

Tulare County Employees' Retirement Association

GASB 67/68 Report as of June 30, 2023

Produced by Cheiron

Revised – December 2023

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December 1, 2023

Board of Retirement Tulare County Employees' Retirement Association 136 N. Akers St. Visalia, CA 93291

Dear Members of the Board:

The purpose of this report is to provide accounting and financial reporting information under GASB 67 for the Tulare County Employees' Retirement Association (TCERA) and under GASB 68 for participating employers. This information includes:

- Determination of the discount rate as of June 30, 2023,
- Disclosure of the TCERA's Total Pension Liability and Net Pension Liability as of the measurement date,
- Note disclosures and required supplementary information under GASB 67 for TCERA,
- Determination of collective amounts under GASB 68, and
- Schedules for the financial reporting of participating employers under GASB 68.

If you have any questions about the report or would like additional information, please let us know.

Sincerely,

Cheiron

Graham A. Schmidt, AŠA, EA, FCA, MAAA Consulting Actuary

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Steven M. Hastings, FSA, EA, FCA, MAAA Consulting Actuary



SECTION I – BOARD SUMMARY

The measurement date for the Tulare County Employees' Retirement Association (TCERA) is June 30, 2023. Measurements are based on the fair value of assets as of June 30, 2023 and the Total Pension Liability as of the valuation date, June 30, 2023. The table below provides a summary of the key collective results during this measurement period.

Ta Summary of (able I-1 Collec			
		Measurem	ient	Date
		6/30/2023		6/30/2022
Net Pension Liability	\$	505,018	\$	427,018
Deferred Outflows		(175,015)		(168,633)
Deferred Inflows		85,357		118,364
Net Impact on Statement of Net Position	\$	415,360	\$	376,749
Pension Expense/(Income)	\$	83,785	\$	70,499
Pension Expense/(Income) (% of Payroll)		27.34%		24.43%

Numbers may not add to totals due to rounding.

Amounts in Thousands

The Net Pension Liability (NPL) increased by approximately \$78.0 million since the prior measurement date, primarily due to a large loss on liabilities during the year. These losses were partially offset by assumptions changes which reduced the NPL. Investment gains or losses are recognized over five years, and Actuarial Liability gains or losses and assumption changes are recognized over the average remaining service life, which is five years. Unrecognized amounts are reported as deferred inflows and deferred outflows.

As of the end of the reporting year, the participating employers in TCERA would report a Net Pension Liability of \$505,018,000, collective Deferred Inflows of \$85,357,000, and collective Deferred Outflows of \$175,015,000. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to TCERA would be \$415,360,000 at the end of the measurement year. In addition, any contributions between the measurement date and each individual employer's reporting date would be reported as deferred outflows to offset the cash outflow reported.

For the measurement year ending June 30, 2023, the collective annual pension expense is \$83,785,000 or 27.34% of covered payroll. This amount is not equal to the participating employers' contributions to TCERA (\$45,174,000), but instead represents the change in the net impact on participating employer's Statements of Net Position plus employer contributions (\$415,360,000 - \$376,749,000 + \$45,174,000). The collective pension expense as a percentage of payroll is higher than the collective expense for the prior year. A breakdown of the components of the net pension expense is shown in Section VI of the report.



SECTION II – CERTIFICATION

The purpose of this report is to provide accounting and financial reporting information under GASB 67 for the Tulare County Employees' Retirement Association (TCERA) and under GASB 68 for the employers that participate in TCERA. This report is for the use of TCERA, the participating employers, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. This report is not appropriate for other purposes, including the measurement of funding requirements for TCERA. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

In preparing our report, we relied on information (some oral and some written) supplied by TCERA. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Future actuarial measurements may differ significantly from the current measurements 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.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this report.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Graham A. Schmidt, ASA, EA, FCA, MAAA Consulting Actuary Steven M. Hastings, FSA, EA, FCA, MAAA Consulting Actuary



SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.08%.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will continue to be made at the required rates. Employer contributions were assumed to be made in accordance with the contribution policy in effect for the June 30, 2023 actuarial valuation. That policy includes contributions equal to the actuarially determined contribution, reflecting a payment equal to annual normal cost and an amount necessary to amortize the total June 30, 2015 Unfunded Actuarial Liability (UAL) as a level percentage of payroll over a closed 19-year period with payments as a level percentage of payroll, assuming payroll increases of 3.00% per year. Subsequent gains and losses are being amortized over new 19-year closed periods, also as a level percentage of payroll.

The UAL and contribution rates do not directly reflect any liability associated with past or future transfers to the Supplemental Retiree Benefit Reserve (SRBR), which the Board has elected not to pre-fund. However, the projection of benefit payments does include the value of the expected benefit payments to the members from the SRBR, based on both the current SRBR assets and the expected future transfers to the SRBR, as estimated using a stochastic model. Those benefit payments result in actuarial losses, which are funded through the plan's amortization policy.

The stochastic model was developed using R-scan, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the Plan. R-scan uses standard roll-forward techniques that implicitly assume a stable active population. Because R-scan does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent. The stochastic model reflects a standard deviation of 12.75% for the annual investment returns, as indicated by an analysis of investment consultants' capital market expectations as described in our 2023 Experience Study report.

Based on these assumptions, TCERA's fiduciary net position was projected to be available to make projected future benefit payments for current members until FYE 2088, when only a portion of the projected benefit payments can be made from the projected fiduciary net position. Projected benefit payments are discounted at the long-term expected return on assets of 7.15% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 3.65% to the extent they are not available. The 7.15% expected return on assets is equal to the 7.00% investment return assumption used in the June 30, 2023 actuarial valuation, plus 0.15% for administrative expenses. The administrative expense adjustment results from the fact that the 7.00% valuation assumption is assumed to be net of both administrative and investment expenses, whereas GASB 67 and 68 require an expected return on assets that is net of investment expenses only. The 3.65% municipal bond rate is based on the Bond Buyer 20-year Bond GO Index as of June 30, 2023.

The single rate that is equivalent to a 7.15% discount rate until the projected fiduciary net position is no longer available to make benefit payments (in FYE 2088), and 3.65% thereafter, is 7.08%. The discount rate used to determine the Total Pension Liability as of June 30, 2023 is therefore 7.08%. Appendix D shows the details of this calculation.



SECTION IV – DETERMINATION OF TOTAL PENSION LIABILITY

The Total Pension Liability (TPL) at the end of the measurement year, June 30, 2023 is measured as of a valuation date of June 30, 2023.

Between the June 30, 2022 and June 30, 2023 measurement dates, the discount rate reduced from 7.09% to 7.08% due to the results of the crossover test. The details of this calculation are shown in Appendix D. Additionally, the following assumptions were changed as a result of the recent Experience Study: termination rates (including rates of refunds), percent married, merit and longevity salary increases for Safety members, spouse age difference, form of payment elections, reciprocal transfer salary increase rates, adjustments to base mortality tables for healthy members, and mortality improvement scale for all members. Please see Appendix B of the June 30, 2023 actuarial valuation report for a more detailed description of the assumptions.

