

San Diego County Employees Retirement Association (SDCERA)

Governmental Accounting Standards Board Statement No. 68 (GAS 68)

Actuarial Valuation Based on June 30, 2021
Measurement Date for Employer Reporting
as of June 30, 2022



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 SDCERA 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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July 5, 2022

Mr. Michael Pattison
Director of Finance
San Diego County Employees Retirement Association
2275 Rio Bonito Way, Suite 100
San Diego, CA 92108-1685

Dear Mike:

We are pleased to submit this Governmental Accounting Standards Board Statement No. 68 (GAS 68) Actuarial Valuation based on a June 30, 2021 measurement date for employer reporting as of June 30, 2022. It contains various information that will need to be disclosed in order for San Diego County Employees Retirement Association (SDCERA) employers to comply with GAS 68.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the sponsors in preparing their financial report for their liabilities associated with the SDCERA pension plan. The census and financial information on which our calculations were based was provided by SDCERA. 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, Enrolled Actuary, MAAA, FCA. 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 Plan.

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

Sincerely,

Segal

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

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

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

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

AW/jl

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Section 1: Actuarial Valuation Summary

Purpose and Basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board Statement No. 68 (GAS 68) for employer reporting as of June 30, 2022. The results used in preparing this GAS 68 report are comparable to those used in preparing the Governmental Accounting Standards Board Statement No. 67 (GAS 67) report for the plan based on a reporting date and a measurement date as of June 30, 2021. This valuation is based on:

- The benefit provisions of SDCERA, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2020, provided by SDCERA;
- The market value of assets of the Plan as of June 30, 2021, provided by SDCERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the June 30, 2021 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the June 30, 2021 valuation.

General Observations on GAS 68 Actuarial Valuation

1. The 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 still 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 SDCERA uses for funding. This means that with the exception of the Section 415(m) benefits for retirees in pay status, the Total Pension Liability (TPL) measure for financial reporting shown in this report is generally determined on the same basis as SDCERA's 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 Fiduciary Net Position. The Plan Fiduciary Net Position is equal to the market value of assets (excluding the Health Benefit 401(h) Account). With the exception of the liability associated with the Section 415(m) benefits for retirees in pay status, the NPL measure is very similar to UAAL on a market value basis.

Section 1: Actuarial Valuation Summary

4. As we disclosed in our June 30, 2020 valuation report, in the June 30, 2020 funding valuation the liabilities and the contribution requirements to pay off the UAAL were calculated after the Section 415(b) limit was applied to the retirees in pay status. This was done because the benefit amounts reported by SDCERA's pension administration system for use in the valuation included only benefits up to the Section 415(b) limit. Those calculations are consistent with the current practice that benefits in excess of the Section 415(b) limit are paid out of the employer's Section 415(m) replacement benefit program. However, for the purpose of GAS 67/68, it is our understanding that those liabilities should be included for financial reporting purposes. Accordingly, a liability of \$20.4 million as of June 30, 2021 (rolled forward from June 30, 2020) has been included in this report.

Highlights of the Valuation

1. For this report, the reporting dates for the employer are June 30, 2022 and June 30, 2021. The NPL was measured as of June 30, 2021 and June 30, 2020, respectively, and determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2020 and June 30, 2019. The Plan's Fiduciary Net Position (plan assets) was 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. Consistent with the provisions of GAS 68, the assets and liabilities measured as of June 30, 2021 and June 30, 2020 are not adjusted or rolled forward to the June 30, 2022 and June 30, 2021 reporting dates, respectively.
2. The NPL decreased from \$4.815 billion as of June 30, 2020 to \$2.395 billion as of June 30, 2021 primarily due to the 25.63% return¹ on the market value of assets during FY 2021 (that was higher than the assumed return of 7.00% for a gain of \$2.398 billion). Changes in these values during the last two fiscal years ending June 30, 2021 and June 30, 2020 can be found in *Section 2, Schedule of Changes in Net Pension Liability* on page 17.
3. There was a decrease in the total employer pension expense from \$920.0 million calculated last year to \$219.0 million calculated this year. The primary cause of the decrease is the recognition of a credit of \$479.6 million in this year's pension expense that is associated with the 25.63% return on the market value of assets during FY 2021 (that was higher than the assumed return of 7.00% for a gain of \$2.398 billion). A breakdown of the pension expenses for this year and last year can be found in *Section 2, Pension Expense* on page 27.
4. The discount rate used to measure the TPL and NPL as of June 30, 2021 and June 30, 2020 was 7.00%, following the same assumptions used by SDCERA in the funding valuations as of the same dates. Details on the derivation of the discount rates can be found in *Section 3, Appendix A* on page 73. Various other information that is required to be disclosed can be found throughout *Section 2*.

¹ This was the rate of return net of investment expense and excludes the rate of return for the Health Benefit 401(h) Account.

Section 1: Actuarial Valuation Summary

5. The Safety membership class has only one employer (i.e., the County), so all of the NPL for Safety as of both June 30, 2021 and June 30, 2020 are allocated to the County.

For General, the NPL (excluding liability for Section 415(m) Replacement Benefit Program) is allocated based on the actual employer contributions (excluding employer pickup of member contributions) for the Qualified Plan within the General membership class. The steps are as follows:

- a. Calculate ratio of employer's contributions to the total contributions for the membership class.
- b. Multiply this ratio by the NPL for the membership class to determine the employer's proportionate share of the NPL for the membership class.

If the employer is in several membership classes, the employer's total allocated NPL is the sum of its allocated NPL from each membership class. Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers. The NPL allocation can be found in *Section 2, Determination of Proportionate Share* on page 20.

The NPL associated with the Section 415(m) Replacement Benefit Program has been allocated according to the employer code provided for all retirees currently eligible to receive a benefit under that program.

6. Results shown in this report exclude any employer contributions made after the measurement date of June 30, 2021. The employer should consult with their auditor to determine the deferred outflow that should be created for these contributions.
7. 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 SDCERA and its members. In particular, the decision requires pension systems like SDCERA to exclude certain pay items from a legacy member's compensation earnable. In response to that decision, the Board determined that three specific earn codes previously considered pensionable compensation for legacy members should be excluded from pensionable compensation prospectively starting January 29, 2021. Such action will not affect any current retirees or members who received such compensation prior to January 29, 2021. It should be noted that the June 30, 2021 liabilities (i.e., rolled forward from June 30, 2020) that we calculated using the June 30, 2020 membership data provided by SDCERA does not reflect the impact of this California Supreme Court decision.
8. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2021. 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 June 30, 2021. 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 GAS 68		June 30, 2022 ¹	June 30, 2021 ¹
Measurement Date for Employer under GAS 68		June 30, 2021	June 30, 2020
Disclosure Elements for Plan Year Ending June 30:	• Service cost ²	\$366,716,019	\$360,261,120
	• Total Pension Liability	18,521,524,468	17,723,895,319
	• Plan Fiduciary Net Position ³	16,126,340,792	12,909,003,373
	• Net Pension Liability	2,395,183,676	4,814,891,946
	• Pension expense	218,950,742	920,030,478
Schedule of Contributions for Plan Year Ending June 30:	• Actuarially determined contributions	\$615,698,887	\$558,903,678
	• Actual contributions ⁴	615,698,887	568,923,801
	• Contribution deficiency / (excess)	0	(10,020,123)
Demographic Data for Plan Year Ending June 30:⁵	• Number of retired members and beneficiaries	20,700	20,296
	• Number of inactive vested members	6,804	6,410
	• Number of active members	18,200	18,451
Key Assumptions as of June 30:	• Investment rate of return	7.00%	7.00%
	• Inflation rate	2.75%	2.75%
	• Projected salary increases ⁶	General: 4.15% to 10.50% Safety: 4.25% to 12.00%	General: 4.15% to 10.50% Safety: 4.25% to 12.00%

¹ The reporting dates and measurement dates for the plan are June 30, 2021 and June 30, 2020, respectively.

² The Service cost is based on the previous year's valuation, meaning the June 30, 2021 and June 30, 2020 measurement date values are based on the valuations as of June 30, 2020 and June 30, 2019, respectively. Both service costs have been calculated using the assumption shown in the June 30, 2020 measurement date column as there had been no changes in the actuarial assumptions between the June 30, 2020 and June 30, 2019 valuations.

³ Net of assets in 401(h) Reserve.

⁴ Excludes employer pickup of member contributions.

⁵ Data as of June 30, 2020 is used in the measurement of the TPL as of June 30, 2021.

⁶ For June 30, 2021 and June 30, 2020, includes inflation at 2.75% plus real across-the-board salary increase 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 SDCERA. 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 fair value of assets as of the measurement date, as provided by SDCERA.
Actuarial Assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments (if any). The projected benefits are then discounted to a present value, typically based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.
Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. 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 SDCERA 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 SDCERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to SDCERA.

Section 2: GAS 68 Information

General Information about the Pension Plan

Plan Description

Plan administration. The San Diego County Employees Retirement Association (SDCERA) was established by the County of San Diego on July 1, 1939. SDCERA is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq.) SDCERA 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 General and Safety members employed by the County of San Diego. SDCERA also provides retirement benefits to the employee members of the Superior Court, Air Pollution Control District, San Dieguito River Valley Joint Powers Authority, Local Agency Formation Commission and San Diego County Office of Education.

The management of SDCERA is vested with the San Diego County Board of Retirement. The Board consists of nine members and two alternates made up of member-elected representatives, Board of Supervisors-appointed representatives and the County Treasurer-Tax Collector who is elected by the general public and a member of the Board of Retirement by law. All members of the Board of Retirement serve terms of three years except for the County Treasurer-Tax Collector whose term runs concurrent with his term as County Treasurer.

