Los Angeles City Employees' Retirement System

Actuarial Valuation and Review of Retirement and Other Postemployment Benefits as of June 30, 2023

Segal

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November 7, 2023

Board of Administration
Los Angeles City Employees' Retirement System
977 N. Broadway
Los Angeles, CA 90012-1728

Re: June 30, 2023 Actuarial Valuations

Dear Board Members:

Enclosed please find the June 30, 2023 actuarial valuations for the retirement, health, and family death benefit plans.

As requested by the System, we have attached the following supplemental schedules:

- Exhibit A – Summary of significant results for the retirement and health plans.
- Exhibit B – History of computed contribution rates for the retirement and health plans.
- Exhibit C – Schedule of funded liabilities by type for the retirement plan.[1]
- Exhibit D – Schedule of retirees and beneficiaries added to and removed from the rolls for the retirement plan.[2]

We look forward to discussing the reports and the enclosed schedules with the Board.

Sincerely,

Segal

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary	Andy Yeung, ASA, MAAA, FCA, EA Vice President and Actuary	Todd Tauzer, FSA, MAAA, FCA, CERA Senior Vice President and Actuary

DNA/jl

[1] For the health plan, a similar schedule is provided in Exhibit H of Section 3 of the health valuation report.
[2] For the health plan, a similar schedule is provided in Exhibit C of Section 3 of the health valuation report.

Exhibit A

Los Angeles City Employees' Retirement System
Summary of Significant Valuation Results

		June 30, 2023	June 30, 2022	Percent Change
I.	**Total Membership**			
	A. Active Members	25,875	24,917	3.8%
	B. Pensioners and Beneficiaries	22,510	22,399	0.5%
II.	**Valuation Salary**			
	A. Total Annual Projected Payroll	$2,512,179,018	$2,258,724,771	11.2%
	B. Average Projected Monthly Salary	8,091	7,554	7.1%
III.	**Benefits to Current Retirees and Beneficiaries**[1]			
	A. Total Annual Benefits	$1,240,519,399	$1,195,992,537	3.7%
	B. Average Monthly Benefit Amount	4,592	4,450	3.2%
IV.	**Total System Assets**[2]			
	A. Actuarial Value	$22,239,263,545	$21,218,951,507	4.8%
	B. Market Value	$21,589,265,113	$20,454,103,991	5.5%
V.	**Unfunded Actuarial Accrued Liability (UAAL)**			
	A. Retirement Benefits	$6,805,716,100	$6,429,483,732	5.9%
	B. Health Subsidy Benefits	(241,889,698)	107,740,545	-324.5%

1 Includes July COLA.

2 Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits.

Exhibit A (continued)

Los Angeles City Employees' Retirement System
Summary of Significant Valuation Results

VI.	Budget Items (as a Percent of Pay)	FY 2024-2025[1]		FY 2023-2024		Difference	
		Beginning of Year	July 15	Beginning of Year	July 15	Beginning of Year	July 15
	A. Retirement Benefits (Tier 1 and Tier 3 Combined)						
	1. Normal Cost	7.74%	7.78%	7.62%	7.64%	0.12%	0.14%
	2. Amortization of UAAL	22.13%	22.19%	21.73%	21.79%	0.40%	0.40%
	3. Total Retirement Contribution	29.87%	29.97%	29.35%	29.43%	0.52%	0.54%
	B. Health Subsidy Benefits (Tier 1 and Tier 3 Combined)						
	1. Normal Cost	3.84%	3.85%	3.59%	3.60%	0.25%	0.25%
	2. Amortization of UAAL	-0.53%	-0.53%	0.33%	0.33%	-0.86%	-0.86%
	3. Total Health Subsidy Contribution	3.31%	3.32%	3.92%	3.93%	-0.61%	-0.61%
	C. Total Contribution (A + B)	33.18%	33.29%	33.27%	33.36%	-0.09%	-0.07%

VII.	Funded Ratio	June 30, 2023	June 30, 2022	Difference
	(Based on Valuation Value of Assets)			
	A. Retirement Benefits	73.1%	73.3%	-0.2%
	B. Health Subsidy Benefits	107.1%	97.0%	10.1%
	C. Total	77.1%	76.4%	0.7%
	(Based on Market Value of Assets)			
	D. Retirement Benefits	71.0%	70.7%	0.3%
	E. Health Subsidy Benefits	104.0%	93.5%	10.5%
	F. Total	74.9%	73.6%	1.3%

[1] Alternative contribution payment date for FY 2024-2025:

	Retirement	Health	Total
End of Pay Periods	30.91%	3.43%	34.34%

Exhibit B

Los Angeles City Employees' Retirement System
Computed Contribution Rates[1] – Historical Comparison

Valuation Date	Retirement	Health	Total	Projected Valuation Payroll (thousands)
06/30/1994	12.07%	2.99%	15.06%	$884,951
06/30/1995	7.34%	2.30%	9.64%	911,292
06/30/1996	6.51%	3.18%	9.69%	957,423
06/30/1997	6.57%	1.85%	8.42%	990,616
06/30/1998	6.43%	1.27%	7.70%	1,011,857
06/30/1999	4.93%	0.67%	5.60%	1,068,124
06/30/2000	2.54%	2.17%	4.71%	1,182,203
06/30/2001	3.84%	1.98%	5.82%	1,293,350
06/30/2002	9.22%	1.85%	11.07%	1,334,335
06/30/2003	11.95%	4.02%	15.97%	1,405,058
06/30/2004	14.76%	4.94%	19.70%	1,575,285
06/30/2005	17.51%	7.27%	24.78%	1,589,306
06/30/2006	17.18%	6.49%	23.67%	1,733,340
06/30/2007	15.52%	5.38%	20.90%	1,896,609
06/30/2008	14.65%	5.48%	20.13%	1,977,645
06/30/2009	18.73%	6.62%	25.35%	1,816,171
06/30/2010				
Before Additional Employee Contributions	21.19%	7.45%	28.64%	1,817,662
After Additional Employee Contributions	18.67%	6.94%	25.61%	1,817,662
06/30/2011[2]				
Before Additional Employee Contributions	24.31%	4.49%	28.80%	1,833,392
After Additional Employee Contributions	21.64%	4.49%	26.13%	1,833,392
06/30/2012[3]	21.34%	5.74%	27.08%	1,819,270
06/30/2013	22.24%	5.80%	28.04%	1,846,970
06/30/2014	24.05%	5.81%	29.86%	1,898,064
06/30/2015	23.65%	4.90%	28.55%	1,907,665
06/30/2016	22.96%	5.09%	28.05%	1,968,703
06/30/2017[4]	23.81%	5.26%	29.07%	2,062,316
06/30/2018	25.56%	5.07%	30.63%	2,177,687
06/30/2019	25.43%	4.64%	30.07%	2,225,413
06/30/2020	28.84%	4.43%	33.27%	2,445,017
06/30/2021	30.32%	4.04%	34.36%	2,254,165
06/30/2022	30.36%	4.05%	34.41%	2,258,725
06/30/2023	30.91%	3.43%	34.34%	2,512,179

1 Contributions are assumed to be made at the end of the pay period. For the 6/30/2014 and 6/30/2015 valuations, the contribution rates are the combined rates for Tiers 1 and 2. Beginning with the 6/30/2016 valuation, the contribution rates are the combined rates for Tiers 1 and 3 (Tier 2 was rescinded effective February 21, 2016).

2 Beginning with the 6/30/2011 valuation date, the contribution rates are before adjustments to phase in over five years the impact of new actuarial assumptions (as a result of the June 30, 2011 Triennial Experience Study) on the City's contributions. Those adjustments no longer apply after the June 30, 2014 valuation.

3 Beginning with the 6/30/2012 valuation date, the contribution rates are after additional employee contributions.

4 Beginning with the 6/30/2017 valuation date, the contribution rates are after reflecting enhanced benefits for Airport Peace Officers effective January 7, 2018.

Exhibit C

Los Angeles City Employees' Retirement System
Schedule of Funded Liabilities by Type for Retirement Benefits
For Years Ended June 30
($ In Thousands)

	Aggregate Actuarial Accrued Liabilities For				Portion of Aggregate Accrued Liabilities Covered by Reported Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
Valuation Date	Member Contributions	Retirees, Beneficiaries, & Inactive/Vested	Active Members	Valuation Value of Assets	Member Contributions	Retirees, Beneficiaries, & Inactive/Vested	Active Members
06/30/1996	$637,737	$2,357,798	$1,480,489	$4,468,433	100.0%	100.0%	99.5%
06/30/1997	683,048	2,598,432	1,604,857	4,802,509	100.0	100.0	94.8
06/30/1998	733,680	2,772,712	1,806,526	5,362,923	100.0	100.0	100.0
06/30/1999	776,617	2,989,218	1,918,751	5,910,948	100.0	100.0	100.0
06/30/2000	827,729	3,149,392	2,035,810	6,561,365	100.0	100.0	100.0
06/30/2001	889,658	3,444,240	2,134,168	6,988,782	100.0	100.0	100.0
06/30/2002	950,002	3,756,935	2,545,181	7,060,188	100.0	100.0	92.5
06/30/2003	1,005,888	4,021,213	2,632,745	6,999,647	100.0	100.0	74.9
06/30/2004	1,062,002	4,348,252	3,123,610	7,042,108	100.0	100.0	52.2
06/30/2005	1,128,101	4,858,932	3,334,492	7,193,142	100.0	100.0	36.2
06/30/2006	1,210,246	5,149,385	3,511,031	7,674,999	100.0	100.0	37.5
06/30/2007	1,307,008	5,365,437	3,854,429	8,599,700[1]	100.0	100.0	50.0
06/30/2008	1,408,074	5,665,130	4,113,200	9,438,318	100.0	100.0	57.5
06/30/2009	1,282,663	7,356,302	3,403,019	9,577,747	100.0	100.0	27.6
06/30/2010	1,379,098	7,507,945	3,707,982	9,554,027	100.0	100.0	18.0
06/30/2011	1,474,824	7,765,071	4,151,809	9,691,011	100.0	100.0	10.9
06/30/2012	1,625,207	7,893,684	4,875,068	9,934,959	100.0	100.0	8.5
06/30/2013	1,757,195	8,066,564	5,057,904	10,223,961	100.0	100.0	7.9
06/30/2014	1,900,068	8,700,896	5,647,889	10,944,751	100.0	100.0	6.1
06/30/2015	2,012,378	9,118,166	5,779,452	11,727,161	100.0	100.0	10.3
06/30/2016	2,137,269	9,439,001	5,848,726	12,439,250	100.0	100.0	14.8
06/30/2017	2,255,048	10,164,403	6,038,737	13,178,334	100.0	100.0	12.6
06/30/2018	2,354,026	11,079,053	6,511,500	13,982,435	100.0	100.0	8.4
06/30/2019	2,469,761	11,933,703	6,389,957	14,818,564	100.0	100.0	6.5
06/30/2020	2,584,851	12,740,109	7,202,235	15,630,103	100.0	100.0	4.2
06/30/2021	2,431,974	14,546,803	6,303,116	16,660,585	100.0	97.8	0.0
06/30/2022	2,554,972	15,266,882	6,256,897	17,649,268	100.0	98.9	0.0
06/30/2023	2,776,364	15,932,796	6,590,377	18,493,821	100.0	98.6	0.0

[1] Excludes assets transferred for Port Police.

Exhibit D

Los Angeles City Employees' Retirement System
Retirees and Beneficiaries Added To and Removed From the Rolls for the Retirement Plan[1]
For Years Ended June 30

Year Ended	No. of New Retirees and Beneficiaries	Annual Allowances Added[2]	No. of Retirees and Beneficiaries Removed	Annual Allowances Removed	No. of Retirees and Beneficiaries at 6/30	Annual Allowances at 6/30	Percent Increase in Annual Allowances	Average Annual Allowance
06/30/2002	844	$23,740,829	620	$11,316,344	13,589	$336,437,038	6.4%	$24,758
06/30/2003	827	24,729,535	611	12,008,132	13,805	359,036,215	6.7%	26,008
06/30/2004	986	53,452,133	654	13,220,316	14,137	399,268,032	11.2%	28,243
06/30/2005	934	43,454,836	749	14,769,736	14,322	427,953,132	7.2%	29,881
06/30/2006	890	42,821,079	642	15,061,287	14,570	455,712,924	6.5%	31,277
06/30/2007	821	34,131,744	555	13,210,740	14,836	476,633,928	4.6%	32,127
06/30/2008	748	40,680,279	609	14,956,623	14,975	502,357,584	5.4%	33,546
06/30/2009	632	36,887,854	616	17,386,042	14,991	521,859,396	3.9%	34,812
06/30/2010	2,893	144,594,918	620	17,604,486	17,264	648,849,828	24.3%	37,584
06/30/2011	528	24,282,965	595	16,585,589	17,197	656,547,204	1.2%	38,178
06/30/2012	620	38,314,256	594	17,986,700	17,223	676,874,760	3.1%	39,301
06/30/2013	772	40,966,952	633	18,776,770	17,362	699,064,942	3.3%	40,264
06/30/2014	831	38,666,905	661	21,175,777	17,532	716,556,070	2.5%	40,871
06/30/2015	1,083	55,849,106	683	22,013,426	17,932	750,391,750	4.7%	41,847
06/30/2016	1,082	51,056,286	657	23,092,610	18,357	778,355,426	3.7%	42,401
06/30/2017	1,142	65,583,105	694	24,422,619	18,805	819,515,912	5.3%	43,580
06/30/2018	1,312	86,917,553	738	26,361,758	19,379	880,071,707	7.4%	45,414
06/30/2019	1,341	93,946,126	686	26,429,224	20,034	947,588,609	7.7%	47,299
06/30/2020	1,134	85,268,880	745	28,126,528	20,423	1,004,730,961	6.0%	49,196
06/30/2021	2,486	169,148,971	897	37,106,822	22,012	1,136,773,110	13.1%	51,643
06/30/2022	1,140	91,420,287	753	32,200,860	22,399	1,195,992,537	5.2%	53,395
06/30/2023	892	80,956,579	781	36,429,717	22,510	1,240,519,399	3.7%	55,110

[1] Does not include Family Death Benefit Plan members. Table based on valuation data.
[2] Effective 06/30/2004, also includes the COLA granted in July.

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Los Angeles City Employees' Retirement System

Actuarial Valuation and Review of Retirement Benefits as of June 30, 2023

This report has been prepared at the request of the Board of Administration to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Administration and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Segal

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November 7, 2023

Board of Administration
Los Angeles City Employees' Retirement System
977 N. Broadway
Los Angeles, CA 90012-1728

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2023. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year 2024/2025.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Retirement System. The census information and financial information on which our calculations were based was prepared by the staff of the System. That assistance is gratefully acknowledged.

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 Andy Yeung, ASA, MAAA, FCA 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 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.

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

Sincerely,

Segal

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary	Andy Yeung, ASA, MAAA, FCA, EA Vice President and Actuary	Todd Tauzer, FSA, MAAA, FCA, CERA Senior Vice President and Actuary

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Section 1: Actuarial Valuation Summary

Purpose and Basis

This report was prepared by Segal to present a valuation of the Los Angeles City Employees' Retirement System ("the System") as of June 30, 2023. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits. The measurements shown in this actuarial valuation may not be applicable for other purposes. In particular, the measures herein are not necessarily appropriate for assessing the sufficiency of current Plan assets to cover the estimated cost of settling the Plan's accrued benefit obligations.

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 contribution requirements presented in this report are based on:

- The benefit provisions of the pension plan, as administered by the Board of Administration;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2023, provided by the System;
- The assets of the Plan as of June 30, 2023, provided by the System;
- Economic assumptions regarding future salary increases and investment earnings;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. that the Board has adopted for the June 30, 2023 valuation; and
- The funding policy adopted by the Board of Administration.

Valuation Highlights

Pgs. 29 & 31

1. The results of this valuation reflect changes in the actuarial assumptions adopted by the Board on June 27, 2023. These new assumptions are described in Section 4, Exhibit 1 of this report. The assumption changes increased the combined (Tier 1 and Tier 3) City contribution rate by 0.26% of payroll (payable on July 15) and decreased the UAAL by $112.7 million.

Pgs. 36-37

2. The funded ratio (the ratio of the valuation value of assets to actuarial accrued liability) is 73.10%, compared to the prior year funded ratio of 73.30%. This ratio is one measure of funding status, and its history is a measure of funding progress. The funded ratio measured on a market value basis is 70.96%, compared to 70.66% as of the prior valuation date. 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.

Pgs. 29, 57 & 58-59

3. The UAAL as of June 30, 2022 was $6.429 billion. In this year's valuation, the UAAL has increased to $6.806 billion mainly due to unfavorable investment experience (after asset smoothing), higher than expected salary increases for continuing actives, and higher than expected cost-of-living adjustment (COLA) increases for payees, offset somewhat by actual contributions greater than expected, new actuarial assumptions adopted for this valuation, and other actuarial gains.

   A reconciliation of the System's UAAL is provided in *Section 2, Subsection E*. A schedule of the current UAAL amortization amounts is provided in *Section 3, Exhibit G*. Note that a graphical projection of the UAAL amortization bases and payments has been provided in *Section 3, Exhibit H.*

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4. The net actuarial loss from investment (after smoothing) and contribution experience is $94.9 million, or 0.37% of actuarial accrued liability. The net experience loss from sources other than investment and contribution experience, or $469.1 million, was 1.85% of the actuarial accrued liability. This loss was primarily due to higher than expected salary increases for continuing actives and higher than expected COLA increases for payees, offset somewhat by other miscellaneous actuarial gains.

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5. The aggregate employer rate (if received on July 15) calculated in this valuation has increased from 29.43% of payroll to 29.97% of payroll. The annual dollar employer contributions calculated in this valuation increased from about $664.8 million to $752.8 million. The increase in the employer rate was due to higher than expected salary increases for continuing active members, higher than expected COLA increases for payees, a lower than expected return on the valuation value of assets (after smoothing), and changes in actuarial assumptions. These increases were offset somewhat by amortizing the prior year's UAAL over a larger than expected projected total payroll, a decrease in the normal cost rate due, in part, to the enrollment of new employees in Tier 3, actual contributions greater than expected as a result of the anticipated one-year delay in implementing the higher contribution rate in the prior valuation, and other miscellaneous actuarial gains.

   A complete reconciliation of the aggregate employer contribution is provided in *Section 2, Subsection F*.

Pg. 24

6. The rate of return on the Market Value of Assets was 7.28% for the July 1, 2022 to June 30, 2023 plan year. The return on the Valuation Value of Assets (Retirement only) was 6.38% for the same period after considering the recognition of current and prior

years' investment gains and losses. This resulted in an actuarial loss when measured against the assumed rate of return of 7.00%. This actuarial investment loss increased the average employer contribution rate by 0.37% of pay.

Pg. 21

7. As indicated in *Section 2, Subsection B* of this report, the total net unrecognized investment loss as of June 30, 2023 is $650.0 million[1] for the assets for Retirement, Health, Family Death, and Larger Annuity Benefits. This net investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next several years. This implies that earning the assumed rate of investment return of 7.00% per year (net of investment and administrative expenses) on a market value basis will result in a net investment loss on the actuarial value of assets after June 30, 2023. Footnote 2 to the chart in *Subsection B of Section 2* shows how the $650.0 million net unrecognized loss will be recognized in the next six years under the asset smoothing method.

   The net deferred loss of $650.0 million represents 3.0% of the market value of assets as of June 30, 2023. Unless offset by future investment gain or other favorable experience, the recognition of the net $650.0 million market loss is expected to have an impact on the System's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:

   a. If the retirement plan component of the net deferred loss was recognized immediately in the valuation value of assets, the funded percentage would decrease from 73.10% to 70.96%.

      For comparison purposes, if the net deferred loss of $636.2 million for the retirement plan in the June 30, 2022 valuation had been recognized immediately in the June 30, 2022 valuation, the funded percentage would have decreased from 73.30% to 70.66%.

   b. If the retirement plan component of the net deferred loss was recognized immediately in the valuation value of assets, the aggregate employer rate (if received on July 15, 2024) would have increased from 29.97% of payroll to about 31.8% of payroll.

      For comparison purposes, if the net deferred loss of $636.2 million for the retirement plan in the June 30, 2022 valuation had been recognized immediately in the June 30, 2022 valuation, the aggregate employer rate (if received on July 15, 2023) would have increased from 29.43% of payroll to about 31.8% of payroll.

8. As in prior years, the employer contribution rates provided in this report have been developed assuming they will be received by LACERS on any of the following dates:

   a. The beginning of the fiscal year, or

   b. On July 15, 2024, or

   c. Throughout the year (i.e., LACERS will receive contributions at the end of every pay period).

[1] For comparison purposes, the total net unrecognized investment loss as of June 30, 2022 was $764.8 million.

9. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2023. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the Plan Year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2023 due to COVID-19. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

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10. Actuarial Standard of Practice No. 51 (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 LACERS 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.

    Since 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. Earlier this year we prepared a stand-alone Risk Assessment report for the Retirement and Health Plans dated March 20, 2023 by using membership and financial information as provided in the actuarial valuations as of June 30, 2022. That report includes various deterministic and stochastic projections of future results under different investment return scenarios based on the assumptions adopted for the June 30, 2022 valuations. A stand-alone risk assessment report associated with this June 30, 2023 valuation, including the quantitative analyses recommended by Segal in consultation with LACERS staff, will be available in the first quarter of 2024. In the interim, we have included a brief discussion of key risks that may affect the System in *Section 2, Subsection J*.

    Note that this year the risk assessment section 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.

Summary of Key Valuation Results

		% of Payroll	
		June 30, 2023	June 30, 2022
Employer Contribution Rates:[1]	**Tier 1**		
	• At the beginning of the year	31.00%	30.20%
	• On July 15	31.08%	30.30%
	• At the end of each pay period	32.06%	31.25%
	Tier 3		
	• At the beginning of the year	27.54%	27.02%
	• On July 15	27.61%	27.10%
	• At the end of each pay period	28.49%	27.95%
	Combined		
	• At the beginning of the year	29.87%	29.35%
	• On July 15	29.97%	29.43%
	• At the end of each pay period	30.91%	30.36%

[1] There is a 12-month delay until the rate is effective.

Summary of Key Valuation Results (continued)

		June 30, 2023	June 30, 2022
Actuarial Accrued Liability:	• Retired members and beneficiaries	$15,556,003,937	$14,893,950,295
	• Inactive vested members	666,372,920	623,239,425
	• Active members	9,077,160,261	8,561,561,583
	• Total Actuarial Accrued Liability	$25,299,537,118	$24,078,751,303
	• Normal Cost for plan year beginning June 30	461,843,826	412,247,235
Assets:	• Market Value of Assets (MVA)[1]	$21,589,265,113	$20,454,103,991
	• Actuarial Value of Assets (AVA)[1]	$22,239,263,545	$21,218,951,507
	• AVA as a percentage of MVA	103.0%	103.7%
	• Valuation Value of Retirement Assets (VVA)	$18,493,821,018	$17,649,267,571
	• Market Value of Retirement Assets (MVA)	17,953,292,567	17,013,091,063
Funded status:	• Unfunded Actuarial Accrued Liability (UAAL) on VVA basis	$6,805,716,100	$6,429,483,732
	• Funded ratio on VVA basis for retirement (VVA/AAL)	73.10%	73.30%
	• UAAL on MVA basis	$7,346,244,551	$7,065,660,240
	• Funded ratio on MVA basis for retirement (MVA/AAL)	70.96%	70.66%
Key assumptions:	• Net investment return	7.00%	7.00%
	• Price Inflation	2.50%	2.75%
	• Payroll growth increase	3.00%	3.25%
	• Cost-of-living adjustments		
	– Tier 1	2.75%	2.75%
	– Tier 3	2.00%	2.00%
	• Amortization period on VVA basis[2]	15 years	15 years

[1] Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits.
[2] Changes in UAAL as a result of gains or losses for each valuation are amortized over separate 15-year periods. Details on the funding policy are provided in *Section 4, Exhibit 1*.

Summary of Key Valuation Results (continued)

		June 30, 2023	June 30, 2022	Change From Prior Year
Demographic data:	**Active Members:**			
	• Number of members	25,875	24,917	3.8%
	• Average age	46.5	46.7	-0.2
	• Average employment service	12.5	12.8	-0.3
	• Total projected compensation[1]	$2,512,179,018	$2,258,724,771	11.2%
	• Average projected compensation	$97,089	$90,650	7.1%
	Retired Members and Beneficiaries:			
	• Number of members:			
	– Service retired	17,457	17,399	0.3%
	– Disability retired	799	819	-2.4%
	– Beneficiaries	4,254	4,181	1.7%
	– Total	22,510	22,399	0.5%
	• Average age	72.8	72.5	0.3
	• Average monthly benefit	$4,592	$4,450	3.2%
	Inactive Vested Members:			
	• Number of members[2]	11,148	10,379	7.4%
	• Average Age	44.8	44.6	0.2
	Total Members:	59,533	57,695	3.2%

[1] Reflects annualized salaries for part-time members.

[2] Includes terminated members due a refund of employee contributions. A breakdown of the inactive vested members by those who are nonvested and due a refund versus those who are vested and eligible for an annuity at retirement follows. (Note that in response to a Segal data question for the June 30, 2023 valuation, LACERS provided vesting service for inactive vested members for the first time. That service has been used to determine the vested/non-vested breakdown below as of June 30, 2023.)

	June 30, 2023			June 30, 2022		
	Tier 1	Tier 3	Combined	Tier 1	Tier 3	Combined
Non-Vested (Refund)	4,763	2,996	7,759	5,291	2,499	7,790
Vested (Annuity)	3,176	213	3,389	2,545	44	2,589
Total	7,939	3,209	11,148	7,836	2,543	10,379

Important Information About Actuarial Valuations

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

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

Plan 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.
Participant information	An actuarial valuation for a plan is based on data provided to the actuary by the System. 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 System. 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 participants 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 participants 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. 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.

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.

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 System. 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 the plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of future financial measures, except where otherwise noted.
If LACERS is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The System should look to their other advisors for expertise in these areas.
While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex 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 the System upon delivery and review. The System should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Actuarial Certification

November 7, 2023

This is to certify that Segal has conducted an actuarial valuation of the Los Angeles City Employees' Retirement System (LACERS or the System) retirement program as of June 30, 2023, in accordance with generally accepted actuarial principles and practices. In particular, it is our understanding that the assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice (ASOPs). Actuarial valuations are performed annually for this retirement program with the last valuation completed on June 30, 2022. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of the historical funding methods used in determination of the liability for retirement benefits.

The actuarial valuation is based on the plan of benefits verified by LACERS and on participant and financial data provided by LACERS. Segal did not audit LACERS' financial statements, but we conducted an examination of all participant data for reasonableness and we concluded that it was reasonable and consistent with the prior year's data.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the System's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age cost method.

The actuarial computations made are for funding plan benefits. Accordingly, additional determinations will be needed for other purposes, such as satisfying financial accounting requirements under Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68 and judging benefit security at termination of the plan.

Segal prepared all of the supporting schedules in the Actuarial Section of the Annual Financial Report and certain supporting schedules in the Financial Section, based on the results of the June 30, 2023 actuarial valuation. A listing of the supporting schedules Segal prepared for inclusion in the Financial Section as Required Supplementary Information prescribed by GASB, and in the Actuarial Section, is provided below:

<u>Financial Section</u>

1. Schedule of Net Pension Liability[1]
2. Schedule of Changes in Net Pension Liability and Related Ratios[1]
3. Schedule of Contribution History[1]

[1] Source: Segal's GASB Statement No. 67 valuation report as of June 30, 2023.

Actuarial Certification (continued)

November 7, 2023

Actuarial Section

4. Summary of Significant Valuation Results
5. Active Member Valuation Data
6. Retirees and Beneficiaries Added to and Removed from Retiree Payroll
7. Schedule of Funded Liabilities by Type
8. Schedule of Funding Progress
9. Actuarial Analysis of Financial Experience
10. Actuarial Balance Sheet
11. Schedule of Changes in Net Pension Liability and Related Ratios[1]
12. Projection of Pension Plan Fiduciary Net Position for use in Calculation of Discount Rate of 7.00% and Preparation of GASB 67 Report as of June 30, 2023[1]

LACERS' staff prepared other trend data schedules in the Statistical Section based on information supplied in Segal's valuation report.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the plan's current funding information. The undersigned is a member of the American Academy of Actuaries and is qualified to render the actuarial opinion contained herein.

Andy Yeung

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

[1] Source: Segal's GASB Statement No. 67 valuation report as of June 30, 2023.

Section 2: Actuarial Valuation Results

A. Member Data

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive vested members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in *Section 3, Exhibits A, B,* and *C*.

Member Population: 2014 – 2023

Year Ended June 30	Active Members	Inactive Vested Members[1]	Retired Members and Beneficiaries	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Retired Members and Beneficiaries to Actives
2014	24,009	6,031	17,532	23,563	0.98	0.73
2015	23,895	6,507	17,932	24,439	1.02	0.75
2016	24,446	6,895	18,357	25,252	1.03	0.75
2017	25,457	7,428	18,805	26,233	1.03	0.74
2018	26,042	8,028	19,379	27,407	1.05	0.74
2019	26,632	8,588	20,034	28,622	1.07	0.75
2020	27,490	9,207	20,423	29,630	1.08	0.74
2021	25,176	9,647	22,012	31,659	1.26	0.87
2022	24,917	10,379	22,399	32,778	1.32	0.90
2023	25,875	11,148	22,510	33,658	1.30	0.87

[1] Includes terminated members due a refund of member contributions.

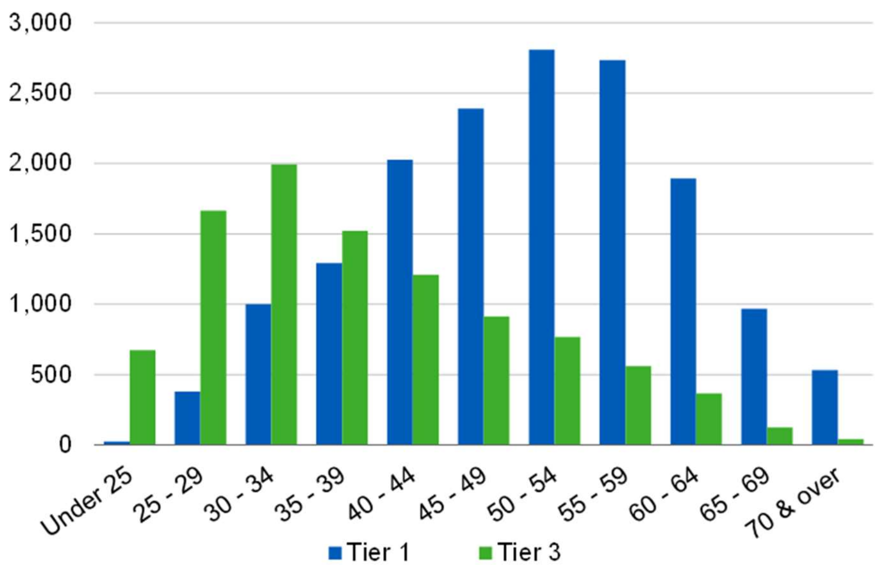
Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 25,875 active members with an average age of 46.5, average years of employment service of 12.5 years and average compensation of $97,089. The 24,917 active members in the prior valuation had an average age of 46.7, average employment service of 12.8 years and average compensation of $90,650.

Among the active members, there were none with unknown age information.

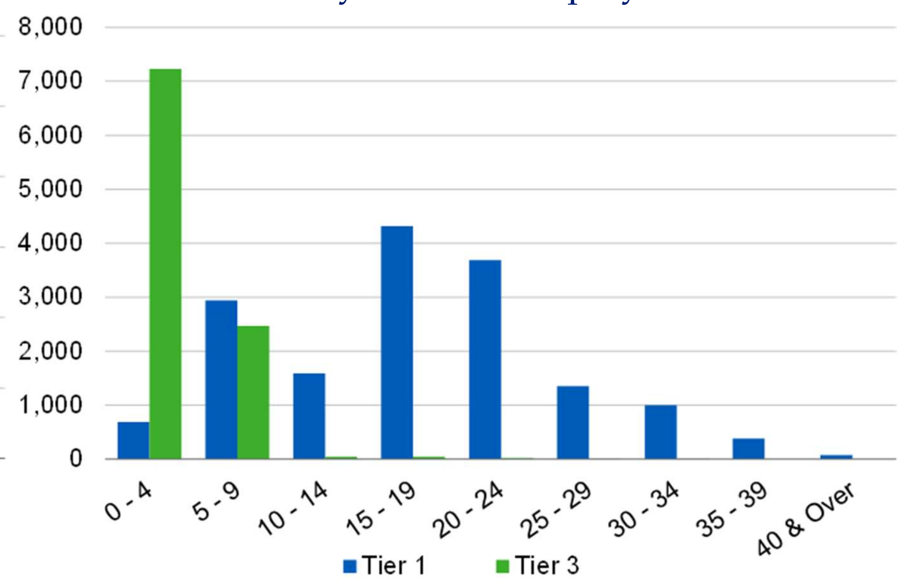
Distribution of Active Members as of June 30, 2023

Actives by Age



Average age	46.5
Prior year average age	46.7
Difference	-0.2

Actives by Years of Employment Service



Average years of service	12.5
Prior year average years of service	12.8
Difference	-0.3

Inactive Members

In this year's valuation, there were 11,148 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 10,379 in the prior valuation.

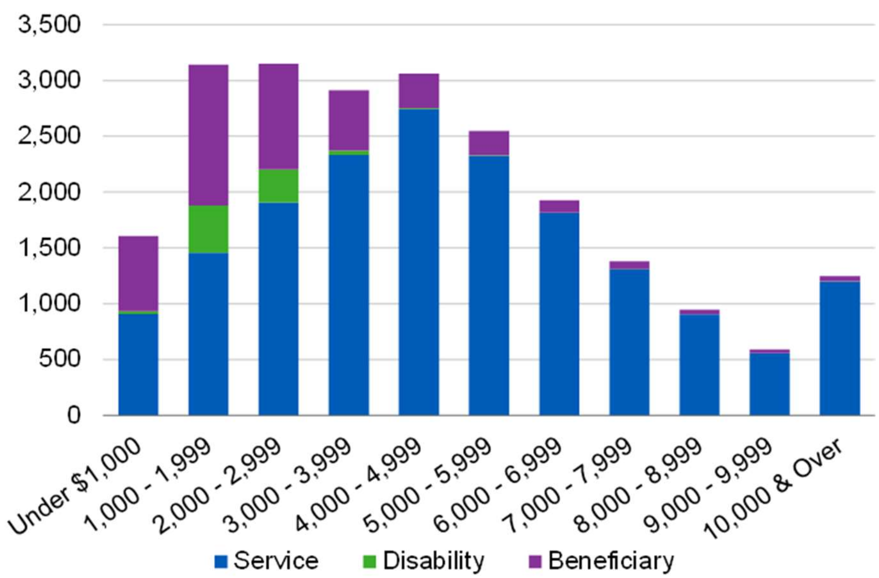
Retired Members and Beneficiaries

As of June 30, 2023, 18,256 retired members and 4,254 beneficiaries were receiving total monthly benefits of $103,376,617. For comparison, in the previous valuation, there were 18,218 retired members and 4,181 beneficiaries receiving monthly benefits of $99,666,045.

