

Orange County Employees Retirement System (OCERS)

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

Actuarial Valuation Based on December 31, 2020
Measurement Date for Employer Reporting
as of June 30, 2021



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.

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June 4, 2021

Board of Retirement
Orange County Employees Retirement System
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Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation based on December 31, 2020 measurement date for employer reporting as of June 30, 2021. 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; increases or decreases expected as part of the natural operation of the methodology used for these measurements and changes in plan provisions or applicable law.

The actuarial calculations were 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

A handwritten signature in dark ink, appearing to read "Paul Angelo", written over a horizontal line.

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

A handwritten signature in dark ink, appearing to read "Andy Yeung", written over a horizontal line.

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

JY/jl

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board (GASB) Statement 68 for employer reporting as of June 30, 2021. 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, 2020. 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, 2019, provided by OCERS;
- The assets of the Plan as of December 31, 2020, provided by OCERS;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the December 31, 2020 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the December 31, 2020 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.

Section 1: Actuarial Valuation Summary

Highlights of the valuation

1. For this report, the reporting dates for the employers are June 30, 2021 and 2020. The NPLs measured as of December 31, 2020 and 2019 have been determined by rolling forward the TPLs as of December 31, 2019 and 2018, 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.
2. The NPL decreased from \$5,075.7 million as of December 31, 2019 to \$4,213.2 million as of December 31, 2020 primarily as a result a 12.79%¹ return on the market value of assets during 2020 that was higher than the assumed return of 7.00% of approximately \$1,008.0 million. The gain was offset to some extent by an experience loss of \$162.3 million and a loss of \$19.0 million from changes in actuarial assumptions. Changes in these values during the last two calendar years ending December 31, 2020 and December 31, 2019 can be found in *Section 2, Schedule of changes in Net Pension Liability* on page 19.
3. There was a decrease in the total employer pension expense from \$590.7 million calculated last year to \$255.9 million calculated this year. The primary cause of the decrease was due to an investment gain of \$1.0 billion with \$201.6 million being recognized in this year's expense. There was also a reduction in the expense by about \$170.2 million due to the full recognition of the investment losses during calendar year 2015 in developing last year's expense.
4. The discount rate used to determine the TPL and NPL as of both December 31, 2020 and 2019 was 7.00% following the same assumption used by the System in the pension funding valuations as of December 31, 2019 and December 31, 2018. However, as the Board has approved a new set of actuarial assumptions for use in the next pension funding valuation as of December 31, 2020, we have estimated the impact of these assumption changes by (1) revaluing the TPL as of December 31, 2019 (before the roll forward) and (2) using this revalued TPL in rolling forward the results from December 31, 2019 to 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, 2020 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 \$16,678,581,000 as of December 31, 2019 is equal to the final market value of assets in the Pension Trust Fund as of December 31, 2019. This differs from the \$16,516,108,000 market value of assets used in our December 31, 2019 funding valuation because the funding valuation excludes \$150,416,000 in the County Investment Account and \$12,057,000 in O.C. Sanitation District UAAL Deferred Account (after transfer of \$18,631,000 to offset the District's entire UAAL as of December 31, 2019).

¹ 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 gain on net pension plan assets was \$2,111,687,000 during 2020 after including both the administrative expenses and discount for prepaid contributions while excluding the gains credited to County Investment Account and O.C. Sanitation District UAAL Deferred Account. Without these adjustments, the actual investment gain was \$2,173,184,000.

Section 1: Actuarial Valuation Summary

The Plan's Fiduciary Net Position of \$18,797,203,000 as of December 31, 2020 is equal to the final market value of assets in the Pension Trust Fund as of December 31, 2020. This differs from the \$18,494,462,000 market value of assets used in our December 31, 2020 funding valuation because (1) our valuation was based on the preliminary market value of assets provided in the unaudited financial statements¹ and (2) the market value of assets in the funding valuation excludes \$160,378,000 in the County Investment Account and \$13,433,000 in O.C. Sanitation District UAAL Deferred Account.

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, 2020. 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 #1² 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 the Schedule of Determination of Proportionate Share in *Section 2*.

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 neither the December 31, 2020 assets provided by OCERS nor the liabilities we calculated using the membership data provided by OCERS reflect the financial impact of the California Supreme Court decision.

¹ The final market value of assets provided in the December 31, 2020 financial statements was higher than the preliminary market value of assets provided in the unaudited financial statements by approximately \$129 million.

² 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.

Section 1: Actuarial Valuation Summary

10. It is important to note that this actuarial valuation is based on plan assets as of December 31, 2020. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. 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, 2020. While it is impossible to determine how the pandemic will affect market conditions and other demographic experience of the plan in future valuations, Segal is available to prepare projections of potential outcomes upon request.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

Reporting Date for Employer under GASB 68 ¹		June 30, 2021	June 30, 2020
Measurement Date for Employer under GASB 68		December 31, 2020	December 31, 2019
Disclosure elements for calendar year ending December 31:	• Service cost ²	\$512,255,298	\$499,255,591
	• Total Pension Liability	23,010,449,650	21,754,263,463
	• Plan's Fiduciary Net Position	18,797,203,000	16,678,581,000
	• Net Pension Liability	4,213,246,650	5,075,682,463
	• Pension expense	255,861,827	590,748,219
Schedule of contributions for calendar year ending December 31:	• Actuarially determined contributions ³	\$638,215,000	\$583,057,000
	• Actual contributions ³	659,807,000	653,793,000
	• Contribution deficiency / (excess) ⁴	(21,592,000)	(70,736,000)
Demographic data for calendar year ending December 31:	• Number of retired members and beneficiaries	19,419	18,420
	• Number of inactive vested members	6,818	6,520
	• Number of active members	21,559	22,257
Key assumptions as of December 31:	• Investment rate of return	7.00%	7.00%
	• Inflation rate	2.50%	2.75%
	• Projected salary increases ⁵	General: 4.00% to 11.00% and Safety: 4.60% to 15.00%	General: 4.25% to 12.25% and Safety: 4.75% to 17.25%
		2.75% of retirement income	2.75% of retirement income
	• Cost of living adjustments		

¹ The reporting date and measurement date for the plan are December 31, 2020 and December 31, 2019.

² The service cost is based on the previous year's valuation, meaning the December 31, 2020 and December 31, 2019 measurement date values are based on the valuations as of December 31, 2019 and December 31, 2018, respectively. Both service costs have been calculated using the assumptions shown in the December 31, 2019 measurement date column, as there had been no changes in the actuarial assumptions between the December 31, 2018 and December 31, 2019 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 Contributions* on page 20.

⁵ For measurement dates December 31, 2020 and December 31, 2019, includes inflation at 2.50% and 2.75% respectively, plus real across-the-board salary increases of 0.50% plus merit and promotion increases.

Section 1: Actuarial Valuation Summary

Important information about actuarial valuations

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

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

Plan of Benefits	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. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan of benefits.
Participant Data	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.
Assets	This valuation is based on the market 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. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets or, if there are no assets, a rate of return based on a yield or index rate of 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). 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. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Section 1: Actuarial Valuation Summary

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

The 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 of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. 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.

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.

Section 2: GASB 68 Information

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, 2020, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	19,419
Inactive vested members entitled to but not yet receiving benefits	6,818
Active members	<u>21,559</u>
Total	47,796

Note: Data as of December 31, 2020 is not used in the measurement of the TPL as of December 31, 2020.

Section 2: GASB 68 Information

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, 31676.1, 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).

Section 2: GASB 68 Information

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 benefit to all retirees. The cost-of-living adjustment, based upon the Consumer Price Index 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 2020 or the second half of fiscal year 2019-2020 (based on the December 31, 2017 valuation) was 37.97%¹ of compensation. The average employer contribution rate for the last six months of calendar year 2020 or the first half of fiscal year 2020-2021 (based on the December 31, 2018 valuation) was 40.02%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 2020 or the second half of fiscal year 2019-2020 (based on the December 31, 2017 valuation) was 12.63%² of compensation. The average member contribution rate for the last six months of calendar year 2020 or the first half of fiscal year 2020-2021 (based on the December 31, 2018 valuation) was 12.47%² of compensation.

¹ These employer contribution rates may be higher or lower than the composite rate for 2020 as shown in the valuation report because these 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.

² It should be noted that these member contribution rates provided above have not been adjusted to reflect any pick-ups or reverse pick-ups.

Section 2: GASB 68 Information

Net Pension Liability

Reporting Date for Employer under GASB 68	June 30, 2021	June 30, 2020
Measurement Date for Employer under GASB 68	December 31, 2020	December 31, 2019
Components of the Net Pension Liability		
Total Pension Liability	\$23,010,449,650	\$21,754,263,463
Plan's Fiduciary Net Position	<u>(18,797,203,000)</u>	<u>(16,678,581,000)</u>
Net Pension Liability	\$4,213,246,650	\$5,075,682,463
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	81.69%	76.67%

The Net Pension Liability (NPL) was measured as of December 31, 2020 and 2019. 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, 2019 and 2018, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of December 31, 2020 and 2019 are the same as those used in the OCERS actuarial valuations as of December 31, 2020 and 2019, respectively.

Actuarial assumptions. The TPL as of December 31, 2020 was remeasured by (1) revaluing the TPL as of December 31, 2019 (before the roll forward) to include the following actuarial assumptions that the Retirement Board has adopted for use in the pension funding valuation as of December 31, 2020 and (2) using this revalued TPL in rolling forward the results from December 31, 2019 to December 31, 2020:

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:	2.75% of retirement income
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

Section 2: GASB 68 Information

The TPL as of December 31, 2019 was determined by actuarial valuations as of December 31, 2018. The actuarial assumptions used were based on the results of an experience study for the period from January 1, 2014 through December 31, 2016 and they are the same assumptions used in the December 31, 2019 funding valuation for OCERS.

Inflation:	2.75%
Salary increases:	General: 4.25% to 12.25% and Safety: 4.75% to 17.25%, vary by service, including inflation
Cost of living adjustments:	2.75% of retirement income
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, 2014 through December 31, 2016

Section 2: GASB 68 Information

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, 2020 actuarial valuation. 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	2.50%	2.50%
Total	100.00%	

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.

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Discount rate. The discount rate used to measure the TPL was 7.00% as of December 31, 2020 and 2019. 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, 2020 and 2019.

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Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL as of December 31, 2020, 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	\$5,967,353,655	\$3,547,545,979	\$1,575,031,351
O.C. Cemetery District	1,621,494	(145,195)	(1,585,318)
O.C. Law Library	706,984	(949,226)	(2,299,292)
O.C. Vector Control District	2,252,210	(1,681,965)	(4,888,921)
O.C. Retirement System	40,232,657	24,954,057	12,499,653
O.C. Fire Authority	498,882,290	181,121,638	(77,902,060)
Cypress Recreation and Parks	1,528,495	185,117	(909,942)
Department of Education	4,354,261	2,661,390	1,281,440
Transportation Corridor Agency	3,824,171	(3,881,366)	(10,162,561)
City of San Juan Capistrano	32,433,157	20,116,465	10,076,471
O.C. Sanitation District	45,329,114	(68,643,380)	(161,548,454)
O.C. Transportation Authority	336,233,423	186,024,390	63,580,976
U.C.I.	39,863,273	25,337,145	13,496,121
O.C. Children and Families Comm.	83,263	(612,417)	(1,179,503)
Local Agency Formation Comm.	2,012,326	1,248,133	625,198
Rancho Santa Margarita	3,780	(2,733)	(8,042)
O.C. Superior Court	483,138,839	299,663,880	150,103,631
O.C. IHSS Public Authority	<u>1,014,740</u>	<u>304,738</u>	<u>(274,023)</u>
Total for all Employers	\$7,460,868,132	\$4,213,246,650	\$1,565,936,725

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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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
Total Pension Liability		
• Service cost	\$512,255,298	\$499,255,591
• Interest	1,535,953,426	1,452,644,872
• Change of benefit terms	0	0
• Differences between expected and actual experience	162,335,537	24,382,911
• Changes of assumptions	18,966,926	0
• Benefit payments, including refunds of member contributions	(973,325,000)	(900,902,000)
• Transfer of members among Rate Groups	0	0
• Other	0	0
Net change in Total Pension Liability	\$1,256,186,187	\$1,075,381,374
Total Pension Liability – beginning	21,754,263,463	20,678,882,089
Total Pension Liability – ending	<u>\$23,010,449,650</u>	<u>\$21,754,263,463</u>
Plan's Fiduciary Net Position		
• Contributions – employer ¹	\$659,807,000	\$653,793,000
• Contributions – member	279,384,000	279,373,000
• Net investment income	2,173,184,000	2,183,808,000
• Benefit payments, including refunds of member contributions	(973,325,000)	(900,902,000)
• Transfer of members among Rate Groups	0	0
• Administrative expense	(20,428,000)	(19,171,000)
• Other	0	0
Net change in Plan's Fiduciary Net Position	\$2,118,622,000	\$2,196,901,000
Plan's Fiduciary Net Position – beginning	\$16,678,581,000	14,481,680,000
Plan's Fiduciary Net Position – ending	<u>\$18,797,203,000</u>	<u>\$16,678,581,000</u>
Net Pension Liability – ending	<u>\$4,213,246,650</u>	<u>\$5,075,682,463</u>
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	81.69%	76.67%
Covered payroll²	\$1,909,268,000	\$1,783,054,000
Plan Net Pension Liability as percentage of covered payroll	220.67%	284.66%

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.