Plan membership. At June 30, 2021, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	20,700
Inactive vested members entitled to but not yet receiving benefits ¹	6,804
Active members	<u>18,200</u>
Total	45,704

Note: Data as of June 30, 2021 is not used in the measurement of the TPL as of June 30, 2021

Benefits provided. SDCERA provides service retirement, disability, death and survivor benefits to eligible employees. All employees appointed to a permanent position and work at least half time or 20 hours weekly for the County of San Diego or the other participating agencies become members of SDCERA effective on the first day of the first full pay period after employment in a permanent position. There are separate retirement plans for General and Safety member employees. Safety membership is extended to those involved in active law enforcement or who otherwise qualify for Safety membership. Court service officers and

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

Section 2: GAS 68 Information

probation officers were added to Safety membership in 1998 and 1999, respectively. All other employees are classified as General members. The tiers and their basic provisions are listed in the following table:

Tier	Governing Code	Membership Effective Date	Basic Provisions	Final Average Salary Period
General Tier 1	§31676.12	Before March 8, 2002 ¹	2.62% at 62; maximum 3% COLA	Highest 1-year
General Tier A	§31676.17	March 8, 2002 to August 27, 2009	3.0% at 60; maximum 3% COLA	Highest 1-year
General Tier B	§31676.12	August 28, 2009 to December 31, 2012	2.62% at 62; maximum 2% COLA	Highest 3-year
General Tier C	§7522.20(a)	January 1, 2013 to June 30, 2018	2.5% at 67; maximum 2% COLA	Highest 3-year ²
General Tier D	§31676.01	July 1, 2018	1.62% at 65; maximum 2% COLA	Highest 3-year ²
Safety Tier A	§31664.1	Before August 28, 2009	3.0% at 50; maximum 3% COLA	Highest 1-year
Safety Tier B	§31664.2	August 28, 2009 to December 31, 2012	3.0% at 55; maximum 2% COLA	Highest 3-year
Safety Tier C	§7522.25(d)	January 1, 2013 to June 30, 2020	2.7% at 57; maximum 2% COLA	Highest 3-year ²
Safety Tier D	§7522.25(c)	July 1, 2020	2.5% at 57; maximum 2% COLA	Highest 3-year ²

Any new member who becomes a member on or after January 1, 2013 is placed into Tier C or Tier D and is subject to the provisions of California Public Employees' Pension Reform Act of 2013 (PEPRA) and California Government Code 7522 et seq.

General members enrolled in Tier 1, A or B are eligible to retire once they attain the age of 70 regardless of service or at age 50 (55 for Tier B) and have acquired 10 or more years of retirement service credit. A General member in Tier 1, A or B with 30 years of

¹ All General members with membership dates before March 8, 2002 who made a specific and irrevocable election to opt out of General Tier A. This also included those General Members in deferred status on March 8, 2002.

² PEPRA limits the amount of compensation that can be used to calculate retirement benefit for Tier C and Tier D to 100% of the 2013 Social Security taxable wage base limit for General members and 120% for Safety members. These amounts will be adjusted with price inflation starting in 2014.

Section 2: GAS 68 Information

service is eligible to retire regardless of age. General members enrolled in General Tier C or D are eligible to retire once they attain the age of 70 regardless of service or at age of 52 and have acquired five or more years of retirement service credit.

Safety members enrolled in Tier A or B are eligible to retire once they attain the age of 70 regardless of service or at age 50 and have acquired 10 or more years of retirement service credit. A Safety member in Tier A or B with 20 years of service is eligible to retire regardless of age. Safety members enrolled in Safety Tier C or D are eligible to retire once they have attained the age of 70 regardless of service or at age of 50 and have acquired five or more years of retirement service credit.

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.

For members enrolled in Tier 1, A or B, the maximum monthly retirement allowance is 100% of final compensation. There is no maximum for members enrolled in Tier C or D.

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 spouse or domestic partner 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.

SDCERA provides an annual cost-of-living benefit to all retirees. The cost-of-living adjustment, based upon the ratio of the past two annual Consumer Price Indices for the San Diego-Carlsbad Area (with 1982-84 as the base period), is capped at 3.0% for Tier 1 and Tier A; and capped at 2.0% for Tier B, Tier C and Tier D.

The County of San Diego and the other participating 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 SDCERA's actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2021 for FY 2021 was 44.26% of compensation before adjustment to include any employer pick-up of member contributions.

All members are required to make contributions to SDCERA regardless of the retirement plan or tier in which they are included. The average member contribution rate as of June 30, 2021 for FY 2021 was 11.70% of compensation before adjustment to include any employer pick-up of member contributions.

Section 2: GAS 68 Information

Net Pension Liability

The components of the Net Pension Liability were as follows:

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
Total Pension Liability	\$18,521,524,468	\$17,723,895,319
Plan Fiduciary Net Position	(16,126,340,792)	(12,909,003,373)
Net Pension Liability	\$2,395,183,676	\$4,814,891,946
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	87.07%	72.83%

The Net Pension Liability (NPL) for the plan was measured as of June 30, 2021 and June 30, 2020. Plan Fiduciary Net Position (plan assets) was valued as of the measurement dates and the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2020 and June 30, 2019, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of June 30, 2021 and June 30, 2020 are the same as those used in the SDCERA actuarial valuations as of June 30, 2021 and June 30, 2020, respectively.

Actuarial assumptions. The TPLs as of June 30, 2021 and June 30, 2020 that were measured by actuarial valuations as of June 30, 2021 and June 30, 2020, respectively, used the following actuarial assumptions, which were based on the results of an experience study for the period from July 1, 2015 through June 30, 2018, applied to all periods included in the measurement:

Inflation:	2.75%
Salary increases:	General: 4.15% to 10.50% and Safety: 4.25% to 12.00%, vary by service, including inflation
Investment rate of return:	7.00%, net of pension plan investment expense, including inflation
Other assumptions:	See analysis of actuarial experience during the period July 1, 2015 through June 30, 2018

Section 2: GAS 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 2019 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 deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption as of June 30, 2021 is summarized in the following table. 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	18.00%	5.44%
Small Cap Equity	2.00%	6.18%
Developed International Equity	15.00%	6.54%
Global Equity	5.80%	6.45%
Emerging Market Equity	7.00%	8.73%
High Yield Bonds	6.00%	3.64%
Intermediate Bonds	19.20%	1.25%
Private Real Estate (Core)	7.20%	4.51%
Private Real Estate (Non-Core)	1.80%	5.82%
Private Equity	7.00%	9.00%
Infrastructure	4.50%	5.83%
Hedge Funds	4.00%	4.90%
Private Debt	1.00%	6.50%
Timber	0.75%	4.34%
Farmland	0.75%	5.63%
Total	100.00%	5.19%

¹ 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.

Section 2: GAS 68 Information

Discount rate: The discount rate used to measure the TPL was 7.00% as of June 30, 2021 and June 30, 2020. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rates 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 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 June 30, 2021 and June 30, 2020.

Section 2: GAS 68 Information

Discount Rate Sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL of SDCERA as of June 30, 2021, calculated using the discount rate of 7.00%, as well as what SDCERA's 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%)
County of San Diego	\$4,649,038,033	\$2,246,673,119	\$281,694,548
Superior Court	265,448,494	128,784,091	16,998,164
Air Pollution Control District	36,563,089	17,601,151	2,091,872
San Dieguito River Valley Joint Powers Authority	2,055,320	989,413	117,590
Local Agency Formation Commission	2,359,623	1,135,902	135,000
San Diego County Office of Education	<u>0</u>	<u>0</u>	<u>0</u>
Total for all Employers	\$4,955,464,559	\$2,395,183,676	\$301,037,174

Section 2: GAS 68 Information

Schedule of Changes in Net Pension Liability – Last Two Fiscal Years

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2022 June 30, 2021	June 30, 2021 June 30, 2020
Total Pension Liability		
• Service cost	\$366,716,019	\$360,261,120
• Interest	1,236,773,297	1,185,482,730
• Change of benefit terms	0	0
• Differences between expected and actual experience	38,982,611	66,249,338
• Changes of assumptions	0	0
• Benefit payments, including refunds of member contributions	(844,842,778)	(794,109,962)
Net change in Total Pension Liability	\$797,629,149	\$817,883,226
Total Pension Liability – beginning	<u>17,723,895,319</u>	<u>16,906,012,093</u>
Total Pension Liability – ending	<u>\$18,521,524,468</u>	<u>\$17,723,895,319</u>
Plan Fiduciary Net Position		
• Contributions – employer ¹	\$615,698,887	\$568,923,801
• Contributions – member ¹	162,740,017	150,682,565
• Contributions – employer pickup of member contributions	176	23,655
• Net investment income	3,298,653,870	134,293,723
• Benefit payments, including refunds of member contributions	(844,842,778)	(794,109,962)
• Administrative expense	(14,912,753)	(13,732,065)
• Other	0	0
Net change in Plan Fiduciary Net Position	\$3,217,337,419	\$46,081,717
Plan Fiduciary Net Position – beginning	<u>12,909,003,373</u>	<u>12,862,921,656</u>
Plan Fiduciary Net Position – ending	<u>\$16,126,340,792</u>	<u>\$12,909,003,373</u>
Net Pension Liability – ending	<u>\$2,395,183,676</u>	<u>\$4,814,891,946</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	87.07%	72.83%
Covered payroll²	\$1,391,053,973	\$1,349,433,902
Net Pension Liability as percentage of covered payroll	172.18%	356.81%

¹ See footnote 2 under the *Schedule of contributions – Last ten fiscal years* on next page.

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

Section 2: GAS 68 Information

Schedule of Employer Contributions – Last Ten Fiscal Years

Year Ended June 30	Actuarially Determined Contributions ¹	Contributions in Relation to the Actuarially Determined Contributions ²	Contribution Deficiency / (Excess)	Covered Payroll ³	Contributions as a Percentage of Covered Payroll
2012	\$274,106,000	\$274,106,000	\$0	\$1,047,414,147	26.17%
2013	298,128,000	312,288,000	(14,160,000)	1,028,420,277	30.37%
2014	353,841,000	353,841,000	0	1,072,896,037	32.98%
2015	386,041,000	386,041,000	0	1,120,001,088	34.47%
2016	382,424,947 ⁴	382,424,947 ⁴	0	1,140,882,516	33.52%
2017	417,920,697 ⁴	417,920,697 ⁴	0	1,181,479,673	35.37%
2018	498,231,326 ⁴	520,733,439	(22,502,113) ⁴	1,232,104,786	42.26%
2019	518,574,258 ^{4,5}	532,406,180 ^{4,5}	(13,831,922)	1,276,238,540	41.72%
2020	558,903,678	568,923,801	(10,020,123)	1,349,433,902	42.16%
2021	615,698,887	615,698,887	0	1,391,053,973	44.26%

See accompanying notes to this schedule on the next page.

¹ All “Actuarially Determined Contributions” through June 30, 2015 were determined as the “Annual Required Contribution” under GAS 25 and 27.

² Excludes employer pickup of member contributions and proceeds from Pension Obligation Bonds.

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

⁴ Based on updated total employer contribution amount provided by SDCERA after we finalized the corresponding GAS 67 reports.

⁵ Per SDCERA, these amounts include \$8 million required to “true up” the prepaid contributions made by the County for FY 2018. In addition, this is based on updated total employer contribution amount provided by SDCERA after we finalized the June 30, 2019 GAS 67 report.

