	\$337,482	13.67%	\$338,684
UAAL ²	23.26%	576,538	24.41%	604,869
Total contribution	36.88%	\$914,020	38.08%	\$943,553

Rate Group and Plan	Projected Annual Compensation (\$ in '000s)	Rate Group and Plan	Projected Annual Compensation (\$ in '000s)	Rate Group and Plan	Projected Annual Compensation (\$ in '000s)
General Employers			Safety Employers		
Rate Group #1 – Plans A and B	\$28,630	Rate Group #3 – Plan U	\$53,797	Rate Group #6 – Plans E and F	\$49,663
Rate Group #1 – Plan U	90,994	Rate Group #5 – Plans A and B	71,687	Rate Group #6 – Plan V	12,426
Rate Group #2 – Plans I and J non-Children and Families Commission	650,090	Rate Group #5 – Plan U	65,948	Rate Group #7 – Plans E and F	112,787
Rate Group #2 – Plans I and J Children and Families Commission	505	Rate Group #9 – Plans M and N	2,926	Rate Group #7 – Plans Q and R	62,680
Rate Group #2 – Plans O and P	15,242	Rate Group #9 – Plan U	5,594	Rate Group #7 – Plan V	182,526
Rate Group #2 – Plan S	1,378	Rate Group #10 – Plans I and J	8,233	Rate Group #8 – Plans E and F	77,459
Rate Group #2 – Plan T	666,275	Rate Group #10 – Plans M and N	5,057	Rate Group #8 – Plans Q and R	25,285
Rate Group #2 – Plan U non-Children and Families Commission	145,506	Rate Group #10 – Plan U	24,923	Rate Group #8 – Plan V	77,587
Rate Group #2 – Plan U Children and Families Commission	1,577	Rate Group #11 – Plans M and N	1,148		
Rate Group #2 – Plan W	186	Rate Group #11 – Plan U	977		
Rate Group #3 – Plans G and H	28,687	Rate Group #12 – Plans G and H	890		
Rate Group #3 – Plan B	7,113	Rate Group #12 – Plan U	363		
Total Combined					\$2,478,139

¹ Based on December 31, 2024 projected annual compensation as shown above.

² UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

Section 2: Actuarial Valuation Results

Rate Group #2 – Recommended Employer Contribution Calculated as of December 31

Component by Plan	2024 Contribution Rate ¹	2024 Contribution Rate ²	2023 Contribution Rate ¹	2023 Contribution Rate ²
Plans I and J (2.7% @ 55 – OCERS)				
Normal cost	15.29%	15.29%	15.29%	15.29%
UAAL ³	24.87%	25.96%	25.79%	26.78%
Total contribution	40.16%	41.25%	41.08%	42.07%
Plan U (2.5% @ 67 PEPRA – OCERS)⁴				
Normal cost	9.09%	9.09%	9.15%	9.15%
UAAL ³	24.87%	25.96%	25.79%	26.78%
Total contribution	33.96%	35.05%	34.94%	35.93%

¹ These rates are **after** reflecting future service only benefit improvements under 2.7% @ 55.

² These rates are **before** reflecting future service only benefit improvements under 2.7% @ 55.

³ UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

⁴ Applicable for Orange County Employees Retirement System members hired on or after January 1, 2013.

Section 2: Actuarial Valuation Results

“Pick-up” discount percentages for non-PEPRA tier members

For every dollar of member contribution “picked up” by the employer for non-PEPRA tier members and not deposited in the member’s contribution account, the employer can contribute less than a dollar. This is because the “pick-up” amount is not deposited in the member’s contribution account and so is not payable to a member who withdraws his or her contributions following termination of employment, and is not payable as an additional death benefit. The contribution discount percentages are as follows:

Rate Group and Plan	2024 Tier 1 Pick-up Percentage	2024 Tier 2 Pick-up Percentage	2023 Tier 1 Pick-up Percentage	2023 Tier 2 Pick-up Percentage
General				
• Rate Group #1 Plan A/B (County and IHSS)	Plan A: N/A	Plan B: 99.43%	Plan A: N/A	Plan B: 99.40%
• Rate Group #2 (2.7% @ 55 – non-OCFA)	Plan I: 100.00%	Plan J: 99.50%	Plan I: 100.00%	Plan J: 99.46%
• Rate Group #2 (1.62% @ 65)	Plan O: N/A	Plan P: 99.18%	Plan O: N/A	Plan P: 99.09%
• Rate Group #2 (2.0% @ 57)		Plan S: 99.28%		Plan S: 99.30%
• Rate Group #3 (2.5% @ 55 – OCSD)	Plan G: N/A	Plan H: 99.53%	Plan G: N/A	Plan H: 99.50%
• Rate Group #3 (1.64% @ 57 – OCSD)		Plan B: 99.18%		Plan B: 99.12%
• Rate Group #5 Plan A/B (OCTA)	Plan A: N/A	Plan B: 99.11%	Plan A: 100.00%	Plan B: 99.04%
• Rate Group #9 (2.0% @ 55 – TCA)	Plan M: N/A	Plan N: 99.28%	Plan M: N/A	Plan N: 99.33%
• Rate Group #10 (2.7% @ 55 – OCFA)	Plan I: N/A	Plan J: 99.54%	Plan I: N/A	Plan J: 99.52%
• Rate Group #10 (2.0% @ 55 – OCFA)	Plan M: N/A	Plan N: 99.43%	Plan M: N/A	Plan N: 99.35%
• Rate Group #11 (2.0% @ 55 – Cemetery)	Plan M: N/A	Plan N: 99.72%	Plan M: N/A	Plan N: 99.48%
• Rate Group #12 (2.5% @ 55 – Law Library)	Plan G: N/A	Plan H: 99.65%	Plan G: N/A	Plan H: 99.69%
Safety				
• Rate Group #6 (3.0% @ 50 – Probation)	Plan E: N/A	Plan F: 99.81%	Plan E: N/A	Plan F: 99.80%
• Rate Group #7 (3.0% @ 50 – Law Enforcement)	Plan E: N/A	Plan F: 99.90%	Plan E: N/A	Plan F: 99.90%
• Rate Group #7 (3.0% @ 55 – Law Enforcement)	Plan Q: N/A	Plan R: 99.80%	Plan Q: N/A	Plan R: 99.77%
• Rate Group #8 (3.0% @ 50 – OCFA)	Plan E: N/A	Plan F: 99.88%	Plan E: N/A	Plan F: 99.87%
• Rate Group #8 (3.0% @ 55 – OCFA)	Plan Q: N/A	Plan R: 99.83%	Plan Q: N/A	Plan R: 99.81%

Section 2: Actuarial Valuation Results

“Pick-up” average entry age

The following table provides the average entry age by employer used in determining the “pick-up” contributions under Section 31581.1.

Employer	Code	Average Entry Age for All non-PEPRA Members
General		
• Orange County	101	30
• Cemetery District	102	27
• Law Library	103	39
• Retirement System	105	29
• OCFA	106	32
• Transportation Corridor Agency	109	33
• City of San Juan Capistrano	110	33
• Sanitation District	111	32
• OCTA	112	34
• Children & Families Commission	118	28
• Local Agency Formation Commission	119	38
• Superior Court	121	31
• IHSS Public Authority	122	44
Safety		
• Probation	101	26
• Law Enforcement	101	26
• OCFA	106	28

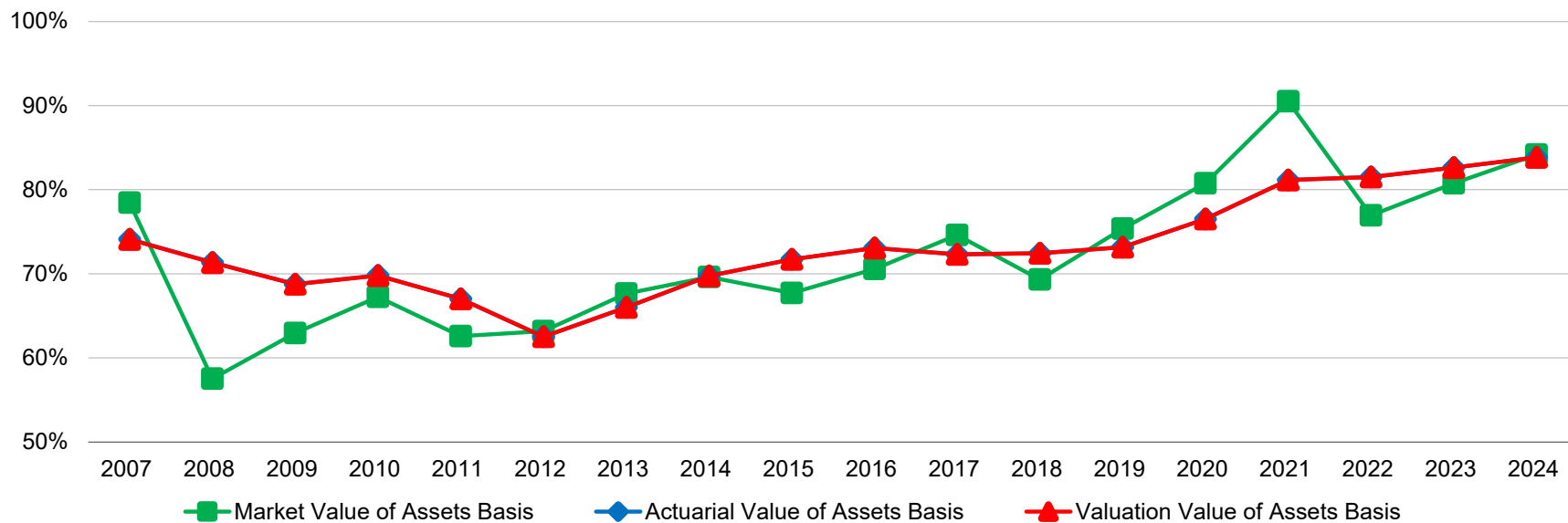
Section 2: Actuarial Valuation Results

G. Funded status

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

The 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, actuarial, or valuation value of assets is used.

Funded Ratio as of December 31



Section 2: Actuarial Valuation Results

Schedule of Funding Progress

Actuarial Valuation as of December 31	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Projected Compensation (c)	UAAL as a % of Projected Compensation [(b) – (a)] / (c)
2015	\$12,228,009,000	\$17,050,357,000	\$4,822,348,000	71.72%	\$1,633,112,000	295.29%
2016	13,102,978,000	17,933,461,000	4,830,483,000	73.06%	1,759,831,000	274.49%
2017	14,197,125,000	19,635,427,000	5,438,302,000	72.30%	1,811,877,000	300.15%
2018	14,994,420,000	20,703,349,000	5,708,929,000	72.43%	1,875,370,000	304.42%
2019	16,036,869,000	21,916,730,000	5,879,861,000	73.17%	1,952,534,000	301.14%
2020	17,525,117,000	22,904,975,000	5,379,858,000	76.51%	1,962,869,000	274.08%
2021	19,488,761,000	24,016,073,000	4,527,312,000	81.15%	2,052,706,000	220.55%
2022	20,691,659,000	25,386,669,000	4,695,010,000	81.51%	2,124,678,000	220.98%
2023	22,135,285,000	26,788,041,000	4,652,756,000	82.63%	2,277,976,000	204.25%
2024	23,688,986,000	28,258,622,000	4,569,636,000	83.83%	2,478,139,000	184.40%

For informational purposes only, we have also developed the funded ratio determined using the historical **market** value of assets after adjustment for amounts in the County Investment Account (funded by pension obligation bond proceeds held by OCERS), prepaid employer contributions, O.C. Sanitation District UAAL Deferred Account (after transfer), unclaimed member reserve and Medicare Medical Insurance Reserve.

Actuarial Valuation as of December 31	Funded Ratio Based on Net Market Value of Assets	Actuarial Valuation as of December 31	Funded Ratio Based on Net Market Value of Assets
2015	67.73%	2020	80.74%
2016	70.58%	2021	90.52%
2017	74.62%	2022	76.95%
2018	69.31%	2023	80.76%
2019	75.36%	2024	84.18%

Section 2: Actuarial Valuation Results

H. Actuarial balance sheet

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

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

Actuarial Balance Sheet as of December 31 (\$ in '000s)

Line Description	2024	2023
Liabilities		
Present value of benefits for retired members and beneficiaries	\$17,668,968	\$16,903,604
Present value of benefits for inactive members ¹	694,435	624,749
Present value of benefits for active members	15,191,848	14,245,599
Total liabilities	\$33,555,251	\$31,773,952
Current and Future Assets		
Total valuation value of assets	\$23,688,986	\$22,135,285
Present value of future contributions by members	2,519,538	2,353,776
Present value of future employer contributions for:		
• Entry age normal cost	2,777,091	2,632,135
• UAAL	4,569,636	4,652,756
Total of current and future assets	\$33,555,251	\$31,773,952

¹ Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

Section 2: Actuarial Valuation Results

I. Risk

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

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

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

Risk assessments

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

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

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

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

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

Section 2: Actuarial Valuation Results

Volatility Ratios, on page 58, a 1% asset gain or loss (relative to the assumed investment return) translates to about 9.6% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.7% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The year-by-year market value rate of return over the last 10 years has ranged from a low of -9.71% to a high of 17.71%.

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

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

- **Other Risks**

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

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 valuation value of assets basis has increased from 71.7% to 83.8%. This is primarily due to contributions made to amortize the UAAL (i.e., amortizing each layer of UAAL over 20 years as a level percentage of pay) 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 51.
- The average geometric investment return on the valuation value of assets over the last 10 years was 7.35%. This includes a low of 5.20% and a high of 11.38%. The average over the last five years is 8.54%. For more details see the *Section 2, Subsection B, Historical investment returns* on page 25.

Section 2: Actuarial Valuation Results

- Beyond investment experience which has generally been favorable, the primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. While the assumption changes in 2014 decreased the unfunded liability by \$103 million, the assumption changes in 2017 that changed the discount rate from 7.25% to 7.00% (as well as various other changes) added \$822 million in unfunded liability, the assumption changes in 2020 added \$24.3 million in unfunded liability, and the assumption changes in 2023 added \$145.0 million in unfunded liability. For more details on unfunded liability changes see *Section 3, Exhibit H, Table of Amortization Bases* starting on page 89. A graphical representation of historical changes in UAAL by source will be included in the stand-alone risk assessment report.
- The plan's funding policy effectively deals with these unfunded liabilities over time. This can be seen most clearly in *Section 3, Exhibit J, Projection of UAAL balances and payments* starting on page 104.

Maturity measures

In the last 10 years the ratio of members in pay status to active participants has increased from 0.73 to 0.93. An increased ratio indicates that the plan has grown in maturity over time. This is to be expected, but is also informative for understanding plan sensitivity to particular risks. For more details see *Section 2, Subsection A, Member information* on page 18.

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 \$126 million more than contributions received. 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 when compared to the total assets and is relatively well funded (at an 83.8% funded ratio). For more details on historical cash flows see *Section 2, Subsection B, Financial information* on page 22.

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 58.

Low-Default-Risk Obligation Measure (LDRM)

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

Section 2: Actuarial Valuation Results

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 December of the measurement period, by The Bond Buyer, is 4.08% for use effective December 31, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or actuarially determined contribution rates. The plan's expected return on assets, currently 7.00%, is used for these calculations.

As of December 31, 2024, the LDROM for the Plan is \$42.3 billion.¹ The difference between the Plan's actuarial accrued liability of \$28.3 billion and the LDROM can be thought of as the increase in the actuarial accrued liability 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 December 31, 2023, the LDROM was \$45.7 billion based on a discount rate of 3.26%, while the Plan's actuarial accrued liability was \$26.8 billion.

Section 2: Actuarial Valuation Results

J. Volatility ratios

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

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

The current AVR is about 9.6. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 9.6% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.7% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

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

The LVR also indicates how volatile contributions will be in response to changes in the actuarial accrued liability due to actual experience or to changes in actuarial assumptions. The current total Plan LVR is about 11.4 but is 10.1 for General compared to 15.5 for Safety. This means, for example, that assumption changes will have a greater impact on employer contribution rates for Safety than for General. The total Plan LVR is about 19% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.

Section 2: Actuarial Valuation Results

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

As of December 31	AVR General	AVR Safety	AVR Total	LVR General	LVR Safety	LVR Total
2015	6.3	9.6	7.1	9.3	14.3	10.4
2016	6.4	9.9	7.2	9.0	14.2	10.2
2017	7.2	11.0	8.1	9.6	14.8	10.8
2018	6.8	10.5	7.7	9.8	15.2	11.0
2019	7.5	11.5	8.5	9.9	15.3	11.2
2020	8.4	12.7	9.4	10.5	15.2	11.7
2021	9.3	14.5	10.6	10.5	15.4	11.7
2022	8.0	12.9	9.2	10.6	16.1	11.9
2023	8.2	13.6	9.5	10.4	16.1	11.8
2024	8.3	13.6	9.6	10.1	15.5	11.4

Section 3: Supplemental Information

Exhibit A: Table of plan demographics

Total Plan

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	23,368	22,782	2.6%
• Average age	44.1	44.2	(0.1)
• Average years of service	11.3	11.5	(0.2)
• Total projected compensation ¹	\$2,478,139,312	\$2,277,976,151	8.8%
• Average projected compensation	\$106,048	\$99,990	6.1%
• Account balances	\$3,648,906,617	\$3,479,433,053	4.9%
• Total active vested members	15,627	15,375	1.6%
Inactive members²			
• Number	9,377	8,579	9.3%
• Average age	45.0	45.0	0.0
Retired members			
• Number	17,103	16,754	2.1%
• Average age	70.7	70.5	0.2
• Average monthly benefit ³	\$5,235	\$5,080	3.1%
Disabled members			
• Number	1,645	1,628	1.0%
• Average age	66.8	66.5	0.3
• Average monthly benefit ³	\$5,220	\$4,986	4.7%
Beneficiaries			
• Number	2,992	2,901	3.1%
• Average age	74.0	73.6	0.4
• Average monthly benefit ³	\$2,753	\$2,616	5.2%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #1 for Plans A, B and U (County and IHSS)¹

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	1,837	1,787	2.8%
• Average age	43.4	42.7	0.7
• Average years of service	7.7	7.7	0.0
• Total projected compensation ²	\$119,624,448	\$110,953,731	7.8%
• Average projected compensation	\$65,119	\$62,089	4.9%
• Account balances	\$80,370,165	\$74,228,639	8.3%
• Total active vested members	826	790	4.6%
Inactive members³			
• Number	974	869	12.1%
• Average age	43.6	43.1	0.5
Retired members			
• Number	721	720	0.1%
• Average age	74.9	74.9	0.0
• Average monthly benefit ⁴	\$3,043	\$2,990	1.8%
Disabled members			
• Number	34	35	(2.9%)
• Average age	68.6	68.1	0.5
• Average monthly benefit ⁴	\$2,985	\$2,884	3.5%
Beneficiaries			
• Number	104	100	4.0%
• Average age	78.3	77.4	0.9
• Average monthly benefit ⁴	\$1,764	\$1,664	6.0%

¹ Includes payees from Vector Control, Cypress Recreation and Parks, U.C.I. and DOE.

² Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

³ Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

⁴ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #2 for Plans I, J, O, P, S, T, U and W

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	15,022	14,724	2.0%
• Average age	44.5	44.7	(0.2)
• Average years of service	11.5	11.7	(0.2)
• Total projected compensation ¹	\$1,480,759,173	\$1,370,454,760	8.0%
• Average projected compensation	\$98,573	\$93,076	5.9%
• Account balances	\$2,339,587,406	\$2,279,297,007	2.6%
• Total active vested members	10,084	10,016	0.7%
Inactive members²			
• Number	6,446	5,846	10.3%
• Average age	44.8	44.8	0.0
Retired members			
• Number	11,454	11,214	2.1%
• Average age	71.6	71.5	0.1
• Average monthly benefit ³	\$4,723	\$4,555	3.7%
Disabled members			
• Number	541	542	(0.2%)
• Average age	68.5	68.2	0.3
• Average monthly benefit ³	\$3,159	\$3,045	3.7%
Beneficiaries			
• Number	1,795	1,758	2.1%
• Average age	75.9	75.6	0.3
• Average monthly benefit ³	\$2,450	\$2,339	4.7%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #3 for Plans B, G, H and U (OCSD)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	625	608	2.8%
• Average age	46.0	45.9	0.1
• Average years of service	10.9	10.8	0.1
• Total projected compensation ¹	\$89,596,589	\$83,658,659	7.1%
• Average projected compensation	\$143,355	\$137,596	4.2%
• Account balances	\$97,996,347	\$90,813,375	7.9%
• Total active vested members	453	440	3.0%
Inactive members²			
• Number	171	161	6.2%
• Average age	48.1	48.4	(0.3)
Retired members			
• Number	532	522	1.9%
• Average age	69.7	69.1	0.6
• Average monthly benefit ³	\$6,990	\$6,868	1.8%
Disabled members			
• Number	18	19	(5.3%)
• Average age	69.4	69.1	0.3
• Average monthly benefit ³	\$4,221	\$4,199	0.5%
Beneficiaries			
• Number	100	93	7.5%
• Average age	70.0	70.8	(0.8)
• Average monthly benefit ³	\$3,050	\$2,870	6.3%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #5 for Plans A, B and U (OCTA)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	1,373	1,264	8.6%
• Average age	48.8	49.5	(0.7)
• Average years of service	11.4	12.4	(1.0)
• Total projected compensation ¹	\$137,635,819	\$125,249,916	9.9%
• Average projected compensation	\$100,245	\$99,090	1.2%
• Account balances	\$150,111,327	\$143,997,284	4.2%
• Total active vested members	857	834	2.8%
Inactive members²			
• Number	802	759	5.7%
• Average age	50.2	50.3	(0.1)
Retired members			
• Number	1,156	1,123	2.9%
• Average age	72.3	72.0	0.3
• Average monthly benefit ³	\$3,273	\$3,166	3.4%
Disabled members			
• Number	255	262	(2.7%)
• Average age	69.6	69.0	0.6
• Average monthly benefit ³	\$2,870	\$2,786	3.0%
Beneficiaries			
• Number	245	231	6.1%
• Average age	73.9	73.2	0.7
• Average monthly benefit ³	\$1,813	\$1,700	6.6%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #9 for Plans M, N and U (TCA)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	62	59	5.1%
• Average age	48.9	48.5	0.4
• Average years of service	8.0	8.2	(0.2)
• Total projected compensation ¹	\$8,519,881	\$7,674,578	11.0%
• Average projected compensation	\$137,417	\$130,078	5.6%
• Account balances	\$6,342,339	\$5,734,104	10.6%
• Total active vested members	35	34	2.9%
Inactive members²			
• Number	82	78	5.1%
• Average age	47.9	47.8	0.1
Retired members			
• Number	67	66	1.5%
• Average age	71.0	70.3	0.7
• Average monthly benefit ³	\$3,739	\$3,770	(0.8%)
Disabled members			
• Number	1	0	N/A
• Average age	56.8	N/A	N/A
• Average monthly benefit ³	\$1,735	N/A	N/A
Beneficiaries			
• Number	6	7	(14.3%)
• Average age	73.0	72.9	0.1
• Average monthly benefit ³	\$706	\$915	(22.8%)

