

# COUNTY OF TULARE BOARD OF RETIREMENT

Leanne Malison Retirement Administrator

136 N AKERS STREET VISALIA, CALIFORNIA 93291 TELEPHONE (559) 713-2900 FAX (559) 730-2631 www.tcera.org

AGENDA OF THE BOARD OF RETIREMENT REGULAR RETIREMENT BOARD MEETING Wednesday, November 2, 2022 at 8:30 a.m. TCERA Board Room, 136 N. Akers Street, Visalia, CA 93291

#### NOTICE TO THE PUBLIC

Documents related to the items on this agenda are available for public inspection at the Retirement Office, 136 N Akers Street, Visalia, CA, during normal business hours. Such documents are also available on TCERA's website, www.tcera.org, subject to staff's ability to post the documents before the meeting.

Persons wishing to listen to the meeting in progress may access a live stream link located on TCERA's website <u>www.tcera.org</u>.

#### **PUBLIC COMMENTS:**

Any person addressing the Board will be limited to a maximum of five (5) minutes. A total of 15 minutes will be allotted for the Public Comment period unless otherwise extended by the Board Chair. If you are part of a large group that would like to comment on an agenda item, please consider commenting in writing or sending one spokesperson to speak on behalf of the group. Public comments are limited to any item of interest to the public that is within the subject matter jurisdiction of the Board of Retirement. (Gov't Code Section 54954.3(a).)

**In Person**: Persons who wish to address the Board of Retirement during public comment or regarding an item that is on the agenda may address the Board of Retirement in person at the meeting.

**Zoom**: Persons wishing to participate in public comment remotely may call the TCERA Office during regular business hours (Monday through Friday, 8:00 a.m. to 5:00 p.m.) within 48 hours of the meeting at 559-713-2900 for access information. In an effort to assist the Board Secretary in identifying the agenda item relating to your public comment, please indicate the agenda item number in the chat feature.

**Email**: Members of the public may also submit public comment via U.S. mail or via email to BORPublicComment@tularecounty.ca.gov before the meeting. The comments received via U.S. mail or email before the meeting will be read to the Board of Retirement in open session during the meeting as long as the comments meet the requirements for Public Comments as posted in the agenda.

# As a courtesy to those in attendance, all individuals are requested to place cell phones and other electronic devices in the non-audible alert mode.

#### I. CALL TO ORDER

#### II. ROLL CALL

#### **III. PLEDGE OF ALLEGIANCE**

#### **IV. PUBLIC COMMENT**

At this time, members of the public may comment on any item not appearing on the agenda. Under state law, matters presented under this item cannot be discussed or acted upon by the Board at this time. For items appearing on the agenda, the public is invited to make comments at the time the item comes up for Board consideration. Any person addressing the Board will be limited to a maximum of five (5) minutes. Please state your name for the record.

#### V. X-AGENDA ITEMS

#### **VI. DISABILITIES**

- 1. Closed session to be held regarding disability matters listed on this agenda.
- 2. In the matter of the disability application of Tonnya Lack, consider and take action regarding the application for a disability retirement.

#### VII. PERSONNEL MATTERS

- 1. Closed session to be held regarding:
- 2. PUBLIC EMPLOYEE APPOINTMENT- Title: Assistant Retirement Administrator, Government Code Section 54957

#### VIII. CONSENT CALENDAR

- 1. Approve payments to:
  - a. Boston Partners invoice for investment management services in the amount of \$72,152.82 for the quarter ended September 30, 2022.
  - b. William Blair invoice for investment management services in the amount of \$67,268.52 for the quarter ended September 30, 2022.
  - c. Cheiron invoice for actuarial services in the amount of \$27,941.25 for the quarter ended September 30, 2022.

#### IX. ADMINISTRATIVE COMMITTEE REPORT

- 1. Update by Dave Kehler regarding the Administrative Committee meeting of October 26, 2022. Discussion and possible action regarding the following items:
  - a. TCERA and TCERA Property, Inc. Financial Statements July 31, 2022, and August 31,2022

#### X. INVESTMENTS

1. Discussion and possible action regarding TCERA's strategic investment allocation and investment managers, including performance, contracts, and fees.

#### XI. NEW BUSINESS

- 1. Discussion and possible action regarding the following actuarial reports, including actuarial assumptions, methods, and contribution rates:
  - a. June 30, 2022 Actuarial Valuation.
  - b. June 30, 2022 GASB 67/68 Report.
- 2. Discussion and possible action regarding Invoice Approval Policy.
- 3. Discussion and possible action regarding Student Status Policy.

#### XII. EDUCATION ITEMS

- 1. Discussion and possible action regarding education summaries.
  - a. Leanne Malison Nossaman Public Pensions & Investment Fiduciaries' Forum, October 17-18, 2022, 7 hours.
- 2. Discussion and possible action regarding educational events.

#### XIII. COMMUNICATIONS

- 1. Discussion and possible action regarding Legislative Update 2022 General Election Review, Part I, Partisan Races.
- 2. Discussion and possible action regarding Legislative Update 2022 General Election Review, Part II, Democrat vs. Democrat Races.

#### XIV. UPCOMING MEETINGS

- 1. Investment Committee Meeting, November 2, 2022, 10:00 a.m.
- 2. Board of Retirement Meeting November 16, 2022, 8:30 a.m.
- 3. Administrative Committee Meeting November 16, 2022, 10:00 a.m.

#### XV. TRUSTEE/STAFF COMMMENTS

Under state law, matters presented under this item cannot be discussed or acted upon by the Board at this time.

#### XVI. ADJOURNMENT

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Secretary of the Board of Retirement at (559) 713-2900. Notification 48 hours prior to the meeting will help enable staff to make reasonable arrangements to ensure meaningful access. Documents related to the items on this Agenda submitted after distribution of the Agenda packet are available for public inspection at TCERA, 136 N. Akers Street, Visalia, CA. during normal business hours.

### SostonPartners

Jake Flores, Administrative Services Officer Tulare County Employees' Retirement Association 136 North Akers Street Visalia, CA 93291

RECEIVED OCT 1 9 2022 TULARE COUNTY

 Invoice Date:
 09/30/2022

 Invoice Number:
 20220930-246-A

EMPLOYEES RETIREMENT ASSOCIATION

Billing Portfolio(s): D709 - Tulare County Employees' Retirement Association

Billing Period: 07/01/2022 to 09/30/2022

SUMMARY FOR INVESTMENT SERVICES

	Current Period Amount Due: \$72			72,152.82		
QUARTEREND Fee	Invoice	Current Period Due	30-60 Days	60-90 Days	Over 90 Days	Total_
Tulare County Employees' Retirement Association	20220930-246-A	72,152.82				72,152.82
Total Amount Due		72,152.82		i duot di		72,152.82

Please contact James Vitelli directly at 212-908-0149 with any billing inquiries. As always, you may also direct any questions to your Relationship Manager.

direct any questions to your relationents manager	CHECKED:	Initial	Date	
	VERIFIED:	<u>DQ</u> Initial	02622 Date	
	APPROVED:	Initial	Date	
	PAID:	Wired	Date	

We would appreciate receiving your payment along with the remittance slip within 30 days of receipt of this involce.

#### WIRE / TRANSFER FUNDS TO:

JP Morgan Chase; ABA #021000021; ACCT #066-654610 REFERENCE: Boston Partners

### Ref Acct #: D709

MAIL REMITTANCES TO: Accounts Receivable Boston Partners One Grand Central Place, 60 East 42nd Street, Suite 1550 New York, NY 10165 Email jvitelli@boston-partners.com Thank You

# Period Market Values (USD) Tulare County Employees' Retirement - D709

Monthly Values	07/31/2022	Market Value				71,281	,632.85		71,28	31,632.85
	08/31/2022	Market Value				69,398	,108.53		69.3	98,108.53
	09/30/2022	Market Value				63,844	,197.47		63.8	14, 197, 47
	Average for	Period							\$ 68,17	74,646.28
Annual Fee Schedu	ıle (IMFEE -	USD)								
0.00	to		50,000,0	00.00				45.00	BPS	
50,000,000.01	to		100,000,0	00.00				35.00	BPS	
100,000,000.01	and above							30.00	BPS	
Quarterly Fee Calc	ulation (IMF	EE - USD)								
50,000,000.00	• 4	5.00 BPS		90	1	360	=			56,250.00
18,174,646.28	* 3	5.00 BPS 🗸	ŧ	90	1	360	=			15,902.82
				Sch	edule <sup>-</sup>	ſotal:			\$	72,152.82
Fee Details:										70 450 90
	Total	IMFEE (D709)								12,102.02
		Fee Total:							\$	72,152.82

Invoice Summary Fee Totals:

Total Amount Due:	\$ 72,152.82
Fee Total For IMFEE:	72,152.82

William Blair RECEIVED OCT 2 5 2022 **TULARE COUNTY** Leanne Malison Tulare County Employees' Retirment Association EMPLOYEES RETIREMENT ASSOCIATION 136 N. Akers Visalia, CA 93291 SUMMARY FOR INVESTMENT SERVICES 21 October 2022 Invoice Date 20220930-764-A Invoice Number 01 July 2022 to 30 September 2022 **Billing Period** 275376 - Tulare County Employees' Retirement Association **Billing Portfolios** Fee Account Name Custodian Account # 67,268.52 Tulare County Employees' Retirement Association 275376 \$67,268.52 **Total Amount Due** \* See attached worksheet for calculation details 10/25/22 CHECKED: Date. Initial 10/26/22 VERIFIED: Date Initial APPROVED: Date Initial PAID: Date Wired 4777 08

### PAYMENT DUE UPON RECEIPT

PLEASE ENCLOSE COPY OF INVOICE IN RETURN ENVELOPE

Wire/Transfer Funds To: Bank Account: 8900619929 ABA: 021000018 Bank of New York Further Credit: Account Name and Number

#### Mail Remittance To:

William Blair Accounts Receivable 150 North Riverside Plaza Chicago, IL 60606

Should you have any questions regarding this invoice, please email If you have any questions, please contact your client service representative.

Invoice Date	21 October 2022	
Invoice Number	20220930-764-A	

# Period Market Value (USD)

Monthly Values	31 July 2022	Market Value	69,054,571.76
·	31 August 2022	Market Value	64,751,122.14
	30 September 2022	Market Value	58,169,601.48

Average

\$63,991,765.13

# Quarterly Fee Calculation (Management Fee - USD)

	Fee Calculation	Billable Assets	Basis Points	Billable Days	Fee
First	50.000.000.00	50,000,000.00	50.000 -	90/360	62,500.00
Next	50,000,000.00	13,991,765.13	35.000	90/360	12,242.80
		63,991,765.13			74,742.80
			Disco	unt @ 10%:	(7,474.28)
			Sch	nedule Total	\$67,268.52

Invoice Summary	/01-09/30 Fee Total for Management Fee	67,268.52
	Total Fee	67,268.52
	Total Amount Due	\$67,268.52

## Invoice

Bill To: Ms. Loanne Malison	For: Actuarial Services	
McLean, VA 22102 Phone 1-703-893-1456 Fax 1-703-893-2006 Tax Id: 13-4215617	lnv. #	44786
8300 Greensboro Drive, Suite 800	Date:	17-Oct-22

Ms. Leanne Malison Retirement Administrator Tulare County Employees' Retirement Association 136 N. Akers Street Visalia, CA 93291

Cheiron

DESCRIPTION	AMOUNT
PROFESSIONAL SERVICES (July 1, 2022 through September 30, 2022)	
2022 Valuation (Progress through 09/30/2022)	\$ 25,941.25
Misc. Retainer Work (Joint Board Meeting, Asset Review, and Auditor Response)	\$ 2,000.00
Payment Options Pay by Check Cheiron, Inc., P.O. Box 37117, Baltimore, MD 21297-3117 Pay by Electronic Deposit / ACH BB&T, Routing Number: 051404260, Account Number: 0000155739428 <u>Please include invoice number(s) with your payment</u> and forward the payment confirmation to accounting@cheiron.us to ensure payment is applied accurately.	\$ 27.941.25
TOTAL	\$ 27,941.25

If you have any questions concerning this invoice, please contact accounting@cheiron.us or 703-893-1456, x1020.

THANK YOU FOR YOUR BUSINESS!

-CHEIRON 🧩

# Invoice

Bill To: Ms. Leanne Malison	For: Actuarial Servic	es
McLean, VA 22102 Phone 1-703-893-1456 Fax 1-703-893-2006 Tax Id: 13-4215617	inv. #	44786
8300 Greensboro Drive, Suite 800	Date:	17-Oct-22

Ms. Leanne Malison Retirement Administrator Tulare County Employees' Retirement Association 136 N. Akers Street Visalia, CA 93291

Cheiron

DESCRIPTION		AMOUNT
PROFESSIONAL SERVICES (July 1, 2022 through September 30, 2022)		
2022 Valuation (Progress through 09/30/2022)	\$	25,941.25
Misc. Retainer Work (Joint Board Meeting, Asset Review, and Auditor Response)	\$	2,000.00
Payment Options         Pay by Check         Cheiron, Inc., P.O. Box 37117, Baltimore, MD 21297-3117         Pay by Electronic Deposit / ACH         BB&T, Routing Number: 051404260, Account Number: 0000155739428         Please include invoice number(s) with your payment         and forward the payment confirmation         to accounting@cheiron.us to ensure payment is applied accurately.		
TOTAL	\$	27,941.25
	L	vithin contract
If you have any questions concerning this invoice, please contact accounting@cheiron.us or 703-893-1456, >	:1020.	AT

THANK YOU FOR YOUR BUSINESS!

October 17, 2022

Via Electronic Mail

Ms. Leanne Malison Retirement Administrator Tulare County Employees' Retirement Association 136 N. Akers Street Visalia, CA 93291

Dear Leanne:

Enclosed with this letter is our statement of professional services related to the actuarial services provided. If you have any questions about setting up ACH direct payment, please contact accounting@cheiron.us or (703) 893-1456, x1020.

If you have any questions, please feel free to call myself or the accounting department.

Sincerely, Cheiron

schin

Graham A. Schmidt, ASA, EA, FCA, MAAA Consulting Actuary (703) 893-1456, x1137 gschmidt@cheiron.us

27,941,20,7.22 Jip From LM Jip



www.cheiron.us 1.877.CHEIRON (243.4766)



# COUNTY OF TULARE BOARD OF RETIREMENT

Leanne Malison Retirement Administrator

136 N AKERS STREET VISALIA, CALIFORNIA 93291 TELEPHONE (559) 713-2900 FAX (559) 730-2631 www.tcera.org

#### TCERA, Board of Retirement Administrative Committee

Agenda Item # IV.2.c.

Agenda Date: October 26, 2022

Subject: TCERA and TCERA Property, Inc. Financial Statements – July 31, 2022 and August 31, 2022

#### **Requests:**

That the Administrative Committee:

- 1. Review the TCERA and TCERA Property, Inc. Financial Statements for July 31, 2022 and August 31, 2022.
- 2. Forward the Financial Reports to the Board of Retirement with a recommendation for approval.

#### Summary:

The July 31, 2022 and August 31, 2022 TCERA and TCERA Property, Inc. Financial Statements have been prepared by TCERA accounting staff for the Committee's review.

Prepared by: Mary Warner

#### TCERA and TCERA Property, Inc. Combined Balance Sheet Comparison As of July 31, 2022 *After Interest Posting*

		Jul 31, 22	Jun 30, 22	\$ Change	% Change	Jul 31, 21	\$ Change	% Change
ASSETS								
Cun	rent Assets							
	Checking/Savings							
(Note 1)	1110 · Cash in County Treasury	47,903,983.37	13,279,818.44	34,624,164.93	260.73%	42,171,615.13	5,732,368.24	13.59%
	1120 · Cash in Custodial Account	36,113,972.89	14,444,770.76	21,669,202.13	150.01%	26,155,498.15	9,958,474.74	38.07%
(Note 2)	1130 · Short Term Investments	6,675,379.18	8,299,332.89	-1,623,953.71	-19.57%	33,372,212.63	-26,696,833,45	-80.00%
(Note 3)	1140 · Securities Lending Collateral	0.00	28,721,854.35	-28,721,854.35	-100.00%	0.00	0.00	0.00%
	Total Checking/Savings	90,693,335.44	64,745,776.44	25,947,559.00	40.08%	101,699,325.91	-11,005,990.47	-10.82%
	Other Current Assets							
	1310 · Fixed Income - Market	363,051,105.20	361,251,652.73	1,799,452.47	0.50%	564,674,851.36	-201,623,746.16	-35.71%
	1340 · Equities - Market	857,034,754.31	797,565,483.51	59,469,270.80	7.46%	960,089,773.88	-103,055,019.57	-10.73%
(Note 4)	1375 · Real Assets	372,134,639.89	393,077,960.11	-20,943,320.22	-5.33%	195,567,700.51	176,566,939.38	90.28%
	1386 · Private Equity	133,120,232.76	133,288,571.93	-168,339.17	-0.13%	124,163,726.01	8,956,506.75	7.21%
	1388 · Private Credit	111,610,767.00	107,403,219.00	4,207,548.00	3.92%	107,955,953.00	3,654,814.00	3.39%
	Total Other Current Assets	1,836,951,499.16	1,792,586,887.28	44,364,611.88	2.48%	1,952,452,004.76	-115,500,505.60	-5.92%
Tota	I Current Assets	1,927,644,834.60	1,857,332,663.72	70,312,170.88	3.79%	2,054,151,330.67	-126,506,496.07	-6.16%
Fixe	d Assets							
	1501 · Building and Improvements	1,278,288.95	1,278,288.95	0.00	0.00%	1,178,366.03	99,922.92	8.48%
	1505 · Office Equipment & Computer System	175,264.64	175,264,64	0.00	0.00%	178,552,49	-3,287.85	-1.84%
	1506 · Project in Process CPAS	2,755,095.55	2,755,095.55	0.00	0.00%	2,755,095.55	0.00	0.00%
	1511 · Accumulated Depreciation	-3,462,787.44	-3,462,787.44	0.00	0.00%	-3,109,385.42	-353,402.02	-11.37%
	1512 · Land	370,345.69	370,345.69	0.00	0.00%	370,345.69	0.00	0.00%
Tota	I Fixed Assets	1,116,207.39	1,116,207.39	0.00	0.00%	1,372,974.34	-256,766.95	-18.70%
Othe	er Assets							
	1710 · Open Trades Sales	12,773,042.13	11,740,850.41	1,032,191.72	8.79%	13,328,431.32	-555,389.19	-4.17%
	1730 · Investment Income Receivable	938,538.11	838,981.94	99,556.17	11.87%	941,001.64	-2,463,53	-0.26%
	1735 · Real Assets Income Receivable	0.00	0.00	0.00	0.00%	0.00	0.00	0.00%
(Note 5)	1750 · Members Contribution Receivable	0.00	887,086.34	-887,086.34	-100.00%	0.00	0.00	0.00%
(Note 5)	1770 · Employer Contribution Receivable	0.00	110,812.47	-110,812.47	-100.00%	0.00	0.00	0.00%
	1780 · Advances Rec- Holding Corp	365,230.00	374,230.00	-9,000.00	-2.41%	473,230.00	-108,000.00	-22.82%
	1785 · Pension Deaths Receivables	-97.96	-97.96	0.00	0.00%	0.00	-97,96	-100.00%
	1790 · Other Receivables	0.00	0.00	0.00	0.00%	6,720.05	-6,720.05	-100.00%
Tota	I Other Assets	14,076,712.28	13,951,863.20	124,849.08	0.90%	14,749,383.01	-672,670.73	-4.56%
TOTAL A	SSETS	1,942,837,754.27	1,872,400,734.31	70,437,019.96	3.76%	2,070,273,688.02	-127,435,933.75	-6.16%

#### TCERA and TCERA Property, Inc. Combined Balance Sheet Comparison As of July 31, 2022 After Interest Posting

		Jul 31, 22	Jun 30, 22	\$ Change	% Change	Jul 31, 21	\$ Change	% Change
LIABILIT	IES & EQUITY							
Liat	pilities							
	Current Liabilities							
(Note 3)	2010 · Sec Lending Collateral Payable	0.00	28,721,854.35	-28,721,854.35	-100.00%	0.00	0.00	0.00%
(Note 6)	2020 · Open Trades - Purchases	11,596,870.43	17,516,012.64	-5,919,142.21	-33.79%	44,119,776.52	-32,522,906.09	-73.72%
(Note 5)	2030 · Accounts Payable - Inv	376,260.40	790,739.17	-414,478.77	-52.42%	634,592.88	-258,332.48	-40.71%
	2040 · Refunds Payable	4,102,418.01	4,102,418.01	0.00	0.00%	4,098,875.89	3,542.12	0.09%
(Note 5)	2050 · Other Payables	85,845.25	2,289,484.14	-2,203,638.89	-96.25%	89,673.30	-3,828.05	-4.27%
(Note 5)	2100 · Payroll Liabilities	0.00	41,399.38	-41,399.38	-100.00%	0.00	0.00	0.00%
	Total Other Current Liabilities	16,161,394.09	53,461,907.69	-37,300,513.60	-69.77%	48,942,918.59	-32,781,524.50	-66.98%
	Total Current Liabilities	16,161,394.09	53,461,907.69	-37,300,513.60	-69.77%	48,942,918.59	-32,781,524.50	-66.98%
	Long Term Liabilities							
	2060 · Accrual-Benefits at Termination	106,256.43	106,256.43	0.00	0.00%	115,302.68	-9.046.25	-7.85%
	2070 · Advances Payable - TCERA	365,230.00	374,230.00	-9,000.00	-2.41%	473,230,00	-108,000,00	-22.82%
	Total Long Term Liabilities	471,486.43	480,486.43	-9,000.00	-1.87%	588,532.68	-117,046.25	-19.89%
Tota	al Liabilities	16,632,880.52	53,942,394.12	-37,309,513.60	-69.17%	49,531,451.27	-32,898,570.75	-66.42%
Equ	ity							
	3110 · Member Deposit Reserve	358,604,609.23	359,335,249.09	-730,639.86	-0.20%	338,548,528.23	20,056,081.00	5.92%
(Note 7)	3120 · Other Reserves - Unapportioned	-2,977,730.40	-2,971,237,65	-6,492.75	-0.22%	2,652,760.29	-5,630,490.69	-212.25%
	3210 · Employer Advance Reserves	964,098,556.34	966,012,280.62	-1,913,724.28	-0.20%	907,033,895.47	57,064,660.87	6.29%
	3310 · Retiree Reserves	463,237,206.98	460,586,350.09	2,650,856.89	0.58%	449,113,998.47	14,123,208.51	3.15%
	3320 · Supp. Retiree Benefit Reserve	113,701,856.85	113,701,856.85	0.00	0.00%	108,446,851.09	5,255,005.76	4.85%
	3410 · Contingency Reserve	55,608,454.13	55,608,454.13	0.00	0.00%	60,735,602.01	-5,127,147.88	-8.44%
	3510 · Market Stabilization	-134,802,290.00	-134,802,290.00	0_00	0.00%	108,713,808.00	-243,516,098.00	-224.00%
	3810 · Income Summary Account	0.00	0.00	0.00	0.00%	0.00	0.00	0.00%
	3900 · Retained Earnings	987,677.06	158,714,189.56	-157,726,512.50	-99.38%	939,409.13	48,267.93	5.14%
	Net Income	107,746,533.56	-157,726,512.50	265,473,046.06	168.31%	44,557,384.06	63,189,149.50	141.82%
Tota	al Equity	1,926,204,873.75	1,818,458,340.19	107,746,533.56	5.93%	2,020,742,236.75	-94,537,363.00	-4.68%
TOTAL L	IABILITIES & EQUITY	1,942,837,754.27	1,872,400,734.31	70,437,019.96	3.76%	2,070,273,688.02	-127,435,933.75	-6.16%

Notes:

Note 1 County Prepaid Contributions for fiscal year 22/23 \$41,428,253

Note 2 Timing of manager short term positions

Note 3 Annual Securities Lending Accruals & Adjustments

Note 4 Increase over last year due to 3 new Real Asset managers: SSGA US REIT, Invesco and ARA