Section 2: GAS 68 Information

Notes to Schedule:

Methods and assumptions used to establish “actuarially determined contribution” rates:

Valuation date:	Actuarially determined contribution rates are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported
Actuarial cost method:	Entry Age Actuarial Cost Method
Amortization method:	Level percent of payroll for total Unfunded Actuarial Accrued Liability (UAAL)
Remaining amortization period:	Prior to July 1, 2013, the Association’s UAAL was amortized over 20-year fixed (i.e. decreasing) layered amortization periods. As of July 1, 2013, any new UAAL resulting from plan amendments is amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing periods of up to 5 years; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are amortized over separate decreasing 20-year periods.
Asset valuation method:	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on market value and is recognized over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations.

Actuarial assumptions:

Valuation date:	June 30, 2019 valuation (for year ended 2021 actuarially determined contributions)
Investment rate of return:	7.00%, net of pension plan investment and administrative expense, including inflation
Inflation rate:	2.75%
Real across-the-board salary increase:	0.50%
Projected salary increases:¹	General: 4.15% to 10.50% and Safety: 4.25% to 12.00%, varying by service, including inflation
Cost of living adjustments:	2.75% of retirement income for Tier 1 and Tier A 2.00% of retirement income for Tier B, Tier C and Tier D
Other assumptions:	Same as those used in the June 30, 2019 funding actuarial valuation

¹ Includes inflation at 2.75% plus real across-the-board salary increases of 0.50% plus merit and promotion increases that vary by service.

Section 2: GAS 68 Information

Determination of Proportionate Share

Actual Employer Contributions by Employer and Membership Class for the Qualified Plan July 1, 2019 to June 30, 2020

Employer	General	General Percentage ¹	Safety	Safety Percentage	Total Contributions	Total Percentage
County of San Diego	\$341,066,958	90.055%	\$190,193,764	100.000%	\$531,260,722	93.380%
Superior Court	32,948,295	8.700%	0	0.000%	32,948,295	5.791%
Air Pollution Control District	4,205,632	1.110%	0	0.000%	4,205,632	0.739%
San Dieguito River Valley Joint Powers Authority	249,296	0.066%	0	0.000%	249,296	0.044%
Local Agency Formation Commission	259,857	0.069%	0	0.000%	259,857	0.046%
San Diego County Office of Education	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$378,730,037	100.000%	\$190,193,764	100.000%	\$568,923,801	100.000%

PART ONE - Allocation of June 30, 2020 Net Pension Liability (NPL) Excluding Liability for Payment under Section 415(m) Replacement Benefit Program

Employer	General	General Percentage	Safety	Safety Percentage	Total NPL	Total Percentage
County of San Diego	\$3,025,838,962	90.055%	\$1,436,568,080	100.000%	\$4,462,407,042	93.034%
Superior Court	292,306,929	8.700%	0	0.000%	292,306,929	6.094%
Air Pollution Control District	37,311,042	1.110%	0	0.000%	37,311,042	0.778%
San Dieguito River Valley Joint Powers Authority	2,211,676	0.066%	0	0.000%	2,211,676	0.046%
Local Agency Formation Commission	2,305,366	0.069%	0	0.000%	2,305,366	0.048%
San Diego County Office of Education	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$3,359,973,975	100.000%	\$1,436,568,080	100.000%	\$4,796,542,055	100.000%

Note: Results may not total due to rounding.

¹ The unrounded percentages are used in the allocation of the NPL amongst the General employers.

Section 2: GAS 68 Information

Determination of Proportionate Share (continued)

PART TWO - Allocation of June 30, 2020 Net Pension Liability (NPL) Attributed to Liability for Payment under Section 415(m) Replacement Benefit Program

Employer	General	General Percentage	Safety	Safety Percentage	Total Contributions	Total Percentage
County of San Diego	\$12,874,613	85.263%	\$3,249,935	100.000%	\$16,124,548	87.873%
Superior Court	2,225,343	14.737%	0	0.000%	2,225,343	12.127%
Air Pollution Control District	0	0.000%	0	0.000%	0	0.000%
San Dieguito River Valley Joint Powers Authority	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Commission	0	0.000%	0	0.000%	0	0.000%
San Diego County Office of Education	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$15,099,956	100.000%	\$3,249,935	100.000%	\$18,349,891	100.000%

PART THREE - Allocation of June 30, 2020 Net Pension Liability (NPL) Including Liability for Payment under Section 415(m) Replacement Benefit Program

Employer	General	General Percentage	Safety	Safety Percentage	Total NPL	Total Percentage
County of San Diego	\$3,038,713,575	90.034%	\$1,439,818,015	100.000%	\$4,478,531,590	93.014%
Superior Court	294,532,272	8.727%	0	0.000%	294,532,272	6.117%
Air Pollution Control District	37,311,042	1.105%	0	0.000%	37,311,042	0.775%
San Dieguito River Valley Joint Powers Authority	2,211,676	0.066%	0	0.000%	2,211,676	0.046%
Local Agency Formation Commission	2,305,366	0.068%	0	0.000%	2,305,366	0.048%
San Diego County Office of Education	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$3,375,073,931	100.000%	\$1,439,818,015	100.000%	\$4,814,891,946	100.000%

Note: Results may not total due to rounding.

Section 2: GAS 68 Information

Determination of Proportionate Share (continued)

Notes:

Based on July 1, 2019 through June 30, 2020 employer contributions (excluding employer pickup of member contributions) as provided by SDCERA.

SDCERA provided us with contributions made by Air Pollution Control District (APCD). The remaining County General employer contribution amount was calculated by subtracting the APCD employer contributions from the County General employer contributions before the District's separation. Segal has not audited such data for accuracy.

The Net Pension Liability (NPL) for each membership class is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position. The TPL for each membership class is obtained from internal valuation results based on actual membership data for each membership class. The Plan's Fiduciary Net Position for each membership class was determined by adjusting the Valuation Value of Assets (VVA) for each membership class by the ratio of the total SDCERA Plan's Fiduciary Net Position to the total SDCERA VVA.

PART ONE - Allocation of NPL (excluding Liability for Section 415(m) Replacement Benefit Program):

The Safety membership class has one employer (County), so all of the NPL for Safety is allocated to the County.

For General, the NPL (excluding Liability for Section 415(m) Replacement Benefit Program) is allocated based on the actual employer contributions (excluding employer pickup of member contributions) for the Qualified Plan within the General membership class. The steps are as follows:

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

If the employer is in several membership classes, the employer's total allocated NPL is the sum of its allocated NPL from each membership class. Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

PART TWO - Allocation of NPL attributable to Liability for Section 415(m) Replacement Benefit Program:

The Liability for Section 415(m) Replacement Benefit Program for each employer (County¹ and Superior Court) has been calculated for retirees from each specific employer.

NPL in PART THREE = NPL in PART ONE + NPL in PART TWO

¹ As directed earlier by SDCERA, we have included the liability for one retiree from the Office of Education with the retirees from the County.

Section 2: GAS 68 Information

Determination of Proportionate Share (continued)

Actual Employer Contributions by Employer and Membership Class for the Qualified Plan July 1, 2020 to June 30, 2021

Employer	General	General Percentage ¹	Safety	Safety Percentage	Total Contributions	Total Percentage
County of San Diego	\$386,213,109	91.072%	\$191,623,203	100.000%	\$577,836,312	93.850%
Superior Court	32,760,945	7.725%	0	0.000%	32,760,945	5.321%
Air Pollution Control District	4,551,984	1.074%	0	0.000%	4,551,984	0.739%
San Dieguito River Valley Joint Powers Authority	255,880	0.060%	0	0.000%	255,880	0.042%
Local Agency Formation Commission	293,765	0.069%	0	0.000%	293,765	0.048%
San Diego County Office of Education	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$424,075,683	100.000%	\$191,623,203	100.000%	\$615,698,887	100.000%

PART ONE - Allocation of June 30, 2021 Net Pension Liability (NPL) Excluding Liability for Payment under Section 415(m) Replacement Benefit Program

Employer	General	General Percentage	Safety	Safety Percentage	Total NPL	Total Percentage
County of San Diego	\$1,493,369,881	91.072%	\$734,964,339	100.000%	\$2,228,334,220	93.835%
Superior Court	126,676,717	7.725%	0	0.000%	126,676,717	5.334%
Air Pollution Control District	17,601,151	1.074%	0	0.000%	17,601,151	0.741%
San Dieguito River Valley Joint Powers Authority	989,413	0.060%	0	0.000%	989,413	0.042%
Local Agency Formation Commission	1,135,902	0.069%	0	0.000%	1,135,902	0.048%
San Diego County Office of Education	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$1,639,773,064	100.000%	\$734,964,339	100.000%	\$2,374,737,403	100.000%

Note: Results may not total due to rounding.

¹ The unrounded percentages are used in the allocation of the NPL amongst the General employers.

Section 2: GAS 68 Information

Determination of Proportionate Share (continued)

PART TWO - Allocation of June 30, 2021 Net Pension Liability (NPL) Attributed to Liability for Payment under Section 415(m) Replacement Benefit Program

Employer	General	General Percentage	Safety	Safety Percentage	Total Contributions	Total Percentage
County of San Diego	\$14,809,688	87.543%	\$3,529,211	100.000%	\$18,338,899	89.693%
Superior Court	2,107,374	12.457%	0	0.000%	2,107,374	10.307%
Air Pollution Control District	0	0.000%	0	0.000%	0	0.000%
San Dieguito River Valley Joint Powers Authority	0	0.000%	0	0.000%	0	0.000%
Local Agency Formation Commission	0	0.000%	0	0.000%	0	0.000%
San Diego County Office of Education	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$16,917,062	100.000%	\$3,529,211	100.000%	\$20,446,273	100.000%

PART THREE - Allocation of June 30, 2021 Net Pension Liability (NPL) Including Liability for Payment under Section 415(m) Replacement Benefit Program

Employer	General	General Percentage	Safety	Safety Percentage	Total NPL	Total Percentage
County of San Diego	\$1,508,179,569	91.036%	\$738,493,550	100.000%	\$2,246,673,119	93.800%
Superior Court	128,784,091	7.774%	0	0.000%	128,784,091	5.377%
Air Pollution Control District	17,601,151	1.062%	0	0.000%	17,601,151	0.735%
San Dieguito River Valley Joint Powers Authority	989,413	0.060%	0	0.000%	989,413	0.041%
Local Agency Formation Commission	1,135,902	0.068%	0	0.000%	1,135,902	0.047%
San Diego County Office of Education	0	0.000%	0	0.000%	0	0.000%
Total for all Employers	\$1,656,690,126	100.000%	\$738,493,550	100.000%	\$2,395,183,676	100.000%

Note: Results may not total due to rounding.

