



Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve

ACTUARIAL REVIEW REPORT FOR
SAN BERNARDINO COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION

Prepared April 23, 2024





Cavanaugh Macdonald
CONSULTING, LLC
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April 23, 2024

Board of Retirement
San Bernardino County Employees' Retirement Association
348 West Hospitality Lane, Suite 100
San Bernardino, CA 92408

Dear Members of the Board:

Cavanaugh Macdonald Consulting, LLC has performed an independent review of the June 30, 2023 Actuarial Valuation of the San Bernardino County Employees' Retirement Association. As an independent reviewing or auditing actuary, we have been asked to express an opinion regarding the reasonableness and accuracy of the actuarial assumptions, actuarial cost methods, and valuation results. We also reviewed the June 30, 2023 Survivor Benefit Valuation and GASB 67 Actuarial Valuation reports along with the 2019-2022 experience study.

Our opinion on the valuation results was based on a replication valuation of the June 30, 2023 Actuarial Valuations and the Survivor Benefit Valuation, with reviews of the other reports. We would like to thank Segal, the retained actuary for the Association, for their cooperation and assistance in providing the required information to us. ***We find the actuarial valuation and other reports results to be generally reasonable and accurate based on the assumptions used. The actuarial work was performed by qualified actuaries and was performed in accordance with the principles and practices prescribed by the Actuarial Standards Board.*** This report documents the detailed results of our review.

If you need anything else, please do not hesitate to give us a call. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Sincerely,

A handwritten signature in blue ink, appearing to read 'LL'.

Larry Langer, ASA, FCA, MAAA, EA
Principal and Consulting Actuary

A handwritten signature in blue ink, appearing to read 'Brent A. Banister'.

Brent A. Banister, PhD, FSA, FCA, MAAA, EA
Chief Actuary



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SECTION 1 – EXECUTIVE SUMMARY

As an independent auditing actuary, Cavanaugh Macdonald Consulting, LLC (CavMac) has been tasked to provide a general overview and express an opinion of the reasonableness and soundness of the work performed by Segal for the San Bernardino County Employees' Retirement Association (SBCERA). The work to be reviewed included:

- June 30, 2023 Actuarial Valuation and Review
- June 30, 2023 Survivor Benefit Valuation
- GASB 67 Report as of June 30, 2023
- Actuarial Experience Study - Analysis of Actuarial Experience During the Period July 1, 2019 through May 31, 2022

We requested full participant and financial data of the pertinent employee groups from SBCERA along with reports, plan descriptions and applicable statutes pertaining to the plans. We also requested from Segal participant data as reconciled for the June 30, 2023 actuarial valuation as well as complete descriptions of assumptions, methods and valuation procedures.

It is our belief that an audit should not focus on finding differences between actuarial processes and procedures utilized by two different actuaries, but rather to verify there are no material errors and to find improvements to the process and procedures utilized by the Association's actuary. In performing this audit, we attempt to limit discussions concerning differing opinions and focus more on the accuracy of calculations, the completeness and reliability of reporting, and the compliance with generally acceptable actuarial practices and standards of practice in all the work reviewed.

CONCLUSIONS

As described in our report, we have determined that the actuarial methods, assumptions, processes, and reports are consistent with the applicable Actuarial Standards of Practice (ASOPs) and our understanding of GASB Statement 67. Throughout the report, we have noted a few areas where we believe there are opportunities for improvement, but that we believe would not have a material impact on the results of the June 30, 2023 valuation. There is no urgency for change. Therefore, such suggestions and recommendations could be considered when the next experience study is performed or when the June 30, 2024 valuation is prepared.

Additional details on our audit findings can be found in the remaining sections of this report.

- In Section 2 of our report, we discuss our review and observations of the 2019-2022 Analysis of Actuarial Experience. We find this experience study to be consistent with the ASOPs and believe the proposed assumptions and methods to be appropriate for the actuarial work that Segal performs for the Association. We offer some suggestions and ideas for consideration in enhancing future studies.



SECTION 1 – EXECUTIVE SUMMARY

- In Section 3 of our report, we review the actuarial methods that are used to develop the actuarial contribution rate. In our opinion, these methods are reasonable and appropriate for systematically funding the benefits.
- In Section 4 of our report, we compare the data provided by SBCERA with the data used by Segal. We find that the data is consistent and appropriate.
- In Section 5 of our report, we independently calculated the liabilities of SBCERA for the pension valuation and the survivor benefit valuation. We reviewed the cost calculations and accounting calculations and found them to be appropriate.
- In Section 6, we provide our analysis of the valuation report produced by Segal. We found it to be substantially in compliance with the ASOPs, and we offered a few suggestions for improvement.
- In Section 7, we provide our analysis of the GASB 67 accounting report produced by Segal. We found the report to be substantially in compliance with the ASOPs.

Because of the complexity of actuarial work, we would not expect to match Segal's results exactly, nor would we necessarily expect our opinions regarding the selection of assumptions and methods to be the same as the opinions of Segal. Our differences of opinion are not material.

The remainder of this report provides the basis for our findings for each of the tasks, including our recommendations.



SECTION 2 – ACTUARIAL ASSUMPTIONS

BACKGROUND ON ACTUARIAL ASSUMPTIONS

The actuarial assumptions form the basis of any actuarial valuation or cost study. Since it is not possible to know in advance how each member's career will evolve in terms of salary growth, future service, or cause of termination, the actuary must develop assumptions in an attempt to estimate future patterns. These assumptions enable the actuary to value the amounts of benefits earned and to reasonably estimate when and how long these benefits will be paid. Similarly, the actuary must make an assumption about the future investment earnings of the trust fund. In developing the assumptions, the actuary examines the past experience and considers future expectations to make the best estimate of the anticipated experience under the plan.

There are two general types of actuarial assumptions:

- ***Economic assumptions:*** These include the valuation interest rate (expected return on plan assets), assumed rates of salary increase, price inflation, wage inflation, and increases in total payroll. The selection of economic assumptions should conform to ASOP No. 27 “*Selection of Economic Assumptions for Measuring Pension Obligations*”.
- ***Demographic assumptions:*** These include the assumed rates of retirement, mortality, termination, and disability. The selection of demographic assumptions should conform to ASOP No. 35 “*Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*”.

The June 30, 2023 valuations we are auditing used assumptions developed by Segal in the Actuarial Experience Study, subtitled *Analysis of Actuarial Experience for the Period July 1, 2019 through May 31, 2022*. This study recommends assumptions and methods that were approved by the Board for use beginning with the June 30, 2023 actuarial valuations. We have reviewed the methods and conclusions of Segal's report and formed our opinion. We did not replicate the calculations in the report since that was beyond the scope of our assignment.