Note 5 Annual Adjustments & Accruals

Note 6 Decrease in Open Trade Purchases over last mo. and last year

Note 7 Interim interest payments/adjustments and private market adjustments

		After Interest Posting							
		Jul 22	Jun 22	\$ Change	% Change	Jul 22	Jul 21	\$ Change	% Change
Ordin	ary Income/Expense							it	
I	ncome								
	4110 · Interest Income	320,363.67	355,720,38	-35,356.71	-9.94%	320,363.67	252,120.49	68,243.18	27.07%
	4120 · Dividend Income	194,681.09	296,688.98	-102,007.89	-34.38%	194,681.09	219,559.77	-24,878.68	-11.33%
(Note 1)	4130 - Real Assets Income	2,775,949.31	504,787.39	2,271,161.92	449.92%	2,775,949.31	0.00	2,775,949.31	100.0%
(Note 2)	4140 · Other Investment Income	285,243.76	197,585.75	87,658.01	44.37%	285,243.76	163,169.80	122,073.96	74.81%
	4200 · Lease Payments from TCERA	15,640.00	15,640.00	0.00	0.0%	15,640.00	15,640.00	0.00	0.0%
	4310 · Commission Rebates	33.23	0.00	33.23	100.0%	33.23	0.00	33.23	100.0%
(Note 3)	4410 · Securities Lending Income	8,850.46	86,906.17	-78,055.71	-89.82%	8,850.46	0.00	8,850.46	100.0%
(Note 4)	4510 · Realized Gains/Losses	50,199.46	159,784,242.64	-159,734,043.18	-99.97%	50,199.46	36,445,683.03	-36,395,483.57	-99.86%
	4530 · Gn/Ls Disposal of Fixed Asset	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
(Note 5)	4610 · Employee Contributions	1,168,922.00	2,890,355.83	-1,721,433.83	-59.56%	1,168,922.00	1,172,737.20	-3,815.20	-0.33%
(Note 5)	4620 · Employer Contributions	43,635,245.28	-1,579,999.29	45,215,244.57	2,861.73%	43,635,245.28	39,319,706.14	4,315,539.14	10.98%
·	Total Income	48,455,128.26	162,551,927.85	-114,096,799.59	-70.19%	48,455,128.26	77,588,616.43	-29,133,488.17	-37.55%
I	Expense								
	5110 · Benefit Payments	8,419,358.88	8,445,374.55	-26,015.67	-0.31%	8,419,358.88	7,935,146.48	484,212.40	6.1%
(Note 6)	5120 · Refunds	225,198.21	-1,029,102.91	1,254,301.12	121.88%	225,198.21	297,048.63	-71,850.42	-24.19%
(Note 7)	5130 · Death Retiree ROC	141,807.81	0.00	141,807.81	100.0%	141,807.81	0.00	141,807.81	100.0%
	5140 · SDA Payments	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
(Note 8)	5210 · Investment Management Fees	124,660.00	1,311,410.30	-1,186,750.30	-90.49%	124,660.00	120,635.00	4,025.00	3.34%
(Note 8)	5250 · Inv. Consultant/Custodial Fees	0.00	302,162.86	-302,162.86	-100.0%	0.00	0.00	0.00	0.0%
(Note 3)	5270 · Securities Lending Expense	0.00	73,855.72	-73,855.72	-100.0%	0.00	0.00	0.00	0.0%
	5275 · Real Assets Investment Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
(Note 8)	5276 · Real Assets Mgr Fees	0.00	870,845.89	-870,845.89	-100.0%	0.00	0.00	0.00	0.0%
(Note 9)	5280 · Other Investment Expense	489.99	27,812.23	-27,322.24	-98.24%	489.99	5,922.45	-5,432.46	-91.73%
(Note 8)	5410 · Actuarial Study Fees	0.00	2,000.00	-2,000.00	-100.0%	0.00	0.00	0.00	0.0%
(Note 8)	5450 · Compensated Benefit Expense	0.00	-9,046.25	9,046.25	100.0%	0.00	0.00	0.00	0.0%
*	5500 · Administrative Expense	161,170.82	329,965.46	-168,794.64	-51.16%	161,170.82	153,458.86	7,711.96	5.03%
*	5750 · TCERA Property Admin Expense	1,000.40	4,930.49	-3,930.09	-79.71%	1,000.40	593,75	406.65	68.49%
(Note 8)	5910 · Deprec/Amort of Fixed Assets	0.00	356,689.87	-356,689.87	-100.0%	0.00	0.00	0.00	0.0%
Ŀ	Fotal Expense	9,073,686.11	10,686,898.21	-1,613,212.10	-15.1%	9,073,686.11	8,512,805.17	560,880.94	6_59%
Net O	rdinary Income	39,381,442.15	151,865,029.64	-112,483,587.49	-74.07%	39,381,442.15	69,075,811.26	-29,694,369.11	-42.99%

#### TCERA and TCERA Property, Inc. Combined Comparative Profit and Loss July 31, 2022

### TCERA and TCERA Property, Inc. Combined Comparative Profit and Loss July 31, 2022

	After interest rosung							
	Jul 22	Jun 22	\$ Change	% Change	Jul 22	Jul 21	\$ Change	% Change
Other Income/Expense					5			
Other Income								
4520 · Unrealized Gains/Losses	68,365,091.41	-221,437,275.68	289,802,367.09	130.87%	68,365,091.41	-24,518,427.20	92,883,518.61	378.83%
4525 · Unrealized Gns/Ls Building/Land	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
5000 · Other Income	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
Total Other Income	68,365,091.41	-221,437,275.68	289,802,367.09	130.87%	68,365,091.41	-24,518,427.20	92,883,518.61	378.83%
Other Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
Not Other Income	69 265 001 41	221 427 275 69	280 802 267 00	400.07%	00.005.004.44	04 540 407 00	00 000 540 04	
Net Other Income	00,305,091.41	-221,437,275,68	289,802,367.09	130.87%	68,365,091.41	-24,518,427.20	92,883,518.61	378.83%
Net Income	107,746,533.56	-69,572,246.04	177,318,779.60	254.87%	107,746,533.56	44,557,384.06	63,189,149.50	141.82%

#### Notes:

Note 1 Real Assets Investment Income reported quarterly and one-two month in arrears

Note 2 Increase in Other Investment Income over last mo. and last yr. from Private Credit

Note 3 Annual Securities Lending Accrual

Note 4 Decrease in Realized Gains over last mo. from Accrual in Public Equity

Note 5 Accruals for EE & ER Contributions; Co. Prepayment ER Contributions FY22/23

Note 6 Semi-Annual Refund Accrual

Note 7 Increase in Retiree deaths with remaining contributions over last mo. and last year

Note 8 Accruals

Note 9 Decrease in Other Investment Expenses over last mo. and last year

\* See Budget report for detail of Administrative expenses (5500 and 5750)

#### TCERA and TCERA Property, Inc. BUDGET VS ACTUAL July 2022 Accounting Period 1 8.33% of the Current Fiscal Year Budget

After Interest Posting

		Jul 22	Jul 21	Jul 22	Annual Budget	Remaining Budget	% Annual Budget
5500 · Ad	ministrative Expense						
	5505 · (6001) Allocated Salaries	37,358.71	37,663.74	37,358.71	1,158,174.00	1,120,815.29	3.23%
	5510 · (6002) Overtime	0.00	0.00	0.00	1,000.00	1,000.00	0.00%
	5515 · (6003) Other Pay	269.15	4,840.96	269.15	34,700.00	34,430.85	0.78%
	5520 · (6004) Benefits	6,963.38	6,764.09	6,963.38	153,495.00	146,531.62	4.54%
	5525 · (6005) Extra-Help	0.00	0.00	0.00	500.00	500.00	0.00%
	5535 · (6011) Retirement- Co. Port.	5,479.38	5,909.69	5,479.38	153,802.00	148,322.62	3,56%
	5540 · (6012) Social Security	2,925.37	3,279.25	2,925.37	86,230.00	83,304.63	3.39%
	5545 · (1024) POB Cost	0.00	0.00	0.00	98,100.00	98,100.00	0.00%
(Note 1)	5550 · (6008) Board Fees-Per Diem Pmts	4,900.25	4,844.25	4,900.25	20,000,00	15,099.75	24.50%
	5551 · Communications						
	5552 · (7005) Communications	0.00	0.00	0.00	8,700.00	8,700.00	0.00%
	5640 · (7005) Co. Telecommunication	595.04	0.00	595.04	15,250.00	14,654.96	3.90%
	Total 5551 · Communications	595.04	0.00	595.04	23,950.00	23,354.96	2.48%
	5553 · Data Processing						
	5650 · (7044) ICT Qtrly - Data Process	0.00	0.00	0.00	100,830.00	100,830,00	0.00%
	5697 · (7044) Computer Exp Hdwr/Sftwr	0.00	0.00	0.00	39,360.00	39,360.00	0.00%
	5698 · (7044) WSI/Q2 Digital	0.00	0.00	0.00	3,000.00	3,000.00	0.00%
	Total 5553 · Data Processing	0.00	0.00	0.00	143,190.00	143,190.00	0.00%
	5555 · (7009) Household Expense	1,347.63	58.85	1,347.63	18,928.00	17,580.37	7.12%
(Note 2)	5560 · (7010) Insurance	65,971.00	58,624.00	65,971.00	67,113.00	1,142.00	98.30%
	5565 · (7011) Unemployment Insurance	0.00	0.00	0.00	6,000.00	6,000.00	0.00%
	5570 · (7021) Maintenance-Equipment	102.63	42.37	102.63	4,100.00	3,997.37	2.50%
(Note 3)	5575 · (7027) Memberships	4,000.00	4,000.00	4,000.00	8,075.00	4,075.00	49.54%
	5580 · (7030) Due Diligence Expense	0.00	783.29	0.00	15,000.00	15,000.00	0.00%
	5585 · (7036) Office Expense	395.63	146.85	395.63	72,276.00	71,880.37	0.55%
	5586 · (7040) Courier	0.00	0.00	0.00	1,550.00	1,550.00	0.00%
	5590 · Prof & Specialized Exp						
	5591 · (7043) Prof & Special Gen Exp	0.00	0.00	0.00	500.00	500.00	0.00%
	5592 · (7043) Prof & Spec - Audit	0.00	0.00	0.00	47,600.00	47,600.00	0.00%
	5593 · (7043) Prof Sr -Outside Counsel	0.00	0.00	0.00	75,000.00	75,000.00	0.00%
	Total 5590 · Prof & Specialized Exp	0.00	0.00	0.00	123,100.00	123,100.00	0.00%
	5594 · County Counsel Charges						
	5661 · (7046) Co Counsel - General Exp	122.40	0.00	122.40	40,000.00	39,877.60	0.31%
	5662 · (7046) Co Counsel - Disability	0.00	0.00	0.00	93,000.00	93,000.00	0.00%
	Total 5594 · County Counsel Charges	122.40	0.00	122.40	133,000.00	132,877.60	0.09%
	5595 · (7049) Prof Exp-Disabilities	3,000.00	628.05	3,000.00	172,500.00	169,500.00	1.74%
	5600 · (7059) Publications	0.00	0.00	0.00	25,000.00	25,000.00	0.00%
	5675 · (7059) Co. Print Services	0.00	0_00	0.00	16,000.00	16,000.00	0.00%
	Total 5600 · (7059) Publications	0.00	0.00	0.00	41,000.00	41,000.00	0.00%

#### TCERA and TCERA Property, Inc. BUDGET VS ACTUAL July 2022 Accounting Period 1 8.33% of the Current Fiscal Year Budget

After Interest Posting

		Jul 22	Jul 21	Jul 22	Annual Budget	Remaining Budget	% Annual Budget
	5605 · (7062) Rent & Lease -Building	15,640.00	15,640.00	15,640.00	187,680.00	172.040.00	8.33%
	5610 · (7066) Spec Dept Exp - RIS	7,941.00	7,941.00	7,941.00	321,835.00	313,894.00	2.47%
	5615 · (7073) Training	1,500,00	0.00	1,500.00	32,975.00	31,475.00	4.55%
	5620 · (7074) Transportation & Travel	464.50	67.70	464.50	35,000.00	34,535.50	1.33%
(Note 4)	5625 · (7081) Utilities	2,194.75	2,223.67	2,194.75	22,400.00	20,205.25	9.80%
	5627 · (7116) Postage - Co. Mail	0.00	1.10	0.00	50,000.00	50,000.00	0.00%
	5630 · (7128) Co. Workers Comp Insurance	0.00	0.00	0.00	55,000.00	55,000.00	0.00%
	5695 · Co. Admin. Services						
	5666 · (7719) HR/Risk Services	0.00	0.00	0.00	14,200.00	14,200.00	0.00%
	5699 · (7719) Auditors Services	0.00	0.00	0.00	7,500.00	7,500.00	0.00%
	Total 5695 · Co. Admin. Services	0.00	0.00	0.00	21,700.00	21,700.00	0.00%
	5720 · (7421) Interest Expense	0.00	0.00	0.00	1.00	1.00	0.00%
	5450 · Compensated Benefit Expense	0.00	0.00	0.00	30,688.00	30,688.00	0.00%
	5911 · Depreciation - TCERA	0.00	0.00	0.00	19,200.00	19,200.00	0.00%
Total TCE	RA Administrative Expense	161,170.82	153,458.86	161,170.82	3,312,262.00	3,151,091.18	4.87%
5750 · TC	ERA Property Administrative Expense						
	5755 · Fees and Taxes	0.00	0.00	0.00	200.00	200.00	0.00%
	5760 · Insurance	0.00	0.00	0.00	9,500.00	9,500.00	0.00%
	5765 · Professional & Spec Services	0.00	0.00	0.00	2,000.00	2,000.00	0.00%
	5780 · Courtyards Property Assn Dues	0.00	0.00	0.00	8,000.00	8,000.00	0.00%
	5785 · Landscape Service	0.00	0.00	0.00	8,550.00	8,550.00	0.00%
	5790 · Security Monitoring	350.00	35.66	350.00	8,500.00	8,150.00	4.12%
	5795 · Maintenance & Improve - Bldg	202.50	100.00	202.50	16,280.00	16,077.50	1.24%
	5797 · Utilities	447.90	458.09	447.90	7,000.00	6,552.10	6.40%
	5912 · Depreciation - TCERA Property	0.00	0.00	0.00	37,100.00	37,100.00	0.00%
Total TCE	RA Property, Inc. Administrative Expense	1,000.40	593.75	1,000.40	97,130.00	96,129.60	1.03%
Total TCE	RA & TCERA Property Administrative Expense	162,171.22	154,052.61	162,171.22	3,409,392.00	3,247,220.78	4.76%

Notes:	

Note 1Quarterly Per Diem paidNote 2Annual Insurance premiums paid

Note 3 Annual memberships paid: SACRS

Note 4 Increased electricity costs during summer months

Accrued Actuarial Liability	1,957,985,000
June 30, 2021	
.21% of AAL	4,111,768.50
8.33%	342,647.38
Expenses to date	(162, 171.22)
(Over)/Under	180,476.16

#### TCERA and TCERA Property, Inc. Combined Balance Sheet Comparison As of August 31, 2022

		Aug 31, 22	Jul 31, 22	\$ Change	% Change	Aug 31, 21	\$ Change	% Change
ASSETS					<u> </u>			
Cur	rent Assets							
	Checking/Savings							
	1110 · Cash in County Treasury	41,092,213.54	47,903,983.37	-6,811,769.83	-14.22%	37,563,478,62	3.528.734.92	9.39%
	1120 · Cash in Custodial Account	34,687,154.89	36,113,972.89	-1,426,818.00	-3.95%	34,362,460.92	324,693.97	0.95%
(Note 1)	1130 · Short Term Investments	6,101,115.12	6,675,379.18	-574,264.06	-8.60%	33,131,024.41	-27,029,909.29	-81.59%
	1140 · Securities Lending Collateral	0.00	0.00	0.00	0.00%	0.00	0.00	0.00%
	Total Checking/Savings	81,880,483.55	90,693,335.44	-8,812,851.89	-9.72%	105,056,963.95	-23,176,480.40	-22.06%
	Other Current Assets							
	1310 - Fixed Income - Market	361,936,392,44	365,208,103,15	-3.271.710.71	-0.90%	566 200 802 82	-204 264 410 38	-36 08%
	1340 · Equities - Market	828.537.855.43	857.034.754.31	-28,496,898,88	-3 33%	983 697 365 74	-155 159 510 31	-15 77%
(Note 2)	1375 · Real Assets	371,100,407.68	372,134,639,89	-1.034.232.21	-0.28%	195,567,700,51	175 532 707 17	89.76%
	1386 · Private Equity	135,013,464.26	133,670,964.28	1,342,499,98	1.00%	114.288.553.08	20,724,911,18	18 13%
	1388 · Private Credit	111,610,767.00	111,610,767.00	0.00	0.00%	107,955,953,00	3,654,814,00	3.39%
	Total Other Current Assets	1,808,198,886.81	1,839,659,228.63	-31,460,341.82	-1.71%	1,967,710,375.15	-159,511,488.34	-8.11%
Tota	I Current Assets	1,890,079,370.36	1,930,352,564.07	-40,273,193.71	-2.09%	2,072,767,339.10	-182,687,968.74	-8.81%
Fixe	d Assets							
	1501 · Building and Improvements	1,278,288.95	1,278,288.95	0.00	0.00%	1,178,366.03	99,922.92	8.48%
	1505 · Office Equipment & Computer System	175,264.64	175,264.64	0.00	0.00%	178,552.49	-3,287.85	-1.84%
	1506 · Project in Process CPAS	2,755,095.55	2,755,095.55	0.00	0.00%	2,755,095.55	0.00	0.00%
	1511 · Accumulated Depreciation	-3,462,787.44	-3,462,787.44	0.00	0.00%	-3,109,385.42	-353,402.02	-11.37%
	1512 · Land	370,345.69	370,345.69	0.00	0.00%	370,345.69	0.00	0.00%
Tota	I Fixed Assets	1,116,207.39	1,116,207.39	0.00	0.00%	1,372,974_34	-256,766.95	-18.70%
Oth	er Assets							
(Note 3)	1710 · Open Trades Sales	13,525,677.69	10,607,181.38	2,918,496.31	27.51%	22,321,238.55	-8,795,560.86	-39.40%
	1730 · Investment Income Receivable	1,071,043.65	938,538,11	132,505.54	14.12%	915,438.75	155,604.90	17.00%
	1735 · Real Assets Income Receivable	0_00	0.00	0.00	0.00%	0.00	0.00	0.00%
	1750 · Members Contribution Receivable	0.00	0.00	0.00	0.00%	0.00	0.00	0.00%
	1770 · Employer Contribution Receivable	0.00	0.00	0.00	0.00%	0.00	0.00	0.00%
	1780 · Advances Rec- Holding Corp	356,230.00	365,230.00	-9,000.00	-2.46%	464,230.00	-108,000.00	-23.26%
(Note 4)	1785 · Pension Deaths Receivables	-97.96	-97.96	0.00	0.00%	0.00	-97.96	-100.00%
(Note 4)	1790 · Other Receivables	0.00	0.00	0.00	0.00%	6,429.04	-6,429.04	-100.00%
Tota	I Other Assets	14,952,853.38	11,910,851.53	3,042,001.85	25.54%	23,707,336.34	-8,754,482.96	-36.93%
TOTAL A	SSETS	1,906,148,431.13	1,943,379,622.99	-37,231,191.86	-1.92%	2,097,847,649.78	-191,699,218.65	-9.14%

#### TCERA and TCERA Property, Inc. Combined Balance Sheet Comparison As of August 31, 2022

		Aug 31, 22	Jul 31, 22	\$ Change	% Change	Aug 31, 21	\$ Change	% Change
LIABILIT	IES & EQUITY							
Liat	bilities							
	Current Liabilities							
	2010 · Sec Lending Collateral Payable	0.00	0.00	0.00	0.00%	0.00	0.00	0.00%
(Note 5)	2020 · Open Trades - Purchases	19,099,728.52	11,588,007.63	7,511,720.89	64.82%	53,543,672.51	-34,443,943.99	-64,33%
(Note 6)	2030 · Accounts Payable - Inv	5,011.00	376,260.40	-371,249.40	-98.67%	167,731.18	-162,720.18	-97.01%
	2040 · Refunds Payable	4,102,418.01	4,102,418.01	0.00	0.00%	4,098,875.89	3,542.12	0.09%
	2050 · Other Payables	85,845.25	85,845.25	0.00	0.00%	78,917.05	6,928.20	8.78%
	2100 · Payroll Liabilities	0.00	0.00	0.00	0.00%	0.00	0.00	0.00%
	Total Other Current Liabilities	23,293,002.78	16,152,531.29	7,140,471.49	44.21%	57,889,196.63	-34,596,193.85	-59.76%
	Total Current Liabilities	23,293,002.78	16,152,531.29	7,140,471.49	44.21%	57,889,196.63	-34,596,193.85	-59.76%
	Long Term Liabilities							
	2060 · Accrual-Benefits at Termination	106,256.43	106,256.43	0.00	0.00%	115 302 68	-9 046 25	-7 85%
	2070 · Advances Payable - TCERA	356,230.00	365,230.00	-9.000.00	-2.46%	464,230,00	-108 000 00	-23.26%
	Total Long Term Liabilities	462,486.43	471,486.43	-9,000.00	-1.91%	579,532,68	-117 046 25	-20 20%
Tota	al Liabilities	23,755,489.21	16,624,017.72	7,131,471.49	42.90%	58,468,729.31	-34,713,240.10	-59.37%
Equ	ity							
	3110 · Member Deposit Reserve	356,783,223.17	358,604,609.23	-1,821,386.06	-0.51%	335,732,569,05	21.050.654.12	6.27%
(Note 7)	3120 · Other Reserves - Unapportioned	-2,499,822.51	-2,426,998.88	-72,823.63	-3.00%	2,559,529.24	-5,059,351.75	-197.67%
	3210 · Employer Advance Reserves	960,264,573.12	964,098,556.34	-3,833,983,22	-0.40%	901,651,348.66	58,613,224.46	6.50%
	3310 · Retiree Reserves	468,966,626.63	463,237,206.98	5,729,419.65	1.24%	457,405,735.51	11,560,891,12	2.53%
	3320 · Supp. Retiree Benefit Reserve	113,701,856.85	113,701,856.85	0.00	0.00%	108,446,851.09	5,255,005.76	4.85%
	3410 · Contingency Reserve	55,608,454.13	55,608,454.13	0.00	0.00%	60,735,602.01	-5,127,147.88	-8.44%
	3510 · Market Stabilization	-134,802,290.00	-134,802,290.00	0.00	0.00%	108,713,808.00	-243,516,098.00	-224.00%
	3810 · Income Summary Account	0.00	0.00	0.00	0.00%	0.00	0.00	0.00%
	3900 · Retained Earnings	987,677.06	987,677.06	0.00	0.00%	939,409.13	48,267.93	5.14%
	Net Income	63,382,643.47	107,746,533.56	-44,363,890.09	-41.17%	63,194,067.78	188,575.69	0.30%
Tota	al Equity	1,882,392,941.92	1,926,755,605.27	-44,362,663.35	-2.30%	2,039,378,920.47	-156,985,978.55	-7.70%
TOTAL L	IABILITIES & EQUITY	1,906,148,431.13	1,943,379,622.99	-37,231,191.86	-1.92%	2,097,847,649.78	-191,699,218.65	-9.14%

Notes:

Note 1 Timing of manager short term positions

Note 2 Increase over last year due to 3 new Real Asset managers: SSGA US REIT, Invesco and ARA

Note 3 Increase in Open Trade Sales over last mo.; decrease over last year

Note 4 Timing of payments

Note 5 Increase in Open Trade Purchases over last mo.; decrease over last year

Note 6 Accruals

Note 7 Interim interest payments/adjustments and private market adjustments

#### TCERA and TCERA Property, Inc. Combined Comparative Profit and Loss August 31, 2022

o		Aug 22	Jul 22	\$ Change	% Change	Jul - Aug 22	Jul - Aug 21	\$ Change	% Change
Ordin	ary Income/Expense								
	ncome								
	4110 · Interest Income	377,412.20	320,363.67	57,048.53	17.81%	697,775.87	501,153.39	196,622.48	39.23%
(Note 1)	4120 · Dividend Income	409,097.19	194,681.09	214,416.10	110.14%	603,778.28	565,641.38	38,136.90	6.74%
(Note 2)	4130 · Real Assets Income	0_00	2,775,949.31	-2,775,949.31	-100.0%	2,775,949.31	0.00	2,775,949.31	100.0%
(Note 3)	4140 · Other Investment Income	60,622.73	285,243.76	-224,621.03	-78.75%	345,866.49	236,443.93	109,422.56	46.28%
	4200 · Lease Payments from TCERA	15,640.00	15,640.00	0.00	0.0%	31,280.00	31,280_00	0.00	0.0%
	4310 · Commission Rebates	0.00	33.23	-33.23	-100.0%	33.23	0.00	33.23	100.0%
(Note 4)	4410 · Securities Lending Income	17,270.04	8,850.46	8,419.58	95.13%	26,120.50	5,588.23	20,532.27	367.42%
(Note 5)	4510 · Realized Gains/Losses	7,959,531.16	50,199.46	7,909,331.70	15,755.81%	8,009,730.62	50,191,771.53	-42,182,040.91	-84.04%
	4530 · Gn/Ls Disposal of Fixed Asset	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
(Note 6)	4610 · Employee Contributions	2,124,235.51	1,168,922.00	955,313.51	81.73%	3,293,157.51	3,228,311.24	64,846.27	2.01%
(Note 6)	4620 · Employer Contributions	245,411.61	43,635,245.28	-43,389,833.67	-99.44%	43,880,656.89	39,658,910.18	4,221,746.71	10.65%
1	fotal Income	11,209,220.44	48,455,128.26	-37,245,907.82	-76.87%	59,664,348.70	94,419,099.88	-34,754,751.18	-36.81%
t									
	5110 · Benefit Payments	8,432,093.96	8,419,358,88	12,735.08	0.15%	16,851,452.84	15,964,394.81	887,058.03	5.56%
(Note 7)	5120 · Refunds	573,533.77	225,198.21	348,335.56	154.68%	798,731.98	668,030.74	130,701.24	19.57%
(Note 8)	5130 · Death Retiree ROC	0.00	141,807.81	-141,807.81	-100.0%	141,807.81	0.00	141,807.81	100.0%
	5140 · SDA Payments	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
	5210 · Investment Management Fees	110,208.10	121,660.00	-11,451.90	-9.41%	231,868.10	261,667.54	-29,799.44	-11.39%
(Note 9)	5250 · Inv. Consultant/Custodial Fees	22,500.00	0.00	22,500.00	100.0%	22,500.00	19,729.08	2,770.92	14.05%
(Note 4)	5270 · Securities Lending Expense	546.00	0.00	546.00	100.0%	546.00	1,015.47	-469.47	-46.23%
	5275 · Real Assets Investment Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
	5276 · Real Assets Mgr Fees	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
(Note 10)	5280 · Other Investment Expense	609.09	489.99	119.10	24.31%	1,099.08	17,178.46	-16,079.38	-93.6%
(Note 9)	5410 · Actuarial Study Fees	0.00	0.00	0.00	0.0%	0.00	970.00	-970.00	-100.0%
	5450 · Compensated Benefit Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
*	5500 · Administrative Expense	160,272.16	161,170.82	-898.66	-0.56%	321,442.98	322,756.39	-1,313.41	-0.41%
*	5750 · TCERA Property Admin Expense	9,883.80	1,000.40	8,883.40	887.99%	10,884.20	15,624.05	-4,739.85	-30,34%
	5910 · Deprec/Amort of Fixed Assets	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
-	otal Exponso	0.000.040.00	0.070.000.00						
		9,309,646.88	9 070,686.11	238,960.77	2.63%	18,380,332.99	17,271,366.54	1,108,966.45	6.42%
Net O	rdinary Income	1,899,573.56	39 384,442.15	-37,484,868.59	-95.18%	41,284,015.71	77,147,733.34	-35,863,717.63	-46.49%