Section 2: GAS 68 Information

Determination of Proportionate Share (continued)

Notes:

Based on July 1, 2020 through June 30, 2021 employer contributions (excluding employer pickup of member contributions) as provided by SDCERA.

SDCERA provided us with contributions made by Air Pollution Control District (APCD). The remaining County General employer contribution amount was calculated by subtracting the APCD employer contributions from the County General employer contributions. Segal has not audited such data for accuracy.

The Net Pension Liability (NPL) for each membership class is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position. The TPL for each membership class is obtained from internal valuation results based on actual membership data for each membership class. The Plan's Fiduciary Net Position for each membership class was determined by adjusting the Valuation Value of Assets (VVA) for each membership class by the ratio of the total SDCERA Plan's Fiduciary Net Position to the total SDCERA VVA.

PART ONE - Allocation of NPL (excluding Liability for Section 415(m) Replacement Benefit Program):

The Safety membership class has one employer (County), so all of the NPL for Safety is allocated to the County.

For General, the NPL (excluding Liability for Section 415(m) Replacement Benefit Program) is allocated based on the actual employer contributions (excluding employer pickup of member contributions) for the Qualified Plan within the General membership class. The steps are as follows:

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

If the employer is in several membership classes, the employer's total allocated NPL is the sum of its allocated NPL from each membership class. Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

PART TWO - Allocation of NPL attributable to Liability for Section 415(m) Replacement Benefit Program:

The Liability for Section 415(m) Replacement Benefit Program for each employer (County¹ and Superior Court) has been calculated for retirees from each specific employer.

NPL in PART THREE = NPL in PART ONE + NPL in PART TWO

¹ As directed earlier by SDCERA, we have included the liability for one retiree from the Office of Education with the retirees from the County.

Section 2: GAS 68 Information

Determination of Proportionate Share (continued)

Notes (continued):

For purposes of developing the above results, the reporting date for the employer under GAS 68 is June 30, 2022. The reporting date and measurement date for the plan under GAS 67 are June 30, 2021. Consistent with the provision of GAS 68, the assets and liabilities measured as of June 30, 2021 are not adjusted or “rolled forward” to June 30, 2022 for employer reporting under GAS 68. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above within each membership class.

Except for results associated with the liability attributable to liability for payments under Section 415(m) Replacement Benefit Program, the following items are allocated based on the corresponding proportionate share in Part One within each membership class. For the Section 415(m) Replacement Benefit Program, these items are allocated based specifically on the Section 415(m) NPL that has been calculated for retirees from each specific employer.

1. Net Pension Liability
2. Service cost
3. Interest on the Total Pension Liability
4. Benefit changes
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
6. Expensed portion of current-period changes of assumptions or other inputs
7. Member contributions
8. Employer pickup of member contributions
9. Projected earnings on plan investments
10. Expensed portion of current-period differences between actual and projected earnings on plan investments
11. Administrative expense
12. Recognition of beginning of year deferred outflows of resources as pension expense
13. Recognition of beginning of year deferred inflows of resources as pension expense

Section 2: GAS 68 Information

Pension Expense

Total for All Employers

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Service cost	\$366,716,019	\$360,261,120
• Interest on the Total Pension Liability	1,236,773,297	1,185,482,730
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
• Benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	8,004,642	13,659,657
• Expensed portion of current-period changes of assumptions or other inputs	0	0
• Member contributions	(162,740,017)	(150,682,565)
• Employer pickup of member contributions	(177)	(23,655)
• Projected earnings on plan investments	(900,784,160)	(897,317,096)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(479,573,942)	152,604,675
• Administrative expense	14,912,753	13,732,065
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	315,796,067	431,689,389
• Recognition of beginning of year deferred inflows of resources as pension expense	(180,153,740)	(189,375,842)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense¹	\$218,950,742	\$920,030,478

¹ The pension expense decreased from \$920.0 million calculated last year to \$219.0 million calculated this year. The primary cause of the decrease is the recognition of a credit of \$479.6 million in this year's pension expense that is associated with the 25.63% return on the market value of assets during FY 2021 (that was higher than the assumed return of 7.00% for a gain of \$2.398 billion).

Section 2: GAS 68 Information

Pension Expense (continued)

County of San Diego

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Service cost	\$344,582,585	\$335,974,501
• Interest on the Total Pension Liability	1,159,603,787	1,102,910,691
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	5,707,512	(167,962)
• Benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	8,144,531	13,386,181
• Expensed portion of current-period changes of assumptions or other inputs	0	0
• Member contributions	(152,687,267)	(140,418,871)
• Employer pickup of member contributions	(161)	(21,326)
• Projected earnings on plan investments	(844,673,957)	(834,807,879)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(449,730,738)	141,966,063
• Administrative expense	13,994,827	12,817,476
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	295,273,565	401,689,710
• Recognition of beginning of year deferred inflows of resources as pension expense	(168,461,110)	(175,655,990)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>6,001,863</u>	<u>5,425,910</u>
Pension Expense	\$217,755,437	\$863,098,504

Section 2: GAS 68 Information

Pension Expense (continued)

Superior Court

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Service cost	\$19,151,160	\$21,246,343
• Interest on the Total Pension Liability	66,792,626	72,253,632
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(5,472,243)	21,272
• Benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(128,614)	238,331
• Expensed portion of current-period changes of assumptions or other inputs	0	0
• Member contributions	(8,698,235)	(8,978,852)
• Employer pickup of member contributions	(14)	(2,038)
• Projected earnings on plan investments	(48,549,876)	(54,684,114)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(25,822,111)	9,306,837
• Administrative expense	794,244	800,098
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	17,757,972	26,249,993
• Recognition of beginning of year deferred inflows of resources as pension expense	(10,139,032)	(12,023,135)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>(6,080,363)</u>	<u>(5,263,490)</u>
Pension Expense	\$(394,486)	\$49,164,877

Section 2: GAS 68 Information

Pension Expense (continued)

Air Pollution Control District

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Service cost	\$2,660,965	\$2,711,954
• Interest on the Total Pension Liability	9,258,886	9,204,115
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(208,164)	110,812
• Benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(10,060)	31,350
• Expensed portion of current-period changes of assumptions or other inputs	0	0
• Member contributions	(1,208,580)	(1,146,091)
• Employer pickup of member contributions	(2)	(260)
• Projected earnings on plan investments	(6,745,783)	(6,980,065)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(3,587,864)	1,187,956
• Administrative expense	110,357	102,127
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	2,466,682	3,344,755
• Recognition of beginning of year deferred inflows of resources as pension expense	(1,386,215)	(1,513,487)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>53,752</u>	<u>(205,440)</u>
Pension Expense	\$1,403,974	\$6,847,726

Section 2: GAS 68 Information

Pension Expense (continued)

San Dieguito River Valley Joint Powers Authority

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Service cost	\$149,581	\$160,756
• Interest on the Total Pension Liability	520,469	545,590
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(30,808)	(11,514)
• Benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(566)	1,858
• Expensed portion of current-period changes of assumptions or other inputs	0	0
• Member contributions	(67,938)	(67,937)
• Employer pickup of member contributions	0	(15)
• Projected earnings on plan investments	(379,200)	(413,755)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(201,684)	70,418
• Administrative expense	6,203	6,054
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	138,659	198,266
• Recognition of beginning of year deferred inflows of resources as pension expense	(77,923)	(89,715)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>(36,363)</u>	<u>8,089</u>
Pension Expense	\$20,430	\$408,095

Section 2: GAS 68 Information

Pension Expense (continued)

Local Agency Formation Commission

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Service cost	\$171,728	\$167,566
• Interest on the Total Pension Liability	597,529	568,702
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	3,703	47,392
• Benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(649)	1,937
• Expensed portion of current-period changes of assumptions or other inputs	0	0
• Member contributions	(77,997)	(70,814)
• Employer pickup of member contributions	0	(16)
• Projected earnings on plan investments	(435,344)	(431,283)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(231,545)	73,401
• Administrative expense	7,122	6,310
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	159,189	206,665
• Recognition of beginning of year deferred inflows of resources as pension expense	(89,460)	(93,515)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>61,111</u>	<u>34,931</u>
Pension Expense	\$165,387	\$511,276

Section 2: GAS 68 Information

Pension Expense (continued)

San Diego County Office of Education

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Service cost	\$0	\$0
• Interest on the Total Pension Liability	0	0
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
• Benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	0	0
• Expensed portion of current-period changes of assumptions or other inputs	0	0
• Member contributions	0	0
• Employer pickup of member contributions	0	0
• Projected earnings on plan investments	0	0
• Expensed portion of current-period differences between actual and projected earnings on plan investments	0	0
• Administrative expense	0	0
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	0	0
• Recognition of beginning of year deferred inflows of resources as pension expense	0	0
• 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	\$0	\$0

Section 2: GAS 68 Information

Deferred Outflows of Resources and Deferred Inflows of Resources

Total for All Employers

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$31,283,424	\$18,631,392
• Changes of assumptions or other inputs	152,325,637	235,563,691
• Net excess of projected over actual earnings on pension plan investments (if any)	0	604,103,142
• Difference between expected and actual experience in the Total Pension Liability	<u>114,586,609</u>	<u>115,826,625</u>
• Total Deferred Outflows of Resources	\$298,195,670	\$974,124,850
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$31,283,424	\$18,631,392
• Changes of assumptions or other inputs	14,195	21,951
• Net excess of actual over projected earnings on pension plan investments (if any)	1,390,850,195	0
• Difference between expected and actual experience in the Total Pension Liability	<u>27,701,053</u>	<u>84,164,578</u>
• Total Deferred Inflows of Resources	\$1,449,848,867	\$102,817,921
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GAS 68 Year Ended June 30:		
2022	N/A	\$135,642,327
2023	\$(197,737,097)	273,832,203
2024	(173,952,284)	297,617,016
2025	(307,353,917)	164,215,383
2026	(472,609,899)	0
2027	0	0

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

Section 2: GAS 68 Information

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

County of San Diego

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$27,933,133	\$13,558,304
• Changes of assumptions or other inputs	140,166,685	214,621,759
• Net excess of projected over actual earnings on pension plan investments (if any)	0	561,945,123
• Difference between expected and actual experience in the Total Pension Liability	<u>111,502,552</u>	<u>110,670,878</u>
• Total Deferred Outflows of Resources	\$279,602,370	\$900,796,064
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,303,149	\$5,014,529
• Changes of assumptions or other inputs	14,195	21,951
• Net excess of actual over projected earnings on pension plan investments (if any)	1,304,565,003	0
• Difference between expected and actual experience in the Total Pension Liability	<u>25,523,561</u>	<u>77,785,522</u>
• Total Deferred Inflows of Resources	\$1,333,405,908	\$82,822,002
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GAS 68 Year Ended June 30:		
2022	N/A	\$131,791,305
2023	\$(175,711,396)	258,131,713
2024	(158,847,170)	274,849,497
2025	(281,565,516)	153,201,547
2026	(437,679,456)	0
2027	0	0