SECTION 2 – ACTUARIAL ASSUMPTIONS

ECONOMIC ASSUMPTIONS

Actuarial Standards of Practice (ASOPs) are issued by the Actuarial Standards Board to provide guidance to actuaries with respect to certain aspects of performing their work. As mentioned earlier, ASOP 27 is the actuarial standard that addresses the selection or recommendation regarding economic assumptions for measuring pension obligations (liabilities) under defined benefit plans. We discuss the assumptions used by Segal below:

Price Inflation: Price inflation impacts the assumptions for investment return, salary and payroll growth, and cost-of-living-adjustments (COLA). The underlying price inflation component in all of these should be consistent in accordance with the guidance provided in ASOP 27.

Segal considers a variety of sources, including historical inflation, the forecasts of investment advisors, the Social Security Administration, and the inflation estimate inherent in the bond market in arriving at their recommendation to reduce the inflation assumption from 2.75% to 2.50%. We believe that Segal's methodology and sources in setting this assumption are reasonable. Because inflation increased dramatically in 2021 following a number of years of being low, we understand that the decision to lower the long-term inflation assumption might seem surprising to some people. Despite what has been observed recently, the bond markets have consistently reflected an expectation that the low rates we have observed for the last 20-30 years will return before long. Consequently, our opinion is that Segal's recommendation is reasonable.

Retiree Cost-of-Living Increases: Connected with price inflation, but an assumption which needs to be independently set, is the expected Cost-of-Living Adjustment (COLA) received by retirees. The provisions provide for a COLA of observed inflation up to 2.0%. Segal provides an explanation of their considerations in developing this assumption, concluding that 2.0% is most appropriate. We believe that Segal's rationale and conclusion are appropriate.

Investment Return Assumption: The investment return assumption should represent the long-term compound rate of return expected on the plan assets, considering the asset allocation, the real rate of return on each asset class, and the underlying inflation rate, all net of expenses paid from the trust.

The long-term relationship between price inflation and investment return has long been recognized by economists. The basic principle is that the investor demands a more or less level "real return" – the excess of actual investment return over price inflation. If inflation rates are expected to be high, investment return rates are also expected to be high, while low inflation rates will result in lower expected investment returns, at least in the long run.

The period considered for pension funding represents a very long time horizon. In reviewing this assumption, the actuary should consider asset allocation policy, historical returns, and expectations of future returns. Frequently, asset advisors focus on no more than the next 5 to 10 years since they are most concerned with how to invest the funds currently to maximize returns. While



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actuaries are projecting benefits to be paid for the next 50 to 100 years, the short term is also relevant, especially for funds with negative cash flows. This difference in perspective can significantly influence how investment advisors and actuaries derive an investment return assumption.

Segal considers the capital market assumptions of both NEPC, the advisor to SBCERA, and other consultants who Segal works with as part of their California public plan work. Both sets of assumptions are then applied to the asset allocation of the SBCERA portfolio to estimate an expected annual return. Both sets of assumptions yield a similar expectation. Segal later adjusts this expected return for what they term a “risk adjustment” which reflects the mathematical reality that the average compound return (geometric mean) of a portfolio is less than the average annual return (arithmetic mean). This is a needed adjustment. Alternatively, it would be possible to directly calculate the compound return directly from the capital market assumptions by using a statistical distribution assumption (the log-normal distribution) and observed correlations between investment classes. Because these should lead to about the same result, we do not have a preference for method.

After considering these adjustments, Segal arrives at a recommended investment return assumption of 7.25%. One factor they note in their analysis is a concern that the current capital market assumptions of investment advisors are perhaps optimistic because they reflect low returns in the 2021-2022 year as well as the increase in the federal funds rate. They then estimate that there is a 67% chance of meeting or exceeding this return over time (as a compound return). We find their approach, analysis, and results to be reasonable.

General Wage Increases: The general wage growth or wage inflation assumption consists of price inflation and real wage growth (also called productivity). As the prices of goods and services increase, we expect wages to increase as well. Productivity is a measure of how much wages increase across the whole labor pool in excess of the rate of price inflation. Both of these items tend to be a function of the general economy rather than system specific. Segal assumes a real wage growth of 0.50% and in keeping with their change in price inflation, recommends changing the general wage increase from 3.25% to 3.00%. Based on our experience with public employment, we find this to be reasonable.

Individual Salary Scale: There are two factors that generally affect salary increases and are typically reflected in the individual salary scale. The first is the wage inflation or the total wage growth assumption. The second component, frequently identified as merit scale, reflects the portion of salary increases provided at the individual level, including promotion, increased skills, longevity pay, and other similar items. The combination of these components is reflected in the total individual salary scale.

Segal has developed merit scales for general and safety members, reflecting that these two groups of members experience different patterns of pay increases. The assumptions are also service based, reflecting that members typically receive their largest pay increases in their early years. To



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improve the credibility of the data, Segal not only considered the last three years' data, but also looked at the last six years as well. They then used these observations to make adjustments to the current assumptions. We find their method and proposed assumptions to be reasonable.

One suggestion we have for future consideration would be to reduce the merit piece to 0% at 25 or 30 years of service. Currently, the merit component is 1.30% for general members and 1.75% for safety members for years eleven and over. At some point, employees have generally mastered their jobs and have been promoted to a point where they remain until retirement. From a theoretical standpoint, there are no merit increases at this point, and the observed pay raises are due to wage growth. Because of the earlier retirement eligibility in public safety jobs, there may still be merit through all service levels, so the on-going merit component may be reasonable for this group. We do not believe that the current approach used by Segal is inappropriate but offer this idea as a possible refinement.

Payroll Growth Assumption: The UAAL is amortized as a level percentage of payroll over the amortization period. As a result, a payroll growth assumption is necessary to develop the UAAL contribution rate. Segal assumes that payroll will grow at 3.00% (reduced from 3.25%), which is the same as the general wage inflation assumption. This is reasonable because as members retire or terminate, they are replaced by new members with lower salaries on average. We find the assumption reasonable, but also note that some systems use a payroll growth assumption that is less than wage inflation to provide for some conservatism, especially as the last part of the Baby Boomers are retiring.

