Orange County Employees Retirement System (OCERS)

Governmental Accounting Standards Board Statement 68 (GASB 68) Actuarial Valuation

Actuarial Valuation Based on December 31, 2022 Measurement Date for Employer Reporting as of June 30, 2023

This report has been prepared at the request of the Board of Retirement to assist the sponsors of the Fund in preparing their financial report for their liabilities associated with the OCERS pension plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Segal



May 31, 2023

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

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation based on a December 31, 2022 measurement date for employer reporting as of June 30, 2023. It contains various information that will need to be disclosed in order for employers to comply with GASB Statement 68.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the sponsors of the Orange County Employees Retirement System (OCERS) in preparing their financial report for their liabilities associated with the OCERS pension plan. The census and financial information on which our calculations were based were prepared by OCERS. That assistance is gratefully acknowledged.

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

The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the System.

We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary Andy Yeung, ASA, MAAA, FCA, EA Vice President and Actuary

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

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Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board (GASB) Statement 68 for employer reporting as of June 30, 2023. The results used in preparing this GASB 68 report are comparable to those used in preparing the GASB Statement 67 report for the plan based on a reporting date and a measurement date as of December 31, 2022. This valuation is based on:

- The benefit provisions of OCERS, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of December 31, 2021, provided by OCERS;
- The assets of the Plan as of December 31, 2022, provided by OCERS;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the December 31, 2022 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the December 31, 2022 valuation.

General observations on GASB 68 actuarial valuation

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

Highlights of the valuation

- 1. For this report, the reporting dates for the employers are June 30, 2023 and 2022. The NPLs measured as of December 31, 2022 and 2021 have been determined by rolling forward the TPLs as of December 31, 2021 and 2020, respectively. The Plan's Fiduciary Net Positions were valued as of the measurement dates. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and the measurement date have been reflected.
 - However, since the O.C. Superior Court's Plan U improvement would be effective after the December 31, 2022 measurement date (and the impact on the TPL is immaterial even if it were to be included), we have not made any adjustment to the TPL when we roll forward the liabilities from December 31, 2021 to December 31, 2022.
- 2. The NPL increased from \$2,050.2 million as of December 31, 2021 to \$5,391.0 million as of December 31, 2022 primarily as a result of a (9.43)%¹ return on the market value of assets during 2022 that was lower than the assumed return of 7.00% by approximately \$3,587.1 million. Changes in these values during the last two calendar years ending December 31, 2022 and December 31, 2021 can be found in Section 2, Schedule of changes in Net Pension Liability on page 17.
- 3. There was an increase in the total employer pension expense from a pension income of \$(121.1) million calculated last year to a pension expense of \$728.3 million calculated this year. The primary cause of the increase was due to an investment loss of \$3.6 billion with \$717.4 million being recognized in this year's expense.
- 4. The discount rate used to determine the TPL and NPL as of both December 31, 2022 and 2021 was 7.00% following the same assumption used by the System in the pension funding valuations as of the December 31, 2021 and December 31, 2020. The detailed calculation of the discount rate of 7.00% used in the calculation of the TPL and NPL as of December 31, 2022 can be found in Section 3, Appendix A. Various other information that is required to be disclosed can be found throughout Section 2.
- 5. The Plan's Fiduciary Net Position of \$21,922,182,000 as of December 31, 2021 is equal to the final market value of assets in the Pension Trust Fund as of December 31, 2021. This differs from the \$21,738,794,000 market value of assets used in our December 31, 2021 funding valuation because the market value of assets in the funding valuation excludes \$167,745,000 in the County Investment Account and \$15,643,000 in O.C. Sanitation District UAAL Deferred Account.
 - The Plan's Fiduciary Net Position of \$19,690,021,000 as of December 31, 2022 is equal to the final market value of assets in the Pension Trust Fund as of December 31, 2022. This differs from the \$19,534,631,000 market value of assets used in our December 31, 2022 funding valuation because the market value of assets in the funding valuation excludes \$140,992,000 in the County Investment Account and \$14,398,000 in O.C. Sanitation District UAAL Deferred Account.

As documented in the funding valuation report, return on market value was calculated using a modified dollar-weighted approach based on pension plan assets net of accounting liabilities. Actual investment return on net pension plan assets was \$(2,106,139,000) during 2022 after including both the administrative expenses and discount for prepaid contributions while excluding the losses credited to County Investment Account and O.C. Sanitation District UAAL Deferred Account. Without these adjustments, the actual investment return was \$(2,058,590,000).



- 6. In Appendix B, we show the Schedule of Pension Amounts by Employer. The expanded information shown in Appendix B has been used to prepare the Schedules that show the Pension Expense as well as the Deferred Outflows of Resources and Deferred Inflows of Resources.
- 7. Results shown in this report exclude any employer contributions made after the measurement date of December 31, 2022. Employers should consult with their auditors to determine the deferred outflow that should be created for these contributions.
- 8. All Rate Groups except Rate Groups #1 and #2 only have one active employer, so all of the NPL for those Rate Groups is allocated to that employer.

For Rate Groups #1¹ and #2, the NPL is allocated based on the actual employer contributions within the Rate Group. The steps we used are as follows:

- Calculate ratio of employer's contributions to the total contributions for the Rate Group.
- Multiply this ratio by the NPL for the Rate Group to determine the employer's proportionate share of the NPL for the Rate Group.

If the employer is in several Rate Groups, the employer's total allocated NPL is the sum of its allocated NPL from each Rate Group. Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers. The NPL allocation can be found in *Section 2, Determination of Proportionate Share*.

- 9. 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 of 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 the December 31, 2022 assets reflects approximately \$5.5 million in contribution refunds related to the contributions previously paid by the members in conjunction with such pay items. In addition, because the December 31, 2022 liabilities were calculated by rolling forward the results as of December 31, 2021, the changes in the membership data as a result of the Board's actions will first be reflected with the December 31, 2023 liabilities.
- 10. It is important to note that this actuarial valuation is based on plan assets as of December 31, 2022. 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. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after December 31, 2022 due to COVID-19. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

¹ The NPL for Rate Group #1 was adjusted by the NPLs for the O.C. Vector Control District, Cypress Recreation and Parks, Department of Education and U.C.I. prior to allocating the net NPL to the other employers in Rate Group #1 as the NPLs for these four employers were calculated separately.



Summary of key valuation results

Reporting Date for Employe	r under GASB 68 ¹	June 30, 2023	June 30, 2022
Measurement Date for Empl	oyer under GASB 68	December 31, 2022	December 31, 2021
Disclosure elements for	Service cost ²	\$526,768,913	\$510,863,197
calendar year ending	Total Pension Liability	25,081,027,171	23,972,419,722
December 31:	 Plan's Fiduciary Net Position 	19,690,021,000	21,922,182,000
	Net Pension Liability	5,391,006,171	2,050,237,722
	Pension expense	728,323,232	(121,126,855)
Schedule of contributions	Actuarially determined contributions	\$707,319,000	\$684,142,000
for calendar year ending	 Actual contributions³ 	719,691,000	698,791,000
December 31:	 Contribution deficiency / (excess)⁴ 	(12,372,000)	(14,649,000)
Demographic data for	Number of retired members and beneficiaries	20,678	19,826
for calendar year ending	 Number of inactive vested members 	7,894	7,238
December 31:	Number of active members	22,061	22,011
Key assumptions as of	Investment rate of return	7.00%	7.00%
December 31:	Inflation rate	2.50%	2.50%
	 Projected salary increases⁵ 	General: 4.00% to 11.00% and Safety: 4.60% to 15.00%	General: 4.00% to 11.00% and Safety: 4.60% to 15.00%
	Cost of living adjustments	2.75% of retirement income	2.75% of retirement income



¹ The reporting date and measurement date for the plan are December 31, 2022 and December 31, 2021.

The Service Cost is based on the previous year's valuation, meaning the December 31, 2022 and December 31, 2021 measurement date values are based on the valuations as of December 31, 2021 and December 31, 2020, respectively. Both service costs have been calculated using the assumptions shown in the December 31, 2021 measurement date column, as there were no changes in the actuarial assumptions between the December 31, 2021 and December 31, 2020 valuations.

³ Reduced by discount for prepaid contributions and transfer from County Investment Account, if any.

⁴ Includes additional contributions made by employers toward the reduction of their UAAL. Details are shown in Section 2, Schedule of Employer Contributions on page 18.

⁵ Includes inflation at 2.50%, plus real across-the-board salary increases of 0.50% plus merit and promotion increases.

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:

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.
Participant Information	An actuarial valuation for a plan is based on data provided to the actuary by OCERS. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial Information	The valuation is based on the fair value of assets as of the measurement date, as provided by OCERS.
Actuarial Assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments (if any). The forecasted benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the Plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.
Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

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

The valuation is prepared at the request of the Board to assist the sponsors of the Fund in preparing items related to the pension plan in their financial reports. 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 future financial measures, except where otherwise noted. 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.

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. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.

While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.

Segal's report shall be deemed to be final and accepted by the System upon delivery and review. The System should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management or assets of OCERS, it is not a fiduciary in its capacity as actuaries and consultants with respect to OCERS.



General information about the pension plan

Plan Description

Plan administration. The Orange County Employees Retirement System (OCERS) was established by the County of Orange in 1945. OCERS is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq.). OCERS is a cost-sharing multiple employer public employee retirement system whose main function is to provide service retirement, disability, death and survivor benefits to the Safety and General members employed by the County of Orange. OCERS also provides retirement benefits to the employee members of the Orange County Courts, the Orange County Retirement System, two cities and thirteen special districts.

The management of OCERS is vested with the Orange County Board of Retirement. The Board consists of nine members and one alternate. The County Treasurer is a member of the Board of Retirement by law. Four members are appointed by the Board of Supervisors, one of whom may be a County Supervisor. Two members are elected by the General membership; one member and one alternate are elected by the Safety membership, one member is elected by the retired members of the System. All members of the Board of Retirement serve terms of three years except for the County Treasurer whose term runs concurrent with the County Treasurer term.

Plan membership. At December 31, 2022, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	20,678
Inactive vested members entitled to but not yet receiving benefits	7,894
Active members	<u>22,061</u>
Total	50,633

Note: Data as of December 31, 2022 is not used in the measurement of the TPL as of December 31, 2022.

Benefits provided. OCERS provides service retirement, disability, death and survivor benefits to eligible employees. All regular full-time employees of the County of Orange or contracting agencies who work a minimum of 20 hours per week become members of OCERS effective on the first day of employment in an eligible position. There are separate retirement plans for General and Safety member employees. Safety membership is extended to those involved in active law enforcement, fire suppression, and certain probation officers. Any new Safety member who becomes a member on or after January 1, 2013 is designated PEPRA Safety and is subject to the provisions of California Public Employees' Pension Reform Act of 2013 (PEPRA), California Government Code 7522 et seq. All other employees are classified as General members. New General members employed on or after January 1, 2013 are designated as PEPRA General subject to the provisions of California Government Code 7522 et. seq.

General members hired prior to January 1, 2013, including all members of Plan T and Plan W hired on or after January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired ten or more years of retirement service credit. A member with thirty years of service is eligible to retire regardless of age. General members who are first hired on or after January 1, 2013, excluding members of Plan T and Plan W, are eligible to retire once they have attained the age of 52, and have acquired five years of retirement service credit.

Safety members hired prior to January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired ten or more years of retirement service credit. A member with twenty years of service is eligible to retire regardless of age. Safety members who are first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 50, and have acquired five years of retirement service credit.

All General and Safety members can also retire at the age of 70 regardless of service.

The retirement benefit the member will receive is based upon age at retirement, final average compensation, years of retirement service credit and retirement plan and tier.

General member benefits are calculated pursuant to the provisions of Sections 31676.01, 31676.12, 31676.16, 31676.18 or 31676.19. For Section 31676.01, the monthly allowance is equal to 1/90th of final compensation times years of accrued retirement service credit times age factor from that Section. For Section 31676.1, the monthly allowance is equal to 1/60th of final compensation times years of accrued retirement service credit times age factor from that Section. For Sections 31676.12, 31676.16, 31676.18 or 31676.19, the monthly allowance is equal to 1/50th of final compensation times years of accrued retirement service credit times age factor from the corresponding Section. General member benefits for those who are first hired on or after January 1, 2013, excluding members of Plan T and Plan W, are calculated pursuant to the provision of California Government Code Section 7522.20(a). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.20(a).

Safety member benefits are calculated pursuant to the provisions of California Government Code Sections 31664.1 and 31664.2. The monthly allowance is equal to 3% of final compensation times years of accrued retirement service credit times age factor from the corresponding Section. Safety member benefits for those who are first hired on or after January 1, 2013, are calculated pursuant to the provision of California Government Code Section 7522.25(d). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.25(d).

For members with membership dates before January 1, 2013, including all members of Plan T and Plan W hired on or after January 1, 2013, the maximum monthly retirement allowance is 100% of final compensation. There is no maximum for members with membership dates on or after January 1, 2013, excluding members of Plan T and Plan W.

Final average compensation consists of the highest 12 consecutive months for a General Tier 1 or Safety Tier 1 member and the highest 36 consecutive months for a General Tier 2, General PEPRA, Safety Tier 2 or Safety PEPRA member.

The member may elect an unmodified retirement allowance, or choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse or domestic partner. An eligible surviving spouse or domestic partner is one married to or registered with the member one year prior to the effective retirement date. Certain surviving spouses or domestic partners may also be eligible if marriage or domestic partnership was at least two years prior to the date of death and the surviving spouse or domestic partner has attained age 55. There are four optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the unmodified retirement allowance in order to allow the member the ability to provide certain benefits to a surviving spouse, domestic partner, or named beneficiary having an insurable interest in the life of the member.

OCERS provides an annual cost-of-living adjustment (COLA) benefit to all retirees. The COLA, based upon the ratio of the past two annual Consumer Price Indices for All Urban Consumers for the Los Angeles-Long Beach-Anaheim Area, is capped at 3.0%.

The County of Orange and contracting agencies contribute to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Retirement. Employer contribution rates are adopted annually based upon recommendations received from OCERS' actuary after the completion of the annual actuarial valuation. The average employer contribution rate for the first six months of calendar year 2022 or the second half of fiscal year 2021-2022 (based on the December 31, 2019 valuation) was 41.49%¹ of compensation. The average employer contribution rate for the last six months of calendar year 2022 or the first half of fiscal year 2022-2023 (based on the December 31, 2020 valuation) was 41.16%¹ of compensation.

All members are required to make contributions to OCERS regardless of the retirement plan or tier in which they are included. The average member contribution rate for the first six months of calendar year 2022 or the second half of fiscal year 2021-2022 (based on the December 31, 2019 valuation) was 12.31%² of compensation. The average member contribution rate for the last six months of calendar year 2022 or the first half of fiscal year 2022-2023 (based on the December 31, 2020 valuation) was 12.16%² of compensation.

It should be noted that these member contribution rates provided above have not been adjusted to reflect any pick-ups or reverse pick-ups.



¹ These employer contribution rates may be higher or lower than the composite rate for 2022 as shown on page 18 of this report because those rates have not been adjusted to reflect any pick-ups or reverse pick-ups. These employer contribution rates also do not reflect the shift in payroll to the lower cost plans from the valuation date to the date of rate implementation.

Net Pension Liability

Reporting Date for Employer under GASB 68	June 30, 2023	June 30, 2022
Measurement Date for Employer under GASB 68	December 31, 2022	December 31, 2021
Components of the Net Pension Liability		
Total Pension Liability	\$25,081,027,171	\$23,972,419,722
Plan's Fiduciary Net Position	(19,690,021,000)	(21,922,182,000)
Net Pension Liability	\$5,391,006,171	\$2,050,237,722
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	78.51%	91.45%

The Net Pension Liability (NPL) was measured as of December 31, 2022 and 2021. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date while the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of December 31, 2021 and 2020, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of December 31, 2022 and 2021 are the same as those used in the OCERS actuarial valuations as of December 31, 2022 and 2021, respectively.

Actuarial assumptions. The TPL as of December 31, 2022 was determined by the actuarial valuation as of December 31, 2021. The actuarial assumptions used were based on the results of an experience study for the period from January 1, 2017 through December 31, 2019 and they are the same assumptions used in the December 31, 2022 funding valuation for OCERS. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Inflation:	2.50%
Salary increases:	General: 4.00% to 11.00% and Safety: 4.60% to 15.00%, vary by service, including inflation
Cost of Living Adjustments (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
Investment rate of return:	7.00%, net of pension plan investment expense, including inflation
Other assumptions:	See analysis of actuarial experience during the period January 1, 2017 through December 31, 2019

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments¹ was determined in 2020 using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses are shown in the following table. This information was used in the derivation of the long-term expected investment rate of return assumption for the December 31, 2022 and 2021 actuarial valuations. This information will change every three years based on the actuarial experience study.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Large Cap Equity	23.10%	5.43%
Small Cap Equity	1.90%	6.21%
International Developed Equity	13.00%	6.67%
Emerging Markets Equity	9.00%	8.58%
Core Bonds	9.00%	1.10%
High Yield Bonds	1.50%	2.91%
TIPS	2.00%	0.65%
Emerging Market Debt	2.00%	3.25%
Corporate Credit	1.00%	0.53%
Long Duration Fixed Income	2.50%	1.44%
Real Estate	3.01%	4.42%
Private Equity	13.00%	9.41%
Value Added Real Estate	3.01%	7.42%
Opportunistic Real Estate	0.98%	10.18%
Energy	2.00%	9.68%
Infrastructure (Core Private)	1.50%	5.08%
Infrastructure (Non-Core Private)	1.50%	8.92%
CTA - Trend Following	2.50%	2.38%
Global Macro	2.50%	2.13%
Private Credit	2.50%	5.47%
Alternative Risk Premia	<u>2.50%</u>	2.50%
Total	100.00%	5.67%

¹ Note that the investment return assumption for funding purposes is developed net of both investment and administrative expenses; however, the same investment return assumption is used for financial reporting purposes, where it is considered gross of administrative expenses.



Discount rate. The discount rate used to measure the TPL was 7.00% as of December 31, 2022 and 2021. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both December 31, 2022 and 2021.

Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL as of December 31, 2022, calculated using the discount rate of 7.00%, as well as what the NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Orange County	\$7,073,376,712	\$4,469,282,004	\$2,345,201,635
O.C. Cemetery District	3,021,923	1,031,416	(592,179)
O.C. Law Library	1,427,506	(321,987)	(1,748,995)
O.C. Vector Control District	3,822,808	47,967	(3,031,055)
O.C. Retirement System	48,284,279	31,526,121	17,857,004
O.C. Fire Authority	628,822,571	279,060,590	(6,229,556)
Cypress Recreation and Parks	1,182,480	61,016	(853,728)
Department of Education	4,897,822	3,323,372	2,039,142
Transportation Corridor Agency	7,603,737	(659,689)	(7,399,913)
City of San Juan Capistrano	28,564,413	18,650,483	10,563,994
O.C. Sanitation District	110,139,693	(10,604,801)	(109,092,390)
O.C. Transportation Authority	362,148,902	207,132,957	80,691,194
U.C.I.	42,717,002	29,314,724	18,382,896
O.C. Children and Families Comm.	845,275	(21,846)	(729,130)
Local Agency Formation Comm.	2,431,582	1,587,646	899,273
Rancho Santa Margarita	7,911	1,652	(3,454)
O.C. Superior Court	552,784,187	360,927,849	204,436,505
O.C. IHSS Public Authority	1,485,636	666,697	(1,286)
Total for all Employers	\$8,873,564,439	\$5,391,006,171	\$2,550,389,957

Schedule of changes in Net Pension Liability — Last two calendar years

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Total Pension Liability		
Service cost	\$526,768,913	\$510,863,197
Interest	1,675,053,178	1,609,891,069
Change of benefit terms	0	0
Differences between expected and actual experience	46,500,358	(113,046,194)
Changes of assumptions	0	0
Benefit payments, including refunds of member contributions	(1,139,715,000)	(1,045,738,000)
Transfer of members among Rate Groups	0	0
Other	<u>0</u>	<u>0</u>
Net change in Total Pension Liability	\$1,108,607,449	\$961,970,072
Total Pension Liability – beginning	<u>23,972,419,722</u>	<u>23,010,449,650</u>
Total Pension Liability – ending	<u>\$25,081,027,171</u>	<u>\$23,972,419,722</u>
Plan's Fiduciary Net Position		
Contributions – employer ¹	\$719,691,000	\$698,791,000
Contributions – member	269,999,000	271,334,000
Net investment income	(2,058,590,000)	3,222,065,000
Benefit payments, including refunds of member contributions	(1,139,715,000)	(1,045,738,000)
Transfer of members among Rate Groups	0	0
Administrative expense	(23,546,000)	(21,473,000)
Other	<u>0</u>	<u>0</u>
Net change in Plan's Fiduciary Net Position	\$(2,232,161,000)	\$3,124,979,000
Plan's Fiduciary Net Position – beginning	21,922,182,000	18,797,203,000
Plan's Fiduciary Net Position – ending	<u>\$19,690,021,000</u>	<u>\$21,922,182,000</u>
Net Pension Liability – ending	<u>\$5,391,006,171</u>	<u>\$2,050,237,722</u>
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	78.51%	91.45%
Covered payroll ²	\$1,932,374,000	\$1,870,387,000
Plan Net Pension Liability as percentage of covered payroll	278.98%	109.62%



¹ Reduced by discount for prepaid contributions and transfer from County Investment Account, if any.

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

Schedule of employer contributions – Last ten calendar years

Year Ended December 31	Actuarially Determined Contributions ^{1,2}	Contributions in Relation to the Actuarially Determined Contributions ^{1,2}	Contribution Deficiency / (Excess)	Covered Payroll ³	Contributions as a Percentage of Covered Payroll ^{1,2}
2013	\$426,020,000	\$427,095,000 ⁴	\$(1,075,000)	\$1,494,745,000	28.57%
2014	476,320,000	625,520,000 ⁵	(149,200,000)	1,513,206,000	41.34%
2015	502,886,000	571,298,000 ⁶	(68,412,000)	1,521,036,000	37.56%
2016	521,447,000	567,196,000 ⁷	(45,749,000)	1,602,675,000	35.40%
2017	536,726,0008	572,104,000 ^{8,9}	(35,378,000)	1,678,322,000	34.09%
2018	556,728,000 ¹⁰	580,905,000 ^{10,11}	(24,177,000)	1,718,798,000	33.80%
2019	583,057,000	653,793,000 ¹²	(70,736,000)	1,783,054,000	36.67%
2020	638,215,000	659,807,000 ¹³	(21,592,000)	1,909,268,000	34.56%
2021	684,142,000 ¹⁴	698,791,000 ¹⁵	(14,649,000)	1,870,387,000	37.36%
2022	707,318,000	719,691,000 ¹⁶	(12,373,000)	1,932,374,000	37.24%

¹ Reduced by transfers from County Investment Account (funded by pension obligation proceeds held by OCERS). Those transfers are as follows:

Calendar Year Ended December 31	Transfers from County Investment Account	Calendar Year Ended December 31	Transfers from County Investment Account
2013	\$5,000,000	2018	\$0
2014	5,000,000	2019	0
2015	0	2020	5,000,000
2016	0	2021	15,077,000
2017	0	2022	14,962,000

² Reduced by discount for prepaid contributions.

¹⁶ Includes additional contributions of \$11,777,000 made by O.C. Fire Authority and \$596,000 made by Cypress Recreation and Parks District towards the reduction of their UAAL.



³ Covered payroll represents payroll on which contributions to the pension plan are based.

⁴ Includes additional contributions of \$1,075,000 made by O.C. Fire Authority towards the reduction of their UAAL.

⁵ Includes additional contributions of \$1,663,000 made by O.C. Cemetery District, \$22,537,000 made by O.C. Fire Authority and \$125,000,000 made by O.C. Sanitation District towards the reduction of their UAAL.

⁶ Includes additional contributions of \$18,412,000 made by O.C. Fire Authority and \$50,000,000 made by O.C. Sanitation District towards the reduction of their UAAL.

⁷ Includes additional contributions of \$5,133,000 made by O.C. Fire Authority, \$1,500,000 made by Law Library and \$5,587,000 made by O.C. Sanitation District towards the reduction of their UAAL as well as \$33,529,000 made by O.C. Sanitation District to their UAAL Deferred Account.

^{8 \$24,042,000} transfer from O.C. Sanitation District Deferred UAAL Account required to offset UAAL increase for the assumption changes has been excluded from both these amounts.

⁹ Includes additional contributions of \$32,096,000 made by O.C. Fire Authority, \$1,538,000 made by Law Library and \$1,744,000 made by O.C. Children and Families Commission towards the reduction of their UAAL.

¹⁰ \$14,589,000 transfer from O.C. Sanitation District Deferred UAAL Account required to offset UAAL increase for the actuarial losses as of December 31, 2018 has been excluded from both these amounts.

¹¹ Includes additional contributions of \$23,437,000 made by O.C. Fire Authority and \$740,000 made by Cypress Recreation and Parks District towards the reduction of their UAAL.

¹² Includes additional contributions of \$19,043,000 made by O.C. Fire Authority, \$878,000 made by O.C. Vector Control, \$12,815,000 Transportation Corridor and \$8,116,000 made by O.C. Sanitation District towards the reduction of their UAAL as well as \$29,884,000 made by O.C. Sanitation District to their UAAL Deferred Account.

¹³ Includes additional contributions of \$21,592,000 made by O.C. Fire Authority towards the reduction of their UAAL.

¹⁴ Includes a contribution of \$6,500,000 made by City of San Juan Capistrano related to transferring its Water Department employees to a separate special district, which resulted in a triggering event under the Board's Declining Employer Payroll policy.

¹⁵ Includes additional contributions of \$14,649,000 made by O.C. Fire Authority towards the reduction of their UAAL.

Notes to Schedule:

Methods and assumptions used to establish "actuarially determined contribution" rates:

Valuation date:	Actuarially determined contribution rates for the first six months of calendar year 2022 or the second half of fiscal year 2021-2022 are calculated based on the December 31, 2019 valuation. Actuarially determined contribution rates for the last six months of calendar year 2022 or the first half of fiscal year 2022-2023 are calculated based on the December 31, 2020 valuation.
Actuarial cost method:	Entry Age Actuarial Cost Method
Amortization method:	Level percent of payroll for total unfunded actuarial accrued liability
Remaining amortization period:	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. Any changes in UAAL due to actuarial gains or losses or due to changes in assumptions or methods will be amortized over separate 20-year periods. Any changes in UAAL due to plan amendments will be amortized over separate 15-year periods and any change in UAAL due to early retirement incentive programs will be amortized over a separate period of up to 5 years.
Asset valuation method:	The Actuarial Value of Assets is determined by recognizing any difference between the actual and the expected market return over a five-year period. The Valuation Value of Assets is the Actuarial Value of Assets reduced by the value of the non-valuation reserves.

Actuarial assumptions:		
Valuation Date:	December 31, 2020 Valuation	December 31, 2019 Valuation
Investment rate of return:	7.00%, net of pension plan investment expense, including inflation	7.00%, net of pension plan investment expense, including inflation
Inflation rate:	2.50%	2.75%
Real across-the-board salary increase:	0.50%	0.50%
Projected salary increases:	General: 4.00% to 11.00% and Safety: 4.60% to 15.00%, vary by service, including inflation	General: 4.25% to 12.25% and Safety: 4.75% to 17.25%, vary by service, including inflation
Cost of Living Adjustments (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	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
Other assumptions:	Same as those used in the December 31, 2020 funding actuarial valuation	Same as those used in the December 31, 2019 funding actuarial valuation

Determination of proportionate share

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2021 to December 31, 2021*

	Rate Group #1	Rate Group #1 Percentage	Rate Group #2	Rate Group #2 Percentage	Rate Group #3	Rate Group #3 Percentage
Orange County	\$13,347,000	98.713%	\$336,991,000	88.527%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	3,301,000	0.867%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	2,367,000	0.622%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	8,607,000	100.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	180,000	0.047%	0	0.000%
Local Agency Formation Comm.	0	0.000%	184,000	0.048%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	37,645,000	9.889%	0	0.000%
O.C. IHSS Public Authority	174,000	1.287%	0	0.000%	0	0.000%
Total for all Employers	\$13,521,000	100.000%	\$380,668,000	100.000%	\$8,607,000	100.000%

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2021 to December 31, 2021*

	Rate Group #4	Rate Group #4 Percentage	Rate Group #5	Rate Group #5 Percentage	Rate Group #9	Rate Group #9 Percentage
Orange County	\$0	0.000%	\$0	0.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	867,000	100.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	30,263,000	100.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	100.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	<u>0</u>	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$0	100.000%	\$30,263,000	100.000%	\$867,000	100.000%

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2021 to December 31, 2021*

	Rate Group #10	Rate Group #10 Percentage	Rate Group #11	Rate Group #11 Percentage	Rate Group #12	Rate Group #12 Percentage
Orange County	\$0	0.000%	\$0	0.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	243,000	100.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	134,000	100.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	8,990,000	100.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$8,990,000	100.000%	\$243,000	100.000%	\$134,000	100.000%

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2021 to December 31, 2021*

	Rate Group #6	Rate Group #6 Percentage	Rate Group #7	Rate Group #7 Percentage	Rate Group #8	Rate Group #8 Percentage
Orange County	\$32,123,000	100.000%	\$171,101,000	100.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	74,105,000	100.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	0.000%	0	<u>0.000%</u>	0	0.000%
Total for all Employers	\$32,123,000	100.000%	\$171,101,000	100.000%	\$74,105,000	100.000%

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2021 to December 31, 2021*

	Total Contributions ¹	Total Percentage
Orange County	\$553,562,000	76.817%
O.C. Cemetery District	243,000	0.034%
O.C. Law Library	134,000	0.019%
O.C. Vector Control District	0	0.000%
O.C. Retirement System	3,301,000	0.458%
O.C. Fire Authority	83,095,000	11.531%
Cypress Recreation and Parks	0	0.000%
Department of Education	0	0.000%
Transportation Corridor Agency	867,000	0.120%
City of San Juan Capistrano	2,367,000	0.328%
O.C. Sanitation District	8,607,000	1.194%
O.C. Transportation Authority	30,263,000	4.200%
U.C.I.	0	0.000%
O.C. Children and Families Comm.	180,000	0.025%
Local Agency Formation Comm.	184,000	0.026%
Rancho Santa Margarita	0	0.000%
O.C. Superior Court	37,645,000	5.224%
O.C. IHSS Public Authority	<u>174,000</u>	<u>0.024%</u>
Total for all Employers	\$720,622,000	100.000%

¹ Excludes combined additional contributions of \$14,649,000 made by O.C. Fire Authority towards the reduction of their UAALs, contributions of \$6,500,000 made by City of San Juan Capistrano, combined contributions of \$3,622,000 made by Department of Education and U.C.I., and combined employer pick-up contributions of \$32,000 made by O.C. Children and Families Commission and Local Agency Formation Commission and reverse pick-up contributions of \$(38,000) made by O.C. Fire Authority.

Allocation of December 31, 2021 Net Pension Liability

	Rate Group #1	Rate Group #1 Percentage	Rate Group #2	Rate Group #2 Percentage	Rate Group #3	Rate Group #3 Percentage
Orange County	\$(21,936,844)	240.597%	\$1,569,726,151	87.955%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District ²	(5,501,623)	60.340%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	16,375,725	0.918%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks ²	(103,379)	1.134%	0	0.000%	0	0.000%
Department of Education ²	1,523,058	(16.704%)	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	11,742,303	0.658%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	(178,731,247)	100.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I. ²	17,134,332	(187.924%)	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	(811,951)	(0.045%)	0	0.000%
Local Agency Formation Comm.	0	0.000%	912,794	0.051%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	186,750,735	10.464%	0	0.000%
O.C. IHSS Public Authority	(233,222)	<u>2.558%</u>	0	0.000%	0	0.000%
Total for all Employers	\$(9,117,678)	100.000%	\$1,784,695,757	100.000%	\$(178,731,247)	100.000%

² In determining the NPLs for the O.C. Vector Control District, Cypress Recreation and Parks, Department of Education and U.C.I., we first start by rolling forward the VVAs of these employers as of December 31, 2020 to December 31, 2021 for the actual contributions, benefit payments and return on their VVAs during 2021. Those VVAs are then marked to the Plan's Fiduciary Net Position as of December 31, 2021. The TPLs for these employers are obtained from internal valuation results (by rolling forward their TPLs from December 31, 2020).



Allocation of December 31, 2021 Net Pension Liability

	Rate Group #4	Rate Group #4 Percentage	Rate Group #5	Rate Group #5 Percentage	Rate Group #9	Rate Group #9 Percentage
Orange County	\$0	0.000%	\$0	0.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	(10,881,786)	100.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	73,424,051	100.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	(6,231)	100.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$(6,231)	100.000%	\$73,424,051	100.000%	\$(10,881,786)	100.000%

Allocation of December 31, 2021 Net Pension Liability

	Rate Group #10	Rate Group #10 Percentage	Rate Group #11	Rate Group #11 Percentage	Rate Group #12	Rate Group #12 Percentage
Orange County	\$0	0.000%	\$0	0.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	(1,394,665)	100.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	(2,629,777)	100.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	(12,928,328)	100.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$(12,928,328)	100.000%	\$(1,394,665)	100.000%	\$(2,629,777)	100.000%

Allocation of December 31, 2021 Net Pension Liability

	Rate Group #6	Rate Group #6 Percentage	Rate Group #7	Rate Group #7 Percentage	Rate Group #8	Rate Group #8 Percentage
Orange County	\$63,879,695	100.000%	\$435,907,016	100.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	(91,979,085)	100.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	0.000%	0	<u>0.000%</u>	0	0.000%
Total for all Employers	\$63,879,695	100.000%	\$435,907,016	100.000%	\$(91,979,085)	100.000%

Allocation of December 31, 2021 Net Pension Liability

	Total NPL	Total Percentage
Orange County	\$2,047,576,018	99.870%
O.C. Cemetery District	(1,394,665)	(0.068%)
O.C. Law Library	(2,629,777)	(0.128%)
O.C. Vector Control District ²	(5,501,623)	(0.268%)
O.C. Retirement System	16,375,725	0.799%
O.C. Fire Authority	(104,907,413)	(5.117%)
Cypress Recreation and Parks ²	(103,379)	(0.005%)
Department of Education ²	1,523,058	0.074%
Transportation Corridor Agency	(10,881,786)	(0.531%)
City of San Juan Capistrano	11,742,303	0.573%
O.C. Sanitation District	(178,731,247)	(8.718%)
O.C. Transportation Authority	73,424,051	3.581%
U.C.I. ²	17,134,332	0.836%
O.C. Children and Families Comm.	(811,951)	(0.040%)
Local Agency Formation Comm.	912,794	0.044%
Rancho Santa Margarita	(6,231)	0.000%
O.C. Superior Court	186,750,735	9.109%
O.C. IHSS Public Authority	(233,222)	(0.011%)
Total for all Employers	\$2,050,237,722	100.000%

² In determining the NPLs for the O.C. Vector Control District, Cypress Recreation and Parks, Department of Education and U.C.I., we first start by rolling forward the VVAs of these employers as of December 31, 2020 to December 31, 2021 for the actual contributions, benefit payments and return on their VVAs during 2021. Those VVAs are then marked to the Plan's Fiduciary Net Position as of December 31, 2021. The TPLs for these employers are obtained from internal valuation results (by rolling forward their TPLs from December 31, 2020).

Notes regarding determination of proportionate share as of December 31, 2021 measurement date

- 1. Based on the January 1, 2021 through December 31, 2021 employer contributions as provided by OCERS. These contributions have been adjusted to include transfers made from the County Investment Account and to exclude employer paid member contributions and they have not been reduced for discount due to prepaid contributions.
- 2a. The Net Pension Liability (NPL) for each Rate Group is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position (plan assets). The TPL for each Rate Group is obtained from internal valuation results. The Plan's Fiduciary Net Position for each Rate Group is estimated by adjusting the Valuation Value of Assets (VVA) for each membership class by the ratio of the total OCERS Plan's Fiduciary Net Position (excluding the balance of the County Investment Account and the O.C. Sanitation District UAAL Deferred Account) to total OCERS VVA. As previously directed by OCERS, the County Investment Account is then allocated among the four County Rate Groups using the proportions of County POB contributions applied during 2021. These amounts are provided in item 3. The O.C. Sanitation District UAAL Deferred Account is allocated entirely to Rate Group #3 and the balance of that account has increased from \$13,433,000 to \$15,643,000 at the end of the year. The balance of the O.C. Sanitation District UAAL Deferred Account was used to reduce the NPL for the O.C. Sanitation District as of the measurement date.
- b. Each of General Rate Groups #3, #4, #5, #9, #10, #11 and #12 and Safety Rate Groups #6, #7 and #8 have only one active employer, so all of the NPL for that Rate Group is allocated to the corresponding employer.
- c. For General Rate Groups #1 and #2, the NPL is allocated based on the actual employer contributions within the General Rate Group.
 - The NPL for Rate Group #1 was adjusted by the NPLs for the O.C. Vector Control District, Cypress Recreation and Parks, Department of Education and U.C.I. prior to allocating the net NPL to the other employers in Rate Group #1 as the NPLs for these four employers were calculated separately.
 - Calculate ratio of employer's contributions to the total contributions for the Rate Group. For this purpose, the employer contributions exclude the following amounts:

(i) Rate Group #1 (Department of Education): \$345,566

(ii) Rate Group #1 (U.C.I.): \$3,276,341

(iii) Rate Group #2 (City of San Juan Capistrano): \$6,500,000

 Multiply this ratio (unrounded) by the NPL for the Rate Group to determine the employer's proportionate share of the NPL for the Rate Group.

- The UAAL contributions referenced in (i), (ii), and (iii) above are adjusted with interest to December 31, 2021 and are used to reduce the NPL for the two employers as of December 31, 2021.
- 3. The percentages of contributions by employer are not exactly equal to the percentages we use to allocate the NPL by employer because the NPL for the County has been reduced to reflect the portion of the County Investment Account that has been allocated among the four County Rate Groups. The amounts of the County Investment Account that have been allocated to those Rate Groups are as follows:

Rate Group #1: \$4,047,073

Rate Group #2: 102,031,509

Rate Group #6: 9,756,386

Rate Group #7: 51,910,032

Total: \$167,745,000

In addition, the NPL for Rate Group #2 was allocated prior to applying the adjusted balance of the \$1,744,454 in additional UAAL contributions made by O.C. Children and Families Commission on November 15, 2017. That balance is equal to \$1,748,649 as of December 31, 2020 and is equal to \$1,704,902 as of December 31, 2021 when adjusted with interest for the entire year and UAAL contribution offset starting from January 1, 2021 to December 31, 2021. We would continue to maintain the outstanding balance of the additional UAAL contributions for use in determining the NPL for this employer.