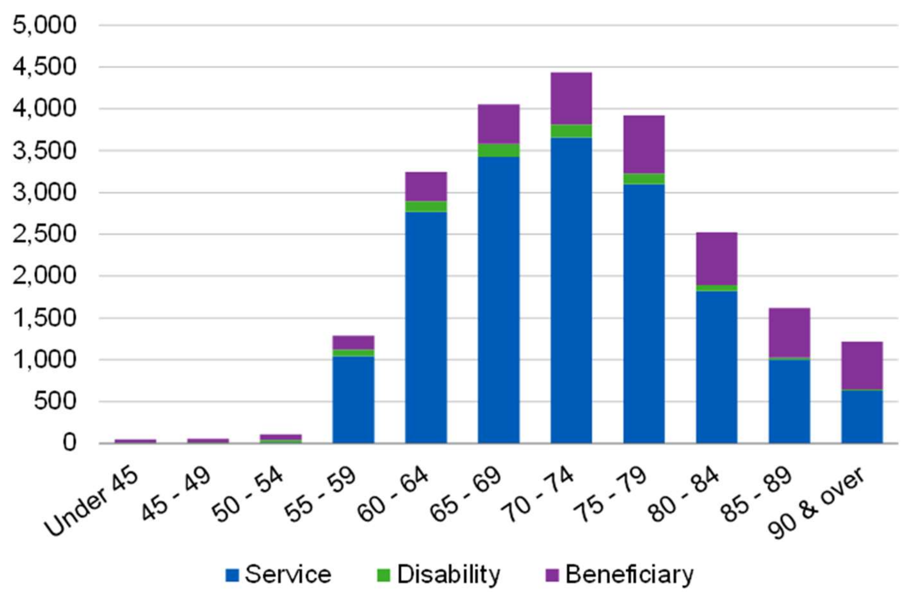
As of June 30, 2023, the average monthly benefit for retired members and beneficiaries is $4,592, compared to $4,450 in the previous valuation. The average age for retired members and beneficiaries is 72.8 in the current valuation, compared with 72.5 in the prior valuation.

Distribution of Retired Members and Beneficiaries as of June 30, 2023

Retired Members and Beneficiaries by Type and Monthly Amount



Retired Members and Beneficiaries by Type and Age



Historical Plan Population

The chart below demonstrates the progression of the active population over the last ten years. The chart also shows the growth among the retired population over the same time period.

Member Data Statistics: 2014 – 2023

	Active Members			Retired Members and Beneficiaries		
Year Ended June 30	Count	Average Age	Average Employment Service	Count	Average Age	Average Monthly Amount
2014	24,009	48.8	15.0	17,532	72.4	$3,406
2015	23,895	48.8	15.0	17,932	72.5	3,487
2016	24,446	48.6	14.7	18,357	72.5	3,533
2017	25,457	48.0	14.1	18,805	72.6	3,632
2018	26,042	47.4	13.7	19,379	72.5	3,784
2019	26,632	47.0	13.2	20,034	72.5	3,942
2020	27,490	46.8	12.9	20,423	72.7	4,100
2021	25,176	46.4	12.6	22,012	72.2	4,304
2022	24,917	46.7	12.8	22,399	72.5	4,450
2023	25,875	46.5	12.5	22,510	72.8	4,592

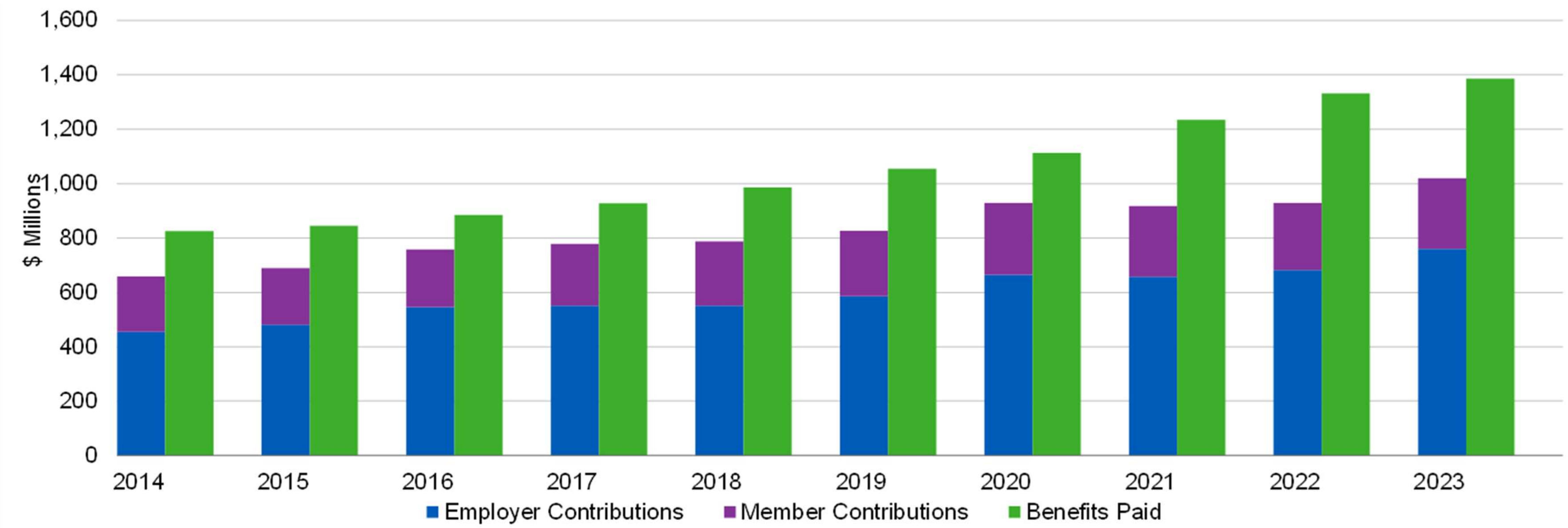
B. Financial Information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components.

Additional financial information, including a summary of transactions for the valuation year, is presented in *Section 3, Exhibits D, E, and F*.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Administration has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Comparison of Contributions Made with Benefits for Years Ended June 30, 2014 – 2023



Determination of Actuarial Value of Assets for Year Ended June 30, 2023

		Actual Return	Expected Return	Investment Gain/(Loss)	Portion Not Recognized	Unrecognized Amount
1	**Market Value of Assets**					**$21,589,265,113**
2	Calculation of unrecognized return[1]					
a)	Year ended June 30, 2023	$1,500,807,128	$1,443,373,615	$57,433,513	6/7	$49,228,725
b)	Year ended June 30, 2022	(1,947,728,626)	1,604,160,949	(3,551,889,575)	5/7	(2,537,063,982)
c)	Year ended June 30, 2021	5,258,341,258	1,260,485,231	3,997,856,027	4/7	2,284,489,158
d)	Year ended June 30, 2020	338,862,747	1,299,282,781	(960,420,034)	3/7	(411,608,586)
e)	Year ended June 30, 2019	945,590,839	1,242,978,109	(297,387,270)	2/7	(84,967,791)
f)	Year ended June 30, 2018	1,498,100,177	1,148,631,872	349,468,305	1/7	49,924,044
g)	Total unrecognized return[2]					$(649,998,432)
3	**Preliminary Actuarial Value of Assets (1) - (2g)**					**$22,239,263,545**
4	Adjustment to be within 40% corridor					0
5	**Final Actuarial Value of Assets 3 + 4**					**$22,239,263,545**
6	Actuarial Value of Assets as a percentage of Market Value of Assets 5 ÷ 1					103.0%
7	Market value of retirement assets					$17,953,292,567
8	**Valuation value of retirement assets 5 ÷ 1 x 7**					**$18,493,821,018**

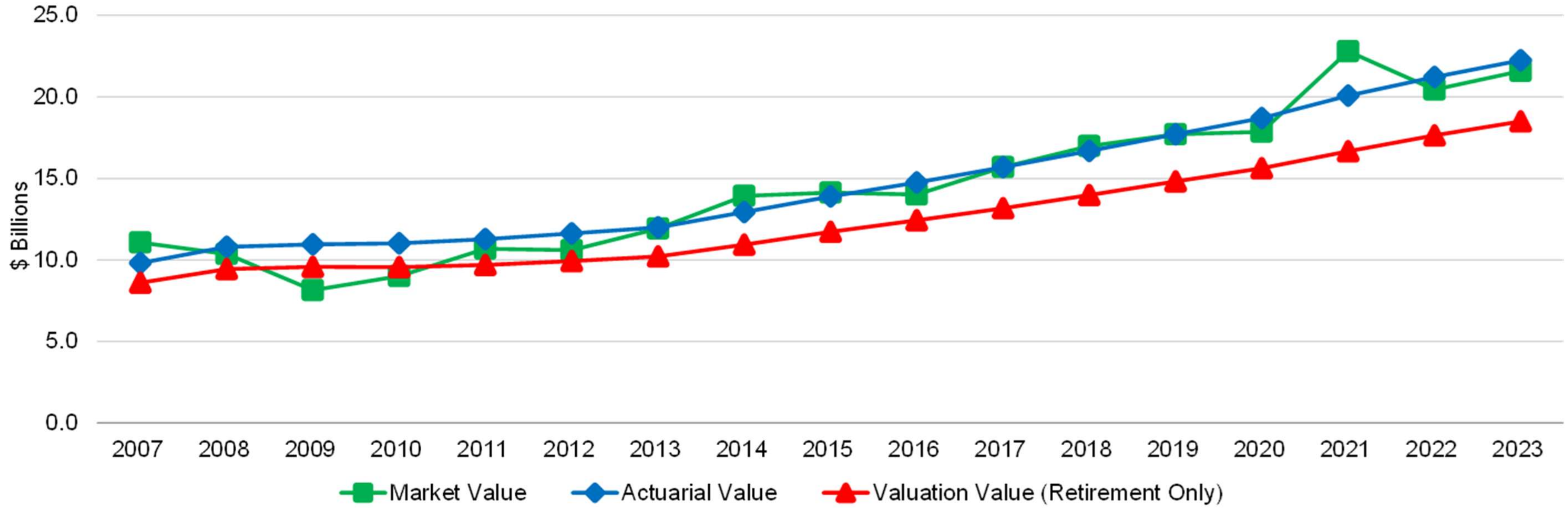
[1] Total return minus expected return on a market value basis.

[2] Deferred return as of June 30, 2023 recognized in each of the next six years (for Retirement and Health Plans):

(a) Amount recognized on June 30, 2024	$(57,848,432)	(e) Amount recognized on June 30, 2028	(499,208,008)
(b) Amount recognized on June 30, 2025	(107,772,476)	(f) Amount recognized on June 30, 2029	8,204,788
(c) Amount recognized on June 30, 2026	(65,288,580)	(g) Total unrecognized return as of June 30, 2023	$(649,998,432)
(d) Amount recognized on June 30, 2027	71,914,282	(may not total exactly due to rounding)	

The Market Value, Actuarial Value and Valuation Value of Assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the Actuarial Value of Assets tracks the Market Value of Assets. The portion of the total actuarial value of assets allocated for retirement benefits, based on a prorated share of market value, is shown as the Valuation Value of Assets. The Valuation Value of Assets is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the Unfunded Actuarial Accrued Liability is an important element in determining the contribution requirement.

Market Value, Actuarial Value, and Valuation Value (Retirement Only) of Assets as of June 30, 2007 – 2023



C. Actuarial Experience

To calculate any actuarially determined contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the actuarially determined contribution will decrease from the previous year. On the other hand, the actuarially determined contribution will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years. There are no changes in actuarial assumptions reflected in this valuation, as noted in *Section 4, Exhibit 1*.

The total loss is $564.0 million, which includes $109.9 million from investment losses (after smoothing), a gain of $15.0 million from contribution experience and $469.1 million in losses from all other sources. The net experience variation from individual sources other than investments and contributions was 1.85% of the Actuarial Accrued Liability. A discussion of the major components of the actuarial experience is on the following pages.

Actuarial Experience for Year Ended June 30, 2023

1	Net loss from investments[1]	$(109,885,702)
2	Net gain from contribution experience[2]	15,009,686
3	Net loss from other experience[3]	(469,171,462)
4	**Net experience loss: 1 + 2 + 3[4]**	$(564,047,478)

[1] Details on next page.

[2] The actual contributions were more than expected due to actual covered payroll for 2022/2023 higher than the payroll projected in the June 30, 2022 valuation. This is somewhat offset by the scheduled one-year lag in implementing the slightly higher employer contribution rates calculated in the June 30, 2022 valuation for fiscal year 2023.

[3] See *Subsection E* for further details.

[4] The net loss is attributed to actual liability experience from July 1, 2022 through June 30, 2023 compared to the projected experience based on the actuarial assumptions as of June 30, 2022. Does not include the effect of plan or assumption changes as of June 30, 2023, if any.

Investment Experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on LACERS' investment policy. The rate of return on the Market Value of Assets was 7.28% for the year ended June 30, 2023.

For valuation purposes, the assumed rate of return on the Valuation Value of Assets was 7.00% for the June 30, 2022 valuation. The actual rate of return on the valuation value basis for the 2022/2023 plan year was 6.38%. Since the actual return for the year was less than the assumed return, the Plan experienced an actuarial loss during the year ended June 30, 2023 with regard to its investments.

Investment Experience for Year Ended June 30, 2023

		Market Value	Actuarial Value	Valuation Value
		(Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits)	**(Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits)**	**(Includes assets for Retirement Only)**
1	Net investment income	$1,500,807,128	$1,385,958,044	$1,136,810,338
2	Average value of assets	20,619,623,070	21,384,470,586	17,809,943,424
3	Rate of return: **1 ÷ 2**	7.28%	6.48%	6.38%
4	Assumed rate of return	7.00%	7.00%	7.00%
5	Expected investment income: **2 x 4**	$1,443,373,615	$1,496,912,941	$1,246,696,040
6	**Actuarial gain/(loss): 1 - 5**	**$57,433,513**	**$(110,954,897)**	**$(109,885,702)**

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the actual market value investment return for Retirement, Health, Family Death, and Larger Annuity Benefits for the last ten years, including the five-year average.

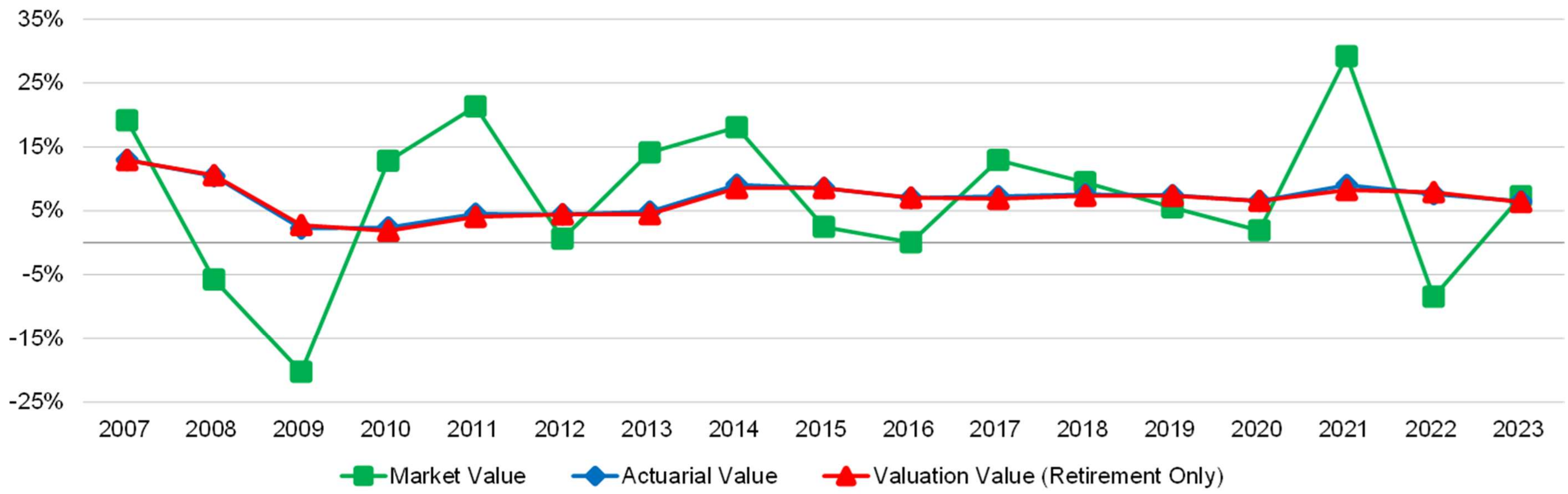
Investment Return – Actuarial Value vs. Market Value: 2014 – 2023

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return[1]	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
2014	$225,147,763	1.86%	$873,017,519	7.19%	$1,098,165,282	9.05%	$2,180,005,303	18.09%
2015	231,942,743	1.77%	887,268,617	6.79%	1,119,211,360	8.56%	348,113,908	2.47%
2016	240,916,934	1.71%	742,488,219	5.28%	983,405,153	6.99%	7,190,895	0.05%
2017	277,724,021	1.86%	807,293,418	5.41%	1,085,017,439	7.27%	1,834,657,728	12.94%
2018	291,385,736	1.84%	907,603,043	5.73%	1,198,988,779	7.57%	1,498,100,177	9.46%
2019	308,498,344	1.83%	942,352,775	5.60%	1,250,851,119	7.43%	945,590,839	5.52%
2020	287,869,198	1.61%	882,083,733	4.92%	1,169,952,931	6.53%	338,862,747	1.89%
2021	244,066,145	1.29%	1,458,211,525	7.74%	1,702,277,670	9.03%	5,258,341,258	29.20%
2022	297,933,122	1.48%	1,240,587,482	6.14%	1,538,520,604	7.62%	(1,947,728,626)	(8.50)%
2023	319,258,979	1.49%	1,066,699,065	4.99%	1,385,958,044	6.48%	1,500,807,128	7.28%
			Most recent five-year average geometric return:			**7.41%**		**6.40%**
			Most recent ten-year average geometric return:			**7.65%**		**7.39%**

[1] The year-ended rates of return have been calculated on a dollar-weighted basis. It is our understanding that LACERS' investment consultant calculates rates of return on a time-weighted basis, which can produce different results.

Section 2, Subsection B described the actuarial asset valuation method that gradually recognizes fluctuations in the market value rate of return. The goal of this is to stabilize the actuarial rate of return and to produce more level pension plan costs.

Market Value, Actuarial Value and Valuation Value (Retirement Only) Rates of Return for Years Ended June 30, 2007 – 2023



Contributions

Contributions for the year ended June 30, 2023, when adjusted for timing, totaled $981.3 million, compared to the projected amount of $966.3 million (also adjusted for timing). This resulted in a gain of $15.0 million for the year.

Non-Investment Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among participants,
- retirement experience (earlier or later than projected),
- mortality (more or fewer deaths than projected),
- the number of disability retirements (more or fewer than projected),
- salary increases (greater or smaller than projected), and
- cost-of-living adjustments (COLAs; higher or lower than anticipated).

The net loss from this other experience for the year ended June 30, 2023 amounted to $469.1 million, which is 1.85% of the Actuarial Accrued Liability. This loss was mainly due to higher than expected individual salary increases for continuing actives and higher than anticipated COLAs for payees. See *Subsection E* for a detailed development of the Unfunded Actuarial Accrued Liability.

D. Other Changes in the Actuarial Accrued Liability

The Actuarial Accrued Liability as of June 30, 2023 is $25.3 billion, an increase of $1.2 billion, or 5.1%, from the liability as of the prior valuation date. The Actuarial Accrued Liability is expected to grow each year with Normal Cost and interest, and to decline due to benefit payments made. Additional fluctuations can occur due to actual experience that differs from expected (as discussed in the previous subsection).

Actuarial Assumptions

This report reflects assumption changes based on the Actuarial Experience Study (dated June 21, 2023) covering the period July 1, 2019 through June 30, 2022.

- The changes in actuarial assumptions decreased the Actuarial Accrued Liability by $112.7 million (a 0.4% decrease) and increased the total Normal Cost by $14.6 million (a 3.3% increase). The effect on the employer contribution rate was an increase of 0.26% of payroll (payable on July 15).

Details on actuarial assumptions and methods are in *Section 4, Exhibit 1*.

Plan Provisions

There were no changes in plan provisions since the prior valuation.

A summary of plan provisions is in *Section 4, Exhibit 2*.

E. Development of Unfunded Actuarial Accrued Liability

Development for Year Ended June 30, 2023

1	**Unfunded actuarial accrued liability at beginning of year**		**$6,429,483,732**
2	Total Normal Cost at beginning of year		412,247,235
3	Expected employer and member contributions at beginning of year		(903,068,086)
4	Interest		415,706,401
5	Expected Unfunded Actuarial Accrued Liability at end of year		$6,354,369,282
6	Changes due to:[1]		
	a. Investment loss on smoothed value of assets	$109,885,702	
	b. Gain due to contribution experience[2]	(15,009,686)	
	c. Loss due to higher than expected salary increases for continuing actives	255,446,392	
	d. Loss due to higher than expected COLAs for payees	236,936,106	
	e. Other net gains on demographic experience	(23,211,036)	
	f. Decrease due to changes in actuarial assumptions	(112,700,660)	
	Total gain		$451,346,818
7	**Unfunded actuarial accrued liability at end of year**		**$6,805,716,100**

[1] The "net loss from other experience" of $469,171,462 from *Subsection C* is equal to the sum of items 6c through 6e.

[2] The actual contributions were more than expected due to actual covered payroll for 2022/2023 higher than the payroll projected in the June 30, 2022 valuation. This is somewhat offset by the scheduled one-year lag in implementing the slightly higher employer contribution rates calculated in the June 30, 2022 valuation for fiscal year 2023.

F. Recommended Contribution

The amount of annual contribution required to fund the Retirement Plan is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability. This total amount, adjusted with interest for timing, is then divided by the projected payroll for active members to determine the funding rate of 29.97% of payroll, if received by LACERS on July 15, 2024. The recommended contribution is set equal to the contributions under the current funding policy.

The Board sets the funding policy used to calculate the recommended contribution based on layered amortization periods. See *Section 4, Exhibit 1* for further details on the funding policy.

The contribution requirement for the June 30, 2023 valuation is based on the data previously described, the actuarial assumptions and Plan provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions.

A reconciliation of the average recommended employer contribution from June 30, 2022 to June 30, 2023 is shown on the next page. A summary of the recommended contributions by tier is shown on pages 32 through 34.

Reconciliation of Average Recommended Employer Contribution Rate

The chart below details the changes in the average recommended employer contribution rate from the prior valuation to the current year's valuation.

Reconciliation of Average Recommended Employer Contribution Rate[1] from June 30, 2022 to June 30, 2023

		Contribution Rate
1	**Average Recommended Employer Contribution Rate as of June 30, 2022**	**29.43%**
2	Effect of decrease in employer normal cost due to payroll and demographic changes (including the enrollment of new employees in Tier 3)	(0.29)%
3	Effect of contribution experience[2]	(0.05)%
4	Effect of investment return less than expected on smoothed value of assets	0.37%
5	Effect of higher than expected COLAs for payees	0.81%
6	Effect of individual salary increases higher than expected for continuing active members	0.87%
7	Effect of amortizing prior year's UAAL over a larger than expected projected total payroll	(1.37)%
8	Effect of other net demographic experience gains	(0.06)%
9	Effect of assumptions changes	0.26%
10	Total change	0.54%
11	**Average Recommended Employer Contribution Rate as of June 30, 2023**	**29.97%**

[1] If received on July 15.

[2] The actual contributions were more than expected due to actual covered payroll for 2022/2023 higher than the payroll projected in the June 30, 2022 valuation. This is somewhat offset by the scheduled one-year lag in implementing the slightly higher employer contribution rates calculated in the June 30, 2022 valuation for fiscal year 2023.

Recommended Employer Contribution Rate

Tier 1

		June 30, 2023 Actuarial Valuation		June 30, 2022 Actuarial Valuation	
		Amount	% of Payroll	Amount	% of Payroll
	Before Reflecting Increase in Contribution Rates due to Enhanced Benefits for APO				
1	Total normal cost	$330,875,045	19.44%	$313,996,717	19.04%
2	Expected employee contributions[1]	180,926,015	10.63%	175,291,255	10.64%
3	Employer normal cost: 1 - 2	$149,949,030	8.81%	$138,705,462	8.40%
4	Actuarial accrued liability	24,792,102,207		23,691,360,828	
5	Valuation value of assets	17,409,718,747		16,886,488,189	
6	Unfunded actuarial accrued liability: 4 - 5	$7,382,383,460		$6,804,872,639	
7	Amortization of unfunded actuarial accrued liability	374,844,316	22.02%[2,3]	356,394,541	21.62%[2]
8	Total recommended contribution, beginning of year: 3 + 7	$524,793,346	30.83%	$495,100,003	30.02%
9	Total recommended contribution, July 15	526,254,560	30.91%	496,478,540	30.12%
10	Total recommended contribution, end of pay periods	542,850,458	31.89%	512,135,425	31.07%
	Increase in Contribution Rates due to Enhanced Benefits for APO				
11	Employer normal cost, July 15		0.06%		0.07%
12	Unfunded actuarial accrued liability, July 15		0.11%		0.11%
13	Total recommended contribution, July 15		0.17%		0.18%
	After Reflecting Increase in Contribution Rates due to Enhanced Benefits for APO				
14	Total recommended contribution, beginning of year	$527,593,819	31.00%	$498,052,841	30.20%
15	Total recommended contribution, July 15	529,062,831	31.08%	499,439,600	30.30%
16	Total recommended contribution, end of pay periods	545,747,290	32.06%	515,189,865	31.25%
17	Projected payroll	$1,702,032,123		$1,648,564,985	

1 Discounted to beginning of year. The average employee rate for contributions made at the end of each pay period is actually 11.01% for the June 30, 2022 valuation and 11.00% for the June 30, 2023 valuation.

2 In developing the UAAL contribution rate, we have combined the UAAL for Tiers 1 and 3 and amortized that total UAAL over the total payroll for Tiers 1 and 3.

3 For purposes of purchasing service with the Water and Power Employees' Retirement Plan (WPERP) for Tier 1, the UAAL rate as of June 30, 2023 is 22.02% before reflecting enhanced benefits for APO, plus an additional 0.11% for the cost increase for the enhanced APO benefits for a total of 22.13%, if received at the beginning of the year. If received on July 15, the total UAAL rate of 22.13% increases to 22.19%.

Recommended Employer Contribution Rate (continued)

Tier 3

		June 30, 2023 Actuarial Valuation		June 30, 2022 Actuarial Valuation	
		Amount	% of Payroll	Amount	% of Payroll
	Before Reflecting Increase in Contribution Rates due to Enhanced Benefits for APO				
1	Total normal cost	$129,947,562	16.04%	$97,136,280	15.92%
2	Expected employee contributions[1]	86,118,615	10.63%	64,847,900	10.63%
3	Employer normal cost: 1 - 2	$43,828,947	5.41%	$32,288,380	5.29%
4	Actuarial accrued liability	486,101,355		364,933,478	
5	Valuation value of assets	1,084,102,271		762,779,382	
6	Unfunded actuarial accrued liability: 4 – 5	$(598,000,916)		$(397,845,904)	
7	Amortization of unfunded actuarial accrued liability	178,421,403	22.02%[2]	131,907,216	21.62%[2]
8	Total recommended contribution, beginning of year: 3 + 7	$222,250,350	27.43%	$164,195,596	26.91%
9	Total recommended contribution, July 15	222,869,176	27.50%	164,652,776	26.99%
10	Total recommended contribution, end of pay periods	229,897,550	28.38%	169,845,245	27.84%
	Increase in Contribution Rates due to Enhanced Benefits for APO				
11	Employer normal cost, July 15		0.00%		0.00%
12	Unfunded actuarial accrued liability, July 15		0.11%		0.11%
13	Total recommended contribution, July 15		0.11%		0.11%
	After Reflecting Increase in Contribution Rates due to Enhanced Benefits for APO				
14	Total recommended contribution, beginning of year	$223,097,253	27.54%	$164,876,090	27.02%
15	Total recommended contribution, July 15	223,718,437	27.61%	165,335,165	27.10%
16	Total recommended contribution, end of pay periods	230,773,593	28.49%	170,549,154	27.95%
17	Projected payroll	$810,146,895		$610,159,786	

[1] Discounted to beginning of year. The average employee rate for contributions made at the end of each pay period is actually 11.00% for the June 30, 2022 and June 30, 2023 valuations.

[2] In developing the UAAL contribution rate, we have combined the UAAL for Tiers 1 and 3 and amortized that total UAAL over the total payroll for Tiers 1 and 3.

Recommended Employer Contribution Rate (continued)

Combined

		June 30, 2023 Actuarial Valuation		June 30, 2022 Actuarial Valuation	
		Amount	% of Payroll	Amount	% of Payroll
	Before Reflecting Increase in Contribution Rates due to Enhanced Benefits for APO				
1	Total normal cost	$460,822,607	18.33%	$411,132,997	18.20%
2	Expected employee contributions	267,044,630	10.63%	240,139,155	10.63%
3	Employer normal cost: 1 - 2	$193,777,977	7.70%	$170,993,842	7.57%
4	Actuarial accrued liability	25,278,203,562		24,056,294,306	
5	Valuation value of assets	18,493,821,018		17,649,267,571	
6	Unfunded actuarial accrued liability: 4 - 5	$6,784,382,544		$6,407,026,735	
7	Amortization of unfunded actuarial accrued liability	553,265,719	22.02%	488,301,757	21.62%
8	Total recommended contribution, beginning of year: 3 + 7	$747,043,696	29.72%	$659,295,599	29.19%
9	Total recommended contribution, July 15	749,123,736	29.82%	661,131,316	29.27%
10	Total recommended contribution, end of pay periods	772,748,008	30.76%	681,980,671	30.20%
	Increase in Contribution Rates due to Enhanced Benefits for APO				
11	Employer normal cost, July 15		0.04%		0.05%
12	Unfunded actuarial accrued liability, July 15		0.11%		0.11%
13	Total recommended contribution, July 15		0.15%		0.16%
	After Reflecting Increase in Contribution Rates due to Enhanced Benefits for APO				
14	Total normal cost	$461,843,826	18.37%	$412,247,235	18.25%
15	Expected employee contributions	267,044,630	10.63%	240,139,155	10.63%
16	Employer normal cost: 14 - 15	$194,799,196	7.74%	$172,108,080	7.62%
17	Actuarial accrued liability	25,299,537,118		24,078,751,303	
18	Valuation value of assets	18,493,821,018		17,649,267,571	
19	Unfunded actuarial accrued liability: 17 - 18	$6,805,716,100		$6,429,483,732	
20	Amortization of unfunded actuarial accrued liability	555,891,876	22.13%	490,820,851	21.73%
21	Total recommended contribution, beginning of year: 16 + 20	$750,691,072	29.87%	$662,928,931	29.35%
22	Total recommended contribution, July 15	752,781,268	29.97%	664,774,765	29.43%
23	Total recommended contribution, end of pay periods	776,520,883	30.91%	685,739,018	30.36%
24	Projected payroll	$2,512,179,018		$2,258,724,771	

Recommended Employer Contribution Rate (continued)

		Tier 1	Tier 3	Combined
	Before Reflecting Increase in Contribution Rates due to Enhanced Benefits for APO			
1	Total normal cost	$330,875,045	$129,947,562	$460,822,607
2	Expected employee contributions[1]	180,926,015	86,118,615	267,044,630
3	Employer normal cost: 1 – 2	$149,949,030	$43,828,947	$193,777,977
4	Payment on unfunded actuarial accrued liability	374,844,316	178,421,403	553,265,719
5	Total recommended contribution: beginning of year: 3 + 4	524,793,346	222,250,350	747,043,696
6	Total recommended contribution: adjusted for July 15 timing	526,254,560	222,869,176	749,123,736
7	Total recommended contribution: adjusted for biweekly timing	542,850,458	229,897,550	772,748,008
8	Item 5 (beginning of year contribution) as a % of projected payroll: 5 ÷ 17	30.83%	27.43%	22.02%
9	Item 6 (July 15 contribution) as a % of projected payroll: 6 ÷ 17	30.91%	27.50%	29.72%
10	Item 7 (biweekly contribution) as a % of projected payroll: 7 ÷ 17	31.89%	28.38%	29.82%
	After Reflecting Increase in Contribution Rates due to Enhanced Benefits for APO			
11	Total recommended contribution: beginning of year	$527,593,819	$223,097,253	$750,691,072
12	Total recommended contribution: adjusted for July 15 timing	529,062,831	223,718,437	752,781,268
13	Total recommended contribution: adjusted for biweekly timing	545,747,290	230,773,593	776,520,883
14	Item 11 (beginning of year contribution) as a % of projected payroll: 11 ÷ 17	31.00%	27.54%	29.87%
15	Item 12 (July 15 contribution) as a % of projected payroll: 12 ÷ 17	31.08%	27.61%	29.97%
16	Item 13 (biweekly contribution) as a % of projected payroll: 13 ÷ 17	32.06%	28.49%	30.91%
17	Projected payroll	$1,702,032,123	$810,146,895	$2,512,179,018

[1] Discounted to beginning of year.

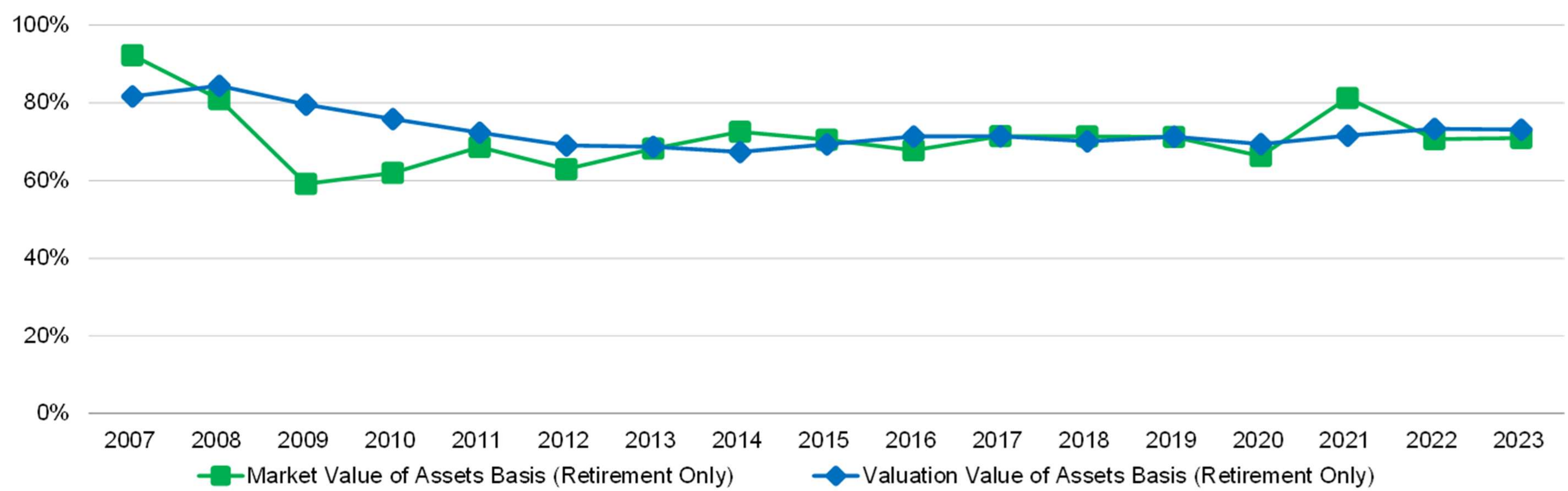
G. Funded Status

A commonly reported piece of information regarding the Plan's financial status is the funded ratio. These ratios compare the Market Value and Valuation Value of Assets to the Actuarial Accrued Liability of the Plan. Higher ratios indicate a relatively well-funded plan while lower ratios may indicate recent changes to actuarial assumptions, funding of the plan below actuarial requirements, poor asset performance, or a variety of other causes.