The TPL measurement includes the accrued portion of expected benefit payments associated with the current SRBR assets, as well as the accrued portion of expected benefit payments associated with future anticipated SRBR transfers (as determined using a stochastic model).

The impact of the assumption changes decreased the TPL measurement by approximately \$11 million as of the end of the measurement year.



SECTION V – GASB 67 REPORTING INFORMATION

Note Disclosures

The table below shows the changes in the Total Pension Liability, the Plan Fiduciary Net Position (i.e., fair value of System assets), and the Net Pension Liability during the measurement year.

		Increa	ase (Decrease)		
	tal Pension Liability (a)		n Fiduciary et Position (b)]	et Pension Liability (a) - (b)
Balances at 6/30/2022	\$ 2,246,027	\$	1,819,009	\$	427,018
Changes for the year:					
Service cost	54,448				54,448
Interest	157,325				157,325
Changes of benefits	0				(
Differences between expected and actual					
experience	71,644				71,64
Changes of assumptions	(10,869)				(10,86
Contributions - employer			45,174		(45,17-
Contributions - member			27,965		(27,96
Net investment income			124,156		(124,15
Benefit payments	(109,503)		(109,503)		
Administrative expense			(2,747)		2,74
Net changes	 163,045		85,045		78,000
Balances at 6/30/2023	\$ 2,409,072	\$	1,904,054	\$	505,01

Numbers may not add to totals due to rounding.

Amounts in Thousands

During the measurement year, the collective NPL increased by approximately \$78.0 million. The service cost, interest cost, actuarial experience losses, and recognition of administrative expense increased the collective NPL by approximately \$286 million while contributions and investment income decreased the collective NPL by approximately \$197 million. The actuarial losses were due primarily to larger than expected salary and retiree cost-of-living increases.

As discussed in Section IV, assumption changes decreased the TPL by approximately \$11 million. There were no changes in benefits during the year.



SECTION V – GASB 67 REPORTING INFORMATION

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. Table V-2 shows the sensitivity of the collective NPL to the discount rate.

		o Cl	nanges in Dis	cou	int Rate
]	1% Decrease 6.08%		Discount Rate 7.08%		1% Increase 8.08%
\$	2,747,426 1,904,054	\$	2,409,072 1,904,054	\$	2,132,525 1,904,054
\$	<u>843,372</u>	\$	505,018	<u>\$</u>	<u>228,471</u> 89.3%
	nsion	1% Decrease 6.08% \$ 2,747,426 1,904,054	Liability to Cl 1% Decrease 6.08% \$ 2,747,426 \$ 1,904,054 \$ 843,372	1% Discount Decrease Rate 6.08% 7.08% \$ 2,747,426 \$ 2,409,072 1,904,054 1,904,054 \$ 843,372 \$ 505,018	1% Discount Decrease Rate 6.08% 7.08% \$ 2,747,426 \$ 2,409,072 \$ 1,904,054 \$ 1,904,054 1,904,054 \$ 505,018 \$ 1,904,054

Numbers may not add to totals due to rounding.

Amounts in Thousands

A 1% decrease in the discount rate increases the TPL by approximately 14% and increases the collective NPL by approximately 67%. A 1% increase in the discount rate decreases the TPL by approximately 11% and decreases the collective NPL by approximately 55%.

Required Supplementary Information

The schedule on the following page shows the changes in collective NPL and related ratios required by GASB for the last 10 years.



SECTION V – GASB 67 REPORTING INFORMATION

								Table											_	
				Schedul	e (of Changes in	۱C	collective Net	: Pe	ension Liabi	lity	y and Relate	d R	latios						
		FYE 2023		FYE 2022		FYE 2021		FYE 2020		FYE 2019		FYE 2018		FYE 2017		FYE 2016		FYE 2015		FYE 2014
Total Pension Liability																				
Service cost (MOY)	\$	54,448	\$	56,123	\$	54,859	\$	49,424	\$	49,484	\$	46,838	\$	38,203	\$	38,307	\$	35,168	\$	39,672
Interest (includes interest on service																				
cost)		157,325		154,625		141,880		140,390		133,895		126,586		118,664		115,716		97,473		94,277
Changes of benefit terms		0		0		0		0		0		0		0		0		0		0
Differences between expected and																				
actual experience		71,644		(69,048)		85,474		(54,091)		(6,667)		10,342		11,936		(40,602)		7,591		0
Changes of assumptions		(10,869)		(40,693)		2,930		70,788		(37,996)		41,149		69,608		23,923		180,187		13,588
Benefit payments, including refunds of member contributions		(100 500)		(102 500)		(06.05.0		(01.425)		(05.007)		(00.51.6)		(76.061)		(72,222)		(60.5.0)		(55.05.0
	-	(109,503)	_	(102,708)	_	(96,276)	_	(91,427)	-	(85,097)	-	(80,716)	_	(76,961)	-	(72,332)	_	(68,560)	-	(65,954)
Net change in total pension liability	\$	163,045	\$	(1,701)	\$	188,867	\$	115,084	\$	53,619	\$	144,199	\$	161,449	\$	65,011	\$	251,858	\$	81,583
Total pension liability - beginning		2,246,027		2,247,728	_	2,058,861		1,943,777		1,890,158	_	1,745,959		1,584,510		1,519,499		1,267,640		1,186,057
Total pension liability - ending	\$	2,409,072	\$	2,246,027	\$	2,247,728	\$	2,058,861	\$	1,943,777	\$	1,890,158	\$	1,745,959	\$	1,584,510	\$	1,519,499	\$	1,267,640
Plan fiduciary net position																				
Contributions - employer	\$	45,174	s	40,392	\$	36,766	\$	35,310	S	33,494	\$	286,263	\$	33,616	s	31,297	s	30,992	\$	25,953
Contributions - member	Ψ	27.965	Ψ	25,880	Ψ	23,536	Ψ	23,104	Ψ	22,325	Ψ	18,512	Ψ	18,190	Ψ	16,815	Ψ	18,887	Ψ	18,969
Net investment income		124,156		(117,773)		395,079		9,515		90,779		95,857		132,865		(20,309)		122,400		179,878
Benefit payments, including refunds		,		())))))		,		- ,		,		,		- ,		(-,,		,		,
of member contributions		(109,503)		(102,708)		(96,276)		(91,427)		(85,097)		(80,716)		(76,961)		(72,332)		(68,560)		(65,954)
Administrative expense		(2,747)		(2,967)		(2,740)		(2,853)		(2,806)		(2,666)		(2,612)		(2,616)		(2,408)		(1,639)
Net change in plan fiduciary net																				
position	\$	85,045	\$	(157,176)	\$	356,365	\$	(26,351)	\$	58,695	\$	317,250	\$	105,098	\$	(47,145)	\$	101,312	\$	157,207
Plan fiduciary net position -																				
beginning		1,819,009		1,976,185		1,619,820		1,646,171		1,587,476		1,270,226		1,165,127		1,212,272		1,110,961		953,754
Plan fiduciary net position - ending	\$	1,904,054	\$	1,819,009	\$	1,976,185	\$	1,619,820	\$	1,646,171	\$	1,587,476	\$	1,270,226	\$	1,165,127	\$	1,212,272	\$	1,110,961
Net pension liability - ending	\$	505,018	\$	427,018	\$	271,543	\$	439,041	\$	297,606	\$	302,682	\$	475,734	\$	419,383	\$	307,226	\$	156,680
Plan fiduciary net position as a percentage of the total pension liability		79.04%		80.99%		87.92%		78.68%		84.69%		83.99%		72.75%		73.53%		79.78%		87.64%
Covered payroll	\$	306,492	\$	288,629	\$	276,127	\$	283,640	\$	264,218	\$	256,049	\$	243,366	\$	238,559	\$	229,431	\$	234,438
Net pension liability as a percentage of covered payroll		164.77%		147.95%		98.34%		154.79%		112.64%		118.21%		195.48%		175.80%		133.91%		66.83%