4. If the employer is in several Rate Groups, the employer's total allocated NPL is the sum of its allocated NPL from each Rate Group. Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2022 to December 31, 2022*

	Rate Group #1	Rate Group #1 Percentage	Rate Group #2	Rate Group #2 Percentage	Rate Group #3	Rate Group #3 Percentage
Orange County	\$13,706,000	98.583%	\$370,256,000	88.630%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	3,614,000	0.865%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	2,138,000	0.512%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	8,686,000	100.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	187,000	0.045%	0	0.000%
Local Agency Formation Comm.	0	0.000%	182,000	0.044%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	41,375,000	9.904%	0	0.000%
O.C. IHSS Public Authority	197,000	<u>1.417%</u>	0	0.000%	0	0.000%
Total for all Employers	\$13,903,000	100.000%	\$417,752,000	100.000%	\$8,686,000	100.000%

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2022 to December 31, 2022*

	Rate Group #4	Rate Group #4 Percentage	Rate Group #5	Rate Group #5 Percentage	Rate Group #9	Rate Group #9 Percentage
Orange County	\$0	0.000%	\$0	0.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	895,000	100.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	33,081,000	100.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	100.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	<u>0</u>	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$0	100.000%	\$33,081,000	100.000%	\$895,000	100.000%

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2022 to December 31, 2022*

	Rate Group #10	Rate Group #10 Percentage	Rate Group #11	Rate Group #11 Percentage	Rate Group #12	Rate Group #12 Percentage
Orange County	\$0	0.000%	\$0	0.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	285,000	100.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	128,000	100.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	8,293,000	100.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	<u>0.000%</u>	0	<u>0.000%</u>	0	0.000%
Total for all Employers	\$8,293,000	100.000%	\$285,000	100.000%	\$128,000	100.000%

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2022 to December 31, 2022*

	Rate Group #6	Rate Group #6 Percentage	Rate Group #7	Rate Group #7 Percentage	Rate Group #8	Rate Group #8 Percentage
Orange County	\$31,341,000	100.000%	\$171,671,000	100.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	69,659,000	100.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$31,341,000	100.000%	\$171,671,000	100.000%	\$69,659,000	100.000%

Actual Contributions (Excluding Employer Paid Member Contributions and Employee Paid Reverse Pick-up Contributions, and not Reduced for Discount due to Prepaid Contributions) by Employer and Rate Group *January 1, 2022 to December 31, 2022*

	Total Contributions ³	Total Percentage
Orange County	\$586,974,000	77.674%
O.C. Cemetery District	285,000	0.038%
O.C. Law Library	128,000	0.017%
O.C. Vector Control District	0	0.000%
O.C. Retirement System	3,614,000	0.478%
O.C. Fire Authority	77,952,000	10.315%
Cypress Recreation and Parks	0	0.000%
Department of Education	0	0.000%
Transportation Corridor Agency	895,000	0.118%
City of San Juan Capistrano	2,138,000	0.283%
O.C. Sanitation District	8,686,000	1.149%
O.C. Transportation Authority	33,081,000	4.378%
U.C.I.	0	0.000%
O.C. Children and Families Comm.	187,000	0.025%
Local Agency Formation Comm.	182,000	0.024%
Rancho Santa Margarita	0	0.000%
O.C. Superior Court	41,375,000	5.475%
O.C. IHSS Public Authority	<u>197,000</u>	<u>0.026%</u>
Total for all Employers	\$755,694,000	100.000%

Excludes combined additional contributions of \$11,777,000 made by O.C. Fire Authority towards the reduction of their UAALs, combined contributions of \$4,186,000 made by Department of Education, U.C.I., and Cypress Recreation & Parks and combined employer pick-up contributions of \$33,000 made by O.C. Children and Families Commission and Local Agency Formation Commission.

Allocation of December 31, 2022 Net Pension Liability

	Rate Group #1	Rate Group #1 Percentage	Rate Group #2	Rate Group #2 Percentage	Rate Group #3	Rate Group #3 Percentage
Orange County	\$43,084,275	56.320%	\$3,141,103,763	88.388%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District ⁴	47,967	0.063%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	31,526,121	0.887%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks ⁴	61,016	0.080%	0	0.000%	0	0.000%
Department of Education ⁴	3,323,372	4.344%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	18,650,483	0.525%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	(10,604,801)	100.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I. ⁴	29,314,724	38.321%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	(21,846)	(0.001%)	0	0.000%
Local Agency Formation Comm.	0	0.000%	1,587,646	0.045%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	360,927,849	10.156%	0	0.000%
O.C. IHSS Public Authority	666,697	<u>0.872%</u>	0	0.000%	0	0.000%
Total for all Employers	\$76,498,051	100.000%	\$3,553,774,016	100.000%	\$(10,604,801)	100.000%

⁴ In determining the NPLs for the O.C. Vector Control District, Cypress Recreation and Parks, Department of Education and U.C.I., we first start by rolling forward the VVAs of these employers as of December 31, 2021 to December 31, 2022 for the actual contributions, benefit payments and return on their VVAs during 2022. Those VVAs are then marked to the Plan's Fiduciary Net Position as of December 31, 2022. The TPLs for these employers are obtained from internal valuation results (by rolling forward their TPLs from December 31, 2021).

Allocation of December 31, 2022 Net Pension Liability

	Rate Group #4	Rate Group #4 Percentage	Rate Group #5	Rate Group #5 Percentage	Rate Group #9	Rate Group #9 Percentage
Orange County	\$0	0.000%	\$0	0.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	(659,689)	100.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	207,132,957	100.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	1,652	100.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$1,652	100.000%	\$207,132,957	100.000%	\$(659,689)	100.000%

Allocation of December 31, 2022 Net Pension Liability

	Rate Group #10	Rate Group #10 Percentage	Rate Group #11	Rate Group #11 Percentage	Rate Group #12	Rate Group #12 Percentage
Orange County	\$0	0.000%	\$0	0.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	1,031,416	100.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	(321,987)	100.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	37,555,646	100.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	<u>0.000%</u>	0	<u>0.000%</u>	0	0.000%
Total for all Employers	\$37,555,646	100.000%	\$1,031,416	100.000%	\$(321,987)	100.000%

Allocation of December 31, 2022 Net Pension Liability

	Rate Group #6	Rate Group #6 Percentage	Rate Group #7	Rate Group #7 Percentage	Rate Group #8	Rate Group #8 Percentage
Orange County	\$199,228,663	100.000%	\$1,085,865,303	100.000%	\$0	0.000%
O.C. Cemetery District	0	0.000%	0	0.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	0	0.000%
O.C. Vector Control District	0	0.000%	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	0	0.000%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	241,504,944	100.000%
Cypress Recreation and Parks	0	0.000%	0	0.000%	0	0.000%
Department of Education	0	0.000%	0	0.000%	0	0.000%
Transportation Corridor Agency	0	0.000%	0	0.000%	0	0.000%
City of San Juan Capistrano	0	0.000%	0	0.000%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	0	0.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I.	0	0.000%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Comm.	0	0.000%	0	0.000%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	0	0.000%	0	0.000%
O.C. IHSS Public Authority	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$199,228,663	100.000%	\$1,085,865,303	100.000%	\$241,504,944	100.000%

Allocation of December 31, 2022 Net Pension Liability

	Total NPL	Total Percentage
Orange County	\$4,469,282,004	82.903%
O.C. Cemetery District	1,031,416	0.019%
O.C. Law Library	(321,987)	(0.006%)
O.C. Vector Control District ⁴	47,967	0.001%
O.C. Retirement System	31,526,121	0.585%
O.C. Fire Authority	279,060,590	5.176%
Cypress Recreation and Parks ⁴	61,016	0.001%
Department of Education ⁴	3,323,372	0.062%
Transportation Corridor Agency	(659,689)	(0.012%)
City of San Juan Capistrano	18,650,483	0.346%
O.C. Sanitation District	(10,604,801)	(0.197%)
O.C. Transportation Authority	207,132,957	3.842%
U.C.I. ⁴	29,314,724	0.544%
O.C. Children and Families Comm.	(21,846)	0.000%
Local Agency Formation Comm.	1,587,646	0.029%
Rancho Santa Margarita	1,652	0.000%
O.C. Superior Court	360,927,849	6.695%
O.C. IHSS Public Authority	666,697	<u>0.012%</u>
Total for all Employers	\$5,391,006,171	100.000%

⁴ In determining the NPLs for the O.C. Vector Control District, Cypress Recreation and Parks, Department of Education and U.C.I., we first start by rolling forward the VVAs of these employers as of December 31, 2021 to December 31, 2022 for the actual contributions, benefit payments and return on their VVAs during 2022. Those VVAs are then marked to the Plan's Fiduciary Net Position as of December 31, 2022. The TPLs for these employers are obtained from internal valuation results (by rolling forward their TPLs from December 31, 2021).

Notes regarding determination of proportionate share as of December 31, 2022 measurement date

- 1. Based on the January 1, 2022 through December 31, 2022 employer contributions as provided by OCERS. These contributions have been adjusted to include transfers made from the County Investment Account and to exclude employer paid member contributions and they have not been reduced for discount due to prepaid contributions.
- 2a. The Net Pension Liability (NPL) for each Rate Group is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position (plan assets). The TPL for each Rate Group is obtained from internal valuation results. The Plan's Fiduciary Net Position for each Rate Group is estimated by adjusting the Valuation Value of Assets (VVA) for each membership class by the ratio of the total OCERS Plan's Fiduciary Net Position (excluding the balance of the County Investment Account and the O.C. Sanitation District UAAL Deferred Account) to total OCERS VVA. As previously directed by OCERS, the County Investment Account is then allocated among the four County Rate Groups using the proportions of County POB contributions applied during 2022. These amounts are provided in item 3. The O.C. Sanitation District UAAL Deferred Account is allocated entirely to Rate Group #3 and the balance of that account has decreased from \$15,643,000 to \$14,398,000 at the end of the year. The balance of the O.C. Sanitation District UAAL Deferred Account was used to reduce the NPL for the O.C. Sanitation District as of the measurement date.
- b. Each of General Rate Groups #3, #4, #5, #9, #10, #11 and #12 and Safety Rate Groups #6, #7 and #8 have only one active employer, so all of the NPL for that Rate Group is allocated to the corresponding employer.
- c. For General Rate Groups #1 and #2, the NPL is allocated based on the actual employer contributions within the General Rate Group.
 - The NPL for Rate Group #1 was adjusted by the NPLs for the O.C. Vector Control District, Cypress Recreation and Parks, Department of Education and U.C.I. prior to allocating the net NPL to the other employers in Rate Group #1 as the NPLs for these four employers were calculated separately.
 - Calculate ratio of employer's contributions to the total contributions for the Rate Group. For this purpose, the employer contributions exclude the following amounts:

(i) Rate Group #1 (Department of Education): \$366,917

(ii) Rate Group #1 (U.C.I.): \$3,223,630

(iii) Rate Group #1 (Cypress Recreation & Parks): \$595,600

- Multiply this ratio (unrounded) by the NPL for the Rate Group to determine the employer's proportionate share of the NPL for the Rate Group.
- The UAAL contributions referenced in (i), (ii) and (iii) above are adjusted with interest to December 31, 2022 and are used to reduce the NPL for the three employers as of December 31, 2022.
- 3. The percentages of contributions by employer are not exactly equal to the percentages we use to allocate the NPL by employer because the NPL for the County has been reduced to reflect the portion of the County Investment Account that has been allocated among the four County Rate Groups. The amounts of the County Investment Account that have been allocated to those Rate Groups are as follows:

Rate Group #1: \$3,300,236

Rate Group #2: 88,762,138

Rate Group #6: 7,563,286

Rate Group #7: 41,366,340

Total: \$140,992,000

In addition, the NPL for Rate Group #2 was allocated prior to applying the adjusted balance of the \$1,744,454 in additional UAAL contributions made by O.C. Children and Families Commission on November 15, 2017. That balance is equal to \$1,704,902 as of December 31, 2021 and is equal to \$1,653,109 as of December 31, 2022 when adjusted with interest for the entire year and UAAL contribution offset starting from January 1, 2022 to December 31, 2022. We would continue to maintain the outstanding balance of the additional UAAL contributions for use in determining the NPL for this employer.

4. If the employer is in several Rate Groups, the employer's total allocated NPL is the sum of its allocated NPL from each Rate Group. Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

For the active employers, the following items are allocated based on the corresponding proportionate share within each Rate Group:

- a. Net Pension Liability
- b. Service cost
- c. Interest on the Total Pension Liability
- d. Current-period benefit changes
- e. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
- f. Expensed portion of current-period changes of assumptions or other inputs
- g. Member contributions
- h. Projected earnings on plan investments
- i. Expensed portion of current-period differences between actual and projected earnings on plan investments
- j. Administrative expense
- k. Recognition of beginning of year deferred outflows of resources as pension expense
- I. Recognition of beginning of year deferred inflows of resources as pension expense

Pension expense

Total for All Employers

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense	,	,
Service cost	\$526,768,913	\$510,863,197
Interest on the Total Pension Liability	1,675,053,178	1,609,891,069
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	8,595,262	(20,742,423)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(270,032,000)	(271,328,000)
Projected earnings on plan investments	(1,528,466,374)	(1,312,304,499)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	717,411,276	(381,952,100)
Administrative expense	23,546,000	21,473,000
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	487,751,950	488,032,428
Recognition of beginning of year deferred inflows of resources as pension expense	(912,304,973)	(765,059,527)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$728,323,232	\$(121,126,855)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

Orange County

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense	ŕ	,
Service cost	\$380,041,954	\$368,412,111
Interest on the Total Pension Liability	1,251,187,176	1,196,305,667
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	1,786,458	(1,005,218)
Current-period benefit changes	0	0
 Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability 	4,117,589	(6,124,010)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(201,176,237)	(203,086,033)
Projected earnings on plan investments	(1,106,094,213)	(946,656,208)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	518,370,000	(276,095,527)
Administrative expense	17,678,496	15,957,997
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	356,184,404	355,055,739
Recognition of beginning of year deferred inflows of resources as pension expense	(645,848,775)	(548,457,241)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	<u>3,818,335</u>	<u>7,137,914</u>
Pension Expense	\$580,065,187	\$(38,554,809)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Cemetery District

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$407,963	\$392,495
Interest on the Total Pension Liability	944,512	890,649
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	19,388	7,939
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(191,000)	(182,000)
Projected earnings on plan investments	(1,029,298)	(887,439)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	489,415	(257,112)
Administrative expense	10,944	9,119
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	423,199	415,637
Recognition of beginning of year deferred inflows of resources as pension expense	(664,112)	(571,006)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$411,011	\$(181,718)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Law Library

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$319,023	\$316,123
Interest on the Total Pension Liability	839,331	825,504
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
 Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability 	6,542	(77,705)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(165,000)	(159,000)
Projected earnings on plan investments	(1,010,753)	(879,609)
Expensed portion of current-period differences between actual and projected earnings on plan investments	480,213	(247,881)
Administrative expense	6,733	6,330
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	288,619	288,618
Recognition of beginning of year deferred inflows of resources as pension expense	(740,456)	(578,969)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	<u>(25,423)</u>
Pension Expense	\$24,252	\$(532,012)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Vector Control District

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense	,	
Service cost	\$0	\$0
Interest on the Total Pension Liability	1,803,819	1,884,831
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
 Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability 	122,278	(191,783)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	0	0
Projected earnings on plan investments	(2,188,933)	(2,002,568)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	1,054,636	(531,341)
Administrative expense	0	0
Other	0	0
 Recognition of beginning of year deferred outflows of resources as pension expense 	773,823	776,282
Recognition of beginning of year deferred inflows of resources as pension expense	(1,674,671)	(1,345,037)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$(109,048)	\$(1,409,616)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Retirement System

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$2,306,862	\$2,333,020
Interest on the Total Pension Liability	8,273,183	8,220,440
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	(125,526)	262,105
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	36,835	(24,527)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(1,365,769)	(1,435,758)
Projected earnings on plan investments	(7,167,638)	(6,380,412)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	3,354,700	(1,854,275)
Administrative expense	114,335	105,166
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	2,397,791	2,480,087
Recognition of beginning of year deferred inflows of resources as pension expense	(3,997,514)	(3,564,625)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	<u>1,185,182</u>	<u>833,197</u>
Pension Expense	\$5,012,441	\$974,418



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Fire Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$71,985,133	\$68,123,987
Interest on the Total Pension Liability	166,418,627	159,120,659
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
 Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability 	4,851,903	(5,411,470)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(30,119,000)	(29,587,000)
Projected earnings on plan investments	(172,732,558)	(146,025,928)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	81,400,488	(43,070,769)
Administrative expense	2,801,567	2,770,589
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	48,039,184	48,263,968
Recognition of beginning of year deferred inflows of resources as pension expense	(113,363,957)	(90,743,047)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$59,281,387	\$(36,559,011)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

Cypress Recreation and Parks

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$0	\$0
Interest on the Total Pension Liability	319,876	314,510
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
 Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability 	(6,841)	17,217
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	0	0
Projected earnings on plan investments	(345,920)	(301,552)
Expensed portion of current-period differences between actual and projected earnings on plan investments	161,776	(79,058)
Administrative expense	14,170	0
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	868,805	851,586
Recognition of beginning of year deferred inflows of resources as pension expense	(187,246)	(908,645)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$824,620	\$(105,942)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

Department of Education

Reporting Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Measurement Date for Employer under GASB 68 Components of Pension Expense	December 31, 2022	December 31, 2021
Service cost	\$0	\$0
Interest on the Total Pension Liability	752,044	796,200
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	88,973	(30,989)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	0	0
Projected earnings on plan investments	(658,415)	(622,689)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	316,706	(161,007)
Administrative expense	8,729	7,649
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	353,747	353,749
Recognition of beginning of year deferred inflows of resources as pension expense	(646,524)	(599,011)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$215,260	\$(256,098)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

Transportation Corridor Agency

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$1,719,824	\$1,515,843
Interest on the Total Pension Liability	4,004,357	3,850,950
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(70,168)	(176,742)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(769,000)	(750,000)
Projected earnings on plan investments	(4,700,977)	(4,070,373)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	2,231,602	(1,159,083)
Administrative expense	38,494	34,817
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	1,160,518	1,191,648
Recognition of beginning of year deferred inflows of resources as pension expense	(2,917,822)	(2,049,721)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$696,828	\$(1,612,661)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

City of San Juan Capistrano

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense	December 31, 2022	December 31, 2021
Service cost	\$1,364,714	\$1,672,904
Interest on the Total Pension Liability	4,894,318	5,894,511
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	(691,040)	906,666
Current-period benefit changes	0	0
 Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability 	21,791	(17,587)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(807,973)	(1,029,518)
Projected earnings on plan investments	(4,240,291)	(4,575,109)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	1,984,601	(1,329,618)
Administrative expense	67,639	75,410
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	1,418,505	1,778,360
Recognition of beginning of year deferred inflows of resources as pension expense	(2,364,883)	(2,556,034)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	<u> 182,364</u>	<u>(1,021,704)</u>
Pension Expense	\$1,829,745	\$(201,719)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Sanitation District