#### TCERA and TCERA Property, Inc. Combined Comparative Profit and Loss August 31, 2022

	Aug 22	Jul 22	\$ Change	% Change	Jul - Aug 22	Jul - Aug 21	\$ Change	% Change
Other Income/Expense								
Other Income								
4520 · Unrealized Gains/Losses	-46,263,463.65	68,362,091.41	-114,625,555.06	-167.67%	22,098,627.76	-13,953,665.56	36.052.293.32	258.37%
4525 · Unrealized Gns/Ls Building/Land	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
5000 · Other Income	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
Total Other Income	-46,263,463.65	68,362,091.41	-114,625,555.06	-167.67%	22,098,627.76	-13,953,665,56	36,052,293,32	258.37%
Other Expense	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
Net Other Income	-46,263,463.65	68,362,091.41	-114,625,555.06	-167.67%	22,098,627.76	-13,953,665.56	36,052,293.32	258.37%
Net Income	-44,363,890.09	107,746,533.56	-152,110,423.65	-141.17%	63,382,643.47	63,194,067.78	188,575.69	0.3%

#### Notes:

Note 1 Increase in Dividend Income over last mo. and last yr. from Public Equity

Note 2 Real Assets Investment Income reported quarterly and one-two month in arrears

Note 3 Decrease in Other Investment Income over last mo. in Private Credit; increase over last yr. in Private Credit

Note 4 Annual Securities Lending Accrual

Note 5 Increase in Realized Gains over last mo. from DSW RREEF redemption; decrease over last yr. from Accrual in Public Equity

Note 6 Accruals for EE & ER Contributions; Co. Prepayment ER Contributions FY22/23

Note 7 Increase in the # of and \$ amount of Refunds over last mo. and last year

Note 8 Timing of Retiree deaths with remaining contributions, decrease over last mo.; increase over last year

Note 9 Timing of payments

Note 10 Decrease in Other Investment Expenses over last yr. in Private Equity

\* See Budget report for detail of Administrative expenses (5500 and 5750)

#### TCERA and TCERA Property, Inc. BUDGET VS ACTUAL August 2022 Accounting Period 2 16.67% of the Current Fiscal Year Budget

		Aug 22	Jul - Aug 21	Jul - Aug 22	Annual Budget	Remaining Budget	% Annual Budget
5500 · Ad	ministrative Expense						
	5505 · (6001) Allocated Salaries	75,545.55	100,832.58	112,904.26	1,158,174.00	1,045,269.74	9.75%
	5510 · (6002) Overtime	0.00	0.00	0.00	1,000.00	1,000.00	0.00%
	5515 · (6003) Other Pay	467.04	5,499.02	736.19	34,700.00	33,963.81	2.12%
	5520 · (6004) Benefits	11,807.04	17,993.89	18,770.42	153,495.00	134,724.58	12.23%
	5525 · (6005) Extra-Help	0.00	0.00	0.00	500.00	500.00	0.00%
	5535 · (6011) Retirement- Co. Port.	9,846.17	14,321,72	15,325.55	153,802.00	138,476.45	9.96%
	5540 · (6012) Social Security	5,900.11	8,204.97	8,825.48	86,230.00	77,404.52	10.23%
	5545 · (1024) POB Cost	6,340.05	5,623.87	6,340.05	98,100.00	91,759.95	6.46%
(Note 1)	5550 · (6008) Board Fees-Per Diem Pmts	0.00	4,844.25	4,900.25	20,000.00	15,099.75	24.50%
	5551 · Communications						
	5552 · (7005) Communications	520.82	484.16	520.82	8,700.00	8,179.18	5.99%
	5640 · (7005) Co. Telecommunication	0.00	1,524.34	595.04	15,250.00	14,654.96	3.90%
	Total 5551 · Communications	520.82	2,008.50	1,115.86	23,950.00	22,834.14	4.66%
	5553 · Data Processing						
	5650 · (7044) ICT Qtrly - Data Process	2,754.12	0.00	2,754.12	100,830,00	98.075.88	2.73%
	5697 · (7044) Computer Exp Hdwr/Sftwr	0.00	4,754.93	0.00	39,360.00	39,360,00	0.00%
	5698 · (7044) WSI/Q2 Digital	0.00	0.00	0.00	3,000.00	3,000,00	0.00%
	Total 5553 · Data Processing	2,754.12	4,754.93	2,754.12	143,190.00	140,435.88	1,92%
	5555 · (7009) Household Expense	1,258.45	2,701.27	2,606.08	18,928.00	16,321.92	13.77%
(Note 2)	5560 · (7010) Insurance	0.00	58,624.00	65,971.00	67,113.00	1,142.00	98.30%
	5565 · (7011) Unemployment Insurance	0.00	0.00	0.00	6,000.00	6,000.00	0.00%
	5570 · (7021) Maintenance-Equipment	73.77	192.26	176.40	4,100.00	3,923.60	4,30%
(Note 3)	5575 · (7027) Memberships	0.00	4,000.00	4,000.00	8,075.00	4,075.00	49.54%
	5580 · (7030) Due Diligence Expense	0.00	2,521.92	0.00	15,000.00	15,000.00	0.00%
	5585 · (7036) Office Expense	1,938.40	2,434.67	2,334.03	72,276.00	69,941.97	3.23%
	5586 · (7040) Courier	124.32	117.97	124.32	1,550.00	1,425.68	8.02%
	5590 · Prof & Specialized Exp						
	5591 · (7043) Prof & Special Gen Exp	0.00	0.00	0.00	500.00	500.00	0.00%
	5592 · (7043) Prof & Spec - Audit	0.00	23,895.50	0.00	47,600.00	47,600.00	0.00%
	5593 · (7043) Prof Sr -Outside Counsel	0.00	0.00	0.00	75,000.00	75,000.00	0.00%
	Total 5590 · Prof & Specialized Exp	0.00	23,895.50	0.00	123,100.00	123,100.00	0.00%
	5594 · County Counsel Charges						
	5661 · (7046) Co Counsel - General Exp	1,774.80	1,327.20	1,897.20	40,000.00	38,102.80	4.74%
	5662 · (7046) Co Counsel - Disability	2,299,10	5,738.00	2,299.10	93,000.00	90,700.90	2.47%
	Total 5594 · County Counsel Charges	4,073.90	7,065.20	4,196.30	133,000.00	128,803.70	3.16%
	5595 · (7049) Prof Exp-Disabilities	0.00	961.63	3,000.00	172,500.00	169,500.00	1.74%
	5600 · (7059) Publications	0.00	0.00	0.00	25,000.00	25,000.00	0.00%
	5675 · (7059) Co. Print Services	679.41	0.00	679.41	16,000.00	15,320.59	4.25%
	Total 5600 · (7059) Publications	679.41	0.00	679.41	41,000.00	40,320.59	1.66%

#### TCERA and TCERA Property, Inc. BUDGET VS ACTUAL August 2022 Accounting Period 2 16.67% of the Current Fiscal Year Budget

		Aug 22	Jul - Aug 21	Jul - Aug 22	Annual Budget	Remaining Budget	% Annual Budget
	5605 · (7062) Rent & Lease -Building	15,640.00	31,280.00	31,280.00	187,680.00	156,400.00	16.67%
	5610 · (7066) Spec Dept Exp - RIS	7,941.00	15,882.00	15,882.00	321,835.00	305,953.00	4.93%
	5615 · (7073) Training	0.00	550.00	1,500.00	32,975.00	31,475.00	4.55%
	5620 · (7074) Transportation & Travel	0.00	354.20	464,50	35,000.00	34,535.50	1.33%
(Note 4)	5625 · (7081) Utilities	2,870.46	4,580.73	5,065.21	22,400.00	17,334.79	22.61%
	5627 · (7116) Postage - Co. Mail	0.00	3,511.31	0.00	50,000.00	50,000.00	0.00%
	5630 · (7128) Co. Workers Comp Insurance	0.00	0.00	0.00	55,000.00	55,000.00	0.00%
	5695 · Co. Admin. Services						
(Note 5)	5666 · (7719) HR/Risk Services	12,491.55	0.00	12,491,55	14,200.00	1,708.45	87.97%
	5699 · (7719) Auditors Services	0.00	0.00	0.00	7,500.00	7,500.00	0.00%
	Total 5695 · Co. Admin. Services	12,491.55	0.00	12,491.55	21,700.00	9,208.45	57.56%
	5720 · (7421) Interest Expense	0.00	0.00	0.00	1.00	1.00	0.00%
	5450 · Compensated Benefit Expense	0.00	0.00	0.00	30,688.00	30,688.00	0.00%
	5911 · Depreciation - TCERA	0.00	0.00	0.00	19,200.00	19,200.00	0.00%
Total TCE	RA Administrative Expense	160,272.16	322,756.39	321,442.98	3,312,262.00	2,990,819.02	9.70%
5750 · TC	ERA Property Administrative Expense						
	5755 · Fees and Taxes	0.00	0.00	0.00	200.00	200.00	0.00%
(Note 2)	5760 · Insurance	8,461.00	7,909.00	8,461.00	9,500.00	1,039.00	89.06%
	5765 · Professional & Spec Services	0.00	0.00	0.00	2,000.00	2,000.00	0.00%
	5780 · Courtyards Property Assn Dues	0.00	0.00	0.00	8,000.00	8,000.00	0.00%
	5785 · Landscape Service	440.00	425.00	440.00	8,550.00	8,110.00	5.15%
	5790 · Security Monitoring	350.00	285_28	700.00	8,500.00	7,800.00	8.24%
	5795 · Maintenance & Improve - Bldg	180.00	5,930.00	382.50	16,280.00	15,897.50	2.35%
	5797 · Utilities	452.80	1,074.77	900.70	7,000.00	6,099.30	12.87%
	5912 · Depreciation - TCERA Property	0.00	0.00	0.00	37,100.00	37,100.00	0.00%
Total TCE	Total TCERA Property, Inc. Administrative Expense		15,624.05	10,884.20	97,130.00	86,245.80	11.21%
Total TCERA & TCERA Property Administrative Expense		170,155.96	338,380.44	332,327.18	3,409,392.00	3,077,064.82	9.75%

Notes:	
Note 1	Quarterly Per Diem paid
Note 2	Annual Insurance premiums paid
Note 3	Annual membership paid: SACRS
Note 4	Increased electricity costs during summer months
Note 5	Annual HR&D expense paid

Accrued Actuarial Liability	1,957,985,000
June 30, 2021	
.21% of AAL	4,111,768.50
16.67%	685,294.75
Expenses to date	(332, 327.18)
(Over)/Under	352,967.57



Celebrating 20 years

**Tulare County Employees' Retirement Association** 

# Actuarial Valuation Report as of June 30, 2022

Produced by Cheiron October 2022

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October 31, 2022

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

Dear Members of the Board:

At your request, we have conducted an actuarial valuation of the Tulare County Employees' Retirement Association (TCERA, the System, the Fund, the Plan) as of June 30, 2022. This report contains information on the System's assets, liabilities, and discloses employer contribution levels. Your attention is called to the Foreword in which we refer to the general approach employed in the preparation of this report.

The purpose of this report is to present the results of the annual actuarial valuation of TCERA. This report was prepared for the TCERA Board of Retirement for the purposes described herein and for use by the plan auditor in completing an audit related to the matters herein. 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 such other users.

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.

Sincerely, Cheiron

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

The MA

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



www.cheiron.us 1.877.CHEIRON (243.4766)

#### FOREWORD

Cheiron has performed the actuarial valuation of the Tulare County Employees' Retirement Association as of June 30, 2022. The valuation is organized as follows:

- In Section I, the **Executive Summary**, we describe the purpose of an actuarial valuation, summarize the key results found in this valuation, and disclose important trends.
- The Main Body of the report presents details on the System's
  - Section II Disclosures Related to Risk
  - Section III Assets
  - Section IV Liabilities
  - Section V Contributions
  - Section VI Annual Comprehensive Financial Reporting Information
- In the **Appendices**, we conclude our report with detailed information describing plan membership (Appendix A), actuarial assumptions and methods employed in the valuation (Appendix B), a summary of pertinent plan provisions (Appendix C), a glossary of key actuarial terms (Appendix D), and tables containing member contribution rates (Appendix E).

Future results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and, changes in plan provisions or applicable law.

This report was prepared using census data and financial information as of the valuation date, June 30, 2022. Events following that date are not reflected in this report. Actual experience, both demographic and economic, will be reflected in subsequent valuations as experience emerges.

In preparing our report, we relied on information (some oral and some written) supplied by the TCERA staff. This information includes, but is not limited to, 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.



#### **SECTION I – EXECUTIVE SUMMARY**

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The funded status of the System,
- Past and expected trends in the funding progress of the System,
- Employer and employee contribution rates for Plan Year 2023-2024,
- An assessment and disclosure of key risks, and
- Information required by the GFOA for the Annual Comprehensive Financial Report (ACFR).

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key findings of this valuation including a summary of all key results, (C) an examination of the historical trends, and (D) the projected outlook for the System.

### A. Valuation Basis

This valuation determines the employer contributions required for the employers' fiscal years beginning July 1, 2023. The System's funding policy is to collect contributions from the employers and employees equal to the sum of (1) the normal cost under the Entry Age Normal Cost Method and (2) amortization of the Unfunded Actuarial Liability.

The Unfunded Actuarial Liability (UAL) is the excess of the Actuarial Liability over the Actuarial Value of Assets. Based on the funding policy adopted by the Board at its October 28, 2015 meeting, the UAL payment in the current valuation is the amount needed to fund the June 30, 2015 UAL over a closed 19-year period with payments as a level percentage of payroll, assuming payroll increases of 3.00% per year, with subsequent gains and losses being amortized over new 19-year closed periods, also as a level percentage of payroll.

Actuarial experience studies are performed every three years. This valuation was performed using the economic and demographic assumptions adopted by the Board, which are based on the experience study presented by Cheiron on September 23, 2020 and described in detail in a follow-up report delivered to the Board in October 2020. The Board decided to phase in the impact of the June 30, 2020 assumption changes on the employer contribution rate over three years, with the assumption changes fully phased-in with the current valuation. There are no assumption changes for this valuation. The discount rate remains 7.00%. A summary of the assumptions and methods used in the current valuation is shown in Appendix B.

At the direction of the Board, the UAL and contribution rates shown in Tables I-1 and I-4 do not reflect any estimated liabilities associated with future transfers to the Supplemental Retiree Benefit Reserve (SRBR). An estimate of this liability has been disclosed in Table IV-4.

This valuation was prepared based on the plan provisions shown in Appendix C. There have been no changes to the plan provisions since the last valuation. This valuation does not include any consideration of external liabilities (or related debt service payments) incurred by the Plan sponsors outside of TCERA, such as those related to pension obligation bonds, which would be disclosed in Tulare County's Annual Comprehensive Financial Report.



#### **SECTION I – EXECUTIVE SUMMARY**

### **B.** Key Findings of this Valuation

The key results of the June 30, 2022 actuarial valuation are as follows:

- The average actuarially determined employer contribution rate increased from 15.19% of payroll to 16.01% of payroll. Information on the contribution rates and changes from last year to this year may be found in Tables I-4 and I-5.
- There was a 0.28% increase in the employer rate due to investment losses for the plan year ending June 30, 2022. On a Market Value of Assets basis, the Plan earned -6.17%, as compared to the prior year's 7.00% assumed return. On a smoothed (Actuarial Value of Assets) basis, the return was 6.37%.
- The UAL is the excess of the System's Actuarial Liability over the Actuarial Value of Assets. The System experienced an increase in the UAL from \$199.0 million as of June 30, 2021 to \$207.2 million as of June 30, 2022. The \$8.2 million increase in the UAL was due to investment losses and contributions being less than the actuarial cost, which increased the UAL by \$15.8 million for the plan year ending June 30, 2022 but were partially offset by demographic gains. A detailed reconciliation of the components of change in the UAL is shown in Table I-3.
- The remaining balance of the June 30, 2015 UAL is being amortized over 12 years and the remaining balances for each of the subsequent UAL layers are being amortized over periods that extend by one additional year each (e.g., the UAL loss from the plan year ending June 30, 2016 is being amortized over 13 years). Finally, the UAL loss for the plan year ending June 30, 2022 is being amortized as a new 19-year layer.
- The System's funded ratio, the ratio of actuarial assets over Actuarial Liability, increased from 89.8% last year to 89.9% as of June 30, 2022. On a market value basis, the funded ratio decreased from 95.4% last year to 83.3% this year. The Actuarial Value of Assets is higher than the market value, meaning that there are deferred investment losses that will be recognized in the Actuarial Value of Assets (and employer contributions) in future years.
- During the 2021-2022 Plan year, the actuarial liabilities of the System increased less than expected. The liability gains were associated primarily with more terminations than expected during the year. These gains were partially offset by salary increases higher than expected. In total, the liability gains decreased the Actuarial Liability by \$1.9 million.
- Overall participant membership increased compared to last year, from 10,251 to 10,484. The total active population decreased from 4,484 to 4,432 and total projected payroll increased from \$286,886,367 to \$293,444,953. The number of inactives increased from 2,295 to 2,467, while the number of retirees increased from 3,472 to 3,585.



#### **SECTION I – EXECUTIVE SUMMARY**

• In Table IV-4 of this valuation, we have disclosed a liability of \$118.7 million associated with future transfers to the Supplemental Retiree Benefit Reserve (SRBR). This represents an decrease of roughly \$56.2 million compared to last year due primarily to poor investment returns and the unrecognized asset losses associated with them. These losses will flow to the Actuarial Value of Assets over 10 years and reduce the likelihood of future transfers.

The liability associated with future transfers is based on a simulation of investment returns and represents the accrued portion of the present value of SRBR transfers expected to result from future returns on the Actuarial Value of Assets in excess of the 7.00% assumption. It has not been reflected in the calculation of the employer contribution rate. Future SRBR transfers would result in lower net asset experience, which will be reflected in future amortization layers.

If the liability for future SRBR transfers were to be pre-funded, the employer contribution would be approximately \$14.2 million higher, or about 5.0% of pay. We have also disclosed a liability of \$106 million associated with the current SRBR balance, which is equal to the current balance of the SRBR, less the portion assumed to represent future benefit accruals. Note that the disclosure of these liabilities does not imply that the current benefit levels are guaranteed. Our understanding is that the Board has the power to adjust the benefit amounts paid from the SRBR.

On the following pages, we present Tables I-1 and I-2, which summarize the key results of the valuation with respect to TCERA assets, liabilities, Unfunded Actuarial Liability, funded ratios, and membership. The results are presented and compared for both the current and prior plan year.

The leverage ratios are equal to the Market Value of Assets (or Actuarial Liability) divided by payroll and represent a measure of the size of the plan relative to the plan sponsor. For additional discussion, see the discussion of maturity measures in Section II of this report.



#### SECTION I – EXECUTIVE SUMMARY

Table I-1         Summary of Key Valuation Results - Funded Status (in thousands)							
Valuation DateJune 30, 2021June 30, 2022% Change							
Actuarial Liability	\$	1,957,985	\$	2,047,350	4.6%		
Market Value of Assets	\$	1,976,185	\$	1,819,009	-8.0%		
Market Value of Assets (Excluding SRBR)		1,867,739		1,705,307	-8.7%		
Actuarial Value of Assets (Excluding SRBR)		1,759,025		1,840,109	4.6%		
Unfunded Actuarial Liability (UAL)							
- based on Market Value of Assets	\$	90,246	\$	342,043	279.0%		
- based on Actuarial Value of Assets		198,960		207,241	4.2%		
Funding Ratio - Market value basis		95.4%		83.3%	-12.1%		
Funding Ratio - Actuarial value basis		89.8%		89.9%	0.1%		
Expected Payroll	\$	286,886	\$	292,987	2.1%		
Asset Leverage Ratio (Excluding SRBR)		6.5		5.8	-10.6%		
Actuarial Liability Leverage Ratio		6.8		7.0	2.4%		
Interest on UAL (MVA basis)	\$	6,317	\$	23,943	279.0%		
Interest Cost as Percent of Payroll		2.2%		8.2%	6.0%		

Numbers may not add to totals due to rounding.



#### SECTION I – EXECUTIVE SUMMARY

Table I-2 Membership Total							
Item	J	une 30, 2021	J	une 30, 2022	% Change		
Actives		4,484		4,432	-1.2%		
Inactives		2,295		2,467	7.5%		
Members Receiving Benefits		3,472		3,585	<u>3.3%</u>		
Total Members		10,251		10,484	2.3%		
Ratio of Retired Members to Active Members		77.4%		80.9%	3.5%		
Active Member Projected Payroll							
for FYE June 30, 2022 and 2023	\$	286,886,367	\$	293,444,953	2.3%		
Average Pay per Active	\$	63,980	\$	66,211	3.5%		

The Unfunded Actuarial Liability (UAL) for TCERA increased by \$8.2 million, from \$199.0 million to \$207.2 million. Table I-3 below presents the specific components of the change in the UAL.

The UAL was expected to decrease by \$5.6 million, due to the scheduled amortization payment being greater than the interest on the UAL. Asset losses – i.e., the smoothed investment return below last year's assumed rate of 7.00% – increased the UAL by \$11.0 million, however, this was partially offset by liability experience gains of \$1.9 million. Contributions were less than the actuarial cost, due to the phase-in of the assumption changes and the 12-month delay in the implementation of the contribution rates, increasing the UAL by \$4.7 million. A detailed breakdown of the liability experience can be found in Table IV-2.

Table I-3		
Change in Unfunded Actuarial Liability		
Experience	(in	thousands)
Unfunded actuarial liability, 6/30/2021	\$	198,960
Expected change in unfunded actuarial liability Increase due to investment loss Increase due to contributions less than actuarial cost Decrease due to liability gain Increase due to assumption changes		(5,555) 11,008 4,748 (1,920) 0
Total change in unfunded actuarial liability	\$	8,281
Unfunded actuarial liability, 6/30/2022	\$	207,241

Numbers may not add to totals due to rounding.



#### **SECTION I – EXECUTIVE SUMMARY**

#### **Employer and Employee Contributions**

Table I-4 below compares the net employer contribution rate and its components to those from the prior year. The overall net employer contribution rate (prior to the phase-in of the assumption changes) increased by 0.36% for the June 30, 2022 valuation. The net employer normal cost rate decreased by 0.05% and the UAL rate increased by 0.41%. The average employee rate decreased by 0.01%, from 9.08% to 9.07%.

Additional details on contributions may be found in Section V, including separate rates for the County versus the other employers, which have been included in this report to reflect the Board's decision to allocate the cost impact of the POB contribution to the County only. Future investment experience related to the POB contribution will be shared amongst all TCERA employers.

Table I-4         Summary of Contributions						
	FYE 2023	FYE 2024	Change			
Contribution Rates						
Net Employer Contribution Rate	15.65%	16.01%	0.36%			
Estimated Employee Contribution Rate	<u>9.08%</u>	<u>9.07%</u>	-0.01%			
Total Contribution Rate	24.73%	25.08%	0.35%			
Net Employer Contribution Rate with Phase-in	15.19%	16.01%				
Estimated Net Employer Contributions \$ (in thousands)	44,904 \$	48,372	\$ 3,468			
Total Contribution Rate						
Estimated Employee Contribution Rate	9.08%	9.07%	-0.01%			
Employer Normal Cost Rate	<u>9.08%</u>	<u>9.03%</u>	-0.05%			
Total Normal Cost Rate	18.16%	18.10%	-0.06%			
UAL Rate						
Interest on Market Value UAL	2.20%	8.17%	5.97%			
Principal on Market Value UAL	<u>4.37%</u>	<u>-1.19%</u>	-5.56%			
Total UAL Rate	6.57%	6.98%	0.41%			
Total Contribution Rate	24 73%	25 08%	0 35%			
Total Contribution Rate with Phase-in	24.28%	25.08%	0.81%			

Numbers may not add to totals due to rounding.



#### **SECTION I – EXECUTIVE SUMMARY**

Table I-5 summarizes the changes in the employer contribution rate. As discussed earlier in this section, the largest sources of change were increases due to the investment losses and contributions being less than the actuarial cost. The costs also increased due to payroll increasing less than expected. The increases were partially offset by demographic gains over the past year. In aggregate, the employer contribution rate increased from 15.19% for FYE 2023 to 16.01% for FYE 2024, after reflecting the final year of the phase-in of the impact of the assumption changes.