Numbers may not add to totals due to rounding.



SECTION V – GASB 67 REPORTING INFORMATION

Because an Actuarially Determined Contribution (ADC) has been calculated, the following schedule is required. An ADC is a contribution amount determined in accordance with Actuarial Standards of Practice. Information prior to FYE 2015 was determined by the prior actuary.

					Scl	hedule of (Coll	Table V ective En	oyer Conti	·ib	utions						
	F	YE 2023	F	YE 2022	I	FYE 2021	F	YE 2020	FYE 2019		FYE 2018*	FYE 2017	l	FYE 2016	FYE 2015]	FYE 2014
Actuarially Determined Contribution Contributions in Relation to the	\$	45,174	\$	40,392	\$	36,766	\$	35,310	\$ 33,494	\$	36,263	\$ 33,616	\$	31,297	\$ 30,992	\$	25,953
Actuarially Determined Contribution		45,174		40,392		36,766		35,310	33,494		36,263	33,616		31,297	30,992		25,953
Contribution Deficiency/(Excess)	\$	0	\$	0	\$	0	\$	0	\$ 0	\$	0	\$ 0	\$	0	\$ 0	\$	0
Covered Payroll	\$	306,492	\$	288,629	\$	276,127	\$	283,640	\$ 264,218	\$	256,049	\$ 243,366	\$	238,559	\$ 229,431	\$	234,438
Contributions as a Percentage of Covered Payroll		14.74%		13.99%		13.31%		12.45%	12.68%		14.16%	13.81%		13.12%	13.51%		11.07%

Numbers may not add to totals due to rounding.

* For the FYE 2018, the contribution shown in this schedule does not include the additional \$250 million contribution made by the County at the end of the Fiscal Year.

Amounts in Thousands

The notes below summarize the key methods and assumptions used to determine the ADC for FYE 2023.

]	Notes	to	Sched	lule
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Valuation Date Timing	6/30/2021 Actuarially determined contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the plan year
Key Methods and Assumptions Use	d to Determine Contribution Rates:
Actuarial cost method	Entry Age
Asset valuation method	10-year smoothed market, with a 30% corridor around the market value
Amortization method	Level percentage of payroll with separate periods for the UAL as of June 30, 2015 (13 years remaining as of 6/30/21), and additional 19-year layers for unexpected changes in UAL after 6/30/15
Discount rate	7.00%
Amortization growth rate	3.00%
Price inflation	2.75%
Salary increases	3.00% plus merit component based on employee classification and years of service
Mortality	For General: RP-2014 Combined Healthy Sex Distinct Table, with Generational improvement using Projection Scale MP-2019, increased by 2.2% for males and 8.0% for females to reflect Plan experience For Safety: RP-2014 Combined Healthy Male Table with blue-collar adjustment, with Generational improvement using Projection Scale MP-2019, increased by 4.5% for males to reflect Plan experience

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2023 can be found in the June 30, 2021 actuarial valuation report



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

Employers that participate in TCERA were required to implement GASB 68 for their first fiscal year that commenced after June 15, 2014. The amounts reported as of their fiscal year end (their reporting date) must be based on a measurement date up to 12 months prior to their reporting date. For employers with a reporting date of June 30, their 2023 disclosures can be based on either the June 30, 2022 or 2023 measurement dates. If an employer elects to base its 2023 disclosures on the June 30, 2022 measurement date, the GASB 68 schedules in this report with a measurement date of June 30, 2023 will be used for its 2024 reporting date.

Because TCERA is a cost-sharing multiple-employer pension plan, each employer participating in TCERA must reflect a portion of the collective Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows in its financial statements. This section develops the collective amounts that are allocated to participating employers.

The impact of experience gains or losses and assumption changes on the TPL are recognized in expense over the average expected remaining service life of all active and inactive members of TCERA. As of the beginning of the measurement period, this recognition period was five years. The impact of investment gains or losses is recognized over a period of five years.

The table on the following page summarizes the current balances of collective deferred outflows and deferred inflows of resources along with the net recognition over the next five years and the total amount recognized thereafter.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

Tat Schedule of Collective Deferred	ole VI-1 Inflows a	and (Dutflows of 1	Resour	ces
		Ou	eferred atflows of esources	In	eferred flows of esources
Differences between expected and actual experience		\$	91,504	\$	52,247
Changes in assumptions			15,328		33,110
Net difference between projected and actual earning	s on				
pension plan investments	-		68,183		0
Total	-	\$	175,015	\$	85,357
Amounts reported as deferred outflows and deferred expense as follows: Measurement year ende		esourc	es will be recog	nized in p	pension
	2024		29,741		
	2025		4,203		
	2026		42,654		
	2027		13,060		
	2028		0		
	Thereafter	\$	0		

Numbers may not add to totals due to rounding.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

The tables below provide details on the current balances of collective deferred inflows and outflows of resources along with the recognition of each base for each of the current and following five years, as well as the total for any years thereafter.

			l	Rec	ognitior	1 0	Table f Experi		ns) and I	208	sses					
Experience Year	Recognition Period	ł	Total Amount	Re	eginning emaining Amount	R	Ending emaining Amount	2023		2024		Recogni 2025	tio	n Year 2026	2027	The	reafter
2023	5.0	\$	71,644	\$	71,644	\$	57,315	\$ 14,329	\$	14,329	\$	14,329	\$	14,329	\$ 14,328	\$	0
2022	5.0		(69,048)		(55,238)		(41,428)	(13,810)		(13,810)		(13,810)		(13,808)	0		0
2021	5.0		85,474		51,284		34,189	17,095		17,095		17,094		0	0		0
2020	5.0		(54,091)		(21,637)		(10,819)	(10,818)		(10,819)		0		0	0		0
2019	5.0		(6,667)		(1,335)		0	(1,335)		0		0		0	0		0
Deferred Out	tflows				122,928		91,504	 31,424		31,424		31,423		14,329	 14,328		0
Deferred (Int	flows)				(78,210)		(52,247)	 (25,963)		(24,629)		(13,810)		(13,808)	 0		0
Net Change	in Pension Exp	ense	•	\$	44,718	\$	39,257	\$ 5,461	\$	6,795	\$	17,613	\$	521	\$ 14,328	\$	0

Numbers may not add to totals due to rounding.