Leave Cashout Assumption: Certain Tier 1 members are eligible for leave cashouts. While some cashouts occur throughout employment and are reflected in pay, others are provided only at the end of employment. To reflect the impact of this, Segal applies a load that varies by General or Safety members. Based on the observed impact over the study period, Segal recommended adjusting the rates part way from the current to observed amounts. We find this approach reasonable.

Administrative Expenses: Because SBCERA's operation expenses are made from plan assets, it is appropriate to reflect those expenses as part of the annual cost. Segal includes an administrative expense assumption as part of the normal cost. (Investment expenses are reflected in the net investment return assumption.) Segal reviewed the administrative expenses as a percentage of payroll for both the last three and last six years, recommending that the assumption be increased from 0.85% of pay to 0.90% of pay. We reviewed their methodology and analysis in arriving at how to modify this assumption and believe that it is reasonable.



SECTION 2 – ACTUARIAL ASSUMPTIONS

DEMOGRAPHIC ASSUMPTIONS

The major demographic assumptions are the assumed rates of retirement, withdrawal (with or without a vested benefit), disability, and mortality (death before or after retirement). There are also various minor assumptions that sometimes are developed with a significant component of professional judgment since useful data is not always readily available.

In the following paragraphs, we make specific comments on the demographic assumptions.

Rates of Retirement: Segal has developed retirement rates that vary by employment type and tier. Within those groups, rates are age-based. Further, Tier 1 (for both General and Safety) has rates that vary by service above or below 30 years. The need for these different sets of rates follows from the SBCERA benefit structure and plan coverage.

Segal tabulated the current assumed retirement rates and the actual retirement rates observed during the study period and then made adjustments to the assumed rates, typically moving part way between the current assumption and the observed experience with consideration for smooth patterns of behavior. Segal notes that Tier 2 has limited data at this point, and so they also consider Tier 1 experience and professional judgment. We note that this methodology is commonly used, and we believe that Segal's approach and resulting rates are reasonable.

We have some observations that we believe could be helpful for the next study. First, it would be helpful to provide some context of how many exposures and retirements occurred at the various ages in the tables and graphs. All the information is shown as rates only, so there is no easy way for a reader to determine which ages had many exposures and retirements and which had few. Changes when there is more data available can be made more confidently than changes with less data.

Another consideration in this study would be some discussion regarding to what extent the Covid pandemic might have affected retirement patterns. In our review of systems across the country, there has not been a uniform impact – sometimes it appears that there have been additional retirements, sometimes there have been fewer retirements, and sometimes there is no clear change from prior patterns. However, since the observed rates for Tier 1 were generally in line with assumptions, this discussion would perhaps be only to note that Covid did not appear to affect behavior.

As part of the retirement rates analysis, Segal also considered assumptions relating to when deferred vested members commence benefits, the prevalence of reciprocity being utilized, and the likelihood of an eligible spouse or domestic partner, along with the expected age difference. Segal provided information regarding the current assumption, the observed data from the study period, and the resulting recommended changes.



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Rates of Mortality: One of the most important demographic assumptions in the pension valuation is mortality because it projects how long benefit payments are expected to be made. The longer retirees live and receive benefits, the larger the liability of the system, thus increasing the contributions required to fund the system. In addition, if members live longer than expected based on the assumption, the true cost of future benefit obligations will be understated, and contributions will increase as the unfavorable experience unfolds.

Constructing mortality tables requires a significant amount of data, and so almost all retirement systems rely on mortality tables published by the Society of Actuaries. SBCERA has been using the Pub-2010 family of tables, and Segal recommended their continued use. Since these tables were developed using public plan retirement data, we are in full support of this. Further, because of the relatively small number of deaths in any given year, Segal aggregated the nine years prior to the study period plus the first year of the study period to perform their analysis. The second and third years of the study period were excluded because they appeared to be affected by the Covid pandemic.

As noted, Pub-2010 is a family of tables. Segal selected tables based on general membership or public safety, as well as the membership status (healthy retirees, disabled retirees, contingent survivors, or active employees). We agree with this approach.

In some cases, Segal recommended increasing or decreasing the mortality rates by 5% or 10%. This is a standard technique used to improve the quality of the fit to the table to the observed data. We note that Segal does not attempt to finely tune the fit and we believe that is very appropriate in light of the amount of data available.

Segal assumes that mortality will increase in keeping with the MP-2021 scale, the most recent mortality projection scale published by the Society of Actuaries. Note that there was no 2022 projection scale published because of concerns that the Covid epidemic skewed the data used for developing the projection scales.

Finally, Segal describes their recommended methodology of selecting the mortality table for calculating Tier 1 member contribution rates. They project the rates out 30 years from the table base year of 2010. We typically use a similar approach and find Segal's approach reasonable.

Rates of Termination: The termination rates developed by Segal are service-based tables and vary by employment type. In our experience, such a set of tables is commonly made and very appropriate. As is also very common, no terminations are assumed once a member is eligible for retirement.

As with retirement, Segal tabulated the current assumed termination rates and the actual termination rates observed during the current and prior study periods and then adjusted the assumed rates, typically moving part way between the current assumption and the observed experience with consideration for smooth patterns of behavior. We note that this methodology is



SECTION 2 – ACTUARIAL ASSUMPTIONS

commonly used, and we believe that Segal's approach and resulting rates are reasonable. As with the retirement analysis, there is little information regarding the number of exposures or terminations to help assess how much credibility should be assigned to the observations.

Also, as with retirement, we believe it would have been appropriate to indicate an awareness of the Covid pandemic and consider whether any of the observed experience was related to that. For safety members in particular, the actual rates were higher, and may be partly a result of higher police terminations than we have seen around the country in recent years.

As part of the termination analysis, Segal analyzed what portion of the terminating members elect a refund of contributions rather than waiting for a deferred retirement benefit. This assumption differs between General and Safety members as well as being split by whether a member elected refundable or non-refundable contributions. Segal recommended reducing the assumption for all groups, moving part way from the current assumption towards the observed experience. We find this to be reasonable.

While the current approach to the refund assumption is fine, we offer a possible alternative for consideration. To provide a small amount of conservatism, the refund assumption could be to assume that each member makes the refund decision based on whether the refund is more or less valuable than the present value of the deferred benefit. While that is not how people actually make the decision, it does protect the Association from losses. This alternative is not likely to be of significant cost consequence.

Rates of Disability: In most retirement systems, disability retirements are relatively rare, making it difficult to set rates. The rates used by Segal are age-based, with separate tables for general and safety employment groups. Sometimes separate tables are developed for males and females, but because of the relatively low incidence of disabilities for a plan of SBCERA's size, it is doubtful that a credible and meaningful distinction could be made.