The chart below depicts a history of the funded ratio for the Plan. The chart on the next page shows the Plan's schedule of funding progress for the last ten years.

The funded status measures shown in this valuation are appropriate for assessing the need for or amount of future contributions. However, they are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. As the chart below shows, the measures are different depending on whether the Market Value or Valuation Value of Assets is used.

Funded Ratio for Years Ended June 30, 2007 – 2023



Schedule of Funding Progress for Years Ended June 30, 2014 – 2023

Actuarial Valuation Date as of June 30	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Projected Covered Payroll [(b) - (a)] / (c)
2014	$10,944,750,574	$16,248,853,099	$5,304,102,525	67.36%	$1,898,064,175	279.45%
2015	11,727,161,378	16,909,996,380	5,182,835,002	69.35%	1,907,664,598	271.68%
2016	12,439,250,206	17,424,996,329	4,985,746,123	71.39%	1,968,702,630	253.25%
2017	13,178,333,884	18,458,187,953	5,279,854,069	71.40%	2,062,316,129	256.02%
2018	13,982,435,465	19,944,579,058	5,962,143,593	70.11%	2,177,687,102	273.78%
2019	14,818,564,427	20,793,421,143	5,974,856,716	71.27%	2,225,412,831	268.48%
2020	15,630,102,547	22,527,195,295	6,897,092,748	69.38%	2,445,016,587	282.09%
2021	16,660,584,654	23,281,892,854	6,621,308,200	71.56%	2,254,165,029	293.74%
2022	17,649,267,571	24,078,751,303	6,429,483,732	73.30%	2,258,724,771	284.65%
2023	18,493,821,018	25,299,537,118	6,805,716,100	73.10%	2,512,179,018	270.91%

H. Actuarial Balance Sheet

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the Plan for current participants is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the actuarial present value of future benefits of the Plan.

Second, this actuarial present value of future benefits is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

Actuarial Balance Sheet

	Year Ended	
	June 30, 2023	**June 30, 2022**
Actuarial present value of future benefits		
• Present value of benefits for retired members and beneficiaries	$15,556,003,937	$14,893,950,295
• Present value of benefits for inactive vested members	666,372,920	623,239,425
• Present value of benefits for active members	12,985,744,755	12,067,954,233
Total actuarial present value of future benefits	**$29,208,121,612**	**$27,585,143,953**
Current and future assets		
• Total valuation value of assets	$18,493,821,018	$17,649,267,571
• Present value of future contributions by members	2,259,921,414	2,041,142,974
• Present value of future employer contributions for:		
• Entry age normal cost	1,648,663,080	1,465,249,676
• Unfunded actuarial accrued liability	6,805,716,100	6,429,483,732
Total of current and future assets	**$29,208,121,612**	**$27,585,143,953**

I. Volatility Ratios

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the Market Value of Assets divided by total payroll, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measurement since it is based on the current level of assets.

The current AVR is about 7.1. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 7.1% of one-year's payroll. Since actuarial gains and losses are amortized over 15 years, there would be a 0.6% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The Liability Volatility Ratio (LVR), which is equal to the actuarial accrued liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions. The current LVR is about 10.1. This is about 42% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.

Volatility Ratios for Years Ended 2014 – 2023

Year Ended June 30	Asset Volatility Ratio	Liability Volatility Ratio
2014	6.2	8.6
2015	6.2	8.9
2016	6.0	8.9
2017	6.4	9.0
2018	6.5	9.2
2019	6.7	9.3
2020	6.1	9.2
2021	8.4	10.3
2022	7.5	10.7
2023	7.1	10.1

J. Risk Assessment

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. Earlier this year we prepared a stand-alone Risk Assessment report for the Retirement and Health Plans dated March 20, 2023 by using membership and financial information as provided in the actuarial valuations as of June 30, 2022. That report includes various deterministic and stochastic projections of future results under different investment return scenarios based on the assumptions adopted for the June 30, 2022 valuations. A copy of the stand-alone risk assessment report associated with this June 30, 2023 valuation, including the quantitative analyses recommended by Segal in consultation with LACERS staff, will be available in the first quarter of 2024.

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, as well as a discussion of historical trends and maturity measures:

Risk Assessments

- Asset/Liability Mismatch Risk (the potential that future plan experience does not affect asset and liability values in the same way, causing them to diverge)

  The most significant asset/liability mismatch risk to the Plan is investment risk, as discussed below. In fact, investment risk has the potential to impact asset/liability mismatch in two ways. The first mismatch is evident in annual valuations: when asset values deviate from assumptions they are typically independent from liability changes. The second mismatch can be caused when systemic asset deviations from assumptions may signal the need for an assumption change, which causes liability values and contribution rates to move in the opposite direction from any change in the expected experience of asset growth rates.

  Asset/liability mismatch can also be caused by demographic assumption risk such as longevity, which affects liabilities but have no impact on asset levels. This risk is also discussed below.

- Investment Risk (the risk that investment returns will be different than expected)

  The investment return assumption is a long-term, static assumption for valuation purposes even though in reality market experience can be quite volatile in any given year. That volatility can cause significant changes in the financial health of the system, affecting both funded status and contribution rates. The inherent year-to-year volatility is reduced by smoothing through the Actuarial Value of Assets, however investment experience can still have a sizable impact. As discussed in *Section 2, Subsection I, Volatility Ratios*, on page 39, a

1% asset gain or loss (relative to the assumed investment return) translates to about 7.1% of one-year's payroll. Since actuarial gains and losses are amortized over 15 years, there would be a 0.6% of payroll decrease/(increase) in the required contribution for each 1% asset gain or loss.

The single year market value rate of return over the last 10 years has ranged from a low of -8.50% to a high of 29.20%.

- 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. This risk can be reduced by using tables appropriate for the Plan (public experience tables) that are weighted by benefit levels, and by using generational mortality projections. Effective with the June 30, 2020 valuation, the Board has adopted mortality tables based on public plan experience that are weighted by benefits and include generational mortality projections.

- Other Risks

  In addition to longevity, the valuation includes a variety of other assumptions that are unlikely to match future experience exactly. One example is projected salary scales over time. As salary is central to the determination of benefits paid in retirement, deviations from the projected salary scales could have a material impact on the benefits anticipated for each member. Examples of demographic assumptions include retirement, termination and disability assumptions, and will likely vary in significance for different pension plans.

Some plans also carry significant contribution risk, defined as the potential for actual future contributions deviating from expected future contributions. However, the employer has a proven track-record of making the Actuarially Determined Contributions based on the Board's Actuarial Funding Policy, so contribution risk is minimal.

Evaluation of Historical Trends

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past ten years:

- The funded percentage on the Valuation Value of Assets basis has increased from 67.36% to 73.10%. This is primarily due to non-investment experience. For a more detailed history see *Section 2, Subsection G, Funded Status* starting on page 36.
- The average geometric investment return on the Actuarial Value of Assets over the last 10 years was 7.65%. This includes a high of 9.05% return and a low of 6.48%. The average over the last 5 years was 7.41%. For more details see *Section 2, Subsection C, Investment Return* on page 25.
- The primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. For example, the assumption changes in:

- 2014 changed the discount rate from 7.75% to 7.50% and updated mortality tables, adding $785 million in unfunded liability;
- 2017 changed the discount rate from 7.50% to 7.25%, adding $341 million in unfunded liability;
- 2018 included the use of generational mortality tables to better reflect future mortality improvement, adding $484 million in unfunded liability; and
- 2020 changed the discount rate from 7.25% to 7.00% and updated mortality tables based on public plan experience that are weighted by benefits, adding $531 million in unfunded liability.
- 2023 changed the inflation rate from 2.75% to 2.50%, subtracting $113 million from the unfunded liability.

For more details on the unfunded liability changes see *Section 3, Exhibit G, Table of Amortization Bases* on page 57. A graphical representation of historical changes in UAAL by source prior to this valuation was included in the stand-alone risk assessment report as of June 30, 2022.

- The plan's funding policy effectively deals with these unfunded liabilities over time. This can be seen most clearly in the *Section 3, Exhibit 1, Projection of UAAL Balances and Payments* provided on pages 58 and 59.

Maturity Measures

In the last 10 years the ratio of retired members and beneficiaries to active members has increased from 0.73 to 0.87. An increased ratio indicates that the plan has grown in maturity over time. This is to be expected, but is also informative for understanding plan sensitivity to particular risks. For more details see *Section 2, Subsection A, Member Data* on page 16.

As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities. For the prior year, benefits paid were $292 million more than contributions received. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return. However, this plan currently has relatively low levels of negative cash flows. For more details on historical cash flows see the Comparison of Contributions with Benefits in *Section 2, Subsection B, Financial Information* on page 20.

A further discussion of plan maturity measures and how they relate to changes in assets and liabilities is included in *Section 2, Subsection I, Volatility Ratios* on page 39.

Low-Default-Risk Obligation Measure (LDROM)

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 (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM 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 LDROM 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 3.65% for use effective June 30, 2023. 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 public pension plan liabilities. The LDROM is not used to determine a plan’s funded status or Actuarially Determined Contribution Rate. The plan’s expected return on assets, currently 7.00%, is used for these calculations.

As of June 30, 2023, the LDROM for the Plan is $39.67 billion. The difference between the plan’s AAL of $25.30 billion and the LDROM can be thought of as the increase in the AAL 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 LDROM with respect to the funded status of the plan, plan contributions, and the security of participant 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.

Section 3: Supplemental Information

Exhibit A: Table of Plan Coverage

Total Plan

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	25,875	24,917	3.8%
• Average age	46.5	46.7	-0.2
• Average years of employment service	12.5	12.8	-0.3
• Total projected compensation[1]	$2,512,179,018	$2,258,724,771	11.2%
• Average projected compensation[1]	$97,089	$90,650	7.1%
• Account balances	$2,486,783,544	$2,304,663,932	7.9%
• Total active vested members	17,968	17,312	3.8%
Inactive vested members:			
• Number	11,148	10,379	7.4%
• Average age	44.8	44.6	0.2
• Average contribution balance for those with under 5 years of service	$8,915	$8,576	4.0%
• Average monthly benefit at age 60 for those with 5 or more years of service[2]	$1,436	$1,658	-13.4%
Retired members:			
• Number in pay status	17,457	17,399	0.3%
• Average service at retirement	26.4	26.5	-0.1
• Average age at retirement	60.8	60.8	0.0
• Average age	72.1	71.7	0.4
• Average monthly benefit (includes July COLA)	$5,164	$5,005	3.2%

[1] Reflects annualized salaries for part-time members.
[2] As noted in footnote 2 on page 11, LACERS provided vesting service for inactive vested members for the first time in the June 30, 2023 valuation. That service has been used to determine which inactive vested members are vested with 5 or more years of service in this valuation. The usage of vesting service starting with the June 30, 2023 valuation led to the decrease in the average monthly benefit comparison shown above.

Exhibit A: Table of Plan Coverage (continued)

Total Plan (continued)

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Disabled members:			
• Number in pay status	799	819	-2.4%
• Average service at retirement	11.5	11.5	0.0
• Average age at retirement	47.8	47.8	0.0
• Average age	69.1	68.7	0.4
• Average monthly benefit (includes July COLA)	$2,018	$1,947	3.6%
Beneficiaries:			
• Number in pay status	4,254	4,181	1.7%
• Average age	76.5	76.3	0.2
• Average monthly benefit (includes July COLA)	$2,730	$2,627	3.9%

Exhibit A: Table of Plan Coverage (continued)

Tier 1[1]

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	16,045	16,762	-4.3%
• Average age	51.1	50.4	0.7
• Average years of employment service	18.1	17.3	0.8
• Total projected compensation[2]	$1,702,032,123	$1,648,564,985	3.2%
• Average projected compensation[2]	$106,079	$98,351	7.9%
• Account balances	$2,228,418,586	$2,111,783,894	5.5%
• Total active vested members	15,369	15,847	-3.0%
Inactive vested members:			
• Number	7,939	7,836	1.3%
• Average age	47.4	46.8	0.6
• Average contribution balance for those with under 5 years of service	$7,262	$7,430	-2.3%
• Average monthly benefit at age 60 for those with 5 or more years of service[3]	$1,498	$1,677	-10.7%
Retired members:			
• Number in pay status	17,451	17,397	0.3%
• Average service at retirement	26.4	26.5	-0.1
• Average age at retirement	60.8	60.8	0.0
• Average age	72.1	71.7	0.4
• Average monthly benefit (includes July COLA)	$5,166	$5,006	3.2%

[1] Includes the following number of Airport Peace Officers eligible for enhanced benefits:

	June 30, 2023	June 30, 2022
Active Members	331	361
Inactive Members	25	15
Retired Members	108	88

[2] Reflects annualized salaries for part-time members.

[3] As noted in footnote 2 on page 11, LACERS provided vesting service for inactive vested members for the first time in the June 30, 2023 valuation. That service has been used to determine which inactive vested members are vested with 5 or more years of service in this valuation. The usage of vesting service starting with the June 30, 2023 valuation led to the decrease in the average monthly benefit comparison shown above.

Exhibit A: Table of Plan Coverage (continued)

Tier 1 (continued)

Category	Year Ended June 30		Change From Prior Year
	2023	2022	
Disabled members:			
• Number in pay status	799	819	-2.4%
• Average service at retirement	11.5	11.5	0.0
• Average age at retirement	47.8	47.8	0.0
• Average age	69.1	68.7	0.4
• Average monthly benefit (includes July COLA)	$2,018	$1,947	3.6%
Beneficiaries:			
• Number in pay status	4,253	4,181	1.7%
• Average age	76.5	76.3	0.2
• Average monthly benefit (includes July COLA)	$2,730	$2,627	3.9%

Exhibit A: Table of Plan Coverage (continued)

Tier 3

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	9,830	8,155	20.5%
• Average age	39.1	39.0	0.1
• Average years of employment service	3.5	3.4	0.1
• Total projected compensation[1]	$810,146,895	$610,159,786	32.8%
• Average projected compensation[1]	$82,416	$74,820	10.2%
• Account balances	$258,364,958	$192,880,038	34.0%
• Total active vested members	2,599	1,465	77.4%
Inactive vested members:			
• Number	3,209	2,543	26.2%
• Average age	38.3	37.7	0.6
• Average contribution balance for those with under 5 years of service	$11,541	$11,004	4.9%
• Average monthly benefit at age 60 for those with 5 or more years of service[2]	$509	$591	-13.9%
Retired members:			
• Number in pay status	6	2	200.0%
• Average service at retirement	3.2	3.3	-0.1
• Average age at retirement	62.9	61.5	1.4
• Average age	63.9	62.2	1.7
• Average monthly benefit (includes July COLA)	$560	$459	22.0%

[1] Reflects annualized salaries for part-time members.

[2] As noted in footnote 2 on page 11, LACERS provided vesting service for inactive vested members for the first time in the June 30, 2023 valuation. That service has been used to determine which inactive vested members are vested with 5 or more years of service in this valuation. The usage of vesting service starting with the June 30, 2023 valuation led to the decrease in the average monthly benefit comparison shown above.

Exhibit A: Table of Plan Coverage (continued)

Tier 3 (continued)

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Disabled members:			
• Number in pay status	N/A	N/A	N/A
• Average service at retirement	N/A	N/A	N/A
• Average age at retirement	N/A	N/A	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit (includes July COLA)	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	1	N/A	N/A
• Average age	45.0	N/A	N/A
• Average monthly benefit (includes July COLA)	$2,580	N/A	N/A

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service,[1] and Average Projected Compensation[2]

Total Plan

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	696	693	3	—	—	—	—	—	—	—
	$56,900	$56,947	$46,056	—	—	—	—	—	—	—
25 – 29	2,044	1,636	407	1	—	—	—	—	—	—
	$71,664	$70,813	$75,076	$75,819	—	—	—	—	—	—
30 – 34	2,996	1,607	1,275	101	13	—	—	—	—	—
	$81,633	$73,842	$90,711	$90,645	$84,266	—	—	—	—	—
35 – 39	2,811	1,111	1,059	320	314	7	—	—	—	—
	$92,427	$81,549	$96,986	$106,855	$101,129	$79,225	—	—	—	—
40 – 44	3,236	865	805	320	943	297	6	—	—	—
	$103,097	$84,869	$103,607	$106,586	$114,797	$114,098	$92,864	—	—	—
45 – 49	3,302	672	553	226	864	843	139	5	—	—
	$105,736	$79,021	$102,678	$107,404	$111,506	$120,606	$118,514	$99,954	—	—
50 – 54	3,575	553	480	202	727	895	454	237	27	—
	$107,605	$79,403	$96,951	$100,285	$104,938	$118,740	$128,653	$126,111	$115,718	—
55 – 59	3,294	411	347	187	639	752	408	407	139	4
	$108,191	$79,958	$98,597	$93,585	$97,784	$110,122	$130,076	$137,968	$121,646	$94,019
60 – 64	2,259	246	300	155	451	513	226	223	124	21
	$104,134	$81,916	$91,897	$87,012	$94,233	$108,180	$121,152	$129,869	$134,158	$145,686
65 – 69	1,090	86	133	78	292	246	84	94	52	25
	$102,015	$81,932	$92,560	$87,007	$95,473	$103,379	$116,724	$119,351	$147,656	$121,662
70 & over	572	41	48	49	123	155	46	42	40	28
	$89,942	$66,349	$80,523	$79,095	$77,500	$91,289	$98,994	$107,061	$120,354	$122,829
Total	**25,875**	**7,921**	**5,410**	**1,639**	**4,366**	**3,708**	**1,363**	**1,008**	**382**	**78**
	$97,089	**$75,468**	**$94,961**	**$99,886**	**$104,473**	**$113,342**	**$124,908**	**$130,176**	**$128,694**	**$127,131**

[1] Based on employment service. Average employment service is 12.5 years compared to average benefit service of 11.7 years.
[2] Limited by Internal Revenue Code Section 401(a)(17) compensation limit.

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service,[1] and Average Projected Compensation[2] (continued)

Tier 1

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	23	23	—	—	—	—	—	—	—	—
	$48,514	$48,514	—	—	—	—	—	—	—	—
25 – 29	379	179	199	1	—	—	—	—	—	—
	$63,109	$56,452	$69,033	$75,819	—	—	—	—	—	—
30 – 34	1,001	172	719	99	11	—	—	—	—	—
	$84,897	$65,633	$88,809	$89,920	$85,246	—	—	—	—	—
35 – 39	1,291	89	583	306	306	7	—	—	—	—
	$97,089	$66,438	$95,623	$105,505	$100,790	$79,225	—	—	—	—
40 – 44	2,027	49	439	305	934	294	6	—	—	—
	$109,560	$69,788	$102,517	$105,773	$114,853	$114,159	$92,864	—	—	—
45 – 49	2,390	42	296	217	856	838	137	4	—	—
	$113,014	$60,933	$105,355	$106,942	$111,289	$120,760	$118,754	$105,669	—	—
50 – 54	2,810	41	261	195	712	887	452	235	27	—
	$112,902	$63,665	$96,115	$99,814	$104,157	$118,499	$128,790	$125,477	$115,718	—
55 – 59	2,734	48	165	184	636	746	406	406	139	4
	$112,058	$61,434	$95,676	$93,523	$97,636	$110,157	$130,104	$138,032	$121,646	$94,019
60 – 64	1,893	26	158	155	449	513	226	221	124	21
	$106,917	$50,472	$89,127	$87,012	$94,055	$108,180	$121,152	$129,915	$134,158	$145,686
65 – 69	966	10	86	78	291	246	84	94	52	25
	$103,832	$61,108	$92,411	$87,007	$95,471	$103,379	$116,724	$119,351	$147,656	$121,662
70 & over	531	11	37	49	123	155	46	42	40	28
	$90,729	$45,200	$76,174	$79,095	$77,500	$91,289	$98,994	$107,061	$120,354	$122,829
Total	**16,045**	**690**	**2,943**	**1,589**	**4,318**	**3,686**	**1,357**	**1,002**	**382**	**78**
	$106,079	**$61,422**	**$93,527**	**$99,151**	**$104,242**	**$113,315**	**$124,982**	**$130,118**	**$128,694**	**$127,131**

[1] Based on employment service. Average employment service for Tier 1 is 18.1 years compared to average benefit service of 17.0 years.
[2] Limited by Internal Revenue Code Section 401(a)(17) compensation limit.

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service,[1] and Average Projected Compensation[2] (continued)

Tier 3

		Years of Service								
Age	**Total**	**0 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & over**
Under 25	673	670	3	—	—	—	—	—	—	—
	$57,187	$57,237	$46,056	—	—	—	—	—	—	—
25 – 29	1,665	1,457	208	—	—	—	—	—	—	—
	$73,612	$72,577	$80,857	—	—	—	—	—	—	—
30 – 34	1,995	1,435	556	2	2	—	—	—	—	—
	$79,995	$74,826	$93,172	$126,504	$78,876	—	—	—	—	—
35 – 39	1,520	1,022	476	14	8	—	—	—	—	—
	$88,467	$82,865	$98,655	$136,353	$114,095	—	—	—	—	—
40 – 44	1,209	816	366	15	9	3	—	—	—	—
	$92,261	$85,775	$104,915	$123,127	$108,983	$108,128	—	—	—	—
45 – 49	912	630	257	9	8	5	2	1	—	—
	$86,665	$80,227	$99,594	$118,553	$134,712	$94,706	$102,084	$77,095	—	—
50 – 54	765	512	219	7	15	8	2	2	—	—
	$88,148	$80,663	$97,946	$113,400	$142,012	$145,377	$97,710	$200,599	—	—
55 – 59	560	363	182	3	3	6	2	1	—	—
	$89,312	$82,407	$101,245	$97,399	$129,304	$105,683	$124,269	$111,706	—	—
60 – 64	366	220	142	—	2	—	—	2	—	—
	$89,738	$85,632	$94,979	—	$134,254	—	—	$124,776	—	—
65 – 69	124	76	47	—	1	—	—	—	—	—
	$87,858	$84,672	$92,832	—	$96,155	—	—	—	—	—
70 & over	41	30	11	—	—	—	—	—	—	—
	$79,750	$74,103	$95,152	—	—	—	—	—	—	—
Total	**9,830**	**7,231**	**2,467**	**50**	**48**	**22**	**6**	**6**	**—**	**—**
	$82,416	**$76,809**	**$96,671**	**$123,237**	**$125,246**	**$117,956**	**$108,021**	**$139,925**	**—**	**—**

1 Based on employment service. Average employment service for Tier 3 is 3.5 years compared to average benefit service of 3.1 years. We understand that some Tier 3 members entered LACERS with incoming reciprocal (i.e., employment) service. Such service is only used for eligibility determination purposes.

2 Limited by Internal Revenue Code Section 401(a)(17) compensation limit.

Exhibit C: Reconciliation of Member Data

	Active Members	Inactive Vested Members	Service Retired Members	Disabled Members	Beneficiaries	Total
Number as of June 30, 2022	**24,917**	**10,379**	**17,399**	**819**	**4,181**	**57,695**
• New members	2,496	0	0	0	286	2,782
• Terminations – with vested rights	-1,269	1,269	0	0	0	0
• Contribution refunds	-71	-169	0	0	0	-240
• Retirements	-477	-117	594	0	0	0
• New disabilities	-1	-11	0	12	0	0
• Return to work	331	-330	0	-1	0	0
• Died with or without beneficiary	-51	-35	-536	-31	-210	-863
• Data adjustments	0	162[1]	0	0	-3	159
Number as of June 30, 2023	**25,875**	**11,148**	**17,457**	**799**	**4,254**	**59,533**

Note: For the change in the annual benefits from the retirees and beneficiaries added to and removed from the rolls, refer to Exhibit D of the supplemental schedules that accompany this report.

[1] Includes members who were both hired and terminated employment after June 30, 2022.

Exhibit D: Summary Statement of Income and Expenses on a Market Value Basis for Retirement, Health, Family Death, and Larger Annuity Benefits

	Year Ended June 30, 2023		Year Ended June 30, 2022	
Net assets at market value at the beginning of the year		**$20,454,103,991**		**$22,805,339,941**
Prior period adjustments		0		(19,987)[1]
Subtotal		$20,454,103,991		$22,805,319,954
Contribution income:				
• Employer contributions	$760,019,088		$682,928,074	
• Member contributions	259,976,824		245,878,551	
Net contribution income		$1,019,995,912		$928,806,625
Investment income:				
• Interest, dividends and other income	$484,084,745		$459,637,714	
• Asset appreciation	1,181,447,188		(2,245,698,458)	
• Less investment and administrative fees	(164,724,805)		(161,667,882)	
Net investment income		$1,500,807,128		$(1,947,728,626)
Total income available for benefits		**$2,520,803,040**		**$(1,018,922,001)**
Less benefit payments:				
• Benefits paid[2]	$(1,371,245,288)		$(1,320,663,863)	
• Member refunds	(14,396,630)		(11,630,099)	
Net benefit payments		$(1,385,641,918)		$(1,332,293,962)
Change in net assets at market value		$1,135,161,122		$(2,351,215,963)
Net assets at market value at the end of the year		**$21,589,265,113**		**$20,454,103,991**

Note: Results may be slightly off due to rounding.

[1] Adjustment made to beginning of year assets in order to match the June 30, 2021 end of year value as noted in the Statement of Changes in Fiduciary Net Position, Retirement Plan and Postemployment Health Care Plan, For the Fiscal Year Ended June 30, 2022, with Comparative Totals, provided by LACERS.

[2] Includes offsets related to self funded dental insurance premium and health insurance premium reserve.

Exhibit E: Summary Statement of Plan Assets for Retirement, Health, Family Death, and Larger Annuity Benefits

	June 30, 2023		June 30, 2022	
Cash equivalents		$427,788,364		$428,386,988
Accounts receivable:				
• Accrued investment income	$89,224,757		$79,684,301	
• Proceeds from sales of investments	93,978,913		135,169,157	
• Other	12,661,960		10,862,885	
Total accounts receivable		$195,865,630		$225,716,343
Investments:				
• Fixed income	$5,011,434,541		$5,151,890,589	
• Equities	10,152,233,548		9,502,159,992	
• Real estate and alternative investment	5,416,827,780		4,963,175,949	
• Derivative instruments	(1,886,090)		(1,252,530)	
• Other	785,386,148		960,814,353	
Total investments at market value		$21,363,995,927		$20,576,788,353
Capital assets		60,725,661		53,305,470
Total assets		$22,048,375,582		$21,284,197,154
Accounts payable:				
• Accounts payable and accrued expenses	$(93,664,527)		$(88,838,675)	
• Accrued investment expenses	(8,818,953)		(19,981,850)	
• Purchases of investments	(145,060,285)		(204,713,269)	
• Securities lending collateral	(210,806,062)		(515,987,947)	
Total accounts payable		$(458,349,827)		$(829,521,741)
Deferred inflow of resources		$(760,642)		$(571,422)
Net assets at market value		**$21,589,265,113**		**$20,454,103,991**
Net assets at actuarial value		**$22,239,263,545**		**$21,218,951,507**
Net assets at valuation value		**$18,493,821,018**		**$17,649,267,571**

Note: Results may be slightly off due to rounding.

Exhibit F: Development of the Fund through June 30, 2023 for Retirement, Health, Family Death, and Larger Annuity Benefits

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return[1]	Benefit Payments[2]	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2014	$455,658,786	$204,135,914	$2,180,005,302	$826,566,921	$13,935,771,998	$12,935,503,398	92.8%
2015	481,765,868	207,564,465	348,113,908	848,455,864[3]	14,124,760,375	13,895,589,227	98.4%
2016	546,687,123	211,344,752	7,190,895	884,923,630	14,005,059,515	14,752,102,625	105.3%
2017	550,961,514	227,531,810	1,834,657,728	928,640,257	15,689,570,310	15,686,973,131	100.0%
2018	551,247,264	236,222,166	1,498,100,177	985,523,573[4]	16,989,616,344	16,687,907,767	98.2%
2019	586,753,902	240,357,396	945,590,839	1,054,408,548	17,707,909,933	17,711,461,636	100.0%
2020	665,358,602	263,935,650	338,862,747	1,112,742,566	17,863,324,366	18,697,966,253	104.7%
2021	658,408,020	259,284,497	5,258,341,258	1,234,018,200	22,805,339,941	20,083,918,240	88.1%
2022	682,928,074	245,878,551	(1,947,748,613)[5]	1,332,293,962	20,454,103,991	21,218,951,507	103.7%
2023	760,019,088	259,976,824	1,500,807,128	1,385,641,918	21,589,265,113	22,239,263,545	103.0%

Note: Results may be slightly off due to rounding.

[1] On a market value basis, net of investment fees and administrative expenses.

[2] Includes offsets related to self funded dental insurance premium and health insurance premium reserve starting with the June 30, 2019 valuation.

[3] Includes transfer of $2,614,765 to Fire and Police Pension for Office of Public Safety.

[4] Includes approximately $3.0 million transferred to LAFPP on January 5, 2018 for the APO who transferred from LACERS to LAFPP on January 7, 2018.

[5] Includes prior period adjustment of $(19,987) for Exhibit F reconciliation purposes only. Note that in the development of the June 30, 2022 actuarial value of assets, this adjustment was treated differently than the rest of the net investment return in that it was fully recognized immediately, as agreed to by LACERS.

Exhibit G: Table of Amortization Bases

Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment[1]
Plan amendment (2009 ERIP)	June 30, 2009	$300,225,354	15	$42,603,594	1	$42,603,594
Combined base	June 30, 2012	4,173,548,280	30	4,643,456,579	19	336,970,216
Experience loss	June 30, 2013	116,022,989	15	65,162,140	5	14,043,916
Experience gain	June 30, 2014	(215,549,892)	15	(137,123,364)	6	(25,084,626)
Change in assumptions	June 30, 2014	785,439,114	20	683,952,207	11	74,682,418
Experience gain	June 30, 2015	(185,473,782)	15	(130,254,340)	7	(20,800,498)
Experience gain	June 30, 2016	(255,444,007)	15	(194,015,399)	8	(27,606,134)
Experience gain	June 30, 2017	(99,814,895)	15	(80,717,339)	9	(10,394,682)
Change in assumptions	June 30, 2017	340,717,846	20	320,444,755	14	28,977,953
Experience loss	June 30, 2018	147,418,362	15	125,847,841	10	14,849,367
Change in assumptions	June 30, 2018	483,717,164	20	463,345,927	15	39,789,825
Plan amendment (APO Tier 1 Enhancement)	January 7, 2018	25,170,149	15	21,333,556	9.5	2,626,157
Experience loss	June 30, 2019	394,012	15	351,565	11	38,388
Experience loss	June 30, 2020	393,785,997	15	364,252,675	12	37,108,880
Change in assumptions	June 30, 2020	530,720,225	20	520,783,660	17	40,835,903
Experience gain	June 30, 2021	(233,981,212)	15	(223,368,811)	13	(21,377,386)
Experience gain	June 30, 2022	(134,440,689)	15	(131,685,964)	14	(11,908,417)
Experience loss	June 30, 2023	564,047,478	15	564,047,478	15	48,437,570
Change in assumptions	June 30, 2023	(112,700,660)	20	(112,700,660)	20	(7,900,568)
Total				**$6,805,716,100**		**$555,891,876**

Note: the equivalent single amortization period is about 16 years.

[1] Beginning of year payments, based on level percentage of payroll.