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

Section 2: GAS 68 Information

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

Superior Court

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$2,080,825	\$3,206,031
• Changes of assumptions or other inputs	10,521,901	18,322,157
• Net excess of projected over actual earnings on pension plan investments (if any)	0	36,880,544
• Difference between expected and actual experience in the Total Pension Liability	<u>2,668,510</u>	<u>4,510,335</u>
• Total Deferred Outflows of Resources	\$15,271,236	\$62,919,067
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$26,744,478	\$12,772,465
• Changes of assumptions or other inputs	0	0
• Net excess of actual over projected earnings on pension plan investments (if any)	74,659,066	0
• Difference between expected and actual experience in the Total Pension Liability	<u>1,931,184</u>	<u>5,617,345</u>
• Total Deferred Inflows of Resources	\$103,334,728	\$18,389,810
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GAS 68 Year Ended June 30:		
2022	N/A	\$2,519,421
2023	\$(20,475,576)	12,899,069
2024	(13,931,782)	19,583,267
2025	(22,961,276)	9,527,500
2026	(30,694,858)	0
2027	0	0

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

Section 2: GAS 68 Information

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

Air Pollution Control District

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,012,991	\$1,504,774
• Changes of assumptions or other inputs	1,460,676	2,336,863
• Net excess of projected over actual earnings on pension plan investments (if any)	0	4,707,557
• Difference between expected and actual experience in the Total Pension Liability	<u>370,777</u>	<u>575,714</u>
• Total Deferred Outflows of Resources	\$2,844,444	\$9,124,908
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,011,413	\$643,851
• Changes of assumptions or other inputs	0	0
• Net excess of actual over projected earnings on pension plan investments (if any)	10,373,536	0
• Difference between expected and actual experience in the Total Pension Liability	<u>219,771</u>	<u>679,453</u>
• Total Deferred Inflows of Resources	\$11,604,720	\$1,323,304
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GAS 68 Year Ended June 30:		
2022	N/A	\$1,171,530
2023	\$(1,370,220)	2,510,110
2024	(1,074,500)	2,811,172
2025	(2,537,839)	1,308,792
2026	(3,777,717)	0
2027	0	0

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

Section 2: GAS 68 Information

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

San Dieguito River Valley Joint Powers Authority

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,502	\$5,416
• Changes of assumptions or other inputs	82,109	138,522
• Net excess of projected over actual earnings on pension plan investments (if any)	0	279,049
• Difference between expected and actual experience in the Total Pension Liability	<u>20,842</u>	<u>34,126</u>
• Total Deferred Outflows of Resources	\$106,453	\$457,113
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$174,125	\$93,176
• Changes of assumptions or other inputs	0	0
• Net excess of actual over projected earnings on pension plan investments (if any)	583,127	0
• Difference between expected and actual experience in the Total Pension Liability	<u>12,354</u>	<u>40,276</u>
• Total Deferred Inflows of Resources	\$769,606	\$133,452
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GAS 68 Year Ended June 30:		
2022	N/A	\$29,895
2023	\$(143,891)	100,154
2024	(113,437)	131,399
2025	(176,846)	62,213
2026	(228,979)	0
2027	0	0

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

Section 2: GAS 68 Information

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

Local Agency Formation Commission

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$252,973	\$356,867
• Changes of assumptions or other inputs	94,266	144,390
• Net excess of projected over actual earnings on pension plan investments (if any)	0	290,869
• Difference between expected and actual experience in the Total Pension Liability	<u>23,928</u>	<u>35,572</u>
• Total Deferred Outflows of Resources	\$371,167	\$827,698
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$50,259	\$107,371
• Changes of assumptions or other inputs	0	0
• Net excess of actual over projected earnings on pension plan investments (if any)	669,463	0
• Difference between expected and actual experience in the Total Pension Liability	<u>14,183</u>	<u>41,982</u>
• Total Deferred Inflows of Resources	\$733,905	\$149,353
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GAS 68 Year Ended June 30:		
2022	N/A	\$130,176
2023	\$(36,014)	191,157
2024	14,605	241,681
2025	(112,440)	115,331
2026	(228,889)	0
2027	0	0

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

Section 2: GAS 68 Information

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

San Diego County Office of Education

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
Deferred Outflows 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
• Net excess of projected over actual earnings on pension plan investments (if any)	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
• Total Deferred Outflows of Resources	\$0	\$0
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
• Net excess of actual over projected earnings on pension plan investments (if any)	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
• Total Deferred Inflows of Resources	\$0	\$0
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GAS 68 Year Ended June 30:		
2022	N/A	\$0
2023	\$0	0
2024	0	0
2025	0	0
2026	0	0
2027	0	0

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

Section 2: GAS 68 Information

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

There are changes in each employer's proportionate share of the total Net Pension Liability (NPL) during the measurement period ended June 30, 2021. 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., 2020/2021) is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through SDCERA which is 4.87 years determined as of June 30, 2020 (the beginning of the measurement period ending June 30, 2021). This is described in Paragraph 33a. of GAS 68.

In addition, the difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended June 30, 2021 is recognized over the same period.

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 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 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 non-active or retired member.
- Dividing the sum of the above amounts by the total number of active, non-active and retired members.

Section 2: GAS 68 Information

Schedule of Proportionate Share of the Net Pension Liability

Total for All Employers

Reporting Date for employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll	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%	\$2,832,308,136	\$1,028,420,277	275.40%	76.18%
2015	100.000%	2,137,714,053	1,072,896,037	199.25%	82.65%
2016	100.000%	2,807,566,790	1,120,001,088	250.68%	78.63%
2017	100.000%	4,297,990,879	1,140,882,516	376.73%	70.48%
2018	100.000%	3,686,996,935	1,181,479,673	312.07%	75.56%
2019	100.000%	3,397,729,231	1,232,104,786	275.77%	78.32%
2020	100.000%	4,043,090,437	1,276,238,540	316.80%	76.08%
2021	100.000%	4,814,891,946	1,349,433,902	356.81%	72.83%
2022	100.000%	2,395,183,676	1,391,053,973	172.18%	87.07%

Section 2: GAS 68 Information

Schedule of Proportionate Share of the Net Pension Liability (continued)

County of San Diego

Reporting Date for employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll	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 ¹
2014	90.629%	\$2,566,886,594	\$932,575,363	275.25%	76.25%
2015	91.378%	1,953,407,775	982,682,554	198.78%	82.71%
2016	91.963%	2,581,905,733	1,030,137,303	250.64%	78.66%
2017	92.129%	3,959,675,985	1,048,624,503	377.61%	70.44%
2018	92.413%	3,407,278,088	1,087,317,648	313.37%	75.51%
2019	93.435%	3,174,665,456	1,141,395,826	278.14%	78.28%
2020	92.985%	3,759,514,000	1,184,513,299	317.39%	76.09%
2021	93.014%	4,478,531,590	1,251,381,408	357.89%	72.84%
2022	93.800%	2,246,673,119	1,300,342,929	172.78%	87.06%

¹ There is a separate calculation of the Plan's Fiduciary Net Position as a percentage of the Total Pension Liability for each of the General and Safety membership classes (using the assets and liabilities maintained in the valuation for the two membership classes). For the County with members in both membership classes, this percentage is calculated by using the County's proportionate share of the assets and liabilities in those classes.

Section 2: GAS 68 Information

Schedule of Proportionate Share of the Net Pension Liability (continued)

Superior Court

Reporting Date for employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll	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	8.391%	\$237,649,347	\$85,276,900	278.68%	75.48%
2015	7.662%	163,783,996	79,623,207	205.70%	81.94%
2016	7.129%	200,137,552	79,272,513	252.47%	78.32%
2017	7.012%	301,395,361	81,683,147	368.98%	70.91%
2018	6.773%	249,703,370	83,635,234	298.56%	76.09%
2019	5.803%	197,178,413	79,606,601	247.69%	78.89%
2020	6.160%	249,037,680	79,936,769	311.54%	75.99%
2021	6.117%	294,532,272	85,114,877	346.04%	72.77%
2022	5.377%	128,784,091	78,021,302	165.06%	87.15%

Section 2: GAS 68 Information

Schedule of Proportionate Share of the Net Pension Liability (continued)

Air Pollution Control District

Reporting Date for employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll	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	0.884%	\$25,051,012	\$9,581,192	261.46%	75.48%
2015	0.863%	18,448,707	9,556,232	193.05%	81.94%
2016	0.826%	23,201,443	9,649,383	240.44%	78.32%
2017	0.769%	33,071,787	9,494,665	348.32%	70.91%
2018	0.723%	26,672,364	9,380,603	284.34%	76.09%
2019	0.684%	23,234,251	10,021,840	231.84%	78.89%
2020	0.765%	30,919,788	10,537,238	293.43%	75.99%
2021	0.775%	37,311,042	11,621,060	321.06%	72.77%
2022	0.735%	17,601,151	11,354,177	155.02%	87.15%

Section 2: GAS 68 Information

Schedule of Proportionate Share of the Net Pension Liability (continued)

San Dieguito River Valley Joint Powers Authority

Reporting Date for employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll	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	0.053%	\$1,489,372	\$540,026	275.80%	75.48%
2015	0.055%	1,179,860	589,698	200.08%	81.94%
2016	0.046%	1,298,694	530,657	244.73%	78.32%
2017	0.051%	2,186,365	617,304	354.18%	70.91%
2018	0.050%	1,841,454	638,204	288.54%	76.09%
2019	0.046%	1,559,911	635,759	245.36%	78.89%
2020	0.048%	1,932,897	635,760	304.03%	75.99%
2021	0.046%	2,211,676	644,403	343.21%	72.77%
2022	0.041%	989,413	626,727	157.87%	87.15%

Section 2: GAS 68 Information

Schedule of Proportionate Share of the Net Pension Liability (continued)