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Schedule of 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}
2011	\$387,585,000	\$387,585,000	\$0	\$1,498,914,000	25.86%
2012	406,521,000	406,521,000	0	1,497,475,000	27.15%
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	536,726,000 ⁸	572,104,000 ^{7,9}	(35,378,000)	1,678,322,000	34.09%
2018	556,728,000 ¹⁰	580,905,000 ^{9,11}	(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%

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
2011	\$11,000,000	2016	\$0
2012	5,500,000	2017	0
2013	5,000,000	2018	0
2014	5,000,000	2019	0
2015	0	2020	5,000,000

² Reduced by discount for prepaid contributions.

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.

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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 2020 or the second half of fiscal year 2019-2020 are calculated based on the December 31, 2017 valuation. Actuarially determined contribution rates for the last six months of calendar year 2020 or the first half of fiscal year 2020-2021 are calculated based on the December 31, 2018 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.

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Actuarial assumptions		
Valuation Date	December 31, 2017 valuation	December 31, 2018 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:	2.75%	2.75%
Real across-the-board salary increase:	0.50%	0.50%
Projected salary increases:	General: 4.25% to 12.25% and Safety: 4.75% to 17.25%, 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:	2.75% of retirement income	2.75% of retirement income
Other assumptions:	Same as those used in the December 31, 2017 funding actuarial valuation	Same as those used in the December 31, 2018 funding actuarial valuation

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Determination of proportionate share

Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group
January 1, 2019 to December 31, 2019

	Rate Group #1	Rate Group #1 Percentage	Rate Group #2	Rate Group #2 Percentage	Rate Group #3	Rate Group #3 Percentage
Orange County	\$13,232,000	98.599%	\$264,402,000	87.836%	\$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%	2,503,000	0.832%	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%	2,444,000	0.812%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	8,056,000	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%	106,000	0.035%	0	0.000%
Local Agency Formation Comm.	0	0.000%	139,000	0.046%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	31,424,000	10.439%	0	0.000%
O.C. IHSS Public Authority	<u>188,000</u>	<u>1.401%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$13,420,000	100.000%	\$301,018,000	100.000%	\$8,056,000	100.000%

Note: Results may not total due to rounding.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group January 1, 2019 to December 31, 2019

	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%	1,248,000	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%	26,415,000	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>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$0	100.000%	\$26,415,000	100.000%	\$1,248,000	100.000%

Note: Results may not total due to rounding.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group

January 1, 2019 to December 31, 2019

	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%	187,000	100.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	118,000	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	8,578,000	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	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$8,578,000	100.000%	\$187,000	100.000%	\$118,000	100.000%

Note: Results may not total due to rounding.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group

January 1, 2019 to December 31, 2019

	Rate Group #6	Rate Group #6 Percentage	Rate Group #7	Rate Group #7 Percentage	Rate Group #8	Rate Group #8 Percentage
Orange County	\$30,025,000	100.000%	\$151,060,000	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%	61,888,000	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	\$30,025,000	100.000%	\$151,060,000	100.000%	\$61,888,000	100.000%

Note: Results may not total due to rounding.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group

January 1, 2019 to December 31, 2019

	Total Contributions ¹	Total Percentage
Orange County	\$458,719,000	76.197%
O.C. Cemetery District	187,000	0.031%
O.C. Law Library	118,000	0.020%
O.C. Vector Control District	0	0.000%
O.C. Retirement System	2,503,000	0.416%
O.C. Fire Authority	70,466,000	11.705%
Cypress Recreation and Parks	0	0.000%
Department of Education	0	0.000%
Transportation Corridor Agency	1,248,000	0.207%
City of San Juan Capistrano	2,444,000	0.406%
O.C. Sanitation District	8,056,000	1.338%
O.C. Transportation Authority	26,415,000	4.388%
U.C.I.	0	0.000%
O.C. Children and Families Comm.	106,000	0.018%
Local Agency Formation Comm.	139,000	0.023%
Rancho Santa Margarita	0	0.000%
O.C. Superior Court	31,424,000	5.220%
O.C. IHSS Public Authority	<u>188,000</u>	<u>0.031%</u>
Total for all Employers	\$602,013,000	100.000%

Note: Results may not total due to rounding.

¹ Excludes combined additional contributions of \$69,858,000 made by O.C. Fire Authority, Transportation Corridor Agency and O.C. Sanitation District towards the reduction of their UAALs, combined contributions of \$3,934,000 made by O.C. Vector Control District, Department of Education and U.C.I. and combined employer pick-up contributions of \$35,000.

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Allocation of December 31, 2019 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	\$45,068,171	57.238%	\$2,741,111,450	87.527%	\$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 ¹	(625,500)	(0.794%)	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	26,824,264	0.857%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks ¹	262,415	0.333%	0	0.000%	0	0.000%
Department of Education ¹	3,099,339	3.936%	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%	26,191,970	0.836%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	(49,446,617)	100.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I. ¹	30,213,739	38.373%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	(646,472)	(0.021%)	0	0.000%
Local Agency Formation Comm.	0	0.000%	1,489,642	0.048%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	336,766,149	10.753%	0	0.000%
O.C. IHSS Public Authority	719,301	0.914%	0	0.000%	0	0.000%
Total for all Employers	\$78,737,465	100.000%	\$3,131,737,003	100.000%	\$(49,446,617)	100.000%

Note: Results may not total due to rounding.

¹ 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, 2018 to December 31, 2019 for the actual contributions, benefit payments and return on their VVAs during 2019. Those VVAs are then marked to the Plan's Fiduciary Net Position as of December 31, 2019. The TPLs for these employers are obtained from internal valuation results (by rolling forward their TPLs from December 31, 2018).

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Allocation of December 31, 2019 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%	(1,753,164)	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%	224,284,548	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	(2,214)	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>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$(2,214)	100.000%	\$224,284,548	100.000%	\$(1,753,164)	100.000%

Note: Results may not total due to rounding.

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Allocation of December 31, 2019 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%	(228,119)	100.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	(74,515)	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	32,453,715	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	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$32,453,715	100.000%	\$(228,119)	100.000%	\$(74,515)	100.000%

Note: Results may not total due to rounding.

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Allocation of December 31, 2019 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	\$235,494,376	100.000%	\$1,102,538,243	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%	321,941,742	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	\$235,494,376	100.000%	\$1,102,538,243	100.000%	\$321,941,742	100.000%

Note: Results may not total due to rounding.

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Allocation of December 31, 2019 Net Pension Liability

	Total NPL	Total Percentage
Orange County	\$4,124,212,240	81.254%
O.C. Cemetery District	(228,119)	(0.004%)
O.C. Law Library	(74,515)	(0.001%)
O.C. Vector Control District ¹	(625,500)	(0.012%)
O.C. Retirement System	26,824,264	0.529%
O.C. Fire Authority	354,395,457	6.982%
Cypress Recreation and Parks ¹	262,415	0.005%
Department of Education ¹	3,099,339	0.061%
Transportation Corridor Agency	(1,753,164)	(0.035%)
City of San Juan Capistrano	26,191,970	0.516%
O.C. Sanitation District	(49,446,617)	(0.974%)
O.C. Transportation Authority	224,284,548	4.419%
U.C.I. ¹	30,213,739	0.595%
O.C. Children and Families Comm.	(646,472)	(0.013%)
Local Agency Formation Comm.	1,489,642	0.029%
Rancho Santa Margarita	(2,214)	(0.000%)
O.C. Superior Court	336,766,149	6.635%
O.C. IHSS Public Authority	<u>719,301</u>	<u>0.014%</u>
Total for all Employers	\$5,075,682,463	100.000%

Note: Results may not total due to rounding.

¹ 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, 2018 to December 31, 2019 for the actual contributions, benefit payments and return on their VVAs during 2019. Those VVAs are then marked to the Plan's Fiduciary Net Position as of December 31, 2019. The TPLs for these employers are obtained from internal valuation results (by rolling forward their TPLs from December 31, 2018).

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Notes regarding determination of proportionate share as of December 31, 2019 measurement date

1. Based on the January 1, 2019 through December 31, 2019 employer contributions as provided by OCERS. These contributions have been adjusted to exclude employer paid member contributions and they have not been reduced for discount due to prepaid contributions. (It should be noted that we would also have included transfers made from the County Investment Account had those transfers been made in 2019.)
- 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 2019. Again, as there were no such County POB contributions made during 2019, we have continued to apply the same proportions determined in 2014 for each of the four County Rate Groups to allocate the \$150,416,000 in the County Investment Account as of December 31, 2019. 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 been reduced by from \$30,688,000 to \$12,057,000 at the end of the year to mitigate the additional UAAL due to actuarial losses (and that UAAL was measured on a VVA basis). Nonetheless, 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:

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- (i) Rate Group #1 (Department of Education): \$267,000
- (ii) Rate Group #1 (U.C.I.): \$2,789,000
- (iii) Rate Group #1 (O.C. Vector Control District): \$878,000

- 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, 2019 and are used to reduce the NPL for the three employers as of December 31, 2019.

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: \$5,558,363

Rate Group #2: 92,443,896

Rate Group #6: 9,607,620

Rate Group #7: 42,806,121

Total: \$150,416,000

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 \$1,809,390 as of December 31, 2018 and is equal to \$1,782,458 as of December 31, 2019 when adjusted with interest for the entire year and UAAL contribution offset starting from January 1, 2019 to December 31, 2019. 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.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group January 1, 2020 to December 31, 2020

	Rate Group #1	Rate Group #1 Percentage	Rate Group #2	Rate Group #2 Percentage	Rate Group #3	Rate Group #3 Percentage
Orange County	\$12,491,000	98.696%	\$303,401,000	88.268%	\$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%	2,899,000	0.843%	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%	2,337,000	0.680%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	8,481,000	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%	132,000	0.038%	0	0.000%
Local Agency Formation Comm.	0	0.000%	145,000	0.042%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	34,813,000	10.128%	0	0.000%
O.C. IHSS Public Authority	<u>165,000</u>	<u>1.304%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$12,656,000	100.000%	\$343,727,000	100.000%	\$8,481,000	100.000%

Note: Results may not total due to rounding.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group January 1, 2020 to December 31, 2020

	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%	865,000	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%	28,893,000	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>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$0	100.000%	\$28,893,000	100.000%	\$865,000	100.000%

Note: Results may not total due to rounding.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group

January 1, 2020 to December 31, 2020

	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%	207,000	100.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	135,000	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	9,130,000	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	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$9,130,000	100.000%	\$207,000	100.000%	\$135,000	100.000%

Note: Results may not total due to rounding.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group

January 1, 2020 to December 31, 2020

	Rate Group #6	Rate Group #6 Percentage	Rate Group #7	Rate Group #7 Percentage	Rate Group #8	Rate Group #8 Percentage
Orange County	\$31,178,000	100.000%	\$160,831,000	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%	68,457,000	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	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$31,178,000	100.000%	\$160,831,000	100.000%	\$68,457,000	100.000%

Note: Results may not total due to rounding.

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Actual Contributions (Excluding Employer Paid Member Contributions and Not Reduced for Discount Due to Prepaid Contributions) by Employer and Rate Group

January 1, 2020 to December 31, 2020

	Total Contributions ¹	Total Percentage
Orange County	\$507,901,000	76.427%
O.C. Cemetery District	207,000	0.031%
O.C. Law Library	135,000	0.020%
O.C. Vector Control District	0	0.000%
O.C. Retirement System	2,899,000	0.436%
O.C. Fire Authority	77,587,000	11.675%
Cypress Recreation and Parks	0	0.000%
Department of Education	0	0.000%
Transportation Corridor Agency	865,000	0.130%
City of San Juan Capistrano	2,337,000	0.352%
O.C. Sanitation District	8,481,000	1.276%
O.C. Transportation Authority	28,893,000	4.348%
U.C.I.	0	0.000%
O.C. Children and Families Comm.	132,000	0.020%
Local Agency Formation Comm.	145,000	0.022%
Rancho Santa Margarita	0	0.000%
O.C. Superior Court	34,813,000	5.239%
O.C. IHSS Public Authority	165,000	0.025%
Total for all Employers	\$664,560,000	100.000%

Note: Results may not total due to rounding.

¹ Excludes combined additional contributions of \$21,592,000 made by O.C. Fire Authority towards the reduction of their UAALs, combined contributions of \$3,354,000 made by Department of Education and U.C.I. and combined employer pick-up contributions of \$32,000.

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Allocation of December 31, 2020 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	\$19,115,737	41.626%	\$2,515,885,249	87.929%	\$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 ¹	(1,681,965)	(3.663%)	0	0.000%	0	0.000%
O.C. Retirement System	0	0.000%	24,954,057	0.872%	0	0.000%
O.C. Fire Authority	0	0.000%	0	0.000%	0	0.000%
Cypress Recreation and Parks ¹	185,117	0.403%	0	0.000%	0	0.000%
Department of Education ¹	2,661,390	5.795%	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%	20,116,465	0.703%	0	0.000%
O.C. Sanitation District	0	0.000%	0	0.000%	(68,643,380)	100.000%
O.C. Transportation Authority	0	0.000%	0	0.000%	0	0.000%
U.C.I. ¹	25,337,145	55.174%	0	0.000%	0	0.000%
O.C. Children and Families Comm.	0	0.000%	(612,417)	(0.021%)	0	0.000%
Local Agency Formation Comm.	0	0.000%	1,248,133	0.044%	0	0.000%
Rancho Santa Margarita	0	0.000%	0	0.000%	0	0.000%
O.C. Superior Court	0	0.000%	299,663,880	10.473%	0	0.000%
O.C. IHSS Public Authority	304,738	0.664%	0	0.000%	0	0.000%
Total for all Employers	\$45,922,162	100.000%	\$2,861,255,367	100.000%	\$(68,643,380)	100.000%

Note: Results may not total due to rounding.