Amounts in Thousands

					Recog	niti	Table ion of As		n (Change	s						
Change Year	Recognition Period	I	Total Amount	Re	eginning emaining Amount	R	Ending emaining Amount	2023		2024		Recogni 2025	tio	on Year 2026	2027	The	eafter
2023	5.0	\$	(10,869)	\$	(10,869)	\$	(8,695)	\$ (2,174)	\$	(2,174)	\$	(2,174)	\$	(2,174)	\$ (2,173)	\$	0
2022	5.0		(40,693)		(32,554)		(24,415)	(8,139)		(8,139)		(8,139)		(8,137)	0		0
2021	5.0		2,930		1,758		1,172	586		586		586		0	0		0
2020	5.0		70,788		28,314		14,156	14,158		14,156		0		0	0		0
2019	5.0		(37,996)		(7,600)		0	 (7,600)		0		0	_	0	 0		0
Deferred Out	tflows				30,072		15,328	14,744		14,742		586		0	0		0
Deferred (Inf	flows)				(51,023)		(33,110)	 (17,913)		(10,313)		(10,313)		(10,311)	 (2,173)		0
Net Change i	n Pension Exp	ense	e	\$	(20,951)	\$	(17,782)	\$ (3,169)	\$	4,429	\$	(9,727)	\$	(10,311)	\$ (2,173)	\$	0

Numbers may not add to totals due to rounding.



			Recognitio		e VI-2(c) ment (Ga	ins) and I	Losses			
Experience Year	Recognition Period	Total Amount	Beginning Remaining Amount	Ending Remaining Amount	2023	2024	Recogni 2025	tion Year 2026	2027	Thereafter
2023	5.0	\$ 4,529	\$ 4,529	\$ 3,623	\$ 906	\$ 906	\$ 906	\$ 906	\$ 905	\$ 0
2022	5.0	257,686	206,149	154,612	51,537	51,537	51,537	51,538	0	0
2021	5.0	(280,622)	(168,374)	(112,250)	(56,124)	(56,124)	(56,126)	0	0	0
2020	5.0	110,998	44,398	22,198	22,200	22,198	0	0	0	0
2019	5.0	25,528	5,104	0	5,104	0	0	0	0	0
Not Change i	n Pension Exp	anco	\$ 91.806	\$ 68,183	\$ 23,623	\$ 18,517	\$ (3,683)	\$ 52,444	\$ 905	\$ 0

SECTION VI – GASB 68 COLLECTIVE AMOUNTS

Numbers may not add to totals due to rounding.

Amounts in Thousands

The collective annual pension expense recognized by the participating employers can be calculated two different ways. First, it is the change in the amounts reported on the participating employers' Statements of Net Position that relate to TCERA and are not attributable to employer contributions. That is, it is the change in collective NPL plus the changes in collective deferred outflows and inflows plus participating employer contributions.

Alternatively, annual pension expense can be calculated by its individual components. While GASB does not require or suggest the organization of the individual components shown in the table on the following page, we believe it helps to understand the level and volatility of the collective pension expense.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

Tabl Calculation of Colle	le VI-3 ctive Pensi	ion Expense		
		Measurement	Year]	Ending
		2023		2022
Change in Net Pension Liability	\$	78,000	\$	155,475
Change in Deferred Outflows		(6,382)		(45,140)
Change in Deferred Inflows		(33,007)		(80,228)
Employer Contributions		45,174		40,392
Pension Expense	\$	83,785	\$	70,499
Pension Expense as % of Payroll		27.34%		24.43%
Operating Expenses				
Service cost	\$	54,448	\$	56,123
Employee contributions		(27,965)		(25,880)
Administrative expenses		2,747		2,967
Total	\$	29,230	\$	33,210
Financing Expenses				
Interest cost	\$	157,325	\$	154,625
Expected return on assets		(128,685)		(139,913)
Total	\$	28,640	\$	14,712
Changes				
Benefit changes	\$	0	\$	0
Recognition of assumption changes		(3,169)		7,236
Recognition of liability gains and losses		5,461		(6,798)
Recognition of investment gains and losses		23,623		22,139
Total	\$	25,915	\$	22,577
Pension Expense	\$	83,785	\$	70,499

Numbers may not add to totals due to rounding.

Amounts in Thousands

Operating expenses are items directly attributable to the operation of the plan during the measurement year. Service cost less employee contributions represents the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating TCERA for the year.

Financing expenses equal the interest on the Total Pension Liability less the expected return on assets.

The recognition of changes will drive most of the volatility in pension expense from year to year. It includes any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses. The total collective pension expense increased by about \$13.3 million. In the current year pension expense, the financing expenses increased by approximately \$13.9 million and the recognition of



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

changes increased about \$3.3 million. These were offset by decreases in operating expenses of approximately \$4.0 million compared to the prior year.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

Proportionate Shares

GASB 68 requires that the proportionate share for each employer be determined based on the "employer's projected long-term contribution effort to the pension ... as compared to the total projected long-term contribution effort of all employers ..." Although not required as part of TCERA's GASB 67 reporting requirements, TCERA is following the advice of the AICPA and making a determination of each employer's proportionate share, which will be reviewed by TCERA's auditor.

GASB 82, which is effective for reporting periods beginning after June 15, 2016, requires that employer-paid member contributions be classified as employee contributions for purposes of determining each employer's proportionate share. TCERA has indicated that their auditor has determined the amount of such contributions to be immaterial for the purposes of GASB 82.

Proportionate shares for each participating employer are generally determined based on the ratio of each participating employer's actual contributions to TCERA during the measurement year to the sum of the employer contributions. In Table VII-1, each employer's proportionate share as of June 30, 2023 has been determined using this method.

	Determinati		ble VII-1 loyers' Proportio	nate Sl	nare	
Employer		June 30 nployer tribution), 2023 Proportionate Share		June 30 nployer tribution), 2022 Proportionate Share
County	\$	41,258	91.3313%	\$	37,014	91.6370%
Courts		3,657	8.0954%		3,129	7.7466%
SPUD		39	0.0863%		36	0.0891%
TCAG		220	0.4870%		213	0.5273%
Total	\$	45,174	100.0000%	\$	40,392	100.0000%

Numbers may not add to totals due to rounding.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

	Schedule of Employers	s' Pro	portiona	ble VII-2 Share of Co	olle	ective Amo	unts	s at June 3	0,2	2023	
Employer	Proportionate Share		e of NPL 6.08%	are of NPL @ 7.08%		are of NPL @ 8.08%]	Share of Deferred Outflows		Share of Deferred Inflows	Pension Expense
County	91.3313%	\$	770,263	\$ 461,239	\$	208,666	\$	159,843	\$	77,958	\$ 76,522
Courts	8.0954%		68,274	40,883		18,496		14,168		6,910	6,783
SPUD	0.0863%		728	436		197		151		74	72
TCAG	0.4870%		4,107	2,459		1,113		852		416	408
Total	100.0000%	\$	843,372	\$ 505,018	\$	228,471	\$	175,015	\$	85,357	\$ 83,785

Numbers may not add to totals due to rounding.