We do not have any concerns with the incidence of disability rates based on our experience. We note that Segal made changes to these tables that were intended to move part way toward the observed experience. We believe this is very appropriate.

Survivor Benefit Assumptions: There are several assumptions that Segal sets relative to family composition for purposes of the survivor benefits. The data required to develop such assumptions is not generally available in most retirement systems, and even if it were, the amount of data required is more than would be possible for a system the size of SBCERA. Consequently, Segal relies on US census information to set these assumptions. We find this methodology and the resulting assumptions to be reasonable.



SECTION 3 – ACTUARIAL METHODS

BACKGROUND ON ACTUARIAL METHODS

Actuarial methods are used to provide for systematic funding of a retirement plan. There are four broad considerations when establishing a funding policy for a pension plan:

- **Sufficiency:** The funding target should be the value of benefits accrued to date so that benefits can be paid when due.
- **Intergenerational equity:** Taxpayers and members should pay for workers' pensions while those workers are providing their services. The goal is to accumulate the funds for the worker's benefits over the worker's career.
- **Stability of contributions:** Generally governmental entities prefer predictable funding patterns. While stable contributions are easy to budget for, stability should not be achieved at the expense of the first two considerations.
- **Accountability and transparency:** Each component of the funding policy should be clear on the intent and effect.

Generally, a funding policy is composed of the following actuarial methods:

- Actuarial Cost Method
- Asset Valuation Method
- Unfunded Actuarial Accrued Liability Amortization Method
- Output Smoothing Methods
- Contribution Lag Policy

The last two methods on the list above have existed in practice for some years in the public sector actuarial universe, but have been recently explicitly added to ASOP 4, the standard that guides actuaries in these matters. Note that not all of these elements are necessary for a complete funding policy. We discuss each component of the actuarial methods for SBCERA and how these components satisfy the four broad considerations when establishing a funding policy below.

We reviewed the SBCERA Actuarial Funding Policy effective October 2022 and scheduled for review October 2025. This policy is mirrored in Section 4 of the actuarial valuation report. Consideration should be given to referencing the policy document in the actuarial valuation report to allow the interested reader to see all of the policy details.



SECTION 3 – ACTUARIAL METHODS

ACTUARIAL COST METHOD

For all pension plans, whether defined benefit or defined contribution, the basic retirement funding equation is:

$$C + I = B + E$$

Where:

- C = employer and member contributions
- I = investment income
- B = benefits paid
- E = expenses paid from the fund, if any.

As can be seen from the formula, for a given level of benefits and expenses the greater “I” is, the smaller “C” is. This is the underlying reason for advance funding a pension plan, and historically investment income pays for 75% to 80% of the benefit dollars received by plan members. In other words, for every dollar paid to a member only 20 to 25 cents come from contributions.

Of course, the problem with the formula is that to figure out exactly how much to contribute, the plan would have to be closed to new members and allowed to operate until all retirees were deceased. At that point, the benefits and expenses actually paid out, and the investment income earned would be known and, using the equation above, the true cost could be determined. Since most plans are ongoing and have no intention of closing, and since even with a closed plan it takes a very long time before all benefits are finally paid out, plan sponsors hire actuaries to estimate the cost of their plans and to create a budget for systematic contributions to meet that cost.

To determine the contributions needed, the actuary’s first step is to estimate on a given date (the valuation date) the value of all benefits (and expenses) that will be paid to the existing active and retired membership over their remaining lifetimes based on the plan’s current benefit structure. This estimation requires the use of assumptions regarding both future events (termination, disability, retirement, death, etc.) and future economic conditions (return on assets, inflation, salary growth, etc.). The SBCERA assumptions were covered in the previous section.

By combining the assumptions for future events and the salary growth assumption, the actuary generates an expected benefit payment stream. In other words, a string of annual payments expected to be made to the current active and retired members from the valuation date until all members are no longer living. Then the actuary applies the investment return assumption to discount each year’s payments to the valuation date, creating the present value of all future benefits or the total liability of the plan.



SECTION 3 – ACTUARIAL METHODS

The difference between the total liability and the current assets of the plan represents the present value of future contributions (PVFC) that must be made by either members or the employers. Usually, the members and employers cannot contribute the entire difference in one year, but rather desire a relatively smooth contribution pattern over time that also meets any external constraints. To budget for the PVFC, the actuary applies an actuarial cost method. There are several acceptable cost methods, but it's important to recognize that they are nothing more than budgeting tools.

Different actuarial cost methods can provide for faster funding earlier in a plan's existence, more level funding over time, or more flexibility in funding. The choice of an actuarial cost method will determine the pattern or pace of the funding and, therefore, should be linked to the long-term financing objectives of the system and benefit security considerations.

The actuarial cost method used by SBCERA is the level percent of pay entry age normal method (except the survivor benefit valuation uses level dollar). This cost method determines the normal cost as a level percentage of pay which, if paid from entry into the plan through the last assumed retirement age, will accumulate to an amount sufficient to pay the expected benefits. Entry age normal tends to result in reasonably stable contribution rates, a feature that has helped make it the most used cost method for public plans. The use of the entry age normal cost method satisfies the sufficiency and intergenerational equity components discussed above by developing contributions for taxpayers and members for workers' pensions while those workers are providing their services. In addition to the normal cost, there is also a cost determined by amortizing the unfunded actuarial accrued liability (discussed later in this section).

In our opinion, the actuarial cost method employed by Segal is appropriate and will systematically fund the prospective pension benefits on an actuarially sound basis if all actuarial assumptions are realized and the actuarial required contributions are made.



SECTION 3 – ACTUARIAL METHODS

ASSET VALUATION METHOD

Since the purpose of actuarial funding is to build up an asset pool (remember the importance of “I” in “C + I = B + E”) actuaries need to value the current asset pool on each valuation date. The market value could be used, but it would tend to create too much volatility from valuation date to valuation date, and a single day’s measurement is not necessarily indicative of the true underlying value of the investments held by the plan. Thus, most actuaries use an asset valuation method which smooths out these fluctuations in pursuit of achieving more stable funding measures and (when relevant) developing more level contributions. A good asset valuation method places values on a plan’s assets which are related to current market value, but which will also produce a smooth pattern of costs. This is a question of balancing fit (measured against market value) and smoothness.