Reporting Date for Employer under GASB 68	June 30, 2023	June 30, 2022
Measurement Date for Employer under GASB 68	December 31, 2022	December 31, 2021
Components of Pension Expense		
Service cost	\$17,682,577	\$17,065,799
Interest on the Total Pension Liability	57,349,037	56,429,458
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	2,583,448	(4,042,052)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(8,371,000)	(8,398,000)
Projected earnings on plan investments	(69,189,314)	(60,607,002)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	32,900,795	(16,948,741)
Administrative expense	394,721	366,765
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	23,879,318	23,879,317
Recognition of beginning of year deferred inflows of resources as pension expense	(41,874,971)	(31,238,883)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	<u>25,423</u>
Pension Expense	\$15,354,611	\$(23,467,916)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Transportation Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		,,
Service cost	\$24,124,909	\$24,234,150
Interest on the Total Pension Liability	76,125,814	74,438,122
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(3,790,022)	(4,399,492)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(11,226,000)	(10,212,000)
Projected earnings on plan investments	(70,749,224)	(61,051,970)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	33,238,497	(17,637,562)
Administrative expense	1,010,939	861,399
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	21,776,737	21,789,253
Recognition of beginning of year deferred inflows of resources as pension expense	(47,521,666)	(37,546,561)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$22,989,984	\$(9,524,661)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

U.C.I

Reporting Date for Employer under GASB 68	June 30, 2023	June 30, 2022
Measurement Date for Employer under GASB 68	December 31, 2022	December 31, 2021
Components of Pension Expense		
Service cost	\$0	\$0
Interest on the Total Pension Liability	6,588,721	6,837,427
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	188,437	11,990
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	0	0
Projected earnings on plan investments	(5,503,209)	(5,175,045)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	2,644,474	(1,345,344)
Administrative expense	76,694	72,519
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	2,481,257	2,515,625
Recognition of beginning of year deferred inflows of resources as pension expense	(4,219,897)	(4,042,164)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$2,256,477	\$(1,124,992)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Children and Families Comm.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$(1,598)	\$(115,678)
Interest on the Total Pension Liability	(5,733)	(407,591)
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	265,607	(79,977)
Current-period benefit changes	0	0
 Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability 	(26)	1,216
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	946	71,189
Projected earnings on plan investments	4,967	316,357
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	(2,325)	91,940
Administrative expense	(79)	(5,214)
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	(1,662)	(122,969)
Recognition of beginning of year deferred inflows of resources as pension expense	2,770	176,743
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	<u>(374,763)</u>	<u>(393,190)</u>
Pension Expense	\$(111,896)	\$(467,174)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

Local Agency Formation Comm.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense	,	
Service cost	\$116,173	\$130,044
Interest on the Total Pension Liability	416,635	458,213
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	(35,036)	41,869
Current-period benefit changes	0	0
 Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability 	1,855	(1,367)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(68,780)	(80,030)
Projected earnings on plan investments	(360,960)	(355,648)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	168,942	(103,359)
Administrative expense	5,758	5,862
Other	0	0
 Recognition of beginning of year deferred outflows of resources as pension expense 	120,752	138,242
Recognition of beginning of year deferred inflows of resources as pension expense	(201,314)	(198,695)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	<u>39,141</u>	<u>42,793</u>
Pension Expense	\$203,166	\$77,924



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

Rancho Santa Margarita

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$0	\$0
Interest on the Total Pension Liability	3,016	3,091
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	182	(30)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	0	0
Projected earnings on plan investments	(3,452)	(3,282)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	1,467	(629)
Administrative expense	0	0
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	1,146	1,144
Recognition of beginning of year deferred inflows of resources as pension expense	(3,040)	(3,992)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	0	0
Pension Expense	\$(681)	\$(3,698)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. Superior Court

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Components of Pension Expense		
Service cost	\$26,410,194	\$26,606,035
Interest on the Total Pension Liability	94,715,812	93,746,882
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	(1,226,025)	(83,753)
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	421,707	(279,706)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(15,636,056)	(16,373,559)
Projected earnings on plan investments	(82,058,946)	(72,762,986)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	38,406,398	(21,146,370)
Administrative expense	1,308,963	1,199,330
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	27,451,185	28,283,207
Recognition of beginning of year deferred inflows of resources as pension expense	(45,765,677)	(40,651,408)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	<u>(4,814,963)</u>	<u>(6,614,138)</u>
Pension Expense	\$39,212,592	\$(8,076,466)



¹ Member contributions include employer paid member contributions, if any.

Pension expense (continued)

O.C. IHSS Public Authority

Reporting Date for Employer under GASB 68	June 30, 2023	June 30, 2022
Measurement Date for Employer under GASB 68	December 31, 2022	December 31, 2021
Components of Pension Expense		
Service cost	\$291,185	\$176,364
Interest on the Total Pension Liability	422,633	281,546
 Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions 	25,562	(41,692)
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	1,391	(3,325)
Expensed portion of current-period changes of assumptions or other inputs	0	0
Member contributions ¹	(137,131)	(106,291)
Projected earnings on plan investments	(437,240)	(263,036)
 Expensed portion of current-period differences between actual and projected earnings on plan investments 	208,891	(76,364)
Administrative expense	7,897	5,262
• Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	134,622	92,935
Recognition of beginning of year deferred inflows of resources as pension expense	(315,218)	(181,231)
 Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions 	(35,296)	<u>15,128</u>
Pension Expense	\$167,296	\$(100,704)



¹ Member contributions include employer paid member contributions, if any.

Deferred outflows of resources and deferred inflows of resources

Total for all Employers

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$25,097,401	\$25,034,306
Changes of assumptions or other inputs	101,253,219	274,433,364
Difference between projected and actual earnings on pension plan investments	2,869,645,098	272,055,737
Difference between expected and actual experience in the Total Pension Liability	163,731,917	143,247,717
Total Deferred Outflows of Resources	\$3,159,727,635	\$714,771,124
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$25,097,401	\$25,034,306
Changes of assumptions or other inputs	90,703,515	122,982,345
Difference between projected and actual earnings on pension plan investments	1,783,252,999	2,600,993,035
Difference between expected and actual experience in the Total Pension Liability	129,435,283	166,626,218
Total Deferred Inflows of Resources	\$2,028,489,198	\$2,915,635,904
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(424,553,023)
2024	\$(94,033,210)	(820,039,748)
2025	156,486,894	(569,519,644)
2026	348,588,252	(377,418,286)
2027	716,672,453	(9,334,079)
2028	3,524,048	0
2029	0	0
Thereafter	0	0



¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

Orange County

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Changes in proportion and differences between employer's contributions and proportionate		
share of contributions ¹	\$16,413,390	\$14,269,881
Changes of assumptions or other inputs	81,544,510	215,922,612
Difference between projected and actual earnings on pension plan investments	2,073,479,998	196,375,395
Difference between expected and actual experience in the Total Pension Liability	<u>85,249,532</u>	<u>82,799,096</u>
Total Deferred Outflows of Resources	\$2,256,687,430	\$509,366,984
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$5,531,581	\$7,448,014
Changes of assumptions or other inputs	59,952,702	81,289,468
Difference between projected and actual earnings on pension plan investments	1,293,513,728	1,881,060,106
Difference between expected and actual experience in the Total Pension Liability	55,012,441	78,100,654
Total Deferred Inflows of Resources	\$1,414,010,452	\$2,047,898,242
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(285,121,140)
2024	\$(61,967,363)	(584,593,278)
2025	118,419,418	(404,763,847)
2026	262,742,907	(260,844,849)
2027	521,061,361	(3,208,144)
2028	2,420,655	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Cemetery District

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Deferred Outflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	82,339	192,556
Difference between projected and actual earnings on pension plan investments	1,957,658	185,535
Difference between expected and actual experience in the Total Pension Liability	401,601	443,549
Total Deferred Outflows of Resources	\$2,441,598	\$821,640
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	1,193,794	1,739,646
Difference between expected and actual experience in the Total Pension Liability	<u> 155,323</u>	273,583
Total Deferred Inflows of Resources	\$1,349,117	\$2,013,229
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(240,913)
2024	\$34,327	(474,476)
2025	177,985	(330,818)
2026	359,849	(148,954)
2027	512,373	3,572
2028	7,947	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Law Library

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	42,717	129,020
Difference between projected and actual earnings on pension plan investments	1,920,850	193,385
Difference between expected and actual experience in the Total Pension Liability	<u>45,465</u>	<u>25,545</u>
Total Deferred Outflows of Resources	\$2,009,032	\$347,950
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	1,166,471	1,705,162
Difference between expected and actual experience in the Total Pension Liability	472,570	674,335
Total Deferred Inflows of Resources	\$1,639,041	\$2,379,497
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(451,837)
2024	\$(212,675)	(699,430)
2025	(1,729)	(488,484)
2026	129,926	(356,829)
2027	451,786	(34,967)
2028	2,683	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Vector Control District

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Deferred Outflows of Resources	December 31, 2022	December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	56,144	220,263
Difference between projected and actual earnings on pension plan investments	4,218,544	497,305
Difference between expected and actual experience in the Total Pension Liability	<u>700,950</u>	<u>274,103</u>
Total Deferred Outflows of Resources	\$4,975,638	\$991,671
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	2,582,253	3,805,364
Difference between expected and actual experience in the Total Pension Liability	<u>958,190</u>	<u>1,409,750</u>
Total Deferred Inflows of Resources	\$3,540,443	\$5,215,114
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(900,848)
2024	\$(401,264)	(1,578,178)
2025	179,703	(997,211)
2026	516,009	(660,905)
2027	1,090,613	(86,301)
2028	50,134	0
2029	0	0
Thereafter	0	0



¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Retirement System

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$2,347,774	\$3,532,956
Changes of assumptions or other inputs	814,678	1,858,168
Difference between projected and actual earnings on pension plan investments	13,418,801	1,347,606
Difference between expected and actual experience in the Total Pension Liability	480,173	445,588
Total Deferred Outflows of Resources	\$17,061,426	\$7,184,318
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$553,571	\$0
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	8,372,177	12,636,493
Difference between expected and actual experience in the Total Pension Liability	<u> 185,187</u>	349,290
Total Deferred Inflows of Resources	\$9,110,935	\$12,985,783
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(469,447)
2024	\$854,892	(2,533,128)
2025	1,644,189	(1,703,070)
2026	2,114,489	(1,202,729)
2027	3,373,284	106,909
2028	(36,363)	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Fire Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Deferred Outflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	1,263,564	11,055,459
Difference between projected and actual earnings on pension plan investments	325,601,951	28,451,703
Difference between expected and actual experience in the Total Pension Liability	44,228,199	32,626,893
Total Deferred Outflows of Resources	\$371,093,714	\$72,134,055
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	30,147,517	40,876,171
Difference between projected and actual earnings on pension plan investments	198,693,451	288,925,170
Difference between expected and actual experience in the Total Pension Liability	21,455,804	<u>33,859,388</u>
Total Deferred Inflows of Resources	\$250,296,772	\$363,660,729
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(65,324,773)
2024	\$(12,576,483)	(98,828,874)
2025	14,217,846	(72,034,545)
2026	33,349,071	(52,903,320)
2027	83,817,228	(2,435,162)
2028	1,989,280	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

Cypress Recreation and Parks

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	232	23,600
Difference between projected and actual earnings on pension plan investments	647,105	70,662
Difference between expected and actual experience in the Total Pension Liability	<u>172,485</u>	<u>947,260</u>
Total Deferred Outflows of Resources	\$819,822	\$1,041,522
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	7,213	9,779
Difference between projected and actual earnings on pension plan investments	387,447	572,127
Difference between expected and actual experience in the Total Pension Liability	<u>30,171</u>	0
Total Deferred Inflows of Resources	\$424,831	\$581,906
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$681,559
2024	\$38,920	(116,015)
2025	86,612	(68,323)
2026	109,580	(45,355)
2027	162,686	7,750
2028	(2,807)	0
2029	0	0
Thereafter	0	0



¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

Department of Education

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	589	59,655
Difference between projected and actual earnings on pension plan investments	1,266,822	180,006
Difference between expected and actual experience in the Total Pension Liability	607,487	<u>329,790</u>
Total Deferred Outflows of Resources	\$1,874,898	\$569,451
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	59,457	80,616
Difference between projected and actual earnings on pension plan investments	804,206	1,193,127
Difference between expected and actual experience in the Total Pension Liability	<u>108,970</u>	345,414
Total Deferred Inflows of Resources	\$972,633	\$1,619,157
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(292,777)
2024	\$74,745	(330,934)
2025	173,583	(232,096)
2026	225,727	(179,952)
2027	391,730	(13,947)
2028	36,480	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

Transportation Corridor Agency

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	104,567	433,224
Difference between projected and actual earnings on pension plan investments	8,926,408	624,027
Difference between expected and actual experience in the Total Pension Liability	<u>477,961</u>	685,795
Total Deferred Outflows of Resources	\$9,508,936	\$1,743,046
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	5,366,673	7,812,023
Difference between expected and actual experience in the Total Pension Liability	<u>950,161</u>	<u>1,113,190</u>
Total Deferred Inflows of Resources	\$6,316,834	\$8,925,213
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(1,757,304)
2024	\$(244,686)	(2,406,120)
2025	450,828	(1,710,606)
2026	932,829	(1,228,605)
2027	2,081,902	(79,532)
2028	(28,771)	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

City of San Juan Capistrano

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Deferred Outflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$3,130,785	\$4,316,186
Changes of assumptions or other inputs	481,954	1,332,409
Difference between projected and actual earnings on pension plan investments	7,938,405	966,308
Difference between expected and actual experience in the Total Pension Liability	284,065	<u>319,511</u>
Total Deferred Outflows of Resources	\$11,835,209	\$6,934,414
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$5,632,351	\$3,587,902
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	4,952,882	9,061,066
Difference between expected and actual experience in the Total Pension Liability	<u>109,555</u>	250,461
Total Deferred Inflows of Resources	\$10,694,788	\$12,899,429
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(1,004,097)
2024	\$(879,118)	(2,727,988)
2025	(129,643)	(1,800,276)
2026	706,533	(832,741)
2027	1,717,042	400,087
2028	(274,393)	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Sanitation District

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Deferred Outflows of Resources	December 01, 2022	December 01, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	5,759,591	11,884,767
Difference between projected and actual earnings on pension plan investments	131,603,178	13,140,560
Difference between expected and actual experience in the Total Pension Liability	<u>21,845,552</u>	<u>15,066,130</u>
Total Deferred Outflows of Resources	\$159,208,321	\$40,091,457
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	79,859,618	116,780,014
Difference between expected and actual experience in the Total Pension Liability	<u>13,954,206</u>	<u>18,908,781</u>
Total Deferred Inflows of Resources	\$93,813,824	\$135,688,795
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(17,995,653)
2024	\$1,152,046	(34,332,197)
2025	11,328,468	(24,155,775)
2026	18,189,452	(17,294,791)
2027	33,665,319	(1,818,922)
2028	1,059,212	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Transportation Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	1,729,712	9,602,044
Difference between projected and actual earnings on pension plan investments	132,953,990	13,108,759
Difference between expected and actual experience in the Total Pension Liability	<u> 1,823,315</u>	<u>2,618,961</u>
Total Deferred Outflows of Resources	\$136,507,017	\$25,329,764
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	82,873,325	121,050,493
Difference between expected and actual experience in the Total Pension Liability	33,789,970	26,420,471
Total Deferred Inflows of Resources	\$116,663,295	\$147,470,964
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(25,744,929)
2024	\$(13,567,797)	(43,016,272)
2025	(685,112)	(30,133,587)
2026	8,181,835	(21,266,640)
2027	27,468,705	(1,979,772)
2028	(1,553,909)	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

U.C.I.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	4,733	478,219
Difference between projected and actual earnings on pension plan investments	10,577,898	1,483,018
Difference between expected and actual experience in the Total Pension Liability	<u>1,886,324</u>	<u>1,580,070</u>
Total Deferred Outflows of Resources	\$12,468,955	\$3,541,307
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0
Changes of assumptions or other inputs	533,050	722,747
Difference between projected and actual earnings on pension plan investments	6,709,422	9,948,282
Difference between expected and actual experience in the Total Pension Liability	<u>7,913</u>	799,253
Total Deferred Inflows of Resources	\$7,250,385	\$11,470,282
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(1,738,640)
2024	\$(84,514)	(2,917,425)
2025	896,330	(1,936,581)
2026	1,491,185	(1,341,726)
2027	2,838,310	5,397
2028	77,259	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Children and Families Comm.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$1,255,317	\$113,879
Changes of assumptions or other inputs	(565)	(92,133)
Difference between projected and actual earnings on pension plan investments	(9,299)	(66,818)
Difference between expected and actual experience in the Total Pension Liability	(333)	<u>(22,093)</u>
Total Deferred Outflows of Resources	\$1,245,120	\$(67,165)
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$684,632	\$1,089,285
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	(5,801)	(626,550)
Difference between expected and actual experience in the Total Pension Liability	(128)	<u>(17,319)</u>
Total Deferred Inflows of Resources	\$678,703	\$445,416
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(292,722)
2024	\$(30,153)	(113,560)
2025	51,885	(91,606)
2026	208,523	20,750
2027	227,274	(35,443)
2028	108,888	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

Local Agency Formation Comm.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$196,618	\$267,727
Changes of assumptions or other inputs	41,027	103,576
Difference between projected and actual earnings on pension plan investments	675,767	75,116
Difference between expected and actual experience in the Total Pension Liability	<u>24,181</u>	24,837
Total Deferred Outflows of Resources	\$937,593	\$471,256
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$220,544	\$98,003
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	421,620	704,367
Difference between expected and actual experience in the Total Pension Liability	9,326	19,470
Total Deferred Inflows of Resources	\$651,490	\$821,840
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(53,089)
2024	\$4,079	(157,612)
2025	58,086	(94,942)
2026	83,480	(63,163)
2027	154,062	18,222
2028	(13,604)	0
2029	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

Rancho Santa Margarita

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021	
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0	
Changes of assumptions or other inputs	3	162	
Difference between projected and actual earnings on pension plan investments	5,868	588	
Difference between expected and actual experience in the Total Pension Liability	<u>1,548</u>	<u>1,145</u>	
Total Deferred Outflows of Resources	\$7,419	\$1,895	
Deferred Inflows of Resources			
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$0	\$0	
Changes of assumptions or other inputs	518	702	
Difference between projected and actual earnings on pension plan investments	2,825	4,364	
Difference between expected and actual experience in the Total Pension Liability	<u>113</u>	<u>1,430</u>	
Total Deferred Inflows of Resources	ed Inflows of Resources \$3,456		
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:			
Reporting Date for Employer under GASB 68 Year Ended June 30:			
2023	N/A	\$(1,894)	
2024	\$272	(1,377)	
2025	1,030	(619)	
2026	949	(700)	
2027	1,638	(11)	
2028	74	0	
2029	0	0	
Thereafter	0	0	

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. Superior Court

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Deferred Outflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$1,634,440	\$2,513,172
Changes of assumptions or other inputs	9,326,865	21,190,769
Difference between projected and actual earnings on pension plan investments	153,625,590	15,368,255
Difference between expected and actual experience in the Total Pension Liability	5,497,276	5,081,537
Total Deferred Outflows of Resources	\$170,084,171	\$44,153,733
Deferred Inflows of Resources	· · · · · · · · · · · · · · · · · · ·	
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$12,313,476	\$12,600,403
Changes of assumptions or other inputs	0	0
Difference between projected and actual earnings on pension plan investments	95,849,149	144,108,081
Difference between expected and actual experience in the Total Pension Liability	2,120,124	3,983,349
Total Deferred Inflows of Resources	\$110,282,749	\$160,691,833
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(23,684,551)
2024	\$(6,137,475)	(44,973,100)
2025	9,634,746	(28,788,778)
2026	19,191,692	(18,928,116)
2027	37,442,227	(163,555)
2028	(329,768)	0
2029	0	0
Thereafter	0	0



¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

O.C. IHSS Public Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Deferred Outflows of Resources	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$119,077	\$20,505
Changes of assumptions or other inputs	559	38,994
Difference between projected and actual earnings on pension plan investments	835,564	54,327
Difference between expected and actual experience in the Total Pension Liability	<u>6,136</u>	0
Total Deferred Outflows of Resources	\$961,336	\$113,826
Deferred Inflows of Resources		
 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 	\$161,246	\$210,699
Changes of assumptions or other inputs	3,058	2,862
Difference between projected and actual earnings on pension plan investments	509,759	513,700
Difference between expected and actual experience in the Total Pension Liability	<u>115,387</u>	<u>134,718</u>
Total Deferred Inflows of Resources	\$789,450	\$861,979
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2023	N/A	\$(159,968)
2024	\$(90,963)	(239,784)
2025	(17,331)	(188,480)
2026	54,216	(139,661)
2027	214,913	(20,260)
2028	11,051	0
2029	0	0
Thereafter	0	0



¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Deferred outflows of resources and deferred inflows of resources (continued)

There are changes in each employer's proportionate share of the total NPL during the measurement period ended December 31, 2022. The net effect of the change on the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources for the current period (i.e., 2022) is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through OCERS which is 5.41 years determined as of December 31, 2021 (the beginning of the measurement period ended December 31, 2022). This is described in Paragraph 33a. of GASB 68.