Table I-5         Employer Contribution Reconciliation						
Item	Normal Cost	Amortization	Total			
FYE 2023 Net Employer Contribution Rate with Phase-in	8.97%	6.22%	15.19%			
Change due to asset loss	0.00%	0.28%	0.28%			
Change due to contributions less than actuarial cost	0.00%	0.12%	0.12%			
Change due to demographic gains and losses	-0.05%	-0.04%	-0.09%			
Change due to payroll less than expected	0.00%	0.05%	0.05%			
Change due to assumption changes	0.00%	0.00%	0.00%			
Phase-in of assumption changes*	0.11%	0.35%	0.45%			
Total Change in Employer Rate	0.06%	0.76%	0.82%			
FYE 2024 Net Employer Contribution Rate	9.03%	6.98%	16.01%			

\*Reflects final year of three year phase-in of assumption changes for employer contribution rate Numbers may not add to totals due to rounding.



#### **SECTION I – EXECUTIVE SUMMARY**

### **C. Historical Trends**

Despite the fact that for most retirement plans the greatest attention is given to the current valuation results and in particular the size of the current Unfunded Actuarial Liability and the employer contribution, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is important to judge the current year's valuation results relative to historical trends, as well as trends expected into the future.

#### **Assets and Liabilities**

The chart below compares the Market Value of Assets (MVA) and Actuarial Value of Assets (AVA) to the actuarial liabilities. The percentage shown in the graph is the ratio of the Actuarial Value of Assets to the Actuarial Liability (the funded ratio). The funded ratio had declined from 89.1% in 2012 to 83.3% in 2016 but increased to 92.9% as of June 30, 2017. The largest factor for the funding ratio decline was asset losses in 2008-2009, and the significant increase in the funded ratio in 2017 was due to the contribution from POB proceeds. For the 2022 plan year, the funding ratio increased slightly to 89.9%, primarily as result of the continued contributions being made to the Plan and the liability gains.





#### **SECTION I – EXECUTIVE SUMMARY**

#### **Contribution Trends**

In the chart below, we present the historical trends for the TCERA employer and employee contributions. The employer contribution rates have increased as a result of the 2008-2009 asset losses that were phased in over 10 years. TCERA has also made assumption changes and experienced additional asset losses, further increasing the employer contribution rates. The assumption changes have also increased the employee contribution rates.

Note that the employer contributions shown below do not include the contribution from POB proceeds in FY2017-2018 that exceeded the regular actuarially determined amounts.




## **SECTION I – EXECUTIVE SUMMARY**

## Cash Flows

The chart below shows the Plan's cash flow (contributions less benefit payments and administrative expenses). This is a critical measure, as it reflects the ability to have funds available to meet benefit payments without having to make difficult investment decisions, especially during volatile markets.

Note that the contributions do not include the excess contributions from POB proceeds.



In the chart above, the contributions, benefit payments plus expenses, and investment returns are shown as bars and the Plan's net cash flow (NCF) is shown as a black line. The NCF, which is equal to contributions less benefit payments and administrative expenses, began close to zero at the beginning of the 10-year period, but has grown consistently more negative over time. For the most recent year, the plan had negative cash flow of approximately 2.3% of assets (market value).

A negative cash flow magnifies the losses during a market decline hindering the Plan in its ability to absorb market fluctuations. The implications of a plan in negative cash flow are that the impact of market fluctuations can be more severe: as assets are being depleted to pay benefits in down markets, there is less principal available to be reinvested during favorable return periods. However, a negative cash flow is also a positive for a well-funded mature plan, as the investment earnings reduce the contributions needed to pay benefits.



## SECTION I – EXECUTIVE SUMMARY

# **D.** Future Expected Financial Trends

The analysis of projected financial trends is an important component of this valuation. In this section, we present our assessment of the implications of the June 30, 2022 valuation results in terms of future projected contribution rates and benefit security (assets over liabilities). All the projections in this section are based on an investment return assumption of 7.00%. We have assumed future increases in total pensionable payroll of 3.00% per year.

The following graph shows the expected employer contribution rate (gold bars) and employee contribution rate (green bars) determined as of the valuation date, and the employer contribution in millions of dollars (red line) for the following fiscal year, based on achieving the investment assumption **each year** for the next 25 years. This scenario is highly unlikely: even if the Plan does achieve the assumed return **on average** over this time period, the returns in each given year will certainly vary.

The contribution graph shows that the employer contribution rate is expected to increase for the next 11 years as the current deferred investment losses (approximately \$135 million) are recognized, then drop significantly after 2033 when the UAL layer from 2015 is paid off.



23 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 Valuation as of June 30



## **SECTION I – EXECUTIVE SUMMARY**

The following graph shows the projection of assets and liabilities assuming that assets will earn the investment assumption each year during the projection period (dollars shown in millions). The percentages at the top of the graph represent the funded ratio or status of the System.



The funded status, based on the Actuarial Value of Assets, is expected to reach 100% by 2043 assuming the actuarial assumptions are achieved, which is 12 years later than in last year's report due to the poor investment returns for the year. The Market Value of Assets is currently lower than the actuarial value – due to the deferred losses mentioned above – and the funded status on this basis is currently about 6% lower but is expected to converge to the actuarial value over time if the investment return assumption is met.

However, as with the projection of contribution rates, it is the **actual** return on System assets that will determine the future funded status.



## SECTION II – RISK IDENTIFICATION AND ASSESSMENT

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may vary significantly. This section of the report is intended to identify the primary risks to the Plan, provide some background information about those risks, and provide an assessment of those risks.

## **Identification of Risks**

The fundamental risks to the pension plan are that the contributions needed to pay the benefits become unaffordable or that the contributions needed to support the Plan may differ significantly from expectations. While there are a number of factors that could lead to either of these events, we believe the primary risks are:

- •Investment risk,
- •Assumption change risk, and
- •Contribution and payroll risk.

Other risks that we have not identified may also turn out to be important.

*Investment risk* is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the Unfunded Actuarial Liability necessitating higher contributions in the future unless there are other gains that offset these investment losses. The potential volatility of future investment returns is determined by the Plan's asset allocation and the affordability of the investment risk is determined by the amount of assets invested relative to the size of the plan sponsors or other contribution base.

Assumption change risk is the potential for the environment to change such that future valuation assumptions are different than the current assumptions. For example, declines in interest rates over the last three decades resulted in higher investment returns for fixed-income investments, but lower expected future returns necessitating either a change in investment policy, a reduction in discount rate, or some combination of the two. Assumption change risk is an extension of the other risks identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in environment when the current assumption is no longer reasonable.

*Contribution risk* is the potential for actual future contributions to deviate from expected future contributions. There are different sources of contribution risk such as the sponsor choosing to not make contributions in accordance with the funding policy. As another example, the contribution requirement might become a financial strain on the sponsor as a result of material contribution base changes (e.g., covered employees, covered payroll) that affect the amount of contributions the Plan can collect.



## SECTION II - RISK IDENTIFICATION AND ASSESSMENT

The chart below shows the components contributing to the Unfunded Actuarial Liability (UAL) from July 1, 2012 through June 30, 2022. Over the last 10 years, the UAL has increased by approximately \$87.7 million. The investment losses (gold bar) of \$183.0 million on the Actuarial Value of Assets (AVA) and assumption/method changes (purple bar) resulting in a total UAL increase of \$157.3 million are the primary sources in the UAL growth. Contributions in excess of the "tread water" level (red bar) of \$229.8 million, resulting from a pension obligation bond contribution of approximately \$250 million, have partially offset the UAL growth. Finally, net liability gains (gray bar) of \$22.7 million also decreased the UAL.





## SECTION II - RISK IDENTIFICATION AND ASSESSMENT

Chart II-2 below details the annual sources of the UAL change (colored bars) for the plan years ending June 30. The net UAL change for each year is represented by the blue diamonds.



On a smoothed basis, the average annual geometric return over the 10-year period is 5.9%, with losses occurring on the AVA every year, except 2021, which have increased the UAL. As of June 30, 2022, there are approximately \$135 million of deferred losses that will be recognized over the next nine years. As a result, even if the Plan earns above the expected return of 7.00% on a market basis, there could still be a loss on the smoothed value of assets.

Over the same time period, the assumed rate of return decreased from 7.90% to 7.00%. It is important to note that these changes simply reflect a downward revision to the estimate of future investment earnings; ultimately costs will be determined by actual investment earnings. Future expectations of investment returns may continue to decline necessitating further reductions in the discount rate.

The net impact of assumption changes is represented by the purple bars and includes changes to demographic assumptions that decreased the UAL in some years.



## SECTION II – RISK IDENTIFICATION AND ASSESSMENT

Each year the UAL is expected to increase for benefits earned in the current year (the normal cost), administrative expenses, and interest on the UAL. This expected increase is referred to as the tread water level. If contributions are greater than the tread water level, the UAL is expected to decrease. Conversely, if contributions are less than the tread water level, the UAL is expected to increase. The amortization policy (as well as the contribution-timing lag) can impact whether or not the contributions exceed the tread water level.

The County issued bonds worth approximately \$250 million and included a similar amount as a receivable contribution for the June 30, 2017 valuation. This large contribution went directly toward paying down the principal on the UAL as seen below in Table II-1, which numerically summarizes the changes in the UAL for each year by source over the last 10 years. It should be noted that for bonds to have positive long-term financial impact, pension investments will need to outperform debt service payments over the length of the bonds.

The Board adopted 19-year layered amortization of the UAL at its October 28, 2015 meeting. Under this approach, contributions are typically above the tread water level each year. However, the Board's election to phase in the impact of the most recent assumption changes over three years was the primary cause for the contributions to be less than the tread water level for the 2021 fiscal year end. Contributions for the 2022 fiscal year end were \$0.8 million more than the actuarial cost and subsequently decreased the UAL by that amount.

Table II-1									
	Unfunded Actuarial Liability (UAL) Change by Source								
		Assumption/	Liability	Investment	Total UAL				
June 30,	Contributions	Method Changes	Experience	Experience	Change				
2013	\$ (1,843,981)	\$ (34,420,710)	\$ 23,026,858	\$ 31,624,756	\$ 18,386,923				
2014	5,138,315	21,095,393	(5,070,085)	10,841,064	32,004,687				
2015	(3,043,058)	36,744,870	(12,668,401)	10,912,537	31,945,948				
2016	2,775,153	9,170,277	(8,948,443)	33,948,354	36,945,341				
2017	(231,452,683)	82,259,297	(12,982,692)	35,033,717	(127,142,361)				
2018	(2,307,142)	0	285,647	23,696,427	21,674,932				
2019	(2,726,065)	0	(161,312)	12,412,582	9,525,205				
2020	(1,439,104)	42,435,148	5,587,388	15,576,636	62,160,068				
2021	5,856,076	0	(9,839,957)	(2,067,958)	(6,051,840)				
<u>2022</u>	(806,901)	0	(1,919,754)	11,007,851	8,281,196				
Total	\$ (229,849,390)	\$ 157,284,275	\$ (22,690,751)	\$ 182,985,965	\$ 87,730,099				



## SECTION II – RISK IDENTIFICATION AND ASSESSMENT

# Assessing Costs and Risks

## Sensitivity to Investment Returns

The chart below compares assets to the present value of all projected future benefits discounted at the current expected rate of return (7.00%) and at discount rates 100 basis points above and below the expected rate of return. The present value of future benefits is shown as a bar with the portion attributable to past service in dark blue (Actuarial Liability) and the portion attributable to future service in teal (Present Value of Future Normal Costs). The Market Value of Assets is shown by the gold line.



If investments return 7.00% annually, the Plan will need approximately \$2.5 billion in assets today to pay all projected benefits compared to current assets of \$1.7 billion (excluding assets and liabilities related to the Supplemental Retiree Benefit Reserve). If investment returns are only 6.00%, the Plan would need approximately \$3.0 billion in assets today, and if investment returns are 8.00%, the Plan would need approximately \$2.1 billion in assets.



## SECTION II – RISK IDENTIFICATION AND ASSESSMENT

## Sensitivity to Investment Returns - Stochastic Projections

Stochastic projections serve to show the range of probable outcomes of various measurements. The graphs below and on the following page show the projected range of the employer contribution rate and of the funded ratio on an Actuarial Value of Assets basis. The range in both scenarios is driven by the volatility of investment returns, assumed to be based on a 12.5% standard deviation of annual returns, as indicated by the prior year analysis of target asset allocations and Verus' capital market assumptions.



The stochastic projection of employer contributions as a percent of pay shows the probable range of future contribution rates. The baseline contribution rate (black line) is based on the median of the simulations using an average return of 7.00%. It is similar to the *deterministic* projections discussed in subsection D of the Executive Summary of this report, where the returns are expected to be exactly 7.00% each year. However, the median results are somewhat higher than the deterministic projections because of the impact of the SRBR, which may result in fewer assets available to fund the basic benefits in years where the smoothed returns exceed 7.00%.

In the most pessimistic scenario shown, the 95<sup>th</sup> percentile, the projected employer contribution rate is over 40% of pay in 2034 and 2037. Conversely, the most optimistic scenario shown, the 5<sup>th</sup> percentile, the projected employer contribution rate declines to 0% in 2035.

We note that these projections only allow the employers' contribution to drop below their share of the normal cost if the Plan becomes extremely overfunded (i.e., a funded ratio above 120%), as is required under PEPRA.





## SECTION II – RISK IDENTIFICATION AND ASSESSMENT

The graph above shows the projection of the funded ratio based on the Actuarial Value of Assets. While the median funded ratio (black line) is projected to be approximately 93% at the end of the 15-year period shown here, there is a wide range of potential outcomes. Good investment returns have the likelihood of bringing the funded ratio well over 100%. Due to the current funding policy of the Plan, even in scenarios with unfavorable investment returns, the Plan is projected to remain over 60% funded on an Actuarial Value of Assets basis, as long as the actuarially determined contributions continue to be made.

## **Contribution Risk**

While investment returns are typically the dominant factor in volatility, contribution rates can also be sensitive to future salary increases and the hiring of new members. When member payroll growth stagnates or even declines, the dollar level of contributions made to the Plan also stagnates or declines since contributions are based on payroll levels.

There is also a risk of the contribution rate increasing even higher when payroll decreases since the Plan's funding policy amortizes the UAL as a level percentage of pay. This means that the UAL payments increase at the assumed payroll growth rate of 3.00%, so that the payment is expected to remain constant as a percentage of payroll. If payroll growth is less than the expected 3.00% or there is a decline in payroll, the UAL payments are spread over a smaller payroll base and the contribution rate as a percentage of pay increases, potentially making the Plan less affordable.



## SECTION II – RISK IDENTIFICATION AND ASSESSMENT

## **Plan Maturity Measures**

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than a less mature plan. Before assessing each of these risks, it is important to understand the maturity of the Plan and how the maturity has changed over time.

Plan maturity can be measured in a variety of ways, but they all get at one basic dynamic – the larger the plan is compared to the contribution or revenue base that supports it; the more sensitive the plan will be to risk. The measures below have been selected as the most important in understanding the primary risks identified for the Plan.

## **Inactives per Active (Support Ratio)**

One simple measure of plan maturity is the ratio of the number of those receiving benefits or those entitled to a deferred benefit to the number of active members. The Support Ratio is expected to increase gradually as a plan matures. The chart below shows the growth in the Support Ratio from 2013 to 2022. The inactive membership level was about equal to the active membership level in 2013, so the Support Ratio was approximately 1.0. During the past few years, the growth in retired membership has exceeded the growth in active membership, increasing the Support Ratio to approximately 1.4. That means for 2022, there are approximately 1.4 inactive members.





## SECTION II – RISK IDENTIFICATION AND ASSESSMENT

## Leverage Ratios

Leverage or volatility ratios measure the size of the plan compared to its revenue base more directly. The asset leverage ratio is simply the Market Value of Assets to active member payroll and indicates the sensitivity of the Plan to investment returns. The liability leverage ratio is the plan's Actuarial Liability to active member payroll and indicates the sensitivity of the Plan to assumption changes or demographic experience.

The chart below shows the historical leverage ratios of the Plan. The liability leverage ratio has increased steadily since 2013, driven by changes to more conservative actuarial assumptions and a continued maturing of the Plan. The asset leverage ratios have also increased, but with more volatility, based on variations in investment experience and with a large jump due to the pension obligation bond contribution for 2017. The asset leverage ratio also jumped significantly in 2021 due to strong asset returns but came back down for 2022 following poor investment performance.



To appreciate the impact of the ratio of assets to payroll on plan cost, consider the situation for a new plan with almost no assets. Even if the assets suffer a bad year of investment returns, the impact on the plan cost is nil, because the asset level is so small.

As the Plan becomes better funded, the asset leverage ratio will increase, and if it was 100% funded, the asset leverage ratio would be close to 7.0 times payroll, or the Actuarial Liability (AL) leverage ratio.



## SECTION II - RISK IDENTIFICATION AND ASSESSMENT

The following chart shows that the ratio of both assets and liabilities to payroll, and therefore the sensitivity to investment returns, is higher for the Safety members compared to the General members. This is because of the higher benefit amounts and the earlier average retirement ages for Safety.



The General asset leverage ratio of 5.4 means that if the Plan's assets lose 10% of their value, which is a 17.00% actuarial loss compared to the expected return of 7.00%, the loss would be equivalent to 92% of payroll (17.00% times 5.4). The same investment loss for the Safety group with an asset ratio of 7.1 would be equivalent to approximately 121% of payroll. As illustrated by this example, the contribution rates for the Safety members will generally be more volatile than those of the General members.

## **More Detailed Assessment**

While a more detailed assessment is always valuable to enhance the understanding of the risks identified above, we believe the scenarios illustrated above cover the primary risks facing the Plan at this time. We would be happy to provide the Board with a more in-depth analysis at their request.



## **SECTION III – ASSETS**

Pension plan assets play a key role in the financial operation of the System and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, employer contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on System assets including:

- **Disclosure** of System assets as of June 30, 2021 and June 30, 2022;
- Statement of the **changes** in market values during the year;
- Development of the Actuarial Value of Assets;
- An allocation of the assets by reserve balances; and,
- An assessment of historical investment performance versus inflation.

## **Disclosure**

There are two types of asset values disclosed in the valuation, the Market Value of Assets and the Actuarial Value of Assets. The market value represents "snap-shot" or "cash-out" values which provide the principal basis for measuring financial performance from one year to the next. The Actuarial Value of Assets reflects smoothing of annual investment returns.

Table III-1 on the next page discloses and compares the market value of assets as of June 30, 2021 and June 30, 2022.



## **SECTION III – ASSETS**

Table III-1 Statement of Assets at Market Value						
		June 30, 2021		June 30, 2022		
Cash and Securities Lending Collateral:						
Cash and Short Term Investments	\$	67,707,000	\$	36,024,000		
Collateral on Loaned Securities		56,729,000		28,722,000		
Total Cash and Securities Lending Collateral	\$	124,436,000	\$	64,746,000		
Receivables:						
Sales of Investments	\$	23,884,000	\$	9,575,000		
Interest and Dividends		2,273,000		839,000		
Employee and Employer Contributions		1,014,000		998,000		
Other Receivables		7,000		0		
Total Receivables	\$	27,178,000	\$	11,412,000		
Investments, at Fair Value:						
Fixed Income	\$	561,576,000	\$	363,409,000		
Equities		950,148,000		797,565,000		
Real Estate		195,568,000		393,078,000		
Alternative Investments (Hedge Funds, Private Equity, Private						
Credit, Futures, Commodities)		230,977,000		241,242,000		
Total Investments, at Fair Value	\$	1,938,269,000	\$	1,795,294,000		
Capital Assets						
Land	\$	370,000	\$	370,000		
Building, Office Equipment and Furniture Net of Accumulated						
Depreciation		699,000		746,000		
Intangible Assets, Pension Administration System Net of		202.000		0		
Accumulated Depreciation		303,000		0		
Total Capital Assets	\$	1,372,000	\$	1,116,000		
Total Assets	\$	2,091,255,000	\$	1,872,568,000		
Current Liabilities:						
Purchase of Investments	\$	51,172,000	\$	17,507,000		
Obligations under Security Lending Program		56,729,000		28,722,000		
Refunds Payable		4,099,000		4,102,000		
Accounts Payable	<u> </u>	2,955,000	<del>.</del>	3,122,000		
Total Current Liabilities	\$	114,955,000	\$	53,453,000		
Long-Term Liabilities:						
Compensated Absences	\$	115,000	\$	106,000		
Total Long-Term Liabilities	\$	115,000	\$	106,000		
Total Liabilities	\$	115,070,000	\$	53,559,000		
Total Market Value of Assets for Valuation	\$	1,976,185,000	\$	1,819,009,000		



## **SECTION III – ASSETS**

# **Changes in Market Value**

The components of asset change are:

- Contributions (employer and employee)
- Benefit payments
- Expenses (investment and administrative)
- Investment income (realized and unrealized)

Table III-2 below and on the following page shows the components of change in the Market Value of Assets during the fiscal years ending June 30, 2021 and June 30, 2022.

Table III-2       Changes in Market Values							
June 30, 2021 June 30, 2022							
Additions:							
Contributions							
Employer	\$	36,766,000	\$	40,392,000			
Plan Member		23,536,000		25,880,000			
Total Contributions	\$	60,302,000	\$	66,272,000			
Investment Income							
Net Appreciation/(Depreciation) in							
Fair Value of Investments	\$	381,705,000	\$	(127,368,000)			
Interest		3,649,000		3,296,000			
Dividends		4,153,000		3,616,000			
Real Estate Operating Income		6,015,000		7,493,000			
Other Investment Income		8,446,000		5,392,000			
Total Investment Activity Income/(Loss)	\$	403,968,000	\$	(107,571,000)			
Less Expenses from Investing Activities		9,145,000		10,488,000			
Net Investing Activity Income/(Loss)	\$	394,823,000	\$	(118,059,000)			
From Securities Lending Activities							
Securities Lending Income	\$	121,000	\$	179,000			
Less Expenses from Securities Lending Income							
Management Fee	\$	12,000	\$	8,000			
Borrower Rebate		41,000		73,000			
Net Securities Lending Income	\$	68,000	\$	98,000			
Total Net Investment Income/(Loss)	\$	394,891,000	\$	(117,961,000)			
Other Income	\$	188,000	\$	188,000			
Total Additions	\$	455,381,000	\$	(51,501,000)			



## **SECTION III – ASSETS**

Table III-2 Changes in Market Values (Continued)									
June 30, 2021 June 30, 2022									
Deductions:									
Benefits	\$	92,690,000	\$	97,762,000					
Refunds of Contributions		3,586,000		4,946,000					
Administrative Expenses		2,740,000		2,967,000					
Total Deductions	\$	99,016,000	\$	105,675,000					
Net Increase/(Decrease)	\$	356,365,000	\$	(157,176,000)					
Net Assets Held in Trust for Pension Benefits Beginning of Year	\$	1,615,418,000	\$	1,976,185,000					
Adjustment to Match 2020 Final Assets	\$	4,402,000	<u>\$</u>	0					
End of Year for Valuation	\$	1,976,185,000	\$	1,819,009,000					
Approximate Return*		24.49%		-6.17%					

Numbers may not add to totals due to rounding. \*Net of investment and administrative expenses



### **SECTION III – ASSETS**

## Actuarial Value of Assets (AVA)

The table below shows the development of the Actuarial Value of Assets. Based on discussions with TCERA staff, the total actual market returns for each period shown are based on preliminary financial information. Please see Appendix B for a description of the asset smoothing method.

Table III-3           Development of Actuarial Value of Assets for June 30, 2022								
Six month           Period           From         To           1/13         6/13	Total Actual Market <u>Return (net)</u> \$ 45,446,072	Expected Market <u>Return (net)</u> \$ 39,915,825	<b>Investment</b> <u>Gain (Loss)</u> \$ 5,530,247	Deferred <u>Factor</u> 0.05	<b>Deferred</b> <u><b>Return</b></u> \$ 276,512			
7/13 12/13 1/14 6/14	114,083,453 62,482,815	41,675,731 45,022,478	72,407,722 17,460,337	0.10 0.15	7,240,772 2,619,051			
7/14 12/14 1/15 6/15	(17,886,044) 26,507,383	46,676,782 44,856,580	(64,562,826) (18,349,197)	0.20 0.25	(12,912,565) (4,587,299)			
7/15 12/15 1/16 6/16	(45,631,715) 24,729,226	45,909,756 43,045,278	(91,541,471) (18,316,052)	0.30 0.35	(27,462,441) (6,410,618) 227,072			
1/17 6/17 7/17 12/17	44,835,718 84,564,705 79,943,304	44,013,787 42,691,625 45 809 189	41,873,080 34 134 115	0.40	18,842,886 17,067,058			
1/18 6/18 7/18 12/18	11,201,303 (54,685,836)	48,460,635	(37,259,332) (111,583,891)	0.50 0.55 0.60	(20,492,633)			
1/19 6/19 7/19 12/19	143,284,434 74,015,847	53,981,060 59,050,363	89,303,374 14,965,484	0.65 0.70	58,047,193 10,475,839			
1/20 6/20 7/20 12/20	(69,767,060) 207,466,372	60,619,959 56,098,158	(130,387,018) 151,368,214	0.75 0.80	(97,790,264) 121,094,571			
1/21 6/21 7/21 12/21 1/22 6/22	178,848,571 69,141,260 (177,123,495)	62,147,805 68,227,159 69,409,485	116,700,766 914,101 (246,532,980)	0.85 0.90 0.95	99,195,651 822,691 (234,206,331)			
1. Total defer	rred return	.,,	( , , ,		(134,802,290)			
2. Market Value of Assets (includes SRBR)1,819,009,0003. Actuarial Value of Assets for Funding Ratio (2 1.)11,953,811,000								
4. Non-valuation reserves and designations:         a. Supplemental Retiree Benefit Reserve (SRBR)         113,702,000								
5. Preliminary Actuarial Value of Assets (3 4.)21,840,109,0006. Corridor Limit1,840,109,000								
a. 709 b. 130	% of Market Value 0% of Market Value	of Assets excludin e of Assets exclud	ng SRBR ing SRBR		1,193,714,900 2,216,899,100			
7. Actuarial V	7. Actuarial Value of Assets after Corridor1,840,109,000							

<sup>1</sup>Items will not sum due to a rounding adjustment on the MVA

<sup>2</sup>Items will not sum due to a rounding adjustment on the SRBR



## **SECTION III – ASSETS**

## **Allocation of Reserve Balances**

The following table shows the allocation of the assets among the various accounting reserves provided by TCERA staff.