Exhibit H: Projection of UAAL Balances and Payments

Outstanding Balance of $6.81 Billion in Net UAAL as of June 30, 2023

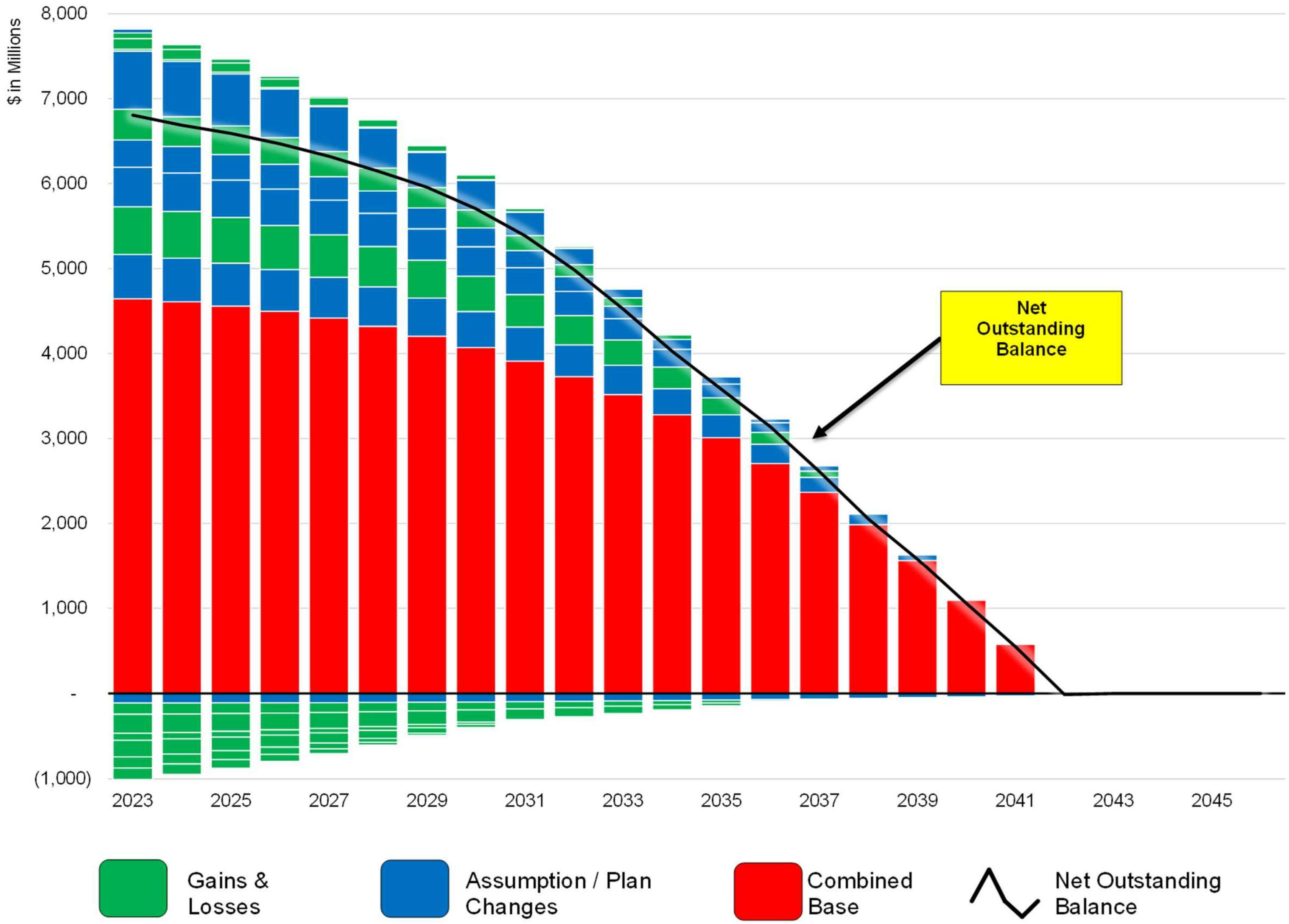


Exhibit H: Projection of UAAL Balances and Payments (continued)

Annual Payments Required to Amortize $6.81 Billion in Net UAAL as of June 30, 2023

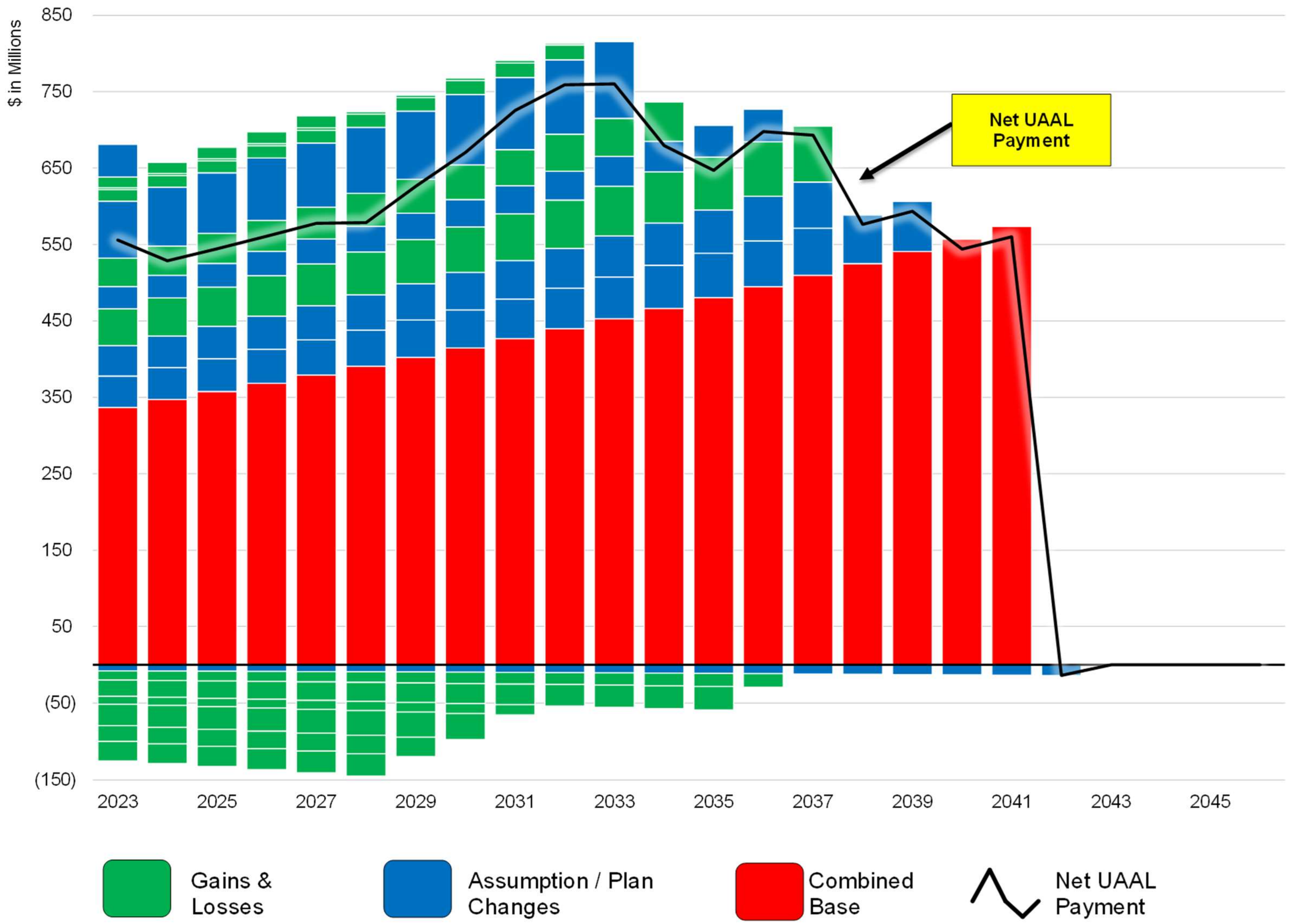


Exhibit I: Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Actuarial Accrued Liability for Actives:	The equivalent of the accumulated Normal Costs allocated to the years before the valuation date.
Actuarial Accrued Liability for Pensioners and Beneficiaries:	The single-sum value of lifetime benefits to existing pensioners and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial Cost Method:	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial Gain or Loss:	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield in actuarial liabilities that are larger than projected.
Actuarially Equivalent:	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV):	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits:	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial Valuation:	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Actuarially Determined Contribution (ADC) and the Net Pension Liability (NPL).
Actuarial Value of Assets (AVA):	The value of the Fund’s assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.
Actuarially Determined:	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.
Actuarially Determined Contribution (ADC):	The employer’s periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan’s funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization Method:	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization Payment:	The portion of the pension plan contribution, or ADC, that is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Assumptions or Actuarial Assumptions:	The estimates upon which the cost of the Fund is calculated, including: Investment return - the rate of investment yield that the Fund will earn over the long-term future; Mortality rates - the death rates of employees and pensioners; life expectancy is based on these rates; Retirement rates - the rate or probability of retirement at a given age or service; Disability rates – the probability of disability retirement at a given age; Withdrawal rates - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates - the rates of salary increase due to inflation and productivity growth.
Closed Amortization Period:	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Open Amortization Period.
Decrements:	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined Benefit Plan:	A retirement plan in which benefits are defined by a formula applied to the member's compensation and/or years of service.
Defined Contribution Plan:	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer Normal Cost:	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience Study:	A periodic review and analysis of the actual experience of the Fund that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.
Funded Ratio:	The ratio of the Valuation Value of Assets (VVA) to the Actuarial Accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the VVA.
Investment Return:	The rate of earnings of the Fund from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

Normal Cost:	That portion of the Actuarial Present Value of pension plan benefits and expenses allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.
Open Amortization Period:	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year.
Unfunded Actuarial Accrued Liability:	The excess of the Actuarial Accrued Liability over the Valuation Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.
Valuation Date or Actuarial Valuation Date:	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.
Valuation Value of Assets:	The Actuarial Value of Assets reduced by the value of non-valuation reserves.

Section 4: Actuarial Valuation Basis

Exhibit 1: Actuarial Assumptions and Methods

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 June 21, 2023. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both Tier 1 and Tier 3 members. These assumptions have been adopted by the Board.
<u>Economic Assumptions</u>	
Net Investment Return:	7.00%; net of administrative and investment expenses. Based on the Actuarial Experience Study report referenced above, expected administrative and investment expenses represent about 0.20% of the Actuarial Value of Assets.
Employee Contribution Crediting Rate:	Based on average of 5-year Treasury note rate. An assumption of 2.50% is used to approximate that crediting rate in this valuation.
Cost of Living Adjustment (COLA):	Retiree COLA increases of 2.75% per year for Tier 1 and 2.00% per year for Tier 3. For Tier 1 members with COLA banks, withdrawals from the bank are assumed to increase the retiree COLA to 3.00% per year until their COLA banks are exhausted.
Payroll Growth:	Inflation of 2.50% per year plus real “across the board” salary increases of 0.50% per year, used to amortize the UAAL as a level percentage of payroll.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 2.50% per year from the valuation date.

Salary Increases:

The annual rate of compensation increase includes: inflation at 2.50%, plus “across the board” salary increases of 0.50% per year, plus the following merit and promotion increases:

Merit and Promotion Increases

Years of Service	Rate (%)
Less than 1	6.00
1 – 2	5.90
2 – 3	5.40
3 – 4	4.20
4 – 5	3.50
5 – 6	2.80
6 – 7	2.50
7 – 8	2.10
8 – 9	1.80
9 – 10	1.60
10 – 11	1.50
11 – 12	1.40
12 – 13	1.30
13 – 14	1.20
14 – 15	1.10
15 & Over	1.00

Demographic Assumptions:

Post-Retirement Mortality Rates:

Healthy Members

- Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables with rates increased by 10% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Disabled Members

- Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Tables with rates increased by 5% for males and decreased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Beneficiaries

- **Beneficiaries not currently in pay status:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables with rates increased by 10% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Beneficiaries currently in pay status:** Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Tables with rates increased by 5% for males and increased by 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

The Pub-2010 mortality tables and adjustments as shown above reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Pre-Retirement Mortality Rates:

- Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables with rates increased by 10% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

	Rate (%)	
Age	**Male**	**Female**
20	0.04	0.01
25	0.03	0.01
30	0.03	0.01
35	0.05	0.02
40	0.06	0.04
45	0.09	0.06
50	0.14	0.08
55	0.21	0.12
60	0.30	0.19
65	0.45	0.30

Generational projections beyond the base year (2010) are not reflected in the above mortality rates.

For Tier 1 Enhanced, 100% of pre-retirement death benefits are assumed to be service-connected.

Disability Incidence:

Disability Incidence

Age	Rate (%)
25	0.01
30	0.02
35	0.03
40	0.05
45	0.10
50	0.14
55	0.15
60	0.16
65	0.20

For Tier 1 Enhanced, 90% of disability retirements are assumed to be service-connected with service-connected disability benefits based on years of service, as follows:

Years of Service	Benefit
Less than 20	55% of Final Average Monthly Compensation
20 – 30	65% of Final Average Monthly Compensation
More than 30	75% of Final Average Monthly Compensation

For Tier 1 Enhanced, 10% of disability retirements are assumed to be nonservice-connected with nonservice-connected disability benefits equal to 40% of Final Average Monthly Compensation.

Termination:

Years of Service	Rate (%)
Less than 1	10.50
1 – 2	10.00
2 – 3	9.00
3 – 4	7.75
4 – 5	6.25
5 – 6	5.25
6 – 7	5.00
7 – 8	4.75
8 – 9	4.50
9 – 10	4.25
10 – 11	4.00
11 – 12	3.75
12 – 13	3.50
13 – 14	3.00
14 – 15	2.75
15 & over	2.50

No termination is assumed after a member is eligible for retirement (as long as a retirement rate is present).

Retirement Rates:

	Rate (%)					
	Tier 1		Tier 1 Enhanced		Tier 3	
Age	Non-55/30	55/30	Non-55/30	55/30	Non-55/30	55/30
50	5.0	0.0	6.0	0.0	5.0	0.0
51	3.0	0.0	5.0	0.0	3.0	0.0
52	3.0	0.0	5.0	0.0	3.0	0.0
53	3.0	0.0	5.0	0.0	3.0	0.0
54	18.0	0.0	18.0	0.0	17.0	0.0
55	6.0	27.0	10.0	30.0	0.0[1]	26.0
56	6.0	18.0	10.0	22.0	0.0[1]	17.0
57	6.0	18.0	10.0	22.0	0.0[1]	17.0
58	6.0	18.0	10.0	22.0	0.0[1]	17.0
59	6.0	18.0	10.0	22.0	0.0[1]	17.0
60	9.0	18.0	11.0	22.0	8.0	17.0
61	9.0	18.0	11.0	22.0	8.0	17.0
62	9.0	18.0	11.0	22.0	8.0	17.0
63	9.0	18.0	11.0	22.0	8.0	17.0
64	9.0	18.0	11.0	22.0	8.0	17.0
65	16.0	21.0	20.0	26.0	15.0	20.0
66	16.0	21.0	20.0	26.0	15.0	20.0
67	16.0	21.0	20.0	26.0	15.0	20.0
68	16.0	21.0	20.0	26.0	15.0	20.0
69	16.0	21.0	20.0	26.0	15.0	20.0
70 & Over	100.0	100.0	100.0	100.0	100.0	100.0

[1] Not eligible to retire under the provisions of the Tier 3 plan at these ages with less than 30 years of service. If a member has at least 30 years of service at these ages, they would be subject to the "55/30" rates.

Retirement Age and Benefit for Inactive Vested Members:

Pension benefit paid at the later of age 60 or the current attained age for members retiring from deferred status and at the later of age 59 and the current attained age for members retiring from reciprocal status. For reciprocals, 4.00% compensation increases per annum.

Other Reciprocal Service:	5% of future inactive vested members will work at a reciprocal system.
Service:	Benefit service is used for benefit calculation purposes. For eligibility determination purposes, employment service is used for currently active members and vesting service is used for currently inactive members.
Future Benefit Accruals:	1.0 year of service credit per year.
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
Form of Payment:	All active and inactive Tier 1 and Tier 3 members who are assumed to be married or with domestic partners at retirement are assumed to elect the 50% Joint and Survivor Cash Refund Annuity. For Tier 1 Enhanced, the continuance percentage is 70% for service retirement and nonservice-connected disability, and 80% for service-connected disability. Those members who are assumed to be un-married or without domestic partners are assumed to elect the Single Cash Refund Annuity.
Percent Married/Domestic Partner:	For all active and inactive members, 76% of male participants and 52% of female participants are assumed to be married or with domestic partner at pre-retirement death or retirement.
Age and Gender of Spouse:	For all active and inactive members, male members are assumed to have a female spouse who is 3 years younger than the member and female members are assumed to have a male spouse who is 2 years older than the member.
Actuarial Funding Policy	
Actuarial Cost Method:	Entry Age Cost Method, level percent of salary. Entry age is calculated as age on the valuation date minus years of benefit service rounded down to the number of completed years. Both the normal cost and the actuarial accrued liability are calculated on an individual basis.
Actuarial Value of Assets:	Market value of assets (MVA) less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets (AVA) is limited by a 40% corridor; the AVA cannot be less than 60% of MVA, nor greater than 140% of MVA.
Valuation Value of Assets:	The portion of the total actuarial value of assets allocated for retirement benefits, based on a prorated share of market value.
Amortization Policy:	The amortization method for the UAAL is a level percent of payroll, assuming annual increases in total covered payroll equal to inflation plus across the board increases (other than inflation). Changes in the UAAL due to actuarial gains/losses are amortized over separate 15-year periods. Changes in the UAAL due to assumption or method changes are amortized over separate 20-year periods. Plan changes, including the 2009 ERIP, are amortized over separate 15-year periods. Future ERIPs will be amortized over 5 years. Any actuarial surplus is amortized over 30 years. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP and the two (at that time) GASB 25/27 layers, were combined and amortized over 30 years effective June 30, 2012.

Other Actuarial Methods	
Employer Contributions:	Employer contributions consist of two components: *Normal Cost* The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is determined as a level percentage of the member's compensation. *Contribution to the Unfunded Actuarial Accrued Liability (UAAL)* The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative UAAL) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the System) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual rate of 3.00% (i.e., 2.50% inflation plus 0.50% across-the-board salary increase). The amortization policy is described on the previous page. The recommended employer contributions are provided in *Section 2, Subsection F*.
Internal Revenue Code Section 415:	Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan. A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active members could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets. In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of $160,000 indexed for inflation. That limit is $265,000 for 2023. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions. Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m). Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard. Contribution rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.
Justification for Change in Actuarial Assumptions:	Based on the July 1, 2019 through June 30, 2022 Actuarial Experience Study, the following actuarial assumptions were changed. Previously, these assumptions were:

Economic Assumptions	
Employee Contribution Crediting Rate:	Based on average of 5-year Treasury note rate. An assumption of 2.75% is used to approximate that crediting rate in this valuation.
Payroll Growth:	Inflation of 2.75% per year plus real "across the board" salary increases of 0.50% per year, used to amortize the UAAL as a level percentage of payroll.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 2.75% per year from the valuation date.
Salary Increases:	The annual rate of compensation increase includes: inflation at 2.75%, plus "across the board" salary increases of 0.50% per year, plus the following merit and promotion increases:

Merit and Promotion Increases

Years of Service	Rate (%)
Less than 1	6.70
1 – 2	6.50
2 – 3	5.80
3 – 4	4.00
4 – 5	3.00
5 – 6	2.20
6 – 7	2.00
7 – 8	1.80
8 – 9	1.60
9 – 10	1.40
10 & Over	1.00

Demographic Assumptions:	
Post-Retirement Mortality Rates:	*Healthy Members* • Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables with rates increased by 10% for males, projected generationally with the two-dimensional mortality improvement scale MP-2019. *Disabled Members* • Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Tables with rates increased by 10% for males and decreased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2019. *Beneficiaries* • Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Tables with rates increased by 10% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2019. The Pub-2010 mortality tables and adjustments as shown above reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.
Pre-Retirement Mortality Rates:	• Pub-2010 General Employee Amount-Weighted Above-Median Mortality Tables with rates increased by 10%, projected generationally with the two-dimensional mortality improvement scale MP-2019.

	Rate (%)	
Age	**Male**	**Female**
20	0.04	0.01
25	0.03	0.01
30	0.03	0.01
35	0.05	0.02
40	0.06	0.04
45	0.09	0.06
50	0.14	0.08
55	0.21	0.12
60	0.30	0.19
65	0.45	0.30

Generational projections beyond the base year (2010) are not reflected in the above mortality rates.

For Tier 1 Enhanced, 100% of pre-retirement death benefits are assumed to be service-connected.

Disability Incidence:

Disability Incidence

Age	Rate (%)
25	0.01
30	0.02
35	0.04
40	0.06
45	0.12
50	0.16
55	0.18
60	0.18
65	0.22

For Tier 1 Enhanced, 90% of disability retirements are assumed to be service-connected with service-connected disability benefits based on years of service, as follows:

Years of Service	Benefit
Less than 20	55% of Final Average Monthly Compensation
20 – 30	65% of Final Average Monthly Compensation
More than 30	75% of Final Average Monthly Compensation

- For Tier 1 Enhanced, 10% of disability retirements are assumed to be nonservice-connected with nonservice-connected disability benefits equal to 40% of Final Average Monthly Compensation.

Termination:

Less Than Five Years of Service

Years of Service	Rate (%)
Less than 1	11.50
1 – 2	10.00
2 – 3	8.50
3 – 4	7.75
4 – 5	7.00

Five or More Years of Service

Age	Rate (%)
25	7.00
30	6.70
35	5.30
40	3.75
45	3.10
50	3.00
55	3.00
60	3.00

No termination is assumed after a member is eligible for retirement (as long as a retirement rate is present).

Retirement Rates:

	Rate (%)					
	Tier 1		Tier 1 Enhanced		Tier 3	
Age	Non-55/30	55/30	Non-55/30	55/30	Non-55/30	55/30
50	5.0	0.0	7.0	0.0	5.0	0.0
51	3.0	0.0	5.0	0.0	3.0	0.0
52	3.0	0.0	5.0	0.0	3.0	0.0
53	3.0	0.0	5.0	0.0	3.0	0.0
54	18.0	0.0	20.0	0.0	17.0	0.0
55	6.0	27.0	8.0	30.0	0.0[1]	26.0
56	6.0	18.0	8.0	22.0	0.0[1]	17.0
57	6.0	18.0	8.0	22.0	0.0[1]	17.0
58	6.0	18.0	8.0	22.0	0.0[1]	17.0
59	6.0	18.0	8.0	22.0	0.0[1]	17.0
60	7.0	18.0	9.0	22.0	6.0	17.0
61	7.0	18.0	9.0	22.0	6.0	17.0
62	7.0	18.0	9.0	22.0	6.0	17.0
63	7.0	18.0	9.0	22.0	6.0	17.0
64	7.0	18.0	9.0	22.0	6.0	17.0
65	14.0	21.0	16.0	26.0	13.0	20.0
66	14.0	21.0	16.0	26.0	13.0	20.0
67	14.0	21.0	16.0	26.0	13.0	20.0
68	14.0	21.0	16.0	26.0	13.0	20.0
69	14.0	21.0	16.0	26.0	13.0	20.0
70 & Over	100.0	100.0	100.0	100.0	100.0	100.0

[1] Not eligible to retire under the provisions of the Tier 3 plan at these ages with less than 30 years of service. If a member has at least 30 years of service at these ages, they would be subject to the “55/30” rates.

Retirement Age and Benefit for Inactive Vested Members: Pension benefit paid at the later of age 59 or the current attained age. For reciprocals, 4.25% compensation increases per annum.

Service: Employment service is used for eligibility determination purposes. Benefit service is used for benefit calculation purposes.

Actuarial Funding Policy	
Actuarial Cost Method:	Entry Age Cost Method, level percent of salary. Entry age is calculated as age on the valuation date minus years of employment service. Both the normal cost and the actuarial accrued liability are calculated on an individual basis.

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.

Plan Year:	July 1 through June 30
Census Date:	June 30
Membership Eligibility:	
Tier 1 *(§ 4.1002(a))* *(§ 4.1002.1)*	All employees who became members of the System before July 1, 2013, and certain employees who became members of the System on or after July 1, 2013. In addition, pursuant to Ordinance No. 184134, all Tier 2 employees who became members of the System between July 1, 2013 and February 21, 2016 were transferred to Tier 1 effective February 21, 2016. Includes Airport Peace Officers who did not pay for enhanced benefits.
Tier 1 Enhanced *(§4.1002(e))*	All Tier 1 Airport Peace Officers (including certain fire fighters) appointed to their positions before January 7, 2018 who elected to remain at LACERS after January 6, 2018, and who paid their mandatory additional contribution of $5,700 to LACERS before January 8, 2019, or prior to their retirement date, whichever was earlier.
Tier 3 *(§4.1080.2(a))*	All employees who became members of the System on or after February 21, 2016, except as provided otherwise in Section 4.1080.2(b) of the Los Angeles Administrative Code.
Normal Retirement Benefit:	
Tier 1 & Tier 1 Enhanced *Age & Service Requirement* *(§ 4.1005(a))*	Age 70; or Age 60 with 10 years of continuous City service; or Age 55 with at least 30 years of City service.
Tier 1 *Amount (§ 4.1007(a))*	2.16% per year of service credit (not greater than 100%) of the Final Average Monthly Compensation.
Tier 1 Enhanced *Amount (§ 4.1007(a))*	2.30% per year of service credit (not greater than 100%) of the Final Average Monthly Compensation.

Normal Retirement Benefit: (continued)	
Tier 3	
• *With less than 30 Years of Service (§ 4.1080.5(a)(2)(i))*	
Age & Service Requirement	Age 60 with 10 years of service, including 5 years of continuous City service.
Amount	1.50% per year of service credit at age 60 (not greater than 80%[1]) of the Final Average Monthly Compensation.
• *With 30 or more Years of Service (§ 4.1080.5(a)(2)(ii))*	
Age & Service Requirement	Age 60 with 30 years of service, including 5 years of continuous City service.
Amount	2.00% per year of service credit at age 60 (not greater than 80%[1]) of the Final Average Monthly Compensation.
	[1] Except when benefit is based solely on the annuity component funded by the member's contributions.
Early Retirement Benefit:	
Tier 1 & Tier 1 Enhanced	Age 55 with 10 years of continuous City service; or
Age & Service Requirement (§ 4.1005(b))	Any age with 30 years of City service.
Amount (§ 4.1007(a) & (b))	2.16% and 2.30% per year of service credit for Tier 1 and Tier 1 Enhanced, respectively, (not greater than 100%) of the Final Average Monthly Compensation, reduced for retirement ages below age 60 using the following Early Retirement benefit adjustment factors:

Age	Factor	Age	Factor
45	0.6250	53	0.8650
46	0.6550	54	0.8950
47	0.6850	55	0.9250
48	0.7150	56	0.9400
49	0.7450	57	0.9550
50	0.7750	58	0.9700
51	0.8050	59	0.9850
52	0.8350	60	1.0000

Early Retirement Benefit: (continued)	
Tier 3	Prior to age 60 with 30 years of service, including 5 years of continuous City service.
Age & Service Requirement (§ 4.1080.5(a)(1))	2.00% per year of service credit (not greater than 80%[1]) of the Final Average Monthly Compensation, reduced for retirement ages below age 55 using the following Early Retirement benefit adjustment factors:
Amount (§ 4.1080.5(a)(1))	

Age	Factor	Age	Factor
45	0.6250	50	0.7750
46	0.6550	51	0.8050
47	0.6850	52	0.8350
48	0.7150	53	0.8650
49	0.7450	54	0.8950
		55 - 60	1.0000

[1] Except when benefit is based solely on the annuity component funded by the member's contributions.

Enhanced Retirement Benefit:	
Tier 1 & Tier 1 Enhanced	
Age & Service Requirement	Not applicable - see Normal Retirement age and service requirement.
Amount	Not applicable - see Normal Retirement amount.
Tier 3	
• *With less than 30 Years of Service (§ 4.1080.5(a)(3)(i))*	
Age & Service Requirement	Age 63 with 10 years of service, including 5 years of continuous City service.
Amount	2.00% per year of service credit at age 63 (not greater than 80%[1]) of the Final Average Monthly Compensation.
• *With 30 or more Years of Service (§ 4.1080.5(a)(3)(ii))*	
Age & Service Requirement	Age 63 with 30 years of service, including 5 years of continuous City service.
Amount	2.10% per year of service credit at age 63 (not greater than 80%[1]) of the Final Average Monthly Compensation.

[1] Except when benefit is based solely on the annuity component funded by the member's contributions.

Service Credit:	
Tier 1, Tier 1 Enhanced, & Tier 3 (§ 4.1001(a) & § 4.1080.1(a))	The time component of the formula used by LACERS for purposes of calculating benefits.

Final Average Monthly Compensation:	
Tier 1 & Tier 1 Enhanced (§ 4.1001(b))	Equivalent of monthly average salary of highest continuous 12 months (one year); includes base salary plus regularly assigned pensionable bonuses or premium pay.[1]
Tier 3 (§ 4.1080.1(b))	Equivalent of monthly average salary of highest continuous 36 months (three years); limited to base salary and any items of compensation that are designated as pension based.[1] [1] IRC Section 401(a)(17) compensation limit would apply to all employees who began membership in LACERS after June 30, 1996.
Post-Retirement Cost-of-Living Benefits:	
Tier 1 & Tier 1 Enhanced (§ 4.1022)	Based on changes to Los Angeles area[1] Consumer Price Index, to a maximum of 3% per year; excess banked.
Tier 3 (§ 4.1080.17)	Based on changes to Los Angeles area[1] Consumer Price Index, to a maximum of 2% per year; excess not banked. [1] Currently referred to as the Los Angeles-Long Beach-Anaheim Area, by the Bureau of Labor Statistics.
Death after Retirement:	
Tier 1 & Tier 3 (§ 4.1010(c), § 4.1080.10(c), & § 4.1012(c))	(i) 50% of retiree's unmodified allowance continued to an eligible spouse or a domestic partner; or a modified continuance to an eligible spouse or a domestic partner at the time of member's death (or a designated beneficiary selected by member at the time of retirement);[1] (ii) $2,500 lump sum death benefit paid to a designated beneficiary; and (iii) Any unused contributions if the member has elected the cash refund annuity option. [1] The retiree may elect at the time of retirement to take a reduced allowance in order to provide for a higher continuance percentage pursuant to the provisions of either Section 4.1015 (Tier 1) or Section 4.1080.14 (Tier 3).
Tier 1 Enhanced (§ 4.1010.1(b), § 4.1010.1(i), and § 4.1010.1(j)) • *While on service-connected disability*	(i) 80% of retiree's unmodified allowance continued to an eligible spouse or a domestic partner; or a modified continuance to an eligible spouse or a domestic partner at the time of member's death (or a designated beneficiary selected by member at the time of retirement) [1, 2] (ii) $2,500 lump sum death benefit paid to a designated beneficiary; and (iii) Any unused contributions if the member has elected the cash refund annuity option. [1] If the death occurs within three years of the retiree's retirement, the eligible survivor shall receive 80% of the Final Average Monthly Compensation (adjusted with Cost of Living benefit). [2] The retiree may elect at the time of retirement to take a reduced allowance in order to provide for a higher continuance percentage pursuant to the provision of Section 4.1010.1(c).

Death after Retirement: (continued)

- *While on nonservice-connected disability or service retirement*

(i) 70% of retiree's unmodified allowance continued to an eligible spouse or a domestic partner; or a modified continuance to an eligible spouse or a domestic partner at the time of member's death (or a designated beneficiary selected by member at the time of retirement)[3]

(ii) $2,500 lump sum death benefit paid to a designated beneficiary; and

(iii) Any unused contributions if the member has elected the cash refund annuity option.

[3] The retiree may elect at the time of retirement to take a reduced allowance in order to provide for a higher continuance percentage pursuant to the provision of Section 4.1010.1(c).

Death before Retirement:

Tier 1, Tier 1 Enhanced & Tier 3
(§ 4.1010(a), § 4.1010.1(b), & § 4.1080.10(a))

Greater of:

Option #1:

(i) Eligibility – None.

(ii) Benefit – Refund of employee contributions plus a limited pension benefit equal to 50% of monthly salary paid, according to the following schedule:[1]

Service Credit	Total Number of Monthly Payments
Less than 1 year	0
1 year	2
2 years	4
3 years	6
4 years	8
5 years	10
6+ Years	12

[1] Refund only if less than one year of service credit.

Tier 1 & Tier 3

Option #2:

(i) Eligibility – Duty-related death or after 5 years of continuous service.

(ii) Benefit – Deferred, service, optional, or disability survivorship benefit payable under 100% joint and survivor option to an eligible spouse or qualified domestic partner. (Limited pension waived.)

(iii) Refund of accumulated contributions. No survivorship benefit payable with refund.

Death before Retirement: (continued)	
Tier 1 Enhanced	Option #2
• *Service-Connected Death*	(i) Eligibility – None. (ii) Benefit – 80% of member's Final Average Monthly Compensation.
• *Nonservice-Connected Death*	(i) Eligibility – 5 years of service (unless on military leave and killed while on military duties). (ii) Benefit – 50% of member's Final Average Monthly Compensation. (iii) Eligibility – Less than 5 years of service. (iv) Benefit – The Basic Death Benefit shall consist of: (1) the return of a deceased Member's accumulated contributions to the Retirement System with accrued interest thereon, subject to the rights created by virtue of the Member's designation of a beneficiary as otherwise provided in the Retirement System; and (2) if the deceased Member had at least one year of service, the deceased Member's Final Compensation multiplied by the number of completed years of Service, not to exceed six years, provided that said amount shall be paid in monthly installments of one-half of the deceased Member's Final Compensation.
Member Contributions:	
Tier 1 & Tier 1 Enhanced *(§ 4.1003)*	Effective July 1, 2011, the member contribution rate became 7% for all employees. Of the 7% rate, 0.5% is the survivor contribution portion and 6.5% is the normal contribution. The 7% member rate shall be paid until June 30, 2026 or until the ERIP Cost Obligation (defined in ERIP Ordinance No. 180926) is fully paid, whichever comes first.[1] Beginning January 1, 2013, all non-represented members and members in certain bargaining groups are required to pay an additional 4% member contribution rate to defray the cost of providing a Retiree Medical Plan premium subsidy (this additional rate has increased to 4.5% for certain members). For Tier 1 (excluding Tier 1 Enhanced), members with no eligible spouse or domestic partner at retirement can request a refund of the survivor portion of the member contributions (i.e., generally based on a contribution rate of 0.5% of pay). [1] The member contribution rate will drop to 6% afterwards.
Tier 3 *(§ 4.1080.3)*	The member contribution rate is 7% for all employees. Of the 7% rate, 0.5% is the survivor contribution portion and 6.5% is the normal contribution. All members are required to pay an additional 4% member contribution rate to defray the cost of providing a Retiree Medical Plan premium subsidy. Members with no eligible spouse or domestic partner at retirement can request a refund of the survivor portion of the member contributions (i.e., generally based on a contribution rate of 0.5% of pay).

Disability:	
Tier 1 & Tier 3	
Service Requirement	
(§ 4.1008(a) & § 4.1080.8(a))	5 years of continuous service
Amount[1] *(§ 4.1008(c) & § 4.1080.8(c))*	1/70 (1.43%) of the Final Average Monthly Compensation per year of service or 1/3 of the Final Average Monthly Compensation, if greater. [1] The benefit calculated using the service retirement formula will be paid if the member is eligible and that benefit is greater than that calculated under the disability retirement formula.
Tier 1 Enhanced	
Service Requirement	
(§ 4.1008.1)	
• *Service-Connected Disability*	None
• *Nonservice-Connected Disability*	5 years of continuous service
Amount[1]	
(§ 4.1008.1)	
• *Service-Connected Disability*	30% to 90% of the Final Average Monthly Compensation depending on severity of disability, with a minimum of 2% of the Final Average Monthly Compensation per year of service.
• *Nonservice-Connected Disability*	30% to 50% of the Final Average Monthly Compensation depending on severity of disability. [1] The benefit calculated using the service retirement formula will be paid if the member is eligible and that benefit is greater than that calculated under the disability retirement formula.
Deferred Retirement Benefit (Vested):	
Tier 1 & Tier 1 Enhanced	
(§ 4.1006)	
Age & Service Requirement	Age 70 with 5 years of continuous City service; or Age 60 with 5 years of continuous City service and at least 10 years elapsed from first date of membership; or Age 55 with at least 30 years of service. Deferred employee who meets part-time eligibility: age 60 and at least 10 years elapsed from first date of membership.
Amount	Normal retirement benefit (or refund of contributions and accumulated interest).

Deferred Retirement Benefit (Vested): (continued)	
Age & Service Requirement	A former member who is not yet age 60 may retire for early retirement with an age-based reduced retirement allowance at age 55 or older with 5 years of continuous City service, provided at least 10 years have elapsed from first date of membership. Deferred employee who meets part-time eligibility: age 55 and at least 10 years elapsed from first date of membership.
Amount	Early retirement benefit (or refund of contributions and accumulated interest), using the following Early Retirement benefit adjustment factors:

Age	Factor
55	0.9250
56	0.9400
57	0.9550
58	0.9700
59	0.9850

Tier 3 *(§ 4.1080.6)*	
Age & Service Requirement	Age 60 with 5 years of continuous City service and at least 10 years elapsed from first date of membership; or Age 70 with 5 years of continuous City service, regardless of the number of years that have elapsed from first date of membership.
Amount	Normal retirement benefit (based on a Retirement Factor of 1.50%; or refund of contributions and accumulated interest).
Age & Service Requirement	Age 60 with 30 years of continuous City service and at least 10 years elapsed from first date of membership; or Age 63 with 10 years of service, including 5 years of continuous City service.
Amount	Normal retirement benefit (benefit based on a Retirement Factor of 2.00%; or refund of contributions and accumulated interest).
Age & Service Requirement	Age 63 with 30 years of continuous City service and at least 10 years elapsed from first date of membership.
Amount	Enhanced retirement benefit (full retirement benefit based on an unreduced Retirement Factor of 2.10%; or refund of contributions and accumulated interest).

Deferred Retirement Benefit (Vested): (continued)	
Tier 3	
Age & Service Requirement	Age 55 (but not yet 60) with 5 years of continuous City service and at least 10 years elapsed from first date of membership.
Amount	Early retirement benefit (based on a Retirement Factor of 1.50% and using the following Early Retirement benefit adjustment factors; or refund of contributions and accumulated interest):
Withdrawal of Contributions Benefit (Ordinary Withdrawal):	Refund of employee contributions with interest.
Changes in Plan Provisions:	There have been no changes in plan provisions since the last valuation.

Age	Factor
55	0.9250
56	0.9400
57	0.9550
58	0.9700
59	0.9850

Note: The summary of major plan provisions is designed to outline principal plan benefits as interpreted for purposes of the actuarial valuation. If the System should find the plan summary not in accordance with the actual provisions, the System should alert the actuary so they can both be sure the proper provisions are valued.