The proportionate share allocated to each individual employer will change on each measurement date. The net effect of the change in proportion on the share of the collective NPL, collective deferred outflows, and collective deferred inflows allocated to each employer becomes a deferred outflow or inflow for that employer and is recognized over the average future working life of TCERA's active and inactive members (five years).

Similarly, the difference between each employer's actual contributions and the employer's proportionate share of collective employer contributions becomes a deferred outflow or inflow for that employer and is recognized over the average future working life of TCERA's active and inactive members (five years).



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the change in proportion and the impact of that change in proportion on the proportionate share of the collective NPL, collective deferred outflows, and collective deferred inflows. It also shows any contribution differences.

	Schedu	ıle of Emplo	yers'	Change	Table s in Pro		on and Co	ntrib	ution Dif	fere	nces			
	Proportion:	ate Shares	Net	In Pension	pact of Defer	8	e in Proport Deferred	ion				 ontributions oportionate		
Employer	6/30/2022	6/30/2023	Li	ability	Outfl	ows	Inflows	Ne	et Effect		Actual	Share	Diff	erence
County	91.6370%	91.3313%	\$	(1,305)	\$	(515)	\$ 362	\$	(1,152)	\$	41,258	\$ 41,258	\$	C
Courts	7.7466%	8.0954%		1,489		588	(413)	1,314		3,657	3,657		(
SPUD	0.0891%	0.0863%		(12)		(5)	3		(11)		39	39		C
TCAG	0.5273%	0.4870%		(172)		(68)	48		(152)		220	220		C
Total	100.0000%	100.0000%	\$	0	\$	0	\$ (\$	0	\$	45,174	\$ 45,174	\$	(

The table below shows the reconciliation of deferred outflows and inflows due to proportion changes for each participating employer from the prior measurement date to the current measurement date.

	Reco	Table VII- Reconciliation of Deferred Outflows and I						e to]	Proportic	on (Change			
			Deferr	ed Out	flows						Deferre	d Inflows		
Employer	6/	30/2022	Current Yea Net Effect		cognition	6	/30/2023	6/	/30/2022		rrent Year et Effect	Recognition	6/.	30/2023
County Courts	\$	1,945 246	\$ (1,314) \$ 4	949 386	\$	997 1,174	\$	(255) (1,921)	\$	(1,152) 0	\$ (358) (831)	\$	(1,049) (1,090)
SPUD TCAG Total	\$	44 103 2,339)	15 27 1,377	¢	29 76 2,276	\$	(19) (145) (2,339)	¢	(11) (152) (1,314)	(14) (175) \$ (1,377)	¢	(15) (122) (2,276)

Numbers may not add to totals due to rounding.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the reconciliation of deferred outflows and inflows due to differences between the proportionate share of contributions and actual contributions made by each employer. Because the proportionate shares are determined based on each employer's share of the contributions, there should be no differences between the actual and proportionate contributions.

	Reconcil	iation o	of Deferred (le VII-5 d Inflows Du	e to Contribu	tion Differen	ces	
			Deferred	Outflows			Deferre	d Inflows	
Employer	6/30/2		⁶ urrent Year Difference	Recognition	6/30/2023	6/30/2022	Current Year Difference	Recognition	6/30/2023
County	\$	0 \$	6 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Courts		0	0	0	0	0	0	0	0
SPUD		0	0	0	0	0	0	0	0
TCAG		0	0	0	0	0	0	0	0
Total	\$	0 \$	6 0 1	\$0	\$0	\$ 0	\$0	\$ 0	\$0

Numbers may not add to totals due to rounding.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below summarizes the deferred outflows allocated to each employer for experience, assumption changes, investment returns, proportion changes, and contribution differences.

	Schedule of Emplo	yers	Table V s' Deferr		nt J	une 30, 20	23		
Employer	Proportionate Shares	Ex]	perience	ssumption Changes	I	nvestment Return		roportion Change	ribution erence
County	91.3313%	\$	83,572	\$ 13,999	\$	62,272	\$	997	\$ 0
Courts	8.0954%		7,408	1,241		5,520		1,174	0
SPUD	0.0863%		79	13		59		29	0
TCAG	0.4870%		446	75		332		76	0
Total	100.0000%	\$	91,504	\$ 15,328	\$	68,183	\$	2,276	\$ 0

Numbers may not add to totals due to rounding.

Amounts in Thousands

The table below summarizes the deferred inflows allocated to each employer for experience, assumption changes, investment returns, proportion changes, and contribution differences.

	Schedule of Emplo	yer	Table V s' Deferr		Ju	ne 30, 202	3		
Employer	Proportionate Shares	Ex	perience	ssumption Changes	I	nvestment Return		coportion Change	ntribution ifference
County	91.3313%	\$	47,718	\$ 30,240	\$	0	\$	1,049	\$ 0
Courts	8.0954%		4,230	2,680		0		1,090	0
SPUD	0.0863%		45	29		0		15	0
TCAG	0.4870%		254	161		0		122	0
Total	100.0000%	\$	52,247	\$ 33,110	\$	0	\$	2,276	\$ 0

Numbers may not add to totals due to rounding.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the net amount of deferred outflows and inflows to be recognized by each participating employer in each of the next five years and the total thereafter.

Schedule	of Employers'	Recogni	tion	n of Defer	red	Outflows	an	d Inflows	at.	June 30,	2023	
				Recog	nitio	n for Meas	ure	ment Year]	End	ing		
Employer		2024		2025		2026		2027		2028	Therea	fter
County	\$	27,204	\$	4,007	\$	38,925	\$	11,698	\$	0	\$	
Courts		2,359		168		3,495		1,320		0		
SPUD		36		13		32		9		0		
TCAG		141		14		202		33		0		
Total	\$	29,741	\$	4,203	\$	42,654	\$	13,060	\$	0	\$	

Numbers may not add to totals due to rounding.

The table below shows the calculation of the pension expense for each participating employer. The calculation is shown first as the sum of the proportionate share of the collective pension expense and the amounts recognized for proportion changes and contribution differences. The right side of the table shows the calculation as the sum of the changes in NPL and deferred amounts not attributable to contributions.