	Table III-4Allocation of Assets by Accounting Reserve Amountsfor the Years Ended June 30, 2021 and June 30, 2022							
			FYE 2021		FYE 2022			
1.	Member Deposit Reserve	\$	339,547,000	\$	359,335,000			
2.	Employer Advance Reserve		908,887,000		966,012,000			
3.	Retiree Reserve		446,256,000		460,586,000			
4.	Supplemental Retiree Benefit Reserve		108,446,000		113,702,000			
5.	Contingency Reserve		60,736,000		55,609,000			
6.	Market Stabilization Reserve		108,714,000		(134,802,000)			
7.	TCERA Property, Inc. Retained Earnings		939,000		988,000			
8.	Other Reserves		2,660,000		(2,421,000)			
	<b>Total Reserves</b>	\$	1,976,185,000	\$	1,819,009,000			



## **SECTION III – ASSETS**

# **Asset Returns vs. Inflation**

Table III-5 shows the returns on the Market and Actuarial Values of Assets, with the increase in the CPI for comparison, over the last 10 years.

Table III-5           Net Return on Assets vs. Increase in Consumer Price Index							
Year Ended June 30	Net Return at Market Value*	Net Return at Actuarial Value*	Increase in Consumer Price Index**				
2013	11.1%	4.6%	1.8%				
2014	16.7%	6.8%	2.1%				
2015	0.7%	6.1%	0.1%				
2016	-1.9%	4.7%	1.0%				
2017	11.3%	4.6%	1.6%				
2018	7.4%	5.6%	2.9%				
2019	5.6%	6.5%	1.6%				
2020	0.1%	6.3%	0.6%				
2021	24.5%	7.1%	5.4%				
2022	-6.2%	6.4%	9.1%				
Compound Average	6.6%	5.9%	2.6%				
<ul> <li>* Net of investment and adminstrative expenses.</li> <li>** Based on All Urban Consumers - U.S. City Average, June indices.</li> </ul>							



## **SECTION IV – LIABILITIES**

In this section, we present detailed information on System liabilities including:

- **Disclosure** of System liabilities at June 30, 2021 and June 30, 2022;
- Statement of **changes** in these liabilities during the year;
- Present value of future **SRBR** benefits based on current benefit levels; and,
- Liability and funded status **disclosures** with and without the SRBR.

## **Disclosure**

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them. Note that these liabilities are not applicable for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future System obligations, represents the amount of money needed today to fully fund all benefits of the System both earned as of the valuation date and those to be earned in the future by current plan participants, under the current System provisions.
- Actuarial Liability: Used for funding calculations, this liability is calculated taking the Present Value of Future Benefits and subtracting the present value of future Member Contributions and future employer normal costs under an acceptable actuarial funding method. The method used for this System is called the Entry Age Normal (EAN) funding method.
- **Unfunded Actuarial Liability:** The excess of the Actuarial Liability over the Actuarial Value of Assets.

Table IV-1 on the following page discloses each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of Plan assets yields, for each respective type, a **net surplus**, or an **Unfunded Actuarial Liability**.



## **SECTION IV – LIABILITIES**

Table IV-1									
Present Value of Future Benefits and Actuarial Liability									
(in thousands)									
Item		General		Safety	J	Total	J	Total	
Present Value of Future Benefits (PVFB)									
Actives	\$	888,089	\$	362,946	\$	1,251,035	\$	1,221,596	
Terminated Vested		98,017		29,522		127,539		116,332	
Retirees		681,690		216,458		898,148		850,186	
Disabled		55,932		66,697		122,629		119,969	
Beneficiaries		52,733		32,411	_	85,143		79,877	
Total PVFB	\$	1,776,461	\$	708,033	\$	2,484,494	\$	2,387,960	
Actuarial Liability									
Total Present Value of Benefits	\$	1,776,461	\$	708,033	\$	2,484,494	\$	2,387,960	
Present Value of Future Normal Costs Employer Portion		157,164		69,390		226.554		222.650	
Employee Portion		146.794		63,796		210.590		207.325	
Actuarial Liability	\$	1,472,502	\$	574,848	\$	2,047,350	\$	1,957,985	
Actuarial Value of Assets	\$	1,332,791	\$	507,318	\$	1,840,109	\$	1,759,025	
Funded Ratio		90.5%		88.3%		89.9%		89.8%	
Unfunded Actuarial Liability/(Surplus)	\$	139,711	\$	67,530	\$	207,241	\$	198,960	



## **SECTION IV – LIABILITIES**

## **Changes in Liabilities**

Each of the liabilities disclosed in the prior tables are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in System assets resulting from:

- Employer contributions different than the actuarial cost
- Investment earnings different than expected
- A change in the method used to measure plan assets



## **SECTION IV – LIABILITIES**

Table IV-2         Development of 2022 Experience Gain/(Loss)         (in thousands)						
	Item		Cost			
1.	Unfunded Actuarial Liability at June 30, 2021	\$	198,960			
2.	Middle of year actuarial liability payment		(18,834)			
3. 4.	Interest to end of year on 1 and 2 Impact of assumption changes		13,279 0			
5.	Expected Unfunded Actuarial Liability at June 30, 2022	\$	193,405			
6.	Actual Unfunded Liability at June 30, 2022 (AVA basis)		207,241			
7.	Net Gain/(Loss): (5 - 6)	\$	(13,836)			
8.	Portion of net gain/(loss) due to:					
	a. Investment experience loss	\$	(11,008)			
	b. Contributions less than actuarial cost		(4,748)			
	c. Inactive mortality gain		149			
	d. COLAs more than expected		(424)			
	e. Salaries more than expected		(5,821)			
	f. Retirements		946			
	g. Terminations		6,656			
	h. Other experience		413			
	i Total gain/(loss)	\$	(13,836)			



## **SECTION IV – LIABILITIES**

Table IV-3 shows the present value of future SRBR benefits at current benefit levels and the calculation of the net reserve based on the SRBR balance. The net reserve as of June 30, 2022 is positive, meaning that the current SRBR balance is expected to cover SRBR benefits at current levels.

	Table IV-3Supplemental Retiree Benefit Reserve as of June 30, 2022						
		J	une 30, 2021	J	une 30, 2022		
Le	vel One						
1.	Current Retirees	\$	61,061,811	\$	62,634,020		
2.	Inactive Members		1,960,719		1,888,632		
3.	Active members		37,820,474		36,155,243		
4.	Subtotal	\$	100,843,004	\$	100,677,895		
Le	vel Two						
5.	Supplemental COLA for those who have	\$	667,759	\$	1,089,150		
	lost at least 15% of Purchasing Power						
Le	vel Three						
6.	Supplemental Spousal Death Benefit	\$	5,459,914	\$	6,310,316		
7.	<b>Total SRBR Combined Liability:</b> (4) + (5) + (6)	\$	106,970,677	\$	108,077,361		
8.	Supplemental Retiree Benefit Reserve: (SRBR)		108,446,000		113,702,000		
9.	Net Reserve: (8) - (7)	\$	1,475,323	\$	5,624,639		



## **SECTION IV – LIABILITIES**

The top portion of Table IV-4 on the next page shows System assets, liabilities, and funded ratios excluding the SRBR. In the bottom half, the liabilities are adjusted to include the portion associated with the current SRBR balance that has been accrued based on service to date (\$106.0 million) as well as the accrued portion of the present value of future transfers to the SRBR (\$118.7 million). In addition, the SRBR balance of \$113.7 million as of June 30, 2022 is added to the asset values.

The Board has not elected to pre-fund the estimated liability associated with future SRBR transfers. Such transfers will be recognized as asset losses in the valuation as they occur. We note that the estimated liability associated with future transfers has decreased significantly since the prior valuation (from \$174.9 million to \$118.7 million), as a result of the increase in deferred investment losses, which raise the likelihood of the smoothed return trailing the investment return assumption in the future.

These liability disclosures do not imply that the current benefit levels are guaranteed. Our understanding is that the Board has the power to adjust the benefit amounts paid from the SRBR.



## **SECTION IV – LIABILITIES**

Table IV-4         Disclosure of SRBR Liabilities         (in thousands)						
Valuation Date	Jun	e 30, 2021	Ju	ne 30, 2022		
Without SRBR						
Actuarial Liability (Excluding SRBR)	\$	1,957,985	\$	2,047,350		
Actuarial Value of Assets (Excluding SRBR)		1,759,025		1,840,109		
Market Value of Assets (Excluding SRBR)		1,867,739		1,705,307		
Funded Ratio - Actuarial Value Basis		89.8%		89.9%		
Funded Ratio - Market Value Basis		95.4%		83.3%		
With SRBR						
Actuarial Liability (Excluding SRBR)	\$	1,957,985	\$	2,047,350		
Liability Associated with Current SRBR Balance		100,270		106,033		
Liability from Future Transfers		174,882		118,668		
Total Liability with SRBR	\$	2,233,137	\$	2,272,050		
Actuarial Value of Assets (Including SRBR)	\$	1.867.471	\$	1.953.811		
Market Value of Assets (Including SRBR)		1,976,185		1,819,009		
Funded Ratio - Actuarial Value Basis		83.6%		86.0%		
Funded Ratio - Market Value Basis		88.5%		80.1%		



### **SECTION V – CONTRIBUTIONS**

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly maintain the funding status of the System. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

For this System, the actuarial funding method used to determine the normal cost and the Unfunded Actuarial Liability is the Entry Age Normal (EAN) cost method. There are two primary components to the total contribution: the normal cost rate (employee and employer), and the Unfunded Actuarial Liability rate (UAL rate).

The normal cost rate is determined in the following steps. First, an individual normal cost rate is determined by taking the value of each member's projected future benefits as of the member's entry age into the System. This value is then divided by the value of the member's expected future salary, also at entry age, producing a normal cost rate that should remain relatively constant over a member's career. The total normal cost is computed by adding the expected dollar amount of each active member's normal cost for the current year – known as the Individual Entry Age Method. The total normal cost rate is the total normal cost divided by expected salary. Finally, the total normal cost rate is reduced by the member contribution rate to produce the employer normal cost rate.

The Unfunded Actuarial Liability is the difference between the Actuarial Liability and the Actuarial Value of Assets. At its October 28, 2015 meeting, the Board adopted 19-year layered amortization of the UAL. The UAL as of June 30, 2015 is being amortized over a closed 19-year period as a level percentage of payroll (with 12 years remaining), 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.

The tables on the following pages present the calculation of the contribution rates for the System for the current and prior valuations.



### **SECTION V – CONTRIBUTIONS**

The employer contribution rates for FYE 2024 are shown in the table below, split by tier (1-4), membership class (General or Safety), and for the General class, employer (County or non-County). As directed by the TCERA Board at its April 12, 2018 meeting, we have allocated the cost impact of the contribution from POB proceeds to the County only, based on their share of pensionable payroll for the fiscal year ending June 30, 2018 (excluding TCAG). We were notified by Staff that all Safety members are employed by the County, so there is only one set of Safety rates. Based on information provided by Staff, we recommend that the General (Non-County) employer contribution rates be used for the Strathmore Public Utility District (SPUD).

	Table V-1(a)         Development of the Net Employer Contribution Rate as of June 30, 2022 for FYE 2024								
		Tier 1	Tier 2 & 3	Tier 4	Total				
Gei	neral (County)								
1.	Total Normal Cost Rate	18.54%	16.76%	15.72%	16.25%				
2.	Member Contribution Rate	2.44%	<u>8.54%</u>	<u>7.86%</u>	<u>8.19%</u>				
3.	Employer Normal Cost Rate (1-2)	16.10%	8.21%	7.86%	8.05%				
4.	UAL Amortization	5.60%	5.60%	5.60%	5.60%				
5.	Net Employer Contribution Rate (3+4)	21.70%	13.81%	13.46%	13.65%				
Gei	neral (Non-County)								
1.	Total Normal Cost Rate	18.54%	16.76%	15.72%	16.25%				
2.	Member Contribution Rate	<u>2.44%</u>	8.54%	<u>7.86%</u>	<u>8.19%</u>				
3.	Employer Normal Cost Rate (1-2)	16.10%	8.21%	7.86%	8.05%				
4.	UAL Amortization	12.94%	12.94%	12.94%	12.94%				
5.	Net Employer Contribution Rate (3+4)	29.04%	21.15%	20.80%	20.99%				
Saf	ety (County)								
1.	Total Normal Cost Rate	N/A	23.42%	25.88%	24.46%				
2.	Member Contribution Rate	<u>N/A</u>	<u>11.47%</u>	<u>12.94%</u>	<u>12.09%</u>				
3.	Employer Normal Cost Rate (1-2)	N/A	11.95%	12.94%	12.37%				
4.	UAL Amortization	N/A	9.68%	9.68%	9.68%				
5.	Net Employer Contribution Rate (3+4)	N/A	21.63%	22.62%	22.05%				

Reflects final year of three year phase-in of assumption changes for employer contribution rate



## **SECTION V – CONTRIBUTIONS**

The employer contribution rates for FYE 2022 are shown in the table below, split by tier (1-4) and membership class (General or Safety).

Table V-1(b)									
Development of the Net Employer Contribution Rate as of June 30, 2021 for FYE 2023									
		Tier 1	Tier 2 & 3	Tier 4	Total				
Gei	neral (County)								
1.	Total Normal Cost Rate	18.50%	16.87%	15.59%	16.29%				
2.	Member Contribution Rate	<u>2.48%</u>	8.56%	<u>7.80%</u>	8.20%				
3.	Employer Normal Cost Rate (1-2)	16.03%	8.31%	7.80%	8.09%				
За.	Employer Normal Cost Rate with Phase-in	15.65%	8.24%	7.62%	7.97%				
4.	UAL Amortization	5.23%	5.23%	5.23%	5.23%				
4a.	UAL Amortization with Phase-in	4.98%	4.98%	4.98%	4.98%				
5.	Net Employer Contribution Rate (3+4)	21.26%	13.54%	13.03%	13.32%				
5а.	Net Employer Contribution Rate with	20.63%	13.22%	12.60%	12.95%				
	Phase-in (3a+4a)								
Gei	aeral (Non-County)								
1.	Total Normal Cost Rate	18.50%	16.87%	15.59%	16.29%				
2.	Member Contribution Rate	<u>2.48%</u>	8.56%	<u>7.80%</u>	8.20%				
3.	Employer Normal Cost Rate (1-2)	16.03%	8.31%	7.80%	8.09%				
За.	Employer Normal Cost Rate with Phase-in	15.65%	8.24%	7.62%	7.97%				
4.	UAL Amortization	12.55%	12.55%	12.55%	12.55%				
4a.	UAL Amortization with Phase-in	12.30%	12.30%	12.30%	12.30%				
5.	Net Employer Contribution Rate (3+4)	28.58%	20.86%	20.35%	20.64%				
5a.	Net Employer Contribution Rate with	27.95%	20.54%	19.92%	20.27%				
	Phase-in $(3a+4a)$								
Saf	ety (County)								
1.	Total Normal Cost Rate	N/A	23.37%	26.02%	24.41%				
2.	Member Contribution Rate	<u>N/A</u>	<u>11.42%</u>	<u>13.01%</u>	12.04%				
3.	Employer Normal Cost Rate (1-2)	N/A	11.95%	13.01%	12.37%				
За.	Employer Normal Cost Rate with Phase-in	N/A	11.99%	12.77%	12.30%				
4.	UAL Amortization	N/A	9.13%	9.13%	9.13%				
4a.	UAL Amortization with Phase-in	N/A	8.47%	8.47%	8.47%				
5.	Net Employer Contribution Rate (3+4)	N/A	21.08%	22.14%	21.50%				
5a.	Net Employer Contribution Rate with Phase-in (3a+4a)	N/A	20.46%	21.25%	20.77%				

Reflects second year of three year phase-in of assumption changes for employer contribution rate



## **SECTION V – CONTRIBUTIONS**

The combined General and Safety employer contribution rates for FYE 2024 are shown in the table below, split by tier (1-4). Separate rates are shown above and below the first \$161.54 of biweekly compensation (Social Security Integration).

	Table V-2(a) Development of the Employer Contribution Rate as of June 30, 2022 for FYE 2024 with Social Security Integration									
		Tier 1	Tier 2 & 3	Tier 4	Total					
G	eneral and Safety									
1.	Employer Normal Cost Rate:	16.10%	9.16%	8.87%	9.03%					
	a. Rate on first \$161.54 of biweekly compensation	11.00%	6.23%							
	b. Rate on biweekly compensation in excess of \$161.54	16.50%	9.35%							
2.	UAL Rate:	6.19%	7.07%	6.88%	6.98%					
	a. Rate on first \$161.54 of biweekly compensation	4.23%	4.81%							
	b. Rate on biweekly compensation in excess of \$161.54	6.34%	7.22%							
3.	Total Rate $(1 + 2)$ :	22.29%	16.23%	15.75%	16.01%					
	a. Rate on first \$161.54 of biweekly compensation	15.23%	11.04%							
	b. Rate on biweekly compensation in excess of \$161.54	22.84%	16.57%							

Reflects final year of three year phase-in of assumption changes for employer contribution rate



### **SECTION V – CONTRIBUTIONS**

The employer contribution rates for FYE 2024 are shown in the table below, split by tier (1-4), membership class (General or Safety), and for the General class, employer (County or Non-County). Separate rates are shown above and below the first \$161.54 of biweekly compensation (Social Security Integration).

Table V-2(b)										
Development of the Employer Contribution Rate as of June 30, 2022 for FYE 2024										
with Social Security Integration										
	Tier 1	Tier 2 & 3	Tier 4	Total						
General (County)										
1. Employer Normal Cost Rate:	16.10%	8.21%	7.86%	8.05%						
a. Rate on first \$161.54 of biweekly compensation	11.00%	5.60%								
b. Rate on biweekly compensation in excess of \$161.54	16.50%	8.40%								
2. UAL Rate:	5.60%	5.60%	5.60%	5.60%						
a. Rate on first \$161.54 of biweekly compensation	3.82%	3.82%								
b. Rate on biweekly compensation in excess of \$161.54	5.74%	5.72%								
3. Total Rate $(1 + 2)$ :	21.70%	13.81%	13.46%	13.65%						
a. Rate on first \$161.54 of biweekly compensation	14.82%	9.41%								
b. Rate on biweekly compensation in excess of \$161.54	22.23%	14.11%								
General (Non-County)	16 100/	0.010/	7.060	0.050/						
1. Employer Normal Cost Rate:	16.10%	8.21%	/.86%	8.05%						
a. Rate on first \$161.54 of biweekly compensation	11.00%	5.60%								
b. Rate on biweekly compensation in excess of \$161.54	16.50%	8.40%								
2. UAL Rate:	12.94%	12.94%	12.94%	12.94%						
a. Rate on first \$161.54 of biweekly compensation	8.84%	8.82%								
b. Rate on biweekly compensation in excess of \$161.54	13.26%	13.23%								
3. Total Rate $(1 + 2)$ :	29.04%	21.15%	20.80%	20.99%						
a. Rate on first \$161.54 of biweekly compensation	19.83%	14.41%								
b. Rate on biweekly compensation in excess of \$161.54	29.75%	21.62%								
Sofety (County)										
1 Employer Normal Cost Rate:	N/A	11 95%	12.94%	12.37%						
a. Rate on first \$161.54 of biweekly compensation	N/A	8.10%	12.9170	12.3770						
b. Rate on biweekly compensation in excess of \$161.54	N/A	12.16%								
2. UAL Rate:	N/A	9.68%	9.68%	9.68%						
a. Rate on first \$161.54 of biweekly compensation	N/A	6.56%								
b. Rate on biweekly compensation in excess of \$161.54	N/A	9.85%								
3. Total Rate (1 + 2):	N/A	21.63%	22.62%	22.05%						
a. Rate on first \$161.54 of biweekly compensation	N/A	14.67%								
b. Rate on biweekly compensation in excess of \$161.54	N/A	22.00%								

Reflects final year of three year phase-in of assumption changes for employer contribution rate



## **SECTION V – CONTRIBUTIONS**

Table V-3 below shows information on each layer of the June 30, 2022 UAL. At its October 28, 2015 meeting, the Board adopted 19-year layered amortization of the UAL. The UAL as of June 30, 2015 is being amortized over a closed 19-year period as a level percentage of payroll, assuming payroll increases of 3.00% per year, and 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.

Table V-3         Development of Amortization Payment         For the June 30, 2022 Actuarial Valuation									
Type of Base	Date Established	Initial Amount	Initial Amortization Years		June 30, 2022 Outstanding Balance	Remaining Amortization Years		Amortization Amount	
1. Initial UAL	6/30/2015	201,848,216	19		178,112,149	12		18,769,838	
2. (Gain)/Loss Base	6/30/2016	38,033,040	19		34,602,920	13		3,425,600	
3. (Gain)/Loss Base	6/30/2017	25,611,386	19		23,890,887	14		2,234,800	
4. Assumption Change Base	6/30/2017	82,259,297	19		76,733,357	14		7,177,787	
5. POB Contribution Base	6/30/2017	(233,100,233)	19		(217,441,234)	14		(20,339,877)	
6. (Gain)/Loss Base	6/30/2018	23,781,349	19		22,659,352	15		2,012,825	
7. (Gain)/Loss Base	6/30/2019	12,251,268	19		11,872,096	16		1,005,821	
8. (Gain)/Loss Base	6/30/2020	23,103,302	19		22,683,697	17		1,839,884	
9. Assumption Change Base	6/30/2020	42,435,148	19		41,664,434	17		3,379,421	
10. (Gain)/Loss Base	6/30/2021	(1,383,632)	19		(1,373,048)	18		(106,979)	
11. (Gain)/Loss Base	6/30/2022	13,836,166	19		13,836,166	19		1,038,623	
Total				\$	207,240,776		\$	20,437,743	

Does not reflect phase-in of 2019 assumption change base.

Numbers may not add to totals due to rounding.

If the UAL payment above of \$20,437,743 is calculated based on a single-equivalent period with the June 30, 2022 UAL of \$207,240,776, the number of years to fully pay off the UAL would be approximately 13 years.



### **SECTION V – CONTRIBUTIONS**

Table V-4 below shows the development of the UAL amortization rates. The payroll split between County General and Non-County General is based on pensionable payroll by employer for FYE 2022 provided for the GASB 67/68 report. Following direction from Staff, the pensionable payroll for TCAG is excluded from the County's share.

As shown below (and described earlier in this section), the cost impact of the contribution from POB proceeds has been allocated to the County only.

Table V-4         Development of UAL Amortization Rates for FYE 2024										
General (County)										
1. General County Projected Payroll for FYE June 30, 2023	\$	208,674,452								
2. Total General Projected Payroll for FYE June 30, 2023	\$	226,945,209								
3. County Share (1 divided by 2)		91.9493%								
4. UAL Payment, not including POB Contribution	\$	29,362,772								
5. UAL Payment for POB Contribution	\$	(15,318,410)								
6. County Share of 4. (3 multiplied by 4)	\$	26,998,853								
7. County Share of 5. (100% of 5)	\$	(15,318,410)								
8. Total General County UAL Payment (6+7)	\$	11,680,443								
9. General County UAL Rate (8 divided by 1)		5.60%								
General (Non-County)										
1. General Non-County Projected Payroll for FYE June 30, 2023	\$	18,270,757								
2. Total General Projected Payroll for FYE June 30, 2023	\$	226,945,209								
3. Non-County Share (1 divided by 2)		8.0507%								
4. UAL Payment, not including POB Contribution	\$	29,362,772								
5. UAL Payment for POB Contribution	\$	(15,318,410)								
6. Non-County Share of 4. (3 multiplied by 4)	\$	2,363,919								
7. Non-County Share of 5. (0% of 5)	\$	0								
8. Total General Non-County UAL Payment (6+7)	\$	2,363,919								
9. General Non-County UAL Rate (8 divided by 1)		12.94%								
Safety (County)										
1. County Safety Projected Payroll for FYE June 30, 2023	\$	66,041,522								
2. Total Safety Projected Payroll for FYE June 30, 2023	\$	66,041,522								
3. County Share (1 divided by 2)		100.0000%								
4. UAL Payment, not including POB Contribution	\$	11,414,848								
5. UAL Payment for POB Contribution	\$	(5,021,467)								
6. County Share of 4. (3 multiplied by 4)	\$	11,414,848								
7. County Share of 5. (100% of 5)	\$	(5,021,467)								
8. Total County Safety UAL Payment (6+7)	\$	6,393,381								
9. County Safety UAL Rate (8 divided by 1)		9.68%								



## **SECTION V – CONTRIBUTIONS**

The employer contribution rates for FYE 2024 are shown in Table V-5 below, split by membership class, employer (County or non-County for General members), and tier (1-4). Separate rates are displayed for normal cost and UAL Amortization, both of which are further split into Basic and COLA rates. Table V-6 on the following page shows employee contribution rates for FYE 2024 at sample ages.