¹ 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, 2019 to December 31, 2020 for the actual contributions, benefit payments and return on their VVAs during 2020. Those VVAs are then marked to the Plan's Fiduciary Net Position as of December 31, 2020. The TPLs for these employers are obtained from internal valuation results (first by revaluing the TPL as of December 31, 2019 to include the actuarial assumptions adopted by the Board for use in the pension funding valuation as of December 31, 2020 and then rolling forward those results from December 31, 2019 to December 31, 2020).

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Allocation of December 31, 2020 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%	(3,881,366)	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%	186,024,390	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	(2,733)	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	\$(2,733)	100.000%	\$186,024,390	100.000%	\$(3,881,366)	100.000%

Note: Results may not total due to rounding.

Section 2: GASB 68 Information

Allocation of December 31, 2020 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%	(145,195)	100.000%	0	0.000%
O.C. Law Library	0	0.000%	0	0.000%	(949,226)	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	19,602,561	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	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$19,602,561	100.000%	\$(145,195)	100.000%	\$(949,226)	100.000%

Note: Results may not total due to rounding.

Section 2: GASB 68 Information

Allocation of December 31, 2020 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	\$156,749,960	100.000%	\$855,795,033	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%	161,519,077	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	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>	<u>0</u>	<u>0.000%</u>
Total for all Employers	\$156,749,960	100.000%	\$855,795,033	100.000%	\$161,519,077	100.000%

Note: Results may not total due to rounding.

Section 2: GASB 68 Information

Allocation of December 31, 2020 Net Pension Liability

	Total NPL	Total Percentage
Orange County	\$3,547,545,979	84.200%
O.C. Cemetery District	(145,195)	(0.003%)
O.C. Law Library	(949,226)	(0.023%)
O.C. Vector Control District ¹	(1,681,965)	(0.040%)
O.C. Retirement System	24,954,057	0.592%
O.C. Fire Authority	181,121,638	4.299%
Cypress Recreation and Parks ¹	185,117	0.004%
Department of Education ¹	2,661,390	0.063%
Transportation Corridor Agency	(3,881,366)	(0.092%)
City of San Juan Capistrano	20,116,465	0.477%
O.C. Sanitation District	(68,643,380)	(1.629%)
O.C. Transportation Authority	186,024,390	4.415%
U.C.I. ¹	25,337,145	0.601%
O.C. Children and Families Comm.	(612,417)	(0.015%)
Local Agency Formation Comm.	1,248,133	0.030%
Rancho Santa Margarita	(2,733)	0.000%
O.C. Superior Court	299,663,880	7.112%
O.C. IHSS Public Authority	<u>304,738</u>	<u>0.007%</u>
Total for all Employers	\$4,213,246,650	100.000%

Note: Results may not total due to rounding.

¹ 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, 2019 to December 31, 2020 for the actual contributions, benefit payments and return on their VVAs during 2020. Those VVAs are then marked to the Plan's Fiduciary Net Position as of December 31, 2020. The TPLs for these employers are obtained from internal valuation results (first by revaluing the TPL as of December 31, 2019 to include the actuarial assumptions adopted by the Board for use in the pension funding valuation as of December 31, 2020 and then rolling forward those results from December 31, 2019 to December 31, 2020).

Section 2: GASB 68 Information

Notes regarding determination of proportionate share as of December 31, 2020 measurement date

1. Based on the January 1, 2020 through December 31, 2020 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 2020. 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 by from \$12,057,000 to \$13,433,000 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):	\$286,000
(ii) Rate Group #1 (U.C.I.):	\$3,068,000
 - 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) and (ii) above are adjusted with interest to December 31, 2020 and are used to reduce the NPL for the three employers as of December 31, 2020.

Section 2: GASB 68 Information

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: \$3,953,868

Rate Group #2: 95,734,572

Rate Group #6: 9,868,945

Rate Group #7: 50,820,615

Total: \$160,378,000

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 \$1,782,458 as of December 31, 2019 as shown on Exhibit A1 and is equal to \$1,748,649 as of December 31, 2020 when adjusted with interest for the entire year and UAAL contribution offset starting from January 1, 2020 to December 31, 2020. We would continue to maintain the outstanding balance of the additional UAAL contributions for use in determining the NPL for this employer.

Section 2: GASB 68 Information

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
- l. Recognition of beginning of year deferred inflows of resources as pension expense

Section 2: GASB 68 Information

Pension expense

Total for All Employers

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Components of Pension Expense	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Service cost	\$512,255,298	\$499,255,591
• Interest on the Total Pension Liability	1,535,953,426	1,452,644,872
• 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	27,940,714	4,160,905
• Expensed portion of current-period changes of assumptions or other inputs	3,264,531	0
• Member contributions ¹	(279,416,000)	(279,408,000)
• Projected earnings on plan investments	(1,165,140,244)	(1,012,912,065)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(201,608,751)	(234,179,185)
• Administrative expense	20,428,000	19,171,000
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	428,190,705	613,106,124
• Recognition of beginning of year deferred inflows of resources as pension expense	(626,005,852)	(471,091,023)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$255,861,827	\$590,748,219

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

Section 2: GASB 68 Information

Pension expense (continued)

Orange County

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Components of Pension Expense	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Service cost	\$371,346,735	\$366,249,523
• Interest on the Total Pension Liability	1,139,902,216	1,076,190,936
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	2,220,532	(971,449)
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	18,249,861	(2,795,814)
• Expensed portion of current-period changes of assumptions or other inputs	7,156,061	0
• Member contributions ¹	(210,961,842)	(213,046,536)
• Projected earnings on plan investments	(840,642,533)	(730,206,990)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(145,873,766)	(168,900,852)
• Administrative expense	15,077,479	13,419,571
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	310,426,008	449,703,448
• Recognition of beginning of year deferred inflows of resources as pension expense	(452,374,213)	(341,078,002)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>5,628,662</u>	<u>7,241,587</u>
Pension Expense	\$220,155,200	\$455,805,422

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Cemetery District

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$355,759	\$351,892
• Interest on the Total Pension Liability	820,243	730,794
• 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	94,716	(83,319)
• Expensed portion of current-period changes of assumptions or other inputs	29,012	0
• Member contributions ¹	(168,000)	(153,000)
• Projected earnings on plan investments	(785,319)	(684,372)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(133,716)	(155,024)
• Administrative expense	7,961	6,821
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	297,806	415,056
• Recognition of beginning of year deferred inflows of resources as pension expense	(478,922)	(301,651)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$39,540	\$127,197

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Law Library

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Components of Pension Expense	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Service cost	\$311,289	\$303,555
• Interest on the Total Pension Liability	777,650	757,369
• 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	(53,515)	8,931
• Expensed portion of current-period changes of assumptions or other inputs	14,948	0
• Member contributions ¹	(164,000)	(159,000)
• Projected earnings on plan investments	(792,873)	(701,619)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(132,015)	(158,795)
• Administrative expense	6,373	5,567
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	273,670	862,354
• Recognition of beginning of year deferred inflows of resources as pension expense	(525,707)	(686,027)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(414,500)	(372,508)
Pension Expense	\$(698,680)	\$(140,173)

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Vector Control District

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$0	\$0
• Interest on the Total Pension Liability	1,873,171	1,838,973
• 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	57,350	(63,304)
• Expensed portion of current-period changes of assumptions or other inputs	19,465	0
• Member contributions ¹	0	0
• Projected earnings on plan investments	(1,893,631)	(1,749,918)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(296,460)	(395,310)
• Administrative expense	0	18,033
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	699,624	1,062,703
• Recognition of beginning of year deferred inflows of resources as pension expense	(1,521,054)	(1,062,441)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$(1,061,535)	\$(351,264)

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Retirement System

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$2,248,238	\$2,204,272
• Interest on the Total Pension Liability	7,376,867	6,886,777
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	96,804	449,510
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	111,162	(10,876)
• Expensed portion of current-period changes of assumptions or other inputs	282,596	0
• Member contributions ¹	(1,466,419)	(1,499,664)
• Projected earnings on plan investments	(5,410,502)	(4,653,533)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(925,785)	(1,072,280)
• Administrative expense	94,104	81,847
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	1,963,543	2,728,584
• Recognition of beginning of year deferred inflows of resources as pension expense	(2,964,238)	(2,347,848)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>1,010,362</u>	<u>703,821</u>
Pension Expense	\$2,416,732	\$3,470,610

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Fire Authority

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$65,552,468	\$58,846,217
• Interest on the Total Pension Liability	154,018,603	143,191,634
• 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	4,854,232	4,913,957
• Expensed portion of current-period changes of assumptions or other inputs	(10,312,352)	0
• Member contributions ¹	(28,291,000)	(25,523,000)
• Projected earnings on plan investments	(126,504,684)	(107,793,739)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(22,320,190)	(24,840,760)
• Administrative expense	2,735,425	2,331,831
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	44,055,157	60,681,021
• Recognition of beginning of year deferred inflows of resources as pension expense	(66,197,374)	(44,682,965)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$17,590,285	\$67,124,196

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

Section 2: GASB 68 Information

Pension expense (continued)

Cypress Recreation and Parks

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$0	\$0
• Interest on the Total Pension Liability	316,509	308,444
• 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	22,924	20,711
• Expensed portion of current-period changes of assumptions or other inputs	(2,566)	0
• Member contributions ¹	0	0
• Projected earnings on plan investments	(288,817)	(271,334)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(44,653)	(60,969)
• Administrative expense	0	0
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	828,662	807,951
• Recognition of beginning of year deferred inflows of resources as pension expense	(861,427)	(800,458)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$(29,368)	\$4,345

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

Section 2: GASB 68 Information

Pension expense (continued)

Department of Education

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$0	\$0
• Interest on the Total Pension Liability	833,351	846,896
• 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	36,028	44,534
• Expensed portion of current-period changes of assumptions or other inputs	(21,159)	0
• Member contributions ¹	0	0
• Projected earnings on plan investments	(611,476)	(590,740)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(93,270)	(134,644)
• Administrative expense	6,223	5,494
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	348,521	596,709
• Recognition of beginning of year deferred inflows of resources as pension expense	(585,617)	(496,921)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$(87,399)	\$271,328

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

Section 2: GASB 68 Information

Pension expense (continued)

Transportation Corridor Agency

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$1,680,188	\$1,628,951
• Interest on the Total Pension Liability	3,628,098	3,487,510
• 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	96,200	111,634
• Expensed portion of current-period changes of assumptions or other inputs	36,170	0
• Member contributions ¹	(748,000)	(748,000)
• Projected earnings on plan investments	(3,648,043)	(2,907,084)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(603,159)	(683,108)
• Administrative expense	34,279	303,189
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	1,069,955	1,317,753
• Recognition of beginning of year deferred inflows of resources as pension expense	(1,589,325)	(1,134,685)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$(43,637)	\$1,376,160

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

Section 2: GASB 68 Information

Pension expense (continued)

City of San Juan Capistrano

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Components of Pension Expense	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Service cost	\$1,812,394	\$2,152,313
• Interest on the Total Pension Liability	5,946,788	6,724,443
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(781,253)	(197,603)
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	89,612	(10,620)
• Expensed portion of current-period changes of assumptions or other inputs	227,812	0
• Member contributions ¹	(1,182,139)	(1,464,314)
• Projected earnings on plan investments	(4,361,622)	(4,543,841)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(746,312)	(1,047,004)
• Administrative expense	75,861	79,918
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	1,582,891	2,664,267
• Recognition of beginning of year deferred inflows of resources as pension expense	(2,389,591)	(2,292,505)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(518,208)	(100,772)
Pension Expense	\$(243,767)	\$1,964,282

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Sanitation District

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$17,388,689	\$17,019,396
• Interest on the Total Pension Liability	53,187,470	49,777,766
• 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	2,527,848	1,527,660
• Expensed portion of current-period changes of assumptions or other inputs	2,035,121	0
• Member contributions ¹	(8,329,000)	(7,999,000)
• Projected earnings on plan investments	(54,967,224)	(46,959,052)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(9,041,738)	(10,929,917)
• Administrative expense	358,146	1,103,626
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	19,316,348	25,093,591
• Recognition of beginning of year deferred inflows of resources as pension expense	(25,653,746)	(18,624,486)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	414,500	372,508
Pension Expense	\$(2,763,586)	\$10,382,092

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Transportation Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Components of Pension Expense	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Service cost	\$24,228,350	\$22,489,191
• Interest on the Total Pension Liability	70,938,807	67,523,163
• 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	361,484	434,162
• Expensed portion of current-period changes of assumptions or other inputs	589,638	0
• Member contributions ¹	(10,329,000)	(9,822,000)
• Projected earnings on plan investments	(54,696,206)	(48,088,883)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(9,421,035)	(11,118,571)
• Administrative expense	826,046	721,096
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	21,034,188	29,054,915
• Recognition of beginning of year deferred inflows of resources as pension expense	(31,437,967)	(24,856,850)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$12,094,305	\$26,336,223