In addition, the difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended December 31, 2022 is recognized over the same period.

The net effects of the change on the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources for prior periods are continued to be recognized based on the expected remaining service lives of all employees calculated as of those prior measurement dates.

The average of the expected service lives of all employees is determined by:

- Calculating each active employees' expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

Schedule of proportionate share of the Net Pension Liability

Total for All Employers

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	100.000%	\$5,291,126,088	\$1,494,745,333	353.98%	67.16%
2015	100.000%	5,082,480,673	1,513,206,357	335.87%	69.42%
2016	100.000%	5,716,604,741	1,521,035,820	375.84%	67.10%
2017	100.000%	5,191,216,603	1,602,675,426	323.91%	71.16%
2018	100.000%	4,952,099,401	1,678,322,080	295.06%	74.93%
2019	100.000%	6,197,202,089	1,718,798,287	360.55%	70.03%
2020	100.000%	5,075,682,463	1,783,054,087	284.66%	76.67%
2021	100.000%	4,213,246,650	1,909,268,347	220.67%	81.69%
2022	100.000%	2,050,237,722	1,870,386,937	109.62%	91.45%
2023	100.000%	5,391,006,171	1,932,374,427	278.98%	78.51%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

Orange County

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	74.198%	\$3,925,918,613	\$1,086,993,804	361.17%	66.88%
2015	76.680%	3,897,232,634	1,107,550,873	351.88%	68.16%
2016	76.813%	4,391,070,880	1,117,547,827	392.92%	65.66%
2017	77.898%	4,043,855,643	1,199,272,843	337.19%	69.56%
2018	80.445%	3,983,695,231	1,246,487,036	319.59%	72.85%
2019	79.367%	4,918,576,912	1,271,800,976	386.74%	68.06%
2020	81.254%	4,124,212,240	1,312,799,835	314.15%	74.47%
2021	84.200%	3,547,545,979	1,403,384,933	252.78%	79.31%
2022	99.870%	2,047,576,018	1,374,766,971	148.94%	88.59%
2023	82.903%	4,469,282,004	1,418,885,341	314.99%	76.17%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Cemetery District

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.034%	\$1,820,018	\$1,183,960	153.72%	76.02%
2015	(0.002%)	(95,350)	1,202,916	(7.93%)	101.24%
2016	0.009%	533,906	1,247,006	42.82%	93.62%
2017	0.004%	222,409	1,288,388	17.26%	97.47%
2018	(0.004%)	(173,677)	1,419,045	(12.24%)	101.78%
2019	0.016%	962,119	1,518,808	63.35%	91.02%
2020	(0.004%)	(228,119)	1,595,506	(14.30%)	102.07%
2021	(0.003%)	(145,195)	1,730,433	(8.39%)	101.16%
2022	(0.068%)	(1,394,665)	1,787,176	(78.04%)	110.35%
2023	0.019%	1,031,416	1,883,493	54.76%	92.81%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Law Library

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.063%	\$3,314,766	\$1,191,662	278.16%	63.14%
2015	0.063%	3,221,570	1,193,852	269.85%	66.76%
2016	0.061%	3,472,003	1,153,022	301.12%	62.38%
2017	0.034%	1,770,282	1,106,587	159.98%	80.96%
2018	(0.001%)	(36,317)	1,095,599	(3.31%)	100.35%
2019	0.009%	573,252	1,075,119	53.32%	94.64%
2020	(0.001%)	(74,515)	1,057,915	(7.04%)	100.66%
2021	(0.023%)	(949,226)	1,109,082	(85.59%)	108.09%
2022	(0.128%)	(2,629,777)	1,059,907	(248.11%)	122.03%
2023	(0.006%)	(321,987)	1,109,677	(29.02%)	102.56%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Vector Control District

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.047%	\$2,464,723	\$0	N/A	91.24%
2015	0.057%	2,900,367	0	N/A	89.85%
2016	0.034%	1,941,891	0	N/A	92.66%
2017	0.032%	1,669,793	0	N/A	93.78%
2018	0.024%	1,166,920	0	N/A	95.89%
2019	0.040%	2,492,695	0	N/A	90.92%
2020	(0.012%)	(625,500)	0	N/A	102.29%
2021	(0.040%)	(1,681,965)	0	N/A	106.03%
2022	(0.268%)	(5,501,623)	0	N/A	120.52%
2023	0.001%	47,967	0	N/A	99.82%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Retirement System

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.402%	\$21,259,813	\$5,368,550	396.01%	64.40%
2015	0.406%	20,656,114	5,655,725	365.22%	67.15%
2016	0.433%	24,747,342	6,063,327	408.15%	64.73%
2017	0.422%	21,886,393	6,190,905	353.52%	68.69%
2018	0.433%	21,427,080	6,486,488	330.33%	71.95%
2019	0.465%	28,844,760	7,501,588	384.52%	67.06%
2020	0.528%	26,824,264	8,491,615	315.89%	73.18%
2021	0.592%	24,954,057	9,414,503	265.06%	76.95%
2022	0.799%	16,375,725	9,518,018	172.05%	85.88%
2023	0.585%	31,526,121	9,950,919	316.82%	73.88%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Fire Authority

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	8.366%	\$442,651,348	\$129,689,221	341.32%	69.66%
2015	9.188%	466,968,323	129,187,729	361.46%	70.35%
2016	9.056%	517,669,806	129,452,647	399.89%	68.90%
2017	9.043%	469,430,660	124,514,004	377.01%	73.11%
2018	7.485%	370,674,668	148,890,685	248.96%	80.44%
2019	7.531%	466,731,526	155,479,486	300.19%	76.63%
2020	6.982%	354,395,457	164,583,742	215.33%	83.51%
2021	4.299%	181,121,638	190,254,989	95.20%	91.96%
2022	(5.117%)	(104,907,413)	189,061,641	(55.49%)	104.45%
2023	5.176%	279,060,590	193,780,939	144.01%	88.92%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

Cypress Recreation and Parks

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.000%	\$0	\$0	N/A	N/A
2015	0.000%	0	0	N/A	N/A
2016	0.000%	0	0	N/A	N/A
2017	0.000%	0	0	N/A	N/A
2018	0.015%	718,340	0	N/A	83.78%
2019	0.007%	408,781	0	N/A	90.81%
2020	0.005%	262,415	0	N/A	94.23%
2021	0.004%	185,117	0	N/A	96.03%
2022	(0.005%)	(103,379)	0	N/A	102.18%
2023	0.001%	61,016	0	N/A	98.70%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

Department of Education

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.051%	\$2,691,224	\$62,538	4303.34%	81.08%
2015	0.072%	3,637,615	0	N/A	75.31%
2016	0.075%	4,306,689	0	N/A	69.50%
2017	0.085%	4,415,517	0	N/A	68.18%
2018	0.051%	2,530,324	0	N/A	80.00%
2019	0.057%	3,517,372	0	N/A	71.79%
2020	0.061%	3,099,339	0	N/A	74.84%
2021	0.063%	2,661,390	0	N/A	77.81%
2022	0.074%	1,523,058	0	N/A	86.62%
2023	0.062%	3,323,372	0	N/A	70.69%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

Transportation Corridor Agency

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.215%	\$11,359,334	\$6,054,822	187.61%	66.44%
2015	0.210%	10,682,807	6,118,067	174.61%	69.62%
2016	0.222%	12,713,136	6,088,331	208.81%	66.45%
2017	0.239%	12,423,364	6,431,272	193.17%	69.93%
2018	0.207%	10,242,769	6,775,031	151.18%	76.84%
2019	0.214%	13,253,632	6,609,886	200.51%	71.83%
2020	(0.035%)	(1,753,164)	6,809,655	(25.75%)	103.35%
2021	(0.092%)	(3,881,366)	7,257,523	(53.48%)	107.11%
2022	(0.531%)	(10,881,786)	6,686,314	(162.75%)	119.16%
2023	(0.012%)	(659,689)	7,068,237	(9.33%)	101.11%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

City of San Juan Capistrano

Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
0.535%	\$28,312,625	\$6,324,207	447.69%	64.40%
0.548%	27,866,378	6,863,345	406.02%	67.15%
0.512%	29,249,120	6,464,876	452.43%	64.73%
0.483%	25,089,009	6,636,488	378.05%	68.69%
0.528%	26,138,852	7,227,226	361.67%	71.95%
0.519%	32,142,058	7,253,654	443.12%	67.06%
0.516%	26,191,970	7,294,439	359.07%	73.18%
0.477%	20,116,465	6,701,987	300.16%	76.95%
0.573%	11,742,303	6,112,331	192.11%	85.88%
0.346%	18,650,483	5,334,212	349.64%	73.88%
	the Net Pension Liability 0.535% 0.548% 0.512% 0.483% 0.528% 0.519% 0.516% 0.477% 0.573%	the Net Pension Liabilityshare of Net Pension Liability0.535%\$28,312,6250.548%27,866,3780.512%29,249,1200.483%25,089,0090.528%26,138,8520.519%32,142,0580.516%26,191,9700.477%20,116,4650.573%11,742,303	the Net Pension Liability share of Net Pension Liability Covered payroll¹ 0.535% \$28,312,625 \$6,324,207 0.548% 27,866,378 6,863,345 0.512% 29,249,120 6,464,876 0.483% 25,089,009 6,636,488 0.528% 26,138,852 7,227,226 0.519% 32,142,058 7,253,654 0.516% 26,191,970 7,294,439 0.477% 20,116,465 6,701,987 0.573% 11,742,303 6,112,331	the Net Pension Liabilityshare of Net Pension LiabilityCovered payroll¹Pension Liability as a percentage of its covered payroll0.535%\$28,312,625\$6,324,207447.69%0.548%27,866,3786,863,345406.02%0.512%29,249,1206,464,876452.43%0.483%25,089,0096,636,488378.05%0.528%26,138,8527,227,226361.67%0.519%32,142,0587,253,654443.12%0.516%26,191,9707,294,439359.07%0.477%20,116,4656,701,987300.16%0.573%11,742,3036,112,331192.11%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Sanitation District

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	3.832%	\$202,747,516	\$58,954,754	343.90%	63.14%
2015	1.130%	57,418,760	58,641,163	97.92%	89.61%
2016	0.742%	42,439,759	59,789,927	70.98%	92.74%
2017	(0.200%)	(10,384,510)	60,000,017	(17.31%)	101.70%
2018	(0.799%)	(39,571,102)	62,341,796	(63.47%)	105.96%
2019	0.468%	29,029,145	66,475,479	43.67%	95.86%
2020	(0.974%)	(49,446,617)	71,395,906	(69.26%)	106.64%
2021	(1.629%)	(68,643,380)	73,290,519	(93.66%)	108.50%
2022	(8.718%)	(178,731,247)	73,539,248	(243.04%)	121.74%
2023	(0.197%)	(10,604,801)	74,669,376	(14.20%)	101.22%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Transportation Authority

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	4.112%	\$217,568,793	\$92,199,745	235.98%	71.77%
2015	4.006%	203,591,950	95,061,437	214.17%	74.00%
2016	4.377%	250,192,983	93,109,984	268.71%	69.82%
2017	4.436%	230,260,478	94,507,309	243.64%	73.17%
2018	4.283%	212,117,162	94,528,116	224.40%	77.15%
2019	4.353%	269,788,642	97,229,545	277.48%	71.97%
2020	4.419%	224,284,548	101,980,885	219.93%	77.80%
2021	4.415%	186,024,390	102,499,571	181.49%	82.52%
2022	3.581%	73,424,051	97,538,254	75.28%	93.26%
2023	3.842%	207,132,957	105,542,209	196.26%	81.45%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

U.C.I.

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.609%	\$32,214,491	\$643,375	5007.11%	74.44%
2015	0.523%	26,578,391	574,780	4624.10%	77.81%
2016	0.633%	36,184,065	285,025	12695.05%	69.50%
2017	0.696%	36,113,699	43,707	82626.81%	68.96%
2018	0.558%	27,644,960	14,874	185860.97%	75.13%
2019	0.562%	34,808,679	0	N/A	67.93%
2020	0.595%	30,213,739	0	N/A	71.62%
2021	0.601%	25,337,145	0	N/A	75.38%
2022	0.836%	17,134,332	0	N/A	82.75%
2023	0.544%	29,314,724	0	N/A	69.63%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Children and Families Comm.

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.087%	\$4,590,845	\$1,116,074	411.34%	64.40%
2015	0.078%	3,957,425	1,043,030	379.42%	67.15%
2016	0.071%	4,066,523	1,042,786	389.97%	64.73%
2017	0.061%	3,158,290	925,031	341.43%	68.69%
2018	0.019%	962,204	849,266	113.30%	90.09%
2019	0.010%	630,610	966,061	65.28%	91.49%
2020	(0.013%)	(646,472)	1,061,044	(60.93%)	115.26%
2021	(0.015%)	(612,417)	1,167,468	(52.46%)	112.42%
2022	(0.040%)	(811,951)	1,304,766	(62.23%)	112.84%
2023	0.000%	(21,846)	1,209,958	(1.81%)	100.35%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

Local Agency Formation Comm.

Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
0.022%	\$1,187,537	\$273,719	433.85%	64.40%
0.026%	1,303,484	334,804	389.33%	67.15%
0.020%	1,156,534	287,698	402.00%	64.73%
0.026%	1,340,888	374,792	357.77%	68.69%
0.026%	1,268,133	394,760	321.24%	71.95%
0.026%	1,582,703	419,538	377.25%	67.06%
0.029%	1,489,642	475,099	313.54%	73.18%
0.030%	1,248,133	463,507	269.28%	76.95%
0.044%	912,794	511,264	178.54%	85.88%
0.029%	1,587,646	488,433	325.05%	73.88%
	the Net Pension Liability 0.022% 0.026% 0.026% 0.026% 0.026% 0.026% 0.029% 0.030% 0.044%	the Net Pension Liability share of Net Pension Liability 0.022% \$1,187,537 0.026% 1,303,484 0.020% 1,156,534 0.026% 1,340,888 0.026% 1,268,133 0.026% 1,582,703 0.029% 1,489,642 0.030% 1,248,133 0.044% 912,794	the Net Pension Liability share of Net Pension Liability Covered payroll¹ 0.022% \$1,187,537 \$273,719 0.026% 1,303,484 334,804 0.020% 1,156,534 287,698 0.026% 1,340,888 374,792 0.026% 1,268,133 394,760 0.026% 1,582,703 419,538 0.029% 1,489,642 475,099 0.030% 1,248,133 463,507 0.044% 912,794 511,264	the Net Pension Liability share of Net Pension Liability Covered payroll¹ Pension Liability as a percentage of its covered payroll 0.022% \$1,187,537 \$273,719 433.85% 0.026% 1,303,484 334,804 389.33% 0.020% 1,156,534 287,698 402.00% 0.026% 1,340,888 374,792 357.77% 0.026% 1,268,133 394,760 321.24% 0.026% 1,582,703 419,538 377.25% 0.029% 1,489,642 475,099 313.54% 0.030% 1,248,133 463,507 269.28% 0.044% 912,794 511,264 178.54%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

Rancho Santa Margarita

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	(0.000%)	\$(4,181)	\$0	N/A	108.66%
2015	0.000%	1,729	0	N/A	96.78%
2016	0.000%	6,660	0	N/A	88.06%
2017	0.000%	9,332	0	N/A	82.95%
2018	(0.000%)	(2,320)	0	N/A	104.91%
2019	0.000%	1,284	0	N/A	97.28%
2020	(0.000%)	(2,214)	0	N/A	104.69%
2021	(0.000%)	(2,733)	0	N/A	105.92%
2022	(0.000%)	(6,231)	0	N/A	113.82%
2023	0.000%	1,652	0	N/A	96.34%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. Superior Court

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	7.415%	\$392,321,750	\$103,987,082	377.28%	64.40%
2015	7.002%	355,886,410	99,034,265	359.36%	67.15%
2016	6.926%	395,957,480	97,656,241	405.46%	64.73%
2017	6.726%	349,173,850	100,413,439	347.74%	68.69%
2018	6.716%	332,589,831	100,683,255	330.33%	71.95%
2019	6.338%	392,760,910	101,374,099	387.44%	67.06%
2020	6.635%	336,766,149	104,356,239	322.71%	73.18%
2021	7.112%	299,663,880	110,862,286	270.30%	76.95%
2022	9.109%	186,750,735	107,375,606	173.92%	85.88%
2023	6.695%	360,927,849	111,160,998	324.69%	73.88%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of proportionate share of the Net Pension Liability (continued)

O.C. IHSS Public Authority

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.013%	\$706,873	\$701,820	100.72%	73.15%
2015	0.013%	672,066	744,371	90.29%	75.26%
2016	0.016%	895,964	847,123	105.77%	73.52%
2017	0.015%	781,506	970,644	80.51%	79.30%
2018	0.014%	706,343	1,128,903	62.57%	84.20%
2019	0.018%	1,097,009	1,094,048	100.27%	77.97%
2020	0.014%	719,301	1,152,206	62.43%	86.11%
2021	0.007%	304,738	1,131,545	26.93%	93.94%
2022	(0.011%)	(233,222)	1,125,442	(20.72%)	104.54%
2023	0.012%	666,697	1,290,634	51.66%	88.70%



¹ Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of reconciliation of Net Pension Liability