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Los Angeles City Employees' Retirement System

Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2023

This report has been prepared at the request of the Board of Administration to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Administration and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Segal

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November 7, 2023

Board of Administration
Los Angeles City Employees' Retirement System
977 N. Broadway
Los Angeles, CA 90012-1728

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2023. The report summarizes the actuarial data used in the valuation, establishes the Actuarially Determined Contribution (ADC) for the Fiscal Year 2024/2025, and analyzes the preceding year's experience. This report was based on the census and unaudited financial data provided by the System and the terms of the Plan as summarized in Exhibit III. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary and Mehdi Riazi, FSA, MAAA, FCA, EA. The health components were completed under the supervision of Mary Kirby, FSA, MAAA, FCA.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Retirement System. The census information and financial information on which our calculations were based was prepared by the staff of the System. That assistance is gratefully acknowledged.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions used in this valuation and described in Exhibit II are reasonably related to the experience of and the expectations for the Plan. The actuarial projections are based on these assumptions and the plan of benefits as summarized in Exhibits II and III.

Sincerely,

Segal

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

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

Mehdi Riazi, FSA, MAAA, FCA, EA
Vice President and Actuary

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

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Section 1: Actuarial Valuation Summary

Purpose

This report presents the results of our actuarial valuation of the City of Los Angeles Employees' Retirement System OPEB plan as of June 30, 2023 for funding purposes. The results of the valuation for financial reporting purposes consistent with GASB Statement No. 74 are provided in a separate report.

Highlights of the Valuation

- The results of this valuation reflect changes in the actuarial assumptions adopted by the Board on June 27, 2023. These new assumptions are referenced in Section 4. The assumption changes increased the combined (Tier 1 and Tier 3) City contribution rate by 0.42% of payroll (payable on July 15) and decreased the UAAL by $57.6 million.
- The ratio of the valuation value of assets to actuarial accrued liabilities increased from 96.99% to 107.10%. On a market value of assets basis, the funded ratio increased from 93.49% to 103.97%. The unfunded actuarial accrued liability decreased from $107.7 million to ($241.9) million. The primary reasons for the decrease in the UAAL were: (i) 2024 premiums, underlying claims estimates and subsidy levels were overall lower than expected; the savings produced by the Medicare plan premiums (which either remained level or decreased) more than offset the losses from the larger than expected premium increases for the non-Medicare plan premiums; updates to the actuarial spread factor methodology also contributed to the savings (ii) reflecting assumptions based on the triennial experience study, and (iii) the overall impact of the updated trend assumptions produced savings for the plan; although the trend rates for 2025 and after were slightly increased, the first year trend assumption for fiscal year 2023/2024 was lower than expected due to the 2024 premium experience. A complete reconciliation of the System's unfunded actuarial accrued liability is provided in Section 2, Subsection B.
- The recommended contribution rate has decreased from 3.93% of payroll to 3.32% of payroll and the recommended contribution amount has decreased from $88.7 million to $83.4 million, assuming contributions are received by LACERS on July 15. The main reasons for the decrease in the contribution rates were (i) the 2024 premium/subsidy experience and its impact on the trend rate assumptions, and (ii) a higher-than-expected increase to total projected payroll. A complete reconciliation of the change in the recommended contribution rate is provided in Section 2, Subsection D. Rates are shown separately for Tier 1 and Tier 3 in Section 2, Subsection E.
- The valuation value of assets was more than the total actuarial accrued liability as of June 30, 2023. Therefore, all prior amortization bases are deemed to have been fully amortized. Based on the amortization method described in Exhibit I (Summary of Supplementary Information), the actuarial surplus as of June 30, 2023 was amortized over a 30-year open (non-decreasing)

period. As shown in Section 2, Subsection D, the overall contribution rate of 3.32% is based on the plan's normal cost of 3.85% and a 0.53% credit related to the funding surplus.

- As noted above, the GAS 74 report with a measurement date of June 30, 2023 for financial reporting purposes for the Plan is provided as a separate report.
- The GAS 75 report with a measurement date of June 30, 2023 for financial reporting purposes for the employer (with a reporting date of June 30, 2024) will be provided in the first or second quarter of 2024.
- The actuarial valuation report as of June 30, 2023 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan.
- As in prior years, the employer contribution rates provided in this report have been developed assuming they will be received by LACERS on any of the following dates:
  - The beginning of the fiscal year, or
  - On July 15, 2024, or
  - Throughout the year (i.e., LACERS will receive contributions at the end of every pay period).

Summary of Valuation Results

	June 30, 2023	June 30, 2022
Actuarial Accrued Liability (AAL)	$3,405,088,528	$3,580,696,288
Valuation Value of Assets	3,646,978,226	3,472,955,743
Unfunded Actuarial Accrued Liability	(241,889,698)	107,740,545
Funded Ratio on Valuation Value Basis	107.10%	96.99%
Market Value of Assets	$3,540,386,112	$3,347,771,350
Funded Ratio on Market Value Basis	103.97%	93.49%
Actuarially Determined Contribution (ADC)		
Normal cost (beginning of year)	$96,467,041	$81,027,749
Amortization of the unfunded actuarial accrued liability	(13,275,741)	7,402,677
Total Actuarially Determined Contribution (beginning of year)	**$83,191,300**	**$88,430,426**
Total Actuarially Determined Contribution (July 15)	**$83,422,934**	**$88,676,648**
Total Actuarially Determined Contribution (end of each pay period)	**$86,053,750**	**$91,473,144**
Total projected compensation[1]	$2,512,179,018	$2,258,724,771
ADC as a percentage of pay (there is a 12-month delay until the rate is effective)[2]		
Beginning of year	3.31%	3.92%
July 15	3.32%	3.93%
End of each pay period	3.43%	4.05%
Total Participants[3]	51,320	50,391

[1] Reflects amount calculated in the pension valuation.
[2] A breakdown of the ADC by tier is provided in Section 2, Subsection E.
[3] Includes 132 pensioners and beneficiaries as of June 30, 2023 and 139 pensioners and beneficiaries as of June 30, 2022 entitled but not yet eligible for health benefits.

Important Information about Actuarial Valuations

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

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

Plan 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 description in this report to confirm that Segal has correctly interpreted the plan of benefits.
Participant information	An actuarial valuation for a plan is based on data provided to the actuary by LACERS. 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 System. 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 projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. To determine the future costs of benefits, Segal collects claims, premiums, and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost trend rates to project increases in costs in future years. This projection requires actuarial assumptions as to the probability of death, disability, termination, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to healthcare trends and member enrollment in retiree health benefits. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results that does not mean that the previous assumptions were unreasonable.

Section 1: Actuarial Valuation Summary

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. Our per capita cost assumptions are based on proprietary modeling software as well as models that were developed by others. These models generate demographic factors that are used in our valuation software. Our Health Technical Services Unit, comprised of actuaries and programmers, is responsible for the initial development and maintenance of our health models. They are also responsible for testing models that we purchase from other vendors for reasonableness. The client team inputs the demographic data, enrollments, plan provisions and assumptions into these models and reviews the results for reasonableness, under the supervision of the responsible actuary.

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 System. 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 the plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of future financial measures, except where otherwise noted.
If LACERS is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The System should look to their other advisors for expertise in these areas.
While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex 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 the System upon delivery and review. The System should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management or assets of LACERS, it is not a fiduciary in its capacity as actuaries and consultants with respect to LACERS.

Actuarial Certification

November 7, 2023

This is to certify that Segal has conducted an actuarial valuation of certain benefit obligations of Los Angeles City Employees' Retirement System's other postemployment benefits program as of June 30, 2023, in accordance with generally accepted actuarial principles and practices. In particular, it is our understanding that the assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice (ASOPs). Actuarial valuations are performed annually for this other postemployment benefit program with the last valuation completed as of June 30, 2022.

The actuarial valuation is based on the plan of benefits verified by LACERS and on participant, premium, claims and financial data provided by LACERS. Segal did not audit LACERS' financial statements, but conducted an examination of all participant data for reasonableness and we concluded that it was reasonable and consistent with the prior year's data.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the System's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age cost method.

The actuarial computations made are for funding plan benefits. Accordingly, additional determinations will be needed for other purposes, such as satisfying financial accounting requirements under Governmental Accounting Standards Board (GASB) Statements No. 74 and judging benefit security at termination of the plan.

Segal prepared all of the supporting schedules for the Actuarial Section of the Annual Comprehensive Financial Report (ACFR) and certain supporting schedules in the Financial Section, based on the results of the June 30, 2023 actuarial valuation. A listing of the supporting schedules Segal prepared for inclusion in the Financial Section, and in the Actuarial Section, is provided below:

Financial Section

1. Schedule of Net OPEB Liability*
2. Schedule of Changes in Net OPEB Liability and Related Ratios*
3. Schedule of Contribution History*

Section 1: Actuarial Valuation Summary

Actuarial Section

4. Summary of Significant Valuation Results
5. Active Member Valuation Data
6. Retirees and Beneficiaries Added to and Removed from Retiree Payroll
7. Schedule of Funded Liabilities by Type
8. Schedule of Funding Progress
9. Actuarial Analysis of Financial Experience
10. Actuarial Balance Sheet
11. Schedule of Changes in Net OPEB Liability and Related Ratios*

* Source: Segal's GASB Statement No. 74 valuation report as of June 30, 2023.

LACERS' staff prepared other trend data schedules in the Statistical Section based on information supplied in Segal's valuation report.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the plan's current funding information. The signing actuaries are members of the American Academy of Actuaries and collectively are qualified to render the actuarial opinion contained herein.

Andy Yeung	Mehdi Riazi	Mary Kirby
Andy Yeung, ASA, MAAA, FCA, EA Vice President and Actuary	Mehdi Riazi, FSA, MAAA, FCA, EA Vice President and Actuary	Mary Kirby FSA, MAAA, FCA Senior Vice President and Actuary

Section 2: Actuarial Valuation Results

A. Actuarial Present Value of Total Projected Benefits and Actuarial Balance Sheet

The actuarial present value of total projected benefits uses the actuarial assumptions disclosed in Section 4 to calculate the value today of all benefits expected to be paid to current actives and retired plan members. The actuarial balance sheet shows the expected breakdown of how these benefits will be financed.

	Actuarial Present Value of Total Projected Benefits (APB)	
	June 30, 2023	**June 30, 2022**
Participant Category		
Current retirees, beneficiaries, and dependents	$1,784,281,066	$1,900,861,299
Current active members	2,398,898,826	2,341,148,846
Terminated members entitled but not yet eligible	76,591,793	74,631,785
Total	**$4,259,771,685**	**$4,316,641,930**

	Actuarial Balance Sheet	
	June 30, 2023	**June 30, 2022**
Assets		
1. Valuation value of assets	$3,646,978,226	$3,472,955,743
2. Present value of future normal costs	854,683,157	735,945,642
3. Unfunded actuarial accrued liability	(241,889,698)	107,740,545
4. Present value of current and future assets	**$4,259,771,685**	**$4,316,641,930**
Liabilities		
5. Actuarial present value of total projected benefits	$4,259,771,685	$4,316,641,930

B. Actuarial Accrued Liability (AAL) and Unfunded AAL (UAAL)

The actuarial accrued liability shows that portion of the APB allocated to periods prior to the valuation date by the actuarial cost method. The chart below shows the portion of the liability for active and inactive members, and reconciles the unfunded actuarial accrued liability from last year to this year.

	June 30, 2023	June 30, 2022
Participant Category		
Current retirees, beneficiaries, and dependents	$1,784,281,066	$1,900,861,299
Current active members	1,544,215,669	1,605,203,204
Terminated members entitled but not yet eligible	76,591,793	74,631,785
Total actuarial accrued liability	**$3,405,088,528**	**$3,580,696,288**
Unfunded Actuarial Accrued Liability		
Total actuarial accrued liability	$3,405,088,528	$3,580,696,288
Valuation value of assets	3,646,978,226	3,472,955,743
Unfunded actuarial accrued liability	**($241,889,698)**	**$107,740,545**
Development of Unfunded Actuarial Accrued Liability for the Year Ended June 30, 2023		
1. Unfunded actuarial accrued liability as of June 30, 2022		**$107,740,545**
2. Employer normal cost as of June 30, 2022		81,027,749
3. Expected employer contributions during 2022/2023 fiscal year		(88,430,426)
4. Interest		7,117,978
5. Expected unfunded actuarial accrued liability as of June 30, 2023 (1 + 2 + 3 + 4)		$107,455,846
6. Change due to investment loss, after smoothing		813,433
7. Change due to actual contributions more than expected		(2,036,804)
8. Change due to demographic gains and losses		(12,047,528)
9. Change due to updated 2023/2024 premiums, underlying claims estimates and subsidy levels		(222,219,952)
10. Change due to updated trend assumption to project future medical premiums after 2023/2024[1]		(56,226,132)
11. Change due to updated assumptions based on the triennial experience study		(57,628,561)
12. Unfunded actuarial accrued liability as of June 30, 2023 (5 + 6 + 7 + 8 + 9 + 10 + 11)		**($241,889,698)**

[1] The overall impact of the updated trend assumptions produced savings for the plan. Although the trend rates for 2025 and after were slightly increased, the first year trend assumption for fiscal year 2023/2024 was lower than expected due to the 2024 premium experience.

C. Table of Amortization Bases

Amortization payments may be calculated as level dollar amounts or as amounts designed to remain level as a percent of a growing payroll base. Los Angeles City Employees' Retirement System has elected to amortize the unfunded actuarial accrued liability using the following rules: The amortization periods for all unfunded actuarial accrued liability layers as of June 30, 2020 were reset to fixed periods of 21 years beginning with the June 30, 2021 valuation date. Thereafter, assumption changes resulting from the triennial experience study will be amortized over 20 years. Health trend and premium assumption changes, plan changes, and gains and losses will be amortized over 15 years. An overall actuarial surplus will be amortized over 30 years on an open (non-decreasing) basis.

As of June 30, 2023, the valuation value of assets is in excess of the total actuarial accrued liability. Therefore, all prior amortization bases are deemed to have been fully amortized and the actuarial surplus as of June 30, 2023 has been amortized over a 30-year period.

Type	Date Established	Initial Balance	Initial Period	Outstanding Balance	Years Remaining	Annual Payment[1]
Actuarial Surplus	06/30/2023	($241,889,698)	30	($241,889,698)	30	($13,275,741)
Total				**($241,889,698)**		**($13,275,741)**

[1] Level percentage of payroll.

D. Reconciliation of Recommended Contribution Rate

The chart below details the changes in the Actuarially Determined Contribution (ADC) from the prior valuation to the current year's valuation.

Reconciliation of Recommended Contribution from June 30, 2022 to June 30, 2023

	Contribution Rate
Recommended Contribution as of June 30, 2022[1]	**3.93%**
Change due to investment loss, after smoothing[2]	0.00%
Change due to reflecting assumptions based on the triennial experience study[3]	0.42%
Change due to miscellaneous demographic and contribution gains and losses	0.09%
Change due to updated 2023/2024 premiums, underlying claims estimates and subsidy levels	-0.93%
Change due to updated trend assumption to project future medical premiums after 2023/2024	-0.23%
Change in UAAL rate from higher-than-expected projected total payroll	-0.26%
Reset to Normal Cost rate of 3.85% (all prior amortization bases deemed fully amortized due to funding surplus)	0.83%
Contribution credit due to funding surplus	-0.53%
Total change	-0.61%
Recommended Contribution as of June 30, 2023[1]	**3.32%**

[1] If received on July 15.
[2] Less than 0.01% when expressed as a percent of $2,512,179,018 in projected compensation as of June 30, 2023
[3] There is an increase in the normal cost rate that is offset to some degree by a reduction in the UAAL rate.

E. Development of Actuarially Determined Contribution (ADC)

The Actuarially Determined Contribution (ADC) is the amount calculated to determine the annual cost of the OPEB plan for funding purposes on an accrual basis. The calculation consists of adding the Normal Cost of the plan to an amortization payment. Both are determined as of the start of the funding period and adjusted as if the annual cost were to be received throughout the fiscal year or on July 15th.

Tier 1

	Determined as of			
	June 30, 2023		June 30, 2022	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Normal cost	$64,315,217	3.78%	$56,574,359	3.43%
2. Amortization of the unfunded actuarial accrued liability[1]	(8,994,477)	-0.53%	5,402,958	0.33%
3. Total Actuarially Determined Contribution (beginning of year)	**$55,320,740**	**3.25%**	**$61,977,317**	**3.76%**
4. Total Projected Compensation[2]	$1,702,032,123		$1,648,564,985	
5. Adjustment for timing (July 15)	$154,033	0.01%	$172,567	0.01%
6. Total Actuarially Determined Contribution (July 15)	**$55,474,773**	**3.26%**	**$62,149,884**	**3.77%**
7. Adjustment for timing (end of pay period)	$1,903,478	0.11%	$2,132,518	0.13%
8. Total Actuarially Determined Contribution (end of pay period)	**$57,224,218**	**3.36%**	**$64,109,835**	**3.89%**

[1] In developing the UAAL contribution rate, we have combined the UAAL for Tier 1 and Tier 3 and amortized that total UAAL over the total payroll for Tier 1 and Tier 3

[2] Reflects amount calculated in the pension valuation.

Tier 3

	Determined as of			
	June 30, 2023		June 30, 2022	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Normal cost	$32,151,824	3.97%	$24,453,390	4.01%
2. Amortization of the unfunded actuarial accrued liability[1,2]	(4,281,264)	-0.53%	1,999,719	0.33%
3. Total Actuarially Determined Contribution (beginning of year)	**$27,870,560**	**3.44%**	**$26,453,109**	**4.34%**
4. Total Projected Compensation[3]	$810,146,895		$610,159,786	
5. Adjustment for timing (July 15)	$77,601	0.01%	$73,655	0.01%
6. Total Actuarially Determined Contribution (July 15)	**$27,948,161**	**3.45%**	**$26,526,764**	**4.35%**
7. Adjustment for timing (end of pay period)	$958,972	0.12%	$910,200	0.14%
8. Total Actuarially Determined Contribution (end of pay period)	**$28,829,532**	**3.56%**	**$27,363,309**	**4.48%**

[1] In developing the UAAL contribution rate, we have combined the UAAL for Tier 1 and Tier 3 and amortized that total UAAL over the total payroll for Tier 1 and Tier 3.
[2] There is a reduction in Tier 3 Normal Cost Rate due to a significant increase of 33% in projected compensation for Tier 3 members as of June 30, 2023.
[3] Reflects amount calculated in the pension valuation.

Total Plan

	Determined as of			
	June 30, 2023		June 30, 2022	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Normal cost	$96,467,041	3.84%	$81,027,749	3.59%
2. Amortization of the unfunded actuarial accrued liability	(13,275,741)	-0.53%	7,402,677	0.33%
3. Total Actuarially Determined Contribution (beginning of year)	**$83,191,300**	**3.31%**	**$88,430,426**	**3.92%**
4. Total Projected Compensation[1]	$2,512,179,018		$2,258,724,771	
5. Adjustment for timing (July 15)	$231,634	0.01%	$246,222	0.01%
6. Total Actuarially Determined Contribution (July 15)	**$83,422,934**	**3.32%**	**$88,676,648**	**3.93%**
7. Adjustment for timing (end of pay period)	$2,862,450	0.12%	$3,042,718	0.13%
8. Total Actuarially Determined Contribution (end of pay period)	**$86,053,750**	**3.43%**	**$91,473,144**	**4.05%**

[1] Reflects amount calculated in the pension valuation.

F. Schedule of Employer Contributions

Fiscal Year Ended June 30	Actuarially Determined Contributions[1]	Actual Contributions[1]	Percentage Contributed
2018	100,909,010	100,909,010	100.00%
2019	107,926,949	107,926,949	100.00%
2020	112,136,429	112,136,429	100.00%
2021	103,454,114	103,454,114	100.00%
2022	91,622,720	91,622,720	100.00%
2023	90,580,892	90,580,892	100.00%

The schedule of employer contributions compares actual contributions to the Actuarially Determined Contributions.

[1] Prior to plan year ending June 30, 2018, this amount was the Annual Required Contribution (ARC).

G. Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll[1] (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/2018	2,628,843,511	3,256,827,847	627,984,336	80.72%	2,177,687,102	28.84%
06/30/2019	2,812,661,894	3,334,298,549	521,636,655	84.36%	2,225,412,831	23.44%
06/30/2020	2,984,423,687	3,486,530,510	502,106,823	85.60%	2,445,016,587	20.54%
06/30/2021	3,330,377,493	3,520,078,454	189,700,961	94.61%	2,254,165,029	8.42%
06/30/2022	3,472,955,743	3,580,696,288	107,740,545	96.99%	2,258,724,771	4.77%
06/30/2023	3,646,978,226	3,405,088,528	(241,889,698)	107.10%	2,512,179,018	-9.63%

This schedule of funding progress presents multi-year trend information about whether the valuation value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

[1] Reflects amount calculated in the pension valuation.

H. Volatility Ratios for Years Ended June 30, 2014 – 2023

The Asset Volatility Ratio (AVR), which is equal to the market value of assets divided by total payroll, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measure since it is based on the current level of assets.

For LACERS, the current AVR is about 1.41. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 1.41% of one-year's payroll. Since LACERS amortizes actuarial gains and losses over a period of 15 years, there would be a 0.1%[1] of payroll decrease/(increase) in the determined contribution for each 1% asset gain/(loss).

The Liability Volatility Ratio (LVR), which is equal to the Actuarial Accrued Liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities. For example, if a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions.

For LACERS, the current LVR is about 1.36. This is about 4% lower than the AVR. Therefore, we would expect that contribution volatility will decrease over the long-term.

Year Ended June 30	Asset Volatility Ratio	Liability Volatility Ratio
2014	1.10	1.40
2015	1.12	1.39
2016	1.08	1.42
2017	1.18	1.46
2018	1.23	1.50
2019	1.26	1.50
2020	1.17	1.43
2021	1.68	1.56
2022	1.48	1.59
2023	1.41	1.36

[1] Before taking into account LACERS' Surplus Position as of June 30, 2023. When the System is in surplus, actuarial gains and losses are amortized over a period of 30 years.

I. Member Population: 2014 – 2023

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive non-vested members (entitled to a refund of member contributions), inactive vested members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibit A, B, and C.

Year Ended June 30	Active Members	Inactive Vested Members	Retired Members and Beneficiaries[1]	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Retired Members and Beneficiaries to Actives
2014	24,009	955	13,686	14,641	0.61	0.57
2015	23,895	1,032	14,012	15,044	0.63	0.59
2016	24,446	1,119	14,313	15,432	0.63	0.59
2017	25,457	1,280	14,652	15,932	0.63	0.58
2018	26,042	1,401	15,144	16,545	0.64	0.58
2019	26,632	1,474	15,791	17,265	0.65	0.59
2020	27,490	1,526	16,107	17,633	0.64	0.59
2021	25,176	1,554	17,500	19,054	0.76	0.70
2022	24,917	1,537	17,753	19,290	0.77	0.71
2023	25,875	1,617	17,759	19,376	0.75	0.69

[1] Excludes retirees and surviving spouses not yet enrolled in retiree health benefits.

Section 3: Valuation Details

Exhibit A: Table of Plan Coverage

Total Plan

Category	Year Ended June 30: 2023	Year Ended June 30: 2022	Change From Prior Year
Active members in valuation:			
• Number	25,875	24,917	3.8%
• Average age	46.5	46.7	-0.2
• Average service	12.5	12.8	-0.3
• Total projected compensation	$2,512,179,018	$2,258,724,771	11.2%
Inactive members:			
• Number	1,617	1,537	5.2%
• Average age	51.3	51.1	0.2
Retirees:[1]			
• Number of non-disabled	15,647	15,616	0.2%
• Number of disabled	301	317	-5.0%
• Total number of retirees	15,948	15,933	0.1%
• Average age of retirees	72.1	71.8	0.3
• Number of spouses	5,937	6,045	-1.8%
• Average age of spouses	71.3	68.4	2.9
Surviving Spouses:[1]			
• Number in pay status	1,811	1,820	-0.5%
• Average age	79.8	79.6	0.2

[1] Excludes retirees and surviving spouses not receiving health benefits.

Tier 1

Category[1]	Year Ended June 30 2023	2022	Change From Prior Year
Active members in valuation:			
• Number	16,045	16,762	-4.3%
• Average age	51.1	50.4	0.7
• Average service	18.1	17.3	0.8
• Total projected compensation	$1,702,032,123	$1,648,564,985	3.2%
Inactive members:			
• Number	1,593	1,519	4.9%
• Average age	51.4	51.1	0.3
Retirees:[2]			
• Number of non-disabled	15,647	15,616	0.2%
• Number of disabled	301	317	-5.0%
• Total number of retirees	15,948	15,933	0.1%
• Average age of retirees	72.1	71.8	0.3
• Number of spouses	5,937	6,045	-1.8%
• Average age of spouses	71.3	68.4	2.9
Surviving Spouses:[2]			
• Number in pay status	1,811	1,820	-0.5%
• Average age	79.8	79.6	0.2

[1] Includes the following number of Airport Peace Officers (APO) eligible for enhanced retirement benefits:

	June 30, 2023	June 30, 2022
Active Members	342	361
Inactive Members	33	11
Retired Members	109	81

Tier 3

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	9,830	8,155	20.5%
• Average age	39.1	39.0	0.1
• Average service	3.5	3.4	0.1
• Total projected compensation	$810,146,895	$610,159,786	32.8%
Inactive members:			
• Number	24	18	33.3%
• Average age	46.8	46.9	-0.1
Retirees:[1]			
• Number of non-disabled	N/A	N/A	N/A
• Number of disabled	N/A	N/A	N/A
• Total number of retirees	N/A	N/A	N/A
• Average age of retirees	N/A	N/A	N/A
• Number of spouses	N/A	N/A	N/A
• Average age of spouses	N/A	N/A	N/A
Surviving Spouses:			
• Number in pay status	N/A	N/A	N/A
• Average age	N/A	N/A	N/A

[1] Excludes non-actives not receiving health benefits.

Exhibit B: Reconciliation of Retiree Health Participant Data with Pension Participant Data

Category	Year Ended June 30 2023	Year Ended June 30 2022
Active		
• Pension valuation	25,875	24,917
• Health valuation	25,875	24,917
Retirees		
• Pension valuation	17,457	17,399
• Retirees with no subsidy due to service or decision not to enroll	-1,797	-1,759
• Deferred retirees eligible for future health benefits	-13	-24
• Health valuation	15,647	15,616
Disableds		
• Pension valuation	799	819
• Disabled with no subsidy due to service or decision not to enroll	-463	-467
• Deferred disableds eligible for future health benefits	-35	-35
• Health valuation	301	317
Surviving Spouses		
• Pension valuation	4,254	4,181
• Surviving spouses with no subsidy due to service or decision not to enroll	-2,359	-2,281
• Deferred surviving spouses eligible for future health benefits	-84	-80
• Health valuation	1,811	1,820
Inactive Vested		
• Pension valuation	11,148	10,379
• Inactive vesteds with less than 10 years of service	-9,531	-8,842
• Health valuation	1,617	1,537

Exhibit C: Retirees and Beneficiaries Added to and Removed from Health Benefits

Year Ended 6/30	No. of New Retirees/ Beneficiaries	Annual Subsidies Added[1]	No. of Retirees/ Beneficiaries Removed	Annual Subsidies Removed	No. of Retirees/ Beneficiaries at 6/30	Annual Subsidies at 6/30	Percent Increase in Annual Subsidies	Average Annual Subsidies
2018	1,104	17,413,241	612	3,649,382	15,144	135,865,750	11.3	8,972
2019	1,195	12,323,187	548	3,780,696	15,791	144,408,241	6.3	9,145
2020	967	7,878,817	651	3,979,061	16,107	148,307,997	2.7	9,208
2021	2,135	25,826,129	742	5,162,633	17,500	168,971,493	13.9	9,656
2022	893	5,631,315	640	4,809,300	17,753	169,793,508	0.5	9,564
2023	699	1,517,839	693	568,742	17,759	170,742,605	0.6	9,614

[1] Also reflects changes in subsidies for continuing retirees and beneficiaries.

Exhibit D: Cash Flow Projections

The ADC generally exceeds the current pay-as-you-go ("paygo") cost of an OPEB plan. Over time the paygo cost will tend to grow and may even eventually exceed the ADC in a well-funded plan. The following table projects the paygo cost as the projected payment over the next ten years.

	Projected Number of Retirees[1]			Projected Benefit Payments		
Year Ending June 30	**Current**	**Future**	**Total**	**Current**	**Future**	**Total**
2024	23,696	1,668	25,364	$159,914,200	$12,859,834	$172,774,034
2025	23,255	2,633	25,888	156,721,650	23,414,758	180,136,408
2026	22,560	3,571	26,131	155,094,049	34,832,372	189,926,421
2027	21,853	4,484	26,337	153,019,650	46,641,951	199,661,601
2028	21,140	5,429	26,569	150,191,749	59,028,606	209,220,355
2029	20,421	6,357	26,778	147,443,441	71,548,512	218,991,953
2030	19,688	7,287	26,975	144,319,970	84,751,082	229,071,052
2031	18,948	8,218	27,166	141,231,694	98,819,265	240,050,959
2032	18,200	9,128	27,328	138,703,258	112,739,989	251,443,247
2033	17,450	10,027	27,477	136,539,383	126,129,518	262,668,901

[1] Includes spouses of retirees, but excludes those not receiving a subsidy from LACERS.

Exhibit E: Summary Statement of Income and Expenses on a Market Value Basis for Retirement, Health, Family Death, and Larger Annuity Benefits

	Year Ended June 30, 2023		Year Ended June 30, 2022	
Net assets at market value at the beginning of the year		**$20,454,103,991**		**$22,805,339,941**
Prior period adjustments:		0		(19,987)[1]
Subtotal		$20,454,103,991		$22,805,319,954
Contribution income:				
• Employer contributions	$760,019,088		$682,928,074	
• Member contributions	259,976,824		245,878,551	
Net contribution income		$1,019,995,912		$928,806,625
Investment income:				
• Interest, dividends and other income	$484,084,745		$459,637,714	
• Asset appreciation	1,181,447,188		(2,245,698,458)	
• Less investment and administrative fees	(164,724,805)		(161,667,882)	
Net investment income		$1,500,807,128		$(1,947,728,626)
Total income available for benefits		**$2,520,803,040**		**$(1,018,922,001)**
Less benefit payments:				
• Benefits paid[2]	$(1,371,245,288)		$(1,320,663,863)	
• Member refunds	(14,396,630)		(11,630,099)	
Net benefit payments		$(1,385,641,918)		$(1,332,293,962)
Change in net assets at market value		$1,135,161,122		$(2,351,215,963)
Net assets at market value at the end of the year		**$21,589,265,113**		**$20,454,103,991**

Note: Results may be slightly off due to rounding.

[1] Adjustment made to beginning of year assets in order to match the June 30, 2021 end of year value as noted in the Statement of Changes in Fiduciary Net Position, Retirement Plan and Postemployment Health Care Plan, for the Fiscal Year Ended June 30, 2022, with Comparative Totals, provided by LACERS.

[2] Includes offsets related to self funded dental insurance premiums and health insurance premium reserve.

Exhibit F: Summary Statement of Plan Assets for Retirement, Health, Family Death, and Larger Annuity Benefits

	June 30, 2023		June 30, 2022	
Cash equivalents		$427,788,364		$428,386,988
Accounts receivable:				
• Accrued investment income	$89,224,757		$79,684,301	
• Proceeds from sales of investments	93,978,913		135,169,157	
• Other	12,661,960		10,862,885	
Total accounts receivable		$195,865,630		$225,716,343
Investments:				
• Fixed income	$5,011,434,541		$5,151,890,589	
• Equities	10,152,233,548		9,502,159,992	
• Real estate and alternative investment	5,416,827,780		4,963,175,949	
• Derivative instruments	(1,886,090)		(1,252,530)	
• Other	785,386,148		960,814,353	
Total investments at market value		$21,363,995,927		$20,576,788,353
Capital Assets		60,725,661		53,305,470
Total assets		$22,048,375,582		$21,284,197,154
Accounts payable:				
• Accounts payable and accrued expenses	$(93,664,527)		($88,838,675)	
• Accrued investment expenses	(8,818,953)		(19,981,850)	
• Purchases of investments	(145,060,285)		(204,713,269)	
• Securities lending collateral	(210,806,062)		(515,987,947)	
Total accounts payable		$(458,349,827)		($829,521,741)
Deferred inflow of resources		$(760,642)		($571,422)
Net assets at market value		**$21,589,265,113**		**$20,454,103,991**
Net assets at actuarial value		**$22,239,263,545**		**$21,218,951,507**
Net assets at valuation value (health benefits)		**$3,646,978,226**		**$3,472,955,743**

Note: Results may be slightly off due to rounding.

Exhibit G: Determination of Actuarial Value of Assets as of June 30, 2023

		Actual Return	Expected Return	Investment Gain/(Loss)	Portion Not Recognized	Unrecognized Amount
1	**Market Value of Assets**					**$21,589,265,113**
2	Calculation of unrecognized return[1]					
a)	Year ended June 30, 2023	$1,500,807,128	$1,443,373,615	57,433,513	6/7	$49,228,725
b)	Year ended June 30, 2022	(1,947,728,626)	1,604,160,949	(3,551,889,575)	5/7	(2,537,063,982)
c)	Year ended June 30, 2021	5,258,341,258	1,260,485,231	3,997,856,027	4/7	2,284,489,158
d)	Year ended June 30, 2020	338,862,747	1,299,282,781	(960,420,034)	3/7	(411,608,586)
e)	Year ended June 30, 2019	945,590,839	1,242,978,109	(297,387,270)	2/7	(84,967,791)
f)	Year ended June 30, 2018	1,498,100,177	1,148,631,872	349,468,305	1/7	49,924,044
g)	Total unrecognized return[2]					$(649,998,432)
3	**Preliminary Valuation Value of Assets (1) - (2g)**					**$22,239,263,545**
4	Adjustment to be within 40% corridor					0
5	**Final Valuation Value of Assets 3 + 4**					**$22,239,263,545**
6	Actuarial Value of Assets as a percentage of Market Value of Assets 5 ÷ 1					103.0%
7	Market value of health assets					$3,540,386,112
8	**Valuation value of health assets 5 ÷ 1 x 7**					**$3,646,978,226**

[1] Total return minus expected return on a market value basis.