Local Agency Formation Commission

Reporting Date for employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll	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	0.043%	\$1,231,811	\$446,796	275.70%	75.48%
2015	0.042%	893,715	444,346	201.13%	81.94%
2016	0.036%	1,023,368	411,232	248.85%	78.32%
2017	0.039%	1,661,381	462,897	358.91%	70.91%
2018	0.041%	1,501,659	507,984	295.61%	76.09%
2019	0.032%	1,091,200	444,760	245.35%	78.89%
2020	0.042%	1,686,072	615,474	273.95%	75.99%
2021	0.048%	2,305,366	672,154	342.98%	72.77%
2022	0.047%	1,135,902	708,838	160.25%	87.15%

Section 2: GAS 68 Information

Schedule of Proportionate Share of the Net Pension Liability (continued)

San Diego County Office of Education

Reporting Date for employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll	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	0.00%	N/A
2015	0.000%	0	0	0.00%	N/A
2016	0.000%	0	0	0.00%	N/A
2017	0.000%	0	0	0.00%	N/A
2018	0.000%	0	0	0.00%	N/A
2019	0.000%	0	0	0.00%	N/A
2020	0.000%	0	0	0.00%	N/A
2021	0.000%	0	0	0.00%	N/A
2022	0.000%	0	0	0.00%	N/A

Section 2: GAS 68 Information

Schedule of Reconciliation of Net Pension Liability

Total for All Employers

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Beginning Net Pension Liability	\$4,814,891,946	\$4,043,090,437
• Pension Expense	218,950,742	920,030,478
• Employer Contributions	(615,698,886)	(568,923,801)
• New Net Deferred Inflows/Outflows	(1,887,317,799)	663,008,379
• Change in Allocation of Prior Deferred Inflows/Outflows	0	0
• New Net Deferred Flows Due to Change in Proportion	0	0
• Recognition of Prior Deferred Inflows/Outflows	(135,642,327)	(242,313,547)
• Recognition of Prior Deferred Flows Due to Change in Proportion	<u>0</u>	<u>0</u>
Ending Net Pension Liability	\$2,395,183,676	\$4,814,891,946

Section 2: GAS 68 Information

Schedule of Reconciliation of Net Pension Liability (continued)

County of San Diego

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Beginning Net Pension Liability	\$4,478,531,590	\$3,759,514,000
• Pension Expense	217,755,437	863,098,504
• Employer Contributions	(577,836,311)	(531,260,722)
• New Net Deferred Inflows/Outflows	(1,767,403,608)	619,401,045
• Change in Allocation of Prior Deferred Inflows/Outflows	6,352,257	(114,952)
• New Net Deferred Flows Due to Change in Proportion	22,088,072	(646,655)
• Recognition of Prior Deferred Inflows/Outflows	(126,812,455)	(226,033,720)
• Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(6,001,863)</u>	<u>(5,425,910)</u>
Ending Net Pension Liability	\$2,246,673,119	\$4,478,531,590

Section 2: GAS 68 Information

Schedule of Reconciliation of Net Pension Liability (continued)

Superior Court

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Beginning Net Pension Liability	\$294,532,272	\$249,037,680
• Pension Expense	(394,486)	49,164,877
• Employer Contributions	(32,760,945)	(32,948,295)
• New Net Deferred Inflows/Outflows	(103,786,180)	38,144,922
• Change in Allocation of Prior Deferred Inflows/Outflows	(6,090,411)	14,558
• New Net Deferred Flows Due to Change in Proportion	(21,177,582)	81,898
• Recognition of Prior Deferred Inflows/Outflows	(7,618,940)	(14,226,858)
• Recognition of Prior Deferred Flows Due to Change in Proportion	<u>6,080,363</u>	<u>5,263,490</u>
Ending Net Pension Liability	\$128,784,091	\$294,532,272

Section 2: GAS 68 Information

Schedule of Reconciliation of Net Pension Liability (continued)

Air Pollution Control District

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Beginning Net Pension Liability	\$37,311,042	\$30,919,788
• Pension Expense	1,403,974	6,847,726
• Employer Contributions	(4,551,984)	(4,205,631)
• New Net Deferred Inflows/Outflows	(14,390,390)	4,872,523
• Change in Allocation of Prior Deferred Inflows/Outflows	(231,679)	75,839
• New Net Deferred Flows Due to Change in Proportion	(805,593)	426,625
• Recognition of Prior Deferred Inflows/Outflows	(1,080,467)	(1,831,268)
• Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(53,752)</u>	<u>205,440</u>
Ending Net Pension Liability	\$17,601,151	\$37,311,042

Section 2: GAS 68 Information

Schedule of Reconciliation of Net Pension Liability (continued)

San Dieguito River Valley Joint Powers Authority

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Beginning Net Pension Liability	\$2,211,676	\$1,932,897
• Pension Expense	20,430	408,095
• Employer Contributions	(255,880)	(249,296)
• New Net Deferred Inflows/Outflows	(808,926)	288,827
• Change in Allocation of Prior Deferred Inflows/Outflows	(34,288)	(7,880)
• New Net Deferred Flows Due to Change in Proportion	(119,226)	(44,327)
• Recognition of Prior Deferred Inflows/Outflows	(60,736)	(108,551)
• Recognition of Prior Deferred Flows Due to Change in Proportion	<u>36,363</u>	<u>(8,089)</u>
Ending Net Pension Liability	\$989,413	\$2,211,676

Section 2: GAS 68 Information

Schedule of Reconciliation of Net Pension Liability (continued)

Local Agency Formation Commission

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Beginning Net Pension Liability	\$2,305,366	\$1,686,072
• Pension Expense	165,387	511,276
• Employer Contributions	(293,766)	(259,857)
• New Net Deferred Inflows/Outflows	(928,695)	301,062
• Change in Allocation of Prior Deferred Inflows/Outflows	4,121	32,435
• New Net Deferred Flows Due to Change in Proportion	14,329	182,459
• Recognition of Prior Deferred Inflows/Outflows	(69,729)	(113,150)
• Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(61,111)</u>	<u>(34,931)</u>
Ending Net Pension Liability	\$1,135,902	\$2,305,366

Section 2: GAS 68 Information

Schedule of Reconciliation of Net Pension Liability (continued)

San Diego County Office of Education

Reporting Date for Employer under GAS 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GAS 68	June 30, 2021	June 30, 2020
• Beginning Net Pension Liability	\$0	\$0
• Pension Expense	0	0
• Employer Contributions	0	0
• New Net Deferred Inflows/Outflows	0	0
• Change in Allocation of Prior Deferred Inflows/Outflows	0	0
• New Net Deferred Flows Due to Change in Proportion	0	0
• Recognition of Prior Deferred Inflows/Outflows	0	0
• Recognition of Prior Deferred Flows Due to Change in Proportion	<u>0</u>	<u>0</u>
Ending Net Pension Liability	\$0	\$0

Section 2: GAS 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 GAS 68 Year Ended June 30	Differences Between Expected and Actual Experience	Recognition Period (Years)	Reporting Date for Employer Under GAS 68 Year Ended June 30:					
			2021	2022	2023	2024	2025	2026
2017 ¹	\$(20,774,030)	4.87	\$(3,711,170)	\$0	\$0	\$0	\$0	\$0
2018 ¹	(188,131,254)	4.86	(38,710,135)	(33,290,714)	0	0	0	0
2019 ¹	(130,589,113)	4.88	(26,760,065)	(26,760,065)	(23,548,853)	0	0	0
2020 ¹	106,963,162	4.83	22,145,582	22,145,582	22,145,582	18,380,834	0	0
2021	66,249,338	4.85	13,659,657	13,659,657	13,659,657	13,659,657	11,610,710	0
2022	38,982,611	4.87	<u>N/A</u>	<u>8,004,642</u>	<u>8,004,642</u>	<u>8,004,642</u>	<u>8,004,642</u>	<u>6,964,043</u>
Net Increase/(Decrease) in Pension Expense			\$(33,376,131)	\$(16,240,898)	\$20,261,028	\$40,045,133	\$19,615,352	\$6,964,043

Note: Results may not total due to rounding.

As described in *Section 2, Schedule of Deferred Outflows of Resources and Deferred Inflows of Resources*, the average of the expected remaining service lives of all employees that are provided with pensions through SDCERA (active and inactive employees) determined as of June 30, 2020 (the beginning of the measurement period ending June 30, 2021) is 4.87 years.

¹ The amortization amounts prior to June 30, 2021 have been omitted from this Schedule. Those amounts can be found in prior years' GAS 68 reports.

Section 2: GAS 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 GAS 68 Year Ended June 30	Assumption Changes or Other Inputs	Recognition Period (Years)	Reporting Date for Employer Under GAS 68 Year Ended June 30:					
			2021	2022	2023	2024	2025	2026
2017 ¹	\$788,402,615	4.87	\$140,843,995	\$0	\$0	\$0	\$0	\$0
2018 ¹	0	4.86	0	0	0	0	0	0
2019 ¹	0	4.88	0	0	0	0	0	0
2020 ¹	402,002,336	4.83	83,230,298	83,230,298	83,230,298	69,081,144	0	0
2021	0	4.85	0	0	0	0	0	0
2022	0	4.87	<u>N/A</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net Increase/(Decrease) in Pension Expense			\$224,074,293	\$83,230,298	\$83,230,298	\$69,081,144	\$0	\$0

Note: Results may not total due to rounding.

As described in *Section 2, Schedule of Deferred Outflows of Resources and Deferred Inflows of Resources*, the average of the expected remaining service lives of all employees that are provided with pensions through SDCERA (active and inactive employees) determined as of June 30, 2020 (the beginning of the measurement period ending June 30, 2021) is 4.87 years.

¹ The amortization amounts prior to June 30, 2021 have been omitted from this Schedule. Those amounts can be found in prior years' GAS 68 reports.

Section 2: GAS 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 GAS 68 Year Ended June 30	Net Difference Between Projected and Actual Earnings	Recognition Period (Years)	Reporting Date for Employer Under GAS 68 Year Ended June 30:					
			2021	2022	2023	2024	2025	2026
2017 ¹	\$706,110,735	5.00	\$141,222,147	\$0	\$0	\$0	\$0	\$0
2018 ¹	(508,439,761)	5.00	(101,687,952)	(101,687,953)	0	0	0	0
2019 ¹	(90,749,298)	5.00	(18,149,859)	(18,149,859)	(18,149,862)	0	0	0
2020 ¹	219,453,530	5.00	43,890,706	43,890,706	43,890,706	43,890,706	0	0
2021	763,023,373	5.00	152,604,675	152,604,675	152,604,675	152,604,675	152,604,673	0
2022	(2,397,869,710)	5.00	N/A	<u>(479,573,942)</u>	<u>(479,573,942)</u>	<u>(479,573,942)</u>	<u>(479,573,942)</u>	<u>(479,573,942)</u>
Net Increase/(Decrease) in Pension Expense			\$217,879,717	\$(402,916,373)	\$(301,228,423)	\$(283,078,561)	\$(326,969,269)	\$(479,573,942)

Note: Results may not total due to rounding.

