SCERA Actuarial Valuation 101

- Every year after the close of the Plan year, which is December 31st, SCERA's Actuary, Segal Consulting, performs an actuarial valuation where they compare the Plan's experience for that year to the assumptions (salary growth, investment earnings, mortality, etc.).
- The valuation is usually received by SCERA in late April and brought to the Retirement Board in early May for discussion and approval.
- The purpose of the valuation is to calculate the liability of the Plan as of the date of the valuation in order to set contribution rates to properly fund both the normal cost and the Unfunded Actuarial Accrued Liability (UAAL) cost.
- The normal cost is the cost of another year of benefit for each active member of the Plan. The UAAL cost is the annual amortization payment on the unfunded liability for each layer of amortization.
- Every year, as part of the valuation, the actuary determines whether the Plan's experience as compared to the assumptions resulted in a gain or loss. The gain or loss for that year is amortized over a closed 20-year period with a resulting annual amortization payment.
- The actuarial valuation sets contribution rates for the fiscal year that starts 18 months from the end of the Plan year. For example, the 12-31-22 valuation sets contribution rates for FY 2024/25. SCERA does this so that the County, Court and Sonoma Valley Fire District have time to budget for upcoming contribution rate changes.
- When contribution rates rise, the 18-month delay will result in increased UAAL, and conversely when rates go down, the UAAL is decreased. It is typically a very small amount.

Specific points regarding the 12-31-22 actuarial valuation

- SCERA's valuation value funded ratio (which is the ratio of valuation value assets to liabilities) decreased from 92.9% to 92.4%. A valuation value of assets means that the actuary calculates the asset value using smoothed investment returns (market investment returns that are recognized over a five-year period in 20% increments).
- SCERA's market value funded ratio decreased from 101.8% to 88.5%.
- The major causes of the decrease in funded ratio were investment returns less than the assumed investment return rate, which was offset to some degree by the County of Sonoma's additional UAAL payments.
- The UAAL increased from $244.5 million to $271.6 million.

- Plan experience resulted in an actuarial loss of $49.6 million which impacted the average employer contribution rate, increasing it from 18.37% of payroll to 21.25% of payroll. (We reported 18.69% last year which was based upon last year's projected payroll. 18.37% is based on actual payroll). This contribution rate is an average of the three employers' contribution rates.

- The impact on the average employee contribution rate was a decrease from 12.12% to 10.11% of payroll. (SCERA reported 12.17% last year based upon last year's projected payroll. 12.12% is based upon actual payroll). This contribution rate is an average of the age-based rates paid by the Legacy Plan A members and the flat rate paid by the PEPRA Plan B members.

- For specific contribution rate impacts please refer to the actuarial valuation itself.

- Each year the valuation contains a reconciliation starting with the prior year's UAAL and ending with the current year's UAAL. This year it is found on page 29 and it shows that we received all of the normal cost contribution and UAAL cost contribution for the year, as well as an annual interest payment on the UAAL. It then shows the result of our experience as compared to our assumptions. It is an informative page.