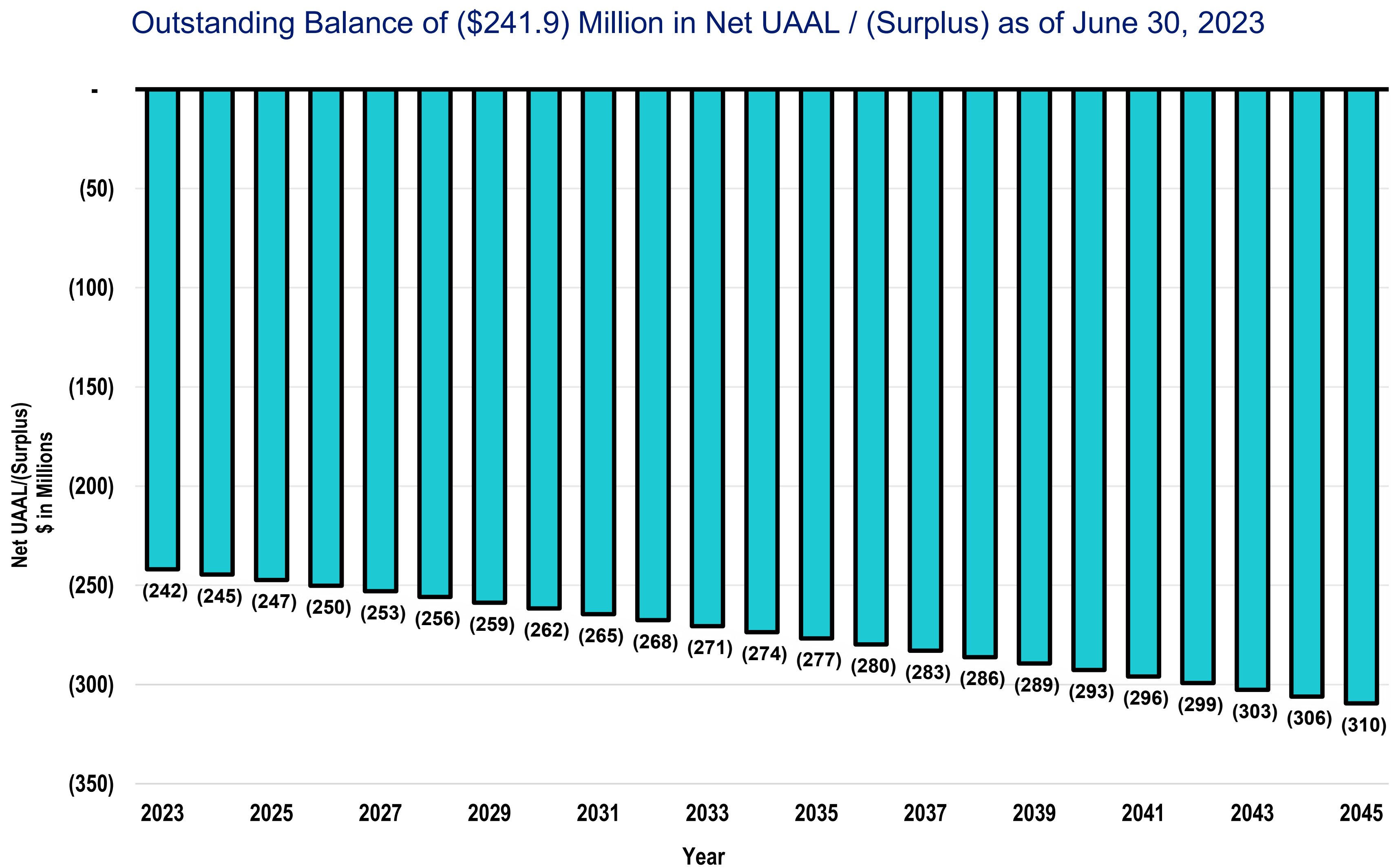
[2] Deferred return as of June 30, 2023 recognized in each of the next 6 years (for Retirement and Health Plans):

(a) Amount recognized on June 30, 2024	$(57,848,432)
(b) Amount recognized on June 30, 2025	(107,772,476)
(c) Amount recognized on June 30, 2026	(65,288,580)
(d) Amount recognized on June 30, 2027	71,914,282
(e) Amount recognized on June 30, 2028	(499,208,008)
(f) Amount recognized on June 30, 2029	8,204,788
(g) Total unrecognized return as of June 30, 2023 (may not total exactly due to rounding)	$(649,998,432)

Exhibit H: Member Benefit Coverage Information for OPEB

	Aggregate Actuarial Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Assets		
	1	2	3		1	2	3
Valuation Date	Terminated Members	Retirees, Beneficiaries, & Dependents	Active Members	Valuation Value of Retiree Health Assets	Terminated Members	Retirees, Beneficiaries, & Dependents	Active Members
06/30/2018	67,137,848	1,497,370,105	1,692,319,894	2,628,843,511	100	100	63
06/30/2019	65,887,248	1,600,130,890	1,668,280,411	2,812,661,894	100	100	69
06/30/2020	70,327,305	1,677,722,536	1,738,480,669	2,984,423,687	100	100	71
06/30/2021	74,599,941	1,869,444,779	1,576,033,734	3,330,377,493	100	100	88
06/30/2022	74,631,785	1,900,861,299	1,605,203,204	3,472,955,743	100	100	93
06/30/2023	76,591,793	1,784,281,066	1,544,215,669	3,646,978,226	100%	100%	100%

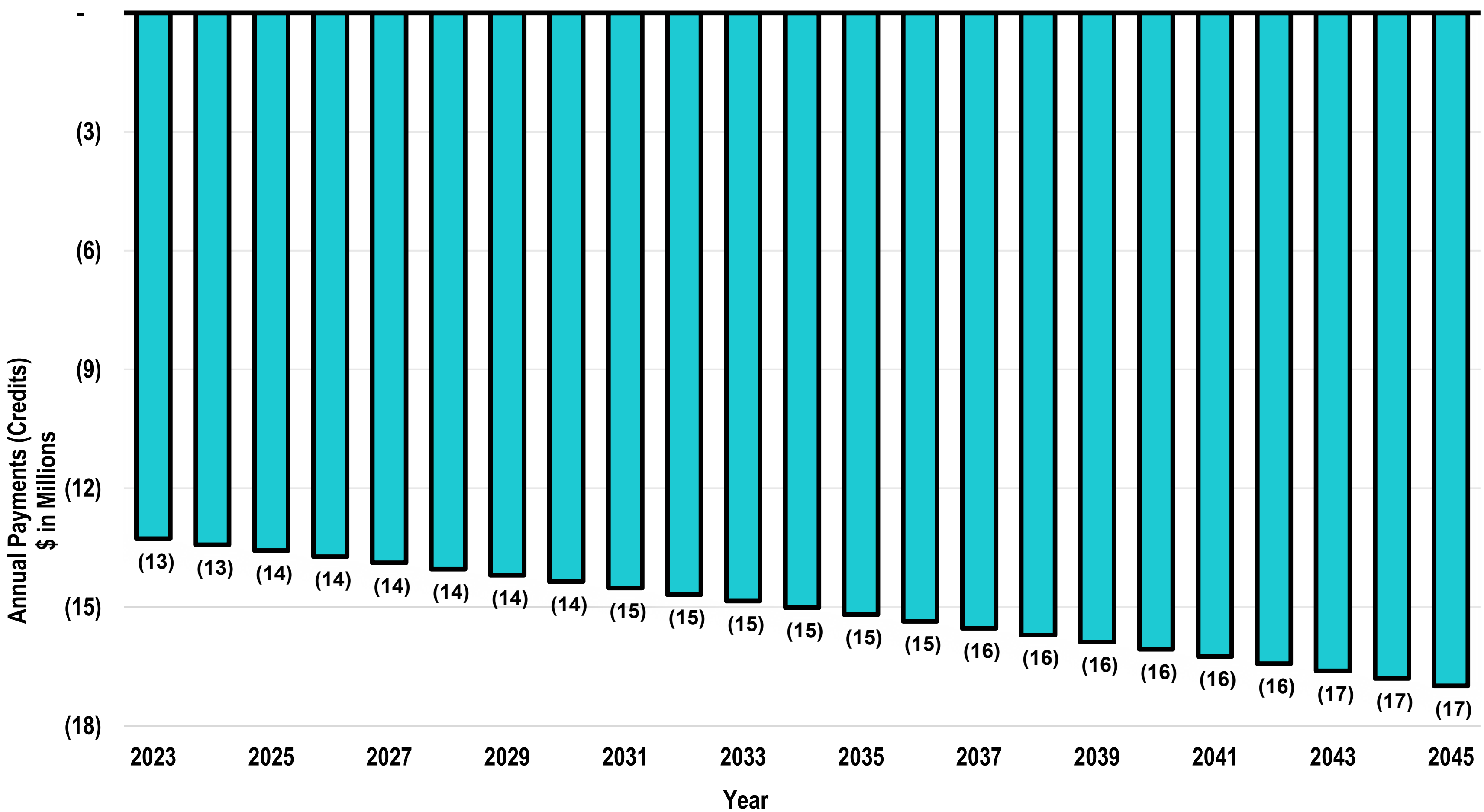
Exhibit I: Projection of UAAL Balances and Payments



Note: The funding surplus is expected to slightly increase each year due to the 30-year, open amortization period.

Exhibit I: Projection of UAAL Balances and Payments (continued)

Annual Payments/(Credits) Resulting from ($241.9) Million in Net UAAL/(Surplus) as of June 30, 2023



Note: The Plan's recommended contribution rate includes an offset or credit related to the plan's funding surplus.

Section 4: Actuarial Valuation Basis

Exhibit I: Summary of Supplementary Information

Valuation date	June 30, 2023
Actuarial cost method	Entry Age Cost Method, level percent of salary.
Amortization method	Level percent of payroll – assuming a 3.00% increase in total covered payroll.
Amortization period	**Multiple Layers:** (see table below) An adjustment is made to the amortization period of all the UAAL actuarial gain layers to be the longer of 15 years or the remaining amortization period for the outstanding balance of the pre-June 30, 2021 UAAL layers when the total UAAL contribution is negative (a credit) but there is still a UAAL balance.
Asset valuation method	Market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The valuation value of assets cannot be less than 60% or greater than 140% of the market value of assets.

Multiple Layers:

2009 ERIP	15 years
Pre-June 30, 2021 layers, starting June 30, 2021	21 years
Actuarial Experience	15 years
Change in non-health related assumptions	20 years
Change in health related assumptions	15 years
Future ERIP	5 years
AVA in excess of AAL	30 years
Plan Amendment	15 years

Section 4: Actuarial Valuation Basis

Actuarial assumptions		
Investment rate of return	7.00%	
Inflation rate	2.50%	
Real across-the-board salary increase	0.50%	
Projected salary increases	Ranges from 9.00% to 4.00% based on years of service, including inflation	
Medical, dental, Medicare Part B trend rates	See table on page 47.	
Plan participants	**June 30, 2023**	**June 30, 2022**
Current retirees, beneficiaries, and dependents receiving benefits	23,696	23,798
Current active participants	25,875	24,917
Terminated participants entitled but not yet eligible	1,617	1,537
Pensioners and beneficiaries entitled but not yet eligible for health benefits	132	139
Total	**51,320**	**50,391**

Exhibit II: Actuarial Assumptions and Actuarial Cost Method

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 June 21, 2023 and retiree health assumptions letter dated September 18, 2023. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both Tier 1 and Tier 3 members. These assumptions have been adopted by the Board.

Economic Assumptions

Net Investment Return

7.00%, net of administrative and investment expenses.

Payroll Growth:

Inflation of 2.50% per year plus real "across the board" salary increases of 0.50% per year, used to amortize the Unfunded Actuarial Accrued Liability as a level percentage of payroll.

Salary Increase

Inflation: 2.50%; plus additional 0.50% "across the board" salary increases (other than inflation); plus the following merit and promotional increases:

Merit and Promotion Increases

Service	Rate (%)
Less than 1	6.00
1 – 2	5.90
2 – 3	5.40
3 – 4	4.20
4 – 5	3.50
5 – 6	2.80
6 – 7	2.50
7 – 8	2.10
8 – 9	1.80
9 – 10	1.60
10 – 11	1.50
11 – 12	1.40
12 – 13	1.30
13 – 14	1.20
14 – 15	1.10
15 & Over	1.00

Demographic Assumptions

Post-Retirement Mortality Rates	*Healthy Members* • Pub-2010 General Healthy Retiree Headcount-Weighted Above-Median Mortality Table (separate tables for males and females), with rates increased by 10% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021. *Disabled Members* • Pub-2010 Non-Safety Disabled Retiree Headcount-Weighted Mortality Table (separate tables for males and females), with rates increased by 5% for males and decreased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021. *Beneficiaries not currently In-Pay Status* • Pub-2010 General Healthy Retiree Headcount-Weighted Above-Median Mortality Table (separate tables for males and females), with rates increased by 10% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021. *Beneficiaries currently In-Pay Status* • Pub-2010 Contingent Survivor Headcount-Weighted Above-Median Mortality Table (separate tables for males and females), with rates increased by 5% for males and increased by 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021. The Pub-2010 mortality tables and adjustments as shown above reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Pre-Retirement Mortality Rates

- Pub-2010 General Employee Headcount-Weighted Above-Median Mortality Table (separate tables for males and females), with rates increased by 10% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

	Rate (%)	
Age	**Male**	**Female**
20	0.04	0.02
25	0.04	0.02
30	0.05	0.02
35	0.08	0.04
40	0.09	0.05
45	0.11	0.06
50	0.14	0.08
55	0.21	0.13
60	0.33	0.20
65	0.47	0.29

Generational projections to the valuation date for each age reflected in the above mortality rates.

For Tier 1 Enhanced, 100% of pre-retirement death benefits are assumed to be service-connected.

Disability Incidence

Age	Rate (%)
25	0.01
30	0.02
35	0.03
40	0.05
45	0.10
50	0.14
55	0.15
60	0.16
65	0.20

Termination

Years of Service	Rate (%)
Less than 1	10.50%
1 – 2	10.00%
2 – 3	9.00%
3 – 4	7.75%
4 – 5	6.25%
5 – 6	5.25%
6 – 7	5.00%
7 – 8	4.75%
8 – 9	4.50%
9 – 10	4.25%
10 – 11	4.00%
11 – 12	3.75%
12 – 13	3.50%
13 – 14	3.00%
14 – 15	2.75%
15 and over	2.50%

No termination is assumed after a member is eligible for retirement (as long as a retirement rate is present).

Retirement Rates

	Rate (%)					
	Tier 1		Tier 1 Enhanced		Tier 3	
Age	**Non-55/30**	**55/30**	**Non-55/30**	**55/30**	**Non-55/30**	**55/30**
50	5.0	0.0	6.0	0.0	5.0	0.0
51	3.0	0.0	5.0	0.0	3.0	0.0
52	3.0	0.0	5.0	0.0	3.0	0.0
53	3.0	0.0	5.0	0.0	3.0	0.0
54	18.0	0.0	18.0	0.0	17.0	0.0
55	6.0	27.0	10.0	30.0	0.0(1)	26.0
56	6.0	18.0	10.0	22.0	0.0(1)	17.0
57	6.0	18.0	10.0	22.0	0.0(1)	17.0
58	6.0	18.0	10.0	22.0	0.0(1)	17.0
59	6.0	18.0	10.0	22.0	0.0(1)	17.0
60	9.0	18.0	11.0	22.0	8.0	17.0
61	9.0	18.0	11.0	22.0	8.0	17.0
62	9.0	18.0	11.0	22.0	8.0	17.0
63	9.0	18.0	11.0	22.0	8.0	17.0
64	9.0	18.0	11.0	22.0	8.0	17.0
65	16.0	21.0	20.0	26.0	15.0	20.0
66	16.0	21.0	20.0	26.0	15.0	20.0
67	16.0	21.0	20.0	26.0	15.0	20.0
68	16.0	21.0	20.0	26.0	15.0	20.0
69	16.0	21.0	20.0	26.0	15.0	20.0
70 & Over	100.0	100.0	100.0	100.0	100.0	100.0

[1] Not eligible to retire under the provisions of the Tier 3 plan at these ages with less than 30 years of service. If a member has at least 30 years of service at these ages, they would be subject to the “55/30” rates.

Retirement Age and Benefit for Inactive Vested Members	Assume retiree health benefit will be paid at the later of age 59 or the current attained age.
Future Benefit Accruals	1.0 year of service credit per year.
Service	Employment service is used for eligibility determination purposes. Benefit service is used for benefit calculation purposes.
Unknown Data for Members	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
<u>Actuarial Funding Policy</u>	
Actuarial Cost Method	Entry Age Cost Method, level percent of salary. Entry age is calculated as age on the valuation date minus years of employment service. Both the normal cost and the actuarial accrued liability are calculated on an individual basis.
Actuarial Value of Assets	The fair value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the fair value of assets.
Valuation Value of Assets	The portion of the total actuarial value of assets allocated for retiree health benefits, based on a prorated share of fair value.
Amortization Policy	The amortization method for the UAAL is a level percent of payroll, assuming annual increases in total covered payroll equal to inflation plus across the board increases (other than inflation). All bases as of June 30, 2020 were re-amortized over 21 years effective with the June 30, 2021 valuation. Changes in the UAAL due to actuarial gains/losses are amortized over separate 15-year periods. Changes in the UAAL due to assumption or method changes are amortized over separate 20-year periods. Plan changes and health trend and premium assumption changes are amortized over separate 15-year periods. Future ERIPs will be amortized over 5 years. Any actuarial surplus is amortized over 30 years on an open (non-decreasing) basis. An adjustment is made to the amortization period of all the UAAL actuarial gain layers to be the longer of 15 years or the remaining amortization period for the outstanding balance of the pre-June 30, 2021 UAAL layers when the total UAAL contribution is negative (a credit) but there is still a UAAL balance.

Retiree Health Assumptions - Applicable for Members/Beneficiaries Eligible for a Health Subsidy

Per Capita Cost Development

The assumed costs on a composite basis are the future costs of providing postemployment health care benefits at each age. To determine the assumed costs on a composite basis, historical premiums are reviewed and adjusted for increases in the cost of health care services.

Per Capita Cost Development - Maximum Dental Subsidy

Carrier	Election Percent (%)	Monthly 2023/2024 Fiscal Year Subsidy
Delta Dental PPO	81.5	$43.37
DeltaCare USA	18.5	15.10

Per Capita Cost Development - Medicare Part B Premium Subsidy

	Single Monthly Premium
Actual monthly premium for calendar year 2023	$164.90
Actual monthly premium for calendar year 2024	174.70
Actual average monthly premium for plan year 2023/2024	169.80

LACERS will not reimburse Medicare Part B premiums for Spouse/Domestic Partners, unless they are LACERS retired Members with Medicare Parts A and B enrolled as a dependent in a LACERS medical plan. This valuation does not reflect Medicare Part B reimbursement for any (married or surviving) spouse/domestic partners enrolled in Medicare Parts A and B.

For retirees age 65 and over on the valuation date, we valued the Medicare Part B premium subsidy for those reported in the data with Medicare Part B premium. For current and future retirees under age 65, we will assume 100% of those electing a medical subsidy will be eligible for the Medicare Part B premium subsidy.

Per Capita Cost Development – Medical Subsidy	Tier 1 members not subject to medical subsidy cap and all Tier 3 members.

Participant Under Age 65 or Not Eligible for Medicare A&B

2023-2024 Fiscal Year		Single Party			Married/With Domestic Partner			Eligible Survivor		
Carrier	**Observed and Assumed Election Rate (%)***	**Monthly Premium**	**Maximum Subsidy**	**Subsidy**	**Monthly Premium**	**Maximum Subsidy**	**Subsidy**	**Monthly Premium**	**Maximum Subsidy**	**Subsidy**
Kaiser HMO	61.3	$995.44	$2,074.89	$995.44	$1,990.87	$2,074.89	$1,990.87	$995.44	$995.44	$995.44
Anthem Blue Cross PPO	21.5	1,528.98	2,074.89	1,528.98	3,052.93	2,074.89	2,074.89	1,528.98	995.44	995.44
Anthem Blue Cross HMO	17.2	1,221.39	2,074.89	1,221.39	2,437.74	2,074.89	2,074.89	1,221.39	995.44	995.44

** The observed election percentages are based on raw census data as of June 30, 2023.*

Participant Eligible for Medicare A&B

2023-2024 Fiscal Year		Single Party			Married/With Domestic Partner			Eligible Survivor		
Carrier	**Observed and Assumed Election Rate (%)***	**Monthly Premium**	**Maximum Subsidy**	**Subsidy**	**Monthly Premium**	**Maximum Subsidy**	**Subsidy**	**Monthly Premium**	**Maximum Subsidy**	**Subsidy**
Kaiser Senior Advantage HMO	56.3	$262.47	$262.47	$262.47	$524.94	$524.94	$524.94	$262.47	$262.47	$262.47
Anthem Medicare Preferred (PPO)	33.7	464.97	464.97	464.97	924.90	924.90	924.90	464.97	464.97	464.97
UHC California Medicare Advantage Plan	10.0	267.68	267.68	267.68	530.33	530.33	530.33	267.68	267.68	267.68

* *The observed election percentages are based on raw census data as of June 30, 2023.*

The monthly premiums provided above include vision premiums and are the plan's member rates; which do not necessarily equal the rates charged by the carriers. Differences between member rates and carrier rates are due to LACERS' premium rate stabilization policies and are expected to be short-term.

Note that there are three plans (SCAN, UHC Medicare Advantage HMO for Arizona and Nevada) offered by LACERS that are not included above because we assume a 0% participation rate for each of those plans. On average, their premiums are close to the UHC California Medicare Advantage plan.

Per Capita Cost Development – Medical Subsidy	Tier 1 Subject to Retiree Medical Subsidy Cap

Tier 1 members who are subject to the retiree medical subsidy cap will have monthly health insurance subsidy maximums capped at the levels in effect at July 1, 2011, as shown in the table below. We understand that no active members are subject to the cap but that some inactive members may be subject to the cap.

Retiree Plan	Single Party	Married/With Domestic Partner	Eligible Survivor
Under 65 – All Plans	$1,190.00	$1,190.00	$593.62
Over 65			
Kaiser Senior Advantage	$203.27	$406.54	$203.27
Anthem Medicare Preferred (PPO)	478.43	478.43*	478.43
UHC California Medicare Adv. HMO	219.09	433.93	219.09

*The reason the subsidy is only at the single-party amount is that there is no excess subsidy to cover a dependent.

Per Capita Cost Development – Medical Subsidy	Adjustments to per-capita costs (as shown on page 44-45) based on age, gender, and status, are as follows:

	Retiree & Spouse	
Age	Male	Female
55	0.6807	0.6914
60	0.7837	0.7495
64	0.9524	0.8137
65	1.0000	0.8306
70	1.1232	0.9292
75	1.2407	0.9769
80	1.2991	1.0427
85+	1.3603	1.1129

Health Care Cost Subsidy Trend Rates	Trend is to be applied to premium for shown fiscal year to calculate next fiscal year's projected premium. First Fiscal Year is July 1, 2023 through June 30, 2024.

	Rate (%)					
Plan	**Anthem Blue Cross PPO, Under Age 65**	**Anthem Preferred PPO Medicare Advantage**	**Kaiser HMO, Under Age 65**	**Kaiser Senior Advantage**	**Anthem Blue Cross HMO, Under 65**	**UHC CA Medicare Advantage**
Trend to be applied to 2023-2024 Fiscal Year premium	8.01	-3.35	9.49	3.25	8.01	-4.51

The fiscal year trend rates are based on the following calendar year trend rates:

	Approximate Trend Rate (%)			**Trend Applied to Calculate Following Year Premium Rate (%)**	
Fiscal Year	**Non-Medicare**	**Medicare**	**Calendar Year**	**Non-Medicare**	**Medicare**
2024-2025	7.12%	6.37%	2024	7.25[1]	6.50[1]
2025-2026	6.87%	6.12%	2025	7.00	6.25
2026-2027	6.62%	5.87%	2026	6.75	6.00
2027-2028	6.37%	5.62%	2027	6.50	5.75
2028-2029	6.12%	5.37%	2028	6.25	5.50
2029-2030	5.87%	5.12%	2029	6.00	5.25
2030-2031	5.62%	4.87%	2030	5.75	5.00
2031-2032	5.37%	4.62%	2031	5.50	4.75
2032-2033	5.12%	4.50%	2032	5.25	4.50
2033-2034	4.87%	4.50%	2033	5.00	4.50
2034-2035	4.62%	4.50%	2034	4.75	4.50
2035 and later	4.50%	4.50%	2035	4.50	4.50

[1] *For example, the 7.25% assumption when applied to the 2024 non-Medicare medical premiums would provide the projected 2025 non-Medicare medical premiums. This trend would also be applied to the maximum medical subsidy, based on the non-Medicare Kaiser premium.*

Section 4: Actuarial Valuation Basis

Health Care Cost Subsidy Trend Rates (continued)	Trend is to be applied to premium for shown fiscal year to calculate next fiscal year's projected premium. First year trend have been adjusted to reflect actual 2024 calendar year premiums. First Fiscal Year is July 1, 2023 through June 30, 2024. Dental Premium Trend: 1.50%, then 3.00% thereafter Medicare Part B Premium Trend: 5.20%, then 4.50% thereafter
Spouse/Domestic Partner Coverage	For all active and inactive members, 60% of male participants and 35% of female participants who receive a retiree health subsidy are assumed to be married or have a qualified domestic partner and elect dependent coverage. Of these covered spouses/domestic partners, 100% are assumed to continue coverage if the retiree predeceases the spouse/domestic partner. Male retirees are assumed to be 4 years older than their female spouses/domestic partners. Female retirees are assumed to be 2 years younger than their male spouses/domestic partners.
Participation	Retiree Medical and Dental Coverage Participation: (see table below)

Service Range (Years)	Percent Covered[1] (%)
10 – 14	60
15 – 19	80
20 – 24	90
25 and over	95

[1]For deferred vested members, we assume an election percent of 50% of these rates.

Health Care Reform	The valuation does not reflect the potential impact of any future changes due to prior or pending legislations.
Administrative Expenses	No administrative expenses were valued separately from the premium costs.
Plan Design	Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.

Assumption Changes Since Prior Valuation	Per capita costs and associated trend assumptions were updated to reflect 2024 calendar year premiums/subsidies and updated trend assumptions for 2025 and after. The actuarial factors used to estimate individual retiree and spouse costs by age and gender were updated. The new factors are based on a review of historical claims experience by age, gender, and status (active vs. retired) from Segal's claims data warehouse. The updated claims and associated trend assumptions had a combined impact of reducing the actuarial accrued liability. Medical carrier election assumptions were updated based on more recent data. Economic and demographic assumptions have been updated based on the July 1, 2019 through June 30, 2022 Actuarial Experience Study. The assumptions changes from the 2022 Actuarial Experience Study had a combined impact of reducing the actuarial accrued liability and increasing the plan's normal cost.

Exhibit III: Summary of Plan

This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

Membership Eligibility:	
Tier 1 (§4.1002(a))	All employees who became members of the System before July 1, 2013, and certain employees who became members of the System on or after July 1, 2013. In addition, pursuant to Ordinance No. 184134, all Tier 2 employees who became members of the System between July 1, 2013 and February 21, 2016 were transferred to Tier 1 effective February 21, 2016.
Tier 3 (§4.1080.2(a))	All employees who became members of the System on or after February 21, 2016, except as provided otherwise in Section 4.1080.2(b) of the Los Angeles Administrative Code.
Benefit Eligibility:	
Tier 1 (§4.1111(a)) and Tier 3 (§4.1126(a))	Retired age 55 or older with at least 10 years of service (including deferred vested members who terminate employment and receive a retirement benefit from LACERS), or if retirement date is between October 2, 1996, and September 30, 1999 at age 50 or older with at least 30 years of service. Benefits are also payable to spouses, domestic partners, or other qualified dependents while the retiree is alive. Please note that the health subsidy is not payable to a service or disabled retiree before the member reaches age 55.

Medical Subsidy for Members Not Subject to Cap:	
Under Age 65 or Over Age 65 Without Medicare Part A	
Tier 1 (§4.1111(d)) and Tier 3 (§4.1126(c))	The System will pay 4% of the maximum health subsidy (limited to actual premium) for each year of Service Credit, up to 100% of the maximum health subsidy. As of July 1, 2023, the maximum health subsidy is $1,962.20 per month and will be $2,187.58 per month as of January 1, 2024. This amount includes coverage of dependent premium costs.
Over Age 65 and Enrolled in Both Medicare Parts A and B	
Tier 1 (§4.1111(e)) and Tier 3 (§4.1126(d))	For retirees, a maximum health subsidy shall be paid in the amount of the single-party monthly premium of the approved Medicare supplemental or coordinated plan in which the retiree is enrolled, subject to the following vesting schedule:

Completed Years of Service	Vested Percentage
10 – 14	75%
15 – 19	90%
20+	100%

Subsidy Cap for Tier 1:	
(§4.1111(b))	As of the June 30, 2011 valuation, the retiree health benefits program was changed to cap the medical subsidy for non-retired members who do not contribute an additional 4.00% or 4.50% of employee contributions to the Pension Plan. The capped subsidy is different for Medicare and non-Medicare retirees. The cap applies to the medical subsidy limits at the 2011 calendar year level. The cap does not apply to the dental subsidy or the Medicare Part B premium reimbursement.
Dental Subsidy for Members:	
Tier 1 (§4.1111(b)) and Tier 3 (§4.1129(b))	The System will pay 4% of the maximum dental subsidy (limited to actual premium) for each year of Service Credit, up to 100% of the maximum dental subsidy. As of July 1, 2023, the maximum dental subsidy is $43.81 per month; decreasing to $42.93 calendar year 2024. There is no subsidy available to dental plan dependents or surviving spouses/domestic partners. There is also no reimbursement for dental plans not sponsored by the System.

Dependents:	
Tier 1 (§4.1111(e)(4)) and Tier 3 (§4.1126(d)(4))	An additional amount is added for coverage of dependents which shall not exceed the amount provided to a retiree not enrolled in Medicare Parts A and B and covered by the same medical plan with the same years of service credit. The combined Member and dependent subsidy shall not exceed the actual premium. This refers to dependents of retired Members with Medicare Parts A and B. It does not apply to those without Medicare or Part B only.
Medicare Part B Reimbursement for Members:	
Tier 1 (§4.1113) and Tier 3 (§4.1128)	If a Retiree is eligible for a health subsidy, covered by both Medicare Parts A and B, and enrolled in a LACERS' medical plan or participates in the LACERS Retiree Medical Premium Reimbursement Program, LACERS will reimburse the retiree the basic Medicare Part B premium. LACERS does not reimburse survivors or dependents any part of their Medicare Part B premium.
Surviving Spouse Medical Subsidy:	
Tier 1 (§4.1115) and Tier 3 (§4.1129.1)	The surviving spouse or domestic partner will be entitled to a health subsidy based on the member's years of service and the surviving dependent's eligibility for Medicare.
Under Age 65 or Over Age 65 Without Medicare Part A	The maximum health subsidy available for survivors is the lowest cost plan available (currently Kaiser) single-party premium ($939.09 as of July 1, 2023 and will be $1,051.78 per month as of January 1, 2024).
Over Age 65 and Enrolled in Both Medicare Parts A and B	For survivors, a maximum health subsidy limited to the single-party monthly premium of the plan in which the survivor is enrolled, is provided subject to the following vesting schedule:

Completed Years of Service	Vested Percentage
10 – 14	75%
15 – 19	90%
20+	100%

Changes in Plan Provisions:	None.

NOTE: The summary of major Plan provisions is designed to outline principal plan benefits as interpreted for purposes of the actuarial valuation. If the System should find the plan summary not in accordance with the actual provisions, the System should alert the actuary so that both parties can be sure the proper provisions are valued.

Exhibit IV: Definitions of Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions	The estimates on which the cost of the Plan is calculated including: **Investment return** — the rate of investment yield that the Plan will earn over the long-term future; **Mortality rates** — the death rates of employees and pensioners; life expectancy is based on these rates; **Retirement rates** — the rate or probability of retirement at a given age; **Turnover rates** — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.
Actuarial Present Value of Total Projected Benefits (APB)	Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.
Normal Cost	The amount of contributions required to fund the benefit allocated to the current year of service.
Actuarial Accrued Liability for Actives	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial Accrued Liability for Retirees	The single sum value of lifetime benefits to existing retirees. This sum takes account of life expectancies appropriate to the ages of the retirees and of the interest which the sum is expected to earn before it is entirely paid out in benefits.
Valuation Value of Assets (VVA)	The value of assets used by the actuary in the valution. These may be at market value or some other method used to smooth variations in market value from one valuation to the next.
Funded Ratio	The ratio VVA/AAL.
Unfunded Actuarial Accrued Liability (UAAL):	The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.
Amortization of the Unfunded Actuarial Accrued Liability	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
Investment Return (discount rate)	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next. If the plan is funded on a pay-as-you-go basis, the discount rate is tied to the expected rate of return on day-to-day employer funds.

Covered Payroll	Annual reported salaries for all active participants on the valuation date.
ADC as a Percentage of Covered Payroll	The ratio of the actuarially determined contribution to covered payroll.
Health Care Cost Trend Rates	The annual rate of increase in net claims costs per individual benefiting from the Plan.
Actuarially Determined Contribution (ADC)	The ADC is equal to the sum of the normal cost and the amortization of the unfunded actuarial accrued liability.
Employer Contributions	An employer has contributed to an OPEB plan if the employer has (a) provided benefits directly to retired plan members or their beneficiaries, (b) paid insurance premiums to insure the payment of benefits, or (c) irrevocably transferred assets to a qualifying trust, or equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator

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Los Angeles City Employees' Retirement System

Family Death Benefit Plan (FDBP) Costs as of June 30, 2023

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November 7, 2023

Board of Administration
Los Angeles City Employees' Retirement System
977 N. Broadway
Los Angeles, CA 90012-1728

Dear Board Members:

We have developed our recommended contribution rates for the voluntary Family Death Benefit Plan ("Plan") as of June 30, 2023. If adopted by the Board, these rates will be effective for the two plan years beginning July 1, 2024 and ending June 30, 2026. The last review of the Plan was conducted as part of the June 30, 2021 actuarial valuation. That study yielded the current employee monthly contribution rate of $1.90. The City matches the employees' cost at the same level.

Recommendations

Based on the census data and the actuarial assumptions used for the June 30, 2023 actuarial valuation, our observations and recommendations are as follows:

- The current employee monthly rate is $1.90 through June 30, 2024. Based on this rate, the estimated total annual contributions would be about $94,600 (about $47,300 each for the members and the City) for plan year 2023/2024. The current monthly rate of $1.90 previously adopted by the Board was a result of a reduction by 20% from the prior monthly rate of $2.40 previously recommended by Segal as a result of the June 30, 2021 valuation. That recommendation was made after considering the surplus position of the Plan as of the date of that valuation.
- It is our understanding that the earnings credited to the Family Death Benefits Reserve include realized and unrealized gains or losses. Therefore, the crediting procedure for the Family Death Benefits Reserve is in line with the procedure utilized for the Retirement Plan reserves (with the exceptions of the Reserve for Member Contributions and the Annuity Reserve). Since the future payment liability for this program has been discounted at the valuation assumed earnings rate of 7.00% per year for this valuation, we believe the crediting procedure is consistent with the valuation discount rate assumption.
- For several years, Plan assets have exceeded the Plan's liability reserve. The Plan does not currently have a formal policy on how the monthly premium rate should be adjusted to reflect any such funding surplus. However, after discussions with LACERS

in 2017, we recommended two action items for reducing surplus in the FDBP liability reserve for the June 30, 2017 FDBP valuation, and those action items were adopted by the Board and implemented by LACERS. We have continued presenting similar action items for the Board to consider for the June 30, 2023 FDBP valuation and those two items are provided as an Appendix to this report.

- We recommend that the current employee monthly rate of $1.90 be decreased by about 20% to $1.50 for the two plan years beginning July 1, 2024 and ending June 30, 2026. This is developed using Action Item 2 in the Appendix to this report, where the surplus is amortized over 30 years.

Analysis and assumptions

It is our understanding that the Plan is funded on a term cost basis and the premium charged for the current year is only supposed to be sufficient to pay for the present value of the projected death benefits for those expected to die in the same period. However, there is an adjustment in the monthly premium based on the Plan's funded status to reflect the relative value of the actual plan reserve compared to the actual present value of death benefits in pay status for those who previously died. As of June 30, 2023, the Plan's annual term cost is $148,679 for the 2,075 active members participating at June 30, 2023. This translates to a monthly rate of $2.99 for both the employee and the City. However, the Plan is in a surplus position as of June 30, 2023, with the Plan's valuation value of assets of $19,072,418 exceeding the liability reserve of $6,080,474 by $12,991,944.[1] This surplus is about $1.3 million higher than the surplus as of the last review as of June 30, 2021.