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

Section 2: GASB 68 Information

Pension expense (continued)

U.C.I

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$0	\$0
• Interest on the Total Pension Liability	7,153,449	7,314,482
• 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	179,363	217,420
• Expensed portion of current-period changes of assumptions or other inputs	(189,697)	0
• Member contributions ¹	0	0
• Projected earnings on plan investments	(5,069,213)	(4,883,758)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(779,876)	(1,113,640)
• Administrative expense	66,734	57,294
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	2,523,897	3,586,875
• Recognition of beginning of year deferred inflows of resources as pension expense	(3,532,556)	(3,010,050)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$352,101	\$2,168,623

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Children and Families Comm.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Components of Pension Expense	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Service cost	\$(55,177)	\$(53,122)
• Interest on the Total Pension Liability	(181,041)	(165,973)
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	29,890	(189,450)
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(2,728)	262
• Expensed portion of current-period changes of assumptions or other inputs	(6,935)	0
• Member contributions ¹	35,989	36,142
• Projected earnings on plan investments	132,783	112,151
• Expensed portion of current-period differences between actual and projected earnings on plan investments	22,720	25,842
• Administrative expense	(2,309)	(1,973)
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	(48,189)	(65,760)
• Recognition of beginning of year deferred inflows of resources as pension expense	72,748	56,584
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(495,651)	(350,297)
Pension Expense	\$(497,900)	\$(595,594)

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

Section 2: GASB 68 Information

Pension expense (continued)

Local Agency Formation Comm.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Components of Pension Expense	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Service cost	\$112,450	\$122,410
• Interest on the Total Pension Liability	368,970	382,446
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(23,468)	26,906
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	5,560	(604)
• Expensed portion of current-period changes of assumptions or other inputs	14,135	0
• Member contributions ¹	(73,346)	(83,281)
• Projected earnings on plan investments	(270,618)	(258,426)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(46,305)	(59,547)
• Administrative expense	4,707	4,545
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	98,211	151,527
• Recognition of beginning of year deferred inflows of resources as pension expense	(148,263)	(130,384)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>29,626</u>	<u>31,249</u>
Pension Expense	\$71,659	\$186,841

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

Section 2: GASB 68 Information

Pension expense (continued)

Rancho Santa Margarita

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$0	\$0
• Interest on the Total Pension Liability	3,220	3,220
• 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	134	133
• Expensed portion of current-period changes of assumptions or other inputs	(184)	0
• Member contributions ¹	0	0
• Projected earnings on plan investments	(3,320)	(3,076)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(26)	(884)
• Administrative expense	0	0
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	2,337	3,874
• Recognition of beginning of year deferred inflows of resources as pension expense	(4,101)	(3,362)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>0</u>	<u>0</u>
Pension Expense	\$(1,940)	\$(95)

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. Superior Court

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Components of Pension Expense	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Service cost	\$26,998,252	\$27,673,610
• Interest on the Total Pension Liability	88,586,015	86,460,274
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(1,537,061)	878,732
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	1,334,903	(136,545)
• Expensed portion of current-period changes of assumptions or other inputs	3,393,587	0
• Member contributions ¹	(17,609,678)	(18,827,583)
• Projected earnings on plan investments	(64,972,680)	(58,422,939)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(11,117,400)	(13,461,975)
• Administrative expense	1,130,057	1,027,549
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	23,579,451	34,256,104
• Recognition of beginning of year deferred inflows of resources as pension expense	(35,596,413)	(29,476,139)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(5,693,830)	(7,563,741)
Pension Expense	\$8,495,203	\$22,407,347

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

Section 2: GASB 68 Information

Pension expense (continued)

O.C. IHSS Public Authority

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Components of Pension Expense

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Service cost	\$275,663	\$267,383
• Interest on the Total Pension Liability	403,040	385,718
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(5,444)	3,354
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(24,420)	(17,417)
• Expensed portion of current-period changes of assumptions or other inputs	(1,121)	0
• Member contributions ¹	(129,565)	(118,764)
• Projected earnings on plan investments	(354,266)	(304,912)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(55,765)	(71,747)
• Administrative expense	6,914	6,592
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	138,625	185,152
• Recognition of beginning of year deferred inflows of resources as pension expense	(218,086)	(162,833)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>39,039</u>	<u>38,153</u>
Pension Expense	\$74,614	\$210,679

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

Section 2: GASB 68 Information

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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$29,842,680	\$28,080,600
• Changes of assumptions or other inputs	447,613,509	419,380,310
• Difference between projected and actual earnings on pension plan investments	544,111,478	816,168,467
• Difference between expected and actual experience in the Total Pension Liability	<u>185,878,956</u>	<u>55,757,456</u>
• Total Deferred Outflows of Resources	\$1,207,446,623	\$1,319,386,833
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$29,842,680	\$28,080,600
• Changes of assumptions or other inputs	155,261,175	8,813,853
• Difference between projected and actual earnings on pension plan investments	1,710,902,886	1,383,375,142
• Difference between expected and actual experience in the Total Pension Liability	<u>169,219,589</u>	<u>298,374,305</u>
• Total Deferred Inflows of Resources	\$2,065,226,330	\$1,718,643,900
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:		
2021	N/A	\$(197,815,147)
2022	\$(277,027,099)	(106,623,593)
2023	(21,858,500)	148,545,006
2024	(417,345,225)	(246,941,719)
2025	(166,825,121)	3,578,386
2026	25,276,238	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$22,213,247	\$18,170,596
• Changes of assumptions or other inputs	350,580,446	322,870,826
• Difference between projected and actual earnings on pension plan investments	392,622,732	587,160,184
• Difference between expected and actual experience in the Total Pension Liability	<u>106,688,286</u>	<u>13,982,779</u>
• Total Deferred Outflows of Resources	\$872,104,711	\$942,184,385
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,780,248	\$4,789,699
• Changes of assumptions or other inputs	102,623,510	6,642,961
• Difference between projected and actual earnings on pension plan investments	1,237,325,625	997,095,584
• Difference between expected and actual experience in the Total Pension Liability	<u>116,822,611</u>	<u>206,914,979</u>
• Total Deferred Inflows of Resources	\$1,460,551,994	\$1,215,443,223
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:		
2021	N/A	\$(135,857,568)
2022	\$(187,706,942)	(67,712,535)
2023	8,279,692	116,022,910
2024	(336,443,054)	(182,471,793)
2025	(112,476,870)	(3,239,852)
2026	39,568,470	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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
Deferred Outflows of Resources

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	302,773	244,428
• Difference between projected and actual earnings on pension plan investments	371,071	556,607
• Difference between expected and actual experience in the Total Pension Liability	<u>528,105</u>	<u>103,588</u>
• Total Deferred Outflows of Resources	\$1,201,949	\$904,623

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	5,895
• Difference between projected and actual earnings on pension plan investments	1,132,625	911,694
• Difference between expected and actual experience in the Total Pension Liability	<u>423,161</u>	<u>582,255</u>
• Total Deferred Inflows of Resources	\$1,555,786	\$1,499,844

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:		
2021	N/A	\$(181,116)
2022	\$(155,369)	(145,381)
2023	8,260	18,248
2024	(225,303)	(215,315)
2025	(81,645)	(71,657)
2026	100,220	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$9,214
• Changes of assumptions or other inputs	215,323	214,778
• Difference between projected and actual earnings on pension plan investments	386,769	580,153
• Difference between expected and actual experience in the Total Pension Liability	<u>34,476</u>	<u>43,407</u>
• Total Deferred Outflows of Resources	\$636,568	\$847,552

Deferred Inflows of Resources

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$25,423	\$449,137
• Changes of assumptions or other inputs	0	30,514
• Difference between projected and actual earnings on pension plan investments	1,139,777	921,702
• Difference between expected and actual experience in the Total Pension Liability	<u>481,376</u>	<u>409,176</u>
• Total Deferred Inflows of Resources	\$1,646,576	\$1,810,529

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:			
	2021	N/A	\$(666,537)
	2022	\$(315,774)	(145,192)
	2023	(126,251)	44,331
	2024	(373,844)	(203,262)
	2025	(162,898)	7,683
	2026	(31,241)	0
	2027	0	0
	Thereafter	0	0

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

Section 2: GASB 68 Information

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 Deferred Outflows of Resources	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	384,382	435,411
• Difference between projected and actual earnings on pension plan investments	994,611	1,491,917
• Difference between expected and actual experience in the Total Pension Liability	<u>388,960</u>	<u>170,770</u>
• Total Deferred Outflows of Resources	\$1,767,953	\$2,098,098
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	2,740,586	2,404,780
• Difference between expected and actual experience in the Total Pension Liability	<u>840,768</u>	<u>1,511,789</u>
• Total Deferred Inflows of Resources	\$3,581,354	\$3,916,569
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:		
2021	N/A	\$(821,430)
2022	\$(568,755)	(349,110)
2023	(177,724)	41,921
2024	(855,054)	(635,409)
2025	(274,087)	(54,443)
2026	62,219	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,305,581	\$3,962,866
• Changes of assumptions or other inputs	2,731,424	2,018,023
• Difference between projected and actual earnings on pension plan investments	2,561,775	3,773,899
• Difference between expected and actual experience in the Total Pension Liability	<u>534,689</u>	<u>0</u>
• Total Deferred Outflows of Resources	\$9,133,469	\$9,754,788
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$105,794	\$218,343
• Changes of assumptions or other inputs	0	62,731
• Difference between projected and actual earnings on pension plan investments	7,932,122	6,362,377
• Difference between expected and actual experience in the Total Pension Liability	<u>645,269</u>	<u>1,273,114</u>
• Total Deferred Inflows of Resources	\$8,683,185	\$7,916,565
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:		
2021	N/A	\$27,575
2022	\$27,575	246,502
2023	246,502	1,558,040
2024	1,558,040	(371,122)
2025	(371,122)	377,228
2026	(1,010,711)	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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
Deferred Outflows of Resources

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	20,847,354	29,267,911
• Difference between projected and actual earnings on pension plan investments	56,903,410	85,355,117
• Difference between expected and actual experience in the Total Pension Liability	<u>42,647,259</u>	<u>24,478,887</u>
• Total Deferred Outflows of Resources	\$120,398,023	\$139,101,915

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	51,604,825	130,986
• Difference between projected and actual earnings on pension plan investments	184,283,215	144,282,784
• Difference between expected and actual experience in the Total Pension Liability	<u>22,151,617</u>	<u>38,937,675</u>
• Total Deferred Inflows of Resources	\$258,039,657	\$183,351,445

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:		
2021	N/A	\$(22,142,217)
2022	\$(42,479,079)	(14,700,769)
2023	(16,842,534)	10,935,776
2024	(50,346,635)	(22,568,325)
2025	(23,552,306)	4,226,005
2026	(4,421,080)	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	46,968	70,336
• Difference between projected and actual earnings on pension plan investments	141,322	211,982
• Difference between expected and actual experience in the Total Pension Liability	<u>1,628,200</u>	<u>2,252,572</u>
• Total Deferred Outflows of Resources	\$1,816,490	\$2,534,890

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	12,345	0
• Difference between projected and actual earnings on pension plan investments	1,161,975	1,844,790
• Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
• Total Deferred Inflows of Resources	\$1,174,320	\$1,844,790

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:		
2021	N/A	\$(32,765)
2022	\$(57,059)	(32,764)
2023	743,400	767,695
2024	(54,174)	(29,879)
2025	(6,482)	17,813
2026	16,485	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	118,721	177,787
• Difference between projected and actual earnings on pension plan investments	360,014	540,022
• Difference between expected and actual experience in the Total Pension Liability	444,465	380,618
• Total Deferred Outflows of Resources	\$923,200	\$1,098,427

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	101,775	10,085
• Difference between projected and actual earnings on pension plan investments	917,172	858,174
• Difference between expected and actual experience in the Total Pension Liability	417,291	678,741
• Total Deferred Inflows of Resources	\$1,436,238	\$1,547,000

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:			
	2021	N/A	\$(237,096)
	2022	\$(245,262)	(166,861)
	2023	(100,781)	(22,380)
	2024	(138,938)	(60,537)
	2025	(40,100)	38,301
	2026	12,043	0
	2027	0	0
	Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	761,881	880,388
• Difference between projected and actual earnings on pension plan investments	1,248,052	1,872,077
• Difference between expected and actual experience in the Total Pension Liability	<u>924,761</u>	<u>615,484</u>
• Total Deferred Outflows of Resources	\$2,934,694	\$3,367,949
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	28,116
• Difference between projected and actual earnings on pension plan investments	4,929,682	3,760,486
• Difference between expected and actual experience in the Total Pension Liability	<u>622,420</u>	<u>940,190</u>
• Total Deferred Inflows of Resources	\$5,552,102	\$4,728,792
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:		
2021	N/A	\$(519,370)
2022	\$(858,073)	(387,284)
2023	(421,479)	49,310
2024	(1,070,295)	(599,506)
2025	(374,781)	96,007
2026	107,220	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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
Deferred Outflows of Resources

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$560,255	\$887,243
• Changes of assumptions or other inputs	2,201,910	1,970,455
• Difference between projected and actual earnings on pension plan investments	2,065,149	3,684,941
• Difference between expected and actual experience in the Total Pension Liability	<u>431,035</u>	<u>0</u>
• Total Deferred Outflows of Resources	\$5,258,349	\$6,542,639

