

# Section 1: Actuarial Valuation Summary

## Valuation Highlights

- Pgs. 81* 1. The results of this valuation reflect changes in the demographic assumptions as recommended by Segal and adopted by the Board for the June 30, 2022 valuation. These changes were documented in our Analysis of Demographic Actuarial Experience and are also outlined in *Section 4, Exhibit 1* of this report. The assumption changes resulted in a decrease in the Actuarial Accrued Liability of \$35.9 million (or a 0.5% decrease), a decrease in the average employer contribution rate of 0.53% of payroll, and an increase in the average member rate of 0.04% of payroll. Of the 0.53% decrease in the employer rate, 0.13% is due to an increase in the Normal Cost and 0.66% is due to a decrease in the UAAL rate.
- This valuation incorporates a refinement in the eligibility service used to determine some members' entry ages for use in Entry Age Actuarial Cost Method calculations. Before the refinement, the eligibility service was determined primarily using benefit service. Beginning with this valuation, eligibility service has now been computed using the date of hire or the entry age provided for member contribution rate purposes, whichever is later. This refinement does not change the Present Value of Future Benefits (PVFB) but it decreases the allocation of PVFB to the Normal Cost (NC) and increases the allocation of PVFB to the Actuarial Accrued Liability (AAL) for actives. These changes result in a net decrease in the average employer and member contribution rates of 0.09% and 0.11% of payroll, respectively.
- The net contribution rate impact of the changes in demographic assumptions and the method refinement is a decrease in the rate of 0.62% and 0.07% for the employer and the member, respectively.
- Pgs. 38-39* 2. The ratio of the Valuation Value of Assets to Actuarial Accrued Liabilities increased from 85.9% to 88.7%. This ratio is one measure of funding status, and its history is a measure of funding progress. The ratio of the Market Value of Assets to the Actuarial Accrued Liability decreased from 94.5% to 81.3%. These measurements are 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.
- Pg. 29* 3. The Association's UAAL (which is based on the Valuation Value of Assets) has decreased from \$939.3 million to \$784.7 million. The decrease in UAAL is primarily due to the investment return (after "smoothing") greater than the 6.50% return assumption and the changes in demographic assumptions adopted by the Board, partially offset by greater than expected cost of living adjustment (COLA) increases for retirees and beneficiaries. A complete reconciliation of the Association's UAAL is provided in *Section 2, Subsection E*.
- Pgs. 70-74, 75-76* 4. The UAAL amortization layers established as of the June 30, 2007 valuation have been fully amortized as of June 30, 2022 which resulted in a decrease in the UAAL contribution rate of about 3.9% of payroll for the Association in total. For illustration we have continued to show that 2007 layers in *Section 3, Exhibit H*, but with zero "Outstanding Balance" and "Years Remaining". Note that the UAAL contributions are expected to continue to decline in the next few valuations as other layers are fully amortized, as shown in the graphical projection found in *Section 3, Exhibit I* on page 76.

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Pg. 23 5. The net actuarial gain from investment and contribution experience is \$91.3 million gain and \$3.1 million loss, respectively, or 1.3%, of the Actuarial Accrued Liability. The net experience loss from sources other than investment and contribution experience was \$59.6 million, or 0.9% of the Actuarial Accrued Liability. This loss was primarily due to greater than expected COLA increases for retirees and beneficiaries.

Pg. 31 6. The average employer contribution rate calculated in this valuation decreased from 51.35% of payroll to 46.49% of payroll. This decrease is primarily due to the June 30, 2007 UAAL amortization layers becoming fully amortized, the investment return (after “smoothing”) greater than the 6.50% return assumption, changes in demographic assumptions adopted by the Board, partially offset by the greater than expected COLA increases for retirees and beneficiaries. A complete reconciliation of the Association’s average employer rate is provided in *Section 2, Subsection F*.

7. The Board approved a two-year phase-in of the UAAL employer cost impact due to economic assumption changes in the June 30, 2021 valuation. The phase-in has the impact of reducing the employer rate as determined in the June 30, 2021 valuation by 1.75% of payroll. The employer contribution rates as of June 30, 2021 shown in this report is before reflecting the two-year phase-in.

Since the phase-in is for two years, the employer rate that we have calculated in this valuation as of June 30, 2022 no longer reflects any phase-in.

Pg. 32 8. The average member rate calculated in this valuation has decreased from 9.55% of payroll to 9.51% of payroll. This change was primarily due to the refinement to the application of the Entry Age Actuarial Cost Method, partially offset by the changes in demographic assumptions adopted by the Board. A complete reconciliation of the Association’s average member rate is provided in *Section 2, Subsection F*.

Pg. 24 9. The rate of return on the Market Value of Assets was -9.93% for the 2021-2022 plan year. The return on the Valuation Value of Assets was 8.10% for the same period after considering the gradual recognition of current and prior years’ investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 6.50%. This actuarial investment gain decreased the average employer contribution rate by 1.60% of payroll.