We anticipate that the surplus reserve of $12,991,944 will be more than sufficient to sustain the recommended monthly premium rates of $1.50 for the employee and the City for the two plan years beginning July 1, 2024. As the surplus would be depleted at the rate of about $74,000 per year, which is substantially less than the 7.00% expected investment return on the surplus assets of $12,991,944, we expect that at, June 30, 2026, there would be an even larger surplus remaining from the June 30, 2023 surplus balance of $12,991,944 if all actuarial assumptions were to come true. The surplus continues to grow, in part, because some active FDBP members are paying premiums even though their survivors may not receive benefits from the Plan. This is discussed in item 5 below and under Action Item 1 in the Appendix.

As noted, all of the calculations are based on the June 30, 2023 actuarial valuation participant data and actuarial assumptions shown in the Retirement Plan valuation report. In addition, this Plan requires further assumptions in the valuation as shown below:

1. Each participating active member is assumed to have two children with an average age of about 13.
2. The children are assumed to be eligible for a monthly benefit of about $938 each until they reach age 18.
3. A surviving spouse is assumed to be eligible for a monthly benefit of about $312 until the children reach age 16.

[1] If the Plan's June 30, 2023 market value of assets of $18,514,979 were to be used in the above analysis, the Plan would have a surplus of $12,434,505 instead of $12,991,944.

4. A surviving spouse of a member who has paid FDBP premiums for 10 or more years is assumed to be eligible for an additional monthly benefit of about $613 starting at age 60.[2]
5. As previously discussed with LACERS and included in our 2021 valuation report, we understood that survivors may not receive benefits from the FDBP if they receive a service retirement survivorship benefit from the Retirement Plan. Therefore, those FDBP participants who are currently eligible to retire under the Retirement Plan do not have an FDBP liability in our valuation even though it is assumed that they would continue to pay premiums to the FDBP. We believe this is one of the contributors to the increase in the surplus balance of $12,991,944 as of June 30, 2023, because 882[3] of the 2,075 active participants in the Plan as of June 30, 2023 will not be eligible for a benefit from the FDBP based on this criterion. Additionally, based on a prior conversation with LACERS, we understood that for the active members who are enrolled in the FDBP and who have no surviving spouse/domestic partner upon death, FDBP payments may be made to the members' eligible children and/or dependent parents, if any. However, LACERS' staff noted in August 2021 that this information was not available while the member is active. Segal anticipates that having this information would not have a material effect on the valuation results anyway.

   Note that the lower than expected returns on the valuation value of FDBP assets for the years ended June 30, 2023 and June 30, 2022 of 6.9% and 6.6%, respectively, served to slightly decrease the surplus balance as of June 30, 2023.

The above costs were certified by Andy Yeung, ASA, Enrolled Actuary. The undersigned 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.

Sincerely,

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary	Andy Yeung, ASA, MAAA, FCA, EA Vice President and Actuary	Todd Tauzer, FSA, MAAA, FCA, CERA Senior Vice President and Actuary

bts/JL

cc: Edwin Avanessian
Todd Bouey
Dale Wong-Nguyen

2 Larger amounts are available if the surviving spouse begins receiving payments after age 60.

3 This is slightly reduced from 890 observed at the time of the June 30, 2021 valuation.

APPENDIX

Possible Action Items On How To Adjust The Monthly Premium Rate
In Years Where There Is A Surplus

Surplus history

Below we provide the historical progression of the surplus in the Family Death Benefit Reserve, based on the valuation (smoothed) value of assets, for the last six biennial valuations:

Valuation Date	Valuation Value of FDBP Assets	FDBP Liability Reserve	Excess FDBP Reserves
June 30, 2013	$14,456,893	$8,453,914	$6,002,979
June 30, 2015	15,402,402	8,378,370	7,024,032
June 30, 2017	15,858,684	7,576,611	8,282,073
June 30, 2019	16,686,626	7,209,746	9,476,880
June 30, 2021	18,186,116	6,530,272	11,655,844
June 30, 2023	19,072,418	6,080,474	12,991,944[1]

[1] The increase in the excess FDBP reserves is offset slightly by the lower than expected return on the valuation value of FDBP assets for the years ended June 30, 2022 and 2023. The actual rates of return were 6.6% for the year ended June 30, 2022 and 6.9% for the year ended June 30, 2023, compared to the assumed annual rate of return of 7.00%. This resulted in an actuarial loss of about $89,000 for the two years.

Action items for reducing surplus in FDBP

Following are two possible action items on how to reduce the FDBP surplus and to adjust the monthly premium rate for the FDBP when there is a surplus:

Action item 1: permanent cessation of contributions to FDBP for certain members

As previously discussed with LACERS and included in our 2019 valuation report, we understood that current or future survivors may not receive any benefits from the FDBP if they are currently receiving a service retirement survivorship benefit from the Retirement Plan because the member has already passed away, or will become entitled to a future service retirement survivorship benefit because the active member has already satisfied the requirements under the Retirement Plan to receive a benefit. Following up on the action item we recommended in the June 30, 2017 FDBP valuation, we were informed that LACERS sent letters to members who were contributing to the FDBP, but who were retirement eligible, to consider de-selecting the voluntary FDBP contributions. However, there are still FDBP active participants who are currently eligible to retire under the Retirement Plan (and whose potential survivors may not receive any benefits from the FDBP) and who are continuing to pay employee premiums. We have estimated the number of such members for the last two valuations to be as follows:

	Active FDBP Members in the June 30, 2021 Valuation	No Longer Active FDBP Members	New Active FDBP Members	Active FDBP Members in the June 30, 2023 Valuation
Eligible to Retire[1]	890			882
Not Eligible to Retire	1,422			1,193
Total	2,312	-287	+50	2,075

[1] Whose potential survivors may not receive any benefits from the FDBP.

We have observed that approximately 193 of the 890 members who were participating in the FDBP as of June 30, 2021 and whose current or future survivors may not receive any benefits from the FDBP were no longer participating in the FDBP as of June 30, 2023.

Note that, based on a prior conversation with LACERS, we understood that for active members enrolled in the FDBP who have no surviving spouse/domestic partner upon death, FDBP payments may be made to the members' eligible children and/or dependent parents, if any. Accordingly, for this action item, Segal proposes that if LACERS can determine exactly which remaining FDBP participants are currently eligible for service retirement and are married or with domestic partners or have no eligible children and/or dependent parents that LACERS continues to consider an annual program to inform these participants to consider de-selecting the voluntary FDBP contributions. (This would have the added effect of allowing the City to suspend matching contributions to the FDBP for these participants.) As noted on page 3 in the body of this report, the Plan's annual term cost of $148,679 as of June 30, 2023 for the 2,075 active members participating in the Plan as of that date translates to an employee and City monthly rate of $2.99 each. This term cost reflects no liabilities for the 882 members who are eligible to retire under the Retirement Plan. Should these 882 members terminate their participation in the FDBP, the term cost as of June 30, 2023 for the remaining 1,193 members would translate to an employee and City monthly rate of $5.19 each. In this case, maintaining the current monthly premium at $1.90 would mean that the surplus is depleted at a rate of about $94,000 per year, which is less than the expected investment return on the surplus of about $909,000.

While this action item may be considered to be more of a communication issue than a funding policy issue, it would help to prevent the Plan from accumulating even more surplus going forward.

Action item 2: reduction in contributions

Under the Retirement Plan's funding policy, actuarial surplus is amortized over a 30-year open (non-decreasing) period. For the FDBP, the Board may want to consider amortizing actuarial surplus over the same 30-year open period. In addition, since the benefits and the associated employer and employee contributions for FDBP are not dependent on salary, we would suggest amortizing the surplus as a level dollar amount, rather than a level percentage of salary. The amortization of the surplus would serve as a reduction in the current $1.90 per month charge to the FDBP. An annual amortization credit of about $978,000 would be available at the beginning of the year by amortizing over 30 years the surplus of $12,991,944 available as of June 30, 2023. We note this credit would be more than the $1.90 monthly charge. This credit would be approximately $19.65 per month each (for the employee and for the City), assuming for this calculation that the same 2,075 active employees as of June 30, 2023 would continue to participate in the Plan (i.e., before considering Action Item 1).

For the June 30, 2021 FDBP valuation, we recommended a decrease in the monthly charge from $2.40 to $1.90, or by 20%, and that recommendation was adopted by the Board. Under this action item for the June 30, 2023 valuation, we propose that the monthly charge be reduced below the current $1.90 by about another 20%, or to $1.50 for the two plan years beginning July 1, 2024 and ending June 30, 2026. However, before the Board considers this action item, the following ramification should be considered. As of the June 30, 2023 valuation date, there were about 25,900 active members. Of those, we have roughly estimated that about 5,900 members were eligible to retire as of the valuation date, leaving about 20,000 not yet eligible. Of those not yet eligible to retire, about 1,200 members are currently contributing FDBP premiums. This leaves approximately 18,800 (i.e., 20,000 - 1,200) additional active employees who may want to participate in the FDBP if contributions are temporarily reduced, which is about a sixteen-fold increase over the number of retirement ineligible members currently contributing.

For an extreme illustration, if all of the 18,800 active employees referenced above were to enroll in the FDBP in the next two years and there is no change to the current $1.90 employee monthly rate, there would be a reduction in the excess FDBP reserves by about $1.48 million. This represents between one and two years of the annual surplus amortization credits of $978,000.

Alternatively, we have reviewed the sensitivity of enrolling new members for purposes of applying the annual surplus amortization credit of $978,000 to reduce the excess FDBP reserves. For instance, if we were to recommend no change in the current $1.90 employee monthly rate, we have estimated that approximately 11,200 new FDBP participants out of the remaining 18,800 eligible participants mentioned above would need to enroll in the FDBP in order to reduce the excess FDBP reserves by the entire annual credit of $978,000. These hypothetical 11,200 new FDBP participants would represent about 60% of all remaining eligible participants. Considering that there were only 50 new members who elected to participate in the FDBP between the June 30, 2021 and June 30, 2023 valuations (when the employee monthly rate was reduced from $2.40 to $1.90), enrolling about another 11,200 new participants in the short term may not be realistic. The 50 new members represented about 0.3% of those not yet in the plan and not yet eligible to retire as of June 30, 2021.

If, instead, we were to recommend a large change in the current $1.90 employee monthly rate, such as a 50% reduction to $0.95, we have estimated that approximately 8,400 new FDBP participants would need to enroll in the FDBP in order for the surplus to be reduced by the annual credit of $978,000. These hypothetical 8,400 new FDBP participants would represent about 45% of all remaining eligible participants.

These scenario results reflect the assumption that the current participants who will not have a survivor eligible for FDBP benefits (i.e., the 882 participants mentioned above in Action Item 1) will opt out of the Plan.

Based on the information discussed above, we recommend that the current employee monthly rate of $1.90 be decreased to $1.50 per month. This approximately 20% reduction in the monthly rate is in line with the recommended decrease in the monthly rate for the last June 30, 2021 FDBP valuation and it would mean that about 9,900 new participants would need to enroll in the FDBP in order for the surplus reserves to be reduced by the annual credit of $978,000.[4]

It should be noted that in preparing the above premium reduction amounts, we have assumed the term cost of the new FDBP participants to be the same as the $5.19 calculated above based on 1,193 members covered under the Plan as of June 30, 2023.

Recommendation

As noted above, we recommend a reduction to the current monthly premiums, from the current $1.90 to $1.50, for 2024/2025 and 2025/2026 (Action Item 2). In addition, we recommend that, if possible, it continue to be communicated to the remaining members who are currently contributing to the FDBP but who are currently retirement eligible and are married or with domestic partners or have no eligible children and/or dependent parents to cease contributing to the Plan (Action Item 1).

Additional considerations

Based on preliminary discussions with LACERS, the Board, in consultation with the City Attorney, may want to consider additional future actions items on how to reduce the funding surplus, in addition to developing a formal policy on how the monthly premium rate should be adjusted to reflect any such surplus.

[4] The 9,900 count assumes that none of the 882 FDBP active members who are currently eligible to retire under the Retirement Plan are single or without a domestic partner and have eligible children and/or dependent parents and will remain in the plan.

One such item the Board may want to consider would be to increase the benefits offered under the Family Death Benefit Plan, recognizing that the current levels of benefit provided by the Plan are fixed amounts. The Board may compare the death benefits currently provided by the FDBP with those offered by Social Security benefits or some other public retirement system peers.

In addition, since participation in the FDBP is voluntary, the Board may consider allowing the System to charge the FDBP for any direct expenses.

Note that we are available to discuss these possible additional future action items with the Board, along with any other possible action items, at a subsequent meeting, if desired.

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Los Angeles City Employees' Retirement System

Governmental Accounting Standards Board Statement 67 (GAS 67) Actuarial Valuation of Retirement Benefits

As of June 30, 2023

Segal

Segal

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November 7, 2023

Board of Administration
Los Angeles City Employees' Retirement System
977 N. Broadway
Los Angeles, CA 90012-1728

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards (GAS) 67 Actuarial Valuation as of June 30, 2023. It contains various information that will need to be disclosed in order to comply with GAS 67.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist LACERS in preparing items related to the retirement plan in their financial report. The census and financial information on which our calculations were based was prepared by LACERS. That assistance is gratefully acknowledged.

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

The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, 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 the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the System.

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

Sincerely,

Segal

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary	Andy Yeung, ASA, MAAA, FCA, EA Vice President and Actuary	Todd Tauzer, FSA, MAAA, FCA, CERA Senior Vice President and Actuary

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board Statement 67 (GAS 67) as June 30, 2023. This valuation is based on:

- The benefit provisions of the Pension Plan, as administered by the Board of Administration;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2023, provided by LACERS;
- The assets of the Plan as of June 30, 2023, provided by LACERS;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. that the Board has adopted for the June 30, 2023 valuation.

General observations on GAS 67 actuarial valuation

1. The Governmental Accounting Standards Board (GASB) rules only define pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for pension funding purposes. Employers and plans should develop and adopt funding policies under current practices.
2. When measuring pension liability, GASB uses the same actuarial cost method (Entry Age) and the same type of discount rate (expected return on assets) as LACERS uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on the same basis as LACERS' Actuarial Accrued Liability (AAL) measure for funding. We note that the same is true for the Normal Cost component of the annual plan cost for funding and financial reporting.
3. The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan Fiduciary Net Position. The Plan Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is the same as the Unfunded Actuarial Accrued Liability (UAAL) calculated on a market value basis. The NPL reflects all investment gains and losses as of the measurement date. This is different from the UAAL calculated on an actuarial value of assets basis in the funding valuation that reflects investment gains and losses over a seven-year period.

Highlights of the valuation

1. The NPLs measured as of June 30, 2023 and 2022 have been determined from the actuarial valuations as of June 30, 2023 and June 30, 2022, respectively.
2. The NPL increased from $7.07 billion as of June 30, 2022 to $7.35 billion as of June 30, 2023 mainly due to (a) higher than expected salary increases for continuing active members (that loss was about $255.4 million), (b) higher than expected cost-of-living adjustment increases for payees (that loss was about $236.9 million), offset somewhat by (c) the return on the market value of retirement plan assets of 7.35%[1] during 2022/2023 that was more than the assumption of 7.00% used in the June 30, 2022 valuation (that gain was about $59.9 million) and (d) changes in the actuarial assumptions (that decrease was about $112.7 million). Changes in these values during the last two fiscal years ending June 30, 2022 and June 30, 2023 can be found in *Section 2, Schedule of Changes in Net Pension Liability* on page 18.
3. The discount rate used to determine the TPLs and NPLs as of June 30, 2023 and 2022 was 7.00%, following the same assumption used by the System in the pension funding valuations as of the same dates. The detailed calculations used in the derivation of the discount rate of 7.00% used in the calculation of the TPL and NPL as of June 30, 2023 can be found in *Section 3, Appendix A*. Various other information that is required to be disclosed can be found throughout *Section 2*.

[1] For the June 30, 2023 valuation, the investment return calculated for the Retirement Plan was 7.35% (net of investment expenses only) which is lower than the 8.05% investment return calculated for the OPEB Plan. (We note that for the June 30, 2022 valuation, the investment return calculated for the Retirement Plan was -8.11% while the investment return for the OPEB Plan was -9.52%.) Both of these returns have been calculated by Segal on a dollar-weighted basis taking into account the beginning of year assets, contributions, and benefit cash flows made during the year. In backing into a rate of return using actual investment income and investment expense as provided by LACERS, we sometimes could come up with a different return for the two Plans if: (a) the timing of the actual cash flows (especially the benefit payments) are different from what we assumed and/or (b) the actual income and expense allocated are different when compared to the proportion of the assets in the two Plans.

Summary of key valuation results[1]

Measurement Date		June 30, 2023	June 30, 2022
Disclosure elements:	• Service cost[2]	$412,247,235	$413,862,737
	• Total Pension Liability	25,299,537,118	24,078,751,303
	• Plan Fiduciary Net Position	17,953,292,567	17,013,091,063
	• Net Pension Liability	7,346,244,551	7,065,660,240
Schedule of contributions:	• Actuarially determined contributions	$669,391,196	$591,234,354
	• Actual contributions	669,391,196	591,234,354
	• Contribution deficiency / (excess)	0	0
Demographic data:	• Number of retired members and beneficiaries	22,510	22,399
	• Number of inactive vested members[3]	11,148	10,379
	• Number of active members	25,875	24,917
Key assumptions:	• Investment rate of return	7.00%	7.00%
	• Inflation rate	2.50%	2.75%
	• Real across-the-board salary increase	0.50%	0.50%
	• Projected salary increases[4]	Ranges from 9.00% to 4.00%, based on years of service	Ranges from 9.95% to 4.25%, based on years of service
	• Cost-of-living adjustments		
	– Tier 1	2.75%	2.75%
	– Tier 3	2.00%	2.00%

1 The assets and liabilities throughout this report are for the Retirement Plan only, and exclude amounts for the Health, Family Death Benefit and Larger Annuity Plans.

2 The service cost is based on the previous year's valuation, meaning the June 30, 2023 and 2022 measurement date values are based on the valuations as of June 30, 2022 and June 30, 2021, respectively. Both measurement date service costs have been calculated using the actuarial assumptions shown in the June 30, 2022 measurement date column, as there had been no changes in the actuarial assumptions between the June 30, 2021 and June 30, 2022 valuations.

3 Includes terminated members due a refund of employee contributions.

4 Includes inflation at 2.50% (2.75% for the June 30, 2022 measurement date) plus real across the board salary increase of 0.50%, plus merit and promotion increases.

Important information about actuarial valuations

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

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

Plan 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 description in this report (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan of benefits.
Participant information	An actuarial valuation for a plan is based on data provided to the actuary by the System. 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	This valuation is based on the market value of assets as of the valuation date, as provided by the System. The System uses 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 contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants 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 participants 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. 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 yes 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.

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.

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 Board to assist LACERS in preparing items related to the pension plan in their financial reports. Segal is not responsible for the use or misuse of its report, particularly by any other party.
An actuarial valuation is a measurement at a specific date – it is not a prediction of the plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of future financial measures, except where otherwise noted.
If the System is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The System 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 LACERS upon delivery and review. The System should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management or assets of LACERS, it is not a fiduciary in its capacity as actuaries and consultants with respect to LACERS.

Section 2: GAS 67 Information

General information about the pension plan

Plan Description

Plan administration. The Los Angeles City Employees' Retirement System (LACERS) was established by City Charter in 1937. LACERS is a single employer public employee retirement system whose main function is to provide retirement benefits to the civilian employees of the City of Los Angeles.

Under the provisions of the City Charter, the Board of Administration (the "Board") has the responsibility and authority to administer the Plan and to invest its assets. The Board members serve as trustees and must act in the exclusive interest of the Plan's members and beneficiaries. The Board has seven members: four members, one of whom shall be a retired member of the System, shall be appointed by the Mayor subject to the approval of the Council; two members shall be active employee members of the System elected by the active employee members; one shall be a retired member of the System elected by the retired members of the System.

Plan membership. At June 30, 2023, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	22,510
Inactive vested members entitled to but not yet receiving benefits[1]	11,148
Active members	25,875
Total	59,533

[1] Includes terminated members due a refund of employee contributions.

Benefits provided. LACERS provides service retirement, disability, death and survivor benefits to eligible retirees and beneficiaries. Employees of the City become members of LACERS on the first day of employment in a position with the City in which the employee is not excluded from membership. Members employed prior to July 1, 2013 are designated as Tier 1. All Tier 2 employees who became members between July 1, 2013 and February 21, 2016 were transferred to Tier 1 effective February 21, 2016. All Tier 1 Airport Peace Officers (including certain fire fighters) appointed to their positions before January 7, 2018 who elected to remain at LACERS after January 6, 2018, and who paid their mandatory additional contribution of $5,700 to LACERS before January 8, 2019, or prior to their retirement date, whichever was earlier, are designated as Tier 1 Enhanced. Those employed on or after February 21, 2016 are designated as Tier 3 (unless a specific exception applies to the employee, providing a right to Tier 1 status).

Section 2: GAS 67 Information

Tier 1 and Tier 1 Enhanced members are eligible to retire for service with a normal retirement benefit once they attain the age of 70, or the age of 60 with 10 or more years of continuous City service, or the age of 55 with 30 or more years of City service. Tier 3 members are eligible to retire for service with a normal retirement benefit at 1.50% of final average monthly compensation per year of service credit once they attain the age of 60 with 10 years of service (but with less than 30 years of service), including 5 years of continuous City service, or at 2.00% of final average monthly compensation per year of service credit once they attain the age of 60 with 30 years of service, including 5 years of continuous City service.

Tier 1 and 3 members are eligible to retire for disability once they have 5 or more years of continuous service. Tier 1 Enhanced members are eligible to retire for service-connected disability without a service requirement, and once they have 5 or more years of continuous service for a nonservice-connected disability.

Under the Tier 1 formula, the monthly service retirement allowance at normal retirement age is 2.16% of final average monthly compensation per year of service credit. Under the Tier 1 Enhanced formula, the monthly service retirement allowance at normal retirement age is 2.30% of final average monthly compensation per year of service credit. Reduced retirement allowances are available for early retirement for Tier 1 and Tier 1 Enhanced members reaching age 55 with 10 or more years of continuous City service, or with 30 or more years of City service at any age. The Tier 1 and Tier 1 Enhanced early retirement reduction factors, for retirement below age 60, are as follows:

Age	Factor
45	0.6250
46	0.6550
47	0.6850
48	0.7150
49	0.7450
50	0.7750
51	0.8050
52	0.8350
53	0.8650
54	0.8950
55	0.9250
56	0.9400
57	0.9550
58	0.9700
59	0.9850
60	1.0000

Under the Tier 3 formula, the monthly service retirement allowance at normal retirement age is 2.00% of final average monthly compensation per year of service credit. Reduced retirement allowances are available for early retirement for Tier 3 members prior to reaching age 60 with 30 years of service, including 5 years of continuous City service. The Tier 3 early retirement reduction factors, for retirement below age 60, are as follows:

Age	Factor
45	0.6250
46	0.6550
47	0.6850
48	0.7150
49	0.7450
50	0.7750
51	0.8050
52	0.8350
53	0.8650
54	0.8950
55 - 60	1.0000

Tier 3 members are eligible to retire with an enhanced retirement benefit at 2.00% of final average monthly compensation per year of service credit once they attain the age of 63 with 10 years of service (but with less than 30 years of service), including 5 years of continuous City service, or at 2.10% of final average monthly compensation per year of service credit once they attain the age of 63 with 30 years of service, including 5 years of continuous City service.

Under Tier 1 and Tier 1 Enhanced, pension benefits are calculated based on the highest average salary earned during a 12-month period (including base salary plus regularly assigned pensionable bonuses or premium pay). Under Tier 3, pension benefits are calculated based on the highest average salary earned during a 36-month period (limited to base salary and any items of compensation that are designated as pension based). The IRC Section 401(a)(17) compensation limit applies to all employees who began membership in LACERS after June 30, 1996.

For Tier 1 and Tier 1 Enhanced members, the maximum monthly retirement allowance is 100% of the final average monthly compensation. For Tier 3 members, the maximum monthly retirement allowance is 80% of the final average monthly compensation, except when the benefit is based solely on the annuity component funded by the member's contributions.

In lieu of the service retirement allowance under the Tier 1, Tier 1 Enhanced, and Tier 3 formulas ("unmodified option"), the member may choose an optional retirement allowance. The unmodified option provides the highest monthly benefit and a 50% continuance to an eligible surviving spouse or domestic partner for Tier 1, Tier 1 Enhanced, and Tier 3 members. The optional retirement allowances require a reduction in the unmodified option amount in order to allow the member the ability to provide various benefits to a surviving spouse, domestic partner, or named beneficiary.

LACERS provides annual cost-of-living adjustments (COLAs) to all retirees. The cost-of-living adjustments are made each July 1 based on the percentage change in the average of the Consumer Price Index for the Los Angeles-Long Beach-Anaheim Area --All Items for All Urban Consumers. It is capped at 3.0% for Tier 1 and Tier 1 Enhanced, and at 2.0% for Tier 3.

The City of Los Angeles contributes to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Administration. Employer contribution rates are adopted annually based upon recommendations received from LACERS' actuary after the completion of the annual actuarial valuation. The combined employer contribution rate as of June 30, 2023 was 29.01% of compensation.[2]

All members are required to make contributions to LACERS regardless of the tier in which they are included. Currently, all Tier 1 members contribute at 11.0% or 11.5% of compensation, and all Tier 1 Enhanced and Tier 3 members contribute at 11.0% of compensation.

[2] Based on the June 30, 2021 funding valuation which established funding requirements for fiscal year 2022/2023. The schedule of contributions in Section 2 of this report provides details on how this rate was calculated.

Net Pension Liability

Measurement Date	June 30, 2023	June 30, 2022
Components of the Net Pension Liability		
Total Pension Liability	$25,299,537,118	$24,078,751,303
Plan Fiduciary Net Position	(17,953,292,567)	(17,013,091,063)
Net Pension Liability	$7,346,244,551	$7,065,660,240
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	70.96%	70.66%

The NPL was measured as of June 30, 2023 and 2022. The Plan Fiduciary Net Position was valued as of the measurement date, while the TPL was determined based upon the results of the actuarial valuations as of June 30, 2023 and 2022, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of June 30, 2023 and 2022 are the same as those used in the LACERS funding valuations as of June 30, 2023 and 2022, respectively.

Actuarial assumptions. The TPL as of June 30, 2023 was determined by an actuarial valuation as of June 30, 2023. The actuarial assumptions used in the June 30, 2023 valuation were based on the results of an experience study for the period from July 1, 2019 through June 30, 2022. They are the same as the assumptions used in the June 30, 2023 funding actuarial valuation for LACERS. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Investment rate of return:	7.00%, net of pension plan investment expense and including inflation
Inflation:	2.50%
Real across-the-board salary increase:	0.50%
Projected salary increases:	Ranges from 9.00% to 4.00% based on years of service, including inflation
Cost-of-living adjustments:	2.75% for Tier 1; 2.00% for Tier 3. (Actual increases are contingent upon CPI increases with a 2.75% maximum for Tier 1 and a 2.00% maximum for Tier 3. For Tier 1 members with a sufficient COLA bank, withdrawals from the bank can be made to increase the retiree COLA up to 3% per year.)
Other assumptions:	Same as those used in the June 30, 2023 actuarial valuation

Section 2: GAS 67 Information

The TPL as of June 30, 2022 was determined by an actuarial valuation as of June 30, 2022. The actuarial assumptions used in the June 30, 2022 valuation were based on the results of an experience study for the period from July 1, 2016 through June 30, 2019. They are the same as the assumptions used in the June 30, 2022 funding actuarial valuation for LACERS. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Investment rate of return:	7.00%, net of pension plan investment expense and including inflation
Inflation:	2.75%
Real across-the-board salary increase:	0.50%
Projected salary increases:	Ranges from 9.95% to 4.25% based on years of service, including inflation
Cost-of-living adjustments:	2.75% for Tier 1; 2.00% for Tier 3. (Actual increases are contingent upon CPI increases with a 2.75% maximum for Tier 1 and a 2.00% maximum for Tier 3. For Tier 1 members with a sufficient COLA bank, withdrawals from the bank can be made to increase the retiree COLA up to 3% per year.)
Other assumptions:	Same as those used in the June 30, 2022 actuarial valuation

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation and, beginning with June 30, 2023, any applicable investment management expenses) are developed for each major asset class. These returns are combined to produce the long-term expected arithmetic rate of return for the portfolio by weighting the expected arithmetic real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses (beginning with June 30, 2023 including only investment consulting fees, custodian fees and other miscellaneous investment expenses) and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class (after deducting inflation) are shown in the following table. These values are after deducting applicable investment management expenses. This information was used in the derivation of the long-term expected investment rate of return assumption in the June 30, 2023 actuarial valuation. This information will change every three years based on the actuarial experience study.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Large Cap U.S. Equity	15.00%	6.00%
Small/Mid Cap U.S. Equity	6.00%	6.65%
Developed International Large Cap Equity	15.00%	7.01%
Developed International Small Cap Equity	3.00%	7.34%
Emerging Markets Equity	6.67%	8.80%
Core Bonds	11.25%	1.97%
High Yield Bonds	1.50%	4.63%
Bank Loans	1.50%	4.07%
TIPS	3.60%	1.77%
Emerging Market External Debt	2.00%	4.72%
Emerging Market Local Currency Debt	2.00%	4.53%
Real Estate - Core	4.20%	3.86%
Cash & Equivalents	1.00%	0.63%
Private Equity	16.00%	9.84%
Private Credit (Private Debt)	5.75%	6.47%
Emerging Market Small-Cap Equity	1.33%	11.10%
REIT	1.40%	6.80%
Real Estate – Non Core	2.80%	5.40%
Total	**100.00%**	**6.27%**

Discount rate. The discount rate used to measure the TPLs was 7.00% as of June 30, 2023 and June 30, 2022. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employee and employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Pension Plan Fiduciary Net Position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both June 30, 2023 and June 30, 2022.

Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability of LACERS as of June 30, 2023, calculated using the discount rate of 7.00%, as well as what LACERS' Net Pension Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability as of June 30, 2023	$10,670,436,546	$7,346,244,551	$4,597,568,534

Schedule of changes in Net Pension Liability – Last two fiscal years

Measurement Date	June 30, 2023	June 30, 2022
Total Pension Liability		
• Service cost[1]	$412,247,235	$413,862,737
• Interest	1,671,683,353	1,617,800,746
• Change of benefit terms	0	0
• Differences between expected and actual experience	469,171,461	(66,172,296)
• Changes of assumptions	(112,700,660)	0
• Benefit payments, including refunds of member contributions	(1,219,615,574)	(1,168,632,738)
Net change in Total Pension Liability	**$1,220,785,815**	**$796,858,449**
Total Pension Liability – beginning	**24,078,751,303**	**23,281,892,854**
Total Pension Liability – ending	**$25,299,537,118**	**$24,078,751,303**
Plan Fiduciary Net Position		
• Contributions – employer	$669,391,196	$591,234,354
• Contributions – member	257,967,487	241,875,691
• Net investment income[2]	1,261,073,040	(1,542,473,179)
• Benefit payments, including refunds of member contributions	(1,219,615,574)	(1,168,632,738)
• Administrative expense	(28,614,645)	(27,032,894)
• Other[3]	0	(16,171)
Net change in Plan Fiduciary Net Position	**$940,201,504**	**$(1,905,044,937)**
Plan Fiduciary Net Position – beginning	**17,013,091,063**	**18,918,136,000**
Plan Fiduciary Net Position – ending	**$17,953,292,567**	**$17,013,091,063**
Net Pension Liability – ending	**$7,346,244,551**	**$7,065,660,240**
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	**70.96%**	**70.66%**
Covered payroll[4]	**$2,307,335,751**	**$2,155,005,471**
Net Pension Liability as percentage of covered payroll	**318.39%**	**327.87%**

1 The service cost is based on the previous year's valuation, meaning the June 30, 2023 and 2022 measurement date values are based on the valuations as of June 30, 2022 and June 30, 2021, respectively. Both measurement date service costs have been calculated using the actuarial assumptions shown in the June 30, 2022 measurement date column on page 6, as there had been no changes in the actuarial assumptions between the June 30, 2021 and June 30, 2022 valuations.

2 Includes building lease and other income.

3 For the June 30, 2022 measurement date, this is a prior period adjustment (adjustment made to beginning of year assets in order to match the June 30, 2021 Plan Fiduciary Net Position restated by LACERS after the completion of the June 30, 2021 GAS 67 valuation report).

4 Covered payroll is defined as the payroll on which contributions to a pension plan are based.

Schedule of contributions – Last ten fiscal years

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll[1]	Contributions as a Percentage of Covered Payroll
2014	$357,649,232	$357,649,232	$0	$1,802,931,195	19.84%
2015	381,140,923	381,140,923	0	1,835,637,409	20.76%
2016	440,546,011	440,546,011	0	1,876,946,179	23.47%
2017	453,356,059	453,356,059	0	1,973,048,633	22.98%
2018	450,195,254	450,195,254	0	2,057,565,478	21.88%
2019	478,716,953	478,716,953	0	2,108,171,088	22.71%
2020	553,118,173	553,118,173	0	2,271,038,575	24.36%
2021	554,855,906	554,855,906	0	2,276,768,292	24.37%
2022	591,234,354	591,234,354	0	2,155,005,471	27.44%
2023	669,391,196	669,391,196	0	2,307,335,751	29.01%

[1] Covered payroll is defined as the payroll on which contributions to a pension plan are based.

See accompanying notes to this schedule on the next page.

Notes to Schedule:

Methods and assumptions used to establish "actuarially determined contribution" rates:

Valuation date:	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported
Actuarial cost method:	Entry Age Cost Method (individual basis)
Amortization method:	Level percent of payroll
Amortization period:	Multiple layers, closed amortization periods. Actuarial gains/losses are amortized over 15 years. Assumption or method changes are amortized over 20 years. Plan changes, including the 2009 ERIP, are amortized over 15 years. Future ERIPs will be amortized over 5 years. Actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two (at that time) GASB 25/27 layers, were combined and amortized over 30 years.
Asset valuation method:	Market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.

Section 2: GAS 67 Information

Actuarial assumptions:

Valuation Date:	**June 30, 2023**
Investment rate of return:	7.00%
Inflation rate:	2.50%
Real across-the-board salary increase:	0.50%
Projected salary increases:[1]	Ranges from 9.00% to 4.00%, based on years of service
Cost-of-living adjustments:	2.75% for Tier 1; 2.00% for Tier 3. (Actual increases are contingent upon CPI increases with a 2.75% maximum for Tier 1 and a 2.00% maximum for Tier 3. For Tier 1 members with a sufficient COLA bank, withdrawals from the bank can be made to increase the retiree COLA up to 3% per year.)
Mortality:	Healthy: Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 10% for males, projected generationally with the two-dimensional mortality improvement scale MP-2021.
Other assumptions:	Same as those used in the June 30, 2023 funding actuarial valuation

[1] Includes inflation at 2.50% plus across the board salary increases of 0.50% plus merit and promotion increases.