Deferred Inflows of Resources

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$4,888,341	\$1,975,710
• Changes of assumptions or other inputs	0	61,252
• Difference between projected and actual earnings on pension plan investments	6,394,402	6,212,405
• Difference between expected and actual experience in the Total Pension Liability	<u>520,178</u>	<u>1,243,105</u>
• Total Deferred Inflows of Resources	\$11,802,921	\$9,492,472

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:		
2021	N/A	\$(1,477,829)
2022	\$(1,477,829)	(718,794)
2023	(718,794)	771,469
2024	771,469	(1,345,609)
2025	(1,345,609)	(179,070)
2026	(3,773,809)	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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
Deferred Outflows of Resources

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$25,423	\$449,137
• Changes of assumptions or other inputs	18,009,943	12,311,067
• Difference between projected and actual earnings on pension plan investments	26,281,119	39,421,678
• Difference between expected and actual experience in the Total Pension Liability	<u>19,679,712</u>	<u>9,606,499</u>
• Total Deferred Outflows of Resources	\$63,996,197	\$61,788,381

Deferred Inflows of Resources

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$9,214
• Changes of assumptions or other inputs	0	372,978
• Difference between projected and actual earnings on pension plan investments	78,515,498	64,842,567
• Difference between expected and actual experience in the Total Pension Liability	<u>2,630,086</u>	<u>5,416,832</u>
• Total Deferred Inflows of Resources	\$81,145,584	\$70,641,591

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:		
2021	N/A	\$(5,922,898)
2022	\$(7,334,143)	(2,855,374)
2023	2,995,140	7,473,909
2024	(13,341,404)	(8,862,635)
2025	(3,164,982)	1,313,788
2026	3,696,002	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	17,474,376	21,920,909
• Difference between projected and actual earnings on pension plan investments	26,217,519	39,326,279
• Difference between expected and actual experience in the Total Pension Liability	<u>3,427,122</u>	<u>2,331,117</u>
• Total Deferred Outflows of Resources	\$47,119,017	\$63,578,305

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	595,454
• Difference between projected and actual earnings on pension plan investments	80,855,942	66,279,519
• Difference between expected and actual experience in the Total Pension Liability	<u>14,033,597</u>	<u>21,768,391</u>
• Total Deferred Inflows of Resources	\$94,889,539	\$88,643,364

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:		
2021	N/A	\$(10,403,779)
2022	\$(15,757,308)	(7,287,395)
2023	(3,707,875)	4,762,038
2024	(20,979,218)	(12,509,305)
2025	(8,096,533)	373,382
2026	770,412	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	951,705	1,425,191
• Difference between projected and actual earnings on pension plan investments	2,966,035	4,449,052
• Difference between expected and actual experience in the Total Pension Liability	<u>2,085,835</u>	<u>1,790,493</u>
• Total Deferred Outflows of Resources	\$6,003,575	\$7,664,736

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	912,444	79,608
• Difference between projected and actual earnings on pension plan investments	7,628,033	7,119,985
• Difference between expected and actual experience in the Total Pension Liability	<u>1,590,593</u>	<u>2,432,087</u>
• Total Deferred Inflows of Resources	\$10,131,070	\$9,631,680

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:		
2021	N/A	\$(1,008,659)
2022	\$(1,526,539)	(736,329)
2023	(405,286)	384,924
2024	(1,584,071)	(793,861)
2025	(603,227)	186,981
2026	(8,372)	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$143,769	\$0
• Changes of assumptions or other inputs	(67,034)	(48,635)
• Difference between projected and actual earnings on pension plan investments	(62,871)	(90,952)
• Difference between expected and actual experience in the Total Pension Liability	(13,122)	0
• Total Deferred Outflows of Resources	\$742	\$(139,587)
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,156,467	\$1,652,118
• Changes of assumptions or other inputs	0	(1,512)
• Difference between projected and actual earnings on pension plan investments	(194,668)	(153,335)
• Difference between expected and actual experience in the Total Pension Liability	(15,836)	(30,682)
• Total Deferred Inflows of Resources	\$945,963	\$1,466,589
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:		
2021	N/A	\$(471,966)
2022	\$(471,966)	(411,273)
2023	(411,273)	(342,312)
2024	(342,312)	(217,925)
2025	(217,925)	(162,700)
2026	498,255	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$159,107	\$246,158
• Changes of assumptions or other inputs	136,618	112,068
• Difference between projected and actual earnings on pension plan investments	128,133	209,577
• Difference between expected and actual experience in the Total Pension Liability	<u>26,744</u>	<u>0</u>
• Total Deferred Outflows of Resources	\$450,602	\$567,803
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$132,905	\$77,447
• Changes of assumptions or other inputs	0	3,484
• Difference between projected and actual earnings on pension plan investments	396,743	353,324
• Difference between expected and actual experience in the Total Pension Liability	<u>32,275</u>	<u>70,700</u>
• Total Deferred Inflows of Resources	\$561,923	\$504,955
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:		
2021	N/A	\$(24,951)
2022	\$(24,951)	39,056
2023	39,056	61,377
2024	61,377	(35,256)
2025	(35,256)	22,622
2026	(151,547)	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$0	\$0
• Changes of assumptions or other inputs	321	480
• Difference between projected and actual earnings on pension plan investments	1,174	3,008
• Difference between expected and actual experience in the Total Pension Liability	<u>1,544</u>	<u>1,242</u>
• Total Deferred Outflows of Resources	\$3,039	\$4,730

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	886	29
• Difference between projected and actual earnings on pension plan investments	3,756	5,535
• Difference between expected and actual experience in the Total Pension Liability	<u>3,198</u>	<u>5,388</u>
• Total Deferred Inflows of Resources	\$7,840	\$10,952

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:		
2021	N/A	\$(1,764)
2022	\$(2,848)	(2,772)
2023	(1,235)	(1,159)
2024	(718)	(642)
2025	40	115
2026	(40)	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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 Deferred Outflows of Resources	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,391,904	\$4,270,636
• Changes of assumptions or other inputs	32,800,644	25,335,345
• Difference between projected and actual earnings on pension plan investments	30,763,392	47,379,540
• Difference between expected and actual experience in the Total Pension Liability	<u>6,420,885</u>	<u>0</u>
• Total Deferred Outflows of Resources	\$73,376,825	\$76,985,521
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$19,720,574	\$18,899,874
• Changes of assumptions or other inputs	0	787,559
• Difference between projected and actual earnings on pension plan investments	95,253,873	79,876,681
• Difference between expected and actual experience in the Total Pension Liability	<u>7,748,797</u>	<u>15,983,355</u>
• Total Deferred Inflows of Resources	\$122,723,244	\$115,547,469
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:		
2021	N/A	\$(18,032,264)
2022	\$(18,032,264)	(11,227,431)
2023	(11,227,431)	5,992,846
2024	5,992,846	(15,933,378)
2025	(15,933,378)	638,279
2026	(10,146,192)	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$43,394	\$84,750
• Changes of assumptions or other inputs	115,754	173,542
• Difference between projected and actual earnings on pension plan investments	162,072	243,386
• Difference between expected and actual experience in the Total Pension Liability	0	0
• Total Deferred Outflows of Resources	\$321,220	\$501,678

Deferred Inflows of Resources

• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$32,928	\$9,058
• Changes of assumptions or other inputs	5,390	3,713
• Difference between projected and actual earnings on pension plan investments	486,528	396,090
• Difference between expected and actual experience in the Total Pension Liability	272,188	237,210
• Total Deferred Inflows of Resources	\$797,034	\$646,071

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:		
2021	N/A	\$(40,513)
2022	\$(40,513)	(29,887)
2023	(29,887)	26,063
2024	26,063	(87,960)
2025	(87,960)	(12,096)
2026	(12,096)	0
2027	0	0
Thereafter	0	0

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

Section 2: GASB 68 Information

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, 2020. 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., 2020) is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through OCERS which is 5.81 years determined as of December 31, 2019 (the beginning of the measurement period ended December 31, 2020). 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, 2020 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.

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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

City of San Juan Capistrano

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	0.535%	\$28,312,625	\$6,324,207	447.69%	64.40%
2015	0.548%	27,866,378	6,863,345	406.02%	67.15%
2016	0.512%	29,249,120	6,464,876	452.43%	64.73%
2017	0.483%	25,089,009	6,636,488	378.05%	68.69%
2018	0.528%	26,138,852	7,227,226	361.67%	71.95%
2019	0.519%	32,142,058	7,253,654	443.12%	67.06%
2020	0.516%	26,191,970	7,294,439	359.07%	73.18%
2021	0.477%	20,116,465	6,701,987	300.16%	76.95%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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

Local Agency Formation 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	0.022%	\$1,187,537	\$273,719	433.85%	64.40%
2015	0.026%	1,303,484	334,804	389.33%	67.15%
2016	0.020%	1,156,534	287,698	402.00%	64.73%
2017	0.026%	1,340,888	374,792	357.77%	68.69%
2018	0.026%	1,268,133	394,760	321.24%	71.95%
2019	0.026%	1,582,703	419,538	377.25%	67.06%
2020	0.029%	1,489,642	475,099	313.54%	73.18%
2021	0.030%	1,248,133	463,507	269.28%	76.95%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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%

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

Section 2: GASB 68 Information

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 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$5,075,682,463	\$6,197,202,089
• Pension Expense	255,861,827	590,748,219
• Employer Contributions	(659,775,000)	(653,758,000)
• New Net Deferred Inflows/Outflows	(656,337,787)	(916,494,744)
• 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	197,815,147	(142,015,101)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>0</u>	<u>0</u>
Ending Net Pension Liability	\$4,213,246,650	\$5,075,682,463

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

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

Orange County

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$4,124,212,240	\$4,918,576,912
• Pension Expense	220,155,200	455,805,422
• Employer Contributions	(481,633,016)	(439,861,920)
• New Net Deferred Inflows/Outflows	(461,292,587)	(689,191,062)
• Change in Allocation of Prior Deferred Inflows/Outflows	(896,165)	(528,831)
• New Net Deferred Flows Due to Change in Proportion ¹	10,680,764	(4,721,248)
• Recognition of Prior Deferred Inflows/Outflows	141,948,205	(108,625,446)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(5,628,662)</u>	<u>(7,241,587)</u>
Ending Net Pension Liability	\$3,547,545,979	\$4,124,212,240

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

Section 2: GASB 68 Information

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
Reconciliation of Net Pension Liability

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Beginning Net Pension Liability	\$(228,119)	\$962,119
• Pension Expense	39,540	127,197
• Employer Contributions	(198,000)	(179,000)
• New Net Deferred Inflows/Outflows	60,268	(1,025,030)
• 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	181,116	(113,405)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>0</u>	<u>0</u>
Ending Net Pension Liability	\$(145,195)	\$(228,119)

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

Section 2: GASB 68 Information

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
Reconciliation of Net Pension Liability

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Beginning Net Pension Liability	\$(74,515)	\$573,252
• Pension Expense	(698,680)	(140,173)
• Employer Contributions	(129,000)	(112,000)
• New Net Deferred Inflows/Outflows	(713,568)	(591,775)
• 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	252,037	(176,327)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>414,500</u>	<u>372,508</u>
Ending Net Pension Liability	\$(949,226)	\$(74,515)

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

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Vector Control District

Reporting Date for Employer under GASB 68
Measurement Date for Employer under GASB 68
Reconciliation of Net Pension Liability

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Beginning Net Pension Liability	\$(625,500)	\$2,492,695
• Pension Expense	(1,061,535)	(351,264)
• Employer Contributions	0	(877,769)
• New Net Deferred Inflows/Outflows	(816,360)	(1,888,900)
• 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	821,430	(262)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$(1,681,965)	\$(625,500)

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

Section 2: GASB 68 Information

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 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$26,824,264	\$28,844,760
• Pension Expense	2,416,732	3,470,610
• Employer Contributions	(2,899,000)	(2,504,000)
• New Net Deferred Inflows/Outflows	(1,809,163)	(4,341,978)
• Change in Allocation of Prior Deferred Inflows/Outflows	(34,735)	254,808
• New Net Deferred Flows Due to Change in Proportion ¹	465,626	2,184,621
• Recognition of Prior Deferred Inflows/Outflows	1,000,695	(380,736)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(1,010,362)</u>	<u>(703,821)</u>
Ending Net Pension Liability	\$24,954,057	\$26,824,264

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

Section 2: GASB 68 Information

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 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$354,395,457	\$466,731,526
• Pension Expense	17,590,285	67,124,196
• Employer Contributions	(97,472,000)	(87,981,000)
• New Net Deferred Inflows/Outflows	(115,534,321)	(75,481,209)
• 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	22,142,217	(15,998,056)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$181,121,638	\$354,395,457

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

Section 2: GASB 68 Information

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
Reconciliation of Net Pension Liability

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Beginning Net Pension Liability	\$262,415	\$408,781
• Pension Expense	(29,368)	4,345
• Employer Contributions	0	0
• New Net Deferred Inflows/Outflows	(80,695)	(143,218)
• 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	32,765	(7,493)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$185,117	\$262,415

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

Section 2: GASB 68 Information

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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$3,099,339	\$3,517,372
• Pension Expense	(87,399)	271,328
• Employer Contributions	(286,085)	(267,432)
• New Net Deferred Inflows/Outflows	(301,561)	(322,141)
• 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	237,096	(99,788)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>0</u>	<u>0</u>
Ending Net Pension Liability	\$2,661,390	\$3,099,339