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #10 for Plans I, J, M, N and U (OCFA)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	333	325	2.5%
• Average age	43.1	44.1	(1.0)
• Average years of service	9.3	9.9	(0.6)
• Total projected compensation ¹	\$38,213,051	\$35,758,725	6.9%
• Average projected compensation	\$114,754	\$110,027	4.3%
• Account balances	\$33,439,614	\$34,270,981	(2.4%)
• Total active vested members	210	197	6.6%
Inactive members²			
• Number	323	293	10.2%
• Average age	42.7	42.7	0.0
Retired members			
• Number	237	220	7.7%
• Average age	67.7	67.8	(0.1)
• Average monthly benefit ³	\$5,208	\$5,177	0.6%
Disabled members			
• Number	13	13	0.0%
• Average age	66.5	65.5	1.0
• Average monthly benefit ³	\$3,919	\$3,805	3.0%
Beneficiaries			
• Number	18	16	12.5%
• Average age	67.3	66.6	0.7
• Average monthly benefit ³	\$2,215	\$1,962	12.9%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #11 for Plans M and N, Future Service, and U (Cemetery)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	25	24	4.2%
• Average age	50.2	52.4	(2.2)
• Average years of service	15.7	17.2	(1.5)
• Total projected compensation ¹	\$2,124,825	\$2,015,550	5.4%
• Average projected compensation	\$84,993	\$83,981	1.2%
• Account balances	\$3,047,044	\$3,173,685	(4.0%)
• Total active vested members	19	20	(5.0%)
Inactive members²			
• Number	4	5	(20.0%)
• Average age	37.6	35.1	2.5
Retired members			
• Number	9	7	28.6%
• Average age	73.3	72.9	0.4
• Average monthly benefit ³	\$3,923	\$3,579	9.6%
Disabled members			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit ³	N/A	N/A	N/A
Beneficiaries			
• Number	7	7	0.0%
• Average age	78.1	77.1	1.0
• Average monthly benefit ³	\$1,533	\$1,488	3.0%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #12 for Plans G, H, Future Service, and U (Law Library)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	14	14	0.0%
• Average age	58.1	59.1	(1.0)
• Average years of service	20.2	20.0	0.2
• Total projected compensation ¹	\$1,252,569	\$1,207,717	3.7%
• Average projected compensation	\$89,469	\$86,265	3.7%
• Account balances	\$3,830,942	\$3,642,468	5.2%
• Total active vested members	12	13	(7.7%)
Inactive members²			
• Number	2	3	(33.3%)
• Average age	43.7	49.4	(5.7)
Retired members			
• Number	13	11	18.2%
• Average age	72.9	73.2	(0.3)
• Average monthly benefit ³	\$2,992	\$3,234	(7.5%)
Disabled members			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit ³	N/A	N/A	N/A
Beneficiaries			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit ³	N/A	N/A	N/A

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #6 for Plans E, F and V (Probation)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	594	599	(0.8%)
• Average age	45.0	44.8	0.2
• Average years of service	18.0	17.9	0.1
• Total projected compensation ¹	\$62,088,279	\$56,441,606	10.0%
• Average projected compensation	\$104,526	\$94,226	10.9%
• Account balances	\$160,544,210	\$154,110,083	4.2%
• Total active vested members	518	525	(1.3%)
Inactive members²			
• Number	220	224	(1.8%)
• Average age	45.5	44.7	0.8
Retired members			
• Number	556	533	4.3%
• Average age	65.2	65.0	0.2
• Average monthly benefit ³	\$6,249	\$6,104	2.4%
Disabled members			
• Number	40	40	0.0%
• Average age	55.3	54.5	0.8
• Average monthly benefit ³	\$3,391	\$3,272	3.6%
Beneficiaries			
• Number	61	57	7.0%
• Average age	67.8	68.0	(0.2)
• Average monthly benefit ³	\$2,971	\$2,906	2.2%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #7 for Plans E, F, Q, R and V (Law Enforcement)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	2,253	2,143	5.1%
• Average age	40.0	40.0	0.0
• Average years of service	11.4	11.4	0.0
• Total projected compensation ¹	\$357,993,709	\$305,580,877	17.2%
• Average projected compensation	\$158,896	\$142,595	11.4%
• Account balances	\$500,959,228	\$443,950,893	12.8%
• Total active vested members	1,663	1,599	4.0%
Inactive members²			
• Number	212	205	3.4%
• Average age	42.3	41.4	0.9
Retired members			
• Number	1,809	1,792	0.9%
• Average age	65.5	65.0	0.5
• Average monthly benefit ³	\$8,530	\$8,311	2.6%
Disabled members			
• Number	434	429	1.2%
• Average age	64.3	64.1	0.2
• Average monthly benefit ³	\$7,019	\$6,720	4.4%
Beneficiaries			
• Number	486	472	3.0%
• Average age	70.3	69.8	0.5
• Average monthly benefit ³	\$4,085	\$3,869	5.6%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Rate Group #8 for Plans E, F, Q, R and V (OCFA)

Demographic Data by Status	As of December 31, 2024	As of December 31, 2023	Change
Active members			
• Number	1,230	1,235	(0.4%)
• Average age	41.0	40.8	0.2
• Average years of service	12.8	12.4	0.4
• Total projected compensation ¹	\$180,330,969	\$178,980,032	0.8%
• Average projected compensation	\$146,611	\$144,923	1.2%
• Account balances	\$272,677,994	\$246,214,535	10.7%
• Total active vested members	950	907	4.7%
Inactive members²			
• Number	141	136	3.7%
• Average age	38.8	38.2	0.6
Retired members			
• Number	549	545	0.7%
• Average age	67.7	67.1	0.6
• Average monthly benefit ³	\$9,620	\$9,429	2.0%
Disabled members			
• Number	309	288	7.3%
• Average age	66.0	65.8	0.2
• Average monthly benefit ³	\$8,849	\$8,654	2.3%
Beneficiaries			
• Number	169	160	5.6%
• Average age	66.2	65.7	0.5
• Average monthly benefit ³	\$4,043	\$3,823	5.8%

¹ Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

² Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

³ Excludes monthly benefits payable from the STAR COLA.

Section 3: Supplemental Information

Exhibit B: Distribution of actives members

Total
Active Counts and Average Projected Compensation by Age and Years of Service
as of December 31, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	457	454	3	—	—	—	—	—	—	—
	\$71,603	\$71,517	\$84,638	—	—	—	—	—	—	—
25–29	2,005	1,769	234	2	—	—	—	—	—	—
	\$84,574	\$81,309	\$108,607	\$160,909	—	—	—	—	—	—
30–34	3,277	1,961	1,148	167	1	—	—	—	—	—
	\$97,553	\$88,836	\$109,164	\$119,627	\$175,005	—	—	—	—	—
35–39	3,355	1,348	1,158	615	229	5	—	—	—	—
	\$106,100	\$92,248	\$110,913	\$124,530	\$113,933	\$100,006	—	—	—	—
40–44	3,463	942	807	588	922	201	3	—	—	—
	\$111,611	\$92,870	\$111,918	\$126,092	\$120,861	\$113,296	\$119,528	—	—	—
45–49	3,404	654	520	371	864	741	250	4	—	—
	\$113,982	\$93,043	\$109,034	\$118,636	\$122,754	\$119,141	\$126,599	\$109,622	—	—
50–54	3,230	562	409	249	595	659	573	180	3	—
	\$116,187	\$101,291	\$113,433	\$120,921	\$113,663	\$119,971	\$129,451	\$113,895	\$162,676	—
55–59	2,144	340	311	195	345	406	302	209	36	—
	\$110,072	\$98,471	\$112,485	\$113,975	\$108,463	\$110,732	\$116,070	\$113,515	\$115,326	—
60–64	1,369	205	193	153	245	249	178	92	40	14
	\$107,475	\$99,015	\$113,808	\$116,688	\$107,724	\$106,119	\$108,269	\$99,417	\$109,915	\$99,022
65–69	492	42	80	83	89	74	57	47	12	8
	\$103,308	\$87,914	\$104,549	\$112,581	\$101,765	\$96,536	\$105,486	\$106,110	\$97,024	\$132,758
70 and over	172	14	22	19	30	38	25	9	8	7
	\$95,694	\$89,042	\$118,038	\$96,518	\$88,287	\$93,563	\$100,920	\$73,439	\$92,194	\$93,785
Total	23,368	8,291	4,885	2,442	3,320	2,373	1,388	541	99	29
	\$106,048	\$89,113	\$110,695	\$121,379	\$116,538	\$114,916	\$121,790	\$109,905	\$110,487	\$107,065

Section 3: Supplemental Information

Rate Group #1 for Plans A, B and U (County and IHSS) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40 Years and Over
Under 25	36	36	—	—	—	—	—	—	—	—
	\$68,049	\$68,049	—	—	—	—	—	—	—	—
25-29	177	160	17	—	—	—	—	—	—	—
	\$64,528	\$63,732	\$72,018	—	—	—	—	—	—	—
30-34	284	228	48	8	—	—	—	—	—	—
	\$63,099	\$61,223	\$70,721	\$70,842	—	—	—	—	—	—
35-39	299	191	62	31	14	1	—	—	—	—
	\$63,814	\$60,430	\$69,676	\$70,040	\$69,895	\$68,727	—	—	—	—
40-44	256	135	61	32	21	7	—	—	—	—
	\$64,864	\$59,929	\$70,351	\$69,660	\$70,682	\$72,866	—	—	—	—
45-49	250	114	39	25	34	28	10	—	—	—
	\$65,609	\$60,353	\$69,166	\$69,919	\$70,424	\$70,171	\$71,737	—	—	—
50-54	218	79	27	20	28	26	28	10	—	—
	\$65,899	\$58,828	\$67,532	\$69,515	\$71,056	\$70,364	\$70,799	\$70,359	—	—
55-59	164	55	24	14	23	22	5	19	2	—
	\$66,863	\$59,577	\$68,954	\$68,828	\$71,020	\$69,931	\$68,927	\$74,536	\$68,784	—
60-64	99	19	12	21	14	8	10	12	2	1
	\$67,194	\$58,991	\$69,065	\$67,576	\$69,442	\$70,607	\$69,195	\$70,107	\$71,975	\$69,241
65-69	45	6	8	13	4	4	2	8	—	—
	\$69,619	\$60,852	\$69,509	\$70,070	\$77,489	\$73,344	\$68,965	\$69,935	—	—
70 and over	9	—	1	3	2	2	1	—	—	—
	\$69,837	—	\$69,785	\$70,130	\$68,816	\$71,002	\$68,727	—	—	—
Total	1,837	1,023	299	167	140	98	56	49	4	1
	\$65,119	\$61,123	\$69,768	\$69,517	\$70,715	\$70,528	\$70,410	\$71,847	\$70,379	\$69,241

Section 3: Supplemental Information

Rate Group #2 for Plans I, J, O, P, S, T, U and W Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	274	272	2	—	—	—	—	—	—	—
	\$62,706	\$62,581	\$79,748	—	—	—	—	—	—	—
25–29	1,231	1,123	108	—	—	—	—	—	—	—
	\$75,230	\$74,373	\$84,145	—	—	—	—	—	—	—
30–34	2,030	1,273	674	83	—	—	—	—	—	—
	\$88,197	\$85,539	\$92,638	\$92,896	—	—	—	—	—	—
35–39	2,088	860	769	315	142	2	—	—	—	—
	\$97,769	\$92,483	\$102,467	\$103,676	\$91,324	\$91,747	—	—	—	—
40–44	2,208	612	525	338	588	143	2	—	—	—
	\$103,150	\$93,510	\$104,502	\$114,411	\$106,204	\$100,621	\$77,372	—	—	—
45–49	2,171	407	369	229	564	443	156	3	—	—
	\$104,756	\$92,920	\$105,363	\$106,788	\$110,955	\$105,661	\$106,179	\$107,460	—	—
50–54	2,199	310	286	156	445	482	383	135	2	—
	\$109,611	\$97,589	\$110,395	\$112,479	\$107,215	\$115,324	\$114,730	\$104,607	\$151,019	—
55–59	1,435	188	188	124	251	280	230	150	24	—
	\$104,368	\$93,890	\$103,740	\$102,543	\$105,621	\$106,750	\$107,070	\$107,237	\$116,073	—
60–64	934	135	134	86	186	171	134	57	23	8
	\$105,312	\$101,789	\$109,725	\$111,935	\$103,913	\$106,074	\$107,635	\$96,457	\$98,811	\$78,729
65–69	320	24	57	40	66	51	44	27	9	2
	\$97,607	\$87,310	\$100,143	\$99,272	\$96,886	\$94,231	\$101,561	\$103,816	\$87,788	\$98,908
70 and over	132	11	18	11	24	28	19	9	7	5
	\$92,500	\$81,499	\$115,420	\$91,852	\$84,093	\$90,423	\$103,726	\$73,439	\$92,101	\$79,803
Total	15,022	5,215	3,130	1,382	2,266	1,600	968	381	65	15
	\$98,573	\$86,031	\$101,530	\$107,354	\$105,894	\$107,708	\$109,658	\$103,654	\$104,542	\$81,777

Section 3: Supplemental Information

Rate Group #3 for Plans B, G, H and U (OCSD) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	3	3	—	—	—	—	—	—	—	—
	\$110,482	\$110,482	—	—	—	—	—	—	—	—
25–29	28	25	3	—	—	—	—	—	—	—
	\$112,697	\$112,771	\$112,080	—	—	—	—	—	—	—
30–34	72	44	24	4	—	—	—	—	—	—
	\$126,483	\$122,793	\$136,039	\$109,735	—	—	—	—	—	—
35–39	89	40	35	13	1	—	—	—	—	—
	\$133,265	\$119,923	\$142,387	\$149,536	\$136,188	—	—	—	—	—
40–44	131	41	46	18	19	7	—	—	—	—
	\$147,787	\$134,395	\$149,435	\$151,717	\$162,073	\$166,512	—	—	—	—
45–49	86	19	19	16	19	13	—	—	—	—
	\$152,235	\$146,582	\$150,956	\$145,035	\$172,045	\$142,274	—	—	—	—
50–54	79	16	22	13	13	8	3	4	—	—
	\$149,442	\$123,966	\$150,400	\$161,613	\$151,192	\$158,571	\$173,394	\$164,625	—	—
55–59	63	11	10	7	10	13	7	3	2	—
	\$157,585	\$131,573	\$165,171	\$173,872	\$174,749	\$159,278	\$167,912	\$88,673	\$176,108	—
60–64	52	5	11	10	13	6	4	2	1	—
	\$146,178	\$137,439	\$131,862	\$140,655	\$155,402	\$162,548	\$141,081	\$175,544	\$146,107	—
65–69	17	—	4	3	5	1	2	2	—	—
	\$150,117	—	\$156,435	\$138,602	\$126,977	\$148,536	\$180,238	\$183,276	—	—
70 and over	5	1	1	1	—	2	—	—	—	—
	\$160,589	\$117,583	\$186,096	\$154,732	—	\$172,266	—	—	—	—
Total	625	205	175	85	80	50	16	11	3	—
	\$143,355	\$126,250	\$145,998	\$149,759	\$160,657	\$156,454	\$163,773	\$149,287	\$166,108	—

Section 3: Supplemental Information

Rate Group #5 for Plans A, B and U (OCTA) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	25	25	—	—	—	—	—	—	—	—
	\$68,342	\$68,342	—	—	—	—	—	—	—	—
25–29	62	57	5	—	—	—	—	—	—	—
	\$82,256	\$80,550	\$101,701	—	—	—	—	—	—	—
30–34	129	83	43	3	—	—	—	—	—	—
	\$88,751	\$84,648	\$95,741	\$102,060	—	—	—	—	—	—
35–39	140	92	29	15	4	—	—	—	—	—
	\$93,962	\$87,451	\$103,147	\$108,035	\$124,356	—	—	—	—	—
40–44	156	75	38	13	22	8	—	—	—	—
	\$101,322	\$88,982	\$109,112	\$121,494	\$112,609	\$116,188	—	—	—	—
45–49	175	61	30	18	28	34	4	—	—	—
	\$102,541	\$89,379	\$100,395	\$118,820	\$110,771	\$109,283	\$131,177	—	—	—
50–54	206	69	32	20	38	29	12	6	—	—
	\$104,402	\$91,392	\$108,326	\$119,390	\$111,161	\$98,122	\$134,687	\$110,115	—	—
55–59	207	38	35	25	34	40	19	11	5	—
	\$108,004	\$94,310	\$97,590	\$126,871	\$108,562	\$109,924	\$109,677	\$133,960	\$108,030	—
60–64	187	31	14	15	26	50	16	18	13	4
	\$105,080	\$84,167	\$98,998	\$138,226	\$116,727	\$94,102	\$101,563	\$111,447	\$131,285	\$125,892
65–69	73	10	8	10	9	15	8	8	2	3
	\$106,136	\$95,124	\$123,274	\$107,065	\$100,272	\$99,529	\$120,844	\$99,856	\$100,788	\$125,764
70 and over	13	1	—	2	2	4	3	—	—	1
	\$93,190	\$64,031	—	\$81,693	\$102,041	\$91,010	\$105,975	—	—	\$98,010
Total	1,373	542	234	121	163	180	62	43	20	8
	\$100,245	\$86,737	\$102,688	\$119,933	\$111,246	\$102,498	\$115,073	\$114,864	\$122,421	\$122,359

Section 3: Supplemental Information

Rate Group #9 for Plans M, N and U (TCA) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40 Years and Over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25-29	4	4	—	—	—	—	—	—	—	—
	\$72,203	\$72,203	—	—	—	—	—	—	—	—
30-34	5	4	1	—	—	—	—	—	—	—
	\$92,409	\$95,694	\$79,268	—	—	—	—	—	—	—
35-39	5	3	2	—	—	—	—	—	—	—
	\$118,788	\$129,206	\$103,161	—	—	—	—	—	—	—
40-44	8	2	3	2	1	—	—	—	—	—
	\$135,070	\$139,669	\$146,795	\$138,665	\$83,505	—	—	—	—	—
45-49	6	3	—	—	2	1	—	—	—	—
	\$166,326	\$182,760	—	—	\$182,228	\$85,219	—	—	—	—
50-54	15	7	6	2	—	—	—	—	—	—
	\$151,182	\$152,867	\$137,578	\$186,096	—	—	—	—	—	—
55-59	9	3	2	1	—	2	1	—	—	—
	\$130,749	\$112,284	\$165,229	\$158,612	—	\$112,222	\$126,374	—	—	—
60-64	7	2	1	1	1	2	—	—	—	—
	\$174,821	\$132,166	\$186,096	\$172,284	\$96,055	\$252,490	—	—	—	—
65-69	2	1	—	1	—	—	—	—	—	—
	\$129,939	\$118,570	—	\$141,308	—	—	—	—	—	—
70 and over	1	1	—	—	—	—	—	—	—	—
	\$168,484	\$168,484	—	—	—	—	—	—	—	—
Total	62	30	15	7	4	5	1	—	—	—
	\$137,417	\$128,171	\$137,866	\$160,247	\$136,004	\$162,929	\$126,374	—	—	—

Section 3: Supplemental Information

Rate Group #10 for Plans I, J, M, N and U (OCFA) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40 Years and Over
Under 25	7	7	—	—	—	—	—	—	—	—
	\$71,378	\$71,378	—	—	—	—	—	—	—	—
25-29	34	33	1	—	—	—	—	—	—	—
	\$82,792	\$81,469	\$126,443	—	—	—	—	—	—	—
30-34	50	33	16	1	—	—	—	—	—	—
	\$100,711	\$91,752	\$117,406	\$129,216	—	—	—	—	—	—
35-39	49	28	20	1	—	—	—	—	—	—
	\$105,605	\$95,290	\$117,221	\$162,112	—	—	—	—	—	—
40-44	53	17	23	6	6	1	—	—	—	—
	\$118,359	\$115,723	\$117,551	\$136,335	\$114,973	\$94,220	—	—	—	—
45-49	45	12	17	5	7	3	1	—	—	—
	\$128,270	\$146,007	\$117,886	\$102,719	\$141,033	\$120,060	\$155,014	—	—	—
50-54	41	12	11	3	6	5	2	2	—	—
	\$128,085	\$125,648	\$119,611	\$169,723	\$133,534	\$114,969	\$156,487	\$114,907	—	—
55-59	32	7	6	4	3	8	2	2	—	—
	\$138,701	\$138,729	\$114,063	\$162,646	\$134,994	\$120,365	\$249,250	\$132,986	—	—
60-64	13	2	4	3	1	2	1	—	—	—
	\$115,517	\$77,894	\$122,987	\$168,653	\$85,776	\$61,989	\$138,266	—	—	—
65-69	6	—	—	2	1	2	—	1	—	—
	\$200,196	—	—	\$243,540	\$103,241	\$130,545	—	\$349,768	—	—
70 and over	3	—	1	—	—	2	—	—	—	—
	\$83,423	—	\$77,296	—	—	\$86,487	—	—	—	—
Total	333	151	99	25	24	23	6	5	—	—
	\$114,754	\$100,915	\$117,439	\$151,029	\$128,011	\$110,879	\$184,126	\$169,110	—	—

Section 3: Supplemental Information

Rate Group #11 for Plans M AND N, Future Service, and U (Cemetery) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40 Years and Over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25-29	2	2	—	—	—	—	—	—	—	—
	\$61,786	\$61,786	—	—	—	—	—	—	—	—
30-34	1	1	—	—	—	—	—	—	—	—
	\$65,730	\$65,730	—	—	—	—	—	—	—	—
35-39	1	—	1	—	—	—	—	—	—	—
	\$66,629	—	\$66,629	—	—	—	—	—	—	—
40-44	2	—	1	—	—	1	—	—	—	—
	\$75,548	—	\$65,083	—	—	\$86,014	—	—	—	—
45-49	5	1	—	—	2	—	2	—	—	—
	\$89,322	\$73,638	—	—	\$80,036	—	\$106,451	—	—	—
50-54	3	2	1	—	—	—	—	—	—	—
	\$86,138	\$67,490	\$123,434	—	—	—	—	—	—	—
55-59	9	—	2	1	1	1	2	—	2	—
	\$91,194	—	\$71,647	\$109,747	\$208,762	\$90,210	\$66,705	—	\$67,662	—
60-64	2	—	1	—	—	—	1	—	—	—
	\$96,013	—	\$70,920	—	—	—	\$121,106	—	—	—
65-69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	25	6	6	1	3	2	5	—	2	—
	\$84,993	\$66,320	\$78,227	\$109,747	\$122,945	\$88,112	\$93,483	—	\$67,662	—

Section 3: Supplemental Information

Rate Group #12 for Plans G, H, Future Service, and U (Law Library) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25–29	1	1	—	—	—	—	—	—	—	—
	\$55,329	\$55,329	—	—	—	—	—	—	—	—
30–34	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
35–39	1	1	—	—	—	—	—	—	—	—
	\$59,399	\$59,399	—	—	—	—	—	—	—	—
40–44	1	—	1	—	—	—	—	—	—	—
	\$73,350	—	\$73,350	—	—	—	—	—	—	—
45–49	2	—	—	—	1	1	—	—	—	—
	\$104,739	—	—	—	\$125,296	\$84,182	—	—	—	—
50–54	2	—	1	—	—	—	1	—	—	—
	\$123,792	—	\$174,864	—	—	—	\$72,720	—	—	—
55–59	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
60–64	3	—	—	—	—	1	1	1	—	—
	\$97,806	—	—	—	—	\$125,055	\$84,182	\$84,182	—	—
65–69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 and over	4	—	—	—	1	—	2	—	1	—
	\$78,503	—	—	—	\$55,599	—	\$82,783	—	\$92,847	—
Total	14	2	2	—	2	2	4	1	1	—
	\$89,469	\$57,364	\$124,107	—	\$90,447	\$104,618	\$80,617	\$84,182	\$92,847	—