	Schedu	chedule of Employers' Pensio				Table Vl spense for the		easuremen	it Y	Year Ending	; Jt	ıne 30, 2023	3				
	Collective				Employer		Change in Employe			er					Employer		
	Pension	C	Change in Contributio					Net Pension Deferred		Deferred		Deferred	Employer		Pension		
Employer	Expense	Pr	oportion	Difference		Expense		Liability		Outflows		Inflows	C	ontributions	F	Expense	
County	\$ 76,522	\$	591	\$ 0	5	5 77,113	\$	69,933	\$	(4,365)	\$	(29,714)	\$	41,258	\$	77,113	
Courts	6,783		(445)	0		6,338		7,804		(2,033)		(3,090)		3,657		6,338	
SPUD	72		1	0		74		55		14		(35)		39		74	
TCAG	408		(147)	0		261		208		64		(231)		220		261	
Total	\$ 83,785	\$	0	\$ 0	5	83,786	\$	78,000	\$	(6,319)	\$	(33,070)	\$	45,174	\$	83,786	

Numbers may not add to totals due to rounding.

Amounts in Thousands



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below summarizes the information needed for each employer's schedules of required supplementary information.

		Sched	ule of Emplo	Table VII oyers' RSI Info	-10 ormation at Jur	ne 30, 2023				
Employer	Proportionate Shares	Proportionate Share of NPL	Covered Payroll	Share of NPL as a % of Payroll	Plan Fiduciary Net Position as % of TPL	Contractually Required Contribution		Actual ontributions	Contribution Deficiency	Contributions as a % of Payroll
County	91.3313%	\$ 461,239	\$ 287,818	160.3%	79.0%	\$ 41,258	\$	41,258	\$ 0	14.3%
Courts	8.0954%	40,883	16,740	244.2%	79.0%	3,657		3,657	0	21.8%
SPUD	0.0863%	436	191	228.1%	79.0%	39		39	0	20.4%
TCAG	0.4870%	2,459	1,742	141.2%	79.0%	220)	220	0	12.6%
Total	100.0000%	\$ 505,018	\$ 306,492	164.8%	79.0%	\$ 45,174	\$	45,174	\$ 0	14.7%

Numbers may not add to totals due to rounding.



APPENDIX A – MEMBERSHIP INFORMATION

	J	une 30, 2022	J	une 30, 2023	Change
General Tier 1					
Count		7		6	-14.3%
Average Age		69.0		70.4	1.9%
Average Service		37.8		43.9	16.1%
Annual Projected Payroll	\$	490,633	\$	404,879	-17.5%
Average Annual Pay	\$	70,090	\$	67,480	-3.7%
General Tier 2 & 3					
Count		1,619		1,481	-8.5%
Average Age		49.6		50.4	1.5%
Average Service		17.8		18.6	4.8%
Annual Projected Payroll	\$	113,469,216	\$	114,382,779	0.8%
Average Annual Pay	\$	70,086	\$	77,233	10.2%
General Tier 4					
Count		1,985		2,221	11.9%
Average Age		37.8		37.7	-0.1%
Average Service		4.2		4.3	2.2%
Annual Projected Payroll	\$	113,443,582	\$	137,689,710	21.4%
Average Annual Pay	\$	57,150	\$	61,994	8.5%
General Total					
Count		3,611		3,708	2.7%
Average Age		43.2		42.8	-0.8%
Average Service		10.4		10.1	-2.6%
Annual Projected Payroll	\$	227,403,431	\$	252,477,368	11.0%
Average Annual Pay	\$	62,975	\$	68,090	8.1%



APPENDIX A – MEMBERSHIP INFORMATION

SUMMARY OF ACTIVE SAFETY MEMBERSHIP									
	Ju	ıne 30, 2022	Jı	ıne 30, 2023	Change				
Safety Tier 1									
Count		0		0	0.0%				
Average Age		0		0	0.0%				
Average Service		0		0	0.0%				
Annual Projected Payroll	\$	0	\$	0	0.0%				
Average Annual Pay	\$	0	\$	0	0.0%				
Safety Tier 2 & 3									
Count		428		389	-9.1%				
Average Age		45.4		46.4	2.1%				
Average Service		17.4		18.4	5.9%				
Annual Projected Payroll	\$	38,249,543	\$	39,071,649	2.1%				
Average Annual Pay	\$	89,368	\$	100,441	12.4%				
Safety Tier 4									
Count		393		408	3.8%				
Average Age		32.7		33.0	0.8%				
Average Service		4.3		4.6	8.5%				
Annual Projected Payroll	\$	27,791,979	\$	31,493,863	13.3%				
Average Annual Pay	\$	70,710	\$	77,191	9.2%				
Safety Total									
Count		821		797	-2.9%				
Average Age		39.4		39.5	0.5%				
Average Service		11.1		11.3	2.3%				
Annual Projected Payroll	\$	66,041,522	\$	70,565,512	6.9%				
Average Annual Pay	\$	80,440	\$	88,539	10.1%				



APPENDIX A – MEMBERSHIP INFORMATION

SUMMARY OF INACTIVE MEMBERSHIP*									
	Ju	June 30, 2022		ıne 30, 2023	Change				
General									
Count		2,083		2,222	6.7%				
Average Age		43.9		43.8	-0.1%				
Total Contribution Balance	\$	52,984,947	\$	58,738,327	10.9%				
Average Contribution Balance	\$	25,437	\$	26,435	3.9%				
Safety									
Count		384		411	7.0%				
Average Age		39.3		39.4	0.3%				
Total Contribution Balance	\$	15,792,000	\$	17,477,746	10.7%				
Average Contribution Balance	\$	41,125	\$	42,525	3.4%				
Fotal									
Count		2,467		2,633	6.7%				
Average Age		43.2		43.1	-0.1%				
Total Contribution Balance	\$	68,776,947	\$	76,216,073	10.8%				
Average Contribution Balance	\$	27,879	\$	28,946	3.8%				

*Includes unclaimed accounts.



APPENDIX A – MEMBERSHIP INFORMATION

SUMMARY OF RETIRED MEMBERSHIP									
	Jı	June 30, 2022 June 30, 2023			Change				
General									
Count		2,947		3,014	2.3%				
Average Age		71.8		71.9	0.2%				
Total Annual Allowance	\$	69,411,269	\$	72,997,199	5.2%				
Average Annual Allowance	\$	23,553	\$	24,219	2.8%				
Safety									
Count		638		668	4.7%				
Average Age		65.3		65.4	0.2%				
Total Annual Allowance	\$	24,727,646	\$	26,445,626	6.9%				
Average Annual Allowance	\$	38,758	\$	39,589	2.1%				
Total									
Count		3,585		3,682	2.7%				
Average Age		70.6		70.8	0.2%				
Total Annual Allowance	\$	94,138,915	\$	99,442,825	5.6%				
Average Annual Allowance	\$	26,259	\$	27,008	2.9%				

Please refer to the June 30, 2023 actuarial valuation report for a more complete summary of the data.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2023 is provided below. Please refer to the June 30, 2023 actuarial valuation report for a complete description of all other assumptions. The economic and demographic assumptions were selected by the Board. With the exception of the discount rate, the expected return on assets, and the administrative expense assumption, the assumptions used in this report and the June 30, 2023 actuarial valuation report reflect the results of the Experience Study performed by Cheiron covering the period July 1, 2020 through June 30, 2023.