Table V-5											
Detailed Employer Contribution Rate as of June 30, 2022 for FYE 2024											
Normal Cost UAL Amortization Cost Total G										t	
		Basic	COLA	Total	Basic	COLA	Total	Basic	COLA	Total	
Member Type	Tier	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
General (County)	1	13.43%	2.68%	16.10%	4.67%	0.93%	5.60%	18.09%	3.61%	21.70%	
General (County)	2&3	6.83%	1.38%	8.21%	4.66%	0.94%	5.60%	11.49%	2.32%	13.81%	
General (County)	4	6.41%	1.45%	7.86%	4.57%	1.03%	5.60%	10.98%	2.48%	13.46%	
General (Non-County)	1	13.43%	2.68%	16.10%	10.79%	2.15%	12.94%	24.21%	4.83%	29.04%	
General (Non-County)	2&3	6.83%	1.38%	8.21%	10.77%	2.17%	12.94%	17.60%	3.55%	21.15%	
General (Non-County)	4	6.41%	1.45%	7.86%	10.56%	2.38%	12.94%	16.97%	3.83%	20.80%	
General (Total)	1	13.43%	2.68%	16.10%	5.16%	1.03%	6.19%	18.59%	3.71%	22.29%	
General (Total)	2&3	6.83%	1.38%	8.21%	5.15%	1.04%	6.19%	11.98%	2.42%	14.40%	
General (Total)	4	6.41%	1.45%	7.86%	5.05%	1.14%	6.19%	11.46%	2.59%	14.05%	
Safety (County)	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Safety (County)	2&3	9.70%	2.25%	11.95%	7.85%	1.83%	9.68%	17.55%	4.08%	21.63%	
Safety (County)	4	10.36%	2.58%	12.94%	7.75%	1.93%	9.68%	18.11%	4.51%	22.62%	

Reflects final year of three year phase-in of assumption changes for employer contribution rate



## **SECTION V – CONTRIBUTIONS**

Table V-6										
Employee Contribution Rate at Sample Ages as of June 30, 2022 for FYE 2024										
Member Type	Tier	Age 25	Age 35	Age 45	Single Rate					
General	1	4.75%	5.83%	7.17%	N/A					
General	2&3	7.67%	9.40%	11.51%	N/A					
General	4	5.69%	7.89%	10.67%	N/A					
Safety	1	N/A	N/A	N/A	N/A					
Safety	2&3	11.14%	13.20%	15.29%	N/A					
Safety	4	11.55%	15.25%	19.31%	N/A					


## **SECTION V – CONTRIBUTIONS**

Table V-7 below shows projected annual employer contributions for FYE 2023, split by membership class, employer (County or non-County for General members), and tier (1-4). The contribution amounts are further split into normal cost and UAL Amortization components.

Table V-7												
Estim	Estimated Annual Employer Contributions for FYE 2024											
Member Type	Tier	Normal Cost	<b>UAL Amortization</b>	<b>Contributions Total</b>								
General (County)	1	\$ 74,943	\$ 26,062	\$ 101,005								
General (County)	2&3	8,841,550	6,027,403	14,868,953								
General (County)	4	8,422,406	6,001,701	14,424,108								
General (Non-County)	1	6,562	5,273	11,835								
General (Non-County)	2&3	774,133	1,219,449	1,993,582								
General (Non-County)	4	737,434	1,214,249	1,951,684								
General (Total)	1	81,504	31,335	112,839								
General (Total)	2&3	9,615,683	7,246,853	16,862,536								
General (Total)	4	9,159,841	7,215,951	16,375,792								
Safety (County)	1	0	0	0								
Safety (County)	2&3	4,715,455	3,819,597	8,535,052								
Safety (County)	4	3,710,326	2,775,305	6,485,631								

*Reflects final year of three-year phase-in of assumption changes for employer contribution rate Numbers may not add to totals due to rounding.* 



## **SECTION V – CONTRIBUTIONS**

Table V-8 below shows a projection of the expected contributions (for the fiscal year beginning one year after the valuation date) to cover the employer normal cost and UAL amortization over the next 20 years.

			Table V-8			
		Retire	ement Contribu	itions		
<b>X7 1 4</b> *	Employer	Employer UAL	Total		<b>T 1</b>	
Valuation	Normal Cost	Amortization	Contributions	Employer Kate	Contribution	Employee Rate
2022	\$ 27 282 800	\$ 21.089.040	\$ 18 371 840	16.0%	\$ 27.364.603	Q 1%
2022	\$ 27,282,809 28,059,191	\$ 21,089,040 23,842,201	\$ 48,371,849 51 001 302	16.7%	<sup>3</sup> 27,304,003 28 170 463	9.1%
2023	28,055,151	25,042,201	56 117 497	17.5%	20,170,403	9.1%
2024	20,0758,036	27,221,004	50,117,477	18.2%	29,002,122	9.1%
2025	20,758,050	32 196 703	62 845 272	18.270	30 7/9 090	9.1%
2020	31 566 246	34 294 298	65 860 544	18.370	31 664 252	9.1%
2027	32 512 595	36 673 350	69 185 9/15	19.0%	32 608 958	9.1%
2020	32,512,575	38,442,523	71 931 1/9	19.270	33 581 367	9.0%
202)	34 493 406	40 146 733	74,640,138	19.470	34 584 783	9.0%
2030	35 529 422	42 941 853	74,040,130	19.9%	35 616 809	9.0%
2031	36 595 465	45 332 143	81 927 607	20.2%	36 678 693	9.0%
2032	37 692 661	46 777 781	84 470 442	20.2%	37 773 906	9.0%
2033	38 823 666	20 623 665	59 //7 331	13.8%	38 900 671	9.0%
2034	39,987,576	13 921 158	53 908 733	12.2%	40.061.682	9.0%
2035	41 186 565	30 794 746	71 981 310	15.8%	41 255 027	9.0%
2030	42 419 806	29 766 478	72 186 285	15.6%	42 482 002	9.0%
2037	43 688 536	29,700,470	72,100,205	15.4%	43 745 388	9.0%
2030	44 994 921	20,045,505	65 679 103	13.0%	45 046 208	9.0%
2037	46 339 974	20,004,102	67 131 175	13.1%	46 386 259	9.0%
2040	47 725 344	19 498 943	67 224 287	12.7%	47 764 277	9.0%
2042	49.150.614	16.147.724	65.298.338	12.0%	49,182,651	9.0%



## SECTION VI – ANNUAL COMPREHENSIVE FINANCIAL REPORTING INFORMATION

The GASB adopted Statement Nos. 67 and 68, replacing GASB Statement Nos. 25 and 27. GASB 67 was effective for periods beginning after June 15, 2013 (first effective June 30, 2014 for the Plan) and GASB 68 was effective for fiscal years beginning after June 15, 2014 (first effective for the fiscal year July 1, 2014 to June 30, 2015 for the Employers). The disclosures needed to satisfy the GASB requirements will be included in the TCERA GASB 67/68 Report as of June 30, 2022.

In accordance with Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports (ACFRs), we continue to prepare the Schedule of Funded Liabilities by Type disclosure, as shown in Table VI-1. As requested by TCERA, we have also included the Schedule of Funding Progress (Table VI-2) and the Schedule of Employer Contributions (Table VI-3).

	S	LITIES BY TYPE					
			(in thousands)				
	(A)	<b>(B)</b>	(C)				
			Remaining		Portio	n of Actua	rial
Valuation	Active/Inactive	Retirees	Active		Liabil	lities Cove	red
Date	Member	And	Members'	Reported	by Re	ported As	sets
June 30,	Contributions	Beneficiaries	Liabilities	Assets	(A)	<b>(B)</b>	( <b>C</b> )
2013	\$ 238,200	\$ 621,125	\$ 326,732	\$ 1,048,160	100%	100%	58%
2014	252,883	660,147	358,802	1,101,929	100%	100%	53%
2015	264,870	698,147	395,418	1,156,587	100%	100%	49%
2016	272,740	748,703	409,993	1,192,642	100%	100%	42%
2017	278,900	808,799	485,707	1,461,755	100%	100%	77%
2018	287,078	869,729	499,550	1,523,030	100%	100%	73%
2019	301,935	925,027	514,321	1,598,431	100%	100%	72%
2020	319,562	1,008,432	547,804	1,670,786	100%	100%	63%
2021	339,547	1,050,032	568,406	1,759,025	100%	100%	65%
2022	359,335	1,105,920	582,095	1,840,109	100%	100%	64%

Numbers may not add to totals due to rounding.

June 30, 2014 and earlier numbers calculated by prior actuary

June 30, 2017 assets include receivable for expected contribution from POB



	Table VI-2									
	SC	HEDULE OF FU	NDING PROC	GRESS						
	(dollars in thousands)									
Actuarial	Actuarial	Actuarial				Unfunded AL				
Valuation	Value	Liability	Unfunded	Funded	Covered	as a % of				
Date	of Assets	(AL)	AL	Ratio	Payroll	<b>Covered Payroll</b>				
June 30, 2002	\$ 612,469	\$ 561,377	\$ (51,092)	109.1%	\$ 158,263	-32.3%				
June 30, 2003	634,249	608,505	(25,744)	104.2%	162,397	-15.9%				
June 30, 2004	665,244	649,649	(15,595)	102.4%	158,032	-9.9%				
June 30, 2005	681,618	714,656	33,038	95.4%	164,777	20.1%				
June 30, 2006	729,899	792,844	62,945	92.1%	186,949	33.7%				
June 30, 2007	800,967	846,030	45,063	94.7%	204,803	22.0%				
June 30, 2008	879,051	946,414	67,363	92.9%	226,836	29.7%				
June 30, 2009	919,179	996,747	77,568	92.2%	227,306	34.1%				
June 30, 2010	946,640	1,033,211	86,571	91.6%	217,811	39.7%				
June 30, 2011	969,681	1,072,144	102,463	90.4%	219,854	46.6%				
June 30, 2012	981,946	1,101,456	119,510	89.1%	222,635	53.7%				
June 30, 2013	1,048,160	1,186,057	137,897	88.4%	230,955	59.7%				
June 30, 2014	1,101,929	1,271,832	169,903	86.6%	234,569	72.4%				
June 30, 2015	1,156,587	1,358,435	201,848	85.1%	239,055	84.4%				
June 30, 2016	1,192,642	1,431,436	238,794	83.3%	248,514	96.1%				
June 30, 2017	1,461,755	1,573,406	111,651	92.9%	254,941	43.8%				
June 30, 2018	1,523,030	1,656,357	133,326	92.0%	262,714	50.7%				
June 30, 2019	1,598,431	1,741,283	142,851	91.8%	272,416	52.4%				
June 30, 2020	1,670,786	1,875,797	205,011	89.1%	284,272	72.1%				
June 30, 2021	1,759,025	1,957,985	198,960	89.8%	286,886	69.4%				
June 30, 2022	1,840,109	2,047,350	207,241	89.9%	293,445	70.6%				

## SECTION VI – ANNUAL COMPREHENSIVE FINANCIAL REPORTING INFORMATION

Numbers may not add to totals due to rounding.

June 30, 2014 and earlier numbers calculated by prior actuary.

June 30, 2017 assets include receivable for expected contribution from POB.



## SECTION VI – ANNUAL COMPREHENSIVE FINANCIAL REPORTING INFORMATION

Table VI-3									
SCHEDUI	LE OF EMPLOY	ER CONTRIBU	TIONS						
	(dollars in the	ousands)							
	Actuarially								
Year Ended	Determined	Actual	Percentage						
June, 30	Contribution	Contribution	Contributed						
2002	\$ 6,186	\$ 6,186	100%						
2003	5,245	5,245	100%						
2004	9,595	9,595	100%						
2005	10,502	10,502	100%						
2006	12,443	12,443	100%						
2007	17,975	17,975	100%						
2008	22,692	22,692	100%						
2009	22,431	22,431	100%						
2010	25,339	25,339	100%						
2011	23,434	23,434	100%						
2012	25,257	25,257	100%						
2013	29,847	29,847	100%						
2014	25,953	25,953	100%						
2015	30,992	30,992	100%						
2016	31,297	31,297	100%						
2017	33,616	33,616	100%						
2018	36,263	36,263	100%						
2019	33,494	33,494	100%						
2020	35,310	35,310	100%						
2021	36,766	36,766	100%						
2022	40,392	40,392	100%						

June 30, 2014 and earlier numbers calculated by prior actuary.

Note that the actual contributions do not include the contribution from POB proceeds above the actuarially determined amount.



## **APPENDIX A – MEMBERSHIP INFORMATION**

The data for this valuation was provided by the Tulare County staff as of June 30, 2022. 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.

SUMMARY OF	TOTA	AL ACTIVE MI	EMBH	ERSHIP	
	J	une 30, 2021	J	une 30, 2022	Change
Total (General & Safety)					_
Count		4,484		4,432	-1.2%
Average Age		42.4		42.5	0.1%
Average Service		10.5		10.5	0.0%
Annual Projected Payroll	\$	286,886,367	\$	293,444,953	2.3%
Average Annual Pay	\$	63,980	\$	66,211	3.5%

	SUMMARY	OF INA	<b>ACTIVE MEMB</b>	BERSI	HP*	
		Ju	ıne 30, 2021	Jı	ine 30, 2022	Change
Genera	al					
	Count		1,935		2,083	7.6%
	Average Age		43.9		43.9	-0.2%
	Total Contribution Balance	\$	46,297,586	\$	52,984,947	14.4%
	Average Contribution Balance	\$	23,926	\$	25,437	6.3%
Safety						
Ĵ	Count		360		384	6.7%
	Average Age		39.3		39.3	0.1%
	Total Contribution Balance	\$	14,311,843	\$	15,792,000	10.3%
	Average Contribution Balance	\$	39,755	\$	41,125	3.4%
Total						
	Count		2,295		2,467	7.5%
	Average Age		43.2		43.2	-0.1%
	Total Contribution Balance	\$	60,609,429	\$	68,776,947	13.5%
	Average Contribution Balance	\$	26,409	\$	27,879	5.6%

\*Includes unclaimed accounts.



SUMMAR	SUMMARY OF RETIRED MEMBERSHIP June 30, 2021 June 30, 2022 Char						
	Jı	ıne 30, 2021	Jı	une 30, 2022	Change		
General							
Count		2,865		2,947	2.9%		
Average Age		71.5		71.8	0.4%		
Total Annual Allowance	\$	65,750,480	\$	69,411,269	5.6%		
Average Annual Allowance	\$	22,950	\$	23,553	2.6%		
Safety							
Count		607		638	5.1%		
Average Age		65.0		65.3	0.5%		
Total Annual Allowance	\$	22,872,888	\$	24,727,646	8.1%		
Average Annual Allowance	\$	37,682	\$	38,758	2.9%		
Total							
Count		3,472		3,585	3.3%		
Average Age		70.4		70.6	0.3%		
Total Annual Allowance	\$	88,623,368	\$	94,138,915	6.2%		
Average Annual Allowance	\$	25,525	\$	26,259	2.9%		



## **APPENDIX A – MEMBERSHIP INFORMATION**

	J	June 30, 2021		une 30, 2022	Change
General Tier 1					
Count		7		7	0.0%
Average Age		68.0		69.0	1.5%
Average Service		36.8		37.8	2.7%
Annual Projected Payroll	\$	476,784	\$	490,633	2.9%
Average Annual Pay	\$	68,112	\$	70,090	2.9%
General Tier 2 & 3					
Count		1,776		1,619	-8.8%
Average Age		49.0		49.6	1.3%
Average Service		16.9		17.8	5.1%
Annual Projected Payroll	\$	119,402,048	\$	113,469,216	-5.0%
Average Annual Pay	\$	67,231	\$	70,043	4.2%
General Tier 4					
Count		1,855		1,985	7.0%
Average Age		37.4		37.8	0.9%
Average Service		4.0		4.2	4.29
Annual Projected Payroll	\$	101,344,393	\$	113,443,582	11.9%
Average Annual Pay	\$	54,633	\$	57,150	4.6%
General Total					
Count		3,638		3,611	-0.79
Average Age		43.1		43.2	0.0%
Average Service		10.4		10.4	-0.3%
Annual Projected Payroll	\$	221,223,225	\$	227,403,431	2.8%
Average Annual Pay	\$	60,809	\$	62,975	3.6%

## SUMMARY OF ACTIVE GENERAL MEMBERSHIP



SUMMARY	OF ACTI	VE SAFETY MI	EMBE	RSHIP	
	Jı	ıne 30, 2021	Jı	ıne 30, 2022	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		468		428	-8.5%
Average Age		44.7		45.4	1.7%
Average Service		16.6		17.4	4.5%
Annual Projected Payroll	\$	39,977,926	\$	38,249,543	-4.3%
Average Annual Pay	\$	85,423	\$	89,368	4.6%
Safety Tier 4					
Count		378		393	4.0%
Average Age		32.6		32.7	0.4%
Average Service		3.9		4.3	8.7%
Annual Projected Payroll	\$	25,685,216	\$	27,791,979	8.2%
Average Annual Pay	\$	67,950	\$	70,710	4.1%
Safety Total					
Count		846		821	-3.0%
Average Age		39.3		39.4	0.2%
Average Service		11.0		11.1	1.3%
Annual Projected Payroll	\$	65,663,142	\$	66,041,522	0.6%
Average Annual Pay	\$	77,616	\$	80,440	3.6%



SUMMARY OF RETIRED GENERAL MEMBERSHIP									
	Jı	ıne 30, 2021	Jı	ıne 30, 2022	Change				
Service Retirement					0				
Count		2,262		2,333	3.1%				
Average Age		71.4		71.7	0.3%				
Total Annual Allowance	\$	55,447,906	\$	58,704,307	5.9%				
Average Annual Allowance	\$	24,513	\$	25,163	2.7%				
Disability									
Count		204		204	0.0%				
Average Age		65.0		65.7	1.0%				
Total Annual Allowance	\$	4,501,396	\$	4,574,239	1.6%				
Average Annual Allowance	\$	22,066	\$	22,423	1.6%				
Beneficiaries									
Count		399		410	2.8%				
Average Age		75.4		75.6	0.3%				
Total Annual Allowance	\$	5,801,178	\$	6,132,723	5.7%				
Average Annual Allowance	\$	14,539	\$	14,958	2.9%				
Total									
Count		2,865		2,947	2.9%				
Average Age		71.5		71.8	0.4%				
Total Annual Allowance	\$	65,750,480	\$	69,411,269	5.6%				
Average Annual Allowance	\$	22,950	\$	23,553	2.6%				



SUMMARY OF RETIRED SAFETY MEMBERSHIP									
	Jı	ıne 30, 2021	Jı	une 30, 2022	Change				
Service Retirement									
Count		357		378	5.9%				
Average Age		66.3		66.4	0.1%				
Total Annual Allowance	\$	15,528,655	\$	16,881,299	8.7%				
Average Annual Allowance	\$	43,498	\$	44,660	2.7%				
Disability									
Count		138		141	2.2%				
Average Age		59.7		60.2	0.8%				
Total Annual Allowance	\$	4,597,665	\$	4,810,225	4.6%				
Average Annual Allowance	\$	33,316	\$	34,115	2.4%				
Beneficiaries									
Count		112		119	6.3%				
Average Age		67.1		67.8	1.1%				
Total Annual Allowance	\$	2,746,568	\$	3,036,122	10.5%				
Average Annual Allowance	\$	24,523	\$	25,514	4.0%				
Total									
Count		607		638	5.1%				
Average Age		65.0		65.3	0.5%				
Total Annual Allowance	\$	22,872,888	\$	24,727,646	8.1%				
Average Annual Allowance	\$	37,682	\$	38,758	2.9%				



						AG	E AND	SERVICE	DIST	RIBUTION	i WIT	H ANNU	AL AV	ERAGE S	ALAI	RY						
							C	OF ACTIV	E GEN	ERAL ME	MBE	RS AS OF	JUNE	30, 2022								
										TI	ER 1											
									Y	YEARS OI	CRE	DITED S	ERVIC	E								
	Un	der 1	1	l to 4		5 to 9	10	) to 14	15	5 to 19	20	0 to 24	25	5 to 29	3	0 to 34	35	5 to 39	40	) & up	Ţ	Гotal
Attained		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average
Age	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 to 54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55 to 59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	1	122,299	0	0	0	0	0	0	0	0	1	79,201	1	50,822	2	71,244	5	78,962
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	48,033	1	47,791	2	47,912
Total	0	0	0	0	1	122,299	0	0	0	0	0	0	0	0	1	79,201	2	49,428	3	63,426	7	70,090

						AG	E AND C	SERVICE	DISTI E GEN	RIBUTION ERAL ME	I WIT MBE	'H ANNUA RS AS OF	AL AV JUNE	ERAGE S 30, 2022	ALA]	RY						
										TIEI	R 2 & .	3										
I .									Ŋ	YEARS OF	F CRE	DITED S	ERVIC	E								
	Un	der 1	1	l to 4		5 to 9	10	to 14	15	5 to 19	20	) to 24	25	5 to 29	3	60 to 34	3	5 to 39	40	& up		Fotal
Attained		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average
Age	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.
Under 25	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
25 to 29	0	0	0	0	0	0	1	42,111	0	0	0	0	0	0	0	0	0	0	0	0	1	42,111
30 to 34	0	0	0	0	17	61,281	39	57,206	1	59,188	0	0	0	0	0	0	0	0	0	0	57	58,456
35 to 39	0	0	3	109,498	25	67,816	114	69,029	39	67,962	0	0	0	0	0	0	0	0	0	0	181	69,302
40 to 44	1	48,325	2	69,984	30	72,580	117	73,945	133	72,597	47	63,515	0	0	0	0	0	0	0	0	330	71,691
45 to 49	0	0	3	57,134	21	81,635	82	68,447	90	68,621	83	67,503	22	71,816	0	0	0	0	0	0	301	69,292
50 to 54	0	0	3	70,683	12	74,346	43	58,729	81	74,345	84	64,884	38	61,420	9	72,441	0	0	0	0	270	66,992
55 to 59	0	0	0	0	11	65,362	48	64,086	55	71,496	67	67,351	35	74,990	19	68,318	2	73,010	0	0	237	68,813
60 to 64	0	0	0	0	6	111,967	37	79,543	43	71,600	45	63,468	21	64,893	21	84,782	5	86,531	1	48,884	179	73,600
65 to 69	0	0	0	0	2	70,435	10	80,049	11	102,413	14	64,836	5	67,051	4	99,295	2	77,843	0	0	48	80,494
70 & up	0	0	0	0	0	0	5	133,387	4	73,474	4	123,344	2	73,906	0	0	0	0	0	0	15	106,801
Total	1	48,325	11	77,446	124	73,006	496	69,392	457	72,198	344	66,302	123	68,166	53	77,880	9	81,596	1	48,884	1,619	70,086



						AG	E AND C	SERVICE OF ACTIV	DIST E GEN	RIBUTION ERAL ME TI	N WIT MBE ER 4	TH ANNU. RS AS OF	AL AV ' JUNE	<b>ERAGE S</b> 2 30, 2022	SALA]	RY						
										YEARS O	F CRE	DITED S	ERVI	CE								
	Un	der 1		1 to 4		5 to 9	10	) to 14	1:	5 to 19	2	0 to 24	2	5 to 29	3	0 to 34	3	5 to 39	40	) & up		Fotal
Attained		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average
Age	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.
Under 25	53	\$ 39,486	26	\$ 45,181	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	79	\$ 41,361
25 to 29	106	48,211	184	50,890	61	50,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	351	50,025
30 to 34	81	49,876	206	57,614	254	60,621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	541	57,867
35 to 39	51	53,784	128	58,443	172	65,505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	351	61,227
40 to 44	38	48,306	104	60,153	100	62,705	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242	59,348
45 to 49	28	58,956	58	56,127	71	59,989	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157	58,378
50 to 54	24	69,817	36	63,108	53	60,547	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	63,332
55 to 59	10	54,972	35	59,187	34	63,082	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	60,330
60 to 64	7	56,885	25	59,848	26	63,424	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	61,093
65 to 69	0	0	5	57,431	7	46,957	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	51,322
70 & up	0	0	0	0	2	105,567	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	105,567
Total	398	50,492	807	56,414	780	61,310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,985	57,150



									AGE A	ND SERVI	CE DIS	TRIBUTIO	N WI	TH ANNUA	L AV	ERAGE SA	LARY							
										OF ACT	TIVE SA	AFETY ME	MBE	RS AS OF J	UNE 3	0, 2022								
												Т	IER 1											
												YEARS C	F CR	EDITED SE	RVIC	Е								
	τ	Under 1			1 to 4		5	to 9	1	0 to 14	15	5 to 19	2	20 to 24	2	5 to 29		30 to 34	3	5 to 39	4	0 & up		Total
Attained		Average	e		Average			Average		Average		Average		Average		Average		Average		Average		Average		Average
Age	No.	Comp.		No.	Comp.	No.		Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.
Under 25	0	\$	0	0	\$ 0	0	) :	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
25 to 29	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 to 54	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55 to 59	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60 to 64	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0		0	0	0	0	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

							AGE A	ND SERVI	CE DIS	TRIBUTIO	N WI	TH ANNUA	LAV	ERAGE SA	LARY							
								OF ACT	IVESA	AFEIY ME TIF	INIBEI	KS AS OF J 2 3	UNE 3	0, 2022								
										YEARS C	F CR	EDITED SE	RVIC	Е								
	U	nder 1		1 to 4		5 to 9	1	0 to 14	15	5 to 19	2	20 to 24	2	5 to 29		30 to 34	3	5 to 39	4(	) & up		Total
Attained		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average
Age	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.
Under 25	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
25 to 29	0	0	1	81,946	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	81,946
30 to 34	0	0	0	0	8	80,815	15	76,527	2	88,708	0	0	0	0	0	0	0	0	0	0	25	78,874
35 to 39	0	0	2	88,269	7	75,109	36	81,755	28	88,664	0	0	0	0	0	0	0	0	0	0	73	83,946
40 to 44	0	0	1	83,653	10	83,506	44	81,370	59	90,044	11	97,251	0	0	0	0	0	0	0	0	125	87,051
45 to 49	0	0	0	0	2	97,928	19	85,132	38	89,947	31	97,612	2	159,154	0	0	0	0	0	0	92	93,213
50 to 54	0	0	0	0	2	77,334	7	80,943	22	91,050	18	100,099	17	100,633	1	100,724	0	0	0	0	67	94,591
55 to 59	0	0	0	0	1	87,413	5	93,649	7	79,001	6	95,823	10	96,747	2	96,780	3	156,009	0	0	34	97,431
60 to 64	0	0	0	0	0	0	2	107,888	3	89,698	2	88,975	2	77,109	1	78,657	0	0	0	0	10	89,569
65 to 69	0	0	0	0	0	0	0	0	0	0	1	64,702	0	0	0	0	0	0	0	0	1	64,702
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	4	85,534	30	81,509	128	82,340	159	89,408	69	97,320	31	101,637	4	93,235	3	156,009	0	0	428	89,368