Section 3: Supplemental Information

Rate Group #6 for Plans E, F and V (Probation) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	11	11	—	—	—	—	—	—	—	—
	\$69,350	\$69,350	—	—	—	—	—	—	—	—
25–29	41	36	5	—	—	—	—	—	—	—
	\$78,364	\$76,512	\$91,700	—	—	—	—	—	—	—
30–34	47	21	25	1	—	—	—	—	—	—
	\$92,014	\$85,108	\$96,802	\$117,316	—	—	—	—	—	—
35–39	38	7	18	8	4	1	—	—	—	—
	\$96,152	\$77,277	\$98,351	\$105,882	\$100,467	\$93,598	—	—	—	—
40–44	100	8	4	9	69	10	—	—	—	—
	\$102,000	\$100,012	\$103,451	\$95,228	\$102,474	\$105,830	—	—	—	—
45–49	190	2	2	3	45	108	29	1	—	—
	\$110,048	\$112,321	\$94,367	\$92,771	\$106,317	\$108,661	\$123,506	\$116,109	—	—
50–54	115	1	1	1	9	40	53	10	—	—
	\$115,767	\$107,238	\$93,686	\$88,002	\$101,726	\$102,195	\$124,905	\$140,105	—	—
55–59	41	—	2	—	7	14	9	9	—	—
	\$110,032	—	\$105,082	—	\$87,193	\$94,843	\$126,183	\$136,372	—	—
60–64	8	—	—	1	—	3	3	—	1	—
	\$110,701	—	—	\$88,216	—	\$102,413	\$120,986	—	\$127,192	—
65–69	3	—	1	—	1	—	—	1	—	—
	\$104,948	—	\$115,557	—	\$89,801	—	—	\$109,485	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	594	86	58	23	135	176	94	21	1	—
	\$104,526	\$81,133	\$97,773	\$98,955	\$102,759	\$105,739	\$124,471	\$135,904	\$127,192	—

Section 3: Supplemental Information

Rate Group #7 for Plans E, F, Q, R and V (Law Enforcement) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	65	64	1	—	—	—	—	—	—	—
	\$109,738	\$109,977	\$94,418	—	—	—	—	—	—	—
25–29	307	221	84	2	—	—	—	—	—	—
	\$124,863	\$116,805	\$145,204	\$160,909	—	—	—	—	—	—
30–34	444	152	232	59	1	—	—	—	—	—
	\$145,034	\$124,497	\$153,896	\$162,590	\$175,005	—	—	—	—	—
35–39	419	62	120	185	51	1	—	—	—	—
	\$157,639	\$136,810	\$153,346	\$162,627	\$175,036	\$154,213	—	—	—	—
40–44	327	26	31	110	138	21	1	—	—	—
	\$168,077	\$136,892	\$163,070	\$162,626	\$175,857	\$189,793	\$203,838	—	—	—
45–49	272	27	14	25	93	73	40	—	—	—
	\$184,686	\$156,559	\$162,374	\$173,367	\$174,325	\$201,730	\$211,535	—	—	—
50–54	235	62	7	10	30	46	73	7	—	—
	\$187,904	\$165,647	\$168,185	\$171,628	\$172,812	\$191,715	\$211,014	\$226,648	—	—
55–59	128	36	38	6	9	10	18	10	1	—
	\$176,346	\$165,950	\$177,841	\$183,178	\$173,766	\$172,057	\$184,408	\$193,649	\$200,716	—
60–64	42	11	14	4	4	4	3	2	—	—
	\$177,416	\$156,287	\$183,754	\$185,833	\$213,872	\$165,323	\$177,964	\$182,878	—	—
65–69	12	1	1	7	3	—	—	—	—	—
	\$190,503	\$162,021	\$186,096	\$187,944	\$207,437	—	—	—	—	—
70 and over	2	—	1	—	1	—	—	—	—	—
	\$209,586	—	\$186,096	—	\$233,075	—	—	—	—	—
Total	2,253	662	543	408	330	155	135	19	1	—
	\$158,896	\$130,166	\$155,811	\$164,456	\$175,883	\$193,980	\$206,833	\$204,673	\$200,716	—

Section 3: Supplemental Information

Rate Group #8 for Plans E, F, Q, R and V (OCFA) Active Counts and Average Projected Compensation by Age and Years of Service as of December 31, 2024

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	36	36	—	—	—	—	—	—	—	—
	\$73,777	\$73,777	—	—	—	—	—	—	—	—
25–29	118	107	11	—	—	—	—	—	—	—
	\$105,576	\$102,643	\$134,103	—	—	—	—	—	—	—
30–34	215	122	85	8	—	—	—	—	—	—
	\$129,682	\$120,830	\$141,462	\$139,527	—	—	—	—	—	—
35–39	226	64	102	47	13	—	—	—	—	—
	\$142,159	\$129,572	\$142,710	\$151,003	\$167,834	—	—	—	—	—
40–44	221	26	74	60	58	3	—	—	—	—
	\$154,947	\$129,810	\$153,936	\$151,503	\$169,524	\$184,769	—	—	—	—
45–49	202	8	30	50	69	37	8	—	—	—
	\$171,088	\$136,065	\$159,161	\$164,527	\$175,108	\$187,969	\$179,091	—	—	—
50–54	117	4	15	24	26	23	18	6	1	—
	\$180,120	\$161,393	\$167,470	\$166,576	\$186,111	\$176,071	\$205,844	\$189,817	\$185,992	—
55–59	56	2	4	13	7	16	9	5	—	—
	\$168,864	\$119,483	\$157,760	\$164,566	\$149,838	\$170,935	\$178,868	\$210,675	—	—
60–64	22	—	2	12	—	2	5	—	—	1
	\$150,956	—	\$137,493	\$151,499	—	\$158,644	\$145,417	—	—	\$183,678
65–69	14	—	1	7	—	1	1	—	1	3
	\$149,897	—	\$186,096	\$147,429	—	\$142,012	\$78,870	—	\$172,624	\$162,318
70 and over	3	—	—	2	—	—	—	—	—	1
	\$151,478	—	—	\$147,483	—	—	—	—	—	\$159,468
Total	1,230	369	324	223	173	82	41	11	2	5
	\$146,611	\$113,877	\$147,611	\$156,108	\$173,320	\$179,915	\$184,236	\$199,298	\$179,308	\$166,020

Section 3: Supplemental Information

Exhibit C: Reconciliation of member data

Line Description	Active Members	Inactive Members ¹	Retired Members	Disabled Members	Beneficiaries	Total
Number as of December 31, 2023	22,782	8,579	16,754	1,628	2,901	52,644
New members	2,206	275	0	0	221	2,702
Terminations with vested rights	(937)	937	0	0	0	0
Contribution refunds	(134)	(136)	0	0	0	(270)
Retirements	(600)	(173)	773	0	0	0
New disabilities	(21)	(3)	(35)	59	0	0
Return to work	93	(92)	(1)	0	0	0
Died with or without beneficiary	(21)	(10)	(379)	(42)	(113)	(565)
Data adjustments	0	0	(9)	0	(17)	(26)
Number as of December 31, 2024	23,368	9,377	17,103	1,645	2,992	54,485

¹ Includes members who chose to leave their contributions on deposit even though they have less than five years of service.

Section 3: Supplemental Information

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

Line Description	Year Ended December 31, 2024	Year Ended December 31, 2023
Contribution income		
• Employer contributions	\$846,363,000	\$749,776,000
• Member contributions	302,545,000	277,455,000
• Discount for prepaid contributions	5,319,000	21,205,000
• Transfer from County Investment Account ¹	4,962,000	10,000,000
– Net contribution income	\$1,159,189,000	\$1,058,436,000
Investment income		
• Interest, dividends and other income	\$2,494,694,000	\$2,460,188,000
• Less investment and administrative fees	(214,471,000)	(201,713,000)
– Net investment income	\$2,280,223,000	\$2,258,475,000
Total income available for benefits	\$3,439,412,000	\$3,316,911,000
Less benefit payments		
• Benefits paid	\$(1,267,210,000)	\$(1,201,497,000)
• Refund of contributions	(18,200,000)	(14,751,000)
– Net benefit payments	\$(1,285,410,000)	\$(1,216,248,000)
Change in market value of assets	\$2,154,002,000	\$2,100,663,000
Net assets at market value at the beginning of the year	\$21,635,294,000	\$19,534,631,000
Net assets at market value at the end of the year²	\$23,789,296,000	\$21,635,294,000

Note: Results may be slightly off due to rounding.

¹ Funded by pension obligation bond proceeds held by OCERS.

² See footnote 1 on next page for further detail.

Section 3: Supplemental Information

Exhibit E: Summary of plan assets

Line Description	Year Ended December 31, 2024	Year Ended December 31, 2023
Cash equivalents	\$1,496,523,000	\$370,116,000
Accounts receivable		
• Contributions	\$59,339,000	\$41,072,000
• Investment income	22,046,000	20,749,000
• Securities settlements	205,183,000	128,372,000
• All other	88,902,000	10,397,000
– Total accounts receivable	\$375,470,000	\$200,590,000
Investments		
• Equities	\$13,867,616,000	\$13,647,586,000
• Fixed income investments	3,730,232,000	3,151,461,000
• Alternative investments and diversified credit	5,009,015,000	4,828,005,000
• Security lending collateral	167,891,000	318,302,000
• Fixed assets net of accumulated depreciation	6,259,000	6,927,000
– Total investments at market value	\$22,781,013,000	\$21,952,281,000
Total assets	\$24,653,006,000	\$22,522,987,000
Accounts payable		
• Securities settlements	\$(305,453,000)	\$(238,504,000)
• Securities lending liability	(167,890,000)	(318,302,000)
• All other	(177,048,000)	(130,249,000)
– Total accounts payable	\$(650,391,000)	\$(687,055,000)
Net assets at market value¹	\$23,789,296,000	\$21,635,294,000
Net assets at actuarial value	\$23,688,986,000	\$22,135,285,000
Net assets at valuation value	\$23,688,986,000	\$22,135,285,000

Note: Results may be slightly off due to rounding.

¹ The market value excludes \$155,101,000 and \$146,110,000 as of December 31, 2024 and December 31, 2023, respectively, in the County Investment Account (funded by pension obligation bond proceeds held by OCERS), \$40,624,000 and \$38,502,000 as of December 31, 2024 and December 31, 2023, respectively, in the prepaid employer contributions account, \$17,594,000 and \$16,025,000 as of December 31, 2024 and December 31, 2023, respectively in the O.C. Sanitation District UAAL Deferred Account (after transfer, if any).

Section 3: Supplemental Information

Exhibit F: Summary of reserve information

Reserve Information as of December 31, 2024

Line Description	Reserves
Used in development of valuation value of assets	
• Active Members Reserve	\$4,112,391,000
• Retired Members Reserve	17,049,210,000
• Employer Advanced Reserve	3,448,492,000
• ERI Contribution Reserve	17,340,000
• STAR COLA Contribution Reserve	0
• Unrealized Appreciation/(Depreciation) Included in valuation value of assets	(938,447,000)
Valuation value of assets	\$23,688,986,000
Not used in development of valuation value of assets	
• Unclaimed Member Deposit	\$0
• Medicare Medical Insurance Reserve	0
Actuarial value of assets	\$23,688,986,000
• Unrecognized Investment Gain / (Loss)	100,310,000
Market value of assets (net of County Investment Account,¹ Prepaid Employer Contributions, and O.C. Sanitation District UAAL Deferred Account)	\$23,789,296,000
• County Investment Account ¹	155,101,000
• Prepaid Employer Contributions	40,624,000
• O.C. Sanitation District UAAL Deferred Account	17,594,000
Gross market value of assets	\$24,002,615,000

¹ Funded by pension obligation bond proceeds held by OCERS.

Section 3: Supplemental Information

Exhibit G: Development of the Plan through December 31, 2024

Year Ended December 31	Employer Contributions ¹	Member Contributions	Net Investment Return ^{2,3}	Benefit Payments	Market Value of Assets at Year-End	Valuation Value of Assets at Year-End	Valuation Value as a Percent of Market Value
2015	\$598,599,000	\$249,271,000	\$(51,601,000)	\$675,963,000	\$11,548,529,000	\$12,228,009,000	105.88%
2016	558,020,000	258,297,000	1,010,548,000	717,976,000	12,657,418,000	13,102,978,000	103.52%
2017	619,067,000	262,294,000	1,878,172,000	764,344,000	14,652,607,000	14,197,125,000	96.89%
2018	616,712,000	270,070,000	(361,321,000)	828,278,000	14,349,790,000	14,994,420,000	104.49%
2019	664,589,000	279,373,000	2,123,258,000	900,902,000	16,516,108,000	16,036,869,000	97.10%
2020	689,538,000	279,384,000	1,982,757,000	973,325,000	18,494,462,000	17,525,117,000	94.76%
2021	745,388,000	271,334,000	3,273,348,000	1,045,738,000	21,738,794,000	19,488,761,000	89.65%
2022	771,692,000	269,999,000	(2,106,139,000)	1,139,715,000	19,534,631,000	20,691,659,000	105.92%
2023	780,981,000	277,455,000	2,258,475,000	1,216,248,000	21,635,294,000	22,135,285,000	102.31%
2024	856,644,000	302,545,000	2,280,223,000	1,285,410,000	23,789,296,000	23,688,986,000	99.58%

¹ Includes discount for prepaid contributions, asset transfers from County Investment Account and asset transfer from O.C. Sanitation District UAAL Deferred Account, if any.

² On a market value basis, net of investment and administrative expenses.

³ Actual investment gains or losses on net pension plan assets includes both the administrative expenses and discount for prepaid contributions while excluding the investment gains or losses credited to County Investment Account and O.C. Sanitation District UAAL Deferred Account, if any.

Section 3: Supplemental Information

Exhibit H: Table of amortization bases

All Rate Groups Combined
(\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
2012 Restart amortization	December 31, 2013	\$5,395,674	20	\$4,150,654	9	\$554,435
Actuarial (gain) or loss	December 31, 2013	(281,532)	20	(216,568)	9	(28,928)
Actuarial (gain) or loss	December 31, 2014	(152,703)	20	(123,828)	10	(15,155)
Assumption changes	December 31, 2014	(103,213)	20	(83,559)	10	(10,227)
Actuarial (gain) or loss	December 31, 2015	(76,285)	20	(64,638)	11	(7,321)
Actuarial (gain) or loss	December 31, 2016	57,904	20	50,874	12	5,377
Actuarial (gain) or loss	December 31, 2017	(168,282)	20	(152,277)	13	(15,118)
Assumption changes	December 31, 2017	821,239	20	743,124	13	73,771
Actuarial (gain) or loss	December 31, 2018	340,064	20	315,718	14	29,615
Actuarial (gain) or loss	December 31, 2019	291,741	20	276,505	15	24,631
Entry age method change	December 31, 2020	(35,289)	20	(33,997)	16	(2,889)
Actuarial (gain) or loss	December 31, 2020	(318,622)	20	(306,940)	16	(26,077)
Assumption changes	December 31, 2020	13,117	20	12,635	16	1,073
Actuarial (gain) or loss	December 31, 2021	(663,306)	20	(647,997)	17	(52,704)
Actuarial (gain) or loss	December 31, 2022	325,688	20	321,578	18	25,125
Actuarial (gain) or loss	December 31, 2023	20,356	20	20,255	19	1,525
Assumption changes	December 31, 2023	137,105	20	136,419	19	10,268
Actuarial (gain) or loss	December 31, 2024	167,742	20	167,742	20	12,197
Subtotal				\$4,565,700		\$579,598

¹ Level percentage of payroll, assumes payments at the end of the month.

Section 3: Supplemental Information

Base Type	Outstanding Balance
Rate Group #1 – Plans A, B and U for O.C. Vector Control	\$(1,512)
Rate Group #1 – Plans A, B and U for Department of Education	2,601
Rate Group #1 – Plans A, B and U for U.C.I.	22,054
Rate Group #1 – Plans A, B and U for Cypress Recreation and Parks	(862)
Rate Group #3 – Plans B, G, H and U (OCSD)	(11,980)
Rate Group #9 – Plans M, N and U (TCA)	(3,614)
Rate Group #12 – Plans G, H, future service, and U (Law Library)	(2,751)
Subtotal	\$3,936
	Outstanding Balance
Total	\$4,569,636

Note: The equivalent single amortization period is about 10 years.

Section 3: Supplemental Information

Rate Group #1 – Plans A, B and U (County and IHSS) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
2012 Restart amortization	December 31, 2013	\$70,164	20	\$53,960	9	\$7,208
Actuarial (gain) or loss	December 31, 2013	(5,744)	20	(4,418)	9	(590)
Actuarial (gain) or loss	December 31, 2014	(2,744)	20	(2,225)	10	(272)
Assumption changes	December 31, 2014	(6,545)	20	(5,303)	10	(649)
Actuarial (gain) or loss	December 31, 2015	(1,650)	20	(1,398)	11	(158)
Actuarial (gain) or loss	December 31, 2016	(9,719)	20	(8,535)	12	(902)
Actuarial (gain) or loss	December 31, 2017	(5,387)	20	(4,875)	13	(484)
Assumption changes	December 31, 2017	21,900	20	19,816	13	1,967
Actuarial (gain) or loss	December 31, 2018	44	20	41	14	4
Actuarial (gain) or loss	December 31, 2019	(6,588)	20	(6,244)	15	(556)
Entry age method change	December 31, 2020	(222)	20	(214)	16	(18)
Actuarial (gain) or loss	December 31, 2020	(6,313)	20	(6,081)	16	(517)
Assumption changes	December 31, 2020	76	20	73	16	6
Actuarial (gain) or loss	December 31, 2021	(15,861)	20	(15,495)	17	(1,260)
Actuarial (gain) or loss	December 31, 2022	526	20	519	18	41
Actuarial (gain) or loss	December 31, 2023	(7,512)	20	(7,474)	19	(563)
Assumption changes	December 31, 2023	1,860	20	1,851	19	139
Actuarial (gain) or loss	December 31, 2024	2,624	20	2,624	20	191
Subtotal				\$16,622		\$3,587

¹ Level percentage of payroll, assumes payments at the end of the month.

Section 3: Supplemental Information

Base Type	Outstanding Balance
Rate Group #1 – Plans A, B and U for O.C. Vector Control ¹	\$(1,512)
Rate Group #1 – Plans A, B and U for Department of Education ¹	2,601
Rate Group #1 – Plans A, B and U for U.C.I. ¹	22,054
Rate Group #1 – Plans A, B and U for Cypress Recreation and Parks ¹	(862)
Subtotal	\$22,281
	Outstanding Balance
Rate Group #1 Total	\$38,903

¹ In determining the UAALs for the O.C. Vector Control District, Department of Education, U.C.I and Cypress Recreation and Parks, we first start by rolling forward the VVAs of these employers as of December 31, 2023 to December 31, 2024 to reflect the actual contributions, benefit payments and return on their VVAs during 2024. The AALs for these employers are obtained from internal valuation results.

Section 3: Supplemental Information

Rate Group #2 – Plans I, J, O, P, S, T, U and W (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
2012 Restart amortization	December 31, 2013	\$3,438,555	20	\$2,644,370	9	\$353,229
Actuarial (gain) or loss	December 31, 2013	(173,790)	20	(133,650)	9	(17,853)
Actuarial (gain) or loss	December 31, 2014	(78,001)	20	(63,226)	10	(7,738)
Assumption changes	December 31, 2014	(246,714)	20	(199,983)	10	(24,476)
Actuarial (gain) or loss	December 31, 2015	(65,063)	20	(55,121)	11	(6,243)
Actuarial (gain) or loss	December 31, 2016	39,445	20	34,642	12	3,661
Subtotal²				\$2,227,032		\$300,580
Actuarial (gain) or loss	December 31, 2017	\$(59,911)	20	\$(54,213)	13	\$(5,382)
Assumption changes	December 31, 2017	481,098	20	435,339	13	43,217
Actuarial (gain) or loss	December 31, 2018	207,573	20	192,712	14	18,076
Actuarial (gain) or loss	December 31, 2019	186,003	20	176,287	15	15,703
Entry age method change	December 31, 2020	(15,846)	20	(15,265)	16	(1,297)
Actuarial (gain) or loss	December 31, 2020	(118,155)	20	(113,823)	16	(9,670)
Assumption changes	December 31, 2020	183,272	20	176,553	16	14,999
Actuarial (gain) or loss	December 31, 2021	(330,889)	20	(323,252)	17	(26,292)
Actuarial (gain) or loss	December 31, 2022	195,127	20	192,665	18	15,053
Actuarial (gain) or loss	December 31, 2023	38,728	20	38,534	19	2,901
Assumption changes	December 31, 2023	123,452	20	122,834	19	9,246
Actuarial (gain) or loss	December 31, 2024	110,739	20	110,739	20	8,052
Subtotal³				\$939,110		\$84,606
Rate Group #2 Total				\$3,166,142		\$385,186

¹ Level percentage of payroll, assumes payments at the end of the month.

² This amount is spread over the payroll for all employers in Rate Group #2 excluding the payroll for Children and Families Commission.

³ This amount is spread over the payroll for all employers in Rate Group #2 including the payroll for Children and Families Commission.

Section 3: Supplemental Information

Note: We have made an adjustment to the amortization bases to reflect the \$1.7 million additional contributions made by Children and Families Commission to pay off their UAAL as of December 31, 2016. With that adjustment, we have reduced the amortization layers established on or before December 31, 2016 for Rate Group #2 by that amount on a pro-rata basis. The UAAL contribution rate for Children and Families Commission is determined based on the amortization layers established on or after December 31, 2017.

Section 3: Supplemental Information

Rate Group #3 – Plans B, G, H and U (OCSD) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
Rate Group #3 Total				\$(11,980)		\$0

¹ Level percentage of payroll, assumes payments at the end of the month.

Section 3: Supplemental Information

Rate Group #5 – Plans A, B and U (OCTA) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
2012 Restart amortization	December 31, 2013	\$232,513	20	\$178,958	9	\$23,905
Actuarial (gain) or loss	December 31, 2013	(13,471)	20	(10,367)	9	(1,385)
Actuarial (gain) or loss	December 31, 2014	4,522	20	3,669	10	449
Assumption changes	December 31, 2014	(19,944)	20	(16,180)	10	(1,980)
Actuarial (gain) or loss	December 31, 2015	(933)	20	(791)	11	(90)
Actuarial (gain) or loss	December 31, 2016	(9,743)	20	(8,565)	12	(905)
Actuarial (gain) or loss	December 31, 2017	(9,948)	20	(9,001)	13	(894)
Assumption changes	December 31, 2017	43,481	20	39,344	13	3,906
Actuarial (gain) or loss	December 31, 2018	22,318	20	20,720	14	1,944
Actuarial (gain) or loss	December 31, 2019	12,234	20	11,596	15	1,033
Entry age method change	December 31, 2020	(2,414)	20	(2,326)	16	(198)
Actuarial (gain) or loss	December 31, 2020	(30,867)	20	(29,735)	16	(2,526)
Assumption changes	December 31, 2020	4,801	20	4,625	16	393
Actuarial (gain) or loss	December 31, 2021	(49,440)	20	(48,299)	17	(3,928)
Actuarial (gain) or loss	December 31, 2022	37,213	20	36,744	18	2,871
Actuarial (gain) or loss	December 31, 2023	4,392	20	4,370	19	329
Assumption changes	December 31, 2023	7,669	20	7,631	19	574
Actuarial (gain) or loss	December 31, 2024	(4,308)	20	(4,308)	20	(313)
Rate Group #5 Total				\$178,085		\$23,185

¹ Calculated as a level percentage of payroll, payable at the end of the month.