Total for All Employers

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$2,050,237,722	\$4,213,246,650
Pension Expense	728,323,232	(121,126,855)
Employer Contributions	(719,658,000)	(698,797,000)
New Net Deferred Inflows/Outflows	2,907,550,194	(1,620,112,172)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
New Net Deferred Flows Due to Change in Proportion ¹	0	0
Recognition of Prior Deferred Inflows/Outflows	424,553,023	277,027,099
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$5,391,006,171	\$2,050,237,722



¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

Orange County

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$2,047,576,018	\$3,547,545,979
Pension Expense	580,065,187	(38,554,809)
Employer Contributions	(539,567,438)	(511,331,176)
New Net Deferred Inflows/Outflows	2,091,638,561	(1,131,633,956)
Change in Allocation of Prior Deferred Inflows/Outflows	(4,154,637)	(240,390)
 New Net Deferred Flows Due to Change in Proportion¹ 	7,878,277	(4,473,218)
Recognition of Prior Deferred Inflows/Outflows	289,664,371	193,401,502
 Recognition of Prior Deferred Flows Due to Change in Proportion¹ 	(3,818,335)	<u>(7,137,914)</u>
Ending Net Pension Liability	\$4,469,282,004	\$2,047,576,018



¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Cemetery District

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$(1,394,665)	\$(145,195)
Pension Expense	411,011	(181,718)
Employer Contributions	(269,000)	(230,000)
New Net Deferred Inflows/Outflows	2,043,157	(993,121)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
New Net Deferred Flows Due to Change in Proportion ¹	0	0
Recognition of Prior Deferred Inflows/Outflows	240,913	155,369
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$1,031,416	\$(1,394,665)



¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Law Library

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability	December 31, 2022	December 31, 2021
Beginning Net Pension Liability	\$(2,629,777)	\$(949,226)
Pension Expense	24,252	(532,012)
Employer Contributions	(118,000)	(127,000)
New Net Deferred Inflows/Outflows	1,949,701	(1,337,313)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
New Net Deferred Flows Due to Change in Proportion ¹	0	0
Recognition of Prior Deferred Inflows/Outflows	451,837	290,351
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	25,423
Ending Net Pension Liability	\$(321,987)	\$(2,629,777)

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Vector Control District

Reporting Date for Employer under GASB 68	June 30, 2023	June 30, 2022
Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	December 31, 2022	December 31, 2021
Beginning Net Pension Liability	\$(5,501,623)	\$(1,681,965)
Pension Expense	(109,048)	(1,409,616)
Employer Contributions	0	0
New Net Deferred Inflows/Outflows	4,757,790	(2,978,797)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
 New Net Deferred Flows Due to Change in Proportion¹ 	0	0
Recognition of Prior Deferred Inflows/Outflows	900,848	568,755
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$47,967	\$(5,501,623)



¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Retirement System

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$16,375,725	\$24,954,057
Pension Expense	5,012,441	974,418
Employer Contributions	(3,614,000)	(3,301,000)
New Net Deferred Inflows/Outflows	13,581,243	(7,526,242)
Change in Allocation of Prior Deferred Inflows/Outflows	309,742	(143,215)
 New Net Deferred Flows Due to Change in Proportion¹ 	(553,571)	1,166,366
Recognition of Prior Deferred Inflows/Outflows	1,599,723	1,084,538
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(1,185,182)</u>	(833,197)
Ending Net Pension Liability	\$31,526,121	\$16,375,725



¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Fire Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$(104,907,413)	\$181,121,638
Pension Expense	59,281,387	(36,559,011)
Employer Contributions	(87,637,000)	(95,585,000)
New Net Deferred Inflows/Outflows	346,998,843	(196,364,119)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
 New Net Deferred Flows Due to Change in Proportion¹ 	0	0
Recognition of Prior Deferred Inflows/Outflows	65,324,773	42,479,079
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$279,060,590	\$(104,907,413)

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

Cypress Recreation and Parks

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$(103,379)	\$185,117
Pension Expense	824,620	(105,942)
Employer Contributions	(595,600)	0
New Net Deferred Inflows/Outflows	616,934	(239,613)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
 New Net Deferred Flows Due to Change in Proportion¹ 	0	0
Recognition of Prior Deferred Inflows/Outflows	(681,559)	57,059
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$61,016	\$(103,379)

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

Department of Education

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Beginning Net Pension Liability	\$1,523,058	\$2,661,390
Pension Expense	215,260	(256,098)
Employer Contributions	(366,917)	(345,566)
New Net Deferred Inflows/Outflows	1,659,194	(781,930)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
 New Net Deferred Flows Due to Change in Proportion¹ 	0	0
Recognition of Prior Deferred Inflows/Outflows	292,777	245,262
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$3,323,372	\$1,523,058

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

Transportation Corridor Agency

Reporting Date for Employer under GASB 68	June 30, 2023	June 30, 2022
Measurement Date for Employer under GASB 68	December 31, 2022	December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$(10,881,786)	\$(3,881,366)
Pension Expense	696,828	(1,612,661)
Employer Contributions	(849,000)	(823,000)
New Net Deferred Inflows/Outflows	8,616,965	(5,422,832)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
 New Net Deferred Flows Due to Change in Proportion¹ 	0	0
Recognition of Prior Deferred Inflows/Outflows	1,757,304	858,073
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$(659,689)	\$(10,881,786)

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

City of San Juan Capistrano

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		,
Beginning Net Pension Liability	\$11,742,303	\$20,116,465
Pension Expense	1,829,745	(201,719)
Employer Contributions	(2,027,000)	(8,752,000)
New Net Deferred Inflows/Outflows	8,034,504	(5,396,733)
Change in Allocation of Prior Deferred Inflows/Outflows	1,354,403	142,246
New Net Deferred Flows Due to Change in Proportion ¹	(3,047,486)	4,034,666
Recognition of Prior Deferred Inflows/Outflows	946,378	777,674
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(182,364)</u>	1,021,704
Ending Net Pension Liability	\$18,650,483	\$11,742,303

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Sanitation District

Reporting Date for Employer under GASB 68	June 30, 2023	June 30, 2022
Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	December 31, 2022	December 31, 2021
Beginning Net Pension Liability	\$(178,731,247)	\$(68,643,380)
Pension Expense	15,354,611	(23,467,916)
Employer Contributions	(8,220,000)	(8,172,000)
New Net Deferred Inflows/Outflows	142,996,182	(85,782,094)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
 New Net Deferred Flows Due to Change in Proportion¹ 	0	0
Recognition of Prior Deferred Inflows/Outflows	17,995,653	7,359,566
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	(25,423)
Ending Net Pension Liability	\$(10,604,801)	\$(178,731,247)

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Transportation Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$73,424,051	\$186,024,390
Pension Expense	22,989,984	(9,524,661)
Employer Contributions	(31,266,000)	(28,705,000)
New Net Deferred Inflows/Outflows	116,239,993	(90,127,986)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
New Net Deferred Flows Due to Change in Proportion ¹	0	0
Recognition of Prior Deferred Inflows/Outflows	25,744,929	15,757,308
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$207,132,957	\$73,424,051

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

U.C.I.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$17,134,332	\$25,337,145
Pension Expense	2,256,477	(1,124,992)
Employer Contributions	(3,223,630)	(3,276,341)
New Net Deferred Inflows/Outflows	11,408,905	(5,328,019)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
New Net Deferred Flows Due to Change in Proportion ¹	0	0
Recognition of Prior Deferred Inflows/Outflows	1,738,640	1,526,539
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$29,314,724	\$17,134,332

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Children and Families Comm.

Reporting Date for Employer under GASB 68	June 30, 2023	June 30, 2022
Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	December 31, 2022	December 31, 2021
Beginning Net Pension Liability	\$(811,951)	\$(612,417)
Pension Expense	(111,896)	(467,174)
Employer Contributions	(177,000)	(165,000)
New Net Deferred Inflows/Outflows	(9,411)	373,171
Change in Allocation of Prior Deferred Inflows/Outflows	(456,571)	75,951
New Net Deferred Flows Due to Change in Proportion ¹	1,171,328	(355,898)
Recognition of Prior Deferred Inflows/Outflows	(1,108)	(53,774)
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>374,763</u>	<u>393,190</u>
Ending Net Pension Liability	\$(21,846)	\$(811,951)

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

Local Agency Formation Comm.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$912,794	\$1,248,133
Pension Expense	203,166	77,924
Employer Contributions	(165,000)	(174,000)
New Net Deferred Inflows/Outflows	683,947	(419,518)
Change in Allocation of Prior Deferred Inflows/Outflows	65,827	(23,720)
New Net Deferred Flows Due to Change in Proportion ¹	(154,509)	186,315
Recognition of Prior Deferred Inflows/Outflows	80,562	60,453
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	(39,141)	<u>(42,793)</u>
Ending Net Pension Liability	\$1,587,646	\$912,794

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

Rancho Santa Margarita

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$(6,231)	\$(2,733)
Pension Expense	(681)	(3,698)
Employer Contributions	0	0
New Net Deferred Inflows/Outflows	6,670	(2,648)
Change in Allocation of Prior Deferred Inflows/Outflows	0	0
New Net Deferred Flows Due to Change in Proportion ¹	0	0
Recognition of Prior Deferred Inflows/Outflows	1,894	2,848
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$1,652	\$(6,231)

¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Superior Court

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Beginning Net Pension Liability	\$186,750,735	\$299,663,880
Pension Expense	39,212,592	(8,076,466)
Employer Contributions	(41,375,000)	(37,645,000)
New Net Deferred Inflows/Outflows	155,485,317	(85,830,170)
Change in Allocation of Prior Deferred Inflows/Outflows	3,131,518	28,851
New Net Deferred Flows Due to Change in Proportion ¹	(5,406,768)	(372,699)
Recognition of Prior Deferred Inflows/Outflows	18,314,492	12,368,201
Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>4,814,963</u>	6,614,138
Ending Net Pension Liability	\$360,927,849	\$186,750,735



¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of reconciliation of Net Pension Liability (continued)

O.C. IHSS Public Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2023 December 31, 2022	June 30, 2022 December 31, 2021
Reconciliation of Net Pension Liability		
Beginning Net Pension Liability	\$(233,222)	\$304,738
Pension Expense	167,296	(100,704)
Employer Contributions	(187,415)	(164,917)
New Net Deferred Inflows/Outflows	841,699	(320,252)
Change in Allocation of Prior Deferred Inflows/Outflows	(250,282)	160,277
New Net Deferred Flows Due to Change in Proportion ¹	112,729	(185,532)
Recognition of Prior Deferred Inflows/Outflows	180,596	88,296
 Recognition of Prior Deferred Flows Due to Change in Proportion¹ 	<u>35,296</u>	<u>(15,128)</u>
Ending Net Pension Liability	\$666,697	\$(233,222)



¹ Includes differences between employer contributions and proportionate share of contributions.

Schedule of recognition of changes in total Net Pension Liability

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total Pension Liability

Date for Employer Under GASB 68 Year Ended	Differences between Expected and Actual	Recognition Period			Reporting Date f	or Employer unde	r GASB 68 Year Er	nded June 30:		
June 30	Experience	(Years)	2022	2023	2024	2025	2026	2027	2028	Thereafter
2016 ¹	\$(205,462,673)	6.06	\$(2,034,281)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017¹	(323,565,741)	5.94	(51,204,006)	0	0	0	0	0	0	0
2018 ¹	(66,963,603)	6.01	(11,142,029)	(11,142,029)	(111,429)	0	0	0	0	0
2019 ¹	(118,124,401)	5.91	(19,987,206)	(19,987,206)	(18,188,371)	0	0	0	0	0
2020 ¹	24,382,911	5.86	4,160,905	4,160,905	4,160,905	3,578,386	0	0	0	0
2021 ¹	162,335,537	5.81	27,940,714	27,940,714	27,940,714	27,940,714	22,631,967	0	0	0
2022	(113,046,194)	5.45	(20,742,423)	(20,742,423)	(20,742,423)	(20,742,423)	(20,742,423)	(9,334,079)	0	0
2023	46,500,358	5.41	N/A	8,595,262	<u>8,595,262</u>	8,595,262	8,595,262	<u>8,595,262</u>	3,524,048	<u>0</u>
Net increase (de	ecrease) in pensi	on expense	\$(73,008,326)	\$(11,174,777)	\$1,654,658	\$19,371,939	\$10,484,806	\$(738,817)	\$3,524,048	\$0

As described in the Schedule of Deferred Outflows of Resources and Deferred Inflows of Resources, for the current period, the average of the expected remaining service lives of all employees that are provided with pensions through OCERS (active and inactive employees) determined as of December 31, 2021 (the beginning of the measurement period ending December 31, 2022) is 5.41 years.

¹ The amortization amounts prior to June 30, 2022 have been omitted from this exhibit. Those amounts can be found in prior years' GASB 68 reports.

Schedule of recognition of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes

Reporting Date for Employer Under GASB 68 Year Ended June 30	Effects of Assumption Changes	Recognition Period (Years)	2022	2023	Reporting Date fo	er Employer under 2025	GASB 68 Year En	ded June 30: 2027	2028	Thereafter
2016 ¹	\$0	6.06	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017¹	0	5.94	0	0	0	0	0	0	0	0
2018 ¹	827,197,075	6.01	137,636,784	137,636,784	1,376,371	0	0	0	0	0
2019 ¹	0	5.91	0	0	0	0	0	0	0	0
2020 ¹	0	5.86	0	0	0	0	0	0	0	0
2021 ¹	18,966,926	5.81	3,264,531	3,264,531	3,264,531	3,264,531	2,644,271	0	0	0
2022	0	5.45	0	0	0	0	0	0	0	0
2023	0	5.41	N/A	0	0	0	0	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (d	ecrease) in pensi	on expense	\$140,901,315	\$140,901,315	\$4,640,902	\$3,264,531	\$2,644,271	\$0	\$0	\$0

As described in the Schedule of Deferred Outflows of Resources and Deferred Inflows of Resources, for the current period, the average of the expected remaining service lives of all employees that are provided with pensions through OCERS (active and inactive employees) determined as of December 31, 2021 (the beginning of the measurement period ending December 31, 2022) is 5.41 years.

¹ The amortization amounts prior to June 30, 2022 have been omitted from this exhibit. Those amounts can be found in prior years' GASB 68 reports.

Schedule of recognition of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Pension Plan Investments

Reporting Date for Employer Under GASB 68 Year Ended	Differences Between Projected and Actual	Recognition Period			Reporting Date t	for Employer unde	er GASB 68 Year E	Ended June 30:		
June 30	Earnings	(Years)	2022	2023	2024	2025	2026	2027	2028	Thereafter
2016 ¹	\$851,007,781	5.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017 ¹	(213,982,570)	5.00	0	0	0	0	0	0	0	0
2018 ¹	(1,009,651,572)	5.00	(201,930,316)	0	0	0	0	0	0	0
2019 ¹	1,360,278,701	5.00	272,055,741	272,055,737	0	0	0	0	0	0
2020 ¹	(1,170,895,935)	5.00	(234,179,185)	(234,179,185)	(234,179,195)	0	0	0	0	0
2021 ¹	(1,008,043,756)	5.00	(201,608,751)	(201,608,751)	(201,608,751)	(201,608,752)	0	0	0	0
2022	(1,909,760,501)	5.00	(381,952,100)	(381,952,100)	(381,952,100)	(381,952,100)	(381,952,101)	0	0	0
2023	3,587,056,374	5.00	N/A	<u>717,411,276</u>	<u>717,411,276</u>	<u>717,411,276</u>	<u>717,411,276</u>	717,411,270	<u>0</u>	<u>0</u>
Net increase (d	ecrease) in pensi	on expense	\$(747,614,611)	\$171,726,977	\$(100,328,770)	\$133,850,424	\$335,459,175	\$717,411,270	\$0	\$0

The differences between projected and actual earnings on pension plan investments are recognized over a five-year period per Paragraph 33b. of GASB 68.

¹ The amortization amounts prior to June 30, 2022 have been omitted from this exhibit. Those amounts can be found in prior years' GASB 68 reports.

Reporting

Schedule of recognition of changes in total Net Pension Liability (continued)

Total Increase (Decrease) in Pension Expense

Date for Employer Under GASB 68 Year Ended	Total			Reporting Date	for Employer unde	er GASB 68 Year E	Ended June 30:		
June 30	Differences	2022	2023	2024	2025	2026	2027	2028	Thereafter
2016 ¹	\$645,545,108	\$(2,034,281)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017¹	(537,548,311)	(51,204,006)	0	0	0	0	0	0	0
2018 ¹	(249,418,100)	(75,435,561)	126,494,755	1,264,942	0	0	0	0	0
2019 ¹	1,242,154,300	252,068,535	252,068,531	(18,188,371)	0	0	0	0	0
2020¹	(1,146,513,024)	(230,018,280)	(230,018,280)	(230,018,290)	3,578,386	0	0	0	0
2021 ¹	(826,741,293)	(170,403,506)	(170,403,506)	(170,403,506)	(170,403,507)	25,276,238	0	0	0
2022	(2,022,806,695)	(402,694,523)	(402,694,523)	(402,694,523)	(402,694,523)	(402,694,524)	(9,334,079)	0	0
2023	3,633,556,732	N/A	726,006,538	726,006,538	726,006,538	726,006,538	726,006,532	3,524,048	<u>0</u>
Net increase (de	ecrease) in pension expense	\$(679,721,622)	\$301,453,515	\$(94,033,210)	\$156,486,894	\$348,588,252	\$716,672,453	\$3,524,048	\$0

¹ The amortization amounts prior to June 30, 2022 have been omitted from this exhibit. Those amounts can be found in prior years' GASB 68 reports.

Allocation of changes in total Net Pension Liability

In addition to the amounts shown in the Schedule of Recognition of Changes in Total Net Pension Liability, there are changes in each employer's proportionate share of the total Net Pension Liability (NPL) during the measurement period ending on December 31, 2022. The net effect of the change in the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources is also recognized over the average of the expected remaining service lives of all employees shown above. The difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ending on December 31, 2022 is recognized over the same periods. These amounts are shown on the following table, with the corresponding amounts for the measurement periods ending on December 31 beginning in 2016 shown on the following pages. While these amounts are different for each employer, they sum to zero over the entire OCERS.