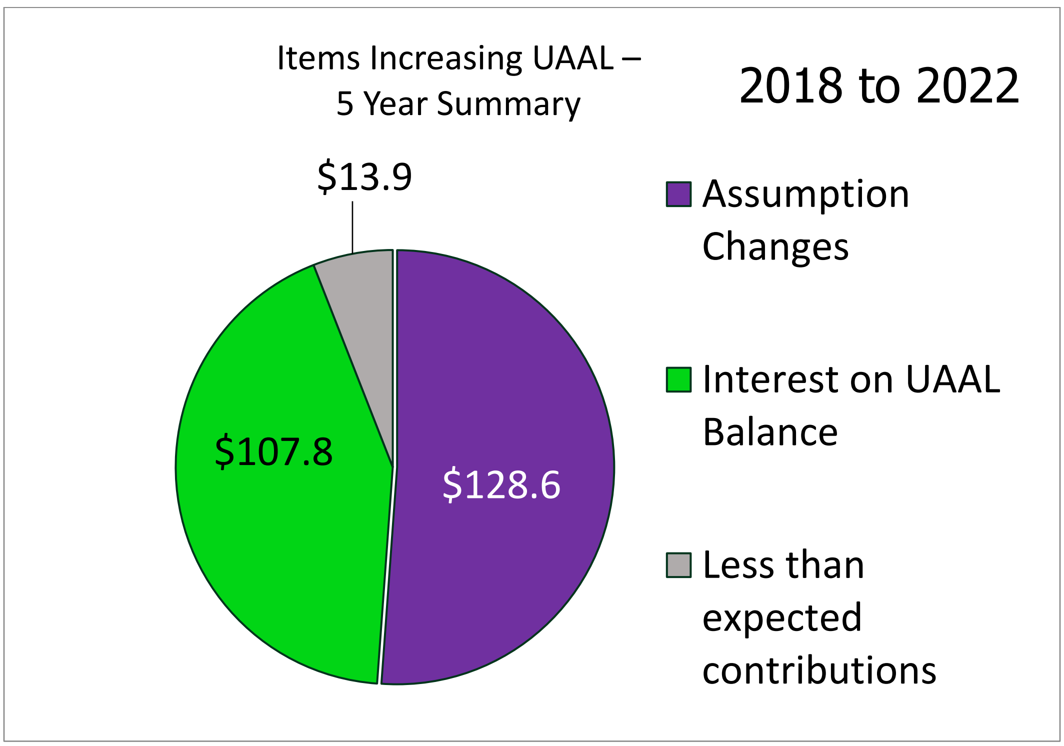
- Over the past five years, the largest items increasing the UAAL have been the changes to actuarial assumptions, interest on the UAAL balance and less than expected contributions. Investments over this five-year period resulted in a gain of $119.5M and the County's additional UAAL payment resulted in a gain of $14.8M. See the following slides from the summary report provided to the Board.

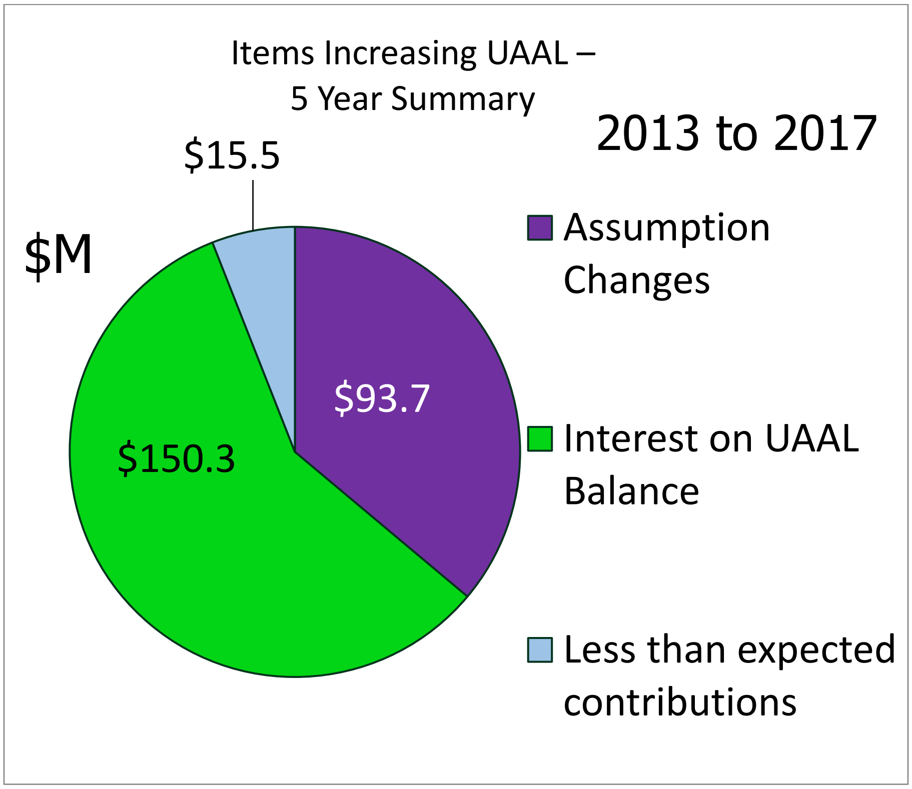
- The actuarial valuation can be found at http://scretire.org/Financial/Actuarial-Reports/.