Section 3: Supplemental Information

Rate Group #9 – Plans M, N and U (TCA) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
Rate Group #9 Total				\$(3,614)		\$0

¹ Level percentage of payroll, assumes payments at the end of the month.

Section 3: Supplemental Information

Rate Group #10 – Plans I, J, M, N and U (OCFA) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
2012 Restart amortization	December 31, 2013	\$72,750	20	\$55,992	9	\$7,479
Actuarial (gain) or loss	December 31, 2013	(2,659)	20	(2,046)	9	(273)
Actuarial (gain) or loss	December 31, 2014	(3,755)	20	(3,046)	10	(373)
Assumption changes	December 31, 2014	(4,489)	20	(3,643)	10	(446)
Actuarial (gain) or loss	December 31, 2015	626	20	530	11	60
Actuarial (gain) or loss	December 31, 2016	134	20	118	12	12
Actuarial (gain) or loss	December 31, 2017	(15,281)	20	(13,828)	13	(1,373)
Assumption changes	December 31, 2017	9,159	20	8,288	13	823
Actuarial (gain) or loss	December 31, 2018	(6,934)	20	(6,438)	14	(604)
Actuarial (gain) or loss	December 31, 2019	76	20	72	15	6
Entry age method change	December 31, 2020	(2,018)	20	(1,945)	16	(165)
Actuarial (gain) or loss	December 31, 2020	(12,238)	20	(11,790)	16	(1,002)
Assumption changes	December 31, 2020	3,814	20	3,674	16	312
Actuarial (gain) or loss	December 31, 2021	(10,169)	20	(9,935)	17	(808)
Actuarial (gain) or loss	December 31, 2022	2,038	20	2,012	18	157
Actuarial (gain) or loss	December 31, 2023	(1,617)	20	(1,609)	19	(121)
Assumption changes	December 31, 2023	2,135	20	2,124	19	160
Actuarial (gain) or loss	December 31, 2024	336	20	336	20	24
Rate Group #10 Total				\$18,866		\$3,868

¹ Calculated as a level percentage of payroll, payable at the end of the month.

Section 3: Supplemental Information

Rate Group #11 – Plans M and N, future service, and U (Cemetery) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
Restart amortization & Assumption changes	December 31, 2017	\$(281)	20	\$253	13	\$25
Actuarial (gain) or loss	December 31, 2018	(244)	20	(226)	13	(21)
Actuarial (gain) or loss	December 31, 2019	613	20	582	14	52
Entry age method change	December 31, 2020	(43)	20	(42)	15	(4)
Actuarial (gain) or loss	December 31, 2020	(178)	20	(172)	16	(15)
Assumption changes	December 31, 2020	218	20	210	16	18
Actuarial (gain) or loss	December 31, 2021	(394)	20	(385)	16	(31)
Actuarial (gain) or loss	December 31, 2022	337	20	332	17	26
Actuarial (gain) or loss	December 31, 2023	(366)	20	(364)	18	(27)
Assumption changes	December 31, 2023	150	20	149	19	11
Actuarial (gain) or loss	December 31, 2024	41	20	41	19	3
Rate Group #11 Total				\$378		\$37

¹ Calculated as a level percentage of payroll, payable at the end of the month.

Section 3: Supplemental Information

Rate Group #12 – Plans G, H, future service, and U (Law Library) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
Rate Group #12 Total				\$(2,751)		\$0

¹ Level percentage of payroll, assumes payments at the end of the month.

Section 3: Supplemental Information

Rate Group #6 – Plans E, F and V (Probation) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
2012 Restart amortization	December 31, 2013	\$192,912	20	\$148,477	9	\$19,833
Actuarial (gain) or loss	December 31, 2013	(14,039)	20	(10,805)	9	(1,443)
Actuarial (gain) or loss	December 31, 2014	(2,596)	20	(2,106)	10	(258)
Assumption changes	December 31, 2014	36,260	20	29,417	10	3,600
Actuarial (gain) or loss	December 31, 2015	(10,703)	20	(9,076)	11	(1,028)
Actuarial (gain) or loss	December 31, 2016	13,799	20	12,129	12	1,282
Actuarial (gain) or loss	December 31, 2017	(6,566)	20	(5,942)	13	(590)
Assumption changes	December 31, 2017	50,030	20	45,271	13	4,494
Actuarial (gain) or loss	December 31, 2018	8,046	20	7,470	14	701
Actuarial (gain) or loss	December 31, 2019	8,063	20	7,643	15	681
Entry age method change	December 31, 2020	(44)	20	(43)	16	(4)
Actuarial (gain) or loss	December 31, 2020	(14,580)	20	(14,045)	16	(1,193)
Assumption changes	December 31, 2020	(36,195)	20	(34,868)	16	(2,962)
Actuarial (gain) or loss	December 31, 2021	(39,490)	20	(38,578)	17	(3,138)
Actuarial (gain) or loss	December 31, 2022	21,662	20	21,388	18	1,671
Actuarial (gain) or loss	December 31, 2023	(106)	20	(105)	19	(8)
Assumption changes	December 31, 2023	1,185	20	1,179	19	89
Actuarial (gain) or loss	December 31, 2024	25,662	20	25,662	20	1,866
Rate Group #6 Total				\$183,068		\$23,593

¹ Calculated as a level percentage of payroll, payable at the end of the month.

Section 3: Supplemental Information

Rate Group #7 – Plans E, F, Q, R and V (Law Enforcement) (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
2012 Restart amortization	December 31, 2013	\$988,833	20	\$761,071	9	\$101,662
Actuarial (gain) or loss	December 31, 2013	(51,652)	20	(39,754)	9	(5,310)
Actuarial (gain) or loss	December 31, 2014	(34,729)	20	(28,175)	10	(3,448)
Assumption changes	December 31, 2014	102,262	20	82,961	10	10,154
Actuarial (gain) or loss	December 31, 2015	23,666	20	20,066	11	2,273
Actuarial (gain) or loss	December 31, 2016	39,724	20	34,915	12	3,690
Actuarial (gain) or loss	December 31, 2017	(27,922)	20	(25,265)	13	(2,508)
Assumption changes	December 31, 2017	161,417	20	146,064	13	14,500
Actuarial (gain) or loss	December 31, 2018	69,329	20	64,366	14	6,038
Actuarial (gain) or loss	December 31, 2019	75,023	20	71,104	15	6,334
Entry age method change	December 31, 2020	(4,900)	20	(4,720)	16	(401)
Actuarial (gain) or loss	December 31, 2020	(62,670)	20	(60,372)	16	(5,129)
Assumption changes	December 31, 2020	(88,103)	20	(84,874)	16	(7,211)
Actuarial (gain) or loss	December 31, 2021	(138,239)	20	(135,049)	17	(10,984)
Actuarial (gain) or loss	December 31, 2022	73,109	20	72,187	18	5,640
Actuarial (gain) or loss	December 31, 2023	(12,680)	20	(12,616)	19	(950)
Assumption changes	December 31, 2023	765	20	761	19	57
Actuarial (gain) or loss	December 31, 2024	85,504	20	85,504	20	6,217
Rate Group #7 Total				\$948,174		\$120,624

¹ Calculated as a level percentage of payroll, payable at the end of the month.

Section 3: Supplemental Information

Rate Group #8 – Plans E, F, Q, R and V (OCFA) (\$ in '000s)

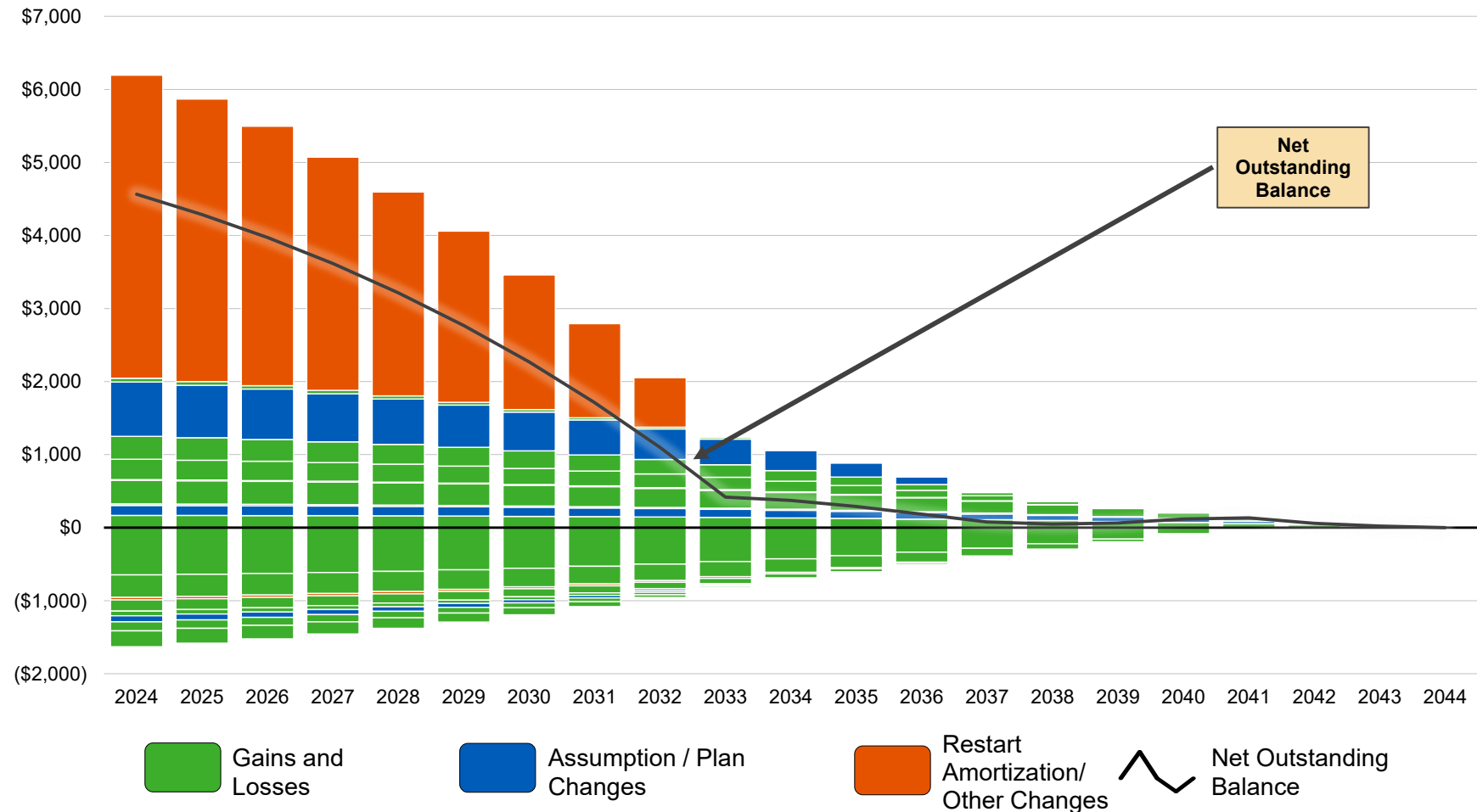
Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment ¹
2012 Restart amortization	December 31, 2013	\$399,947	20	\$307,826	9	\$41,119
Actuarial (gain) or loss	December 31, 2013	(20,177)	20	(15,528)	9	(2,074)
Actuarial (gain) or loss	December 31, 2014	(35,400)	20	(28,719)	10	(3,515)
Assumption changes	December 31, 2014	35,957	20	29,172	10	3,570
Actuarial (gain) or loss	December 31, 2015	(22,228)	20	(18,848)	11	(2,135)
Actuarial (gain) or loss	December 31, 2016	(15,736)	20	(13,830)	12	(1,461)
Actuarial (gain) or loss	December 31, 2017	(43,031)	20	(38,939)	13	(3,866)
Assumption changes	December 31, 2017	53,637	20	48,535	13	4,818
Actuarial (gain) or loss	December 31, 2018	39,932	20	37,073	14	3,477
Actuarial (gain) or loss	December 31, 2019	16,317	20	15,465	15	1,378
Entry age method change	December 31, 2020	(9,802)	20	(9,442)	16	(802)
Actuarial (gain) or loss	December 31, 2020	(73,621)	20	(70,922)	16	(6,025)
Assumption changes	December 31, 2020	(54,766)	20	(52,758)	16	(4,482)
Actuarial (gain) or loss	December 31, 2021	(78,824)	20	(77,004)	17	(6,263)
Actuarial (gain) or loss	December 31, 2022	(4,324)	20	(4,269)	18	(334)
Actuarial (gain) or loss	December 31, 2023	(483)	20	(481)	19	(36)
Assumption changes	December 31, 2023	(111)	20	(110)	19	(8)
Actuarial (gain) or loss	December 31, 2024	(52,856)	20	(52,856)	20	(3,843)
Rate Group #8 Total				\$54,365		\$19,518

¹ Calculated as a level percentage of payroll, payable at the end of the month.

Section 3: Supplemental Information

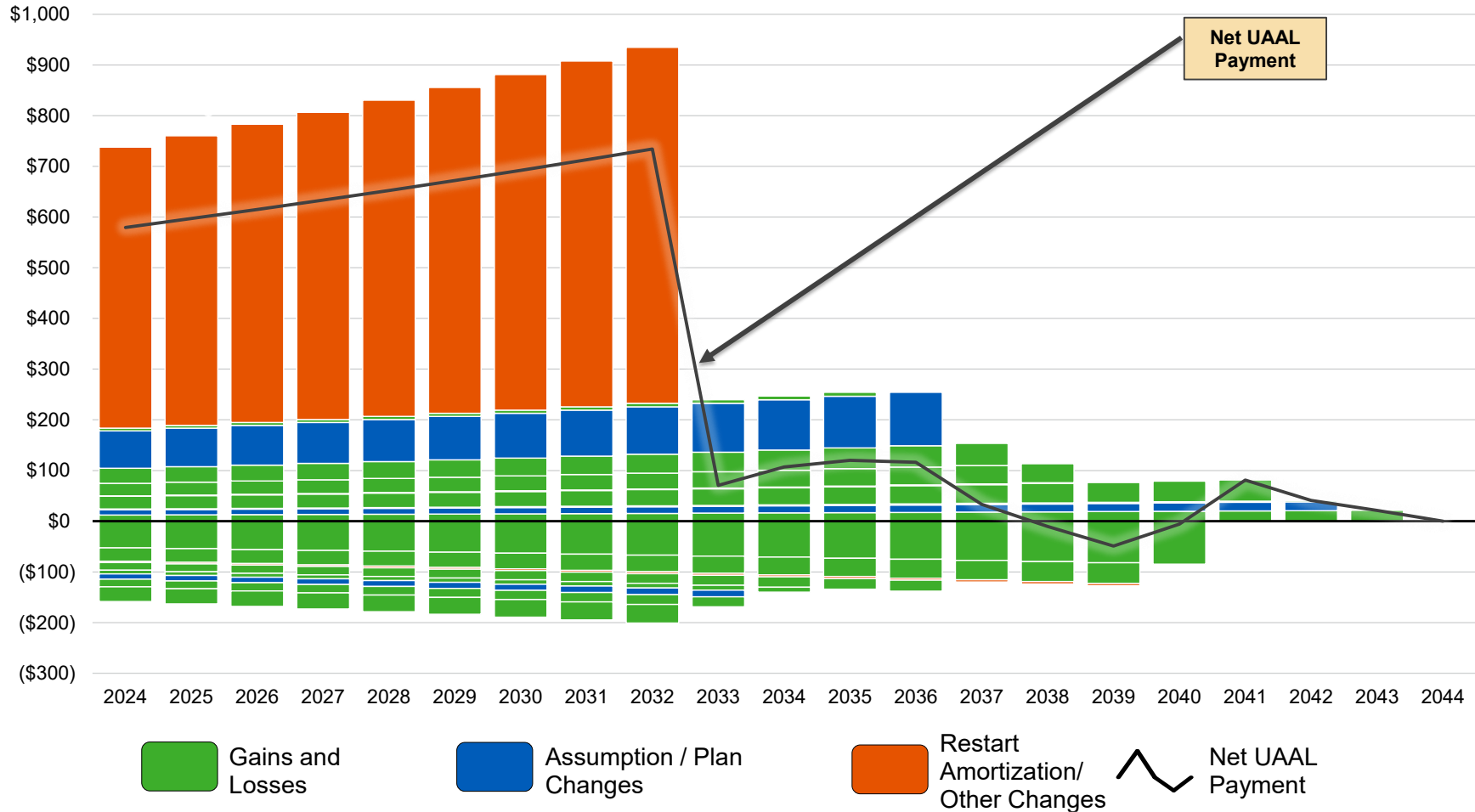
Exhibit I: Projection of UAAL balances and payments

Outstanding Balance of \$4.6 Billion in Net UAAL as of December 31, 2024
(\$ in Millions)



Section 3: Supplemental Information

Annual Payments Required to Amortize \$4.6 Billion in Net UAAL as of December 31, 2024¹
(\$ in Millions)



¹ As of December 31, 2038, the Net UAAL payment for all rate groups combined is projected to become negative even though the UAAL for some individual rate groups is still expected to be positive. Since this graph is for illustrative purposes only, we have not refined the Net UAAL payment shown in calendar years 2039 and thereafter to show only the UAAL payment for those rate groups that have a positive UAAL and are still required to make annual UAAL contributions.

Section 4: Actuarial Valuation Basis

Exhibit 1: Actuarial assumptions, methods and models

Rationale for assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the January 1, 2020 through December 31, 2022 Actuarial Experience Study dated August 11, 2023. Unless otherwise noted, all actuarial assumptions and methods shown below apply to all members for all tiers. These assumptions were adopted by the Board.

Net investment return

7.00%; net of administrative and investment expenses.

Based on the Actuarial Experience Study referenced above, expected administrative and investment expenses represent about 0.30% of the actuarial value of assets.

Inflation rate

Increase of 2.50% per year.

Cost-of-Living Adjustment (COLA)

Retiree COLA increases of 2.75% per year. For members that have COLA banks, we assume they receive 3.00% COLA increases until their COLA banks are exhausted and 2.75% thereafter.

The actual COLA granted by OCERS on April 1, 2025 has been reflected for non-active members in the December 31, 2024 valuation.

Member contribution crediting rate

5.00%, compounded semi-annually.

Section 4: Actuarial Valuation Basis

Payroll

Inflation of 2.50% per year plus “across-the-board” salary increase of 0.50% per year, used to amortize the UAAL as a level percentage of payroll.

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

Increase of 2.50% per year from the valuation date.

Increase in Section 7522.10 compensation limit

Increase of 2.50% per year from the valuation date.

Section 4: Actuarial Valuation Basis

Salary increase

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 Increases¹

Years of Service	General	Safety
Less than 1	5.00%	12.00%
1–2	7.25%	10.00%
2–3	6.50%	8.75%
3–4	5.50%	7.75%
4–5	4.50%	6.75%
5–6	3.75%	5.75%
6–7	3.00%	5.00%
7–8	2.75%	3.75%
8–9	2.00%	3.00%
9–10	1.80%	2.75%
10–11	1.60%	2.00%
11–12	1.50%	1.85%
12–13	1.40%	1.85%
13–14	1.30%	1.85%
14–15	1.25%	1.85%
15–16	1.25%	1.60%
16–17	1.15%	1.60%
17–18	1.10%	1.60%
18–19	1.10%	1.60%
19–20	0.90%	1.50%
20 and over	0.90%	1.50%

¹ In addition to the individual salary increase assumptions, we have applied an average of two hours of additional salary annually for leap-year salary adjustment.

Section 4: Actuarial Valuation Basis

Post-retirement mortality rates

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

Healthy

- **General members:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Safety members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) decreased 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Disabled

- **General members:** Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) decreased 5% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Safety members:** Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) decreased 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Beneficiary

- **Beneficiaries not currently in pay status:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Beneficiaries in pay status:** Pub-2010 Contingent Survivor Amount-Weighted Above Median Mortality Table (separate tables for males and females) increased 10% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Section 4: Actuarial Valuation Basis

Pre-retirement mortality rates

- **General members:** 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.
- **Safety members:** Pub-2010 Safety 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 — Before Generational Projection from 2010

Age	General Male	General Female	Safety Male	Safety Female
20	0.04%	0.01%	0.04%	0.02%
25	0.02%	0.01%	0.03%	0.02%
30	0.03%	0.01%	0.04%	0.02%
35	0.04%	0.02%	0.04%	0.03%
40	0.06%	0.03%	0.05%	0.04%
45	0.09%	0.05%	0.07%	0.06%
50	0.13%	0.08%	0.10%	0.08%
55	0.19%	0.11%	0.15%	0.11%
60	0.28%	0.17%	0.23%	0.14%
65	0.41%	0.27%	0.35%	0.20%
70	0.61%	0.44%	0.66%	0.39%

All General pre-retirement deaths are assumed to be non-service connected.

For Safety, 90% of pre-retirement deaths are assumed to be non-service connected. The other 10% are assumed to be service connected.

Section 4: Actuarial Valuation Basis

Mortality rates for member contributions

- **General members:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) increased 5% for females, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 40% male and 60% female.
- **Safety members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) decreased by 5% for females, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 85% male and 15% female.

Section 4: Actuarial Valuation Basis

Disability incidence

Disability Incidence Rates

Age	General All Other	General OCTA	Safety Law & Fire	Safety Probation
20	0.00%	0.00%	0.00%	0.00%
25	0.00%	0.00%	0.02%	0.03%
30	0.01%	0.03%	0.08%	0.08%
35	0.03%	0.20%	0.19%	0.13%
40	0.07%	0.36%	0.34%	0.18%
45	0.13%	0.46%	0.46%	0.26%
50	0.21%	0.56%	1.22%	0.36%
55	0.28%	0.72%	3.38%	0.49%
60	0.30%	1.04%	5.40%	0.22%
65	0.30%	1.68%	7.50%	0.00%

75% of General All Other disabilities are assumed to be service-connected disabilities. The other 25% are assumed to be non-service connected.

85% of General OCTA disabilities are assumed to be service-connected disabilities. The other 15% are assumed to be non-service connected.

100% of Safety Law Enforcement and Fire disabilities are assumed to be service-connected disabilities.

85% of Safety Probation disabilities are assumed to be service-connected disabilities. The other 15% are assumed to be non-service connected.