The goal of the actuarial asset valuation method is thus to smooth or reduce investment market fluctuations. This is particularly important during periods of volatile capital markets in which abrupt changes in asset values, when factored into the funding valuation, produce sudden unnecessary changes in contribution levels. In this case, “unnecessary” implies that the change in asset values is not necessarily a true revaluing of the assets involved, but rather a fluctuation reflecting a current economic climate or a short-term reaction to specific news.

In our opinion, desirable characteristics of an actuarial asset valuation method include the following:

- The method should be simple to operate. It should be readily calculable from financial statements.
- The method should be easy to explain to all interested parties.
- The theoretical underpinnings should be solid and not produce a long-term lag to the fair value of assets. The value produced should account for market values.
- The method should smooth the effect of market fluctuations.
- Investment decisions should not be affected by the actuarial asset valuation method, and vice versa.
- The value produced should be realistic; the price tag placed on assets should be sensible and should not cause other variables to be adjusted to account for unrealistic asset values.



SECTION 3 – ACTUARIAL METHODS

The use of an asset valuation method satisfies the stability of contributions component by providing for contribution stability which is not achieved at the expense of the sufficiency and intergenerational equity components of a sound funding policy.

SBCERA Asset Valuation Method: The asset valuation method used by Segal in the valuation is a method commonly used by other public sector retirement systems. The smoothing method finds the difference between the actual net investment return on the market value of assets and the expected investment return on the market value of assets. The differences are developed annually over a five-year period. This difference is then recognized equally over five years. No corridor is applied. Finally, various non-valuation reserves are subtracted from the final actuarial value of assets to arrive at the valuation value of assets which is used to develop the unfunded actuarial accrued liability.

We reviewed the calculations, and they are being applied properly. The amount of the expected and actual returns is included by Segal in the development of the actuarial value. The derivation of the expected amount is not included, and consideration can be given to including the calculation. Using the financials in the actuarial valuation report, we were able to replicate the amount of the expected annual return within tolerance.

Compliance with ASOP 44: Actuarial Standard of Practice Number 44, “*Selection and Use of Asset Valuation Methods for Pension Valuations*”, provides guidance to the actuary when selecting an asset valuation method for purposes of a defined benefit pension plan actuarial valuation. When considering the use of an asset valuation method other than market value, ASOP 44 states the actuary should select an asset valuation method that is designed to produce actuarial values of assets that bear a reasonable relationship to the corresponding market values. Further guidance states that the asset valuation method must satisfy both of the following criteria:

- The asset values fall within a reasonable range around the corresponding market value.

AND

- Any differences between the actuarial value of assets and the market value of assets are recognized within a reasonable period of time.

In lieu of satisfying both (a) and (b) above, an asset valuation method meets ASOP 44 requirements if, in the actuary's professional judgment, the asset valuation method either:

- Produces values within a sufficiently narrow range around market value OR
- Recognizes differences from market value in a sufficiently short period.



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Several of the terms in the criteria of ASOP 44 such as “reasonable” and “sufficiently narrow” are not well defined. As we consider the current asset valuation method used by SBCERA in light of ASOP 44, we believe it satisfies these requirements. The asset valuation method does not include a corridor which is allowed under ASOP 44. The five-year phase in of the difference between actual and expected returns is sufficiently short enough to not require a corridor. Use of a corridor can result in volatility in the unfunded actuarial accrued liability and resulting contributions.

The current asset valuation method is reasonable, complies with actuarial standards and provides for more stable employer contributions than if the unadjusted market value was used without impacting the long-term funding of SBCERA.



SECTION 3 – ACTUARIAL METHODS

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) AMORTIZATION METHOD

The UAAL amortization method determines the length of time and the structure of the increase or decrease in contributions required to systematically fund the UAAL. Amortization payment schedules are maintained for each of the following groups:

- County General
- Superior Court
- Other General
- SCAQMD
- Safety
- Combined

The UAAL amortization method used for the calculated contribution rates is as follows:

Amortization period: The period over which the UAAL is paid off. Effective June 30, 2011, the periods used for any new UAAL varies by source as follows:

- Actuarial (experience) gains/losses – 20 years,
- Assumption or method changes – 20 years, and
- Plan amendments – 15 years,
 - with alternate shorter periods which may be recommended by the actuary based on average remaining future service for actives and remaining life expectancy for retirees with a focus on the increased cash flow of the amendment and adjustments to avoid incremental negative cash flow, and
 - temporary retirement incentive – up to 5 years.

Prior to June 30, 2011, the period was 20 years for all sources of UAAL.

Closed or open amortization: Under a closed amortization the amortization period decreases by one each year and the associated UAAL is “paid off”; under an open amortization, the UAAL is amortized over the same amortization period and the associated UAAL is not “paid off”. A closed period is used for SBCERA, which complements the policy of amortization layers that is used.

Single base or amortization layers: Under a single base all UAAL is amortized as one component; under amortization layers the UAAL is broken down into several layers, with new layers added each valuation. An amortization layers policy is used for SBCERA.

Level dollar or level percent of payroll: Under level dollar the payments are calculated so the payment is the same dollar amount in the future; under level percent of payroll the payments are projected to increase each year. The survivor benefit program uses a level dollar approach. For



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all groups in the retirement benefit program, the level percent of payroll method is used and the payment increase assumption is the payroll growth assumption of 3.00% per year.

We were able to confirm the calculations used for the tables of amortization bases in Exhibit H of the actuarial valuation report.

The UAAL amortization method also includes a policy if overfunding exists, which we refer to as a surplus management policy. If the funded ratio exceeds 120%, any prior UAAL bases are fully recognized and eliminated. Any surplus in excess of 120% of the actuarial accrued liability is amortized over an open 30-year period. This has the effect of contributing the employer normal cost when the funded ratio is between 100 and 120%, and something less than the employer normal cost when the funded ratio is above 120%.

Compliance with ASOP 4: Revised Actuarial Standard of Practice Number 4, “*Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*”, which is first effective for the June 30, 2023 actuarial valuation of SBCERA, provides guidance to the actuary when selecting an amortization policy in section 3.14:

- The actuary should select an amortization method for each amortization base that is expected to produce amortization payments that fully amortize the amortization base within a reasonable time period or reduce the outstanding balance by a reasonable amount each year.
- For purposes of determining a reasonable period or a reasonable amount, the actuary should take into account factors including, but not limited to, the following, if applicable:
 - a. whether the amortization method is open or closed;
 - b. the source of the amortization base;
 - c. the anticipated pattern of the amortization payments, including the length of time until amortization payments exceed nominal interest on the outstanding balance;
 - d. whether the amortization base is positive or negative;
 - e. the duration of the actuarial accrued liability;
 - f. the average remaining service lifetime of active plan participants; and
 - g. the asset values fall within a reasonable range around the corresponding market value.