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

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

Transportation Corridor Agency

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$(1,753,164)	\$13,253,632
• Pension Expense	(43,637)	1,376,160
• Employer Contributions	(828,000)	(14,010,000)
• New Net Deferred Inflows/Outflows	(1,775,935)	(2,189,888)
• 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	519,370	(183,068)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>0</u>	<u>0</u>
Ending Net Pension Liability	\$(3,881,366)	\$(1,753,164)

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

Section 2: GASB 68 Information

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
Reconciliation of Net Pension Liability

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Beginning Net Pension Liability	\$26,191,970	\$32,142,058
• Pension Expense	(243,767)	1,964,282
• Employer Contributions	(2,237,000)	(2,339,000)
• New Net Deferred Inflows/Outflows	(1,458,439)	(4,239,630)
• Change in Allocation of Prior Deferred Inflows/Outflows	296,620	(104,402)
• New Net Deferred Flows Due to Change in Proportion ¹	(3,757,827)	(960,348)
• Recognition of Prior Deferred Inflows/Outflows	806,700	(371,762)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>518,208</u>	<u>100,772</u>
Ending Net Pension Liability	\$20,116,465	\$26,191,970

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

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Sanitation District

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$(49,446,617)	\$29,029,145
• Pension Expense	(2,763,586)	10,382,092
• Employer Contributions	(8,137,000)	(45,721,000)
• New Net Deferred Inflows/Outflows	(14,219,075)	(36,295,241)
• 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	6,337,398	(6,469,105)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(414,500)</u>	<u>(372,508)</u>
Ending Net Pension Liability	\$(68,643,380)	\$(49,446,617)

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

Section 2: GASB 68 Information

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 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$224,284,548	\$269,788,642
• Pension Expense	12,094,305	26,336,223
• Employer Contributions	(27,649,000)	(25,278,000)
• New Net Deferred Inflows/Outflows	(33,109,242)	(42,364,252)
• 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	10,403,779	(4,198,065)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$186,024,390	\$224,284,548

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

Section 2: GASB 68 Information

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
Reconciliation of Net Pension Liability

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Beginning Net Pension Liability	\$30,213,739	\$34,808,679
• Pension Expense	352,101	2,168,623
• Employer Contributions	(3,068,144)	(2,788,839)
• New Net Deferred Inflows/Outflows	(3,169,210)	(3,397,899)
• 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	1,008,659	(576,825)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	0	0
Ending Net Pension Liability	\$25,337,145	\$30,213,739

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

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

O.C. Children and Families Comm.

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$(646,472)	\$630,610
• Pension Expense	(497,900)	(595,594)
• Employer Contributions	(129,000)	(101,000)
• New Net Deferred Inflows/Outflows	44,400	104,643
• Change in Allocation of Prior Deferred Inflows/Outflows	1,694	(123,879)
• New Net Deferred Flows Due to Change in Proportion ¹	143,769	(920,725)
• Recognition of Prior Deferred Inflows/Outflows	(24,559)	9,176
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>495,651</u>	<u>350,297</u>
Ending Net Pension Liability	\$(612,417)	\$(646,472)

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

Section 2: GASB 68 Information

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
Reconciliation of Net Pension Liability

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Beginning Net Pension Liability	\$1,489,642	\$1,582,703
• Pension Expense	71,659	186,841
• Employer Contributions	(139,000)	(133,000)
• New Net Deferred Inflows/Outflows	(90,489)	(241,125)
• Change in Allocation of Prior Deferred Inflows/Outflows	8,778	15,850
• New Net Deferred Flows Due to Change in Proportion ¹	(112,883)	130,765
• Recognition of Prior Deferred Inflows/Outflows	50,052	(21,143)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(29,626)</u>	<u>(31,249)</u>
Ending Net Pension Liability	\$1,248,133	\$1,489,642

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

Section 2: GASB 68 Information

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 Reconciliation of Net Pension Liability	June 30, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$(2,214)	\$1,284
• Pension Expense	(1,940)	(95)
• Employer Contributions	0	0
• New Net Deferred Inflows/Outflows	(343)	(2,891)
• 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	1,764	(512)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>0</u>	<u>0</u>
Ending Net Pension Liability	\$(2,733)	\$(2,214)

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

Section 2: GASB 68 Information

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, 2021 December 31, 2020	June 30, 2020 December 31, 2019
• Beginning Net Pension Liability	\$336,766,149	\$392,760,910
• Pension Expense	8,495,203	22,407,347
• Employer Contributions	(34,813,000)	(31,424,000)
• New Net Deferred Inflows/Outflows	(21,725,558)	(54,511,512)
• Change in Allocation of Prior Deferred Inflows/Outflows	623,556	478,992
• New Net Deferred Flows Due to Change in Proportion ¹	(7,393,262)	4,270,636
• Recognition of Prior Deferred Inflows/Outflows	12,016,962	(4,779,965)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>5,693,830</u>	<u>7,563,741</u>
Ending Net Pension Liability	\$299,663,880	\$336,766,149

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

Section 2: GASB 68 Information

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
Reconciliation of Net Pension Liability

June 30, 2021
December 31, 2020

June 30, 2020
December 31, 2019

• Beginning Net Pension Liability	\$719,301	\$1,097,009
• Pension Expense	74,614	210,679
• Employer Contributions	(157,755)	(180,040)
• New Net Deferred Inflows/Outflows	(345,909)	(371,636)
• Change in Allocation of Prior Deferred Inflows/Outflows	252	7,462
• New Net Deferred Flows Due to Change in Proportion ¹	(26,187)	16,299
• Recognition of Prior Deferred Inflows/Outflows	79,461	(22,319)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(39,039)</u>	<u>(38,153)</u>
Ending Net Pension Liability	\$304,738	\$719,301

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

Section 2: GASB 68 Information

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

Reporting Date for Employer Under GASB 68 Year Ended June 30	Differences between Expected and Actual Experience	Recognition Period (Years)	Reporting Date for Employer under GASB 68 Year Ended June 30:							
			2020	2021	2022	2023	2024	2025	2026	Thereafter
2015	\$(327,402,088)	6.18	\$(52,977,684)	\$(9,535,984)	\$0	\$0	\$0	\$0	\$0	\$0
2016	(205,462,673)	6.06	(33,904,732)	(33,904,732)	(2,034,281)	0	0	0	0	0
2017	(323,565,741)	5.94	(54,472,347)	(54,472,347)	(51,204,006)	0	0	0	0	0
2018	(66,963,603)	6.01	(11,142,029)	(11,142,029)	(11,142,029)	(11,142,029)	(111,429)	0	0	0
2019	(118,124,401)	5.91	(19,987,206)	(19,987,206)	(19,987,206)	(19,987,206)	(18,188,371)	0	0	0
2020	24,382,911	5.86	4,160,905	4,160,905	4,160,905	4,160,905	4,160,905	3,578,386	0	0
2021	162,335,537	5.81	N/A	<u>27,940,714</u>	<u>27,940,714</u>	<u>27,940,714</u>	<u>27,940,714</u>	<u>27,940,714</u>	<u>22,631,967</u>	<u>0</u>
Net increase (decrease) in pension expense			\$(168,323,093)	\$(96,940,679)	\$(52,265,903)	\$972,384	\$13,801,819	\$31,519,100	\$22,631,967	\$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, 2019 (the beginning of the measurement period ending December 31, 2020) is 5.81 years.

Section 2: GASB 68 Information

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)	Reporting Date for Employer under GASB 68 Year Ended June 30:							
			2020	2021	2022	2023	2024	2025	2026	Thereafter
2015	\$(127,729,220)	6.18	\$(20,668,159)	\$(3,720,266)	\$0	\$0	\$0	\$0	\$0	\$0
2016	0	6.06	0	0	0	0	0	0	0	0
2017	0	5.94	0	0	0	0	0	0	0	0
2018	827,197,075	6.01	137,636,784	137,636,784	137,636,784	137,636,784	1,376,371	0	0	0
2019	0	5.91	0	0	0	0	0	0	0	0
2020	0	5.86	0	0	0	0	0	0	0	0
2021	18,966,926	5.81	N/A	3,264,531	3,264,531	3,264,531	3,264,531	3,264,531	2,644,271	0
Net increase (decrease) in pension expense			\$116,968,625	\$137,181,049	\$140,901,315	\$140,901,315	\$4,640,902	\$3,264,531	\$2,644,271	\$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, 2019 (the beginning of the measurement period ending December 31, 2020) is 5.81 years.

Section 2: GASB 68 Information

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 June 30	Differences Between Projected and Actual Earnings	Recognition Period (Years)	Reporting Date for Employer under GASB 68 Year Ended June 30:							
			2020	2021	2022	2023	2024	2025	2026	Thereafter
2016	\$851,007,781	5.00	\$170,201,561	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017	(213,982,570)	5.00	42,796,514)	(42,796,514)	0	0	0	0	0	0
2018	(1,009,651,572)	5.00	(201,930,314)	(201,930,314)	(201,930,316)	0	0	0	0	0
2019	1,360,278,701	5.00	272,055,741	272,055,741	272,055,741	272,055,737	0	0	0	0
2020	(1,170,895,935)	5.00	(234,179,185)	(234,179,185)	(234,179,185)	(234,179,185)	(234,179,195)	0	0	0
2021	(1,008,043,756)	5.00	N/A	(201,608,751)	(201,608,751)	(201,608,751)	(201,608,751)	(201,608,752)	0	0
Net increase (decrease) in pension expense			\$(36,648,711)	\$(408,459,023)	\$(365,662,511)	\$(163,732,199)	\$(435,787,946)	\$(201,608,752)	\$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.

Section 2: GASB 68 Information

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

Total Increase (Decrease) in Pension Expense

Reporting Date for Employer Under GASB 68 Year Ended June 30	Total Differences	Reporting Date for Employer under GASB 68 Year Ended June 30:							
		2020	2021	2022	2023	2024	2025	2026	Thereafter
2015	\$(165,086,234)	\$(73,645,843)	\$(13,256,250)	\$0	\$0	\$0	\$0	\$0	\$0
2016	\$645,545,108	136,296,829	(33,904,732)	(2,034,281)	0	0	0	0	0
2017	(537,548,311)	(97,268,861)	(97,268,861)	(51,204,006)	0	0	0	0	0
2018	(249,418,100)	(75,435,559)	(75,435,559)	(75,435,561)	126,494,755	1,264,942	0	0	0
2019	1,242,154,300	252,068,535	252,068,535	252,068,535	252,068,531	(18,188,371)	0	0	0
2020	(1,146,513,024)	(230,018,280)	(230,018,280)	(230,018,280)	(230,018,280)	(230,018,290)	3,578,386	0	0
2021	(826,741,293)	N/A	(170,403,506)	(170,403,506)	(170,403,506)	(170,403,506)	(170,403,507)	25,276,238	0
Net increase (decrease) in pension expense		\$(88,003,179)	\$(368,218,653)	\$(277,027,099)	\$(21,858,500)	\$(417,345,225)	\$(166,825,121)	\$25,276,238	\$0

Section 2: GASB 68 Information

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, 2020. 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, 2020 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 2014 shown on the following pages. While these amounts are different for each employer, they sum to zero over the entire OCERS.

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2020

	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	<u>(31,631)</u>	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

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2019

	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

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2018

	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	<u>(13,692)</u>	5.91	<u>(2,317)</u>	<u>(2,317)</u>	<u>(2,317)</u>	<u>(2,317)</u>	<u>(2,317)</u>	<u>(2,107)</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2017

	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	<u>64,929</u>	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

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2016

	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	<u>48,111</u>	5.94	<u>8,099</u>	<u>8,099</u>	<u>8,099</u>	<u>8,099</u>	<u>8,099</u>	<u>7,616</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2015

	Total Change to be Recognized	Recognition Period (Years)	2016	2017	2018	2019	2020	2021	Thereafter
Orange County	\$2,736,401	6.06	\$451,552	\$451,552	\$451,552	\$451,552	\$451,552	\$451,552	\$27,089
O.C. Cemetery District	0	6.06	0	0	0	0	0	0	0
O.C. Law Library	(2,567,707)	6.06	(423,714)	(423,714)	(423,714)	(423,714)	(423,714)	(423,714)	(25,423)
O.C. Vector Control District	0	6.06	0	0	0	0	0	0	0
O.C. Retirement System	1,607,456	6.06	265,257	265,257	265,257	265,257	265,257	265,257	15,914
O.C. Fire Authority	0	6.06	0	0	0	0	0	0	0
Department of Education	0	6.06	0	0	0	0	0	0	0
Transportation Corridor Agency	0	6.06	0	0	0	0	0	0	0
City of San Juan Capistrano	(1,987,430)	6.06	(327,959)	(327,959)	(327,959)	(327,959)	(327,959)	(327,959)	(19,676)
O.C. Sanitation District	2,567,707	6.06	423,714	423,714	423,714	423,714	423,714	423,714	25,423
O.C. Transportation Authority	0	6.06	0	0	0	0	0	0	0
U.C.I.	0	6.06	0	0	0	0	0	0	0
O.C. Children and Families Comm.	(366,436)	6.06	(60,468)	(60,468)	(60,468)	(60,468)	(60,468)	(60,468)	(3,628)
Local Agency Formation Comm.	(296,484)	6.06	(48,925)	(48,925)	(48,925)	(48,925)	(48,925)	(48,925)	(2,934)
Rancho Santa Margarita	0	6.06	0	0	0	0	0	0	0
O.C. Superior Court	(1,805,959)	6.06	(298,013)	(298,013)	(298,013)	(298,013)	(298,013)	(298,013)	(17,881)
O.C. IHSS Public Authority	<u>112,452</u>	6.06	<u>18,556</u>	<u>18,556</u>	<u>18,556</u>	<u>18,556</u>	<u>18,556</u>	<u>18,556</u>	<u>1,116</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2014