Section 3: Appendices

Appendix A: Projection of Plan Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2023 ($ in millions)

Year Beginning July 1,	Projected Beginning Plan's Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan's Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2022	$17,013	$927	$1,220	$29	$1,261	$17,953
2023	17,953	1,008	1,404	30	1,236	18,764
2024	18,764	978	1,396	32	1,292	19,607
2025	19,607	997	1,457	33	1,349	20,463
2026	20,463	1,012	1,521	34	1,407	21,327
2027	21,327	1,018	1,586	36	1,466	22,188
2028	22,188	1,049	1,650	37	1,524	23,075
2029	23,075	1,089	1,719	39	1,585	23,992
2030	23,992	1,126	1,792	40	1,648	24,934
2049	32,246	188	2,752	54	2,155	31,782
2050	31,782	176 *	2,778	53	2,121	31,248
2051	31,248	166 *	2,795	53	2,083	30,649
2052	30,649	155 *	2,807	52	2,040	29,985
2053	29,985	145 *	2,816	50	1,993	29,256
2086	2,705	23 *	581	5	167	2,310
2087	2,310	21 *	514	4	142	1,956
2088	1,956	19 *	452	3	120	1,640
2089	1,640	17 *	393	3	100	1,361
2090	1,361	15 *	339	2	83	1,118
2106	15	1 *	6	0	1	11
2107	11	1 *	4	0	1	8
2108	8	1 *	3	0	0	6
2109	6	1 *	2	0	0	4
2110	4	0 *,**	2	0	0	3
2111	3	0 *,**	1	0	0	2
2112	2	0 *,**	1	0	0	2
2113	2	0 *,**	1	0	0	1
2114	1	0 *,**	1	0	0	1
2115	1	0 *,**	0 **	0	0	1
2116	1	0 *,**	0 **	0	0	0
2117	0	0 *,**	0 **	0	0	0
2118	0	0 *,**	0 **	0	0	0
2119	0	0 *,**	0 **	0	0	0
2120	0	0 *,**	0 **	0	0	0
2121	0	0 *,**	0 **	0	0	0

* Mainly attributable to employer contributions to fund each year's annual administrative expenses.

** Less than $1 million, when rounded.

Note that in preparing the above projections, we have not taken into consideration the one-year delay between the date of the contribution rate calculation and the implementation.

Notes:

(1) Amounts may not total exactly due to rounding.

(2) Amounts shown for the year beginning July 1, 2022 row are actual amounts, based on the unaudited financial statements provided by LACERS.

(3) Years 2031-2048, 2054-2085, and 2091-2105 have been omitted from this table.

(4) Column (a): None of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.

(5) Column (b): Projected total contributions include employee and employer normal cost contributions based on closed group projections (based on covered active members as of June 30, 2023); plus employer contributions to the unfunded actuarial accrued liability; plus contributions to fund each year's annual administrative expenses reflecting a 15-year amortization schedule. Contributions are assumed to occur halfway through the year, on average.

(6) Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2023. The projected benefit payments reflect the cost of living increase assumptions used in the June 30, 2023 funding valuation report. Benefit payments are assumed to occur halfway through the year, on average. In accordance with paragraph 31.b.(1)(e) of GASB Statement No. 67, the long-term expected rate of return on Plan investments of 7.00% was applied to all periods of projected benefit payments to determine the discount rate.

(7) Column (d): Projected administrative expenses are calculated as approximately 0.17% of the projected beginning Plan's Fiduciary Net Position amount. The 0.17% portion was based on the actual fiscal year 2022 - 2023 administrative expenses as a percentage of the beginning Plan's Fiduciary Net Position amount as of July 1, 2022. Administrative expenses are assumed to occur halfway through the year, on average.

(8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.

(9) As illustrated in this Exhibit, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected 'cross-over date' when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.00% per annum was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2023 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.

(10) This projection is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

Appendix B: Definition of Terms

Definitions of certain terms as they are used in Statement 67. The terms may have different meanings in other contexts.

Actuarial Present Value of Projected Benefit Payments:	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation:	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial Valuation Date:	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution:	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad Hoc Cost-of-Living Adjustments (Ad Hoc COLAs):	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad Hoc Postemployment Benefit Changes:	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Automatic Cost-of-Living Adjustments (Automatic COLAs):	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Automatic Postemployment Benefit Changes:	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Cost-of-Living Adjustments:	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Cost-Sharing Pension Plan):	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered Payroll:	Payroll on which contributions to the pension plan are based.
Defined Benefit Pension Plans:	Pension plans that are used to provide defined benefit pensions.

Defined Benefit Pensions:	Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of Statement 67.)
Defined Contribution Pension Plans:	Pension plans that are used to provide defined contribution pensions.
Defined Contribution Pensions:	Pensions having terms that (1) provide an individual account for each employee; (2) define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (3) provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.
Discount Rate:	The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following: 1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the pension Plan Fiduciary Net Position is projected (under the requirements of Statement 67) to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments. 2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.
Entry Age Actuarial Cost Method:	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability.
Inactive Employees:	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
Multiple-Employer Defined Benefit Pension Plan:	A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
Net Pension Liability (NPL):	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit pension plan.

Other Postemployment Benefits:	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Pension Plans:	Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed and benefits are paid as they come due.
Pensions:	Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.
Plan Members:	Individuals that are covered under the terms of a pension plan. Plan members generally include (1) employees in active service (active plan members) and (2) terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).
Postemployment:	The period after employment.
Postemployment Benefit Changes:	Adjustments to the pension of an inactive employee.
Postemployment Healthcare Benefits:	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.
Projected Benefit Payments:	All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.
Public Employee Retirement System:	A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.
Real Rate of Return:	The rate of return on an investment after adjustment to eliminate inflation.
Service Costs:	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Single-Employer Defined Benefit Pension Plan (Single-Employer Pension Plan):	A defined benefit pension plan that is used to provide pensions to employees of only one employer.
Termination Benefits:	Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.
Total Pension Liability (TPL):	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of Statement 67.

Los Angeles City Employees' Retirement System

Governmental Accounting Standards Board Statement 74 (GAS 74) Actuarial Valuation of Other Postemployment Benefits (OPEB)

As of June 30, 2023

This report has been prepared at the request of the Board of Administration to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Administration and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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November 7, 2023

Board of Administration
Los Angeles City Employees' Retirement System
977 N. Broadway
Los Angeles, CA 90012-1728

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board Statement 74 (GAS 74) Actuarial Valuation as of June 30, 2023. It contains various information that will need to be disclosed in order to comply with GAS 74.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist LACERS in preparing items related to the other postemployment benefits (OPEB) plan in their financial report. The census and financial information on which our calculations were based was prepared by LACERS. That assistance is gratefully acknowledged.

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

The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, EA and Mehdi Riazi, FSA, MAAA, FCA, EA. The health care trend and other related medical assumptions have been reviewed by Mary Kirby, FSA, MAAA, FCA. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the System.

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

Sincerely,

Segal

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

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

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Senior Vice President and Actuary

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required for “Other Postemployment Benefits (OPEB)” plans by Statement No. 74 of the Governmental Accounting Standards Board as of June 30, 2023. This valuation is based on:

- The benefit provisions of the OPEB Plan, as administered by the Board of Administration;
- The characteristics of covered active members, inactive vested members, and retired members and surviving spouses as of June 30, 2023, provided by LACERS;
- The assets of the Plan as of June 30, 2023, provided by LACERS;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other (health and non-health) actuarial assumptions, regarding employee terminations, retirement, death, health care trend and enrollment, etc. that the Board has adopted for the June 30, 2023 valuation.

General Observations on GAS 74 Actuarial Valuation

1. The Governmental Accounting Standards Board (GASB) rules only define OPEB liability and expense for financial reporting purposes, and do not apply to contribution amounts for OPEB funding purposes. Employers and plans should develop and adopt funding policies under current practices.
2. When measuring OPEB liability, GASB uses the same actuarial cost method (Entry Age) and, for benefits that are being fully funded on an actuarial basis, the same expected return on Plan assets as used for funding. This means that the Total OPEB Liability (TOL) measure for financial reporting shown in this report is determined on the same basis as the Actuarial Accrued Liability (AAL) measure for funding. We note that the same is true for the Normal Cost component of the annual plan cost for funding and financial reporting.
3. The Net OPEB Liability (NOL) is equal to the difference between the TOL and the Plan’s Fiduciary Net Position. The Plan’s Fiduciary Net Position is equal to the market value of assets and therefore, the NOL measure is the same as the Unfunded Actuarial Accrued Liability (UAAL) calculated on a market value basis. The NOL reflects all investment gains and losses as of the measurement date. This is different from the UAAL calculated on an actuarial value of assets basis in the funding valuation that reflects investment gains and losses over a seven-year period.

Highlights of the valuation

1. The NOLs measured as of June 30, 2023 and 2022 have been determined from the actuarial valuations as of June 30, 2023 and June 30, 2022, respectively.
2. The NOL has decreased from a liability of $232.9 million as of June 30, 2022 to a surplus of ($135.3) million as of June 30, 2023 mainly due to (i) 2024 premiums, underlying claims estimates and subsidy levels were overall lower than expected; the savings produced by the Medicare plan premiums (which either remained level or decreased) more than offset the losses which resulted from the larger than expected premium increases for the non-Medicare plan premiums; updates to the actuarial spread factor methodology also contributed to the savings (ii) reflecting assumptions based on the triennial experience study, and (iii) the overall impact of the updated trend assumptions produced savings for the plan; although the trend rates for 2025 and after were slightly increased, the first year trend assumption for fiscal year 2023/2024 was lower than expected due to the 2024 premium experience.
3. The investment return calculated for the OPEB Plan was 8.05% (net of investment expenses only). This is higher than the 7.35% investment return calculated for the Retirement Plan.[1] Both of these returns have been calculated by Segal on a dollar-weighted basis taking into account the beginning of year assets, contributions, and benefit cash flows made during the year. In backing into a rate of return using actual investment income and investment expense as provided by LACERS, we sometimes could come up with a different return for the two Plans if: (a) the timing of the actual cash flows (especially the benefit payments) are different from what we assumed and/or (b) the actual income and expense allocated are different when compared to the proportion of the assets in the two Plans.
4. The discount rates used in the valuations for financial disclosure purposes as of June 30, 2023 and 2022 are the assumed investment returns on Plan assets (i.e. 7.00% for the funding valuations as of the same dates). As contributions that are required to be made by the City to amortize the Unfunded Actuarial Accrued Liability in the funding valuation are determined on an actuarial basis, the future Actuarially Determined Contributions and current Plan assets, when projected in accordance with the method prescribed by GAS 74, are expected to be sufficient to make all benefit payments to current members.

[1] We note that for the June 30, 2022 valuation, the investment return calculated for the OPEB Plan was -9.52% while the investment return calculated for the Retirement Plan was -8.11%.

Summary of key valuation results

Measurement Date		June 30, 2023	June 30, 2022
Disclosure elements for plan year ending June 30:	• Service cost[2]	$81,027,749	$81,415,128
	• Total OPEB Liability	3,405,088,528	3,580,696,288
	• Plan Fiduciary Net Position	3,540,386,112	3,347,771,350
	• Net OPEB Liability	(135,297,584)	232,924,938
Schedule of contributions for plan year ending June 30:	• Actuarially determined contributions	$90,580,892	$91,622,720
	• Actual contributions	90,580,892	91,622,720
	• Contribution deficiency / (excess)	0	0
Demographic data for plan year ending June 30:	• Number of retired members and surviving spouses[3]	17,759	17,753
	• Number of vested terminated members	1,617	1,537
	• Retired members and surviving spouses entitled but not yet eligible for health benefits.	132	139
	• Number of active members	25,875	24,917
Key assumptions as of June 30:	• Discount rate	7.00%	7.00%
	• Health care premium trend rates		
	Non-Medicare medical plans	Actual premium increase in first year, then graded from 7.12% to ultimate 4.50% over 11 years	Actual premium increase in first year, then graded from 7.12% to ultimate 4.50% over 11 years
	Medicare medical plans	Actual premium increase in first year, then graded from 6.37% to ultimate 4.50% over 8 years	Actual premium increase in first year, then graded from 6.37% to ultimate 4.50% over 8 years
	Dental	Actual premium increase in first year, then 3.00%	3.00%
	Medicare Part B	Actual premium increase in the first year then 4.50%	4.50%

[2] The service cost is based on the previous year's valuation, meaning the June 30, 2023 and 2022 values are based on the valuations as of June 30, 2022 and June 30, 2021, respectively. The key assumptions used in the June 30, 2021 valuation are as follows:

Discount rate	7.00%
Health care premium trend rates	
Non-Medicare medical plan	Actual premium increase in first year, then graded from 7.37% to ultimate 4.50% over 12 years
Medicare medical plan	Actual premium increase in first year, then graded from 6.37% to ultimate 4.50% over 8 years
Dental	4.00%
Medicare Part B	4.50%

[3] The total number of participants, including married dependents, receiving benefits is 23,696 as of June 30, 2023 and 23,798 as of June 30, 2022.

Important information about actuarial valuations

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

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

Plan 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 description in this report (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan of benefits.
Participant information	An actuarial valuation for a plan is based on data provided to the actuary by LACERS. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	This valuation is based on the market value of assets as of the measurement date, as provided by LACERS.
Actuarial assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. To determine the future costs of benefits, Segal collects claims, premiums, and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost trend rates to project increases in costs in future years. This projection requires actuarial assumptions as to the probability of death, disability, termination, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to healthcare trends and member enrollment in retiree health benefits. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results that does not mean that the previous assumptions were unreasonable.

Section 1: Actuarial Valuation Summary

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. Our per capita cost assumptions are based on proprietary modeling software as well as models that were developed by others. These models generate demographic factors that are used in our valuation software. Our Health Technical Services Unit, comprised of actuaries and programmers, is responsible for the initial development and maintenance of our health models. They are also responsible for testing models that we purchase from other vendors for reasonableness. The client team inputs the demographic data, enrollments, plan provisions and assumptions into these models and reviews the results for reasonableness, under the supervision of the responsible actuary.

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

The valuation is prepared at the request of LACERS. Segal is not responsible for the use or misuse of its report, particularly by any other party.
The actuarial valuation is prepared at the request of the Board to assist LACERS in preparing items related to the pension plan in their financial reports. Segal is not responsible for the use or misuse of its report, particularly by any other party.
An actuarial valuation is a measurement at a specific date – it is not a prediction of the plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of future financial measures, except where otherwise noted.
If the System is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The System 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.

As Segal has no discretionary authority with respect to the management or assets of LACERS, it is not a fiduciary in its capacity as actuaries and consultants with respect to LACERS.

Section 2: GAS 74 Information

General information about the OPEB plan

Plan Description

Plan administration. The Los Angeles City Employees' Retirement System (LACERS) was established by City Charter in 1937. LACERS is a single employer public employee retirement system whose main function is to provide retirement benefits to the civilian employees of the City of Los Angeles.

Under the provisions of the City Charter, the Board of Administration (the "Board") has the responsibility and authority to administer the Plan and to invest its assets. The Board members serve as trustees and must act in the exclusive interest of the Plan's members and surviving spouses. The Board has seven members: four members, one of whom shall be a retired member of the System, shall be appointed by the Mayor subject to the approval of the Council; two members shall be active employee members of the System elected by the active employee members; one shall be a retired member of the System elected by the retired members of the System.

Plan membership. At June 30, 2023, OPEB plan membership consisted of the following:

Retired members or surviving spouses currently receiving benefits[1]	17,759
Vested terminated members entitled to, but not yet receiving benefits	1,617
Retired members and surviving spouses entitled but not yet eligible for health benefits	132
Active members	25,875
Total	45,383

1 The total number of participants, including married dependents, receiving benefits is 23,696.

Benefits provided. LACERS provides benefits to eligible retirees and beneficiaries:

Membership Eligibility:	
Tier 1 (§4.1002(a))	All employees who became members of the System before July 1, 2013, and certain employees who became members of the System on or after July 1, 2013. In addition, pursuant to Ordinance No. 184134, all Tier 2 employees who became members of the System between July 1, 2013 and February 21, 2016 were transferred to Tier 1 effective February 21, 2016.
Tier 3 (§4.1080.2(a))	All employees who became members of the System on or after February 21, 2016, except as provided otherwise in Section 4.1080.2(b) of the Los Angeles Administrative Code.
Benefit Eligibility:	
Tier 1 (§4.1111(a)) *and Tier 3 (§4.1126(a))*	Retired age 55 or older with at least 10 years of service (including deferred vested members who terminate employment and receive a retirement benefit from LACERS), or if retirement date is between October 2, 1996, and September 30, 1999 at age 50 or older with at least 30 years of service. Benefits are also payable to spouses, domestic partners, or other qualified dependents while the retiree is alive. Please note that the health subsidy is not payable to a service or disabled retiree before the member reaches age 55.
Medical Subsidy for Members Not Subject to Cap:	
Under Age 65 or Over Age 65 Without Medicare Part A	
Tier 1 (§4.1111(d)) *and Tier 3 (§4.1126(c))*	The System will pay 4% of the maximum health subsidy (limited to actual premium) for each year of Service Credit, up to 100% of the maximum health subsidy. As of July 1, 2023, the maximum health subsidy is $1,962.20 per month. As of January 1, 2024, the maximum health subsidy is $2,187.58. This amount includes coverage of dependent premium costs.
Over Age 65 and Enrolled in Both Medicare Parts A and B	
Tier 1 (§4.1111(e)) and *Tier 3 (§4.1126(d))*	For retirees, a maximum health subsidy shall be paid in the amount of the single-party monthly premium of the approved Medicare supplemental or coordinated plan in which the retiree is enrolled, subject to the following vesting schedule:

Completed Years of Service	Vested Percentage
10-14	75%
15-19	90%
20+	100%

Subsidy Cap for Tier 1:	
(§4.1111(b))	As of the June 30, 2011 valuation, the retiree health benefits program was changed to cap the medical subsidy for non-retired members who do not contribute an additional 4% or 4.5% of employee contributions to the Pension Plan. The capped subsidy is different for Medicare and non-Medicare retirees. The cap applies to the medical subsidy limits at the 2011 calendar year level. The cap does not apply to the dental subsidy or the Medicare Part B premium reimbursement.
Dependents:	
Tier 1 (§4.1111(e)(4)) *and Tier 3 (§4.1126(d)(4))*	An additional amount is added for coverage of dependents which shall not exceed the amount provided to a retiree not enrolled in Medicare Parts A and B and covered by the same medical plan with the same years of service. The combined member and dependent subsidy shall not exceed the actual premium. This refers to dependents of retired members with Medicare Parts A and B. It does not apply to those without Medicare or Part B only.
Dental Subsidy for Members:	
Tier 1 (§4.1114(b)) *and Tier 3 (§4.1129(b))*	The System will pay 4% of the maximum dental subsidy (limited to actual premium) for each year of Service Credit, up to 100% of the maximum dental subsidy. As of July 1, 2023, the maximum dental subsidy is $43.81 per month; decreasing to $42.93 per month in calendar year 2024. There is no subsidy available to spouses or domestic partners or for dependent coverage. There is also no reimbursement for dental plans not sponsored by the System.
Medicare Part B Reimbursement for Members:	
Tier 1 (§4.1113) and *Tier 3 (§4.1128)*	If a retiree is eligible for a health subsidy, covered by both Medicare Parts A and B, and enrolled in a LACERS medical plan or participates in the LACERS Retiree Medical Premium Reimbursement Program, LACERS will reimburse the retiree the basic Medicare Part B premium.

Surviving Spouse Medical Subsidy:	
Tier 1 (§4.1115) and Tier 3 (§4.1129.1)	The surviving spouse or domestic partner will be entitled to a health subsidy based on the member's years of service and the surviving dependent's eligibility for Medicare.
Under Age 65 or Over Age 65 Without Medicare Part A	The maximum health subsidy available for survivors is the lowest cost plan available (currently Kaiser) single-party premium ($939.09 per month as of July 1, 2023 and $1,051.78 per month as of January 1, 2024).
Over Age 65 and Enrolled in Both Medicare Parts A and B	For survivors, a maximum health subsidy limited to the single-party monthly premium of the plan in which the survivor is enrolled, is provided subject to the following vesting schedule:

Completed Years of Service	Vested Percentage
10-14	75%
15-19	90%
20+	100%

Note that a new Tier 1 Enhanced Plan providing a higher retirement benefit was adopted pursuant to Ordinance No. 184853. However, other than Segal applying higher retirement rate assumptions to anticipate somewhat earlier retirement, there are no differences between the retiree health benefits paid by LACERS to those members.

Net OPEB Liability

Measurement Date	June 30, 2023	June 30, 2022
Components of the Net OPEB Liability		
Total OPEB Liability	$3,405,088,528	$3,580,696,288
Plan Fiduciary Net Position	(3,540,386,112)	(3,347,771,350)
Net OPEB Liability	$(135,297,584)	$232,924,938
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	103.97%	93.49%

The NOL was measured as of June 30, 2023 and 2022. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date, while the TOL was determined based upon the results of the actuarial valuations as of June 30, 2023 and 2022, respectively.

Plan provisions. The plan provisions used in the measurement of the NOL as of June 30, 2023 and 2022 are the same as those used in the LACERS funding valuations as of June 30, 2023 and 2022, respectively.

Actuarial assumptions. The TOL as of June 30, 2023 was determined by an actuarial valuation as of June 30, 2023. The actuarial assumptions used in the June 30, 2023 valuation were based on the results of an experience study for the period from July 1, 2019 through June 30, 2022, dated June 21, 2023, and retiree health assumptions letter dated September 18, 2023. They are the same as the assumptions used in the June 30, 2023 funding actuarial valuation for LACERS. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	Ranges from 9.00% to 4.00% based on years of service, including inflation
Investment rate of return	7.00%, net of OPEB plan investment expense and including inflation
Health care trend	Non-Medicare: Actual premium increases in the first year and then 7.12% graded to ultimate 4.50% over 11 years Medicare: Actual premium increases in the first year and then 6.37% graded to ultimate 4.50% over 8 years
Other assumptions	Same as those used in the June 30, 2023 funding valuation

Section 2: GAS 74 Information

The TOL as of June 30, 2022 was determined by an actuarial valuation as of June 30, 2022. The actuarial assumptions used in the June 30, 2022 valuation were based on the results of an experience study for the period from July 1, 2016 through June 30, 2019, dated June 17, 2020, and the retiree health assumptions letter dated September 22, 2022. They are the same as the assumptions used in the June 30, 2022 funding actuarial valuation for LACERS. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	Ranges from 9.95% to 4.25% based on years of service, including inflation
Investment rate of return	7.00%, net of OPEB plan investment expense and including inflation
Health care trend	Non-Medicare: Actual premium increases in the first year and then 7.12% graded to ultimate 4.50% over 11 years Medicare: Actual premium increases in the first year and then 6.37% graded to ultimate 4.50% over 8 years
Other assumptions	Same as those used in the June 30, 2022 funding valuation

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation and, beginning with June 30, 2023, any applicable investment management expenses) are developed for each major asset class. These returns are combined to produce the long-term expected arithmetic rate of return for the portfolio by weighting the expected arithmetic real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses (beginning with June 30, 2023 including only investment consulting fees, custodian fees and other miscellaneous investment expenses) and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class (after deducting inflation) are shown in the following table. These values are after deducting applicable investment management expenses. This information was used in the derivation of the long-term expected investment rate of return assumption in the June 30, 2023 actuarial valuation. This information will change every three years based on the actuarial experience study.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Large Cap U.S. Equity	15.00%	6.00%
Small/Mid Cap U.S. Equity	6.00%	6.65%
Developed International Large Cap Equity	15.00%	7.01%
Developed International Small Cap Equity	3.00%	7.34%
Emerging Markets Equity	6.67%	8.80%
Core Bonds	11.25%	1.97%
High Yield Bonds	1.50%	4.63%
Bank Loans	1.50%	4.07%
TIPS	3.60%	1.77%
Emerging Market External Debt	2.00%	4.72%
Emerging Market Local Currency Debt	2.00%	4.53%
Real Estate - Core	4.20%	3.86%
Cash & Equivalents	1.00%	0.63%
Private Equity	16.00%	9.84%
Private Credit (Private Debt)	5.75%	6.47%
Emerging Market Small-Cap Equity	1.33%	11.10%
REIT	1.40%	6.80%
Real Estate – Non Core	2.80%	5.40%
Total	**100.00%**	**6.27%**

Section 2: GAS 74 Information

Discount rate: The discount rates used to measure the TOL was 7.00% as of June 30, 2023 and 2022. The projection of cash flows used to determine the discount rate assumed employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries are not included. Based on those assumptions, the OPEB Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the TOL as of both June 30, 2023 and June 30, 2022.

Discount rate and trend sensitivity

Sensitivity of the Net OPEB Liability to changes in the discount rate. The following presents the Net OPEB Liability of LACERS as of June 30, 2023, calculated using the discount rate of 7.00%, as well as what LACERS' Net OPEB Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net OPEB Liability as of June 30, 2023	$316,466,107	$(135,297,584)	$(508,751,280)

Sensitivity of the Net OPEB Liability to changes in the healthcare cost trend rate. The following presents the Net OPEB Liability of LACERS as of June 30, 2023, calculated using the trend rate as well as what LACERS' Net OPEB Liability would be if it were calculated using a trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease	Current Trend Rates[4]	1% Increase
Net OPEB Liability as of June 30, 2023	$(546,070,481)	$(135,297,584)	$372,463,635

[4] Current trend rates: Actual premium increase in first year then 7.12% graded down to 4.50% over 11 years for Non-Medicare medical plan costs and 6.37% graded down to 4.50% over 8 years for Medicare medical plan costs. Actual premium increase in first year, then 3.00% thereafter for Dental and 4.50% thereafter for Medicare Part B subsidy cost.

Schedule of changes in Net OPEB Liability – Last two fiscal years

Measurement Date	June 30, 2023	June 30, 2022
Total OPEB Liability		
• Service cost[5]	$81,027,749	$81,415,128
• Interest	250,837,724	246,694,076
• Change of benefit terms	0	0
• Differences between expected and actual experience	(12,047,528)	(369,459)
• Changes of assumptions	(336,074,645)	(109,877,440)
• Benefit payments	(159,351,060)	(157,244,471)
Net change in Total OPEB Liability	**$(175,607,760)**	**$60,617,834**
Total OPEB Liability – beginning	**3,580,696,288**	**3,520,078,454**
Total OPEB Liability – ending (a)	**$3,405,088,528**	**$3,580,696,288**
Plan Fiduciary Net Position		
• Contributions – employer	$90,580,892	$91,622,720
• Contributions – employee	0	0
• Net investment income[6]	269,610,945	(360,636,412)
• Benefit payments	(159,351,060)	(157,244,471)
• Administrative expense	(8,226,015)	(7,618,828)
• Other[7]	0	(3,722)
Net change in Plan Fiduciary Net Position	**$192,614,762**	**$(433,880,713)**
Plan Fiduciary Net Position – beginning	**3,347,771,350**	**3,781,652,063**
Plan Fiduciary Net Position – ending (b)	**$3,540,386,112**	**$3,347,771,350**
Net OPEB Liability – ending (a) – (b)	**$(135,297,584)**	**$232,924,938**
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	**103.97%**	**93.49%**
Covered payroll[8]	**$2,307,335,751**	**$2,155,005,471**
Plan Net OPEB Liability as percentage of covered payroll	**-5.86%**	**10.81%**

[5] The service cost is based on the previous year's valuation, meaning the June 30, 2023 and 2022 values are based on the valuations as of June 30, 2022 and June 30, 2021, respectively.

[6] Includes building lease and other income.

[7] Adjustment made to beginning of year assets in order to match the June 30, 2021 Plan Fiduciary Net Position restated by LACERS after the completion of the June 30, 2021 GAS 74 valuation report.

[8] Covered payroll is the payroll on which contributions to an OPEB plan are based.

Schedule of contributions – Last ten fiscal years

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll[9]	Contributions as a Percentage of Covered Payroll
2014	$97,840,554	$97,840,554	$0	$1,802,931,195	5.43%
2015	100,466,945	100,466,945	0	1,835,637,409	5.47%
2016	105,983,112	105,983,112	0	1,876,946,179	5.65%
2017	97,457,455	97,457,455	0	1,973,048,633	4.94%
2018	100,909,010	100,909,010	0	2,057,565,478	4.90%
2019	107,926,949	107,926,949	0	2,108,171,088	5.12%
2020	112,136,429	112,136,429	0	2,271,038,575	4.94%
2021	103,454,114	103,454,114	0	2,276,768,292	4.54%
2022	91,622,720	91,622,720	0	2,155,005,471	4.25%
2023	90,580,892	90,580,892	0	2,307,335,751	3.93%

See accompanying notes to this schedule on the next page.

[9] Covered payroll is defined as the payroll on which contributions to an OPEB plan are based.

Section 2: GAS 74 Information

Notes to Schedule:

Methods and assumptions used to establish "actuarially determined contribution" (ADC) rates:

Valuation date:	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported
Actuarial cost method:	Entry Age Cost Method (level percent of payroll)
Amortization method:	Level percent of payroll
Remaining amortization period:	Multiple layers, closed amortization periods. The unfunded actuarial accrued liability as of June 30, 2020 is amortized over a fixed period of 21 years beginning June 30, 2021. Assumption changes resulting from the triennial experience study will be amortized over 20 years. Health trend and premium assumption changes, plan changes, and gains and losses will be amortized over 15 years. Any actuarial surplus is amortized over 30 years on an open (non-decreasing) basis.
Asset valuation method:	Market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.
Actuarial assumptions:	
Valuation date:	June 30, 2023
Investment rate of return	7.00%
Inflation rate	2.50%
Real across-the-board salary increase	0.50%
Projected salary increases[10]	Ranges from 9.00% to 4.00%, based on years of service
Medical cost trend rates	
Non-Medicare medical plans	Actual premium increase in first year, then graded from 7.12% to ultimate 4.50% over 11 years
Medicare medical plans	Actual premium increase in first year, then graded from 6.37% to ultimate 4.50% over 8 years
Dental	Actual premium increase in first year, then 3.00% thereafter
Medicare Part B	Actual premium increase in first year, then 4.50% thereafter
Other assumptions:	Same as those used in the June 30, 2023 funding actuarial valuation.

[10] Includes inflation at 2.50% plus across the board salary increases of 0.50% plus merit and promotional increases

Section 3: Appendices

Appendix A: Projection of Plan Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2023 ($ in millions)

Year Beginning July 1,	Projected Beginning Plan's Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan's Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2022	$3,348	$91	$159	$8	$270	$3,540
2023	3,540	85	173	9	244	3,688
2024	3,688	83	180	9	254	3,837
2025	3,837	83	190	9	265	3,985
2026	3,985	83	200	10	275	4,133
2027	4,133	80	209	10	284	4,278
2028	4,278	89	219	11	295	4,432
2029	4,432	88	229	11	305	4,585
2030	4,585	86	240	11	315	4,735
2049	6,273	5	440	15	423	6,247
2050	6,247	0 *,**	455	15	421	6,198
2051	6,198	0 *,**	467	15	417	6,133
2052	6,133	0 *,**	480	15	412	6,050
2053	6,050	0 *,**	490	15	406	5,950
2086	2,143	0 *,**	169	5	144	2,113
2087	2,113	0 *,**	153	5	142	2,097
2088	2,097	0 *,**	138	5	142	2,095
2089	2,095	0 *,**	124	5	142	2,108
2090	2,108	0 *,**	110	5	144	2,137
2106	4,558	0 *,**	3	11	319	4,863
2107	4,863	0 *,**	2	12	340	5,189
2108	5,189	0 *,**	1	13	363	5,538
2109	5,538	0 *,**	1	14	387	5,911
2110	5,911	0 *,**	1	15	413	6,309
2111	6,309	0 *,**	0 **	16	441	6,734
2112	6,734	0 *,**	0 **	17	471	7,188
2113	7,188	0 *,**	0 **	18	503	7,673
2114	7,673	0 *,**	0 **	19	536	8,190
2115	8,190	0 *,**	0 **	20	573	8,743
2116	8,743	0 *,**	0 **	21	611	9,332
2117	9,332	0 *,**	0 **	23	652	9,962
2118	9,962	0 *,**	0 **	24	696	10,634
2119	10,634	0 *,**	0 **	26	743	11,351
2120	11,351	0 *,**	0 **	28	794	12,117
2121	12,117	0 *,**	0 **	30	847	12,934
2122	$12,934					
2122	Discounted: $16 ***					

* Mainly attributable to employer contributions to fund each year's annual administrative expenses.

** Less than $1 million, when rounded.

*** $12,934 million when discounted with interest at the rate of 7.00% per annum has a value of $16 million as of June 30, 2023.

Note that in preparing the above projections, we have not taken into consideration the one-year delay between the date of the contribution rate calculation and the implementation.

Section 3: Appendices

Notes:

(1) Amounts may not total exactly due to rounding.

(2) Amounts shown for the year beginning July 1, 2022 row are actual amounts, based on the unaudited financial statements provided by LACERS.

(3) Years 2031-2048, 2054-2085, and 2091-2105 have been omitted from this table.

(4) Column (a): Except for the “discounted value” shown for 2122, none of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.

(5) Column (b): Projected total contributions include employee and employer normal cost contributions based on closed group projections (based on covered active members as of June 30, 2023); plus employer contributions to the unfunded actuarial accrued liability; plus contributions to fund each year's annual administrative expenses. Unfunded accrued liabilities are amortized over closed 20 and 15-year periods, depending on the source of the changes. Contributions are assumed to occur halfway through the year, on average. Any actuarial surplus is amortized over 30 years on an open (non-decreasing) basis.

(6) Column (c): Projected benefit payments have been determined in accordance with paragraph 43 of GASB Statement No. 74, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2023. The projected benefit payments reflect future health care trends used in the June 30, 2023 funding valuation report. Benefit payments are assumed to occur halfway through the year, on average. In accordance with paragraph 49 of GASB Statement No. 74, the long-term expected rate of return on Plan investments of 7.00% was applied to all periods of projected benefit payments to determine the discount rate.

(7) Column (d): Projected administrative expenses are calculated as approximately 0.25% of the projected beginning Plan's Fiduciary Net Position amount. The 0.25% portion was based on the actual fiscal year 2022 - 2023 administrative expenses as a percentage of the beginning Plan's Fiduciary Net Position amount as of July 1, 2022. Administrative expenses are assumed to occur halfway through the year, on average.

(8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.

(9) As illustrated in this Exhibit, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected 'cross-over date' when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.00% per annum was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2023 shown earlier in this report, pursuant to paragraph 49 of GASB Statement No. 74.

(10) This projection is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

Appendix B: Definition of Terms

Definitions of certain terms as they are used in Statement 74. The terms may have different meanings in other contexts.

Actuarially Determined Contribution:	A target or recommended contribution to an OPEB plan for the reporting period based on the most recent measurement available.
Assumptions or Actuarial Assumptions:	The estimates on which the cost of the Plan is calculated including: a) Investment return — the rate of investment yield that the Plan will earn over the long-term future; b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates; c) Retirement rates — the rate or probability of retirement at a given age; d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.
Covered Employee Payroll:	The payroll of the employees that are provided OPEB benefits.
Discount Rate:	The single rate of return, that when applied to all projected benefit payments results in an actuarial present value that is the sum of the following: 1) the actuarial present value of projected benefit payments projected to be funded by plan assets using a long term rate of return, and 2) the actuarial present value of projected benefit payments that are not included in (1) using a yield or index rate for 20 year tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher.
Entry Age Actuarial Cost Method:	An actuarial cost method where the present value of the projected benefits for an individual is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age.
Healthcare Cost Trend Rates:	The rate of change in per capita health costs over time.
Net OPEB Liability:	The Total OPEB Liability less the Plan Fiduciary Net Position.
Plan Fiduciary Net Position:	Market Value of Assets
Real Rate of Return:	The rate of return on an investment after removing inflation.
Service Cost:	The amount of contributions required to fund the benefit allocated to the current year of service.
Total OPEB Liability:	Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.
Valuation Date:	The date at which the actuarial valuation is performed.

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