The UAAL Amortization Method used by Segal for the SBCERA actuarial valuations takes this guidance into consideration, in particular the choice of an amortization policy that fully amortizes the UAAL. Additional guidance on parameters can be found in Actuarial Funding Policies and Practices for Public Pension Plans written by the Conference of Consulting Actuaries Public Plans



SECTION 3 – ACTUARIAL METHODS

Community in October 2014. We find that the amortization method complies with relevant ASOPs and common practice in the public plans community.

We believe these amortization methods are well thought out and reasonable.

OTHER ACTUARIAL METHODS

Output Smoothing Methods: The revised ASOP 4 provides guidance to the actuary when selecting an output smoothing method in section 3.16. Output smoothing methods can be used to reduce volatility of the employer contribution. Common output smoothing methods include:

1. Phasing in the impact of assumption changes on contributions,
2. Placing a corridor around changes in the dollar amount, contribution rate, or percentage change in contributions from year to year,
3. Adjustments to the pattern of net deferred investment gains and losses in the determination of the actuarial value of assets, and
4. Amortization base management where similar amortization bases are combined to reduce potential large changes in future employer contributions.

Segal does use Output Smoothing Methods, particularly items three and four in the list above. Segal recommends the method based on professional judgement and provides an actuarial analysis of the recommended change for the Board to adopt. Item three is contained in the Asset Smoothing Method section of the Funding Policy document. Consideration could be given to including item four in the Amortization Policy section of the Funding Policy document. The use of Output Smoothing Methods is not required and must be coordinated with relevant statutory requirements, but we offer items one and two for consideration for use in future valuations as the need arises. We find that the Output Smoothing Methods employed by Segal are well thought out, reasonable and consistent with the three objectives of the Funding Policy.

Contribution Lag Policy: The revised ASOP 4 added guidance to the actuary when selecting a contribution lag policy in section 3.20:

When calculating an actuarially determined contribution, the actuary should consider reflecting the passage of time between the measurement date and the expected timing of actual contributions.

For SBCERA, the employer contribution rates for July 1, 2024 to June 30, 2025 are developed by dividing the June 30, 2023 employer normal cost plus UAAL amortization payment by the expected payroll from July 1, 2023 to June 30, 2024. These rates are applied to the actual payroll



SECTION 3 – ACTUARIAL METHODS

from July 1, 2024 to June 30, 2025. No adjustment is made for the passage of time, a very common approach for employer contribution rate development for public sector retirement systems that are used in the following fiscal year.

We believe the entire array of actuarial methods used by Segal comply with Actuarial Standards of Practice, are generally reasonable and well thought out. Consideration could be given to employing output smoothing methods or reflecting the passage of time as noted above.



SECTION 4 – DATA REVIEW

DATA ANALYSIS

We requested and received the participant data files that SBCERA provided to Segal for the June 30, 2023 valuation. Segal also supplied us with their processed active, inactive, terminated vested, retired and beneficiary data files as they used the data for the June 30, 2023 valuation. Our review of the data was to assure that the processing performed by Segal resulted in data sets that may be reasonably used for the intended calculations.

The actual data supplied by SBCERA to Segal each year is as of May 31 rather than June 30. In order to prepare the valuation as of June 30, one month of service is added for active members. Ages are calculated based on the June 30 valuation date. This approach is reasonable and not uncommon.

As is typical with most plans, the raw and processed data did not match exactly. There may be elements in the data administration system that need some sort of adjustment in order to be used in an actuarial context or other items that are needed for the valuation that are not available from the administration system. It is not uncommon to see adjustments made to the same records year after year because the information needed for the valuation is either not contained in the data administration system or is not in the format needed for the actuarial valuation. We observed a very limited number of discrepancies, as would be expected following Segal's screening and review process, which would typically include clarification by SBCERA of certain unusual, missing, or inaccurate data items.

We also considered the data elements provided by SBCERA to determine if the data contained sufficient detail to be able to adequately assess the liabilities of the Association. We did not identify any issues that were of concern to us.

Upon review of the data we are comfortable with the processed data that is being used for the actuarial valuation.

The following table provides a comparison of the raw data with the data processed by Segal for the valuation.



SECTION 4 – DATA REVIEW

RAW VS. PROCESSED DATA ANALYSIS

	(1) Valuation Report or Segal Data Files	(2) SBCERA Raw Data Files	(1) / (2)
Active Members			
Count	22,084	22,085	100.00%
Average Age	43.7	43.7	100.00%
Average Service	10.4	10.4	100.00%
Inactive Vested Members			
Count	10,324	10,324	100.00%
Average Age	43.7	43.7	100.00%
Retired Members			
Count	11,526	11,526	100.00%
Average Age	70.4	70.4	100.00%
Average Monthly Benefit	\$4,423	\$4,423	100.00%
Disabled Members			
Count	1,700	1,700	100.00%
Average Age	65.7	65.7	100.00%
Average Monthly Benefit	\$4,462	\$4,462	100.00%
Beneficiaries			
Count	2,163	2,166	99.86%
Average Age	72.6	72.6	100.00%
Average Monthly Benefit	\$2,358	\$2,356	100.08%

Our analysis of the June 30, 2023 valuation data includes comparisons of relevant data fields in the raw data files provided by SBCERA to the final valuation data used by Segal for 100% of the records. Some examples of data fields reviewed include date of birth, service, salary, plan tier, benefit amount, and form of payment. We did not find any concerning issues with the data during our review.



SECTION 5 – ACTUARIAL VALUATION RESULTS REVIEW

REASONABLENESS OF THE ACTUARIAL VALUATION RESULTS

This section of our review discusses the reasonableness and accuracy of the valuation liabilities and costs.

Generally accepted actuarial standards and practices provide actuaries with the basic mathematics and the framework for calculating the actuarial results. When it comes to applying those actuarial standards to complex calculations, differences may exist due to individual opinion on the best way to model the liabilities. Although these factors may lead to variance in the calculated results, the differences should not be material. Differences may also arise from the actuarial software used to make these calculations, not only in the actual pieces of the benefits being calculated, but also in the allocation of liabilities between past and future service for active members. Generally, differences in the present value of benefits of 1% to 2% or less and differences in the actuarial liabilities of 5% or less are considered reasonable. The normal cost rate should generally be within 5-7% as well, but it is also important that it be consistent with the relationship of the present value of benefits and the actuarial liability.