Section 4: Actuarial Valuation Basis

Termination

Termination Rates

Years of Service	General All Other	General OCTA	Safety Law & Fire	Safety Probation
Less than 1	11.25%	16.50%	4.00%	12.50%
1–2	7.25%	11.50%	3.00%	11.50%
2–3	6.50%	9.25%	2.50%	9.50%
3–4	5.50%	8.25%	2.25%	5.00%
4–5	5.25%	7.75%	2.00%	4.00%
5–6	4.75%	6.50%	1.75%	3.25%
6–7	4.25%	4.25%	1.25%	2.75%
7–8	4.00%	4.00%	1.20%	2.75%
8–9	3.50%	3.50%	1.15%	2.50%
9–10	3.00%	2.75%	1.10%	1.75%
10–11	2.50%	2.75%	1.05%	1.50%
11–12	2.00%	2.50%	1.00%	1.50%
12–13	1.75%	2.50%	0.95%	1.25%
13–14	1.75%	2.25%	0.65%	1.00%
14–15	1.60%	2.25%	0.60%	0.75%
15–16	1.50%	2.00%	0.55%	0.75%
16–17	1.40%	2.00%	0.50%	0.75%
17–18	1.30%	1.75%	0.45%	0.75%
18–19	1.20%	1.75%	0.40%	0.50%
19–20	1.00%	1.25%	0.30%	0.25%
20 and over	0.50%	0.75%	0.15%	0.20%

Section 4: Actuarial Valuation Basis

Election for withdrawal of contributions

Election Rates

Years of Service	General All Other	General OCTA	Safety Law & Fire	Safety Probation
Less than 5	25.00%	35.00%	25.00%	20.00%
5–9	17.50%	30.00%	25.00%	20.00%
10–14	17.50%	25.00%	12.50%	20.00%
15 and over	15.00%	15.00%	12.50%	15.00%

Section 4: Actuarial Valuation Basis

Retirement rates

Retirement Rates — General

Age	Enhanced Less than 30 Years of Service	Enhanced 30 or More Years of Service	Non-Enhanced ¹ Less than 30 Years of Service	Non-Enhanced ¹ 30 or More Years of Service
49	0.00%	30.00%	0.00%	25.00%
50	2.25%	5.00%	2.75%	2.75%
51	2.25%	5.00%	2.75%	2.75%
52	2.50%	5.00%	2.75%	2.75%
53	3.00%	9.00%	2.75%	2.75%
54	7.50%	16.00%	2.75%	2.75%
55	13.00%	35.00%	3.25%	3.50%
56	10.00%	24.00%	3.25%	3.50%
57	10.00%	22.00%	5.50%	5.50%
58	10.00%	22.00%	6.50%	6.50%
59	11.00%	24.00%	6.50%	6.50%
60	12.00%	24.00%	8.00%	12.00%
61	12.00%	24.00%	8.00%	15.00%
62	14.00%	24.00%	8.00%	18.00%
63	14.00%	24.00%	10.00%	22.00%
64	17.00%	30.00%	12.00%	25.00%
65	25.00%	30.00%	22.00%	30.00%
66	25.00%	30.00%	25.00%	32.00%
67	25.00%	30.00%	27.00%	32.00%
68	25.00%	25.00%	32.00%	32.00%
69	25.00%	25.00%	30.00%	30.00%
70	25.00%	25.00%	25.00%	30.00%
71	25.00%	25.00%	20.00%	30.00%
72	22.00%	25.00%	20.00%	30.00%
73	20.00%	25.00%	20.00%	30.00%
74	20.00%	25.00%	20.00%	30.00%
75	100.00%	100.00%	100.00%	100.00%

The retirement rates only apply to members that are eligible to retire at the age shown.

¹ These assumptions are also used for the CalPEPRA 1.62% @ 65 formula (Plan T and Plan W).

Section 4: Actuarial Valuation Basis

Retirement Rates — Safety

Age	Law (31664.1) Less than 30 Years of Service	Law (31664.1) 30 or More Years of Service	Fire (31664.1) Less than 30 Years of Service	Fire (31664.1) 30 or More Years of Service	Probation (31664.1) Less than 30 Years of Service	Probation (31664.1) 30 or More Years of Service
45	2.50%	16.00%	2.00%	10.00%	3.00%	5.00%
46	2.50%	16.00%	2.00%	10.00%	3.00%	5.00%
47	2.50%	16.00%	2.00%	10.00%	3.00%	5.00%
48	2.50%	16.00%	2.00%	10.00%	3.00%	5.00%
49	12.00%	16.00%	2.00%	10.00%	3.00%	5.00%
50	18.00%	20.00%	4.50%	10.00%	9.00%	12.00%
51	18.00%	20.00%	4.50%	10.00%	7.00%	10.00%
52	18.00%	20.00%	4.50%	10.00%	5.00%	9.00%
53	20.00%	35.00%	9.00%	20.00%	7.00%	9.00%
54	24.00%	35.00%	12.00%	25.00%	7.00%	12.00%
55	24.00%	35.00%	12.00%	25.00%	12.00%	30.00%
56	24.00%	35.00%	12.00%	25.00%	18.00%	30.00%
57	24.00%	35.00%	20.00%	25.00%	25.00%	30.00%
58	24.00%	40.00%	20.00%	30.00%	25.00%	30.00%
59	24.00%	40.00%	25.00%	30.00%	18.00%	30.00%
60	30.00%	40.00%	25.00%	30.00%	20.00%	40.00%
61	30.00%	40.00%	25.00%	30.00%	20.00%	40.00%
62	30.00%	40.00%	25.00%	30.00%	20.00%	40.00%
63	30.00%	40.00%	25.00%	30.00%	20.00%	40.00%
64	30.00%	40.00%	25.00%	30.00%	20.00%	40.00%
65	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

The retirement rates only apply to members that are eligible to retire at the age shown.

Section 4: Actuarial Valuation Basis

Retirement Rates

Age	General SJC (31676.12)	Safety Law (31664.2)	Safety Fire (31664.2)
50	4.00%	12.00%	8.00%
51	4.00%	12.50%	9.00%
52	4.00%	13.00%	10.00%
53	4.00%	18.00%	12.00%
54	4.00%	19.00%	14.00%
55	4.00%	35.00%	24.00%
56	5.00%	25.00%	23.00%
57	6.00%	25.00%	25.00%
58	7.00%	25.00%	25.00%
59	9.00%	30.00%	35.00%
60	10.00%	40.00%	40.00%
61	12.00%	40.00%	40.00%
62	13.00%	40.00%	40.00%
63	13.00%	40.00%	40.00%
64	19.00%	40.00%	40.00%
65	22.00%	100.00%	100.00%
66	26.00%	100.00%	100.00%
67	26.00%	100.00%	100.00%
68	26.00%	100.00%	100.00%
69	26.00%	100.00%	100.00%
70	45.00%	100.00%	100.00%
71	45.00%	100.00%	100.00%
72	45.00%	100.00%	100.00%
73	45.00%	100.00%	100.00%
74	45.00%	100.00%	100.00%
75	100.00%	100.00%	100.00%

The retirement rates only apply to members that are eligible to retire at the age shown.

Section 4: Actuarial Valuation Basis

Retirement Rates

Age	CalPEPRA 2.5% @ 67 General Formula	CalPEPRA 2.7% @ 57 Safety Formula Probation	CalPEPRA 2.7% @ 57 Safety Formula Law	CalPEPRA 2.7% @ 57 Safety Formula Fire
50	0.00%	3.00%	11.50%	6.00%
51	0.00%	3.00%	12.00%	6.50%
52	5.50%	3.50%	12.50%	8.00%
53	2.00%	3.50%	16.50%	10.00%
54	2.00%	6.00%	17.50%	12.00%
55	2.75%	12.00%	30.00%	20.00%
56	3.75%	12.00%	20.00%	19.00%
57	5.50%	15.00%	20.00%	21.00%
58	7.50%	25.00%	25.00%	25.00%
59	7.50%	25.00%	30.00%	30.00%
60	7.50%	40.00%	40.00%	40.00%
61	7.50%	40.00%	40.00%	40.00%
62	14.00%	40.00%	40.00%	40.00%
63	14.00%	40.00%	40.00%	40.00%
64	15.00%	40.00%	40.00%	40.00%
65	20.00%	100.00%	100.00%	100.00%
66	22.00%	100.00%	100.00%	100.00%
67	23.00%	100.00%	100.00%	100.00%
68	23.00%	100.00%	100.00%	100.00%
69	23.00%	100.00%	100.00%	100.00%
70	25.00%	100.00%	100.00%	100.00%
71	25.00%	100.00%	100.00%	100.00%
72	25.00%	100.00%	100.00%	100.00%
73	25.00%	100.00%	100.00%	100.00%
74	25.00%	100.00%	100.00%	100.00%
75	100.00%	100.00%	100.00%	100.00%

The retirement rates only apply to members that are eligible to retire at the age shown.

Section 4: Actuarial Valuation Basis

Retirement age and benefit for deferred vested members

Current and Future Inactive Member Assumptions

Membership and Reciprocity	% of Future ¹ Deferred Vested Members	Annual Salary Increases from Separation Date	Retirement Age for Members with Less than Five Years of Service	Retirement Age for Members with Five or More Years of Service
General with reciprocity	12.5%	3.90%	60	60
General without reciprocity	87.5%	N/A	70	58
Safety with reciprocity	20.0%	4.50%	54	54
Safety without reciprocity	80.0%	N/A	70	54

Liability calculation for current deferred vested members

Liability for a current deferred vested member is calculated based on salary (adjusted with the additional cashout assumptions for non-CalPEPRA members), service, and eligibility for reciprocal benefit as provided by the Retirement System. For those members without salary information that have 3 or more years of service, we used an average salary. For those members without salary information that have less than 3 years of service or for those members without service information, we assumed a refund of account balance.

Future benefit accruals

1.0 year of service per year of employment. There is no assumption to anticipate conversion of unused sick leave 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.

Inclusion of deferred vested members

All deferred vested members are included in the valuation.

¹ OCERS provides the reciprocity status for current deferred vested members in the valuation census data.

Section 4: Actuarial Valuation Basis

Definition of active members

First day of employment.

Form of payment

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

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	75%	3 years younger than member	Female
Female member	55%	2 years older than member	Male

Nonbinary member assumptions

A blended mortality table is used based on the sex-distinct mortality tables above and the proportion of males and females for General and Safety separately. A blended mortality is also used for the spouse of a nonbinary member with the opposite proportion of males and females used for the member.

The spousal assumptions for percentage with spouse at retirement or pre-retirement death and for spouse age are also blended based on the proportion of males and females for General and Safety separately.

Section 4: Actuarial Valuation Basis

Cashout assumptions

Additional compensation amounts are expected to be received during a member's final average earnings period. The percentages used in this valuation are:

Rates

Plan	Final One Year Salary	Final Three Year Salary
General Non CalPEPRA	3.00%	3.20%
Safety Probation Non CalPEPRA	N/A	3.50%
Safety Law Non CalPEPRA	N/A	6.60%
Safety Fire Non CalPEPRA	N/A	1.50%
General CalPEPRA	N/A	N/A
Safety Probation CalPEPRA	N/A	N/A
Safety Law CalPEPRA	N/A	N/A
Safety Fire CalPEPRA	N/A	N/A

The additional cashout assumptions are the same for service and disability retirements.

Actuarial cost method

Entry age actuarial cost method.

Entry age is the age on the valuation date minus the lesser of years of employment or years of benefit service. Normal cost and AAL are calculated on an individual basis and are based on costs allocated as a level percentage of compensation. The normal cost rate is calculated assuming their entry age is the date they entered service with OCERS.

Please note that for Probation members who have prior benefit service in another General OCERS plan, the normal cost rate for the current plan is calculated assuming their entry age is the date they entered service with their current plan.

Section 4: Actuarial Valuation Basis

Actuarial value of assets

Market value of assets less unrecognized returns in each of the last five annual accounting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on the market value, and are recognized annually over a five-year period.

Valuation value of assets

The actuarial value of assets reduced by the value of the non-valuation reserves.

Amortization policy

Effective December 31, 2013, the outstanding balance of the UAAL from the December 31, 2012 valuation was combined and re-amortized over a declining 20-year period (9 years remaining as of December 31, 2024).

Any new UAAL resulting from plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are also amortized over separate decreasing 20-year periods.

Employer contributions

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

Normal cost

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

The contribution rate is determined as a level percentage of the member's compensation.

Contribution to the UAAL

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate.

Section 4: Actuarial Valuation Basis

The contribution (or rate credit in the case of a negative UAAL) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the System) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual payroll growth rate assumption.

Member contributions

The member contribution rates for all members are provided in *Section 4, Exhibit 3*.

Non-CalPEPRA Members

Articles 6 and 6.8 of the CERL define the methodology to be used in the calculation of member basic contribution rates for General members and Safety members, respectively. The basic contribution rate is determined so that the accumulation of a member's basic contributions made each year until a certain age (age is 60 for General Plans A, B, M, N, O, P and S, 55 for General Plans G, H, I and J, and 50 for Safety Plans E, F, Q and R) will be sufficient to fund an annuity at that age that is equal to:

- 1/200 of Final Average Salary for General Plan A;
- 1/120 of Final Average Salary for General Plan B;
- 1/100 of Final Average Salary for General Plans G, H, I, J, and S;
- 1/120 of Final Average Salary for General Plans M, N, O, and P;
- 1/200 of Final Average Salary for Safety Plans E and Q, and;
- 1/100 of Final Average Salary for Safety Plans F and R.

It is assumed that contributions are made annually at the same rate, starting at entry age.

In addition to the basic contributions, members also pay one-half of the total normal cost necessary to fund cost-of-living benefits which is calculated separately for each rate group, with the exception of Rate Groups #9 and #11, which are developed on a combined or pooled basis as described in our Cost Sharing Structure letter dated July 30, 2010. Within each rate group, the COLA normal cost is either pooled for Tiers 1 and 2 because the same 3% COLA is provided for both Tiers, or it differs by a set formula based on past practice we carried over from the OCERS' prior actuary. Accumulation includes crediting of interest at the assumed investment earnings rate.

Effective with the December 31, 2014 valuation, for determining the cost of the total benefit (i.e., basic and COLA components), the effect of the assumed additional cashouts are recognized in the valuation as an employer and member cost.

Section 4: Actuarial Valuation Basis

CalPEPRA Members

Pursuant to Section 7522.30(a) of the Government Code, members in Plans T, U, V and W are required to contribute at least 50% of the normal cost rate. We have assumed that exactly 50% of the normal cost would be paid by the members in these Plans. Also of note is that based on our recommendation, OCERS decided to use the discretion made available by AB1380 to not round the member's contribution rate to the nearest $\frac{1}{4}\%$ as previously required by CalPEPRA.

For members in Plan T and Plan W, their basic rates have been calculated using a methodology similar to that used for Plan P. For members in Plan U or Plan V, their basic rates have been calculated using a methodology outlined in our letter dated December 4, 2012 that was previously approved by the Board.

Internal Revenue Code Section 415

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

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

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.

Non-CalPEPRA 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.

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

Section 4: Actuarial Valuation Basis

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

There have been no changes in actuarial assumptions,¹ methods or models since the prior valuation.

¹ Nonbinary member assumptions were introduced with this valuation, which uses blended mortality tables and spousal assumptions for those members who self-report as nonbinary. The impact of this change on the valuation results is de minimis and is therefore not identified separately in this report.

Section 4: Actuarial Valuation Basis

Exhibit 2: Summary of plan provisions

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

Plan year

January 1 through December 31.

Membership eligibility

Membership with OCERS begins with the day of employment in an eligible position by the County or a participating employer.

Non-CalPEPRA General Plans

Membership Tier	Membership Tier Eligibility
Plan G (2.5% @ 55)	General members of Orange County Sanitation District and Law Library ¹ hired before September 21, 1979.
Plan H (2.5% @ 55)	General members of Orange County Sanitation District ² and Law Library ¹ hired on or after September 21, 1979.
Plan I (2.7% @ 55)	General members of City of San Juan Capistrano, Orange County (except AFSCME bargaining unit), Orange County Superior Court, Local Agency Formation Commission, ¹ Orange County Employees Retirement System, ³ Children and Families Commission, ⁴ and Orange County Fire Authority hired before September 21, 1979.
Plan J (2.7% @ 55)	General members of City of San Juan Capistrano, Orange County (except AFSCME bargaining unit), Orange County Superior Court, Local Agency Formation Commission, ¹ Orange County Employees Retirement System, ³ Children and Families Commission, ⁴ and Orange County Fire Authority hired on or after September 21, 1979.
Plan M (2.0% @ 55)	General members of Transportation Corridor Agency and Cemetery District ⁵ hired before September 21, 1979.

¹ Improvement is prospective only for service after June 23, 2005.

² Members of Orange County Sanitation District within Supervisors and Professional bargaining unit hired on or after October 1, 2010 are in Plan B.

³ Improvement for Management members is prospective only for service after June 30, 2005.

⁴ Improvement is prospective only for service after December 22, 2005.

⁵ Improvement is prospective only for service after December 7, 2007.

Section 4: Actuarial Valuation Basis

Membership Tier	Membership Tier Eligibility
Plan N (2.0% @ 55)	General members of Transportation Corridor Agency and Cemetery District ¹ hired on or after September 21, 1979 and General members of Orange County Fire Authority hired on or after July 1, 2011.
Plan O (1.62% @ 65)	General members of Orange County (OCEA bargaining unit) and Superior Court rehired on or after May 7, 2010 and General members of Local Agency Formation Commission rehired on or after July 1, 2010 and General members of Orange County (Management) rehired on or after August 17, 2010 and not electing to rejoin Plan I.
Plan P (1.62% @ 65)	General members of Orange County (OCEA bargaining unit) and Superior Court rehired on or after May 7, 2010 and General members of Local Agency Formation Commission rehired on or after July 1, 2010 and General members of Orange County (Management) rehired on or after August 17, 2010 and not electing to rejoin Plan J.
Plan S (2.0% @ 57)	General members of San Juan Capistrano hired on or after July 1, 2012.
Plan A (2.0% @ 57)	General members of all other employers hired before September 21, 1979.
Plan B (1.64% @ 57)	General members of all other employers hired on or after September 21, 1979 and Orange County Sanitation District members (Supervisors and Professional bargaining unit) hired on or after October 1, 2010.

Section 4: Actuarial Valuation Basis

Non-CalPEPRA Safety Plans

Membership Tier	Membership Tier Eligibility
Plan E (3.0% @ 50)	Safety members of Orange County (Law Enforcement and Probation) and Orange County Fire Authority hired before September 21, 1979.
Plan F (3.0% @ 50)	Safety members of Orange County (Law Enforcement and Probation) and Orange County Fire Authority hired on or after September 21, 1979 and before April 9, 2010 for Law Enforcement, before July 1, 2011 for Orange County Fire Authority Executive Management members, and before July 1, 2012 for other Orange County Fire Authority members.
Plan Q (3.0% @ 55)	Safety members of Orange County (Law Enforcement) rehired on or after April 9, 2010, Safety members of Orange County Fire Authority Executive Management rehired on or after July 1, 2011, and other Safety members of Orange County Fire Authority rehired on or after July 1, 2012 and previously enrolled in Plan E.
Plan R (3.0% @ 55)	Safety members of Orange County (Law Enforcement) hired on or after April 9, 2010, Safety members of Orange County Fire Authority Executive Management hired on or after July 1, 2011, and other Safety members of Orange County Fire Authority hired on or after July 1, 2012.

CalPEPRA General Plans

Membership Tier	Membership Tier Eligibility
Plan T (1.62% @ 65)	General members of Orange County (except County Attorneys), Orange County Employees Retirement System (except Management), Local Agency Formation Commission, and Orange County Superior Court with membership dates on or after January 1, 2013.
Plan U (2.5% @ 67)	General members of Orange County Transportation Authority with membership dates on or after January 1, 2015 and General members of all other employers, Orange County (County Attorneys), Orange County Employees Retirement System (Management), and Orange County Superior Court, ¹ with membership dates on or after January 1, 2013.
Plan W (1.62% @ 65)	General members of City of San Juan Capistrano with membership dates on or after January 1, 2016 and not electing Plan U.

¹ Improvement is prospective only for service after July 1, 2023.

Section 4: Actuarial Valuation Basis

CalPEPRA Safety Plans

Membership Tier	Membership Tier Eligibility
Plan V (2.7% @ 57)	Safety members of Orange County (Law Enforcement and Probation) and Orange County Fire Authority with membership dates on or after January 1, 2013.

Final average compensation and service for benefit determination

Final Compensation and Service	Plan Provision
Final average compensation	
Plans A, E, G, I, M, O and Q	Highest consecutive 12 months of compensation earnable (§31462.1) (FAS1).
Plans B, F, H, J, N, P, R and S	Highest consecutive 36 months of compensation earnable (§31462) (FAS3).
Plan T	Highest 36 months of pensionable compensation (§7522.32 and §7522.34) (FAS3).
Plans U, V and W	Highest 36 months of pensionable compensation (§7522.10(c), §7522.32 and §7522.34) (FAS3).
Compensation limit	
Plan U, V and W	<p>Pensionable compensation is limited to \$155,081 for 2025 for an employer that is enrolled in Social Security. For an employer that is not enrolled in Social Security, the maximum amount for 2025 is 120% of \$155,081, or \$186,096 (§7522.10).</p> <p>These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2025 (§7522.10(d)).</p>
Service	
All members	Years of service (Yrs) are generally based on a member's employment during a period of time for which deductions are made from their compensation.

Service retirement benefits

Provision by Tier	Service Retirement Plan Provision
Eligibility	
General Plans A, B, G, H, I, J, M, N, O, P, S, T and W	Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years of service regardless of age (§31672). All part time members over age 55 with 10 years of employment may retire with five years of service.
General Plan U	Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).

Section 4: Actuarial Valuation Basis

Provision by Tier	Service Retirement Plan Provision
Safety Plans E, F, Q and R	Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years regardless of age (§31663.25). All part time members over age 55 with 10 years of employment may retire with 5 years of service.
Safety Plan V	Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).
Benefit amount	
All members	The benefit formula for all members varies by membership tier and retirement age. See the tables below for a selection of benefit formulas at various ages for each membership tier.
Maximum benefit	
Plans A, B, E, F, G, H, I, J, M, N, O, P, Q, R, S, T and W	100% of final average compensation (§31676.01, §31676.1, §31676.12, §31676.16, §31676.18, §31676.19, §31664.1, §31664.2).
Plans U and V	There is no final compensation limit on the maximum retirement benefit.

Service retirement benefit formula (sample ages)

Tier and Retirement Age	Service Retirement Benefit Formula by Tier
General Plan G – 2.5% @ 55 (§31676.18)	
50	2.00% × FAS1 × Yrs
55	2.50% × FAS1 × Yrs
60	2.50% × FAS1 × Yrs
62 and over ¹	2.62% × FAS1 × Yrs
General Plan H – 2.5% @ 55 (§31676.18)	
50	2.00% × FAS3 × Yrs
55 and over	2.50% × FAS3 × Yrs
General Plan I – 2.7% @ 55 (§31676.19)	
50	2.00% × FAS1 × Yrs
55 and over	2.70% × FAS1 × Yrs

¹ Reflects benefit factors from Plan A as they provide a better benefit than those under 2.5% @ 55.

Section 4: Actuarial Valuation Basis

Tier and Retirement Age	Service Retirement Benefit Formula by Tier
General Plan J – 2.7% @ 55 (\$31676.19)	
50	$2.00\% \times \text{FAS3} \times \text{Yrs}$
55 and over	$2.70\% \times \text{FAS3} \times \text{Yrs}$
General Plan M – 2.0% @ 55 (\$31676.16)	
50	$1.43\% \times \text{FAS1} \times \text{Yrs}$
55	$2.00\% \times \text{FAS1} \times \text{Yrs}$
60 ¹	$2.34\% \times \text{FAS1} \times \text{Yrs}$
62 and over ¹	$2.62\% \times \text{FAS1} \times \text{Yrs}$
General Plan N – 2.0% @ 55 (\$31676.16)	
50	$1.43\% \times \text{FAS3} \times \text{Yrs}$
55	$2.00\% \times \text{FAS3} \times \text{Yrs}$
60	$2.26\% \times \text{FAS3} \times \text{Yrs}$
62	$2.37\% \times \text{FAS3} \times \text{Yrs}$
65 and over ²	$2.43\% \times \text{FAS3} \times \text{Yrs}$
General Plan O – 1.62% @ 65 (\$31676.01)	
50	$0.79\% \times \text{FAS1} \times \text{Yrs}$
55	$0.99\% \times \text{FAS1} \times \text{Yrs}$
60	$1.28\% \times \text{FAS1} \times \text{Yrs}$
62	$1.39\% \times \text{FAS1} \times \text{Yrs}$
65 and over	$1.62\% \times \text{FAS1} \times \text{Yrs}$

¹ Reflects benefit factors from Plan A as they provide a better benefit than those under 2.0% @ 55.