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

¹ The amortization amounts prior to June 30, 2021 have been omitted from this Schedule. Those amounts can be found in prior years' GAS 68 reports.

Section 2: GAS 68 Information

Schedule of Recognition of Changes in Total Net Pension Liability (continued)

Total Increase (Decrease) in Pension Expense

Reporting Date for Employer Under GAS 68 Year Ended June 30	Total Increase / (Decrease)	Reporting Date for Employer Under GAS 68 Year Ended June 30:					
		2021	2022	2023	2024	2025	2026
2017 ¹	\$1,473,739,320	\$278,354,972	\$0	\$0	\$0	\$0	\$0
2018 ¹	(696,571,015)	(140,398,087)	(134,978,667)	0	0	0	0
2019 ¹	(221,338,411)	(44,909,924)	(44,909,924)	(41,698,715)	0	0	0
2020 ¹	728,419,028	149,266,586	149,266,586	149,266,586	131,352,684	0	0
2021	829,272,711	166,264,332	166,264,332	166,264,332	166,264,332	164,215,383	0
2022	(2,358,887,099)	N/A	(471,569,300)	(471,569,300)	(471,569,300)	(471,569,300)	(472,609,899)
Net Increase/(Decrease) in Pension Expense		\$408,577,879	\$(335,926,973)	\$(197,737,097)	\$(173,952,284)	\$(307,353,917)	\$(472,609,899)

Note: Results may not total due to rounding.

¹ The amortization amounts prior to June 30, 2021 have been omitted from this Schedule. Those amounts can be found in prior years' GAS 68 reports.

Section 2: GAS 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 NPL during the measurement period ending on June 30, 2021. 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. These amounts are shown on the following table, with the corresponding amounts for the measurement periods ending on June 30 beginning in 2017 shown on the following pages. While these amounts are different for each employer, they sum to zero over the entire SDCERA.

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 June 30, 2021

	Total Change to be Recognized	Recognition Period (Years)	Reporting Date for Employer under GAS 68 Year Ended June 30:				
			2022	2023	2024	2025	2026
County of San Diego	\$27,795,584	4.87	\$5,707,512	\$5,707,512	\$5,707,512	\$5,707,512	\$4,965,536
Superior Court	(26,649,825)	4.87	(5,472,243)	(5,472,243)	(5,472,243)	(5,472,243)	(4,760,853)
Air Pollution Control District	(1,013,757)	4.87	(208,164)	(208,164)	(208,164)	(208,164)	(181,101)
San Dieguito River Valley Joint Powers Authority	(150,034)	4.87	(30,808)	(30,808)	(30,808)	(30,808)	(26,802)
Local Agency Formation Commission	18,032	4.87	3,703	3,703	3,703	3,703	3,220
San Diego County Office of Education	0	4.87	0	0	0	0	0
Total for All Employers	\$0		\$0	\$0	\$0	\$0	\$0

Section 2: GAS 68 Information

Allocation of Changes in Total Net Pension Liability (continued)

The amounts as of June 30, 2020 are as follows:

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 June 30, 2020

	Total Change to be Recognized	Recognition Period (Years)	Reporting Date for Employer under GAS 68 Year Ended June 30:				
			2021	2022	2023	2024	2025
County of San Diego	\$(814,617)	4.85	\$(167,962)	\$(167,962)	\$(167,962)	\$(167,962)	\$(142,769)
Superior Court	103,170	4.85	21,272	21,272	21,272	21,272	18,082
Air Pollution Control District	537,437	4.85	110,812	110,812	110,812	110,812	94,189
San Dieguito River Valley Joint Powers Authority	(55,841)	4.85	(11,514)	(11,514)	(11,514)	(11,514)	(9,785)
Local Agency Formation Commission	229,851	4.85	47,392	47,392	47,392	47,392	40,283
San Diego County Office of Education	0	4.85	0	0	0	0	0
Total for All Employers	\$0		\$0	\$0	\$0	\$0	\$0

The amounts as of June 30, 2019 are as follows:

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 June 30, 2019

	Total Change to be Recognized	Recognition Period (Years)	Reporting Date for Employer under GAS 68 Year Ended June 30:				
			2020	2021	2022	2023	2024
County of San Diego	\$(7,454,710)	4.83	\$(1,543,418)	\$(1,543,418)	\$(1,543,418)	\$(1,543,418)	\$(1,281,038)
Superior Court	5,332,001	4.83	1,103,934	1,103,934	1,103,934	1,103,934	916,265
Air Pollution Control District	1,840,091	4.83	380,971	380,971	380,971	380,971	316,207
San Dieguito River Valley Joint Powers Authority	9,244	4.83	1,914	1,914	1,914	1,914	1,588
Local Agency Formation Commission	273,374	4.83	56,599	56,599	56,599	56,599	46,978
San Diego County Office of Education	0	4.83	0	0	0	0	0
Total for All Employers	\$0		\$0	\$0	\$0	\$0	\$0

Section 2: GAS 68 Information

Allocation of Changes in Total Net Pension Liability (continued)

The amounts as of June 30, 2018 are as follows:

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 June 30, 2018

	Total Change to be Recognized	Recognition Period (Years)	Reporting Date for Employer under GAS 68 Year Ended June 30:				
			2019	2020	2021	2022	2023
County of San Diego	\$32,413,509	4.88	\$6,642,112	\$6,642,112	\$6,642,112	\$6,642,112	\$5,845,061
Superior Court	(30,870,968)	4.88	(6,326,018)	(6,326,018)	(6,326,018)	(6,326,018)	(5,566,896)
Air Pollution Control District	(1,141,356)	4.88	(233,884)	(233,884)	(233,884)	(233,884)	(205,820)
San Dieguito River Valley Joint Powers Authority	(122,478)	4.88	(25,098)	(25,098)	(25,098)	(25,098)	(22,086)
Local Agency Formation Commission	(278,707)	4.88	(57,112)	(57,112)	(57,112)	(57,112)	(50,259)
San Diego County Office of Education	0	4.88	0	0	0	0	0
Total for All Employers	\$0		\$0	\$0	\$0	\$0	\$0

The amounts as of June 30, 2017 are as follows:

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 June 30, 2017

	Total Change to be Recognized	Recognition Period (Years)	Reporting Date for Employer under GAS 68 Year Ended June 30:				
			2018	2019	2020	2021	2022
County of San Diego	\$6,053,151	4.86	\$1,245,505	\$1,245,505	\$1,245,505	\$1,245,505	\$1,071,131
Superior Court	(4,970,483)	4.86	(1,022,733)	(1,022,733)	(1,022,733)	(1,022,733)	(879,551)
Air Pollution Control District	(1,153,675)	4.86	(237,382)	(237,382)	(237,382)	(237,382)	(204,147)
San Dieguito River Valley Joint Powers Authority	(9,413)	4.86	(1,937)	(1,937)	(1,937)	(1,937)	(1,665)
Local Agency Formation Commission	80,420	4.86	16,547	16,547	16,547	16,547	14,232
San Diego County Office of Education	0	4.86	0	0	0	0	0
Total for All Employers	\$0		\$0	\$0	\$0	\$0	\$0

Section 3: Actuarial Assumptions and Methods and Appendices

Actuarial Assumptions and Methods

For June 30, 2021 Measurement Date and Employer Reporting as of June 30, 2022:

Rationale for Assumptions:	The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2015 through June 30, 2018 Actuarial Experience Study dated April 5, 2019. 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:	One-half of the net investment return credited semi-annually.
Consumer Price Index (CPI) and Cost of Living Adjustments (COLA):	CPI increases of 2.75% per year. Retiree COLA increases of 2.75% per year for Tier 1 and Tier A, and 2% per year for Tiers B, C and D. For Tier 1 and Tier A members that have COLA banks, we assume they receive 3.0% COLA increases until their COLA banks are exhausted and 2.75% thereafter.
Payroll Growth:	Inflation of 2.75% per year plus “across the board” real salary increases of 0.50% per year.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 2.75% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 2.75% per year from the valuation date.

Section 3: Actuarial Assumptions and Methods and Appendices

Salary Increases:

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	7.25	8.75
1 – 2	5.50	6.25
2 – 3	5.00	5.00
3 – 4	4.25	4.60
4 – 5	3.00	4.50
5 – 6	2.50	2.75
6 – 7	2.00	2.40
7 – 8	1.75	1.75
8 – 9	1.50	1.50
9 – 10	1.40	1.40
10 – 11	1.30	1.30
11 – 12	1.20	1.20
12 – 13	1.10	1.15
13 – 14	1.00	1.10
14 – 15	0.95	1.05
15 & Over	0.90	1.00

Section 3: Actuarial Assumptions and Methods and Appendices

Demographic Assumptions:

Post-Retirement Mortality Rates:

Healthy

- **General Members and All Beneficiaries:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) times 100% for males and 105% for females, projected generationally with the two-dimensional mortality improvement scale MP-2018.
- **Safety Members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) times 105% for males and 95% for females, projected generationally with the two-dimensional mortality improvement scale MP-2018.

Disabled

- **General Members:** Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) times 75% for males and 75% for females, projected generationally with the two-dimensional mortality improvement scale MP-2018.
- **Safety Members:** Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) times 100% for males and 100% for females, projected generationally with the two-dimensional mortality improvement scale MP-2018.

The Pub-2010 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.

Section 3: Actuarial Assumptions and Methods and Appendices

Pre-Retirement Mortality Rates:

- **General Members:** Pub-2010 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females) times 100% for males and 100% for females, projected generationally with the two-dimensional mortality improvement scale MP-2018.
- **Safety Members:** Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females) times 100% for males and 100% for females, projected generationally with the two-dimensional mortality improvement scale MP-2018.

Age	Rate (%) ¹			
	General ¹		Safety ¹	
	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. All Safety pre-retirement deaths 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) times 100% for males and 105% for females, projected 30 years with the two-dimensional mortality improvement scale MP-2018, weighted 30% male and 70% female.
- **Safety Members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) times 105% for males and 95% for females, projected 30 years with the two-dimensional mortality improvement scale MP-2018, weighted 75% male and 25% female.

Section 3: Actuarial Assumptions and Methods and Appendices

Disability Incidence:

Age	Rate (%)	
	General	Safety
20	0.00	0.02
25	0.01	0.07
30	0.03	0.19
35	0.05	0.37
40	0.13	0.48
45	0.20	0.62
50	0.24	1.06
55	0.31	1.42
60	0.41	1.68
65	0.48	1.92
70	0.56	1.70
75	0.60	1.50

70% of General disabilities are assumed to be service connected disabilities and the other 30% are assumed to be non-service connected disabilities.