	Total Change to be Recognized	Recognition Period (Years)	2015	2016	2017	2018	2019	2020	Thereafter
Orange County	\$4,834,533	6.18	\$782,287	\$782,287	\$782,287	\$782,287	\$782,287	\$782,287	\$140,811
O.C. Cemetery District	0	6.18	0	0	0	0	0	0	0
O.C. Law Library	316,450	6.18	51,206	51,206	51,206	51,206	51,206	51,206	9,214
O.C. Vector Control District	0	6.18	0	0	0	0	0	0	0
O.C. Retirement System	1,077,481	6.18	174,350	174,350	174,350	174,350	174,350	174,350	31,381
O.C. Fire Authority	0	6.18	0	0	0	0	0	0	0
Department of Education	0	6.18	0	0	0	0	0	0	0
Transportation Corridor Agency	0	6.18	0	0	0	0	0	0	0
City of San Juan Capistrano	1,656,769	6.18	268,086	268,086	268,086	268,086	268,086	268,086	48,253
O.C. Sanitation District	(316,450)	6.18	(51,206)	(51,206)	(51,206)	(51,206)	(51,206)	(51,206)	(9,214)
O.C. Transportation Authority	0	6.18	0	0	0	0	0	0	0
U.C.I.	0	6.18	0	0	0	0	0	0	0
O.C. Children and Families Comm.	(332,329)	6.18	(53,775)	(53,775)	(53,775)	(53,775)	(53,775)	(53,775)	(9,679)
Local Agency Formation Comm.	215,036	6.18	34,795	34,795	34,795	34,795	34,795	34,795	6,266
Rancho Santa Margarita	0	6.18	0	0	0	0	0	0	0
O.C. Superior Court	(7,470,106)	6.18	(1,208,755)	(1,208,755)	(1,208,755)	(1,208,755)	(1,208,755)	(1,208,755)	(217,576)
O.C. IHSS Public Authority	<u>18,616</u>	6.18	<u>3,012</u>	<u>3,012</u>	<u>3,012</u>	<u>3,012</u>	<u>3,012</u>	<u>3,012</u>	<u>544</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 3: Actuarial Assumptions and Methods and Appendices

Actuarial assumptions and methods

For December 31, 2020 Measurement Date and Employer Reporting as of June 30, 2021

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.
<u>Economic Assumptions</u>	
Net Investment Return:	7.00%; net of investment expenses.
Member Contribution Crediting Rate:	5.00%, compounded semi-annually.
Consumer Price Index:	Increase of 2.50% per year, retiree COLA increases of 2.75% per year
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.

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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 Service	Rate (%)	
	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.

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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

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Age	Rate (%) ¹			
	General		Safety	
	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.

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

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

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Disability Incidence:

Age	Rate (%)			
	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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Termination:

Years of Service	Rate (%)			
	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 (%)

Years of Service	Rate (%)			
	General All Other	General OCTA	Safety Law & Fire	Safety Probation
Less than 5	30.00	40.00	20.00	25.00
5 – 9	25.00	30.00	20.00	25.00
10 – 14	25.00	25.00	10.00	25.00
15 & Over	17.50	15.00	10.00	15.00

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Retirement Rates:

Age	Rate (%) ¹			
	General Enhanced		General Non-Enhanced ²	
	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

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

² These assumptions are also used for the CalPEPRA 1.62% @ 65 formula (Plan T and Plan W).

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Rates (continued):

Age	Rate (%) ¹					
	Safety Law (31664.1)		Safety Fire (31664.1)		Safety Probation (31664.1)	
	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.

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Rates (continued):

Age	Rate (%) ¹		
	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.

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Rates (continued):

Age	Rate (%) ¹			
	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.

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Age and Benefit for Deferred Vested Members:	<p>General Retirement Age: 59 Safety Retirement Age: 54</p> <p>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.</p>
Liability Calculation for Current Deferred Vested Members:	<p>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.</p>
Future Benefit Accruals:	<p>1.0 year of service per year of employment. There is no assumption to anticipate conversion of unused sick leave at retirement.</p>
Unknown Data for Members:	<p>Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.</p>
Form of Payment:	<p>All active and inactive members are assumed to elect the unmodified option at retirement.</p>
Percent Married:	<p>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.</p>
Age and Gender of Spouse:	<p>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.</p>

Section 3: Actuarial Assumptions and Methods and Appendices

Cashout Assumptions:

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

Years of Service	Rate (%)	
	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 terminal pay assumptions are the same for service and disability 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 cost rate is calculated assuming their Entry Age is the date they entered service with OCERS.

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

Expected Remaining Service Lives:

The average of the expected service lives of all employees is 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 member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

Changed Actuarial Assumptions and Methods:

A refinement to the Entry Age actuarial cost method was made. Before the refinement, Entry Age was calculated as the age of the member as of the valuation date minus years of employment, including non-OCERS reciprocal employers. After the refinement, only years of employment with OCERS employers are used.

Based on the Actuarial Experience Study, the following assumptions were changed.

Previously, these assumptions and methods were as follows:

Section 3: Actuarial Assumptions and Methods and Appendices

Prior Actuarial Assumptions (continued):

- | | |
|--|--|
| <i>Consumer Price Index:</i> | <ul style="list-style-type: none"> • Increase of 2.75% per year, retiree COLA increases due to CPI subject to a 3.0% maximum change per year. |
| <i>Payroll Growth:</i> | <ul style="list-style-type: none"> • Inflation of 2.75% per year plus “across the board” real salary increases of 0.50% per year. |
| <i>Increase in Section 7522.10 Compensation Limit:</i> | <ul style="list-style-type: none"> • Increase of 2.75% per year from the valuation date. |
| <i>Salary Increases:</i> | <ul style="list-style-type: none"> • The annual rate of compensation increase includes: inflation at 2.75%, plus “across the board” salary increases of 0.50% per year, plus the following merit and promotion increases: |

Years of Service	Rate (%)	
	General	Safety
Less than 1	9.00	14.00
1 - 2	7.25	10.00
2 - 3	6.00	7.75
3 - 4	5.00	6.00
4 - 5	4.00	5.50
5 - 6	3.50	4.50
6 - 7	2.50	3.75
7 - 8	2.25	3.25
8 - 9	1.75	2.50
9 - 10	1.50	2.25
10 - 11	1.50	1.75
11 - 12	1.50	1.75
12 - 13	1.50	1.75
13 - 14	1.50	1.75
14 - 15	1.50	1.75
15 - 16	1.50	1.75
16 - 17	1.00	1.50
17 - 18	1.00	1.50
18 - 19	1.00	1.50
19 - 20	1.00	1.50
20 & Over	1.00	1.50

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

Section 3: Actuarial Assumptions and Methods and Appendices

Prior Actuarial Assumptions (continued):

Post-Retirement Mortality Rates:

Healthy

- **General Members and All Beneficiaries:** Headcount-Weighted RP-2014 Healthy Annuitant Mortality Tables, projected generationally with the two-dimensional MP-2016 projection scale, with no setback for males and females.
- **Safety Members:** Headcount-Weighted RP-2014 Healthy Annuitant Mortality Tables, projected generationally with the two-dimensional MP-2016 projection scale, setback four years for males and females.

Disabled

- **General Members:** Headcount-Weighted RP-2014 Healthy Annuitant Mortality Tables, projected generationally with the two-dimensional MP-2016 projection scale, set forward five years for males and females.
- **Safety Members:** Headcount-Weighted RP-2014 Healthy Annuitant Mortality Tables, projected generationally with the two-dimensional MP-2016 projection scale, with no setback for males and females.

The RP-2014 mortality tables and adjustments as shown above reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Pre-Retirement Mortality Rates:

- **General and Safety Members:** Headcount-Weighted RP-2014 Employee Mortality Tables multiplied by 80%, projected generationally with the two-dimensional MP-2016 projection scale.

Age	Rate (%) ¹			
	General		Safety	
	Male	Female	Male	Female
25	0.05	0.02	0.05	0.02
30	0.05	0.02	0.05	0.02
35	0.05	0.03	0.05	0.03
40	0.06	0.04	0.06	0.04
45	0.10	0.07	0.10	0.07
50	0.17	0.11	0.17	0.11
55	0.27	0.17	0.27	0.17
60	0.45	0.24	0.45	0.24
65	0.78	0.36	0.78	0.36

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.

¹ Generational projections beyond the base year (2014) are not reflected in the above mortality rates.

Section 3: Actuarial Assumptions and Methods and Appendices

Prior Actuarial Assumptions (continued):

Mortality Rates for Member Contributions:

- **General Members:** Headcount-Weighted RP-2014 Healthy Annuitant Mortality Tables, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, with no setback for males and females, weighted 40% male and 60% female.
- **Safety Members:** Headcount-Weighted RP-2014 Healthy Annuitant Mortality Tables, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, setback four years for males and females, weighted 80% male and 20% female.

Disability Incidence:

Age	Rate (%)			
	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	0.04	0.08
35	0.03	0.20	0.14	0.10
40	0.08	0.36	0.23	0.13
45	0.13	0.43	0.40	0.21
50	0.18	0.48	1.10	0.28
55	0.23	0.65	2.40	0.42
60	0.31	1.26	4.80	0.20

60% of General All Other disabilities are assumed to be service connected disabilities. The other 40% are assumed to be non-service connected.

65% of General OCTA disabilities are assumed to be service connected disabilities. The other 35% 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.

Section 3: Actuarial Assumptions and Methods and Appendices

Prior Actuarial Assumptions (continued):

Termination:

Years of Service	Rate (%)			
	General All Other	General OCTA	Safety Law & Fire	Safety Probation
Less than 1	11.00	17.50	4.50	14.00
1 – 2	7.50	11.00	2.50	13.00
2 – 3	6.50	9.00	2.00	10.00
3 – 4	5.00	8.50	1.50	5.00
4 – 5	4.50	7.50	1.25	4.00
5 – 6	4.25	7.00	1.00	3.50
6 – 7	3.75	4.50	0.95	2.75
7 – 8	3.25	4.00	0.90	2.00
8 – 9	3.00	3.50	0.85	2.00
9 – 10	2.75	3.00	0.80	1.75
10 – 11	2.50	3.00	0.75	1.75
11 – 12	2.00	3.00	0.65	1.50
12 – 13	2.00	3.00	0.60	1.25
13 – 14	1.75	2.50	0.55	1.00
14 – 15	1.50	2.50	0.50	0.75
15 – 16	1.40	2.50	0.45	0.75
16 – 17	1.30	2.00	0.40	0.75
17 – 18	1.20	1.80	0.35	0.25
18 – 19	1.10	1.60	0.30	0.25
19 – 20	1.00	1.40	0.25	0.25
20 & Over	0.90	1.20	0.20	0.25

Election for Withdrawal of Contributions (%)

Years of Service	Rate (%)			
	General All Other	General OCTA	Safety Law & Fire	Safety Probation
Less than 5	35.00	40.00	20.00	25.00
5 – 9	30.00	35.00	20.00	25.00
10 – 14	25.00	30.00	20.00	25.00
15 & Over	20.00	20.00	20.00	25.00

Section 3: Actuarial Assumptions and Methods and Appendices

Prior Actuarial Assumptions (continued):

Retirement Rates:

Age	Rate (%) ¹			
	General Enhanced	General Non-Enhanced ²	General SJC (31676.12)	Safety Law (31664.1) ³
48	0.00	0.00	0.00	0.00
49	30.00	25.00	0.00	12.00
50	2.50	2.00	3.00	18.00
51	2.00	2.00	3.00	18.00
52	2.50	2.00	3.00	17.00
53	2.50	2.75	3.00	17.00
54	5.50	2.75	3.00	22.00
55	15.00	3.25	4.00	22.00
56	10.00	3.50	5.00	20.00
57	10.00	5.50	6.00	20.00
58	11.00	5.50	7.00	20.00
59	11.00	6.50	9.00	26.00
60	12.00	9.25	11.00	35.00
61	12.00	12.00	13.00	35.00
62	14.00	16.00	15.00	40.00
63	16.00	16.00	15.00	40.00
64	16.00	18.00	20.00	40.00
65	22.00	22.00	20.00	100.00
66	22.00	28.00	24.00	100.00
67	23.00	24.00	24.00	100.00
68	23.00	24.00	24.00	100.00
69	23.00	20.00	24.00	100.00
70	25.00	20.00	50.00	100.00
71	25.00	25.00	50.00	100.00
72	25.00	25.00	50.00	100.00
73	25.00	25.00	50.00	100.00
74	25.00	25.00	50.00	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.

² These assumptions are also used for the CalPEPRA 1.62% @ 65 formula (Plan T and Plan W).

³ Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

Section 3: Actuarial Assumptions and Methods and Appendices

Prior Actuarial Assumptions (continued):

Retirement Rates (continued):

Age	Rate (%) ¹			
	Safety Law (31664.2) ²	Safety Fire (31664.1)	Safety Fire (31664.2)	Safety Probation ²
48	0.00	0.00	0.00	0.00
49	0.00	2.00	0.00	0.00
50	11.50	5.00	8.00	3.25
51	12.00	7.00	10.00	3.25
52	12.70	9.50	11.00	4.25
53	17.90	10.50	12.00	4.25
54	18.80	15.00	14.00	7.00
55	30.70	18.00	24.00	12.00
56	20.00	20.00	23.00	12.00
57	20.00	21.00	27.00	18.00
58	25.00	28.00	27.00	18.00
59	30.00	28.00	36.00	18.00
60	40.00	30.00	40.00	20.00
61	40.00	30.00	40.00	20.00
62	40.00	35.00	40.00	25.00
63	40.00	35.00	40.00	40.00
64	40.00	35.00	40.00	40.00
65	100.00	100.00	100.00	100.00
66	100.00	100.00	100.00	100.00
67	100.00	100.00	100.00	100.00
68	100.00	100.00	100.00	100.00
69	100.00	100.00	100.00	100.00
70	100.00	100.00	100.00	100.00
71	100.00	100.00	100.00	100.00
72	100.00	100.00	100.00	100.00
73	100.00	100.00	100.00	100.00
74	100.00	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.

² Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

Section 3: Actuarial Assumptions and Methods and Appendices

Prior Actuarial Assumptions (continued):

Retirement Rates (continued):

Age	Rate (%) ¹			
	CalPEPRA 2.5% @ 67 General Formula	CalPEPRA 2.7% @ 57 Safety Formula Probation ²	CalPEPRA 2.7% @ 57 Safety Formula Law ²	CalPEPRA 2.7% @ 57 Safety Formula Fire
50	0.00	2.50	11.00	6.00
51	0.00	2.50	11.50	7.00
52	4.00	3.00	12.00	9.00
53	1.50	3.00	16.00	10.00
54	1.50	5.50	17.00	11.50
55	2.50	10.00	28.00	21.00
56	3.50	10.00	18.00	20.00
57	5.50	15.00	17.50	22.00
58	7.50	20.00	22.00	25.00
59	7.50	20.00	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	18.00	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.

² Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

Section 3: Actuarial Assumptions and Methods and Appendices

Prior Actuarial Assumptions (continued):

Retirement Age and Benefit for Deferred Vested Members:

General Retirement Age: 59
Safety Retirement Age: 53

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 25% of future Safety deferred vested members are assumed to continue to work for a reciprocal employer. For reciprocals, 4.25% and 4.75% compensation increases are assumed per annum for General and Safety, respectively.

Cashout Assumptions:

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

Years of Service	Rate (%)	
	Final One Year Salary	Final Three Year Salary
General Non-CalPEPRA	3.00%	2.80%
Safety Probation Non-CalPEPRA	3.80%	3.40%
Safety Law Non-CalPEPRA	5.20%	4.60%
Safety Fire Non-CalPEPRA	2.00%	1.70%
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 terminal pay assumptions are the same for service and disability retirements.

Section 3: Actuarial Assumptions and Methods and Appendices

Appendix A: Projection of Pension Plan's Fiduciary Net Position (\$ in millions) for use in the Calculation of Discount Rate as of December 31, 2020

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)
2020	\$16,679	\$939	\$973	\$20	\$2,173	\$18,797
2021	18,797	1,004	1,054	23	1,313	20,038
2022	20,038	983	1,123	25	1,397	21,270
2023	21,270	971	1,194	26	1,480	22,502
2024	22,502	938	1,264	28	1,563	23,711
2025	23,711	921	1,335	29	1,645	24,912
2026	24,912	923	1,410	31	1,726	26,121
2027	26,121	926	1,485	32	1,808	27,339
2028	27,339	929	1,561	33	1,891	28,564
2029	28,564	932	1,640	35	1,974	29,795
2045	37,237	175	2,793	46	2,515	37,088
2046	37,088	165	2,832	45	2,503	36,878
2047	36,878	156	2,866	45	2,487	36,610
2048	36,610	148	2,894	45	2,467	36,286
2049	36,286	140	2,917	44	2,443	35,907
2094	38,962	61	189	48	2,721	41,507
2095	41,507	63	154	51	2,901	44,265
2096	44,265	65	124	54	3,095	47,246
2097	47,246	67	98	58	3,304	50,462
2098	50,462	70	76	62	3,530	53,924
2133	536,612	657	0 **	657	37,563	574,174
2134	574,174					
2134 Discounted Value:		275 ***				

* Of all the projected total contributions, only the first year's (i.e., 2020) contribution has been reduced by discount for prepaid contributions and transfers from County Investment Account, if any.

** Less than \$1 million, when rounded.

*** \$574,174 million when discounted with interest at the rate of 7.00% per annum has a value of \$275 million as of December 31, 2020. Of this amount, about \$160 million is the balance available in the County Investment Account and \$13 million is the O.C. Sanitation District UAAL Deferred Account as of December 31, 2020.

Note: 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, 2020.

Notes:

- (1) Amounts may not total exactly due to rounding.
- (2) Amounts shown in the year beginning January 1, 2020 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, 2019), 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, 2019. The projected benefit payments reflect the cost of living increase assumptions used in the December 31, 2020 valuation report. The 2020 benefit payments have been increased by the balance of the Medicare Insurance Reserve as of December 31, 2020.
- (7) Column (d): Projected administrative expenses are calculated as approximately 0.12% of the projected beginning Plan's Fiduciary Net Position amount. The 0.12% portion was based on the actual calendar year 2020 administrative expenses (unaudited) as a percentage of the actual beginning Plan's Fiduciary Net Position as of January 1, 2020. 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 long-term 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, 2020 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.

Section 3: Actuarial Assumptions and Methods and Appendices

Appendix B: Schedule of Pension Amounts by Employer as of December 31, 2020

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	\$106,688,286	\$528,105	\$34,476	\$388,960	\$534,689
• Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	392,622,732	371,071	386,769	994,611	2,561,775
• Changes of Assumptions	350,580,446	302,773	215,323	384,382	2,731,424
• Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>22,213,247</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3,305,581</u>
• Total Deferred Outflows of Resources	\$872,104,711	\$1,201,949	\$636,568	\$1,767,953	\$9,133,469
Deferred Inflows of Resources					
• Differences Between Expected and Actual Experience	\$116,822,611	\$423,161	\$481,376	\$840,768	\$645,269
• Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	1,237,325,625	1,132,625	1,139,777	2,740,586	7,932,122
• Changes of Assumptions	102,623,510	0	0	0	0
• Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>3,780,248</u>	<u>0</u>	<u>25,423</u>	<u>0</u>	<u>105,794</u>
• Total Deferred Inflows of Resources	\$1,460,551,994	\$1,555,786	\$1,646,576	\$3,581,354	\$8,683,185
Net Pension Liability as of December 31, 2019	\$4,124,212,240	\$(228,119)	\$(74,515)	\$(625,500)	\$26,824,264
Net Pension Liability as of December 31, 2020	\$3,547,545,979	\$(145,195)	\$(949,226)	\$(1,681,965)	\$24,954,057
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions					
• Proportionate Share of Allocable Plan Pension Expense	\$212,306,006	\$39,540	\$(284,180)	\$(1,061,535)	\$1,309,566
• Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>7,849,194</u>	<u>0</u>	<u>(414,500)</u>	<u>0</u>	<u>1,107,166</u>
• Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	\$220,155,200	\$39,540	\$(698,680)	\$(1,061,535)	\$2,416,732

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	O.C. Fire Authority	Cypress Recreation and Parks	Department of Education	Transportation Corridor Agency	City of San Juan Capistrano
Deferred Outflows of Resources					
• Differences Between Expected and Actual Experience	\$42,647,259	\$1,628,200	\$444,465	\$924,761	\$431,035
• Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	56,903,410	141,322	360,014	1,248,052	2,065,149
• Changes of Assumptions	20,847,354	46,968	118,721	761,881	2,201,910
• Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>560,255</u>
• Total Deferred Outflows of Resources	\$120,398,023	\$1,816,490	\$923,200	\$2,934,694	\$5,258,349
Deferred Inflows of Resources					
• Differences Between Expected and Actual Experience	\$22,151,617	\$0	\$417,291	\$622,420	\$520,178
• Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	184,283,215	1,161,975	917,172	4,929,682	6,394,402
• Changes of Assumptions	51,604,825	12,345	101,775	0	0
• Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>4,888,341</u>
• Total Deferred Inflows of Resources	\$258,039,657	\$1,174,320	\$1,436,238	\$5,552,102	\$11,802,921
Net Pension Liability as of December 31, 2019	\$354,395,457	\$262,415	\$3,099,339	\$(1,753,164)	\$26,191,970
Net Pension Liability as of December 31, 2020	\$181,121,638	\$185,117	\$2,661,390	\$(3,881,366)	\$20,116,465
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions					
• Proportionate Share of Allocable Plan Pension Expense	\$17,590,285	\$(29,368)	\$(87,399)	\$(43,637)	\$1,055,694
• Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(1,299,461)</u>
• Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	\$17,590,285	\$(29,368)	\$(87,399)	\$(43,637)	\$(243,767)

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	O.C. Sanitation District	O.C. Transportation Authority	U.C.I.	O.C. Children and Families Comm.	Local Agency Formation Comm.
Deferred Outflows of Resources					
• Differences Between Expected and Actual Experience	\$19,679,712	\$3,427,122	\$2,085,835	\$(13,122)	\$26,744
• Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	26,281,119	26,217,519	2,966,035	(62,871)	128,133
• Changes of Assumptions	18,009,943	17,474,376	951,705	(67,034)	136,618
• Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>25,423</u>	<u>0</u>	<u>0</u>	<u>143,769</u>	<u>159,107</u>
• Total Deferred Outflows of Resources	\$63,996,197	\$47,119,017	\$6,003,575	\$742	\$450,602
Deferred Inflows of Resources					
• Differences Between Expected and Actual Experience	\$2,630,086	\$14,033,597	\$1,590,593	\$(15,836)	\$32,275
• Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	78,515,498	80,855,942	7,628,033	(194,668)	396,743
• Changes of Assumptions	0	0	912,444	0	0
• Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,156,467</u>	<u>132,905</u>
• Total Deferred Inflows of Resources	\$81,145,584	\$94,889,539	\$10,131,070	\$945,963	\$561,923
Net Pension Liability as of December 31, 2019	\$(49,446,617)	\$224,284,548	\$30,213,739	\$(646,472)	\$1,489,642
Net Pension Liability as of December 31, 2020	\$(68,643,380)	\$186,024,390	\$25,337,145	\$(612,417)	\$1,248,133
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions					
• Proportionate Share of Allocable Plan Pension Expense	\$(3,178,086)	\$12,094,305	\$352,101	\$(32,139)	\$65,501
• Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>414,500</u>	<u>0</u>	<u>0</u>	<u>(465,761)</u>	<u>6,158</u>
• Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	\$(2,763,586)	\$12,094,305	\$352,101	\$(497,900)	\$71,659

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Deferred Outflows of Resources	Rancho Santa Margarita	O.C. Superior Court	O.C. IHSS Public Authority	Total for all Employers
• Differences Between Expected and Actual Experience	\$1,544	\$6,420,885	\$0	\$185,878,956
• Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	1,174	30,763,392	162,072	544,111,478
• Changes of Assumptions	321	32,800,644	115,754	447,613,509
• Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>0</u>	<u>3,391,904</u>	<u>43,394</u>	<u>29,842,680</u>
• Total Deferred Outflows of Resources	\$3,039	\$73,376,825	\$321,220	\$1,207,446,623
Deferred Inflows of Resources				
• Differences Between Expected and Actual Experience	\$3,198	\$7,748,797	\$272,188	\$169,219,589
• Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	3,756	95,253,873	486,528	1,710,902,886
• Changes of Assumptions	886	0	5,390	155,261,175
• Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>0</u>	<u>19,720,574</u>	<u>32,928</u>	<u>29,842,680</u>
• Total Deferred Inflows of Resources	\$7,840	\$122,723,244	\$797,034	\$2,065,226,330
Net Pension Liability as of December 31, 2019	\$(2,214)	\$336,766,149	\$719,301	\$5,075,682,463
Net Pension Liability as of December 31, 2020	\$(2,733)	\$299,663,880	\$304,738	\$4,213,246,650
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions				
• Proportionate Share of Allocable Plan Pension Expense	\$(1,940)	\$15,726,094	\$41,019	\$255,861,827
• Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	<u>0</u>	<u>(7,230,891)</u>	<u>33,595</u>	<u>0</u>
• Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	\$(1,940)	\$8,495,203	\$74,614	\$255,861,827

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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., 2020) 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, 2019 (the beginning of the measurement period ending December 31, 2020) and is 5.81 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 a decrease in the total employer pension expense from \$590.7 million calculated last year to \$255.9 million calculated this year. The primary cause of the decrease was due to an investment gain of \$1.0 billion with \$201.6 million being recognized in this year's expense. There was also a reduction in the expense by about \$170.2 million due to the full recognition of the investment losses during calendar year 2015 in developing last year's expense.

Note: Results may not total due to rounding.

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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.

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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 67.)
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:	<p>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:</p> <ol style="list-style-type: none"> 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 67) to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments. 2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.
Entry Age Actuarial Cost Method:	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability.

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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.

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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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