Pg. 21 10. The total unrecognized net investment loss as of June 30, 2022 is about \$510.7 million as compared to an unrecognized net investment gain of \$572.5 million in the previous valuation. This deferred investment loss of \$510.7 million will be recognized in the determination of the Actuarial Value of Assets for funding purposes in the next few years as shown in *Section 2, Subsection B*.

The net deferred losses of \$510.7 million represent about 9.1% of the Market Value of Assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$510.7 million market losses is expected to have an impact on the Association’s future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows:

- a. If the net deferred losses in this year’s valuation were recognized immediately and entirely in the Valuation Value of Assets, the funded ratio would decrease from 88.7% to 81.3%.

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For comparison purposes, if all the net deferred gains in the June 30, 2021 valuation had been recognized immediately in the June 30, 2021 valuation, the funded ratio in last year's valuation would have increased from 85.9% to 94.5%.

- b. If the net deferred losses in this year's valuation were recognized immediately and entirely in the Valuation Value of Assets, the average employer contribution rate would increase from 46.49% to 55.45% of payroll.

For comparison purposes, if all the net deferred gains in the June 30, 2021 valuation had been recognized immediately in the June 30, 2021 valuation, the average employer contribution rate in last year's valuation would have decreased from 51.89% to 41.66% of payroll.

*Pg. 107* 11. In preparing the breakdown of the total costs of the General Tier 1 plan into the cost to provide the "Regular" and the "Settlement" benefits, we have followed the FCERA practice of allocating the cost to provide a benefit under Section 31676.12 as the cost for the "Regular" benefit and allocating the difference between this "Regular" benefit cost and the cost to provide a benefit under Section 31676.14 plus Section 31627 as the "Settlement" benefit. In particular, this means that the difference between benefits under Sections 31676.12 and 31676.14 is considered "Settlement" and so under the Settlement Agreement could be funded out of future undistributed excess earnings. Based on discussions with Counsel, the Agreement might not be clear as to what should be considered the "Settlement" benefit. We will require guidance from the Board if and when the Board and Counsel consider the use of any future undistributed excess earnings to pay the cost of the "Settlement" benefit.

*Pg. 41* 12. The Actuarial Standards Board approved Actuarial Standard of Practice No. 51 (ASOP 51) regarding risk assessment, which was first effective with FCERA's June 30, 2019 actuarial valuation. ASOP 51 requires actuaries to identify and assess risks that "may reasonably be anticipated to significantly affect the plan's future financial condition". Examples of key risks listed that are particularly relevant to FCERA are asset/liability mismatch risk, investment risk, and longevity risk. The standard also requires an actuary to consider if there is any ongoing contribution risk to the plan, however it does not require the actuary to evaluate the particular ability or willingness of contributing entities to make contributions when due, nor does it require the actuary to assess the likelihood or consequences of future changes in applicable law.

The actuary's initial assessment can be strictly a qualitative discussion about potential adverse experience and the possible effect on future results, but it may also include quantitative numerical demonstrations where informative. The actuary is also encouraged to consider a recommendation as to whether a more detailed assessment or risk report would be significantly beneficial for the intended user in order to examine particular financial risks. When making that recommendation, the actuary will take into account such factors as the plan's design, risk profile, maturity, size, funded status, asset allocation, cash flow, possible insolvency and current market conditions.

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 Association. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Association's future financial condition, but

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have included a brief discussion of key risks that may affect the Association in *Section 2, Subsection J*. A more detailed assessment of the risks tailored to specific interests or concerns of the Board would provide the Board with a better understanding of the inherent risks. This assessment would further discuss and highlight information and risks particular to FCERA such as detailed historical experience and key events, growing plan maturity, heightened contribution sensitivity to asset and liability changes, and projected sensitivity to potential future investment returns through selected scenario or stress test projections.

13. Segal strongly recommends an actuarial funding policy that targets 100% funding of the Actuarial Accrued Liability. Generally, this implies payments that are ultimately at least enough to cover Normal Cost, interest on the UAAL and the principal balance. The funding policy adopted by the Board meets this standard.
14. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution (ADC) under the Association's funding policy and measuring the progress of that funding policy. The Net Pension Liability (NPL) and Pension Expense under Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the plan and employer's financial statements as of June 30, 2022, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.
15. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2022. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. The Association's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2022. While it is impossible to determine how the pandemic will affect market conditions and other demographic experience of the Association in future valuations, Segal is available to prepare projections of potential outcomes upon request.

