

**San Bernardino County Employees'
Retirement Association**

**Survivor Benefit Valuation
Review of Contribution Rate and
Funded Status as of June 30, 2024**



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October 22, 2024

Board of Retirement
San Bernardino County Employees' Retirement Association
348 West Hospitality Lane, Suite 100
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Dear Board Members:

We are pleased to submit this Survivor Benefit Valuation as of June 30, 2024. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year 2025-2026.

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

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

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

The actuarial calculations were directed under the supervision of Molly Calcagno, ASA, MAAA and Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board of Retirement based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of the Plan and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

Exhibit B: Page 3

Board of Retirement
October 22, 2024

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

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

Sincerely,

Segal

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

Molly Calcagno, ASA, MAAA, EA
Senior Actuary

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present a valuation of the San Bernardino County Employees' Retirement Association ("SBCERA" or "the Plan" or "the Association") as of June 30, 2024. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions for the survivor benefits, as administered by the staff of SBCERA;
- The characteristics of covered active members and beneficiaries as of May 31, 2024, provided by the staff of SBCERA;
- The assets of the Plan as of June 30, 2024, provided by the staff of SBCERA;
- Economic assumptions regarding future salary increases and investment earnings and adopted by the Board of Retirement for the June 30, 2024 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2024 valuation; and
- The funding policy adopted by the Board of Retirement.

One of the general goals of an actuarial valuation is to establish contributions which fully fund the Association's liabilities. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

Section 1: Actuarial Valuation Summary

Valuation highlights

1. The Board has elected to include the Survivor Benefit Valuation in the regular valuation process. Therefore, the Actuarial Valuation and Review includes the Survivor Benefit liabilities and normal cost, and the valuation assets will include the Survivor Benefit Reserve. We will continue to issue this separate report for the Survivor Benefit as the contribution rate structure is different and there are special assumptions used only for this valuation.
2. We have continued to exclude any potential liabilities associated with current or future terminated vested members in the valuation. This change was made after discussions with SBCERA and is consistent with how these benefits have historically been administered.

Funding measures

3. The funded ratio (the ratio of the survivor benefit reserves to actuarial accrued liability) is 363.3%, compared to the prior year funded ratio of 339.7%. This ratio is one measure of funding status, and its history is a measure of funding progress. This measurement is not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan’s benefit obligation or the need for, or the amount of, future contributions.

The difference between the expected and actual surplus (a gain of \$0.8 million) is due to demographic experience. There is no investment return gain or loss because the survivor benefit reserve is credited at the 7.25% expected rate of return (credited semi-annually).

4. The following table compares the reserves and liabilities for the Survivor Benefit as of June 30, 2024:

	Line Description	Amount
1.	June 30, 2024 reserves	\$98,789,000
2.	June 30, 2024 actuarial accrued liabilities:	
	a. Current recipients	\$22,708,000
	b. Future recipients	4,458,000
	c. Total	\$27,166,000
3.	Liabilities minus reserves: 2c – 1	\$(71,623,000)
4.	Funded ratio: 1 ÷ 2c	363.6%

Section 1: Actuarial Valuation Summary

Contribution Recommendations

5. The following table summarizes the biweekly pay period contribution rate recommendations for the employers and the members:

Contribution Rate	General Employers	Estimated Annual Amount	General Members	Estimated Annual Amount
Current contribution rate	\$0.90	\$456,000	\$0.90	\$456,000
Recommended contribution rate	\$0.91	\$483,000	\$0.91	\$483,000

Risk

6. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2024. The Plan’s funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
7. Because the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan’s future financial condition, but have included a brief discussion of some risks that may affect the Plan in *Section 2, Subsection D*, beginning on page 13.
8. The risk assessment in *Section 2, Subsection D* includes the disclosure of a “Low-Default-Risk Obligation Measure” (LDROM). This disclosure, along with commentary on the significance of the LDROM, is a new requirement under Actuarial Standard of Practice No. 4 (ASOP 4) for all pension funding actuarial valuation reports and can be found on page 14.

Section 1: Actuarial Valuation Summary

Important information about actuarial valuations

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

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

Input Item	Description
Plan provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Member information	An actuarial valuation for a plan is based on data provided to the actuary by the Association. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial information	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the Association. A snapshot as of a single date may not be an appropriate value for determining a single year’s contribution requirement, especially in volatile markets. Plan sponsors often use an “actuarial value of assets” that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan members for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of members in each year, as well as forecasts of the plan’s benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments (if applicable). The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan’s assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

Section 1: Actuarial Valuation Summary

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

- The actuarial valuation is prepared at the request of the Association. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If SBCERA is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting or tax advice and is not acting as a fiduciary to the Plan. This valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The Association should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by SBCERA upon delivery and review. SBCERA should notify Segal immediately of any questions or concerns about the final content.