² Reflects benefit factors from Plan B as they provide a better benefit than those under 2.0% @ 55.

Section 4: Actuarial Valuation Basis

Tier and Retirement Age	Service Retirement Benefit Formula by Tier
General Plans P, T and W – 1.62% @ 65 (\$31676.01)	
50	0.79% x FAS3 x Yrs
55	0.99% x FAS3 x Yrs
60	1.28% x FAS3 x Yrs
62	1.39% x FAS3 x Yrs
65 and over	1.62% x FAS3 x Yrs
General Plan S – 2.0% @ 57 (\$31676.12)	
50	1.34% x FAS3 x Yrs
55	1.77% x FAS3 x Yrs
60	2.34% x FAS3 x Yrs
62 and over	2.62% x FAS3 x Yrs
General Plan A – 2.0% @ 57 (\$31676.12)	
50	1.34% x FAS1 x Yrs
55	1.77% x FAS1 x Yrs
60	2.34% x FAS1 x Yrs
62 and over	2.62% x FAS1 x Yrs
General Plan B – 1.64% @ 57 (\$31676.1)	
50	1.18% x FAS3 x Yrs
55	1.49% x FAS3 x Yrs
60	1.92% x FAS3 x Yrs
62	2.09% x FAS3 x Yrs
65 and over	2.43% x FAS3 x Yrs

Section 4: Actuarial Valuation Basis

Tier and Retirement Age	Service Retirement Benefit Formula by Tier
General Plan U – 2.5% @ 67 (\$7522.20(a))	
52	1.00% x FAS3 x Yrs
55	1.30% x FAS3 x Yrs
60	1.80% x FAS3 x Yrs
62	2.00% x FAS3 x Yrs
65	2.30% x FAS3 x Yrs
67 and over	2.50% x FAS3 x Yrs
Safety Plan E – 3.0% @ 50 (\$31664.1)	
50 and over	3.00% x FAS1 x Yrs
Safety Plan F – 3.0% @ 50 (\$31664.1)	
50 and over	3.00% x FAS3 x Yrs
Safety Plan Q – 3.0% @ 55 (\$31664.2)	
50	2.29% x FAS1 x Yrs
55 and over	3.00% x FAS1 x Yrs
Safety Plan R – 3.0% @ 55 (\$31664.2)	
50	2.29% x FAS3 x Yrs
55 and over	3.00% x FAS3 x Yrs
Safety Plan V – 2.7% @ 57 (\$7522.25(d))	
50	2.00% x FAS3 x Yrs
55	2.50% x FAS3 x Yrs
57 and over	2.70% x FAS3 x Yrs

Section 4: Actuarial Valuation Basis

Disability benefits

Non-service-connected disability

Provision by Tier	Non-Service-Connected Disability Plan Provision
Eligibility	
All members	Five years of service (§31720).
Benefit amount	
General Plans A, G, I, M and O	1.8% of final average compensation per year of service. If the benefit does not exceed one-third of final average compensation, the service is projected to 62, but the total projected benefit cannot be more than one-third of final average compensation (§31727.1). 100% of the service retirement benefit is payable, if greater.
General Plans B, H, J, N, P, S, T, U and W	1.5% of final average compensation per year of service. If the benefit does not exceed one-third of final average compensation, the service is projected to 65, but the total projected benefit cannot be more than one-third of final average compensation (§31727). 100% of the service retirement benefit is payable, if greater.
Safety Plans E, F, Q, R and V	1.8% of final average compensation per year of service. If the benefit does not exceed one-third of final average compensation, the service is projected to 55, but the total projected benefit cannot be more than one-third of final average compensation (§31727.2). 100% of the service retirement benefit is payable, if greater.

Service-connected disability

Provision by Tier	Service-Connected Disability Plan Provision
Eligibility	
All members	No age or service requirements (§31720).
Benefit amount	
All members	50% of the final average compensation or 100% of service retirement benefit, if greater (§31727.4).

Section 4: Actuarial Valuation Basis

Pre-retirement death benefits

Non-service-connected death

Provision by Tier	Pre-Retirement Death (Non-Service-Connected Death) Benefit Plan Provision
Eligibility	
All members	No age or service requirements.
Vested members	Five years of service.
Benefit amount	
All members	Refund of employee contributions with interest, plus one month's compensation for each year of service, to a maximum of six months' compensation (§37181). A lump sum benefit in the amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary (§31790).
Vested members	60% of the greater of service retirement or non-service-connected disability benefit payable to surviving eligible spouse (§31765.1, §31781.1), in lieu of the basic lump sum benefit above (§31781).

Service-connected death

Provision by Tier	Pre-Retirement Death (Service-Connected) Benefit Plan Provision
Eligibility	
All members	No age or service requirements.
Benefit amount	
All members	50% of final average compensation or 100% of service retirement benefit, if greater, payable to spouse or minor children (§31787).

Section 4: Actuarial Valuation Basis

Post-retirement death benefits

Service retirement or non-service-connected disability retirement

Provision by Tier	Post-Retirement Death (Service Retirement or Non-Service-Connected Disability Retirement) Benefit Plan Provision
All members	Unless another option was selected at retirement, 60% of member's unmodified allowance continued to eligible spouse (§31760.1). ¹ A lump sum benefit amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary (§31790).

Service-connected disability retirement

Provision by Tier	Post-Retirement Death (Service-Connected Disability Retirement) Benefit Plan Provision
All members	Unless another option was selected at retirement, 100% of member's unmodified allowance continued to eligible spouse (§31786). ¹ A lump sum benefit amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary (§31790).

¹ An eligible spouse is a surviving spouse who was married to the member at least one year prior to the date of retirement.

Section 4: Actuarial Valuation Basis

Withdrawal benefits

Provision by Tier	Withdrawal Benefit Plan Provision
Eligibility	
All members	No age or service requirements.
Vested members	Five years of service.
Benefit amount	
All members	Refund of accumulated employee contributions with interest, or effective January 1, 2003, in lieu of a refund of employee contributions, a member may elect to leave contributions on deposit in the retirement fund (\$31629.5). If contributions left on deposit, eligible for retirement benefits at age 70 (\$31628).
Vested members	Refund of accumulated employee contributions with interest, or if contributions left on deposit, eligible for retirement benefits at any time after eligible to retire (\$31700).

Post-retirement cost-of-living benefits

Annual adjustment based on Consumer Price Index to a maximum of 3% per year; excess “banked” (\$31870.1).

Supplemental benefit

Non-vested supplemental COLA benefit is also paid by the System to eligible retirees and survivors. This benefit has been excluded from this valuation.

Member normal cost contributions

Please refer to *Section 4, Exhibit 3* for specific rates.

Section 4: Actuarial Valuation Basis

Provision by Tier	Member Contribution Plan Provision
General Plan A	
Basic contributions	Entry-age based rates that provide for an annuity at age 60 equal to 1/200 of FAS1 (\$31621.5).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
General Plan B	
Basic contributions	Entry-age based rates that provide for an annuity at age 60 equal to 1/120 of FAS3 (\$31621).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
General Plans G, H, I and J	
Basic contributions	Entry-age based rates that provide for an annuity at age 55 equal to 1/100 of FAS3 (FAS1 for Plans G and I) (\$31621.8).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
General Plans M, N, O and P	
Basic contributions	Entry-age based rates that provide for an annuity at age 60 equal to 1/120 of FAS3 (FAS1 for Plans M and O) (\$31621).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
General Plan S	
Basic contributions	Entry-age based rates that provide for an annuity at age 60 equal to 1/100 of FAS3 (\$31621.2).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
Safety Plans E and Q	
Basic contributions	Entry-age based rates that provide for an annuity at age 50 equal to 1/200 of FAS1 (\$31639.5).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
Safety Plans F and R	
Basic contributions	Entry-age based rates that provide for an annuity at age 50 equal to 1/100 of FAS3 (\$31639.25).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
General Plans T, U, and W and Safety Plan V	
Contributions	Entry-age based rates that provide for one-half of the total normal cost rate.

Section 4: Actuarial Valuation Basis

Other information

Non-CalPEPRA Safety members with 30 or more years of benefit service are exempt from paying member contributions. This also applies for General members hired on or before March 7, 1973.

Changes in Plan Provisions

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

Section 4: Actuarial Valuation Basis

Exhibit 3: Member contribution rates

General Tier 1 Members' Contribution Rates (as a % of Monthly Payroll)

Entry Age	Plan I (2.7% @ 55) Normal	Plan I (2.7% @ 55) Total	Plan A (OCTA) Normal	Plan A (OCTA) Total
16	7.26%	10.25%	3.14%	5.27%
17	7.39%	10.44%	3.19%	5.37%
18	7.53%	10.63%	3.25%	5.47%
19	7.67%	10.82%	3.31%	5.57%
20	7.81%	11.02%	3.38%	5.67%
21	7.95%	11.23%	3.44%	5.78%
22	8.10%	11.44%	3.50%	5.89%
23	8.25%	11.65%	3.57%	5.99%
24	8.40%	11.86%	3.63%	6.11%
25	8.56%	12.08%	3.70%	6.22%
26	8.71%	12.31%	3.77%	6.33%
27	8.88%	12.54%	3.84%	6.45%
28	9.04%	12.77%	3.91%	6.57%
29	9.21%	13.01%	3.98%	6.69%
30	9.39%	13.26%	4.05%	6.81%
31	9.57%	13.51%	4.13%	6.94%
32	9.75%	13.77%	4.21%	7.07%
33	9.94%	14.03%	4.29%	7.20%
34	10.13%	14.31%	4.37%	7.34%
35	10.33%	14.59%	4.45%	7.48%
36	10.52%	14.86%	4.53%	7.62%
37	10.72%	15.14%	4.62%	7.77%
38	10.92%	15.42%	4.71%	7.92%
39	11.11%	15.69%	4.80%	8.07%
40	11.32%	15.98%	4.90%	8.23%

Section 4: Actuarial Valuation Basis

Entry Age	Plan I (2.7% @ 55) Normal	Plan I (2.7% @ 55) Total	Plan A (OCTA) Normal	Plan A (OCTA) Total
41	11.53%	16.28%	4.99%	8.38%
42	11.74%	16.57%	5.08%	8.54%
43	11.95%	16.87%	5.17%	8.69%
44	12.17%	17.18%	5.27%	8.85%
45	12.38%	17.48%	5.36%	9.01%
46	12.60%	17.79%	5.46%	9.18%
47	12.75%	18.00%	5.56%	9.35%
48	12.89%	18.20%	5.66%	9.52%
49	12.97%	18.32%	5.77%	9.69%
50	12.99%	18.35%	5.87%	9.86%
51	12.92%	18.24%	5.97%	10.03%
52	12.74%	17.99%	6.04%	10.15%
53	12.45%	17.58%	6.11%	10.27%
54	12.21%	17.25%	6.15%	10.33%
55	12.21%	17.25%	6.16%	10.35%
56	12.21%	17.25%	6.12%	10.29%
57	12.21%	17.25%	6.04%	10.15%
58	12.21%	17.25%	5.90%	9.92%
59	12.21%	17.25%	5.79%	9.73%
60 and over	12.21%	17.25%	5.79%	9.73%
COLA loading		41.21%		68.08%

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See Section 4, Exhibit 1

Salary increase: Inflation (2.50%) + "across-the-board" (0.50%) + merit and promotion (See Section 4, Exhibit 1)

Additional cashouts: See Section 4, Exhibit 1

Section 4: Actuarial Valuation Basis

General Tier 2 Members' Contribution Rates (as a % of Monthly Payroll)

Entry Age	Plan J (2.7% @ 55 non-OCFA) Normal	Plan J (2.7% @ 55 non-OCFA) Total	Plan H (2.5% @ 55 OCSD) Normal	Plan H (2.5% @ 55 OCSD) Total	Plan N (2.0% @ 55) ¹ Normal	Plan N (2.0% @ 55) ¹ Total
16	6.99%	9.88%	6.99%	9.64%	5.04%	7.57%
17	7.12%	10.06%	7.12%	9.82%	5.13%	7.71%
18	7.25%	10.24%	7.25%	10.00%	5.23%	7.85%
19	7.39%	10.43%	7.39%	10.18%	5.33%	8.00%
20	7.52%	10.62%	7.52%	10.37%	5.42%	8.15%
21	7.66%	10.82%	7.66%	10.56%	5.52%	8.30%
22	7.80%	11.02%	7.80%	10.76%	5.63%	8.45%
23	7.95%	11.22%	7.95%	10.95%	5.73%	8.60%
24	8.09%	11.43%	8.09%	11.16%	5.83%	8.76%
25	8.24%	11.64%	8.24%	11.36%	5.94%	8.92%
26	8.39%	11.85%	8.39%	11.57%	6.05%	9.09%
27	8.55%	12.07%	8.55%	11.79%	6.16%	9.26%
28	8.71%	12.30%	8.71%	12.01%	6.28%	9.43%
29	8.87%	12.53%	8.87%	12.23%	6.39%	9.60%
30	9.04%	12.76%	9.04%	12.46%	6.51%	9.78%
31	9.21%	13.00%	9.21%	12.69%	6.63%	9.96%
32	9.38%	13.25%	9.38%	12.94%	6.75%	10.14%
33	9.56%	13.51%	9.56%	13.19%	6.88%	10.33%
34	9.74%	13.76%	9.74%	13.43%	7.01%	10.52%
35	9.92%	14.01%	9.92%	13.68%	7.14%	10.72%
36	10.10%	14.26%	10.10%	13.93%	7.27%	10.92%
37	10.28%	14.52%	10.28%	14.17%	7.41%	11.13%
38	10.46%	14.77%	10.46%	14.42%	7.55%	11.35%
39	10.64%	15.03%	10.64%	14.67%	7.70%	11.56%
40	10.83%	15.29%	10.83%	14.93%	7.84%	11.77%

¹ Payable by members in Rate Group #9 and Rate Group #11.

Section 4: Actuarial Valuation Basis

Entry Age	Plan J (2.7% @ 55 non-OCFA) Normal	Plan J (2.7% @ 55 non-OCFA) Total	Plan H (2.5% @ 55 OCSD) Normal	Plan H (2.5% @ 55 OCSD) Total	Plan N (2.0% @ 55) ¹ Normal	Plan N (2.0% @ 55) ¹ Total
41	11.02%	15.56%	11.02%	15.19%	7.98%	11.98%
42	11.20%	15.82%	11.20%	15.44%	8.12%	12.20%
43	11.39%	16.08%	11.39%	15.70%	8.26%	12.41%
44	11.57%	16.33%	11.57%	15.94%	8.41%	12.63%
45	11.72%	16.55%	11.72%	16.16%	8.55%	12.85%
46	11.85%	16.73%	11.85%	16.33%	8.70%	13.07%
47	11.93%	16.85%	11.93%	16.45%	8.85%	13.29%
48	11.97%	16.91%	11.97%	16.50%	8.99%	13.51%
49	11.94%	16.86%	11.94%	16.46%	9.13%	13.72%
50	11.83%	16.71%	11.83%	16.31%	9.26%	13.90%
51	11.64%	16.44%	11.64%	16.05%	9.36%	14.06%
52	11.44%	16.16%	11.44%	15.77%	9.42%	14.16%
53	11.82%	16.69%	11.82%	16.29%	9.46%	14.20%
54	12.21%	17.25%	12.21%	16.84%	9.43%	14.17%
55	12.21%	17.25%	12.21%	16.84%	9.35%	14.04%
56	12.21%	17.25%	12.21%	16.84%	9.19%	13.81%
57	12.21%	17.25%	12.21%	16.84%	9.04%	13.57%
58	12.21%	17.25%	12.21%	16.84%	9.33%	14.02%
59	12.21%	17.25%	12.21%	16.84%	9.65%	14.49%
60 and over	12.21%	17.25%	12.21%	16.84%	9.65%	14.49%
COLA loading		41.21%			37.85%	50.20%

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See *Section 4, Exhibit 1*

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See *Section 4, Exhibit 1*)

Additional cashouts: See *Section 4, Exhibit 1*

¹ Payable by members in Rate Group #9 and Rate Group #11.

Section 4: Actuarial Valuation Basis

General Tier 2 Members' Contribution Rates (as a % of Monthly Payroll)

Entry Age	Plan B (OCTA) Normal	Plan B (OCTA) Total	Plan B (County and IHSS) Normal	Plan B (County and IHSS) Total	Plan J (2.7% @ 55 OCFA) Normal	Plan J (2.7% @ 55 OCFA) Total
16	5.04%	7.10%	5.04%	6.89%	6.99%	9.81%
17	5.13%	7.23%	5.13%	7.02%	7.12%	9.99%
18	5.23%	7.36%	5.23%	7.15%	7.25%	10.18%
19	5.33%	7.50%	5.33%	7.28%	7.39%	10.37%
20	5.42%	7.64%	5.42%	7.42%	7.52%	10.56%
21	5.52%	7.78%	5.52%	7.56%	7.66%	10.75%
22	5.63%	7.92%	5.63%	7.69%	7.80%	10.95%
23	5.73%	8.07%	5.73%	7.84%	7.95%	11.15%
24	5.83%	8.22%	5.83%	7.98%	8.09%	11.36%
25	5.94%	8.37%	5.94%	8.13%	8.24%	11.56%
26	6.05%	8.52%	6.05%	8.28%	8.39%	11.78%
27	6.16%	8.68%	6.16%	8.43%	8.55%	12.00%
28	6.28%	8.84%	6.28%	8.58%	8.71%	12.22%
29	6.39%	9.00%	6.39%	8.74%	8.87%	12.45%
30	6.51%	9.17%	6.51%	8.90%	9.04%	12.68%
31	6.63%	9.34%	6.63%	9.07%	9.21%	12.92%
32	6.75%	9.51%	6.75%	9.24%	9.38%	13.17%
33	6.88%	9.69%	6.88%	9.41%	9.56%	13.42%
34	7.01%	9.87%	7.01%	9.58%	9.74%	13.67%
35	7.14%	10.05%	7.14%	9.76%	9.92%	13.93%
36	7.27%	10.24%	7.27%	9.95%	10.10%	14.17%
37	7.41%	10.44%	7.41%	10.14%	10.28%	14.43%
38	7.55%	10.64%	7.55%	10.33%	10.46%	14.68%
39	7.70%	10.84%	7.70%	10.53%	10.64%	14.94%
40	7.84%	11.04%	7.84%	10.72%	10.83%	15.20%

Section 4: Actuarial Valuation Basis

Entry Age	Plan B (OCTA) Normal	Plan B (OCTA) Total	Plan B (County and IHSS) Normal	Plan B (County and IHSS) Total	Plan J (2.7% @ 55 OCFA) Normal	Plan J (2.7% @ 55 OCFA) Total
41	7.98%	11.24%	7.98%	10.91%	11.02%	15.46%
42	8.12%	11.44%	8.12%	11.11%	11.20%	15.72%
43	8.26%	11.64%	8.26%	11.30%	11.39%	15.98%
44	8.41%	11.84%	8.41%	11.50%	11.57%	16.23%
45	8.55%	12.05%	8.55%	11.70%	11.72%	16.45%
46	8.70%	12.25%	8.70%	11.90%	11.85%	16.63%
47	8.85%	12.46%	8.85%	12.10%	11.93%	16.74%
48	8.99%	12.67%	8.99%	12.30%	11.97%	16.80%
49	9.13%	12.87%	9.13%	12.49%	11.94%	16.76%
50	9.26%	13.04%	9.26%	12.66%	11.83%	16.60%
51	9.36%	13.18%	9.36%	12.80%	11.64%	16.33%
52	9.42%	13.27%	9.42%	12.89%	11.44%	16.06%
53	9.46%	13.32%	9.46%	12.93%	11.82%	16.58%
54	9.43%	13.29%	9.43%	12.90%	12.21%	17.14%
55	9.35%	13.16%	9.35%	12.78%	12.21%	17.14%
56	9.19%	12.95%	9.19%	12.57%	12.21%	17.14%
57	9.04%	12.73%	9.04%	12.36%	12.21%	17.14%
58	9.33%	13.15%	9.33%	12.77%	12.21%	17.14%
59	9.65%	13.59%	9.65%	13.20%	12.21%	17.14%
60 and over	9.65%	13.59%	9.65%	13.20%	12.21%	17.14%
COLA loading		40.85%				40.32%

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See *Section 4, Exhibit 1*

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See *Section 4, Exhibit 1*)

Additional cashouts: See *Section 4, Exhibit 1*

Section 4: Actuarial Valuation Basis

General Tier 2 Members' Contribution Rates (as a % of Monthly Payroll)

Entry Age	Plan P (1.62% @ 65) Normal	Plan P (1.62% @ 65) Total	Plan B (OCSD) Normal	Plan B (OCSD) Total	Plan N (OCFA) Normal	Plan N (OCFA) Total
16	5.04%	6.39%	5.04%	7.26%	5.04%	7.92%
17	5.13%	6.51%	5.13%	7.39%	5.13%	8.06%
18	5.23%	6.63%	5.23%	7.53%	5.23%	8.21%
19	5.33%	6.75%	5.33%	7.67%	5.33%	8.37%
20	5.42%	6.88%	5.42%	7.81%	5.42%	8.52%
21	5.52%	7.00%	5.52%	7.96%	5.52%	8.68%
22	5.63%	7.13%	5.63%	8.10%	5.63%	8.84%
23	5.73%	7.26%	5.73%	8.25%	5.73%	9.00%
24	5.83%	7.40%	5.83%	8.40%	5.83%	9.17%
25	5.94%	7.53%	5.94%	8.56%	5.94%	9.33%
26	6.05%	7.67%	6.05%	8.72%	6.05%	9.51%
27	6.16%	7.81%	6.16%	8.88%	6.16%	9.68%
28	6.28%	7.96%	6.28%	9.04%	6.28%	9.86%
29	6.39%	8.10%	6.39%	9.21%	6.39%	10.04%
30	6.51%	8.25%	6.51%	9.38%	6.51%	10.23%
31	6.63%	8.41%	6.63%	9.55%	6.63%	10.42%
32	6.75%	8.56%	6.75%	9.73%	6.75%	10.61%
33	6.88%	8.72%	6.88%	9.91%	6.88%	10.81%
34	7.01%	8.88%	7.01%	10.09%	7.01%	11.01%
35	7.14%	9.05%	7.14%	10.28%	7.14%	11.21%
36	7.27%	9.22%	7.27%	10.48%	7.27%	11.43%
37	7.41%	9.40%	7.41%	10.68%	7.41%	11.64%
38	7.55%	9.58%	7.55%	10.88%	7.55%	11.87%
39	7.70%	9.76%	7.70%	11.09%	7.70%	12.09%
40	7.84%	9.94%	7.84%	11.29%	7.84%	12.31%