Allocation of changes in total Net Pension Liability (continued)

	Total Change to be Recognized	Recognition Period (Years)	2023	2024	2025	2026	2027	2028	Thereafter
Orange County	\$9,664,735	5.41	\$1,786,458	\$1,786,458	\$1,786,458	\$1,786,458	\$1,786,458	\$732,445	\$0
O.C. Cemetery District	0	5.41	0	0	0	0	0	0	0
O.C. Law Library	0	5.41	0	0	0	0	0	0	0
O.C. Vector Control District	0	5.41	0	0	0	0	0	0	0
O.C. Retirement System	(679,097)	5.41	(125,526)	(125,526)	(125,526)	(125,526)	(125,526)	(51,467)	0
O.C. Fire Authority	0	5.41	0	0	0	0	0	0	0
Cypress Recreation and Parks	0	5.41	0	0	0	0	0	0	0
Department of Education	0	5.41	0	0	0	0	0	0	0
Transportation Corridor Agency	0	5.41	0	0	0	0	0	0	0
City of San Juan Capistrano	(3,738,526)	5.41	(691,040)	(691,040)	(691,040)	(691,040)	(691,040)	(283,326)	0
O.C. Sanitation District	0	5.41	0	0	0	0	0	0	0
O.C. Transportation Authority	0	5.41	0	0	0	0	0	0	0
U.C.I.	0	5.41	0	0	0	0	0	0	0
O.C. Children and Families Comm.	1,436,935	5.41	265,607	265,607	265,607	265,607	265,607	108,900	0
Local Agency Formation Comm.	(189,545)	5.41	(35,036)	(35,036)	(35,036)	(35,036)	(35,036)	(14,365)	0
Rancho Santa Margarita	0	5.41	0	0	0	0	0	0	0
O.C. Superior Court	(6,632,793)	5.41	(1,226,025)	(1,226,025)	(1,226,025)	(1,226,025)	(1,226,025)	(502,668)	0
O.C. IHSS Public Authority	138,291	5.41	<u>25,562</u>	<u>25,562</u>	<u>25,562</u>	<u>25,562</u>	<u>25,562</u>	<u>10,481</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Allocation of changes in total Net Pension Liability (continued)

	Total Change to be Recognized	Recognition Period (Years)	2022	2023	2024	2025	2026	2027	Thereafter
Orange County	\$(5,478,436)	5.45	\$(1,005,218)	\$(1,005,218)	\$(1,005,218)	\$(1,005,218)	\$(1,005,218)	\$(452,346)	\$0
O.C. Cemetery District	0	5.45	0	0	0	0	0	0	0
O.C. Law Library	0	5.45	0	0	0	0	0	0	0
O.C. Vector Control District	0	5.45	0	0	0	0	0	0	0
O.C. Retirement System	1,428,471	5.45	262,105	262,105	262,105	262,105	262,105	117,946	0
O.C. Fire Authority	0	5.45	0	0	0	0	0	0	0
Cypress Recreation and Parks	0	5.45	0	0	0	0	0	0	0
Department of Education	0	5.45	0	0	0	0	0	0	0
Transportation Corridor Agency	0	5.45	0	0	0	0	0	0	0
City of San Juan Capistrano	4,941,332	5.45	906,666	906,666	906,666	906,666	906,666	408,002	0
O.C. Sanitation District	0	5.45	0	0	0	0	0	0	0
O.C. Transportation Authority	0	5.45	0	0	0	0	0	0	0
U.C.I.	0	5.45	0	0	0	0	0	0	0
O.C. Children and Families Comm.	(435,875)	5.45	(79,977)	(79,977)	(79,977)	(79,977)	(79,977)	(35,990)	0
Local Agency Formation Comm.	228,184	5.45	41,869	41,869	41,869	41,869	41,869	18,839	0
Rancho Santa Margarita	0	5.45	0	0	0	0	0	0	0
O.C. Superior Court	(456,452)	5.45	(83,753)	(83,753)	(83,753)	(83,753)	(83,753)	(37,687)	0
O.C. IHSS Public Authority	(227,224)	5.45	<u>(41,692)</u>	<u>(41,692)</u>	<u>(41,692)</u>	(41,692)	<u>(41,692)</u>	<u>(18,764)</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Allocation of changes in total Net Pension Liability (continued)

	Total Change to be Recognized	Recognition Period (Years)	2021	2022	2023	2024	2025	2026	Thereafter
Orange County	\$12,901,296	5.81	\$2,220,532	\$2,220,532	\$2,220,532	\$2,220,532	\$2,220,532	\$1,798,636	\$0
O.C. Cemetery District	0	5.81	0	0	0	0	0	0	0
O.C. Law Library	0	5.81	0	0	0	0	0	0	0
O.C. Vector Control District	0	5.81	0	0	0	0	0	0	0
O.C. Retirement System	562,430	5.81	96,804	96,804	96,804	96,804	96,804	78,410	0
O.C. Fire Authority	0	5.81	0	0	0	0	0	0	0
Cypress Recreation and Parks	0	5.81	0	0	0	0	0	0	0
Department of Education	0	5.81	0	0	0	0	0	0	0
Transportation Corridor Agency	0	5.81	0	0	0	0	0	0	0
City of San Juan Capistrano	(4,539,080)	5.81	(781,253)	(781,253)	(781,253)	(781,253)	(781,253)	(632,815)	0
O.C. Sanitation District	0	5.81	0	0	0	0	0	0	0
O.C. Transportation Authority	0	5.81	0	0	0	0	0	0	0
U.C.I.	0	5.81	0	0	0	0	0	0	0
O.C. Children and Families Comm.	173,659	5.81	29,890	29,890	29,890	29,890	29,890	24,209	0
Local Agency Formation Comm.	(136,351)	5.81	(23,468)	(23,468)	(23,468)	(23,468)	(23,468)	(19,011)	0
Rancho Santa Margarita	0	5.81	0	0	0	0	0	0	0
O.C. Superior Court	(8,930,323)	5.81	(1,537,061)	(1,537,061)	(1,537,061)	(1,537,061)	(1,537,061)	(1,245,018)	0
O.C. IHSS Public Authority	(31,631)	5.81	<u>(5,444)</u>	<u>(5,444)</u>	<u>(5,444)</u>	<u>(5,444)</u>	<u>(5,444)</u>	<u>(4,411)</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Allocation of changes in total Net Pension Liability (continued)

	Total Change to be Recognized	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	Thereafter
Orange County	\$(5,692,697)	5.86	\$(971,449)	\$(971,449)	\$(971,449)	\$(971,449)	\$(971,449)	\$(835,452)	\$0
O.C. Cemetery District	0	5.86	0	0	0	0	0	0	0
O.C. Law Library	0	5.86	0	0	0	0	0	0	0
O.C. Vector Control District	0	5.86	0	0	0	0	0	0	0
O.C. Retirement System	2,634,131	5.86	449,510	449,510	449,510	449,510	449,510	386,581	0
O.C. Fire Authority	0	5.86	0	0	0	0	0	0	0
Cypress Recreation and Parks	0	5.86	0	0	0	0	0	0	0
Department of Education	0	5.86	0	0	0	0	0	0	0
Transportation Corridor Agency	0	5.86	0	0	0	0	0	0	0
City of San Juan Capistrano	(1,157,951)	5.86	(197,603)	(197,603)	(197,603)	(197,603)	(197,603)	(169,936)	0
O.C. Sanitation District	0	5.86	0	0	0	0	0	0	0
O.C. Transportation Authority	0	5.86	0	0	0	0	0	0	0
U.C.I.	0	5.86	0	0	0	0	0	0	0
O.C. Children and Families Comm.	(1,110,175)	5.86	(189,450)	(189,450)	(189,450)	(189,450)	(189,450)	(162,925)	0
Local Agency Formation Comm.	157,671	5.86	26,906	26,906	26,906	26,906	26,906	23,141	0
Rancho Santa Margarita	0	5.86	0	0	0	0	0	0	0
O.C. Superior Court	5,149,368	5.86	878,732	878,732	878,732	878,732	878,732	755,708	0
O.C. IHSS Public Authority	<u>19,653</u>	5.86	<u>3,354</u>	<u>3,354</u>	<u>3,354</u>	<u>3,354</u>	<u>3,354</u>	<u>2,883</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Allocation of changes in total Net Pension Liability (continued)

	Total Change to be Recognized	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	Thereafter
Orange County	\$13,152,991	5.91	\$2,225,549	\$2,225,549	\$2,225,549	\$2,225,549	\$2,225,549	\$2,025,246	\$0
O.C. Cemetery District	0	5.91	0	0	0	0	0	0	0
O.C. Law Library	0	5.91	0	0	0	0	0	0	0
O.C. Vector Control District	0	5.91	0	0	0	0	0	0	0
O.C. Retirement System	2,177,730	5.91	368,482	368,482	368,482	368,482	368,482	335,320	0
O.C. Fire Authority	0	5.91	0	0	0	0	0	0	0
Cypress Recreation and Parks	0	5.91	0	0	0	0	0	0	0
Department of Education	0	5.91	0	0	0	0	0	0	0
Transportation Corridor Agency	0	5.91	0	0	0	0	0	0	0
City of San Juan Capistrano	(142,910)	5.91	(24,181)	(24,181)	(24,181)	(24,181)	(24,181)	(22,005)	0
O.C. Sanitation District	0	5.91	0	0	0	0	0	0	0
O.C. Transportation Authority	0	5.91	0	0	0	0	0	0	0
U.C.I.	0	5.91	0	0	0	0	0	0	0
O.C. Children and Families Comm.	(361,087)	5.91	(61,098)	(61,098)	(61,098)	(61,098)	(61,098)	(55,597)	0
Local Agency Formation Comm.	13,795	5.91	2,334	2,334	2,334	2,334	2,334	2,125	0
Rancho Santa Margarita	0	5.91	0	0	0	0	0	0	0
O.C. Superior Court	(14,826,827)	5.91	(2,508,769)	(2,508,769)	(2,508,769)	(2,508,769)	(2,508,769)	(2,282,982)	0
O.C. IHSS Public Authority	(13,692)	5.91	<u>(2,317)</u>	(2,317)	(2,317)	<u>(2,317)</u>	<u>(2,317)</u>	(2,107)	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Allocation of changes in total Net Pension Liability (continued)

	Total Change to be Recognized	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	Thereafter
Orange County	\$8,107,013	6.01	\$1,348,921	\$1,348,921	\$1,348,921	\$1,348,921	\$1,348,921	\$1,348,921	\$13,487
O.C. Cemetery District	0	6.01	0	0	0	0	0	0	0
O.C. Law Library	0	6.01	0	0	0	0	0	0	0
O.C. Vector Control District	0	6.01	0	0	0	0	0	0	0
O.C. Retirement System	49,770	6.01	8,281	8,281	8,281	8,281	8,281	8,281	84
O.C. Fire Authority	0	6.01	0	0	0	0	0	0	0
Cypress Recreation and Parks	0	6.01	0	0	0	0	0	0	0
Department of Education	0	6.01	0	0	0	0	0	0	0
Transportation Corridor Agency	0	6.01	0	0	0	0	0	0	0
City of San Juan Capistrano	1,675,195	6.01	278,735	278,735	278,735	278,735	278,735	278,735	2,785
O.C. Sanitation District	0	6.01	0	0	0	0	0	0	0
O.C. Transportation Authority	0	6.01	0	0	0	0	0	0	0
U.C.I.	0	6.01	0	0	0	0	0	0	0
O.C. Children and Families Comm.	(445,507)	6.01	(74,128)	(74,128)	(74,128)	(74,128)	(74,128)	(74,128)	(739)
Local Agency Formation Comm.	(51,088)	6.01	(8,500)	(8,500)	(8,500)	(8,500)	(8,500)	(8,500)	(88)
Rancho Santa Margarita	0	6.01	0	0	0	0	0	0	0
O.C. Superior Court	(9,400,312)	6.01	(1,564,112)	(1,564,112)	(1,564,112)	(1,564,112)	(1,564,112)	(1,564,112)	(15,640)
O.C. IHSS Public Authority	64,929	6.01	<u>10,803</u>	<u>10,803</u>	<u>10,803</u>	<u>10,803</u>	<u>10,803</u>	<u>10,803</u>	<u>111</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Allocation of changes in total Net Pension Liability (continued)

	Total Change to be Recognized	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	Thereafter
Orange County	\$14,453,662	5.94	\$2,433,278	\$2,433,278	\$2,433,278	\$2,433,278	\$2,433,278	\$2,287,272	\$0
O.C. Cemetery District	0	5.94	0	0	0	0	0	0	0
O.C. Law Library	0	5.94	0	0	0	0	0	0	0
O.C. Vector Control District	0	5.94	0	0	0	0	0	0	0
O.C. Retirement System	(668,539)	5.94	(112,549)	(112,549)	(112,549)	(112,549)	(112,549)	(105,794)	0
O.C. Fire Authority	0	5.94	0	0	0	0	0	0	0
Department of Education	0	5.94	0	0	0	0	0	0	0
Transportation Corridor Agency	0	5.94	0	0	0	0	0	0	0
City of San Juan Capistrano	(1,754,991)	5.94	(295,453)	(295,453)	(295,453)	(295,453)	(295,453)	(277,726)	0
O.C. Sanitation District	0	5.94	0	0	0	0	0	0	0
O.C. Transportation Authority	0	5.94	0	0	0	0	0	0	0
U.C.I.	0	5.94	0	0	0	0	0	0	0
O.C. Children and Families Comm.	(598,916)	5.94	(100,828)	(100,828)	(100,828)	(100,828)	(100,828)	(94,776)	0
Local Agency Formation Comm.	306,180	5.94	51,545	51,545	51,545	51,545	51,545	48,455	0
Rancho Santa Margarita	0	5.94	0	0	0	0	0	0	0
O.C. Superior Court	(11,785,507)	5.94	(1,984,092)	(1,984,092)	(1,984,092)	(1,984,092)	(1,984,092)	(1,865,047)	0
O.C. IHSS Public Authority	48,111	5.94	8,099	8,099	8,099	8,099	8,099	<u>7,616</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Actuarial assumptions and methods

For December 31, 2022 Measurement Date and Employer Reporting as of June 30, 2023

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, 2017 through December 31, 2019 Actuarial Experience Study dated August 6, 2020 and PowerPoint presentation dated August 17, 2020. Unless otherwise noted, all actuarial assumptions and methods shown below apply to members for all tiers. These assumptions were adopted by the Board.
Economic Assumptions	
Net Investment Return:	7.00%; net of investment expenses.
Member Contribution Crediting Rate:	5.00%, compounded semi-annually.
Cost of Living Adjustments (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, 2022 has been reflected for non-active members in the December 31, 2021 valuation.
Payroll Growth:	Inflation of 2.50% per year plus "across the board" real salary increases of 0.50% per year.
Increase in Section 7522.10 Compensation Limit:	Increase of 2.50% per year from the valuation date.

Salary Increases:

• The annual rate of compensation increase includes: inflation at 2.50%, plus "across the board" salary increases of 0.50% per year, plus the following merit and promotion increases:

Years of	Rate (%)				
Service	General	Safety			
Less than 1	8.00	12.00			
1 - 2	7.25	10.00			
2 - 3	6.25	8.50			
3 - 4	5.25	7.50			
4 - 5	4.25	6.50			
5 - 6	3.50	5.50			
6 - 7	2.75	5.00			
7 - 8	2.50	4.00			
8 - 9	1.70	3.00			
9 - 10	1.70	2.50			
10 - 11	1.60	1.85			
11 - 12	1.60	1.85			
12 - 13	1.50	1.85			
13 - 14	1.50	1.85			
14 - 15	1.25	1.85			
15 - 16	1.25	1.60			
16 - 17	1.00	1.60			
17 - 18	1.00	1.60			
18 - 19	1.00	1.60			
19 - 20	1.00	1.60			
20 & Over	1.00	1.60			

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.

Demographic Assumptions:	
Post-Retirement Mortality Rates:	Healthy
	 General Members: Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5%, projected generationally with the two- dimensional mortality improvement scale MP-2019
	 Safety Members: Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2019
	Disabled
	 General Members: Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates decreased by 5%, projected generationally with the two-dimensional mortality improvement scale MP-2019
	• Safety Members: Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2019
	All Beneficiaries
	 Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5%, projected generationally with the two-dimensional mortality improvement scale MP-2019
	The Pub-2010 mortality tables and adjustments as shown above reflect the mortality experience as of the measurement date. The generational projection is a provision for future mortality improvement.

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-2019
- 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-2019

Rate (%)¹

	Ge	neral	Safety		
Age	Male	Female	Male	Female	
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.

Mortality Rates for Member Contributions:

- General Members: Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5%, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP 2019, 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), projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 80% male and 20% female

¹ Generational projections beyond the base year (2010) are not reflected in the above mortality rates.

Disability Incidence:

Rate (%)						
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	0.01	0.03		
30	0.01	0.03	0.07	0.08		
35	0.03	0.20	0.19	0.10		
40	0.08	0.39	0.31	0.13		
45	0.14	0.48	0.44	0.21		
50	0.20	0.53	1.10	0.28		
55	0.27	0.70	2.70	0.42		
60	0.33	1.22	5.00	0.20		

65% of General All Other disabilities are assumed to be service connected disabilities. The other 35% are assumed to be non-service connected.

80% of General OCTA disabilities are assumed to be service connected disabilities. The other 20% are assumed to be non-service connected.

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

75% of Safety Probation disabilities are assumed to be service connected disabilities. The other 25% are assumed to be non-service connected.

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	Rate (%)						
Years of Service	General All Other	General OCTA	Safety Law & Fire	Safety Probation			
Less than 1	11.00	17.00	4.25	14.00			
1 – 2	7.25	11.50	2.75	13.00			
2 – 3	6.50	9.00	2.25	11.00			
3 – 4	5.50	8.50	1.75	5.00			
4 – 5	5.00	8.00	1.50	4.00			
5 – 6	4.50	7.00	1.25	3.25			
6 – 7	4.00	4.25	1.00	2.75			
7 – 8	3.50	4.00	0.95	2.75			
8 – 9	3.25	3.25	0.90	2.50			
9 – 10	3.00	3.00	0.85	1.75			
10 – 11	2.50	2.75	0.80	1.50			
11 – 12	2.00	2.50	0.75	1.50			
12 – 13	2.00	2.50	0.70	1.25			
13 – 14	2.00	2.25	0.65	1.00			
14 – 15	1.50	2.25	0.60	0.75			
15 – 16	1.40	2.25	0.55	0.75			
16 – 17	1.30	2.00	0.50	0.75			
17 – 18	1.20	1.80	0.45	0.75			
18 – 19	1.10	1.60	0.40	0.50			
19 – 20	1.00	1.40	0.30	0.25			
20 & Over	0.75	1.20	0.15	0.15			

Election for Withdrawal of Contributions (%)

	Rate (%)							
Years of Service	General All Other	General OCTA	Safety Law & Fire	Safety Probation				
Less than 5	30.00	40.00	20.00	25.00	Ī			
5 – 9	25.00	30.00	20.00	25.00				
10 – 14	25.00	25.00	10.00	25.00	Ī			
15 & Over	17 50	15 00	10.00	15 00	_			

etirement Rates:		Rate (%) ¹			
		General Enhanced		General Non-Enhanced ²	
	Age	Less than 30 Years of Service	Greater than 30 Years of Service	Less than 30 Years of Service	Greater than 30 Years of Service
	49	0.00	30.00	0.00	25.00
	50	2.00	4.00	3.00	3.00
	51	2.00	4.00	3.00	3.00
	52	2.50	5.00	2.00	2.00
	53	2.50	5.00	3.50	3.50
	54	7.00	14.00	2.75	2.75
	55	12.00	30.00	3.25	3.25
	56	9.00	19.00	3.50	3.50
	57	9.00	18.00	5.00	5.00
	58	9.00	18.00	5.50	5.50
	59	10.00	20.00	6.50	6.50
	60	11.00	20.00	9.00	13.50
	61	11.00	20.00	9.00	13.50
	62	13.00	20.00	9.00	18.00
	63	13.00	22.00	9.50	19.00
	64	16.00	24.00	10.00	20.00
	65	24.00	28.00	22.00	26.40
	66	24.00	30.00	25.00	30.00
	67	24.00	30.00	25.00	30.00
	68	22.00	27.50	30.00	27.50
	69	22.00	27.50	30.00	27.50
	70	25.00	27.50	20.00	27.50
	71	25.00	27.50	20.00	27.50
	72	25.00	27.50	20.00	27.50
	73	20.00	27.50	20.00	27.50
	74	20.00	27.50	20.00	27.50
	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.
 These assumptions are also used for the CalPEPRA 1.62% @ 65 formula (Plan T and Plan W).