Key Actuarial Assumptions

Expected Return on Assets	7.15% net of investment expenses as of June 30, 2023.
Municipal Bond Yield	3.65% net of investment expenses as of June 30, 2023 (Bond Buyer 20-year Bond GO Index, June 29, 2023)
Discount Rate	7.08%
Inflation	The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 2.75% per year.
Post Retirement COLA	Benefits are assumed to increase after retirement at the rate of 2.6% per year for Tier 1 participants and 2% per year for all participants in Tiers 2-4. An additional COLA of 0.4% per year (for a total COLA growth rate of 3.0%) is included for Tier 1 participants in pay status to reflect their accumulated COLA banks.
Administrative Expenses	Administrative Expenses used in the cashflow projection are assumed to average 0.15% of assets annually.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below.

1. Actuarial Cost Method

The actuarial valuation is prepared using the Entry Age Actuarial Cost Method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age). For members who transferred between plans, entry age is based on original entry into the system. The normal cost for the Plan is based on the sum of the individual normal costs for each member (Individual Entry Age Method).

2. Asset Valuation Method

Beginning in fiscal year 2009, the assets are valued using a 10-year smoothed method based on the difference between the expected market value and the actual market value of the assets, net of expenses, as of June 30 and December 31 of each year. The expected market value at the end of each period is the beginning market value increased with the net increase in the cash flow of funds, all increased with interest at the expected investment return rate assumption.

A 30% asset corridor limit is applied.

3. Amortization Method

The Unfunded Actuarial Liability is the difference between the Actuarial Liability and the Actuarial Value of Assets. The UAL (or Surplus) is amortized as a percentage of the projected salaries of present and future members of TCERA. At its October 28, 2015 meeting, the Board adopted 19-year layered amortization of the UAL. Starting as of June 30, 2015, the UAL is amortized over a closed 19-year period as a level percentage of payroll, assuming payroll increases of 3.00% per year. Subsequent changes in the UAL due to experience gains and losses, assumption changes, or plan changes will be amortized over new closed 19-year periods.

4. Contributions

The employer (County or District) contributes to the retirement fund a percentage of the total compensation provided for all members based on an actuarial investigation, valuation, and recommendation of the actuary.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

The plan provisions are the same as those summarized in the June 30, 2023 actuarial valuation report.

Plan provisions include liabilities associated with the Supplemental Retiree Benefit Reserve (SRBR).

The county has adopted the financial provisions of Article 5.5 of the 1937 Act for Tiers 1-3. The Article requires that in certain cases, a portion of investment earnings be allocated to a Supplemental Retiree Benefit Reserve (SRBR). Earnings allocated to the SRBR are to be used for the benefit of members in Tiers 1-3. Members of Tier 4 are not eligible for supplemental benefits (*31618*).



APPENDIX D – DETERMINATION OF DISCOUNT RATE

FYE	Projected Beginning Fiduciary Net Position*	Normal Cost Contribution - Employer and Employee	UAL Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2024	\$ 1,904,054	\$ 51,555	\$ 27,477	\$ 2,856	\$ 133,219	\$ 134,136	\$ 1,981,146	\$ 133,219	\$ 0
2025	1,981,146	52,056	31,918	2,972	130,624	139,909	2,071,433	130,624	0
2026	2,071,433	49,819	35,658	3,107	137,149	146,183	2,162,837	137,149	0
2027	2,162,837	47,656	38,593	3,244	143,494	152,518	2,254,865	143,494	0
2028	2,254,865	45,565	41,673	3,382	149,436	158,919	2,348,204	149,436	0
2029	2,348,204	43,520	45,075	3,522	155,815	165,411	2,442,873	155,815	0
2030	2,442,873	41,558	47,872	3,664	162,966	171,953	2,537,625	162,966	0
2031	2,537,625	39,704	50,691	3,806	169,882	178,514	2,632,845	169,882	0
2032	2,632,845	37,910	54,659	3,949	176,878	185,148	2,729,733	176,878	0
2033	2,729,733	36,167	58,169	4,095	183,588	191,896	2,828,283	183,588	0
2034	2,828,283	34,468	60,615	4,242	190,407	198,724	2,927,441	190,407	0
2035	2,927,441	32,810	36,489	4,391	197,429	204,656	2,999,576	197,429	0
2036	2,999,576	31,214	33,370	4,499	203,950	209,415	3,065,125	203,950	0
2037	3,065,125	29,637	51,715	4,598	210,726	214,450	3,145,604	210,726	0
2038	3,145,604	28,062	50,943	4,718	217,590	219,876	3,222,176	217,590	0
2039	3,222,176	26,483	51,664	4,833	224,383	225,078	3,296,185	224,383	0
2040	3,296,185	24,920	45,388	4,944	231,491	229,841	3,359,899	231,491	0
2041	3,359,899	23,373	47,725	5,040	238,274	234,182	3,421,866	238,274	0
2042	3,421,866	21,834	48,118	5,133	245,056	238,331	3,479,960	245,056	0
2043	3,479,960	20,290	39,063	5,220	251,719	241,875	3,524,250	251,719	0
2044	3,524,250	18,744	34,649	5,286	258,423	244,595	3,558,529	258,423	0
2045	3,558,529	17,214	31,550	5,338	264,612	246,664	3,584,006	264,612	0
2046	3,584,006	15,694	29,949	5,376	270,725	248,160	3,601,708	270,725	0
2047	3,601,708	14,206	28,180	5,403	276,702	249,100	3,611,089	276,702	0
2048	3,611,089	12,756	25,935	5,417	282,546	249,435	3,611,253	282,546	0

* Fiduciary Net Position based on financial statements provided by TCERA dated September 29, 2023.



APPENDIX D – DETERMINATION OF DISCOUNT RATE

FYE	Projected Beginning Fiduciary Net Position*	Normal Cost Contribution - Employer and Employee	UAL Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2049	3,611,253	11,340	24,843	5,417	288,217	249,160	3,602,962	288,217	0
2050	3,602,962	9,971	23,804	5,404	293,787	248,287	3,585,832	293,787	0
2051	3,585,832	8,657	20,842	5,379	299,028	246,729	3,557,653	299,028	0
2052	3,557,653	7,426	18,781	5,336	303,691	244,436	3,519,268	303,691	0
2053	3,519,268	6,272	18,684	5,279	307,910	241,501	3,472,536	307,910	0
2054	3,472,536	5,198	18,356	5,209	311,384	237,991	3,417,489	311,384	0
2055	3,417,489	4,233	17,995	5,126	314,296	233,909	3,354,203	314,296	0
2056	3,354,203	3,386	17,602	5,031	316,197	229,277	3,283,240	316,197	0
2057	3,283,240	2,668	17,179	4,925	317,220	224,131	3,205,074	317,220	0
2058	3,205,074	2,069	16,730	4,808	317,387	218,504	3,120,182	317,387	0
2059	3,120,182	1,580	16,255	4,680	316,497	212,436	3,029,275	316,497	0
2060	3,029,275	1,186	15,757	4,544	314,872	205,966	2,932,769	314,872	0
2061	2,932,769	873	15,241	4,399	312,325	199,132	2,831,290	312,325	0
2062	2,831,290	634	14,709	4,247	308,962	191,972	2,725,397	308,962	0
2063	2,725,397	454	14,165	4,088	304,883	184,524	2,615,568	304,883	0
2064	2,615,568	320	13,611	3,923	300,059	176,823	2,502,339	300,059	0
2065	2,502,339	222	13,051	3,754	294,535	168,904	2,386,228	294,535	0
2066	2,386,228	151	12,487	3,579	288,371	160,802	2,267,718	288,371	0
2067	2,267,718	101	11,924	3,402	281,614	152,551	2,147,278	281,614	0
2068	2,147,278	67	11,361	3,221	274,290	144,182	2,025,377	274,290	0
2069	2,025,377	43	10,803	3,038	266,429	135,728	1,902,484	266,429	0
2070	1,902,484	27	10,251	2,854	258,056	127,222	1,779,075	258,056	0
2071	1,779,075	17	9,707	2,669	249,191	118,697	1,655,636	249,191	0
2072	1,655,636	10	9,172	2,483	239,871	110,186	1,532,650	239,871	0
2073	1,532,650	6	8,647	2,299	230,128	101,723	1,410,597	230,128	0