90% of Safety disabilities are assumed to be service connected disabilities and the other 10% are assumed to be non-service connected disabilities.

Section 3: Actuarial Assumptions and Methods and Appendices

Termination Rates:

Years of Service	Rate (%)	
	General	Safety
Less than 1	12.00	7.50
1 – 2	8.25	5.75
2 – 3	7.00	4.25
3 – 4	5.50	3.25
4 – 5	5.50	3.00
5 – 6	5.25	2.75
6 – 7	4.50	2.50
7 – 8	4.25	2.50
8 – 9	3.75	2.25
9 – 10	3.50	2.00
10 – 11	3.25	1.75
11 – 12	3.00	1.50
12 – 13	2.75	1.25
13 – 14	2.50	1.00
14 – 15	2.25	0.90
15 – 16	2.00	0.80
16 – 17	1.75	0.70
17 – 18	1.70	0.60
18 – 19	1.65	0.50
19 – 20	1.60	0.50
20 & Over	1.50	0.50

The greater of a refund of member contributions and a deferred annuity is valued when a member terminates. No termination is assumed after a member is first assumed to retire.

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Rates:

Age	Rate (%)				
	General Tiers 1 and A (Less than 30 Years of Service)	General Tiers 1 and A (30 or More Years of Service)	General Tier B	General Tier C	General Tier D
49	0.0	75.0	0.0	0.0	0.0
50	4.0	10.0	0.0	0.0	0.0
51	4.0	10.0	0.0	0.0	0.0
52	4.0	10.0	0.0	4.0	3.0
53	5.0	10.0	0.0	4.0	3.0
54	6.0	14.0	0.0	4.0	3.0
55	8.0	16.0	5.0	4.0	3.0
56	9.0	18.0	6.0	4.5	4.0
57	9.0	20.0	7.0	5.5	5.0
58	9.0	20.0	7.0	5.5	5.0
59	11.0	24.0	7.0	5.5	6.0
60	16.0	24.0	9.0	7.0	9.0
61	18.0	25.0	13.0	10.0	12.0
62	20.0	26.0	18.0	14.0	15.0
63	22.0	27.0	18.0	14.0	17.0
64	22.0	28.0	18.0	14.0	19.0
65	32.0	32.0	30.0	26.0	23.0
66	35.0	35.0	30.0	30.0	26.0
67	35.0	35.0	30.0	30.0	26.0
68	35.0	35.0	30.0	30.0	26.0
69	30.0	30.0	30.0	30.0	26.0
70	30.0	30.0	30.0	30.0	30.0
71	25.0	25.0	25.0	25.0	25.0
72	25.0	25.0	25.0	25.0	25.0
73	25.0	25.0	25.0	25.0	25.0
74	25.0	25.0	25.0	25.0	25.0
75 & Over	100.0	100.0	100.0	100.0	100.0

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Rates: (continued)

Age	Rate (%)				
	Safety Tier A (Less than 30 Years of Service)	Safety Tier A (30 or More Years of Service)	Safety Tier B	Safety Tier C	Safety Tier D
41	6.0	0.0	6.0	0.0	0.0
42	6.0	0.0	6.0	0.0	0.0
43	6.0	0.0	6.0	0.0	0.0
44	2.0	0.0	2.0	0.0	0.0
45	2.0	0.0	2.0	0.0	0.0
46	2.0	0.0	2.0	0.0	0.0
47	3.0	0.0	3.0	0.0	0.0
48	4.0	4.0	4.0	0.0	0.0
49	11.0	11.0	4.5	0.0	0.0
50	15.0	37.5	11.5	15.0	15.0
51	15.0	37.5	11.0	9.5	9.5
52	15.0	37.5	11.0	10.5	10.5
53	15.0	37.5	11.0	10.5	10.5
54	15.0	37.5	12.5	11.0	11.0
55	15.0	30.0	19.0	16.5	15.0
56	15.0	32.0	22.5	20.0	18.0
57	15.0	32.0	20.0	20.0	18.0
58	15.0	32.0	20.0	20.0	18.0
59	15.0	32.0	20.0	22.0	20.0
60	22.0	33.0	22.0	22.0	20.0
61	25.0	37.5	26.0	26.0	26.0
62	25.0	37.5	26.0	26.0	26.0
63	25.0	37.5	26.0	26.0	26.0
64	28.0	42.0	30.0	30.0	30.0
65	50.0	75.0	50.0	50.0	50.0
66	50.0	75.0	50.0	50.0	50.0
67	50.0	75.0	50.0	50.0	50.0
68	50.0	75.0	50.0	50.0	50.0
69	50.0	75.0	50.0	50.0	50.0
70 & Over	100.0	100.0	100.0	100.0	100.0

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Age and Benefit for Deferred Vested Members:	<u>General Retirement Age</u>	
	Reciprocal members:	60
	Other members:	57
	<u>Safety Retirement Age</u>	
	Reciprocal members:	53
	Other members:	50
	<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. 20% of future General and 30% of future Safety deferred vested members are assumed to continue to work for a reciprocal employer. For reciprocals, 4.15% and 4.25% compensation increases are assumed per annum for General and Safety members, respectively.</p>	
Future Benefit Accruals:	1.0 year of service per year of employment.	
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be female.	
Definition of Active Members:	First day of pay period following employment.	
Form of Payment:	All active and inactive members are assumed to elect the unmodified option at retirement.	
Percent Married:	For all active and inactive members, 70% of male members and 55% of female members are assumed to be married at pre-retirement death or retirement.	
Age and Gender of Spouse:	For all active and inactive members, male members are assumed to have a female spouse who is 3 years younger than the member and female members are assumed to have a male spouse who is 2 years older than the member.	
Service Converted from Unused Sick Leave:	<p>The following assumptions for service converted from unused sick leave as a percentage of service at retirement are used:</p> <p>General members: 1.00%</p> <p>Safety members: 1.50%</p> <p>Pursuant to Section 31641.02, the cost of this benefit for Tiers 1, A and B members will be charged only to employers and will not affect member contribution rates.</p>	

Section 3: Actuarial Assumptions and Methods and Appendices

Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the age on the valuation date minus years of 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.
Expected Remaining Service Lines:	The average of the expected service lives of all employees is determined by: <ul style="list-style-type: none">• 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:	There have been no changes in actuarial assumptions since the last valuation.

Section 3: Actuarial Assumptions and Methods and Appendices

Appendix A: Projection of Plan Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2021 (\$ in millions)

Year Beginning July 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	\$12,909	\$778	\$845	\$15	\$3,299	\$16,126
2021	16,126	780	923	19	1,123	17,088
2022	17,088	764	972	20	1,188	18,049
2023	18,049	743	1,022	21	1,253	19,002
2024	19,002	718	1,073	22	1,317	19,942
2025	19,942	521	1,125	23	1,374	20,691
2026	20,691	519	1,177	24	1,425	21,433
2027	21,433	516	1,230	25	1,475	22,170
2028	22,170	515	1,284	26	1,525	22,900
2029	22,900	513	1,338	26	1,574	23,623
2045	26,914	135	2,060	31	1,817	26,774
2046	26,774	128	2,082	31	1,806	26,595
2047	26,595	122	2,101	31	1,792	26,377
2048	26,377	116	2,118	30	1,776	26,120
2049	26,120	110	2,132	30	1,758	25,825
2094	26,052	38	112	30	1,820	27,768
2095	27,768	39	90	32	1,941	29,627
2096	29,627	41	72	34	2,072	31,633
2097	31,633	42	56	37	2,213	33,795
2098	33,795	44	44	39	2,364	36,120
2135	411,580	475	0 *	475	28,811	440,391
2136	440,391					
2136 Discounted Value:	184 **					

* Less than \$1 million, when rounded.

** \$440,391 million when discounted with interest at the rate of 7.00% per annum has a value of \$184 million as of June 30, 2021.

Section 3: Actuarial Assumptions and Methods and Appendices

Appendix A: Projection of Plan Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2021 (\$ in millions) (continued)

Notes:

- (1) Amounts may not total exactly due to rounding.
- (2) Amounts shown in the year beginning July 1, 2020 row are actual amounts, based on the unaudited financial statements provided by SDCERA.
- (3) Various years have been omitted from this table.
- (4) Column (a): Except for the "discounted value" shown for 2136, none of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.
- (5) Column (b): Projected total contributions include employee and employer normal cost rates applied to closed group projected payroll (based on covered active members as of June 30, 2020), 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 June 30, 2020. The projected benefit payments reflect the cost of living increase assumptions used in the June 30, 2020 valuation report.
- (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 Fiscal Year 2021 administrative expenses as a percentage of the actual beginning Plan's Fiduciary Net Position as of July 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 June 30, 2021 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: Definition of Terms

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

Active Employees	Individuals employed at the end of the reporting or measurement period, as applicable.
Actual Contributions	Cash contributions recognized as additions to a Pension Plan Fiduciary Net Position.
Actuarial Present Value of Projected Benefit Payments	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad Hoc Cost-of-Living Adjustments (Ad Hoc COLAs)	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
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).
Closed Period	A specific number of years that is counted from one date and declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth.
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 Net Pension Liability	The Net Pension Liability for benefits provided through (1) a cost-sharing pension plan or (2) a single-employer or agent pension plan in circumstances in which there is a special funding situation.
Collective Pension Expense	Pension expense arising from certain changes in the collective Net Pension Liability.

Section 3: Actuarial Assumptions and Methods and Appendices

Contributions	Additions to a Pension Plan Fiduciary Net Position for amounts from employers, non-employer contributing entities (for example, state government contributions to a local government pension plan), or employees. Contributions can result from cash receipts by the pension plan or from recognition by the pension plan of a receivable from one of these sources.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Employer	An employer whose employees are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Cost-Sharing Pension Plan)	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered Payroll	Payroll on which contributions to the pension plan are based.
Defined Benefit Pension Plans	Pension plans that are used to provide defined benefit pensions.
Defined Benefit Pensions	Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of Statement 68.)
Defined Contribution Pension Plans	Pension plans that are used to provide defined contribution pensions.
Defined Contribution Pensions	Pensions having terms that (1) provide an individual account for each employee; (2) define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (3) provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.
Discount Rate	The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following: <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 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.

Section 3: Actuarial Assumptions and Methods and Appendices

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 <i>normal cost</i> . 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 <i>actuarial accrued liability</i> .
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	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit pension plan.
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.
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.

Section 3: Actuarial Assumptions and Methods and Appendices

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	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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