Section 4: Actuarial Valuation Basis

Entry Age	Plan P (1.62% @ 65) Normal	Plan P (1.62% @ 65) Total	Plan B (OCSD) Normal	Plan B (OCSD) Total	Plan N (OCFA) Normal	Plan N (OCFA) Total
41	7.98%	10.11%	7.98%	11.49%	7.98%	12.53%
42	8.12%	10.29%	8.12%	11.70%	8.12%	12.76%
43	8.26%	10.47%	8.26%	11.90%	8.26%	12.98%
44	8.41%	10.66%	8.41%	12.11%	8.41%	13.21%
45	8.55%	10.84%	8.55%	12.32%	8.55%	13.44%
46	8.70%	11.03%	8.70%	12.53%	8.70%	13.67%
47	8.85%	11.22%	8.85%	12.74%	8.85%	13.90%
48	8.99%	11.40%	8.99%	12.95%	8.99%	14.13%
49	9.13%	11.58%	9.13%	13.16%	9.13%	14.35%
50	9.26%	11.74%	9.26%	13.33%	9.26%	14.54%
51	9.36%	11.86%	9.36%	13.48%	9.36%	14.70%
52	9.42%	11.95%	9.42%	13.58%	9.42%	14.81%
53	9.46%	11.99%	9.46%	13.62%	9.46%	14.85%
54	9.43%	11.96%	9.43%	13.59%	9.43%	14.82%
55	9.35%	11.85%	9.35%	13.46%	9.35%	14.68%
56	9.19%	11.65%	9.19%	13.24%	9.19%	14.44%
57	9.04%	11.46%	9.04%	13.02%	9.04%	14.20%
58	9.33%	11.83%	9.33%	13.44%	9.33%	14.66%
59	9.65%	12.23%	9.65%	13.90%	9.65%	15.16%
60 and over	9.65%	12.23%	9.65%	13.90%	9.65%	15.16%
COLA loading		26.78%			57.10%	
			44.04%			

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See *Section 4, Exhibit 1*

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See *Section 4, Exhibit 1*)

Additional cashouts: See *Section 4, Exhibit 1*

Section 4: Actuarial Valuation Basis

General Tier 2 Members' Contribution Rates (as a % of Monthly Payroll)

Entry Age	Plan S (City of SJC) Normal	Plan S (City of SJC) Total	Plan H (2.5% @ 55 (Law Library) Normal	Plan H (2.5% @ 55 (Law Library) Total
16	6.05%	8.71%	6.99%	9.52%
17	6.16%	8.87%	7.12%	9.69%
18	6.27%	9.03%	7.25%	9.87%
19	6.39%	9.20%	7.39%	10.05%
20	6.51%	9.37%	7.52%	10.24%
21	6.63%	9.54%	7.66%	10.43%
22	6.75%	9.72%	7.80%	10.62%
23	6.87%	9.90%	7.95%	10.81%
24	7.00%	10.08%	8.09%	11.01%
25	7.13%	10.27%	8.24%	11.21%
26	7.26%	10.46%	8.39%	11.42%
27	7.39%	10.65%	8.55%	11.63%
28	7.53%	10.84%	8.71%	11.85%
29	7.67%	11.04%	8.87%	12.07%
30	7.81%	11.25%	9.04%	12.30%
31	7.96%	11.46%	9.21%	12.53%
32	8.10%	11.67%	9.38%	12.77%
33	8.25%	11.89%	9.56%	13.02%
34	8.41%	12.11%	9.74%	13.26%
35	8.57%	12.33%	9.92%	13.50%
36	8.73%	12.57%	10.10%	13.75%
37	8.89%	12.81%	10.28%	13.99%
38	9.07%	13.05%	10.46%	14.23%
39	9.24%	13.30%	10.64%	14.48%
40	9.41%	13.54%	10.83%	14.74%

Section 4: Actuarial Valuation Basis

Entry Age	Plan S (City of SJC) Normal	Plan S (City of SJC) Total	Plan H (2.5% @ 55 (Law Library) Normal	Plan H (2.5% @ 55 (Law Library) Total
41	9.57%	13.79%	11.02%	14.99%
42	9.74%	14.03%	11.20%	15.24%
43	9.91%	14.28%	11.39%	15.49%
44	10.09%	14.53%	11.57%	15.74%
45	10.26%	14.78%	11.72%	15.95%
46	10.44%	15.03%	11.85%	16.12%
47	10.62%	15.29%	11.93%	16.24%
48	10.79%	15.54%	11.97%	16.29%
49	10.96%	15.78%	11.94%	16.25%
50	11.11%	16.00%	11.83%	16.10%
51	11.23%	16.17%	11.64%	15.84%
52	11.31%	16.29%	11.44%	15.57%
53	11.35%	16.34%	11.82%	16.08%
54	11.32%	16.30%	12.21%	16.62%
55	11.22%	16.15%	12.21%	16.62%
56	11.03%	15.89%	12.21%	16.62%
57	10.85%	15.62%	12.21%	16.62%
58	11.20%	16.13%	12.21%	16.62%
59	11.58%	16.67%	12.21%	16.62%
60 and over	11.58%	16.67%	12.21%	16.62%
COLA loading		44.00%		36.07%

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See *Section 4, Exhibit 1*

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See *Section 4, Exhibit 1*)

Additional cashouts: See *Section 4, Exhibit 1*

Section 4: Actuarial Valuation Basis

General CalPEPRA Members' Contribution Rates (as a % of Monthly Payroll)¹

Entry Age	Rate Group #1 (Plan U) Normal	Rate Group #1 (Plan U) Total	Rate Group #2 (Plan T) Normal	Rate Group #2 (Plan T) Total	Rate Group #2 (Plan U) Normal	Rate Group #2 (Plan U) Total
16	5.99%	8.09%	3.84%	5.16%	5.43%	7.37%
17	5.73%	7.73%	3.92%	5.26%	5.19%	7.05%
18	5.45%	7.36%	3.99%	5.35%	4.95%	6.71%
19	5.55%	7.50%	4.06%	5.45%	5.04%	6.84%
20	5.66%	7.64%	4.14%	5.56%	5.13%	6.96%
21	5.76%	7.79%	4.21%	5.66%	5.23%	7.09%
22	5.87%	7.93%	4.29%	5.76%	5.33%	7.23%
23	5.98%	8.08%	4.37%	5.87%	5.43%	7.36%
24	6.09%	8.23%	4.45%	5.98%	5.53%	7.50%
25	6.21%	8.38%	4.54%	6.09%	5.63%	7.64%
26	6.32%	8.54%	4.62%	6.20%	5.73%	7.78%
27	6.44%	8.70%	4.70%	6.32%	5.84%	7.92%
28	6.56%	8.86%	4.79%	6.43%	5.95%	8.07%
29	6.68%	9.02%	4.88%	6.55%	6.06%	8.22%
30	6.80%	9.19%	4.97%	6.67%	6.17%	8.37%
31	6.93%	9.36%	5.06%	6.80%	6.29%	8.53%
32	7.06%	9.53%	5.16%	6.92%	6.40%	8.68%
33	7.19%	9.71%	5.25%	7.05%	6.52%	8.84%
34	7.32%	9.89%	5.35%	7.19%	6.64%	9.01%
35	7.45%	10.07%	5.46%	7.32%	6.76%	9.17%
36	7.59%	10.26%	5.56%	7.46%	6.89%	9.34%
37	7.73%	10.45%	5.67%	7.61%	7.02%	9.52%
38	7.88%	10.64%	5.78%	7.75%	7.15%	9.70%
39	8.02%	10.84%	5.89%	7.90%	7.28%	9.88%
40	8.18%	11.04%	6.00%	8.05%	7.42%	10.06%

¹ It is our understanding that in the determination of pension benefits under the CalPEPRA 2.5% at 67 formula and the Plan W 1.62% at 65 formula, the maximum compensation that can be taken into account should be limited by the compensation limit as noted in *Section 4, Exhibit 2*, page 129 (\$7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers for future years (\$7522.10(d)).

Section 4: Actuarial Valuation Basis

Entry Age	Rate Group #1 (Plan U) Normal	Rate Group #1 (Plan U) Total	Rate Group #2 (Plan T) Normal	Rate Group #2 (Plan T) Total	Rate Group #2 (Plan U) Normal	Rate Group #2 (Plan U) Total
41	8.33%	11.25%	6.11%	8.20%	7.56%	10.25%
42	8.49%	11.47%	6.22%	8.34%	7.70%	10.45%
43	8.65%	11.68%	6.33%	8.49%	7.85%	10.64%
44	8.82%	11.91%	6.44%	8.65%	8.00%	10.85%
45	8.99%	12.14%	6.56%	8.80%	8.15%	11.06%
46	9.16%	12.37%	6.67%	8.96%	8.31%	11.27%
47	9.33%	12.60%	6.79%	9.11%	8.46%	11.48%
48	9.50%	12.83%	6.91%	9.27%	8.62%	11.69%
49	9.67%	13.06%	7.02%	9.42%	8.77%	11.90%
50	9.84%	13.30%	7.12%	9.56%	8.93%	12.11%
51	10.02%	13.54%	7.21%	9.68%	9.09%	12.33%
52	10.20%	13.78%	7.27%	9.76%	9.25%	12.55%
53	10.38%	14.02%	7.31%	9.81%	9.42%	12.77%
54	10.56%	14.27%	7.31%	9.81%	9.58%	13.00%
55	10.74%	14.51%	7.26%	9.75%	9.75%	13.22%
56	10.92%	14.75%	7.17%	9.63%	9.91%	13.44%
57	11.08%	14.97%	7.11%	9.54%	10.05%	13.63%
58	11.21%	15.15%	7.34%	9.85%	10.17%	13.80%
59	11.31%	15.28%	7.59%	10.18%	10.26%	13.92%
60	11.37%	15.36%	7.59%	10.18%	10.31%	13.99%
61	11.37%	15.35%	7.59%	10.18%	10.31%	13.99%
62	11.30%	15.26%	7.59%	10.18%	10.25%	13.90%
63	11.16%	15.08%	7.59%	10.18%	10.13%	13.74%
64	11.06%	14.94%	7.59%	10.18%	10.03%	13.61%
65	11.42%	15.42%	7.59%	10.18%	10.36%	14.05%
66 and over	11.80%	15.94%	7.59%	10.18%	10.71%	14.52%
COLA loading		35.10%				35.66%

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See Section 4, Exhibit 1

Salary increase: Inflation (2.50%) + "across-the-board" (0.50%) + merit and promotion (See Section 4, Exhibit 1)

Section 4: Actuarial Valuation Basis

General CalPEPRA Members' Contribution Rates (as a % of Monthly Payroll)¹

Entry Age	Rate Group #2 (Plan W) Normal	Rate Group #2 (Plan W) Total	Rate Group #3 (Plan U) Normal	Rate Group #3 (Plan U) Total	Rate Group #5 (Plan U) Normal	Rate Group #5 (Plan U) Total
16	3.97%	5.04%	5.61%	7.61%	6.46%	8.79%
17	4.04%	5.14%	5.37%	7.28%	6.18%	8.40%
18	4.11%	5.23%	5.11%	6.93%	5.88%	8.00%
19	4.19%	5.33%	5.21%	7.06%	6.00%	8.15%
20	4.27%	5.43%	5.30%	7.19%	6.11%	8.30%
21	4.35%	5.53%	5.40%	7.32%	6.22%	8.46%
22	4.43%	5.63%	5.50%	7.46%	6.34%	8.62%
23	4.51%	5.73%	5.61%	7.60%	6.46%	8.78%
24	4.59%	5.84%	5.71%	7.74%	6.58%	8.94%
25	4.68%	5.95%	5.82%	7.89%	6.70%	9.11%
26	4.76%	6.06%	5.93%	8.03%	6.82%	9.28%
27	4.85%	6.17%	6.04%	8.18%	6.95%	9.45%
28	4.94%	6.28%	6.15%	8.33%	7.08%	9.62%
29	5.03%	6.40%	6.26%	8.49%	7.21%	9.80%
30	5.13%	6.52%	6.38%	8.64%	7.34%	9.98%
31	5.22%	6.64%	6.49%	8.80%	7.48%	10.17%
32	5.32%	6.76%	6.61%	8.97%	7.62%	10.36%
33	5.42%	6.89%	6.74%	9.13%	7.76%	10.55%
34	5.52%	7.02%	6.86%	9.30%	7.90%	10.74%
35	5.63%	7.15%	6.99%	9.47%	8.05%	10.94%
36	5.73%	7.29%	7.12%	9.65%	8.20%	11.14%
37	5.84%	7.43%	7.25%	9.83%	8.35%	11.35%
38	5.96%	7.58%	7.38%	10.01%	8.50%	11.56%
39	6.07%	7.72%	7.52%	10.20%	8.66%	11.78%
40	6.18%	7.86%	7.66%	10.39%	8.83%	12.00%

¹ It is our understanding that in the determination of pension benefits under the CalPEPRA 2.5% at 67 formula and the Plan W 1.62% at 65 formula, the maximum compensation that can be taken into account should be limited by the compensation limit as noted in *Section 4, Exhibit 2*, page 129 (\$7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers for future years (\$7522.10(d)).

Section 4: Actuarial Valuation Basis

Entry Age	Rate Group #2 (Plan W) Normal	Rate Group #2 (Plan W) Total	Rate Group #3 (Plan U) Normal	Rate Group #3 (Plan U) Total	Rate Group #5 (Plan U) Normal	Rate Group #5 (Plan U) Total
41	6.30%	8.01%	7.81%	10.58%	8.99%	12.22%
42	6.41%	8.15%	7.96%	10.79%	9.16%	12.46%
43	6.53%	8.30%	8.11%	10.99%	9.34%	12.69%
44	6.64%	8.45%	8.26%	11.20%	9.52%	12.94%
45	6.76%	8.60%	8.42%	11.42%	9.70%	13.19%
46	6.88%	8.75%	8.58%	11.64%	9.89%	13.44%
47	7.00%	8.90%	8.75%	11.86%	10.07%	13.69%
48	7.12%	9.06%	8.90%	12.07%	10.25%	13.94%
49	7.24%	9.21%	9.06%	12.29%	10.44%	14.19%
50	7.34%	9.34%	9.23%	12.51%	10.63%	14.45%
51	7.43%	9.45%	9.39%	12.73%	10.82%	14.70%
52	7.50%	9.53%	9.56%	12.96%	11.01%	14.97%
53	7.54%	9.58%	9.73%	13.19%	11.21%	15.23%
54	7.53%	9.58%	9.90%	13.42%	11.40%	15.50%
55	7.49%	9.52%	10.07%	13.65%	11.60%	15.77%
56	7.40%	9.41%	10.24%	13.88%	11.79%	16.03%
57	7.33%	9.32%	10.39%	14.08%	11.96%	16.26%
58	7.57%	9.62%	10.51%	14.25%	12.10%	16.46%
59	7.82%	9.95%	10.60%	14.37%	12.21%	16.60%
60	7.82%	9.95%	10.66%	14.45%	12.27%	16.68%
61	7.82%	9.95%	10.65%	14.44%	12.27%	16.68%
62	7.82%	9.95%	10.59%	14.36%	12.19%	16.58%
63	7.82%	9.95%	10.46%	14.18%	12.05%	16.38%
64	7.82%	9.95%	10.36%	14.05%	11.94%	16.23%
65	7.82%	9.95%	10.70%	14.51%	12.33%	16.76%
66 and over	7.82%	9.95%	11.06%	15.00%	12.74%	17.32%
COLA loading		27.16%	35.57%		35.95%	

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See Section 4, Exhibit 1

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See Section 4, Exhibit 1)

Section 4: Actuarial Valuation Basis

General CalPEPRA Members' Contribution Rates (as a % of Monthly Payroll)¹

Entry Age	Rate Group #9 (Plan U) Normal	Rate Group #9 (Plan U) Total	Rate Group #10 (Plan U) Normal	Rate Group #10 (Plan U) Total	Rate Group #11 (Plan U) Normal	Rate Group #11 (Plan U) Total
16	5.71%	7.69%	5.82%	7.91%	6.22%	8.42%
17	5.46%	7.35%	5.57%	7.56%	5.95%	8.05%
18	5.20%	7.00%	5.30%	7.20%	5.66%	7.67%
19	5.30%	7.13%	5.40%	7.33%	5.77%	7.81%
20	5.40%	7.26%	5.50%	7.47%	5.88%	7.96%
21	5.50%	7.40%	5.61%	7.61%	5.99%	8.11%
22	5.60%	7.54%	5.71%	7.75%	6.10%	8.26%
23	5.70%	7.68%	5.82%	7.90%	6.22%	8.41%
24	5.81%	7.82%	5.93%	8.04%	6.33%	8.57%
25	5.92%	7.97%	6.04%	8.19%	6.45%	8.73%
26	6.03%	8.11%	6.15%	8.34%	6.57%	8.89%
27	6.14%	8.26%	6.26%	8.50%	6.69%	9.06%
28	6.25%	8.42%	6.38%	8.66%	6.81%	9.22%
29	6.37%	8.57%	6.50%	8.82%	6.94%	9.39%
30	6.49%	8.73%	6.62%	8.98%	7.07%	9.57%
31	6.61%	8.89%	6.74%	9.15%	7.20%	9.74%
32	6.73%	9.06%	6.86%	9.31%	7.33%	9.92%
33	6.85%	9.22%	6.99%	9.49%	7.47%	10.11%
34	6.98%	9.39%	7.12%	9.66%	7.61%	10.29%
35	7.11%	9.57%	7.25%	9.84%	7.75%	10.49%
36	7.24%	9.75%	7.38%	10.02%	7.89%	10.68%
37	7.38%	9.93%	7.52%	10.21%	8.04%	10.88%
38	7.51%	10.11%	7.66%	10.40%	8.19%	11.08%
39	7.65%	10.30%	7.80%	10.59%	8.34%	11.29%
40	7.80%	10.49%	7.95%	10.79%	8.50%	11.50%

¹ It is our understanding that in the determination of pension benefits under the CalPEPRA 2.5% at 67 formula and the Plan W 1.62% at 65 formula, the maximum compensation that can be taken into account should be limited by the compensation limit as noted in *Section 4, Exhibit 2*, page 129 (\$7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers for future years (\$7522.10(d)).

Section 4: Actuarial Valuation Basis

Entry Age	Rate Group #9 (Plan U) Normal	Rate Group #9 (Plan U) Total	Rate Group #10 (Plan U) Normal	Rate Group #10 (Plan U) Total	Rate Group #11 (Plan U) Normal	Rate Group #11 (Plan U) Total
41	7.94%	10.69%	8.10%	11.00%	8.66%	11.72%
42	8.09%	10.89%	8.25%	11.20%	8.82%	11.94%
43	8.25%	11.10%	8.41%	11.42%	8.99%	12.17%
44	8.41%	11.31%	8.57%	11.64%	9.16%	12.40%
45	8.57%	11.53%	8.74%	11.86%	9.34%	12.64%
46	8.73%	11.75%	8.91%	12.09%	9.52%	12.88%
47	8.90%	11.97%	9.07%	12.32%	9.69%	13.12%
48	9.06%	12.19%	9.24%	12.54%	9.87%	13.36%
49	9.22%	12.41%	9.40%	12.77%	10.05%	13.60%
50	9.39%	12.63%	9.57%	12.99%	10.23%	13.85%
51	9.56%	12.86%	9.74%	13.23%	10.41%	14.09%
52	9.73%	13.09%	9.92%	13.46%	10.60%	14.35%
53	9.90%	13.32%	10.09%	13.70%	10.79%	14.60%
54	10.07%	13.56%	10.27%	13.94%	10.98%	14.86%
55	10.25%	13.79%	10.45%	14.18%	11.16%	15.11%
56	10.42%	14.02%	10.62%	14.42%	11.35%	15.36%
57	10.57%	14.22%	10.77%	14.62%	11.51%	15.58%
58	10.69%	14.39%	10.90%	14.80%	11.65%	15.77%
59	10.79%	14.52%	11.00%	14.93%	11.75%	15.91%
60	10.84%	14.59%	11.05%	15.01%	11.81%	15.99%
61	10.84%	14.59%	11.05%	15.00%	11.81%	15.99%
62	10.77%	14.50%	10.99%	14.91%	11.74%	15.89%
63	10.64%	14.33%	10.85%	14.73%	11.60%	15.70%
64	10.54%	14.19%	10.75%	14.60%	11.49%	15.55%
65	10.89%	14.65%	11.10%	15.07%	11.86%	16.06%
66 and over	11.26%	15.15%	11.48%	15.58%	12.26%	16.60%
COLA loading		34.58%				35.35%

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See Section 4, Exhibit 1

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See Section 4, Exhibit 1)

Section 4: Actuarial Valuation Basis

General CalPEPRA Members' Contribution Rates (as a % of Monthly Payroll)¹

Entry Age	Rate Group #12 (Plan U) Normal	Rate Group #12 (Plan U) Total
16	5.72%	7.77%
17	5.47%	7.43%
18	5.21%	7.07%
19	5.31%	7.21%
20	5.40%	7.34%
21	5.51%	7.48%
22	5.61%	7.62%
23	5.71%	7.76%
24	5.82%	7.91%
25	5.93%	8.05%
26	6.04%	8.20%
27	6.15%	8.35%
28	6.26%	8.51%
29	6.38%	8.67%
30	6.50%	8.83%
31	6.62%	8.99%
32	6.74%	9.16%
33	6.86%	9.32%
34	6.99%	9.50%
35	7.12%	9.67%
36	7.25%	9.85%
37	7.39%	10.03%
38	7.52%	10.22%
39	7.67%	10.41%
40	7.81%	10.61%

¹ It is our understanding that in the determination of pension benefits under the CalPEPRA 2.5% at 67 formula and the Plan W 1.62% at 65 formula, the maximum compensation that can be taken into account should be limited by the compensation limit as noted in *Section 4, Exhibit 2*, page 129 (\$7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers for future years (§7522.10(d)).