## **APPENDIX A – MEMBERSHIP INFORMATION**

							AGE A	ND SERVIO OF ACT	CE DIS TIVE SA	TRIBUTIO AFETY ME T	N WI MBEI IER 4	ΓΗ ANNUA RS AS OF J	L AVI UNE 3	ERAGE SAI 0, 2022	LARY							
										YEARS O	FCR	EDITED SE	RVIC	E								
	U	Jnder 1		1 to 4		5 to 9	10	) to 14	15	5 to 19	2	0 to 24	2	5 to 29		30 to 34	3	5 to 39	- 40	) & up	<u> </u>	Total
Attained		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average		Average
Age	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.
Under 25	20	\$ 55,436	14	\$ 58,681	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	34	\$ 56,772
25 to 29	25	58,454	87	68,723	20	74,636	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	67,674
30 to 34	14	62,327	51	69,921	58	76,289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	72,059
35 to 39	5	70,287	17	73,832	32	75,986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	74,780
40 to 44	0	0	9	70,977	13	79,904	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	76,252
45 to 49	1	81,913	4	73,224	6	82,789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	79,231
50 to 54	0	0	5	87,846	4	76,377	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	82,749
55 to 59	0	0	2	77,717	3	104,248	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	93,636
60 to 64	0	0	1	80,958	1	92,185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	86,572
65 to 69	0	0	0	0	1	92,121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	92,121
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	65	59,631	190	69,626	138	77,443	0	0	0	0	0	0	0	0	0	0	0	0	0	0	393	70,718

# **Average Increases in Pay**

(for upcoming year, based on valuation data)

Longevity and Promotion Component	2.30%
Wage Inflation Component	<u>3.00%</u>
Total	5.30%



		AGE PENSIONERS	DISTRIB	UTI	ION OF TOTAL IN	ACTIVE I	PAF FI	RTICIPANTS	30 2022	
	]	Disability Retirements	N De	lorn efer: Ret	nal, Early red Vested irements	Surv and Reco	vivin Ber eivir	ng Spouses neficiaries ng Benefits	30, 2022	Total
Age	Number	Annual Benefit	Number		Annual Benefit	Number		Annual Benefit	Number	Annual Benefit
Under 55	81	\$ 2,439,504	64	\$	1,238,247	40	\$	637,072	185	\$ 4,314,823
55-59	46	1,391,172	202		5,302,803	16		249,351	264	6,943,326
60-64	52	1,285,326	384		10,623,872	44		805,736	480	12,714,934
65-69	59	1,466,566	614		18,241,200	68		1,306,311	741	21,014,077
70-74	58	1,604,706	596		17,557,611	96		1,598,942	750	20,761,259
75-79	30	801,434	491		14,162,112	91		1,670,042	612	16,633,588
80 & Over	19	395,756	360		8,459,761	174		2,901,391	553	11,756,908
Total	345	\$ 9,384,464	2,711	\$	75,585,606	529	\$	9,168,845	3,585	\$ 94,138,915

			AGE I PENSIONERS	DISTRIBU AND BENI	TIC EFI	ON OF INACTIVE CIARIES RECEIV	GENERAI ING BENH	Z PA	ARTICIPANTS IS AS OF JUNE :	30, 2022	
		<b>D</b> !	- 1. *1*4	N	lorr	nal, Early	Sur	vivi	ng Spouses		
	]	Disa Retir	rements	D	efer Ret	red Vested irements	and Reco	Be eivin	neficiaries ng Benefits		Total
Age	Number	Ι	Annual Benefit	Number		Annual Benefit	Number		Annual Benefit	Number	Annual Benefit
Under 55	32	\$	698,881	34	\$	397,226	18	\$	163,071	84	\$ 1,259,178
55-59	22		492,197	132		2,025,244	12		149,203	166	2,666,644
60-64	35		820,199	310		7,487,478	30		465,719	375	8,773,396
65-69	43		936,580	541		14,777,109	45		623,869	629	16,337,558
70-74	39		867,718	537		14,632,396	78		1,095,519	654	16,595,633
75-79	22		522,102	434		11,524,936	81		1,417,356	537	13,464,394
80 & Over	11		236,562	345		7,859,918	146		2,217,986	502	10,314,466
Total	204	\$	4,574,239	2,333	\$	58,704,307	410	\$	6,132,723	2,947	\$ 69,411,269



	AGE DISTRIBUTION OF INACTIVE SAFETY PARTICIPANTS PENSIONERS AND BENEFICIARIES RECEIVING BENEFITS AS OF JUNE 30, 2022													
			PENSIONERS	AND BENI	Jorn	CIARIES RECEIV	ING BENE		SAS OF JUNE	30, 2022				
		Disa	bility	D	eferi	red Vested	and	Bei	neficiaries					
	]	Retir	ements	_	Reti	irements	Reco	eivir	ng Benefits			Total		
Age	Number	A	Annual Benefit	Number		Annual Benefit	Number	1	Annual Benefit	Number		Annual Benefit		
Under 55	49	\$	1,740,623	30	\$	841,021	22	\$	474,001	101	\$	3,055,645		
55-59	24		898,975	70		3,277,559	4		100,148	98		4,276,682		
60-64	17		465,127	74		3,136,394	14		340,017	105		3,941,538		
65-69	16		529,986	73		3,464,091	23		682,442	112		4,676,519		
70-74	19		736,988	59		2,925,215	18		503,423	96		4,165,626		
75-79	8		279,332	57		2,637,176	10		252,686	75		3,169,194		
80 & Over	8		159,194	15		599,843	28		683,405	51		1,442,442		
Total	141	\$	4,810,225	378	\$	16,881,299	119	\$	3,036,122	638	\$	24,727,646		



## **APPENDIX A – MEMBERSHIP INFORMATION**

			Ret	irants and Bene	ficiaries Ad	lded t	o and Removed	l From Pay	yrol	l			
Plan Year Ended June 30	At Beginning of Year	Added During Year	Ann Add	ual Allowances led to the Rolls	Removed During Year	Ann Ren	ual Allowances noved from the Rolls	At End of Year		Annual Allowance	% Increase in Annual Allowance	A A	verage Annual Ilowance
2012	2,313	181	\$	4,736,189	70	\$	985,645	2,424	\$	48,974,812	8.29%	\$	20,204
2013	2,424	183	\$	4,745,718	65	\$	483,264	2,542	\$	53,237,266	8.70%	\$	20,943
2014	2,542	224	\$	4,198,797	75	\$	659,212	2,691	\$	56,776,851	6.65%	\$	21,099
2015	2,691	218	\$	4,360,151	88	\$	1,432,880	2,821	\$	59,960,567	5.61%	\$	21,255
2016	2,821	185	\$	4,540,356	66	\$	986,150	2,940	\$	64,292,378	7.22%	\$	21,868
2017	2,940	191	\$	4,483,587	59	\$	896,529	3,072	\$	68,669,924	6.81%	\$	22,353
2018	3,072	178	\$	5,487,994	58	\$	830,938	3,192	\$	73,731,771	7.37%	\$	23,099
2019	3,192	174	\$	4,705,555	54	\$	1,098,384	3,312	\$	78,971,061	7.11%	\$	23,844
2020	3,312	163	\$	4,626,973	67	\$	925,421	3,408	\$	84,412,237	6.89%	\$	24,769
2021	3,408	141	\$	3,908,186	77	\$	1,434,138	3,472	\$	88,623,368	4.99%	\$	25,525
2022	3,472	178	\$	5,109,979	65	\$	1,181,524	3,585	\$	94,138,915	6.22%	\$	26,259

Data prior to 2015 was compiled by the previous actuary.

Starting in 2015, Annual Allowances Added to the Rolls no longer includes cost of living adjustments for existing retirees.



	-	Reconci	liation of Sys	tem Memb Total Me	ership Sinc mbers	e Prior V	aluation				
			Deferred	I ottai Mit	mbers			Non-Vested			
		Deferred	Vested -	Ordinary	Duty			Terminations		Deferred	
	Active	Vested	Transferred	Disability	Disability	Retired	Beneficiaries	Due Refund	QDRO	QDRO	Totals
June 30, 2021	4,484	467	655	121	221	2,619	454	1,155	57	18	10,251
New Entrants	526										526
Rehires	25	(6)	(2)					(17)			-
Duty Disabilities	(7)				9	(2)					-
Ordinary Disabilities				1		(1)					-
Retirements	(123)	(11)	(27)			161					-
Vested Terminations	(107)	107									-
Non-Vested Terminations and	(212)	(1)	(2)	(1)	(2)	(36)		206			(48)
Death without beneficiary											-
Death with beneficiary	(3)			(3)	(2)	(29)	37				-
Transfers	(22)	(7)	39					(10)			-
Beneficiary Deaths							(25)		(1)		(26)
Domestic Relations Orders									7	(2)	5
Deferred Domestic Relations Orders										4	4
Withdrawals Paid	(129)	(19)	(3)					(78)		(1)	(230)
Data Corrections				1		(1)		2			2
June 30, 2022	4,432	530	660	119	226	2,711	466	1,258	63	19	10,484



Reconciliation of System Membership Since Prior Valuation											
			Deferred	General w	rembers			Non-Vested			
		Deferred	Vested -	Ordinary	Duty			Terminations		Deferred	
	Active	Vested	Transferred	Disability	Disability	Retired	Beneficiaries	Due Refund	QDRO	QDRO	Totals
June 30, 2021	3,638	385	540	103	101	2,262	362	1,001	37	9	8,438
New Entrants	451										451
Rehires	19	(4)	(2)					(13)			-
Duty Disabilities	(3)	-			4	(1)					-
Ordinary Disabilities	-	-		1		(1)					-
Retirements	(102)	(11)	(21)			134					-
Vested Terminations	(92)	92									-
Non-Vested Terminations and	(177)	(1)	(2)	(1)	(1)	(36)		171		-	(47)
Death without beneficiary											-
Death with beneficiary	(2)			(3)	(1)	(24)	30				-
Transfers	(19)	(5)	28					(5)			(1)
Beneficiary Deaths							(20)		(1)		(21)
Domestic Relations Orders									2		2
Deferred Domestic Relations Orders										1	1
Withdrawals Paid	(102)	(14)	(3)					(63)		(1)	(183)
Data Corrections	-	-	-	1		(1)	-	1	-		1
June 30, 2022	3,611	442	540	101	103	2,333	372	1,092	38	9	8,641



Reconciliation of System Membership Since Prior Valuation Safety Members											
		Deferred	Deferred	Ordinary	Duty			Non-Vested		Deferred	
	Active	Vested	Transferred	Disability	Disability	Retired	Beneficiaries	Due Refund	ODRO	ODRO	Totals
June 30, 2021	846	82	115	18	120	357	92	154	20	9	1,813
New Entrants	75										75
Rehires	6	(2)	-					(4)			-
Duty Disabilities	(4)				5	(1)					-
Ordinary Disabilities											-
Retirements	(21)	-	(6)			27			-	-	-
Vested Terminations	(15)	15	-								-
Non-Vested Terminations and	(35)		-		(1)	-		35			(1)
Death without beneficiary											-
Death with beneficiary	(1)				(1)	(5)	7				-
Transfers	(3)	(2)	11					(5)			1
Beneficiary Deaths							(5)				(5)
Domestic Relations Orders									5	(2)	) 3
Deferred Domestic Relations Orders										3	3
Withdrawals Paid	(27)	(5)	-					(15)		-	(47)
Data Corrections		-		-	-	-	-	1			1
June 30, 2022	821	88	120	18	123	378	94	166	25	10	- 1,843



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

The methods and assumptions used in the actuarial valuation as of June 30, 2022 are outlined on the following pages.

## A. Actuarial Methods

## 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).

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. The UAL as of June 30, 2015 is being amortized over a closed 19-year period as a level percentage of payroll, assuming payroll increases of 3.00% per year, and 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.

## 2. Valuation of Assets

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.

The contribution of \$250 million expected to be made on or before June 30, 2018 from the proceeds of a POB was included in the 2017 valuation as a receivable in both the Market and Actuarial Values of Assets as of June 30, 2017. Accordingly, it was not recorded as a contribution during the FY 2017-2018.

## 3. Changes in Actuarial Methods

None.



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

## **B.** Actuarial Assumptions

The TCERA Board has the authority to select economic and demographic assumptions for the Plan. The assumptions used in this report reflect the results of an Experience Study performed by Cheiron covering the period July 1, 2017 through June 30, 2020.

## 1. Rate of Return

Assets are assumed to earn 7.00% net of investment and administrative expenses.

## 2. Inflation

The Consumer Price Index (CPI) is assumed to increase at the rate of 2.75% per year. This assumption is also used to project the compensation limit for PEPRA members.

## 3. Post Retirement COLA

Benefits are assumed to increase after retirement at the rate of 2.6% per year for Tier 1 and 2% per year for Tiers 2-4.

## 4. Internal Revenue Code Limits and PEPRA Pensionable Compensation Limits

The maximum benefit and maximum compensation limitations under Internal Revenue Code Sections 415 and 401(a)(17), respectively, are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement. The PEPRA compensation limit, which was \$128,059 for calendar year 2021 for members participating in Social Security, was applied.

## 5. Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 7.00%.

## 6. Family Composition

Percentage married for deferred vested terminations and all active members who retire, become disabled, or die during active service is shown below. Spouses of male members are assumed to be female and three years younger. Spouses of female members are assumed to be male and two years older. Actual spouse demographic data is reflected following benefit commencement.

Division	Gender	Percentage
General	Male	80%
General	Female	60%
Safety	Male	85%
Safety	Female	65%



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

## 7. Increases in Pay

Wage inflation component: 3.00%

Additional longevity and promotion component:

Longevity and Promotion Increases							
Service	General	Safety					
0	8.00%	9.00%					
1	6.50%	6.00%					
2	5.50%	5.00%					
3	4.00%	3.00%					
4	3.00%	3.00%					
5	2.00%	2.00%					
6	1.75%	2.00%					
7	1.50%	2.00%					
8	1.00%	1.00%					
9	1.00%	1.00%					
10	1.00%	1.00%					
11	1.00%	1.00%					
12	1.00%	1.00%					
13	1.00%	1.00%					
14	1.00%	1.00%					
15+	0.50%	1.00%					

## 8. Sick Leave Service Credit Upon Service Retirement

Active members' service retirement benefits are adjusted by a percentage, 1% for General and 2% for Safety, for anticipated conversions of sick leave to retirement service credit.



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

## 9. Termination

				Rates of Te	rmination		
			General			Safety	
		Ŷ	ears of Serv	vice	Year	s of Serv	vice
Age	Less than 3	3 to 5	5 to 10	10 or more	Less than 3	3 to 5	5 or more
20	15.00%	12.00%	10.00%	10.00%	11.00%	7.00%	6.00%
21	15.00%	12.00%	10.00%	10.00%	11.00%	7.00%	6.00%
22	15.00%	12.00%	10.00%	10.00%	11.00%	7.00%	6.00%
23	15.00%	12.00%	10.00%	10.00%	11.00%	7.00%	6.00%
24	15.00%	12.00%	10.00%	10.00%	11.00%	7.00%	6.00%
25	15.00%	8.00%	8.00%	8.00%	11.00%	7.00%	6.00%
26	15.00%	8.00%	8.00%	8.00%	11.00%	7.00%	6.00%
27	15.00%	8.00%	8.00%	8.00%	11.00%	7.00%	6.00%
28	15.00%	8.00%	8.00%	8.00%	11.00%	7.00%	6.00%
29	15.00%	8.00%	8.00%	8.00%	11.00%	7.00%	6.00%
30	15.00%	8.00%	6.00%	5.00%	11.00%	7.00%	4.50%
31	15.00%	8.00%	6.00%	5.00%	11.00%	7.00%	4.50%
32	15.00%	8.00%	6.00%	5.00%	11.00%	7.00%	4.50%
33	15.00%	8.00%	6.00%	5.00%	11.00%	7.00%	4.50%
34	15.00%	8.00%	6.00%	5.00%	11.00%	7.00%	4.50%
35	15.00%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
36	15.00%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
37	15.00%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
38	15.00%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
39	15.00%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
40	14.25%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
41	14.25%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
42	14.25%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
43	14.25%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
44	14.25%	8.00%	5.00%	3.00%	11.00%	7.00%	4.00%
45	13.50%	8.00%	5.00%	3.00%	8.00%	6.00%	3.50%
46	13.50%	8.00%	5.00%	3.00%	8.00%	6.00%	3.50%
47	13.50%	8.00%	5.00%	3.00%	8.00%	6.00%	3.50%
48	13.50%	8.00%	5.00%	3.00%	8.00%	6.00%	3.50%
49	13.50%	8.00%	5.00%	3.00%	8.00%	6.00%	3.50%
50	12.75%	5.00%	5.00%	3.00%	8.00%	6.00%	0.00%
51	12.75%	5.00%	5.00%	3.00%	8.00%	6.00%	0.00%
52	12.75%	5.00%	5.00%	3.00%	8.00%	6.00%	0.00%
53	12.75%	5.00%	5.00%	3.00%	8.00%	6.00%	0.00%
54	12.75%	5.00%	5.00%	3.00%	8.00%	6.00%	0.00%
55	12.00%	5.00%	5.00%	3.00%	5.00%	6.00%	0.00%
56	12.00%	5.00%	5.00%	3.00%	5.00%	6.00%	0.00%
57	12.00%	5.00%	5.00%	3.00%	5.00%	6.00%	0.00%
58	12.00%	5.00%	5.00%	3.00%	5.00%	6.00%	0.00%
59	12.00%	5.00%	5.00%	3.00%	5.00%	6.00%	0.00%
60	11.25%	5.00%	5.00%	3.00%	0.00%	0.00%	0.00%
61	11.25%	5.00%	5.00%	3.00%	0.00%	0.00%	0.00%
62	11.25%	5.00%	5.00%	3.00%	0.00%	0.00%	0.00%
63	11.25%	5.00%	5.00%	3.00%	0.00%	0.00%	0.00%
64	11.25%	5.00%	5.00%	3.00%	0.00%	0.00%	0.00%
65 and over	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

Rates of termination apply to active Members who terminate their employment. Rates are assumed not to apply after eligibility for retirement.

Former members with contributions on deposit are assumed to receive a retirement benefit commencing at the following ages:

General Members: Age 60 Safety Members: Age 55

## **10. Rates of Deferred Vested Termination**

Rates of deferred vested termination are a percentage of the termination rates shown on the previous page.

Service	<b>General Males</b>	<b>General Females</b>	Safety
5-10	75%	55%	60%
10-15	85%	70%	60%
15-20	85%	75%	60%
20+	85%	75%	100%

## **11. Reciprocal Transfers**

60% of General and 65% of Safety deferred vested terminated members that leave their member contributions on deposit with the Plan are assumed to be reciprocal.

Reciprocal members are assumed to remain with the reciprocal agency until retirement, and receive annual salary increases of 3.50% for General members and 4.00% for Safety members.



### APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

## 12. Rates of Disability

Disability rates of active participants are shown below.

Rates of Disability								
	General - Males General - Females			Females	Safe	ety		
Age	Ordinary	Duty	Ordinary	Duty	Ordinary	Duty		
20	0.000%	0.010%	0.000%	0.010%	0.000%	0.110%		
21	0.000%	0.010%	0.000%	0.010%	0.000%	0.120%		
22	0.000%	0.010%	0.000%	0.010%	0.000%	0.130%		
23	0.000%	0.010%	0.000%	0.010%	0.000%	0.140%		
24	0.000%	0.010%	0.000%	0.010%	0.000%	0.150%		
25	0.010%	0.010%	0.010%	0.010%	0.050%	0.170%		
26	0.010%	0.010%	0.010%	0.010%	0.050%	0.200%		
27	0.010%	0.010%	0.010%	0.010%	0.050%	0.250%		
28	0.010%	0.010%	0.010%	0.010%	0.050%	0.300%		
29	0.010%	0.010%	0.010%	0.010%	0.050%	0.350%		
30	0.010%	0.010%	0.010%	0.010%	0.050%	0.400%		
31	0.010%	0.010%	0.010%	0.010%	0.050%	0.450%		
32	0.010%	0.010%	0.010%	0.010%	0.050%	0.500%		
33	0.010%	0.010%	0.010%	0.010%	0.050%	0.520%		
34	0.010%	0.010%	0.010%	0.010%	0.050%	0.540%		
35	0.020%	0.020%	0.080%	0.020%	0.050%	0.560%		
36	0.020%	0.020%	0.080%	0.020%	0.050%	0.580%		
37	0.020%	0.020%	0.080%	0.020%	0.050%	0.600%		
38	0.030%	0.030%	0.120%	0.030%	0.050%	0.620%		
39	0.030%	0.030%	0.130%	0.030%	0.050%	0.640%		
40	0.030%	0.030%	0.140%	0.030%	0.075%	0.660%		
41	0.040%	0.045%	0.160%	0.045%	0.075%	0.670%		
42	0.040%	0.045%	0.170%	0.045%	0.080%	0.680%		
43	0.040%	0.045%	0.180%	0.045%	0.085%	0.690%		
44	0.050%	0.050%	0.190%	0.050%	0.090%	0.700%		
45	0.050%	0.055%	0.200%	0.055%	0.095%	0.750%		
46	0.050%	0.060%	0.220%	0.060%	0.100%	0.800%		
47	0.060%	0.070%	0.240%	0.070%	0.150%	0.850%		
48	0.070%	0.080%	0.260%	0.080%	0.200%	0.900%		
49	0.080%	0.090%	0.280%	0.090%	0.250%	0.950%		
50	0.090%	0.100%	0.300%	0.100%	0.300%	1.000%		
51	0.100%	0.150%	0.320%	0.150%	0.350%	1.250%		
52	0.120%	0.200%	0.340%	0.200%	0.400%	1.500%		
53	0.140%	0.250%	0.360%	0.250%	0.450%	1.750%		
54	0.160%	0.300%	0.380%	0.300%	0.500%	2.000%		
55	0.180%	0.350%	0.400%	0.350%	0.550%	2.250%		
56	0.200%	0.400%	0.420%	0.400%	0.600%	2.300%		
57	0.220%	0.450%	0.440%	0.450%	0.650%	2.350%		
58	0.240%	0.500%	0.480%	0.500%	0.700%	2.400%		
59	0.260%	0.550%	0.520%	0.550%	0.750%	2.450%		
60	0.280%	0.600%	0.540%	0.600%	0.000%	0.000%		
61	0.300%	0.650%	0.560%	0.650%	0.000%	0.000%		
62	0.320%	0.700%	0.600%	0.700%	0.000%	0.000%		
63	0.340%	0.750%	0.620%	0.750%	0.000%	0.000%		
64	0.360%	0.800%	0.640%	0.800%	0.000%	0.000%		
65 and over	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%		



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

## 13. Rates of Mortality for Healthy Lives

Mortality rates for General actives, retirees, beneficiaries (both General and Safety), terminated vested, and reciprocals are based on the sex distinct Retired Pensioner (RP) 2014 Combined Healthy Tables, published by the Society of Actuaries, with Generational improvement using Projection Scale MP-2019, and increased by 2.2% for males and 8.0% for females to reflect Plan experience.

Mortality rates for Safety actives, retirees, terminated vested, and reciprocals are based on the sex distinct Retired Pensioner (RP) 2014 Combined Healthy Tables with blue-collar adjustment, published by the Society of Actuaries, with Generational improvement using Projection Scale MP-2019, and increased by 4.5% for males to reflect Plan experience.

## 14. Rates of Mortality for Retired Disabled Lives

Mortality rates for disabled retirees are based on the sex distinct Retired Pensioner (RP) 2014 Disabled Retiree Mortality Table, published by the Society of Actuaries, with Generational improvement using Projection Scale MP-2019.

Percentage of deaths assumed to be duty related							
Age							
20-24	37%						
25-30	42%						
31-34	45%						
35-43	50%						
44-45	52%						
46-47	54%						
48-49	56%						
50-54	58%						
55-56	60%						
57-58	62%						
59	63%						

## 15. Duty-Related Deaths (Safety Employees Only)



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

## **16. Rates of Retirement**

Rates of retirement are based on age and service according to the following below.