RETIREMENT PLAN VALUATION

As part of the actuarial audit, CavMac used the data provided by Segal to reproduce the valuation liabilities used for the cost calculations. We have presented a summary of the results at the end of this section. Note that we looked at a finer level of detail than is displayed, examining results by status (in-pay, beneficiaries, actives, etc.) and decrement status (retirement, disability, etc.) within each subgroup. This allowed us to make sure that there were no situations in which there was a proportionately large difference that would not be detectable in total.

Based on the results of our review, overall, we find the actuarial liabilities and normal cost measures to be reasonable.

We replicated a stratified sample of the member contribution rates and found a consistency in the comparison that gave us assurance of the reasonableness of the Segal results. Based on this analysis, we find the member contribution rates to be reasonable.

As the tables on the following page indicate, we matched most subgroups within very reasonable tolerances.



SECTION 5 – ACTUARIAL VALUATION RESULTS REVIEW

Comparison of June 30, 2023 Liability Measures (in thousands)

Present Value of Future Benefits						
Total						
		Segal		CavMac		
		<u>Tier 1</u>	<u>Tier 2</u>	<u>Total</u>	<u>Tier 1</u>	<u>Tier 2</u>
Actives	\$ 7,124,274	\$ 2,488,218	\$ 9,612,492	\$ 7,138,739	\$ 2,498,106	\$ 9,636,846 0.25%
Term Vested	633,952	73,341	707,293	630,652	73,447	704,100 -0.45%
In Payment	<u>9,150,521</u>	<u>50,238</u>	<u>9,200,759</u>	<u>9,087,851</u>	<u>49,508</u>	<u>9,137,360</u> -0.69%
Total	\$ 16,908,747	\$ 2,611,797	\$ 19,520,544	\$ 16,857,243	\$ 2,621,062	\$ 19,478,305 -0.22%
General	Segal	CavMac	Difference	Superior Court	Segal	CavMac
Tier 1	\$ 10,103,938	\$ 10,042,934	-0.60%	Tier 1	\$ 669,149	\$ 666,601 -0.38%
Tier 2	<u>1,596,554</u>	<u>1,594,164</u>	-0.15%	Tier 2	<u>107,531</u>	<u>107,522</u> -0.01%
	\$ 11,700,492	\$ 11,637,098	-0.54%		\$ 776,680	\$ 774,123 -0.33%
Safety	Segal	CavMac	Difference	SCAQMD	Segal	CavMac
Tier 1	\$ 4,524,348	\$ 4,534,860	0.23%	Tier 1	\$ 1,102,525	\$ 1,104,382 0.17%
Tier 2	<u>749,058</u>	<u>758,549</u>	1.27%	Tier 2	<u>99,154</u>	<u>100,580</u> 1.44%
	\$ 5,273,406	\$ 5,293,409	0.38%		\$ 1,201,679	\$ 1,204,962 0.27%
Other				Withdrawn Employers	Segal	CavMac
General	Segal	CavMac	Difference			
Tier 1	\$ 493,556	\$ 492,549	-0.20%			
Tier 2	<u>59,500</u>	<u>60,247</u>	1.26%			
	\$ 553,056	\$ 552,796	-0.05%		\$ 15,231	\$ 15,917 4.50%



SECTION 5 – ACTUARIAL VALUATION RESULTS REVIEW

Comparison of June 30, 2023 Liability Measures (in thousands)

Actuarial Accrued Liability						
Total						
	Segal			CavMac		
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Total</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Total</u>
Actives	\$ 5,741,265	\$ 769,465	\$ 6,510,730	\$ 5,709,040	\$ 801,611	\$ 6,510,651
Term Vested	633,952	73,341	707,293	630,652	73,447	704,100
In Payment	<u>9,150,521</u>	<u>50,238</u>	<u>9,200,759</u>	<u>9,087,851</u>	<u>49,508</u>	<u>9,137,360</u>
Total	<u>\$ 15,525,738</u>	<u>\$ 893,044</u>	<u>\$ 16,418,782</u>	<u>\$ 15,427,544</u>	<u>\$ 924,567</u>	<u>\$ 16,352,110</u>
				Superior Court	Segal	CavMac
General	Segal	CavMac	Difference	Segal	CavMac	Difference
Tier 1	\$ 9,275,424	\$ 9,206,096	-0.75%	\$ 608,700	\$ 604,430	-0.70%
Tier 2	<u>566,202</u>	<u>586,656</u>	3.61%	<u>40,993</u>	<u>41,923</u>	2.27%
	<u>\$ 9,841,626</u>	<u>\$ 9,792,752</u>	<u>-0.50%</u>	<u>\$ 649,693</u>	<u>\$ 646,353</u>	<u>-0.51%</u>
Safety	Segal	CavMac	Difference	SCAQMD	Segal	CavMac
Tier 1	\$ 4,133,696	\$ 4,112,251	-0.52%	\$ 1,045,920	\$ 1,046,431	0.05%
Tier 2	<u>232,381</u>	<u>239,913</u>	3.24%	<u>33,220</u>	<u>35,200</u>	5.96%
	<u>\$ 4,366,077</u>	<u>\$ 4,352,164</u>	<u>-0.32%</u>	<u>\$ 1,079,140</u>	<u>\$ 1,081,631</u>	<u>0.23%</u>
Other				Withdrawn Employers	Segal	CavMac
General	Segal	CavMac	Difference	Segal	CavMac	Difference
Tier 1	\$ 446,767	\$ 442,419	-0.97%	\$ 15,231	\$ 15,917	4.50%
Tier 2	<u>20,248</u>	<u>20,875</u>	3.10%			
	<u>\$ 467,015</u>	<u>\$ 463,294</u>	<u>-0.80%</u>			



SECTION 5 – ACTUARIAL VALUATION RESULTS REVIEW

Comparison of June 30, 2023 Liability Measures (in thousands)