Section 4: Actuarial Valuation Basis

Entry Age	Rate Group #12 (Plan U) Normal	Rate Group #12 (Plan U) Total
41	7.96%	10.81%
42	8.11%	11.01%
43	8.26%	11.22%
44	8.42%	11.44%
45	8.58%	11.66%
46	8.75%	11.88%
47	8.91%	12.11%
48	9.07%	12.33%
49	9.24%	12.55%
50	9.40%	12.77%
51	9.57%	13.00%
52	9.74%	13.23%
53	9.91%	13.47%
54	10.09%	13.71%
55	10.26%	13.94%
56	10.43%	14.17%
57	10.58%	14.38%
58	10.71%	14.55%
59	10.80%	14.68%
60	10.86%	14.75%
61	10.86%	14.75%
62	10.79%	14.66%
63	10.66%	14.48%
64	10.56%	14.35%
65	10.91%	14.82%
66 and over	11.27%	15.31%
COLA loading		35.85%

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See Section 4, Exhibit 1

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See Section 4, Exhibit 1)

Section 4: Actuarial Valuation Basis

Safety Tier 2 Members' Contribution Rates (as a % of Monthly Payroll)

Entry Age	Plan F (OCFA) Normal	Plan F (OCFA) Total	Plan F (Law Enforcement) Normal	Plan F (Law Enforcement) Total	Plan F (Probation) Normal	Plan F (Probation) Total
16	8.77%	13.85%	9.18%	14.83%	8.93%	13.98%
17	8.90%	14.05%	9.31%	15.05%	9.06%	14.19%
18	9.03%	14.26%	9.45%	15.27%	9.20%	14.41%
19	9.17%	14.48%	9.59%	15.50%	9.34%	14.62%
20	9.31%	14.70%	9.74%	15.73%	9.48%	14.84%
21	9.45%	14.92%	9.88%	15.97%	9.62%	15.07%
22	9.60%	15.15%	10.03%	16.21%	9.77%	15.30%
23	9.74%	15.39%	10.19%	16.46%	9.92%	15.53%
24	9.90%	15.63%	10.34%	16.71%	10.07%	15.78%
25	10.05%	15.88%	10.50%	16.97%	10.23%	16.02%
26	10.21%	16.13%	10.67%	17.24%	10.39%	16.28%
27	10.38%	16.39%	10.84%	17.51%	10.56%	16.54%
28	10.55%	16.66%	11.01%	17.80%	10.73%	16.81%
29	10.73%	16.94%	11.19%	18.08%	10.91%	17.09%
30	10.90%	17.22%	11.37%	18.37%	11.09%	17.37%
31	11.09%	17.51%	11.56%	18.67%	11.27%	17.65%
32	11.28%	17.81%	11.75%	18.98%	11.46%	17.95%
33	11.47%	18.11%	11.94%	19.29%	11.65%	18.25%
34	11.66%	18.42%	12.13%	19.60%	11.85%	18.56%
35	11.86%	18.73%	12.33%	19.92%	12.04%	18.86%
36	12.07%	19.06%	12.54%	20.25%	12.25%	19.19%
37	12.29%	19.41%	12.75%	20.61%	12.47%	19.54%
38	12.50%	19.74%	12.96%	20.93%	12.68%	19.86%
39	12.69%	20.04%	13.14%	21.22%	12.87%	20.15%
40	12.85%	20.29%	13.27%	21.45%	13.02%	20.38%

Section 4: Actuarial Valuation Basis

Entry Age	Plan F (OCFA) Normal	Plan F (OCFA) Total	Plan F (Law Enforcement) Normal	Plan F (Law Enforcement) Total	Plan F (Probation) Normal	Plan F (Probation) Total
41	12.94%	20.44%	13.35%	21.57%	13.10%	20.52%
42	12.97%	20.48%	13.35%	21.56%	13.12%	20.55%
43	12.92%	20.40%	13.26%	21.42%	13.05%	20.44%
44	12.80%	20.21%	13.08%	21.14%	12.91%	20.22%
45	12.60%	19.90%	12.82%	20.71%	12.69%	19.87%
46	12.32%	19.45%	12.45%	20.12%	12.37%	19.38%
47	11.93%	18.84%	11.93%	19.27%	11.93%	18.68%
48	12.31%	19.43%	12.31%	19.88%	12.31%	19.27%
49	12.71%	20.07%	12.71%	20.53%	12.71%	19.90%
50 and over	12.71%	20.07%	12.71%	20.53%	12.71%	19.90%
COLA loading			57.93%		61.56%	
					56.62%	

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See Section 4, Exhibit 1

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See Section 4, Exhibit 1)

Additional cashouts: See Section 4, Exhibit 1

Section 4: Actuarial Valuation Basis

Safety Tier 2 Members' Contribution Rates (as a % of Monthly Payroll)

Entry Age	Plan R (OCFA) Normal	Plan R (OCFA) Total	Plan R (Law Enforcement) Normal	Plan R (Law Enforcement) Total
16	8.77%	14.12%	9.18%	14.19%
17	8.90%	14.33%	9.31%	14.40%
18	9.03%	14.54%	9.45%	14.62%
19	9.17%	14.76%	9.59%	14.83%
20	9.31%	14.99%	9.74%	15.06%
21	9.45%	15.21%	9.88%	15.28%
22	9.60%	15.45%	10.03%	15.51%
23	9.74%	15.69%	10.19%	15.75%
24	9.90%	15.93%	10.34%	15.99%
25	10.05%	16.19%	10.50%	16.24%
26	10.21%	16.45%	10.67%	16.50%
27	10.38%	16.71%	10.84%	16.76%
28	10.55%	16.99%	11.01%	17.03%
29	10.73%	17.27%	11.19%	17.31%
30	10.90%	17.56%	11.37%	17.58%
31	11.09%	17.85%	11.56%	17.87%
32	11.28%	18.15%	11.75%	18.17%
33	11.47%	18.46%	11.94%	18.46%
34	11.66%	18.77%	12.13%	18.76%
35	11.86%	19.09%	12.33%	19.06%
36	12.07%	19.43%	12.54%	19.38%
37	12.29%	19.79%	12.75%	19.72%
38	12.50%	20.13%	12.96%	20.03%
39	12.69%	20.43%	13.14%	20.31%
40	12.85%	20.68%	13.27%	20.53%

Section 4: Actuarial Valuation Basis

Entry Age	Plan R (OCFA) Normal	Plan R (OCFA) Total	Plan R (Law Enforcement) Normal	Plan R (Law Enforcement) Total
41	12.94%	20.84%	13.35%	20.64%
42	12.97%	20.88%	13.35%	20.64%
43	12.92%	20.80%	13.26%	20.50%
44	12.80%	20.60%	13.08%	20.23%
45	12.60%	20.28%	12.82%	19.82%
46	12.32%	19.83%	12.45%	19.25%
47	11.93%	19.20%	11.93%	18.44%
48	12.31%	19.81%	12.31%	19.03%
49	12.71%	20.46%	12.71%	19.65%
50 and over	12.71%	20.46%	12.71%	19.65%
COLA loading			54.62%	

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See Section 4, Exhibit 1

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See Section 4, Exhibit 1)

Additional cashouts: See Section 4, Exhibit 1

Section 4: Actuarial Valuation Basis

Safety CalPEPRA Members' Contribution Rates (as a % of Monthly Payroll)¹

Entry Age	Rate Group #6 (Plan V) Normal	Rate Group #6 (Plan V) Total	Rate Group #7 (Plan V) Normal	Rate Group #7 (Plan V) Total	Rate Group #8 (Plan V) Normal	Rate Group #8 (Plan V) Total
16	9.47%	13.31%	9.67%	13.78%	9.22%	13.17%
17	9.61%	13.51%	9.81%	13.99%	9.36%	13.37%
18	9.75%	13.71%	9.96%	14.20%	9.49%	13.57%
19	9.89%	13.92%	10.10%	14.41%	9.64%	13.77%
20	10.04%	14.12%	10.26%	14.62%	9.78%	13.97%
21	10.19%	14.33%	10.41%	14.84%	9.92%	14.18%
22	10.34%	14.55%	10.56%	15.06%	10.07%	14.39%
23	10.50%	14.76%	10.72%	15.29%	10.22%	14.61%
24	10.65%	14.99%	10.88%	15.51%	10.38%	14.83%
25	10.81%	15.21%	11.05%	15.75%	10.53%	15.05%
26	10.98%	15.44%	11.21%	15.99%	10.69%	15.28%
27	11.15%	15.68%	11.38%	16.23%	10.86%	15.51%
28	11.32%	15.92%	11.56%	16.48%	11.02%	15.75%
29	11.49%	16.16%	11.74%	16.73%	11.19%	15.99%
30	11.67%	16.42%	11.92%	17.00%	11.37%	16.24%
31	11.85%	16.67%	12.11%	17.26%	11.55%	16.50%
32	12.04%	16.94%	12.30%	17.54%	11.73%	16.76%
33	12.24%	17.21%	12.50%	17.82%	11.92%	17.03%
34	12.44%	17.49%	12.70%	18.11%	12.11%	17.31%
35	12.64%	17.78%	12.91%	18.41%	12.31%	17.60%
36	12.85%	18.08%	13.13%	18.72%	12.52%	17.89%
37	13.07%	18.38%	13.35%	19.03%	12.73%	18.19%
38	13.29%	18.69%	13.57%	19.35%	12.94%	18.49%
39	13.52%	19.01%	13.81%	19.69%	13.17%	18.81%
40	13.75%	19.34%	14.04%	20.02%	13.39%	19.14%

¹ It is our understanding that in the determination of pension benefits under the CalPEPRA 2.7% at 57 formula, the maximum compensation that can be taken into account should be limited by the compensation limit as noted in *Section 4, Exhibit 2*, page 129 (\$7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers for future years (\$7522.10(d)).

Section 4: Actuarial Valuation Basis

Entry Age	Rate Group #6 (Plan V) Normal	Rate Group #6 (Plan V) Total	Rate Group #7 (Plan V) Normal	Rate Group #7 (Plan V) Total	Rate Group #8 (Plan V) Normal	Rate Group #8 (Plan V) Total
41	13.98%	19.67%	14.28%	20.36%	13.62%	19.46%
42	14.22%	20.01%	14.53%	20.71%	13.85%	19.80%
43	14.48%	20.37%	14.79%	21.09%	14.10%	20.15%
44	14.75%	20.75%	15.07%	21.48%	14.37%	20.53%
45	15.01%	21.11%	15.33%	21.86%	14.62%	20.89%
46	15.25%	21.45%	15.57%	22.20%	14.85%	21.22%
47	15.44%	21.72%	15.77%	22.48%	15.04%	21.49%
48	15.56%	21.89%	15.90%	22.66%	15.16%	21.66%
49	15.61%	21.95%	15.94%	22.73%	15.20%	21.72%
50	15.56%	21.88%	15.89%	22.65%	15.15%	21.65%
51	15.43%	21.70%	15.76%	22.46%	15.03%	21.47%
52	15.21%	21.39%	15.54%	22.15%	14.81%	21.17%
53	14.90%	20.96%	15.22%	21.70%	14.52%	20.74%
54	14.48%	20.37%	14.79%	21.09%	14.10%	20.15%
55	14.94%	21.01%	15.26%	21.75%	14.55%	20.79%
56 and over	15.42%	21.70%	15.76%	22.46%	15.02%	21.47%
COLA loading		40.67%				42.89%

Interest: 7.00% per annum

COLA: 2.75%

Mortality: See *Section 4, Exhibit 1*

Salary increase: Inflation (2.50%) + “across-the-board” (0.50%) + merit and promotion (See *Section 4, Exhibit 1*)

Section 4: Actuarial Valuation Basis

Exhibit 4: Funded percentages by rate group

The funded percentages on a valuation value of assets basis by rate group provided for informational purposes only are as follows:

Funded Percentages as of December 31

Rate Group	2024	2023
General		
• Rate Group #1 – Plans A, B and U (County and IHSS) ¹	93.43%	92.84%
• Rate Group #2 – Plans I, J, O, P, S, T, U and W (County et al.)	79.75%	78.45%
• Rate Group #3 – Plans B, G, H and U (OCSD)	101.21%	100.89%
• Rate Group #5 – Plans A, B and U (OCTA)	85.94%	84.19%
• Rate Group #9 – Plans M, N and U (TCA)	105.34%	103.39%
• Rate Group #10 – Plans I, J, M, N and U (OCFA)	94.66%	93.77%
• Rate Group #11 – Plans M and N, future service, and U (Cemetery)	97.73%	97.77%
• Rate Group #12 – Plans G, H, future service, and U (Law Library)	121.60%	119.94%
Safety		
• Rate Group #6 – Plans E, F and V (Probation)	84.97%	85.19%
• Rate Group #7 – Plans E, F, Q, R and V (Law Enforcement)	83.16%	82.58%
• Rate Group #8 – Plans E, F, Q, R and V (OCFA)	97.80%	94.84%

¹ Includes payees from Vector Control, Cypress Recreation and Parks, U.C.I. and DOE.

Section 4: Actuarial Valuation Basis

Exhibit 5: Reconciliation of employer contribution rates by rate group

The reconciliation of the employer contribution rates for the General Rate Groups #1 to #5 are as follows:

Item	RG #1	RG #2	RG #3	RG #5
1. Average recommended employer contribution as of December 31, 2023	13.21%	37.76%	11.51%	30.60%
2. Changes due to:				
a. Investment return greater than expected after asset smoothing	(0.15%)	(0.36%)	(0.47%)	(0.32%)
b. Actual contributions (more)/less than expected ¹	(0.02%)	0.10%	0.00%	0.19%
c. Additional UAAL contributions for OCFA	0.00%	0.00%	0.00%	0.00%
d. Individual salary increases (less)/greater than expected	0.29%	0.66%	0.24%	0.10%
e. Amortizing prior year's UAAL over a (larger)/smaller than expected total payroll	(0.13%)	(1.25%)	0.00%	(1.14%)
f. COLA increases greater than expected in 2025 ²	0.01%	0.04%	0.04%	0.03%
g. Other net experience (gain)/loss ^{3,4}	0.25%	0.00%	0.15%	(0.45%)
h. Total change	0.25%	(0.81%)	(0.04%)	(1.59%)
3. Average recommended employer contribution as of December 31, 2024: 1 + 2h	13.46%	36.95%	11.47%	29.01%

¹ Includes impact of difference between actual and expected normal cost and UAAL contributions due to actual payroll different than expected during 2024.

² Actuarial loss from payment of COLAs higher than the 2.75% COLA assumption (based on actual CPI of 3.50%, 3.00% COLA expected to be paid April 1st 2025, 2026 and 2027, for members without COLA Banks as of April 1, 2025).

³ Includes an adjustment to reflect 18-month delay between date of valuation and date of rate implementation. This adjustment is (0.22%) of payroll for RG #5.

⁴ Includes the effect of adjusting the rate to normal cost for RG#3, which was fully funded as of December 31, 2024. Under CalPEPRA, the employer's contribution rate cannot be less than the normal cost unless the funded ratio is over 120% for the total plan and other conditions in CalPEPRA are met.

Section 4: Actuarial Valuation Basis

The reconciliation of the employer contribution rates for the General Rate Groups #9 to #12 are as follows:

Item	RG #9	RG #10	RG #11	RG #12
1. Average recommended employer contribution as of December 31, 2023	12.98%	22.81%	14.18%	13.41%
2. Changes due to:				
a. Investment return greater than expected after asset smoothing	(0.35%)	(0.37%)	(0.31%)	(0.51%)
b. Actual contributions (more)/less than expected ¹	(0.02%)	0.06%	0.08%	0.05%
c. Additional UAAL contributions for OCFA	0.00%	0.00%	0.00%	0.00%
d. Individual salary increases (less)/greater than expected	0.06%	0.45%	0.09%	(0.16%)
e. Amortizing prior year's UAAL over a (larger)/smaller than expected total payroll	0.00%	(0.38%)	(0.04%)	0.00%
f. COLA increases greater than expected in 2025 ²	0.04%	0.04%	0.03%	0.02%
g. Other net experience (gain)/loss ^{3,4}	0.35%	(0.33%)	0.16%	0.44%
h. Total change	0.08%	(0.53%)	0.01%	(0.16%)
3. Average recommended employer contribution as of December 31, 2024: 1 + 2h	13.06%	22.28%	14.19%	13.25%

¹ Includes impact of difference between actual and expected normal cost and UAAL contributions due to actual payroll different than expected during 2024.

² Actuarial loss from payment of COLAs higher than the 2.75% COLA assumption (based on actual CPI of 3.50%, 3.00% COLA expected to be paid April 1st 2025, 2026 and 2027, for members without COLA Banks as of April 1, 2025).

³ Includes an adjustment to reflect 18-month delay between date of valuation and date of rate implementation.

⁴ Includes the effect of adjusting the rate to normal cost for RG#9 and RG#12, which were fully funded as of December 31, 2024. Under CalPEPRA, the employer's contribution rate cannot be less than the normal cost unless the funded ratio is over 120% for the total plan and other conditions in CalPEPRA are met.

Section 4: Actuarial Valuation Basis

The reconciliation of the employer contribution rates for the Safety Rate Groups are as follows:

Item	RG #6	RG #7	RG #8
1. Average recommended employer contribution as of December 31, 2023	60.02%	57.88%	34.04%
2. Changes due to:			
a. Investment return greater than expected after asset smoothing	(0.69%)	(0.54%)	(0.56%)
b. Actual contributions (more)/less than expected ¹	0.08%	(0.56%)	(0.08%)
c. Additional UAAL contributions for OCFA	0.00%	0.00%	(0.65%)
d. Individual salary increases (less)/greater than expected ²	3.54%	2.96%	(1.00%)
e. Amortizing prior year's UAAL over a (larger)/smaller than expected total payroll ³	(2.38%)	(4.39%)	0.28%
f. COLA increases greater than expected in 2025 ⁴	0.09%	0.08%	0.06%
g. Other net experience (gain)/loss ^{5,6}	(0.15%)	(0.88%)	(0.17%)
h. Total change	0.49%	(3.33%)	(2.12%)
3. Average recommended employer contribution as of December 31, 2024: 1 + 2h	60.51%	54.55%	31.92%

¹ Includes impact of difference between actual and expected normal cost and UAAL contributions due to actual payroll different than expected during 2024.

² The average individual salary increase for continuing actives in RG #6 and RG #7 were 12.5% and 15.3%, respectively.

³ The increase in total payroll for RG #6 and RG #7 were 10.0% and 17.2%, respectively. For RG#6, the increase in total payroll was less than the 12.5% average salary increase received by the individual employees. For RG#7, the increase in total payroll was more than the 15.3% average salary increase received by the individual employees.

⁴ Actuarial loss from payment of COLAs higher than the 2.75% COLA assumption (based on actual CPI of 3.50%, 3.00% COLA expected to be paid April 1st 2025, 2026 and 2027, for members without COLA Banks as of April 1, 2025).

⁵ Includes an adjustment to reflect 18-month delay between date of valuation and date of rate implementation. This adjustment is (0.28%) of payroll for RG #7.

⁶ Effect of other experience gains for RG#7 include (0.39%) of payroll change in average normal cost rate.

Section 4: Actuarial Valuation Basis

Exhibit 6: Reconciliation of UAAL by rate group

The reconciliation of UAAL for the General Rate Groups #1 to #5 are as follows (\$ in '000s):

Line Description	RG #1	RG #2	RG #3	RG #5
1. Unfunded actuarial accrued liability at beginning of year	\$40,743	\$3,208,511	\$(8,411)	\$192,453
2. Normal cost at middle of year	22,421	294,127	18,922	28,844
3. Expected employer and member contributions	(25,672)	(660,768)	(18,922)	(51,778)
4. Interest to end of year	2,704	213,533	(589)	12,874
5. Expected unfunded actuarial accrued liability at end of year	\$40,196	\$3,055,403	\$(9,000)	\$182,393
6. Changes due to:				
a. Investment return greater than expected, after asset smoothing	\$(3,156)	\$(71,118)	\$(5,768)	\$(6,220)
b. Actual contributions (more)/less than expected under funding policy	(400)	20,435	6	3,547
c. Additional UAAL contributions from OCFA, and scheduled payments ¹ from DOE and U.C.I.	(3,386)	0	0	0
d. Individual salary increases (less)/greater than expected	4,728	135,169	2,915	1,955
e. COLA increases greater than expected in 2025 ²	183	8,233	522	651
f. Other net experience (gain)/loss	738	18,020	(655)	(4,241)
g. Total changes	\$(1,293)	\$110,739	\$(2,980)	\$(4,308)
7. Unfunded actuarial accrued liability at end of year: 5 + 6g	\$38,903	\$3,166,142	\$(11,980)	\$178,085

¹ Segal provided separate letters for DOE and U.C.I. with regard to their required UAAL contributions based on the Board's Declining Employer Payroll policy. These contributions have not been reflected in the contribution rates developed in this valuation. Segal also provided separate letters for O.C. Vector Control and Cypress Recreation and Parks with regard to their updated withdrawal liabilities based on the Board's Withdrawing Employer Policy, although no contributions were made by O.C. Vector Control and CRPD during the past calendar year. O.C. Vector Control and CRPD had no withdrawal liability as of December 31, 2023.

² Actuarial loss from payment of COLAs higher than the 2.75% COLA assumption (based on actual CPI of 3.50%, 3.00% COLA expected to be paid April 1st 2025, 2026 and 2027, for members without COLA Banks as of April 1, 2025).

Section 4: Actuarial Valuation Basis

The reconciliation of UAAL for the General Rate Groups #9 to #12 are as follows (\$ in '000s):

Line Description	RG #9	RG #10	RG #11	RG #12
1. Unfunded actuarial accrued liability at beginning of year	\$(2,220)	\$20,920	\$347	\$(2,417)
2. Normal cost at middle of year	1,849	8,421	466	319
3. Expected employer and member contributions	(1,849)	(12,179)	(497)	(319)
4. Interest to end of year	(155)	1,368	21	(169)
5. Expected unfunded actuarial accrued liability at end of year	\$(2,375)	\$18,530	\$337	\$(2,586)
6. Changes due to:				
a. Investment return greater than expected, after asset smoothing	\$(409)	\$(1,912)	\$(93)	\$(88)
b. Actual contributions (more)/less than expected under funding policy	(24)	294	23	8
c. Additional UAAL contributions from OCFA, and scheduled payments from DOE and U.C.I.	0	0	0	0
d. Individual salary increases (less)/greater than expected	66	2,382	27	(27)
e. COLA increases greater than expected in 2025 ¹	43	232	9	3
f. Other net experience (gain)/loss	(915)	(660)	75	(61)
g. Total changes	\$(1,239)	\$336	\$41	\$(165)
7. Unfunded actuarial accrued liability at end of year: 5 + 6g	\$(3,614)	\$18,866	\$378	\$(2,751)

¹ Actuarial loss from payment of COLAs higher than the 2.75% COLA assumption (based on actual CPI of 3.50%, 3.00% COLA expected to be paid April 1st 2025, 2026 and 2027, for members without COLA Banks as of April 1, 2025).

Section 4: Actuarial Valuation Basis

The reconciliation of UAAL for the Safety Rate Groups are as follows (\$ in '000s):

Line Description	RG #6	RG #7	RG #8
1. Unfunded actuarial accrued liability at beginning of year	\$167,443	\$913,315	\$122,072
2. Normal cost at middle of year	21,596	119,502	67,493
3. Expected employer and member contributions	(42,908)	(230,305)	(90,080)
4. Interest to end of year	11,275	60,158	7,736
5. Expected unfunded actuarial accrued liability at end of year	\$157,406	\$862,670	\$107,221
6. Changes due to:			
a. Investment return greater than expected, after asset smoothing	\$(5,881)	\$(26,527)	\$(13,718)
b. Actual contributions (more)/less than expected under funding policy	654	(27,727)	(2,003)
c. Additional UAAL contributions from OCFA and CRPD, and scheduled payments from DOE and U.C.I.	0	0	(16,158)
d. Individual salary increases (less)/greater than expected	30,217	145,778	(24,843)
e. COLA increases greater than expected in 2025 ¹	755	3,704	1,422
f. Other net experience (gain)/loss	(83)	(9,724)	2,444
g. Total changes	\$25,662	\$85,504	\$(52,856)
7. Unfunded actuarial accrued liability at end of year: 5 + 6g	\$183,068	\$948,174	\$54,365

¹ Actuarial loss from payment of COLAs higher than the 2.75% COLA assumption (based on actual CPI of 3.50%, 3.00% COLA expected to be paid April 1st 2025, 2026 and 2027, for members without COLA Banks as of April 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	<p>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:</p> <p>Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)</p> <p>Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and</p> <p>Discounted according to an assumed rate (or rates) of return to reflect the time value of money.</p>

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.
Assumptions or actuarial assumptions	<p>The estimates upon which the cost of the Plan is calculated, including:</p> <p>Investment return — the rate of investment yield that the Plan will earn over the long-term future;</p> <p>Mortality rates — the rate or probability of death at a given age for employees and retirees;</p> <p>Retirement rates — the rate or probability of retirement at a given age or service;</p> <p>Disability rates — the rate or probability of disability retirement at a given age;</p> <p>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;</p> <p>Salary increase rates — the rates of salary increase due to inflation, real wage growth and merit and promotion increases.</p>

Appendix A: Definition of Pension Terms

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

Appendix A: Definition of Pension Terms

Term	Definition
Open amortization period	An open amortization period is one which is used to determine the amortization payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the amortization period.
Plan fiduciary net position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total pension liability	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded actuarial accrued liability	The excess of the actuarial accrued liability over the valuation value of assets. This value may be negative, in which case it may be expressed as a negative unfunded actuarial accrued liability, also called the funding surplus or an overfunded actuarial accrued liability.
Valuation date or actuarial valuation date	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date.
Valuation value of assets	The actuarial value of assets reduced by the value of non-valuation reserves.

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