Retirement Rates (continued):				Rate	(%)¹		
			fety 1664.1)		ety 1664.1)		ety (31664.1)
	Age	Less than 30 Years of Service	Greater than 30 Years of Service	Less than 30 Years of Service	Greater than 30 Years of Service	Less than 30 Years of Service	Greater than 30 Years of Service
	45	1.00	16.00	2.00	10.00	3.00	5.00
	46	1.00	16.00	2.00	10.00	3.00	5.00
	47	1.00	16.00	2.00	10.00	3.00	5.00
	48	1.00	16.00	2.00	10.00	3.00	5.00
	49	11.00	16.00	2.00	10.00	3.00	5.00
	50	16.00	16.00	4.00	10.00	9.00	12.00
	51	16.00	16.00	4.00	10.00	7.00	10.00
	52	17.00	16.00	4.00	10.00	5.00	9.00
	53	19.00	30.00	9.00	20.00	7.00	9.00
	54	24.00	30.00	12.00	25.00	7.00	12.00
	55	24.00	30.00	12.00	25.00	12.00	30.00
	56	22.00	30.00	12.00	25.00	18.00	30.00
	57	22.00	30.00	18.00	25.00	25.00	30.00
	58	22.00	40.00	18.00	30.00	25.00	30.00
	59	22.00	40.00	18.00	30.00	18.00	30.00
	60	30.00	40.00	18.00	30.00	20.00	40.00
	61	30.00	40.00	18.00	30.00	20.00	40.00
	62	30.00	40.00	18.00	35.00	20.00	40.00
	63	30.00	40.00	18.00	35.00	20.00	40.00
	64	30.00	40.00	18.00	35.00	20.00	40.00
	65	100.00	100.00	100.00	100.00	100.00	100.00

¹ The retirement rates only apply to members that are eligible to retire at the age shown.

etirement Rates (continued):		Rate (%) ¹			
	Age	General SJC (31676.12)	Safety Law (31664.2)	Safety Probation (31664.1)	
	50	4.00	11.50	8.00	
	51	4.00	12.00	9.00	
	52	4.00	12.70	10.00	
	53	4.00	17.90	12.00	
	54	4.00	18.80	14.00	
	55	4.00	35.00	23.00	
	56	5.00	25.00	22.00	
	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	20.00	100.00	100.00	
	66	25.00	100.00	100.00	
	67	25.00	100.00	100.00	
	68	25.00	100.00	100.00	
	69	25.00	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	

¹ The retirement rates only apply to members that are eligible to retire at the age shown.

Retirement Rates (continued):		Rate (%)¹			
	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	11.00	6.00
	51	0.00	3.00	11.50	6.50
	52	6.00	3.50	12.00	8.00
	53	2.00	3.50	16.00	10.00
	54	2.00	6.00	17.00	11.50
	55	2.50	12.00	29.00	20.00
	56	3.50	12.00	19.00	19.00
	57	5.50	15.00	19.00	21.00
	58	7.50	25.00	23.00	24.00
	59	7.50	25.00	26.00	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	14.00	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

¹ The retirement rates only apply to members that are eligible to retire at the age shown.

Retirement Age and Benefit for	General Retirement Age: 59
Deferred Vested Members:	Safety Retirement Age: 54
	Future deferred vested members who terminate with less than five years of service and are not vested are assumed to retire at age 70 for both General and Safety if they decide to leave their contributions on deposit.
	15% of future General and 20% of future Safety deferred vested members are assumed to continue to work for a reciprocal employer. For reciprocals, 4.00% and 4.60% compensation increases are assumed per annum for General and Safety, respectively.
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.
Form of Payment:	All active and inactive members are assumed to elect the unmodified option at retirement.
Percent Married:	For all active and inactive members, 75% of male members and 55% of female members are assumed to be married at pre-retirement death or retirement.
Age and Gender of Spouse:	For all active and inactive members, male members are assumed to have a female spouse who is 3 years younger than the member and female members are assumed to have a male spouse who is 2 years older than the member.

Cashout Assumptions:		pensation amounts are expected to be centages used in this valuation are:	received during a m	ember's final average	earnings
		_	Rate	e (%)	
		Years of Service	Final One Year Salary	Final Three Year Salary	
		General Non-CalPEPRA	3.00%	2.90%	
		Safety Probation Non-CalPEPRA	3.80%	3.40%	
		Safety Law Non-CalPEPRA	N/A	6.90%	
		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 t	erminal pay assumptions are the same	e for service and disa	ability retirements.	
Actuarial Funding Policy					
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 Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation. The normal costs calculated assuming their Entry Age is the date they entered service with OCERS.			ted on an ormal cost rate	
	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.				
Expected Remaining Service Lives:	The average of	the expected service lives of all emplo	yees is determined	by:	
		each active employee's expected remove at zero percent interest.	aining service life as	the present value of \$	1 per year of
	Setting the remaining service life to zero for each nonactive or retired member.				
	_	sum of the above amounts by the total			nd retired
Changed Actuarial Assumptions and Methods:	There have bee	n no changes in actuarial assumptions	s or methods since t	he last valuation.	

Appendix A: Projection of Pension Plan's Fiduciary Net Position for use in the Calculation of Discount Rate as of December 31, 2022 (\$ in millions)

Year Beginning January 1	Projected Beginning Plan's Fiduciary Net Position (a)	Projected Total Contributions * (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan's Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2022	\$21,922	\$990	\$1,140	\$24	-\$2,059	\$19,690
2023	19,690	992	1,204	21	1,370	20,827
2024	20,827	985	1,274	22	1,447	21,962
2025	21,962	1,001	1,346	24	1,525	23,119
2026	23,119	1,037	1,419	25	1,604	24,316
2027	24,316	1,109	1,493	26	1,688	25,594
2028	25,594	1.116	1,568	27	1.775	26,890
2029	26,890	1,124	1,646	29	1,863	28,202
2030	28,202	1,131	1,725	30	1,953	29,531
2031	29,531	1,139	1,804	32	2,043	30,878
2047	38,085	171	2,918	41	2,570	37,868
2048	37,868	161	2,954	41	2,553	37,587
2049	37,587	151	2,987	40	2,532	37,243
2050	37,243	142	3,015	40	2,507	36,838
2051	36,838	134	3,037	40	2,477	36,372
2096	21,862	35	188	23	1,524	23,209
2097	23,209	36	153	25	1,620	24,687
2098	24,687	36	122	27	1,724	26,299
2099	26,299	37	96	28	1,838	28,049
2100	28,049	38	74	30	1,961	29,944
2134 2134 Di	277,919 scounted Value: 152 ***	299 **	0	299	19,454	297,374

Of all the projected total contributions, only the first year's (i.e., 2022) contribution has been reduced by discount for prepaid contributions and transfers from County Investment Account, if any.

We have not utilized the balance in the County Investment Account to reduce the projected total contributions in column (b) even though those amounts have been used to reduce the NPL for the County as of December 31, 2022.

Mainly attributable to employer contributions to fund each year's annual administrative expenses.

^{\$277,919} million when discounted with interest at the rate of 7.00% per annum has a value of \$152 million as of December 31, 2022. Of this amount, about \$141 million is the balance available in the County Investment Account and \$14 million is the O.C. Sanitation District UAAL Deferred Acount as of

Notes:

- (1) Amounts may not total exactly due to rounding.
- (2) Amounts shown in the year beginning January 1, 2022 row are actual amounts, based on the final audited financial statements provided by OCERS.
- (3) Certain years have been omitted from the table.
- (4) Column (a): Except for the "discounted value" shown for 2134, all of the projected beginning Plan's Fiduciary Net Position amounts shown have not been adjusted for the time value of money.
- (5) Column (b): Projected total contributions include member and employer normal cost rates applied to closed group projected payroll (based on covered active members as of December 31, 2021), plus employer contributions to the Unfunded Actuarial Accrued Liability. Contributions are assumed to occur halfway through the year, on average.
- (6)Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of December 31, 2021. The projected benefit payments reflect the cost of living increase assumptions used in the December 31, 2022 valuation report.
- Column (d): Projected administrative expenses are calculated as approximately 0.11% of the projected beginning Plan's Fiduciary Net Position amount. (7) The 0.11% portion was based on the actual calendar year 2022 administrative expenses (unaudited) as a percentage of the actual beginning Plan's Fiduciary Net Position as of January 1, 2022. Administrative expenses are assumed to occur halfway through the year, on average.
- (8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.
- (9)As illustrated in this Appendix, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the longterm expected rate of return on Plan investments of 7.00% per annum was applied to all periods of projected benefit payments to determine the total pension liability as of December 31, 2022 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.
- (10)This projection is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

Appendix B: Schedule of Pension Amounts by Employer as of **December 31, 2022**

Deferred Outflows of Resources	Orange County	O.C. Cemetery District	O.C. Law Library	O.C. Vector Control District	O.C. Retirement System
Differences Between Expected and Actual Experience	\$85,249,532	\$401,601	\$45,465	\$700,950	\$480,173
Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	2,073,479,998	1,957,658	1,920,850	4,218,544	13,418,801
Changes of Assumptions	81,544,510	82,339	42,717	56,144	814,678
 Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions 	<u>16,413,390</u>	0	0	0	2,347,774
Total Deferred Outflows of Resources	\$2,256,687,430	\$2,441,598	\$2,009,032	\$4,975,638	\$17,061,426
Deferred Inflows of Resources					
Differences Between Expected and Actual Experience	\$55,012,441	\$155,323	\$472,570	\$958,190	\$185,187
 Difference Between Projected and Actual Investment Earnings on Pension Plan Investments 	1,293,513,728	1,193,794	1,166,471	2,582,253	8,372,177
Changes of Assumptions	59,952,702	0	0	0	0
 Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions 	5,531,581	0	0	0	<u>553,571</u>
Total Deferred Inflows of Resources	\$1,414,010,452	\$1,349,117	\$1,639,041	\$3,540,443	\$9,110,935
Net Pension Liability as of December 31, 2021	\$2,047,576,018	\$(1,394,665)	\$(2,629,777)	\$(5,501,623)	\$16,375,725
Net Pension Liability as of December 31, 2022	\$4,469,282,004	\$1,031,416	\$(321,987)	\$47,967	\$31,526,121
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions					
Proportionate Share of Allocable Plan Pension Expense	\$574,460,394	\$411,011	\$24,252	\$(109,048)	\$3,952,785
 Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions 	<u>5,604,793</u>	0	0	0	<u>1,059,656</u>
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	\$580,065,187	\$411,011	\$24,252	\$(109,048)	\$5,012,441

Appendix B: Schedule of Pension Amounts by Employer as of December 31, 2022 (continued)

Deferred Outflows of Resources	O.C. Fire Authority	Cypress Recreation and Parks	Department of Education	Transportation Corridor Agency	City of San Juan Capistrano
Differences Between Expected and Actual Experience	\$44,228,199	\$172,485	\$607,487	\$477,961	\$284,065
Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	325,601,951	647,105	1,266,822	8,926,408	7,938,405
Changes of Assumptions	1,263,564	232	589	104,567	481,954
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	0	0	0	0	<u>3,130,785</u>
Total Deferred Outflows of Resources	\$371,093,714	\$819,822	\$1,874,898	\$9,508,936	\$11,835,209
Deferred Inflows of Resources					
Differences Between Expected and Actual Experience	\$21,455,804	\$30,171	\$108,970	\$950,161	\$109,555
 Difference Between Projected and Actual Investment Earnings on Pension Plan Investments 	198,693,451	387,447	804,206	5,366,673	4,952,882
Changes of Assumptions	30,147,517	7,213	59,457	0	0
 Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions 	0	0	0	0	<u>5,632,351</u>
Total Deferred Inflows of Resources	\$250,296,772	\$424,831	\$972,633	\$6,316,834	\$10,694,788
Net Pension Liability as of December 31, 2021	\$(104,907,413)	\$(103,379)	\$1,523,058	\$(10,881,786)	\$11,742,303
Net Pension Liability as of December 31, 2022	\$279,060,590	\$61,016	\$3,323,372	\$(659,689)	\$18,650,483
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions					
Proportionate Share of Allocable Plan Pension Expense	\$59,281,387	\$824,620	\$215,260	\$696,828	\$2,338,421
Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	0	0	0	0	(508,676)
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	\$59,281,387	\$824,620	\$215,260	\$696,828	\$1,829,745

Appendix B: Schedule of Pension Amounts by Employer as of December 31, 2022 (continued)

Deferred Outflows of Resources	O.C. Sanitation District	O.C. Transportation Authority	U.C.I.	O.C. Children and Families Comm.	Local Agency Formation Comm.
Differences Between Expected and Actual Experience	\$21,845,552	\$1,823,315	\$1,886,324	\$(333)	\$24,181
Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	131,603,178	132,953,990	10,577,898	(9,299)	675,767
Changes of Assumptions	5,759,591	1,729,712	4,733	(565)	41,027
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	0	0	0	<u>1,255,317</u>	<u>196,618</u>
Total Deferred Outflows of Resources	\$159,208,321	\$136,507,017	\$12,468,955	\$1,245,120	\$937,593
Deferred Inflows of Resources					
Differences Between Expected and Actual Experience	\$13,954,206	\$33,789,970	\$7,913	\$(128)	\$9,326
Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	79,859,618	82,873,325	6,709,422	(5,801)	421,620
Changes of Assumptions	0	0	533,050	0	0
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	0	0	0	<u>684,632</u>	<u>220,544</u>
Total Deferred Inflows of Resources	\$93,813,824	\$116,663,295	\$7,250,385	\$678,703	\$651,490
Net Pension Liability as of December 31, 2021	\$(178,731,247)	\$73,424,051	\$17,134,332	\$(811,951)	\$912,794
Net Pension Liability as of December 31, 2022	\$(10,604,801)	\$207,132,957	\$29,314,724	\$(21,846)	\$1,587,646
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions					
Proportionate Share of Allocable Plan Pension Expense	\$15,354,611	\$22,989,984	\$2,256,477	\$(2,740)	\$199,061
 Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions 	0	0	0	<u>(109,156)</u>	4,105
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	\$15,354,611	\$22,989,984	\$2,256,477	\$(111,896)	\$203,166

Appendix B: Schedule of Pension Amounts by Employer as of December 31, 2022 (continued)

Deferred Outflows of Resources	Rancho Santa Margarita	O.C. Superior Court	O.C. IHSS Public Authority	Total for all Employers
	Ū			
Differences Between Expected and Actual Experience	\$1,548	\$5,497,276	\$6,136	\$163,731,917
 Difference Between Projected and Actual Investment Earnings on Pension Plan Investments 	5,868	153,625,590	835,564	2,869,645,098
Changes of Assumptions	3	9,326,865	559	101,253,219
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	0	1,634,440	<u>119,077</u>	25,097,401
Total Deferred Outflows of Resources	\$7,419	\$170,084,171	\$961,336	\$3,159,727,635
Deferred Inflows of Resources				
Differences Between Expected and Actual Experience	\$113	\$2,120,124	\$115,387	\$129,435,283
Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	2,825	95,849,149	509,759	1,783,252,999
Changes of Assumptions	518	0	3,058	90,703,515
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	0	12,313,476	<u>161,246</u>	25,097,401
Total Deferred Inflows of Resources	\$3,456	\$110,282,749	\$789,450	\$2,028,489,198
Net Pension Liability as of December 31, 2021	\$(6,231)	\$186,750,735	\$(233,222)	\$2,050,237,722
Net Pension Liability as of December 31, 2022	\$1,652	\$360,927,849	\$666,697	\$5,391,006,171
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
Proportionate Share of Allocable Plan Pension Expense	\$(681)	\$45,253,580	\$177,030	\$728,323,232
Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	0	<u>(6,040,988)</u>	<u>(9,734)</u>	0
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	\$(681)	\$39,212,592	\$167,296	\$728,323,232

Notes:

Amounts shown in this Appendix were allocated by employer based on the Employer Allocation Percentage calculated in the Schedule of Determination of Proportionate Share in this report.

In determining the pension expense:

- Any differences between projected and actual investment earnings on pension plan investments are recognized over a period of five years beginning with the year in which they occur.
- Current-period (i.e., 2022) differences between expected and actual experience and changes of assumptions are recognized over
 the average of the expected remaining service lives of all employees that are provided with pensions through OCERS determined
 as of December 31, 2021 (the beginning of the measurement period ending December 31, 2022) and is 5.41 years.
- Prior-period differences between expected and actual experience and changes of assumptions are continued to be recognized based on the expected remaining service lives of all employees calculated as of those prior measurement dates.

The average of the expected remaining service lives of all employees was determined by:

- Calculating each active employee's expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired members.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

There was an increase in the total employer pension expense from a pension income of \$(121.1) million calculated last year to a pension expense of \$728.3 million calculated this year. The primary cause of the increase was due to an investment loss of \$3.6 billion with \$717.4 million being recognized in this year's expense.

Note: Results may not total due to rounding.

Appendix C: Definition of Terms

Definitions of certain terms as they are used in Statement 68. The terms may have different meanings in other contexts.

Actuarial Present Value of Projected Benefit Payments:	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation:	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial Valuation Date:	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution:	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad Hoc Cost-of-Living Adjustments (Ad Hoc COLAs):	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad Hoc Postemployment Benefit Changes:	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Automatic Cost-of-Living Adjustments (Automatic COLAs):	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Automatic Postemployment Benefit Changes:	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Collective Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions:	Deferred outflows of resources and deferred inflows of resources related to pensions arising from certain changes in the collective Net Pension Liability.
Collective Pension Expense:	Pension expense arising from certain changes in the collective Net Pension Liability.
Cost-of-Living Adjustments:	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.

Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Cost-Sharing Pension Plan):	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered Payroll:	Payroll on which contributions to a pension plan are based.
Defined Benefit Pension Plans:	Pension plans that are used to provide defined benefit pensions.
Defined Benefit Pensions:	Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of Statement 68.)
Defined Contribution Pension Plans:	Pension plans that are used to provide defined contribution pensions.
Defined Contribution Pensions:	Pensions having terms that (1) provide an individual account for each employee; (2) define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (3) provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.
Discount Rate:	The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following: 1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the pension Plan's Fiduciary Net Position is projected (under the requirements of Statement 68) to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments. 2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.
Entry Age Actuarial Cost Method:	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability.

Inactive Employees:	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
Measurement Period:	The period between the prior and the current measurement dates.
Multiple-Employer Defined Benefit Pension Plan:	A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
Net Pension Liability (NPL):	The liability of employers and nonemployer contributing entities to employees for benefits provided through a defined benefit pension plan.
Other Postemployment Benefits:	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Pension Plans:	Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed and benefits are paid as they come due.
Pensions:	Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.
Plan Members:	Individuals that are covered under the terms of a pension plan. Plan members generally include (1) employees in active service (active plan members) and (2) terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).
Postemployment	The period after employment.
Postemployment Benefit Changes:	Adjustments to the pension of an inactive employee.
Postemployment Healthcare Benefits:	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.
Projected Benefit Payments:	All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.
Public Employee Retirement System:	A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.
Real Rate of Return:	The rate of return on an investment after adjustment to eliminate inflation.
Service Costs:	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Single-Employer Defined Benefit Pension Plan (Single-Employer Pension Plan):	A defined benefit pension plan that is used to provide pensions to employees of only one employer.

Termination Benefits:	Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.
Total Pension Liability (TPL):	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of Statement 68.

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