Section 2: Actuarial Valuation Results

A. Introduction

The Survivor Benefit program was adopted by the County (in January 1976) and South Coast Air Quality District (in February 1977) to replace similar benefits formerly provided by Social Security. These benefits are provided only to eligible beneficiaries of members who are General active employees. The cost of the program is equally shared between the employers and the active employee members.

The contribution rates are calculated to provide for the ongoing cost of benefits, plus any amounts necessary to recognize any shortfall of reserves relative to the actuarial accrued liabilities. A summary of the Survivor Benefit provisions is displayed in *Section 3, Exhibit 2*.

Section 2: Actuarial Valuation Results

B. Member information

Section 3, Exhibit 1 provides a summary of the actuarial assumptions used in this actuarial valuation. Assumptions regarding the number and type of beneficiaries for future deaths were derived from 2021 U.S. Census data. The Board adopted these assumptions as part of the 2023 Actuarial Experience Study. Additional assumptions are necessary for this valuation because the benefit amount varies depending upon the number and type of survivors receiving it.

The following tables provide a summary of the beneficiaries and active members covered by SBCERA.

SBCERA Survivor Benefit Recipients Counts and Type as of June 30, 2024

SBCERA Survivor Benefit Recipients	Death Before 4/1/1994	Death 4/1/1994 or Later
1. Surviving spouse caring for one child OR two children only	0	13
2. Surviving spouse caring for two or more children OR three or more children	0	21
3. One child only OR each of two dependent parents age 62 or older	0	11
4. Widow or widower age 62 or older (no children) or in deferred status	42	143
5. Widow or widower age 60 or older (no children)	0	95
6. Total	42	283

Active Members Covered by SBCERA as of June 30, 2024

SBCERA Covered Members	Count
1. Active members	20,429

Section 2: Actuarial Valuation Results

C. Valuation results and contribution requirements

The funding of the Survivor Benefit comes from the following sources:

1. The Survivor Benefit Reserve, which equals \$98,789,000 as of June 30, 2024; and
2. Projected contributions shared 50-50 by employers and members.

Line Description	Amount
1. June 30, 2024 reserves	\$98,789,000
2. June 30, 2024 actuarial accrued liabilities:	
a. Current recipients	\$22,708,000
b. Future recipients	4,458,000
c. Total	\$27,166,000
3. Liabilities minus reserves: 2c – 1	\$(71,623,000)
4. Funded ratio: 1 ÷ 2c	363.6%

The contribution requirements are determined based on the entry age actuarial cost method. Based on advice received from SBCERA’s legal counsel, the excess of assets over the actuarial accrued liability (Item 3 in the above table) can no longer be used to reduce the contribution rates. This is because CalPEPRA requires contributions be at least equal to the normal cost unless the provisions of Section 7522.52 are met. It is our understanding that those provisions are currently not met and are not anticipated to be met in the future. The employer and member contribution rates are derived below.

Line Description	Amount
1. Biweekly entry age normal cost per active member	\$1.81
2. Employer portion: 50% × 1	\$0.91
3. Member portion: 50% × 1	\$0.91
4. Estimated annual employer contributions	\$483,000
5. Estimated annual member contributions	\$483,000

Note: The above contributions include an adjustment to account for contributions being made throughout the year.

The recommended contribution is expected to remain level in dollar per active member and the funded ratio is expected to remain above 100% assuming there are no future actuarial gains or losses.

Section 2: Actuarial Valuation Results

D. Risk

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

This report does not contain a detailed analysis of the potential range of future measurements, but does include a concise discussion of some of the primary risks that may affect the Plan's future financial condition. We do not recommend that a more detailed assessment of the risks be performed due to the relatively small liabilities of the survivor benefits as compared to the main retirement benefits paid by SBCERA.

This section provides descriptions and basic assessments of the primary risks that are likely to have an ongoing influence on the Plan's financial health. Historical trends and maturity measures are shown in *Section 2, Subsection J* of the June 30, 2024 Actuarial Valuation Report for SBCERA.

Risk assessments

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

The actuarial valuation includes current life expectancy assumptions and an expectation of future improvement in life expectancy, which are significant assumptions given the relatively long duration of liabilities for pension plans. Emerging plan experience that does not match these expectations will result in increases or decreases in the actuarially determined contribution over time.