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### Summary of Key Valuation Results

		June 30, 2022		June 30, 2021	
		Total Rate	Estimated Annual Dollar Amount <sup>1</sup> (\$ in '000s)	Total Rate	Estimated Annual Dollar Amount <sup>1</sup> (\$ in '000s)
<b>Employer Contribution Rates<sup>2</sup>:</b>	• General Tier 1	50.81%	\$78,305	55.39%	\$85,363
	• General Tier 2	48.34%	3,639	51.93%	3,910
	• General Tier 3	48.42%	14,282	52.37%	15,447
	• General Tier 4	39.90%	5,949	43.75%	6,523
	• General Tier 5	37.86%	77,567	41.22%	84,450
	• Safety Tier 1	69.28%	22,734	79.46%	26,074
	• Safety Tier 2	69.61%	2,620	80.06%	3,013
	• Safety Tier 4	56.86%	2,811	66.34%	3,280
	• Safety Tier 5	52.74%	20,576	62.28%	24,298
	<b>All Categories Combined</b>	<b>46.49%</b>	<b>\$228,483</b>	<b>51.35%</b>	<b>\$252,358</b>
<b>Average Member Contribution Rates:</b>	• General Tier 1	10.26%	\$15,812	10.34%	\$15,935
	• General Tier 2	7.17%	540	7.15%	538
	• General Tier 3	8.31%	2,451	8.38%	2,472
	• General Tier 4	7.89%	1,176	7.75%	1,156
	• General Tier 5	8.01%	16,411	8.00%	16,390
	• Safety Tier 1	12.90%	4,233	13.06%	4,286
	• Safety Tier 2	11.61%	437	11.81%	445
	• Safety Tier 4	11.06%	547	11.08%	548
	• Safety Tier 5	13.19%	5,146	13.26%	5,173
	<b>All Categories Combined</b>	<b>9.51%</b>	<b>\$46,753</b>	<b>9.55%</b>	<b>\$46,943</b>

<sup>1</sup> Based on June 30, 2022 projected annual compensation of \$491,462,000.

<sup>2</sup> Before reflecting the two-year phase-in as approved by the Board for the June 30, 2021 valuation.

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### Summary of Key Valuation Results (continued)

		June 30, 2022 (\$ in '000s)	June 30, 2021 (\$ in '000s)
<b>Actuarial Accrued Liability as of June 30:</b>	• Retired members and beneficiaries	\$4,427,231	\$4,191,596
	• Inactive vested members <sup>1</sup>	367,279	348,871
	• Active members	2,124,349	2,109,164
	• Total Actuarial Accrued Liability	6,918,859	6,649,631
	• Normal Cost for plan year beginning June 30 <sup>2</sup>	120,722	123,919
<b>Assets as of June 30:</b>	• Market Value of Assets (MVA) <sup>3</sup>	\$5,623,399	\$6,282,922
	• Valuation Value of Assets (VVA) <sup>3</sup>	6,134,136	5,710,379
<b>Funded status as of June 30:</b>	• Unfunded Actuarial Accrued Liability on Market Value of Assets basis	\$1,295,460	\$366,709
	• Funded percentage on MVA basis	81.28%	94.49%
	• Unfunded Actuarial Accrued Liability on Valuation Value of Assets basis	\$784,723	\$939,252
	• Funded percentage on VVA basis	88.66%	85.88%
<b>Key assumptions:</b>	• Net investment return	6.50%	6.50%
	• Price inflation	2.50%	2.50%
	• Payroll growth increase	3.00%	3.00%
	• Cost of living adjustments	Tiers with 3.00%	Tiers with 3.00%
		COLA: 2.50%	COLA: 2.50%
	Tiers without COLA: 0.00%	Tiers without COLA: 0.00%	

<sup>1</sup> Includes inactive members with member contributions on deposit with less than five years of service.

<sup>2</sup> Includes administrative expense load.

<sup>3</sup> Excludes non-valuation reserves (contingency reserve, if any).

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### Summary of Key Valuation Results (continued)

		June 30, 2022	June 30, 2021	Change From Prior Year
<b>Demographic data as of June 30:</b>	<b>Active Members:</b>			
	• Number of members	7,466	7,660	-2.5%
	• Average age	42.1	42.3	-0.2
	• Average service	10.3	10.2	0.1
	• Total projected compensation	\$491,461,957	\$482,498,920	1.9%
	• Average projected compensation	\$65,827	\$62,989	4.5%
	<b>Retired Members and Beneficiaries:</b>			
	• Number of members:			
	– Service retired	6,610	6,465	2.2%
	– Disability retired	406	415	-2.2%
	– Beneficiaries	1,159	1,102	5.2%
	– Total	8,175	7,982	2.4%
	• Average age	70.5	70.3	0.2
	• Average monthly benefit <sup>1</sup>	\$3,384	\$3,278	3.2%
	<b>Inactive Vested Members:</b>			
	• Number of members	4,848	4,308	12.5%
	• Average age	43.7	44.3	-0.6
	<b>Total Members:</b>	20,489	19,950	2.7%

<sup>1</sup> Benefits include regular and settlement benefits but exclude non-vested supplemental benefits, if any.