SCERA Actuarial Analysis of Financial Experience

(K$)	2022	2021	2020	2019	2018	Total
Beginning of the Year UAAL Liability (Surplus)	244546	282715	332031	404732	359557	
Source of Actuarial (Gain) Loss:						
Compensation Increase Greater/(Less) than Expected	12509	(5243)	17286	(34651)	11293	1194
Investment Experience recognized	39826	(99099)	(41110)	(32718)	13629	(119472)
Other Experience	(1211)	(7266)	(983)	(2786)	661	(11585)
(Greater)/Less than Expected Contributions	4298	(1976)	(255)	12332	(493)	13906
Composite (Gain) Loss for the Year - Total	55422	(113584)	(25062)	(57823)	25090	(115957)

Other Items Impacting UAAL:						
Assumption Change (Economic and Demographic)		96768			31798	128566
Interest Accrual on UAAL Balance	15353	18586	22003	27009	24876	107827
County's Additional UAAL Payment	(5795)	(1873)	(7128)			(14796)
Expected UAAL Contribution Payment	(37934)	(38066)	(39129)	(41887)	(36589)	(193605)
Other Items Impacting UAAL - Total	(28376)	75415	(24254)	(14878)	20085	27992
End of the Year UAAL Liability (Surplus)	271592	244546	282715	332031	404732	





SCERA Member Information as of December 31, 2022

- Of the 3,433 active General members, 1,391 are in Plan A (Legacy) and 2,042 are in Plan B (PEPRA), which means that roughly 59% of SCERA active General members are in the PEPRA Plan.
- Of the 670 Active Safety members, 365 are in Plan A (Legacy) and 305 are in Plan B (PEPRA), which means that roughly 45% of the active Safety members are in the PEPRA Plan.
- The average annual retirement benefit for all retired Plan A (Legacy) retirees is $44,633 with 17.5 average years of service at retirement. The average annual retirement benefit for all Plan B (PEPRA) retirees is $18,422 with 6.2 average years of service. The average annual retirement benefit for all Pre-Plan A retirees is $23,754 with 15.8 average years of service. The average age at retirement for all retirees is 56.8 years old.
- The average annual retirement benefit for just those retirees who retired in 2022 for Plan A (Legacy) is $55,314 with 18.1 average years of service and for Plan B (PEPRA) is $24,438 with 7 average years of service. The average age at retirement for all retirees who retired in 2022 is 58.3.

Specific Points regarding the 2018 to 2020 Experience Study (Effective January 1, 2022)

- Beginning January 1, 2022, SCERA is assuming investment earnings of 6.75% which includes a real rate of return expectation of 5.11% minus administrative and investment expenses of .70% and a risk adjustment of .16%, plus an inflation expectation of 2.50%.

- The real rate of return expectation is what we expect to get from our target asset allocation (where we invest our money, like fixed income, equities, real estate, etc.) over and above inflation and deducting expenses and a risk adjustment. The risk adjustment is used to reflect the potential risk of shortfalls in achieving the return assumption.

- SCERA is assuming annual salary growth from inflationary increases plus across the board pay increases of 3.00%. SCERA also assumes that individual salaries will increase as employees advance in their career. These are called merit and promotion increases and they are in addition to the annual salary growth assumption.

- SCERA moved from a static mortality approach using the 2014 mortality improvement scale, to a generational mortality approach using the 2017 mortality improvement scale. In 2020 SCERA further refined the morality assumptions to adopt a Benefit-Weighted Above-Median Pub 2010 mortality table with mortality improvement projected generationally using the MP-2020 mortality improvement scale. This approach combined the generational approach adopted with the last experience study with a benefit weighted scale to capture the mortality improvements that accompany the higher likelihood of obtaining medical care when retirees and beneficiaries receive a retirement benefit. The likelihood increases with the amount of the retirement benefit.

- There are other assumption changes in this report, which can be accessed at http://scretire.org/Financial/Actuarial-Reports/.