* Fiduciary Net Position based on financial statements provided by TCERA dated September 29, 2023.



APPENDIX D – DETERMINATION OF DISCOUNT RATE

FYE	Projected Beginning Fiduciary Net Position*	Normal Cost Contribution - Employer and Employee	UAL Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2074	1,410,597	3	8,132	2,116	220,004	93,340	1,289,953	220,004	0
2075	1,289,953	0	7,629	1,935	209,546	85,070	1,171,171	209,546	0
2076	1,171,171	0	7,139	1,757	198,805	76,943	1,054,691	198,805	0
2077	1,054,691	0	6,661	1,582	187,839	68,990	940,921	187,839	0
2078	940,921	0	6,197	1,411	176,707	61,236	830,234	176,707	0
2079	830,234	0	5,747	1,245	165,472	53,706	722,971	165,472	0
2080	722,971	0	5,312	1,084	154,196	46,424	619,425	154,196	0
2081	619,425	0	4,892	929	142,944	39,406	519,849	142,944	0
2082	519,849	0	4,488	780	131,779	32,670	424,449	131,779	0
2083	424,449	0	4,101	637	120,763	26,227	333,377	120,763	0
2084	333,377	0	3,732	500	109,960	20,087	246,736	109,960	0
2085	246,736	0	3,381	370	99,433	14,254	164,568	99,433	0
2086	164,568	0	3,048	247	89,245	8,730	86,854	89,245	0
2087	86,854	0	2,735	130	79,458	3,510	13,511	79,458	0
2088	13,511	0	2,441	20	70,133	0	(54,202)	13,511	56,623
2089	(54,202)	0	2,167	0	61,329	0	(59,162)	0	61,329
2090	(59,162)	0	1,913	0	53,097	0	(51,183)	0	53,097
2091	(51,183)	0	1,679	0	45,481	0	(43,802)	0	45,481
2092	(43,802)	0	1,465	0	38,519	0	(37,054)	0	38,519
2093	(37,054)	0	1,270	0	32,232	0	(30,961)	0	32,232
2094	(30,961)	0	1,095	0	26,629	0	(25,534)	0	26,629
2095	(25,534)	0	938	0	21,706	0	(20,768)	0	21,706
2096	(20,768)	0	1,134	0	17,444	0	(16,310)	0	17,444
2097	(16,310)	0	1,401	0	13,812	0	(12,411)	0	13,812
2098	(12,411)	0	1,605	0	10,768	0	(9,163)	0	10,768

* Fiduciary Net Position based on financial statements provided by TCERA dated September 29, 2023.



APPENDIX D – DETERMINATION OF DISCOUNT RATE

FYE	Projected Beginning Fiduciary Net Position*	Normal Cost Contribution - Employer and Employee	UAL Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	''Funded'' Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2099	(9,163)	0	1,757	0	8,258	0	(6,502)	0	8,258
2100	(6,502)	0	1,867	0	6,227	0	(4,360)	0	6,227
2101	(4,360)	0	1,945	0	4,612	0	(2,667)	0	4,612
2102	(2,667)	0	1,998	0	3,353	0	(1,355)	0	3,353
2103	(1,355)	0	2,034	0	2,391	0	(357)	0	2,391
2104	(357)	0	2,056	0	1,671	14	399	0	1,671
2105	399	0	2,071	1	1,144	61	1,387	0	1,144
2106	1,387	0	2,080	2	766	145	2,844	0	766
2107	2,844	0	2,086	4	502	259	4,683	0	502
2108	4,683	0	2,091	7	321	397	6,843	0	321
2109	6,843	0	2,095	10	201	555	9,283	0	201
2110	9,283	0	2,100	14	122	733	11,980	0	122
2111	11,980	0	2,106	18	73	927	14,922	0	73
2112	14,922	0	2,112	22	42	1,139	18,109	0	42
2113	18,109	0	2,120	27	24	1,367	21,545	0	24
2114	21,545	0	2,128	32	13	1,614	25,241	0	13
2115	25,241	0	1,547	38	7	1,857	28,600	0	7
2116	28,600	0	887	43	4	2,074	31,515	0	2
2117	31,515	0	382	47	2	2,265	34,113	0	2
2118	34,113	0	7	51	1	2,437	36,506	0	1
2119	36,506	0	(261)	55	0	2,599	38,789	0	(
2120	38,789	0	(443)	58	0	2,756	41,043	0	(
2121	41,043	0	(557)	62	0	2,913	43,338	0	(
2122	43,338	0	(617)	65	0	3,075	45,730	0	(
2123	45,730	0	(637)	69	0	3,245	48,270	0	(
							Discount Rate: Present Value: SB Discount Rate:	7.15% \$ 2,841,883	3.659 \$ 35,047 \$ 2,876,930 7.089

* Fiduciary Net Position based on financial statements provided by TCERA dated September 29, 2023.



APPENDIX E – GLOSSARY OF TERMS

1. Actuarially Determined Contribution

A target or recommended contribution 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.

2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

3. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

4. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

5. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 67 and 68 calculations. Under this method, 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 of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the service cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

6. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the actuarial valuation date to the measurement date. The measurement date must be the same as the reporting date for the plan.



APPENDIX E – GLOSSARY OF TERMS

7. Net Pension Liability

The liability of employers and nonemployer contributing entities to employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position. The Net Pension Liability is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling TCERA's benefit obligations in the event of a plan termination or other similar action.

8. Plan Fiduciary Net Position

The fair or Market Value of Assets.

9. Reporting Date

The last day of the plan or employer's fiscal year.

10. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 67 and 68. The service cost is the normal cost calculated under the Entry Age Actuarial Cost Method.

11. Total Pension Liability

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 GASB 67 and 68. The Total Pension Liability is the Actuarial Liability calculated under the Entry Age Actuarial Cost Method.





Classic Values, Innovative Advice