Because the survivor benefit provides for death benefits payable to surviving spouses and children rather than a retirement annuity such as that paid by the main SBCERA plan, members living longer than expected generally results in a decrease in liabilities and contribution rates.

- **Other Risks**

In addition to longevity, the valuation includes a variety of other assumptions that are unlikely to match future experience exactly. Examples of other demographic assumptions include retirement, termination, and disability assumptions.

Section 2: Actuarial Valuation Results

Low-Default-Risk Obligation Measure (LDRM)

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

The LDRM is a calculation assuming a plan’s assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in June of the measurement period, by The Bond Buyer, is 3.93% for use effective June 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDRM is not used to determine a plan’s funded status or actuarially determined contribution rates. The plan’s expected return on assets, currently 7.25%, is used for these calculations.

As of June 30, 2024, the LDRM for the Plan is \$37.8 million.¹ The difference between the Plan’s actuarial accrued liability of \$27.2 million and the LDRM can be thought of as the increase in the actuarial accrued liability if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the Plan’s diversified portfolio compared to investing only in low-default-risk securities.

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

¹ For comparison purposes, as of June 30, 2023, the LDRM was \$40.0 million based on a discount rate of 3.65%, while the Plan’s actuarial accrued liability was \$27.6 million.

Section 3: Actuarial Valuation Basis

Exhibit 1: Actuarial assumptions, methods and models

Rationale for assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2019 through June 30, 2022 Actuarial Experience Study dated May 24, 2023. Unless otherwise noted, all actuarial assumptions and methods shown below apply to all members for all tiers. These assumptions were adopted by the Board.

Actuarial assumptions

- Those described in the SBCERA June 30, 2024 actuarial valuation report; and
- The following assumptions derived from 2021 U.S. Census data.

Member's Age at Death	Percent Married	Not Married No Children	Not Married One Child	Not Married Two Children	Married No Children	Married One Child	Married Two Children	1 st Child's Age	2 nd Child's Age
Under 25	17%	73%	7%	3%	9%	5%	3%	3	1
25-34	52%	35%	5%	8%	19%	13%	20%	6	4
35-44	75%	14%	5%	5%	15%	17%	44%	10	8
45-54	75%	21%	3%	2%	37%	18%	19%	14	12
55-59	69%	30%	1%	0%	61%	5%	3%	18	16
60-64	69%	30%	1%	0%	61%	5%	3%	21	19
65-74	68%	31%	0%	0%	67%	1%	1%	N/A	N/A
75 and over	49%	52%	0%	0%	48%	0%	0%	N/A	N/A

Child payments are assumed to end when the child reaches age 22.

Widows or widowers are assumed to start payment at age 62 (or later if they are caring for an eligible child).

Actuarial funding policy

Actuarial cost method

Entry age actuarial cost method.

Entry age is the age on the valuation date minus the lesser of years of employment or years of benefit service. Normal cost and actuarial accrued liability are calculated on an individual basis and are based on costs allocated by service, with normal cost determined as if the plan of benefits had always been in effect.

Actuarial value of assets

Survivor Benefit Reserve value as of valuation date.

Amortization policy

Parameters of the amortization policy follow those established for SBCERA's other retirement benefits, with the exception that a level dollar methodology will be used instead of level percent of payroll.

Because the provisions of Government Code Section 7522.52 have not been met, the Survivor Benefit surplus has not been amortized.

Models

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

Justification for change in actuarial assumptions, methods or models

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

Exhibit 2: Summary of plan provisions

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

Plan year

July 1 through June 30

Covered members

This Plan provides a survivor benefit for active general members who die prior to retirement or disability and have been a member continuously for not less than 18 months immediately prior to death. All General active employees at SBCERA are eligible for this benefit.

Member contribution rate

50% of benefit cost, charged to all active General members

Employer contribution rate

50% of benefit cost

Table of benefits

Monthly Allowance

Member's Survivor	Death Before 4/1/1994	Death 4/1/1994 or Later
Surviving spouse caring for one child	\$591.80	\$1,390.00
Surviving spouse caring for two or more children	\$690.40	\$1,622.00
One child only	\$295.90	\$695.00
Two children only (divided between children)	\$581.80	\$1,390.00
Three children only (divided between children)	\$690.40	\$1,622.00
Widow or widower age 60 (no children)	\$0.00	\$663.00
Widow or widower age 62 or older (no children)	\$327.10	\$768.00
Each of two dependent parents age 62 or older	\$295.90	\$695.00
One dependent parent only, age 62 or older	\$325.50	\$795.00
One-time burial allowance	\$255.00	\$255.00

Changes in plan provisions

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

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