Normal Cost								
Total								
		Segal			CavMac			
		Tier 1	Tier 2	Total	Tier 1	Tier 2		
Actives		\$ 198,504	\$ 160,424	\$ 358,928	\$ 197,483	\$ 157,905		
General		<u>Segal</u>	<u>CavMac</u>	<u>Difference</u>	Superior Court	<u>Segal</u>	<u>CavMac</u>	<u>Difference</u>
Tier 1		\$ 115,952	\$ 112,916	-2.62%	Tier 1	\$ 8,341	\$ 8,263	-0.94%
Tier 2		<u>102,576</u>	<u>100,364</u>	<u>-2.16%</u>	Tier 2	<u>6,607</u>	<u>6,482</u>	<u>-1.89%</u>
		\$ 218,528	\$ 213,280	-2.40%		\$ 14,948	\$ 14,745	-1.36%
Safety		<u>Segal</u>	<u>CavMac</u>	<u>Difference</u>	SCAQMD	<u>Segal</u>	<u>CavMac</u>	<u>Difference</u>
Tier 1		\$ 59,689	\$ 61,754	3.46%	Tier 1	\$ 8,061	\$ 8,043	-0.22%
Tier 2		<u>41,087</u>	<u>40,946</u>	<u>-0.34%</u>	Tier 2	<u>6,157</u>	<u>6,114</u>	<u>-0.70%</u>
		\$ 100,776	\$ 102,700	1.91%		\$ 14,218	\$ 14,157	-0.43%
Other General		<u>Segal</u>	<u>CavMac</u>	<u>Difference</u>	Withdrawn Employers	<u>Segal</u>	<u>CavMac</u>	<u>Difference</u>
Tier 1		\$ 6,461	\$ 6,507	0.71%		\$ -	\$ -	0.00%
Tier 2		<u>3,997</u>	<u>3,999</u>	<u>0.05%</u>				
		\$ 10,458	\$ 10,506	0.46%				



SECTION 5 – ACTUARIAL VALUATION RESULTS REVIEW

SURVIVOR BENEFIT VALUATION

As part of the actuarial audit, CavMac used the data provided by Segal to reproduce the valuation liabilities used for the cost calculations for the survivor benefit valuation. Valuation software is developed with a focus on traditional retirement benefits, and so ancillary benefits, the focus of the survivor benefit valuation, sometimes require approximations or simplifications. As a result, we do not expect to replicate the survivor benefits as closely as we did the retirement benefits. Nonetheless, we believe that our replication is sufficiently close to confirm the reasonableness of Segal's work.

We note that these benefits are very well funded and understand that the applicable statutes require the normal cost be contributed each year. Because of the significant surplus, the funded status is expected to continue to improve simply because of the investment return on the excess assets. However, we would suggest that consideration be given to determining if the assumed death rates for the active members are higher than actual experience. If this is the case, contributions each year will exceed what is needed and the surplus will increase faster still. We recognize that the active population size is too small to provide credible analysis of mortality rates, but if there are actuarial gains flowing through most years, it might be appropriate to reduce the assumed death rates for this purpose.

Based on the results of our review, overall, we find the actuarial liabilities and normal cost measures to be reasonable.

Comparison of June 30, 2023 Liability Measures

Present Value of Future Benefits			
	Segal	CavMac	Difference
Current Recipients	\$ 23,092,000	\$ 23,255,034	0.71%
Future Recipients	<u>9,638,000</u>	<u>10,188,612</u>	<u>5.71%</u>
Total	\$ 32,730,000	\$ 33,443,646	2.18%
Actuarial Accrued Liability			
	Segal	CavMac	Difference
Current Recipients	\$ 23,092,000	\$ 23,255,034	0.71%
Future Recipients	<u>4,473,000</u>	<u>4,674,869</u>	<u>4.51%</u>
Total	\$ 27,565,000	\$ 27,929,903	1.32%
Normal Cost			
	Segal	CavMac	Difference
Biweekly Normal Cost per Active Member	\$ 1.80	\$ 1.72	-4.44%
Estimated Employer/Employee Contributions	456,000	435,000	-4.61%



SECTION 6 – VALUATION REPORT REVIEW

ACTUARIAL REPORTS

The American Academy of Actuaries has issued Actuarial Standards of Practice which deal with measuring pension obligations and communicating the results (ASOP No. 4, 23, 27, 35, 41, 44, 51, and 56). Those standards list specific elements to be included, either directly or by reference to other documents, in pension actuarial communications. Some of the elements would not be pertinent in all communications, but since an actuarial valuation report is the most complete picture of the actuarial status of the plan, all of the elements listed should be covered in the report, even if only briefly.

The June 30, 2023 Actuarial Valuation Reports for SBCERA generally provide sufficient information for another actuary to understand what was done and to assess the reasonableness of the results. We compared the contents of the reports to over 40 specific items detailed for pension actuarial work in ASOPs 4, 41, 51, and 56.

In our review of the report, we found both the pension and survivor benefit reports to be in compliance with the applicable ASOPs.

EXPERIENCE STUDY REPORT

The Actuarial Standards of Practice do not provide much guidance relative to the contents of an experience study. Rather, the focus is on the substance of the analysis. The report prepared by Segal is laid out in a logical manner as it systematically considers the appropriate assumptions. We found the description of the assumption to be clear and the analysis was succinctly provided. We would encourage Segal to consider providing detailed summaries of the number of member exposures and decrements, potentially in an appendix. (The total number of members that *could* retire, terminate, become disabled or die is referred to as exposures; the number of members that *do* retire, terminate, become disabled or die is referred to as decrements.) This is a preference on our part, and not an expectation of the ASOPs.

GENERAL COMMENTS

We do note a couple items that we would suggest be included in future reports that could provide greater clarity:

- In the experience study, explain that the refund of assumptions provision for nonrefundable contributions is applicable to the refundable contributions of members who have currently elected to make nonrefundable contributions.
- In the valuation report, include a disclosure that decrement timing is as of the beginning of the year.



SECTION 7 – GASB REPORT REVIEW

CONTENT OF THE GASB REPORT

In their work for SBCERA, Segal provides accounting disclosures to comply with Governmental Accounting Standards Board (GASB) Statement 67. We note that this GASB statement relates to the accounting treatment and disclosures of retirement plans by the plan sponsor. Some of the items needed for the accounting work to be completed are numbers which are calculated by actuaries. Like other actuarial firms, Segal provides many of the exhibits needed by the plan sponsor and employers, even though some of these items are not particularly actuarial in nature. In our review, we focused especially on the parts that are actuarial in nature. The GASB 67 report prepared as of a Measurement Date of June 30, 2023 relies on the liabilities derived from the June 30, 2023 actuarial funding valuation, which is based on the liabilities we were replicating in this audit.

We reviewed the GASB report for disclosures such as the Net Pension Liability and sensitivity analysis, etc. and found the calculation to be reasonable and transparent. We found the report to be consistent with our understanding of the relevant Actuarial Standards of Practice and GASB 67.