	Gene Years of S	ral Service	Safety Years of Service			
Age	Less than 30	30 or more	Less than 20	20 or more		
45	0.00%	0.00%	7.00%	7.00%		
46	0.00%	0.00%	7.00%	7.00%		
47	0.00%	0.00%	7.00%	7.00%		
48	0.00%	0.00%	7.00%	7.00%		
49	0.00%	0.00%	7.00%	7.00%		
50	5.00%	10.00%	7.00%	7.00%		
51	5.00%	10.00%	7.00%	7.00%		
52	5.00%	10.00%	7.00%	7.00%		
53	5.00%	10.00%	7.00%	7.00%		
54	5.00%	10.00%	7.00%	7.00%		
55	6.00%	10.00%	10.00%	18.00%		
56	6.00%	10.00%	10.00%	18.00%		
57	6.00%	10.00%	10.00%	18.00%		
58	6.00%	10.00%	10.00%	18.00%		
59	6.00%	10.00%	10.00%	18.00%		
60	15.00%	20.00%	20.00%	40.00%		
61	15.00%	20.00%	20.00%	40.00%		
62	15.00%	20.00%	20.00%	40.00%		
63	15.00%	20.00%	20.00%	40.00%		
64	15.00%	20.00%	20.00%	40.00%		
65	35.00%	35.00%	40.00%	75.00%		
66	35.00%	35.00%	40.00%	75.00%		
67	35.00%	35.00%	40.00%	75.00%		
68	35.00%	35.00%	40.00%	75.00%		
69	35.00%	35.00%	40.00%	75.00%		
70	35.00%	35.00%	100.00%	100.00%		
71	35.00%	35.00%	100.00%	100.00%		
72	35.00%	35.00%	100.00%	100.00%		
73	35.00%	35.00%	100.00%	100.00%		
74	35.00%	35.00%	100.00%	100.00%		
75 and over	100.00%	100.00%	100.00%	100.00%		



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

## 17. Disclosures regarding Models Used

In accordance with Actuarial Standard of Practice (ASOP) No. 56 *Modeling*, the following disclosures are made:

a. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software program leased from Winklevoss Technologies (WinTech), to calculate liabilities and projected benefit payments. We have reviewed the underlying workings of this model to the degree feasible and consistent with ASOP No. 56 and believe them to be appropriate for the purposes of the valuation.

b. Projections

This valuation report includes projections of future contributions and funded status for the purpose of assisting the Retirement Board and the sponsors of the System with the management of the Fund.

Deterministic projections in this valuation report were developed using P-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 System. P-scan uses standard roll-forward techniques that implicitly assume a stable active population. Because P-scan does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent.

Stochastic projections and related calculations (including the estimation of future SRBR transfers) in this valuation report were developed using R-scan, our proprietary tool for assessing the probability of different outcomes based on a range of potential investment returns. We relied on Cheiron colleagues for the development of the model. The stochastic projections of investment returns assume that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. The standard deviation used in the stochastic projection of investment returns is based on information provided by the System's investment consultant.

The projections are based on the same census data and financial information as of June 30, 2022 as disclosed in this actuarial valuation. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of June 30, 2022 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after June 30, 2022.

The projections assume that all future assumptions are met except where specifically indicated. The future outcomes become increasingly uncertain over time, and therefore the



## APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

general trends and not the absolute values should be considered in the review of these projections. Further, for the purpose of these projections, we have only reflected the impact of new entrants entering the plan in aggregate and have not developed individual liabilities or detailed profiles related to these potential new entrants. We feel this is appropriate for the purpose of these projections, but if they were to be used for other purposes, this may not be appropriate and alternative projections may need to be developed.

## **18.** Changes in Assumptions

None.



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

All actuarial calculations are based on our understanding of the statutes governing the TCERA as contained in the County Employees Retirement Law (CERL) of 1937, with provisions adopted by the County Board of Supervisors, a district Board of Directors, or the TCERA Board, effective through June 30, 2022. The benefit and contribution provisions of this law are summarized briefly below, (*along with corresponding references to the State Code*). This summary does not attempt to cover all the detailed provisions of the law.

There have been no changes to the Plan provisions since the prior valuation.

## A. Membership in Retirement Plans

The County has established several defined benefit tiers based primarily on a member's date of entry into TCERA and in some cases, bargaining unit. There are two types of TCERA members:

**Safety members**: Employees whose principal duty is active law enforcement or active fire suppression are eligible to be Safety members. Membership in a particular tier depends upon date of entry to the system.

**General members**: All non-Safety employees are eligible to be General members. Membership in a particular tier depends primarily upon date of entry to the system.

- **Tier 1:** General and Safety employees hired on or before December 31, 1979.
- **Tier 2:** General and Safety employees hired on or after January 1, 1980 through December 31, 1989.
- Tier 3:General and Safety employees hired on or after January 1, 1990 through<br/>December 31, 2012.
- **Tier 4 (PEPRA):** All new members hired on or after January 1, 2013. Employees who transfer from and are eligible for reciprocity with another public employer will not be PEPRA members if their service in the reciprocal system was under a pre-PEPRA tier.

## **B.** Member Contributions

**Basic:** Contributions are based on the entry age and class of each member and are required of all members. See Appendix F for details on this calculation. Current member rates are shown in the Appendix. (*31621.5*, *31621.2*, *31639.5*, *31639.25*)

Contributions cease for all non-PEPRA members credited with 30 years of service. (*31625, 31625.2*)



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

Tier 4: PEPRA members must contribute half of the normal cost of the Plan. Contributions for these members will be based on the Normal Cost associated with their benefits; General and Safety members will pay different rates.

Interest is credited to contributions semiannually on June 30 and December 31 at an interest rate set by the Board of Retirement on amounts that have been on deposit for at least six months. (31591, 31700)

**Cost-of-Living**: The following loads are applied to Tier 1-3 Basic rates to pay for the employee portion of Cost-of-Living Adjustments. For PEPRA members, the cost of COLAs is included in the normal cost, of which they contribute half.

	Tier 1	<b>Tier 2-3</b>
2020 Actual	53.70% (General)	25.29% (General)
2020 Actual	68.45% (Safety)	31.01% (Safety)
2021 Actual	53.70% (General)	25.29% (General)
2021 Actual	68.45% (Safety)	31.01% (Safety)

## **C. Employer 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. (*31453*, *31453*.5, *31453*.6, *31454*, *31454*.1, *31581*)

## **D.** Service Retirement Allowance:

## **Eligibility**:

## General Plan members:

Tiers 1-3:Age 50 with 10 years of service;<br/>Any age with 30 years of service; or<br/>Age 70 regardless of service. (31672, 31672.1)

Tier 4 (PEPRA): Age 52 with 5 years of service.



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

### Safety Plan members:

Tiers 1-3:	Age 50 with 10 years of service;
	Any age with 20 years of service. (31663.25)

Tier 4 (PEPRA): Age 50 with 5 years of service.

#### **Final Compensation:**

- **Tier 1:** Monthly average of a member's highest 12 consecutive months of compensation. (31462.1)
- **Tiers 2-3:** Monthly average of a member's highest 36 consecutive months of compensation. (*31462*)
- **Tier 4 (PEPRA):** Monthly average of a member's highest 36 consecutive months of compensation, limited to the Social Security Wage Base on January 1, 2013, adjusted based on the annual change in the CPI-U each January 1 thereafter.

### Compensation

**Limit:** The amount of compensation that is taken into account in computing benefits payable to any person who first becomes a member on or after July 1, 1996, shall not exceed the dollar limitations in Section 401(a)(17) of Title 26 of the US Code. (*31671*)

#### Integration with

**Social Security:** General and Safety Tier 1-3 members' benefits are integrated with Social Security. Benefits payable from the first \$161.54 of bi-weekly compensation are reduced by 1/3.

#### Monthly Allowance:

## General Plan members:

Tier 1:Sum of (a) + (b):<br/>(a) 1/60 x Final Compensation x Plan Age Factor x Years of Service prior<br/>to 7/1/2005 (31676.11); plus<br/>(b) 1/50 x Final Compensation x Plan Age Factor x Years of Service after<br/>7/1/2005 (31676.12)



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

Tiers 2-3: Sum of (a) + (b):
(a) 1/60 x Final Compensation x Plan Age Factor x Years of Service prior to 7/1/2005 (*31676.1*); plus
(b) 1/50 x Final Compensation x Plan Age Factor x Years of Service after 7/1/2005 (*31676.12*)

Tier 4 (PEPRA): 2% x Final Compensation x PEPRA Age Factor x Years of Service

Safety Plan members:

**Tiers 1-3:** 2% x Final Compensation x Plan Age Factor x Years of Service (*31664*)

Tier 4 (PEPRA): 2% x Final Compensation x PEPRA Age Factor x Years of Service

	Sat	fetv				
Code Section:	31676.11 1.67% @ 55	31676.1 1 67% @ 57 5	31676.12 2% @ 57	<b>PEPRA</b> 2% @ 62	31664 2% @ 50	PEPRA 2% @ 50
Rase.	1.67%	1 67%	2.00%	2.00%	2.00%	2.00%
Age			2.0070			
41					0.6258	
42					0.6625	
43					0.7004	
44					0.7397	
45					0.7805	
46					0.8226	
47					0.8678	
48					0.9085	
49					0.9522	
50	0.7454	0.7091	0.6681		1.0000	1.0000
51	0.7882	0.7457	0.7056		1.0516	1.0500
52	0.8346	0.7816	0.7454	0.5000	1.1078	1.1000
53	0.8850	0.8181	0.7882	0.5500	1.1692	1.1500
54	0.9399	0.8556	0.8346	0.6000	1.2366	1.2000
55	1.0000	0.8954	0.885	0.6500	1.3099	1.2500
56	1.0447	0.9382	0.9399	0.7000	1.3099	1.3000
57	1.1048	0.9846	1.0000	0.7500	1.3099	1.3500
58	1.1686	1.0350	1.0447	0.8000	1.3099	1.3500
59	1.2365	1.0899	1.1048	0.8500	1.3099	1.3500
60	1.3093	1.1500	1.1686	0.9000	1.3099	1.3500
61	1.3608	1.1947	1.2365	0.9500	1.3099	1.3500
62	1.4123	1.2548	1.3093	1.0000	1.3099	1.3500
63	1.4638	1.3186	1.3093	1.0500	1.3099	1.3500
64	1.5153	1.3865	1.3093	1.1000	1.3099	1.3500
65	1.5668	1.4593	1.3093	1.1500	1.3099	1.3500
66	1.5668	1.4593	1.3093	1.2000	1.3099	1.3500
67	1.5668	1.4593	1.3093	1.2500	1.3099	1.3500



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

### Maximum Allowance:

Allowance may not exceed 100% of Final Compensation.

## **Unmodified Retirement Allowance (Normal Form)**:

All Plans: Life Annuity payable to retired member with 60% continuance to an eligible spouse. (31760.1)

Eligible survivor includes certain domestic partners and dependent children. (31780.2) If there is no eligible survivor, any unpaid remainder of the member's accumulated contributions will be paid to the member's designated beneficiary.

### **Death after Retirement**:

- All Plans: Upon a member's death after retirement, a special lump sum of \$5,000 is payable to an eligible survivor, or the member's estate. (*31789.3*)
- All Allowances: All allowances are made on a pro-rata basis (based on the number of days in that month) if not in effect for the entire month of retirement. (*31600*)

## Supplemental Retiree Benefit Reserve:

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*)

Level 1: Members with at least 20 years of service are eligible for a supplemental benefit up to \$250 a month. The multiplier in effect is as follows:

Period	Multiplier
Prior to July 1, 2013	\$18.00
After July 1, 2013	\$17.00
After July 1, 2014	\$16.00
After July 1, 2015	\$15.00
After July 1, 2016	\$14.00
After July 1, 2017	\$12.50


## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

Members with less than 20 years of service are eligible for benefits in accordance with the schedule below:

Years of Service	Percentage of Full Benefit
Less than 10	0.00%
10	50.0%
11	55.0%
12	60.0%
13	65.0%
14	70.0%
15	75.0%
16	80.0%
17	85.0%
18	90.0%
19	95.0%

Only years of service with Tulare County are included for this benefit. 50% of member's reduced allowance is payable to an eligible spouse, or minor children if no eligible spouse exists.

- Level 2: In addition to the Level 1 benefit, a supplemental COLA is available to retirees and beneficiaries who have lost more than 15% of their purchasing power, measured by their COLA Banks. The design of this COLA is to allow retirees to retain at least 85% of their purchasing power.
- Level 3: 60% of a service retirement or 100% of a service-connected disability is payable to a spouse not married to the member at retirement. The spouse must be at least age 55 at the member's date of retirement, must have been married for at least two years, and the member must have elected the Unmodified Allowance retirement option to be eligible for this benefit.

## E. Service-Connected Disability Retirement Allowance

## **Eligibility**:

All Plans: Any age and length of service; disability must result from occupational injury or disease, and member must be permanently incapacitated for the performance of duty. (31720, 31720.5, 31720.6, 31720.7, 31720.9)

## Monthly Allowance:

All Plans: Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if eligible to retire. (*31727.4*)



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

#### Normal Form of Payment:

All Plans: Life Annuity payable to retired member with 100% continuance to an eligible spouse.

### **Death after Retirement:**

All Plans: Upon a member's death after retirement, a special lump sum of \$5,000 is payable to an eligible survivor, or the member's estate. (*31789.3*)

## F. Non-Service-Connected Disability Retirement Allowance

## Eligibility:

All Plans: Any age with five (5) years of service and permanently incapacitated for the performance of duty. (*31720*)

## **Monthly Allowance:**

All Plans: The monthly allowance is equal to a service retirement allowance if the member is eligible to retire and the service retirement allowance exceeds the benefits described below. Otherwise, allowance equals 20% of Final Compensation, plus 2% for each year of service over five, with a maximum allowance of 40% of Final Compensation at 15 years of service. (31727.7)

#### Normal Form of Payment:

All Plans: Life Annuity with 60% continuance to a surviving spouse (or eligible children). (31760.1)

#### **Death after Retirement:**

All Plans: Upon a member's death after retirement, a special lump sum of \$5,000 is payable to an eligible survivor, or the member's estate. (*31789.3*)

## G. Service-Connected Death Benefits

#### **Eligibility**:

All Plans: Active members who die in service as a result of injury or disease arising out of and in the course of employment. (31486.7, 31787)



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

### Monthly Allowance:

All Plans: A monthly allowance is payable to an eligible survivor equal to the greater of the Member's Service Retirement Allowance or Non-Service-Connected Disability Allowance (if he is eligible for service retirement or non-service disability at his date of death), and (b) 50% x Final Compensation. (*31787*)

A lump sum is payable to an eligible survivor equal to 1/12 x final 12 months' Salary x years of service (up to max of 6 years). (31781)

## H. Non-Service-Connected Death Benefits

**Eligibility**:

All Plans: Active members who die while in service but not as a result of injury or disease arising out of and in the course of employment.

#### Monthly Allowance:

All Plans: If an active member is eligible for Non-Service-Connected Disability at his date of death, then a monthly allowance is payable to an eligible survivor equal to 60% x the member's non-service connected disability allowance. Otherwise, the benefit is a refund of contributions. (31781.1)

## I. Deferred Vested Benefits

## **Eligibility**:

All other Plans: Member contributions must be left on deposit and the member must have terminated with five (5) years of service or entered a reciprocal agency. Members are eligible for service retirement when they reach service retirement eligibility (based on years of service at termination plus reciprocal service, if any). (31700, 31701, 31702)

## **Monthly Allowance**:

All other Plans: Same as service retirement allowance; payable any time after the member would have been eligible for service retirement. (*31703, 31704, 31705*)

## J. Cost-of-Living Increases

Cost-of-living increases (or decreases) are applied to all retirement allowances (service and disability), optional death allowances, and annual death allowances effective April 1, based on changes in the average annual Consumer Price Index (CPI), rounded to the nearest  $\frac{1}{2}$  of 1%. (*31870, 31870.1*)



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

## All Plans (excluding Tier 1):

Members (and their beneficiaries) are limited to a maximum 2% cost-ofliving increase. (31870)

## Tier 1:

Members (and their beneficiaries) are limited to a maximum 3% cost-ofliving increase. (31870.1)

## **COLA Bank**:

## All Plans:

When the CPI exceeds the applicable percentage, the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation (COLA Bank). It may be used in future years to provide cost-of-living increases when the CPI falls below the applicable percentage. (*31874, 31874.1, 31874.2, 31874.3*)

## **K. Optional Forms**

In addition to the Unmodified Allowance, retirees may choose one of the following options:

- **Option 1:** A slightly reduced monthly retirement allowance will be paid throughout the member's life, with the provision that accumulated contributions less the sum of the annuity portion of the payments received by the member will be paid upon death to the beneficiary.
- **Option 2:** A reduced monthly retirement allowance will be paid to the member for life, with 100% of the allowance continued after death to the beneficiary.
- **Option 3:** A reduced monthly retirement allowance will be paid to the member for life, with 50% of the allowance continued after death to the beneficiary.
- **Option 4:** This option allows the member to name multiple beneficiaries and provides for a reduced monthly retirement allowance paid to the member for the member's lifetime with an actuarially calculated benefit continued throughout the life of the beneficiaries named at retirement.



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

## **Assumptions Used for Optional Forms:**

Our understanding is that the following assumptions are used to calculate the reduced monthly retirement allowances for Options 1-4 described above.

## <u>General</u>

Mortality: RP-2000 Healthy Annuitant Mortality Table with adjustment for white-collar workers (healthy), RP-2000 Disabled Annuitant Mortality Table (disabled) Gender Blend: 1/3 male, 2/3 female Discount Rate: 7.25% per annum Post-Retirement COLA: 3% per annum (Tier 1), 2% per annum (Tiers 2-3)

## Safety

Mortality: RP-2000 Healthy Annuitant Mortality Table with adjustment for blue-collar workers (healthy), RP-2000 Disabled Annuitant Mortality Table with 2-year setback (disabled) Gender Blend: 5/6 male, 1/6 female Discount Rate: 7.25% per annum Post-Retirement COLA: 3% per annum (Tier 1), 2% per annum (Tiers 2-3)



## **APPENDIX D – GLOSSARY**

## **1.** Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation, and rates of investment return.

## 2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an Actuarial Liability.

## **3.** Actuarial Gain (Loss)

The difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

## 4. Actuarial Liability

The portion of the actuarial present value of projected benefits which will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

## 5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

## 6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, Actuarial Liability, Actuarial Value of Assets, and related actuarial present values for a pension plan.

## 7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.

## 8. Actuarially Equivalent

Of equal actuarial present value, determined as of a given date, with each value based on the same set of actuarial assumptions.



## **APPENDIX D – GLOSSARY**

## 9. Amortization Payment

The portion of the pension plan contribution which is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

## 10. Entry Age Normal 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 of the individual between entry age and assumed exit ages.

## **11. Funded Ratio**

The ratio of the Actuarial Value of Assets to the Actuarial Liability.

## **12. Normal Cost**

That portion of the actuarial present value of pension plan benefits and expenses which is allocated to a valuation year by the actuarial cost method.

## **13. Projected Benefits**

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of actuarial assumptions, taking into account such items as increases in future compensation and service credits.

## 14. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets.



## **APPENDIX E – MEMBER CONTRIBUTION RATES**

Assumptions used to develop member contribution rates match valuation assumptions detailed in Appendix B, other than mortality which is static for member contribution rates. Additionally, only service retirement benefits are included in Tiers 1-3 member basic rate development.

The table below shows the applicable Code Section for Tier 1-3 member contribution rates as well as the corresponding annuity funded by the member.

Plan/Tier	Code Section	Member Contribution Provides Average Annuity	FAS Period
General Tier 1	31621.5	1/200 of Final Average Salary (FAS) at age 60	1 year
General Tier 2	31621.2	1/100 of Final Average Salary (FAS) at age 60	3 years
General Tier 3	31621.2	1/100 of Final Average Salary (FAS) at age 60	3 years
Safety Tier 1	31639.5	1/200 of Final Average Salary (FAS) at age 50	1 year
Safety Tier 2	31639.25	1/100 of Final Average Salary (FAS) at age 50	3 years
Safety Tier 3	31639.25	1/100 of Final Average Salary (FAS) at age 50	3 years

For Tiers 1-3, the following COLA loads were applied to the Basic rates. Starting in 2015, based on discussion with TCERA staff, we developed separate loads for General and Safety.

	Tier 1	<b>Tier 2-3</b>
2021 Actual	53.70% (General)	25.29% (General)
2021 Actual	68.45% (Safety)	31.01% (Safety)
2022 Actual	50.14% (General)	25.29% (General)
2022 Actual	68.45% (Safety)	31.01% (Safety)

For PEPRA members, the cost of COLAs is included in the normal cost, of which they contribute half.



## **APPENDIX E – MEMBER CONTRIBUTION RATES**

## 2022 Member Contribution Rates (for fiscal year ending 2024)

	Genera	al Tier 1	General Ti	iers 2 and 3	Safety	Tier 1	Safety Tie	ers 2 and 3	Tier 4 M	Iembers
Entry Age	First	Over	First	Over	First	Over	First	Over	General	Safety
16	\$161.54	\$161.54	\$161.54	\$161.54	\$161.54	\$161.54	\$161.54	\$161.54	4.420/	0.620/
16	2.69%	4.03%	4.34%	6.51%	4.65%	6.9/%	6.95%	10.43%	4.42%	9.63%
17	2.7370	4.1270	4.43%	6 78%	4.05%	6.97%	6.95%	10.43%	4.42%	9.03%
19	2.81%	4.21%	4.52%	6.93%	4.65%	6.97%	6.95%	10.43%	4.42%	9.63%
20	2.00%	4 38%	4.02%	7.07%	4.65%	6.97%	6.95%	10.43%	4.42%	9.63%
20	2.92%	4 48%	4 81%	7.07%	4 73%	7.09%	7.07%	10.60%	4 67%	10.01%
22	3.05%	4.57%	4.91%	7.37%	4.81%	7.21%	7.19%	10.78%	4.92%	10.39%
23	3.11%	4.66%	5.01%	7.52%	4.89%	7.33%	7.31%	10.96%	5.17%	10.77%
24	3.17%	4.76%	5.12%	7.68%	4.97%	7.45%	7.43%	11.14%	5.43%	11.16%
25	3.24%	4.86%	5.23%	7.84%	5.05%	7.57%	7.55%	11.33%	5.69%	11.55%
26	3.31%	4.96%	5.33%	8.00%	5.13%	7.70%	7.68%	11.52%	5.91%	11.92%
27	3.37%	5.06%	5.44%	8.16%	5.22%	7.83%	7.81%	11.72%	6.13%	12.29%
28	3.45%	5.17%	5.55%	8.33%	5.31%	7.96%	7.94%	11.91%	6.35%	12.66%
29	3.51%	5.27%	5.67%	8.50%	5.40%	8.10%	8.07%	12.11%	6.58%	13.01%
30	3.59%	5.38%	5.79%	8.68%	5.49%	8.24%	8.21%	12.32%	6.80%	13.36%
31	3.66%	5.49%	5.91%	8.86%	5.59%	8.38%	8.35%	12.53%	7.01%	13.74%
32	3.74%	5.61%	6.03%	9.04%	5.68%	8.52%	8.50%	12.75%	7.22%	14.12%
33	3.81%	5.72%	6.15%	9.23%	5.78%	8.67%	8.65%	12.97%	7.44%	14.49%
34	3.89%	5.84%	6.28%	9.42%	5.88%	8.82%	8.79%	13.19%	7.66%	14.87%
35	3.97%	5.96%	6.41%	9.61%	5.99%	8.98%	8.95%	13.43%	7.89%	15.25%
36	4.05%	6.08%	6.54%	9.81%	6.09%	9.14%	9.11%	13.67%	8.12%	15.61%
37	4.14%	6.21%	6.68%	10.02%	6.21%	9.31%	9.29%	13.93%	8.36%	15.96%
38	4.23%	6.34%	6.81%	10.22%	6.33%	9.49%	9.46%	14.19%	8.62%	16.32%
39	4.31%	6.47%	6.96%	10.44%	6.45%	9.67%	9.65%	14.47%	8.88%	16.69%
40	4.41%	6.61%	7.11%	10.66%	6.58%	9.87%	9.81%	14.72%	9.13%	17.09%
41	4.50%	6.75%	7.26%	10.89%	6.73%	10.09%	9.97%	14.95%	9.40%	17.48%
42	4.60%	6.90%	7.41%	11.12%	6.82%	10.23%	10.11%	15.16%	9.66%	17.89%
43	4.70%	7.05%	7.57%	11.35%	6.92%	10.38%	10.22%	15.33%	9.99%	18.36%
44	4.81%	7.21%	7.71%	11.57%	7.04%	10.56%	10.33%	15.49%	10.33%	18.83%
45	4.89%	7.33%	7.85%	11.//%	7.11%	10.00%	10.37%	15.50%	10.67%	19.31%
40	4.98% 5.07%	7.47%	7.99% 8.14%	11.99%	7.20%	10.80%	10.35%	15.52%	11.09%	19.70%
47	5.07%	7.00%	8 20%	12.2170	7.19%	10.79%	10.19%	15.28%	11.51%	20.1170
40	5.27%	7.73%	8.45%	12.44%	6.00%	10.73%	10.32%	16 31%	12 10%	20.33%
50	5 38%	8.07%	8.62%	12.03%	6.99%	10.48%	10.87%	16.31%	12.17%	20.95%
50	5.49%	8 24%	8.77%	13.16%	6.99%	10.48%	10.87%	16 31%	12.32%	20.95%
52	5.60%	8.40%	8.91%	13.37%	6.99%	10.48%	10.87%	16.31%	13.18%	20.95%
53	5.70%	8.55%	9.03%	13.55%	6.99%	10.48%	10.87%	16.31%	13.50%	20.95%
54	5.80%	8.70%	9.11%	13.66%	6.99%	10.48%	10.87%	16.31%	13.79%	20.95%
55	5.87%	8.80%	9.12%	13.68%	6.99%	10.48%	10.87%	16.31%	14.03%	20.95%
56	5.91%	8.86%	9.06%	13.59%	6.99%	10.48%	10.87%	16.31%	14.29%	20.95%
57	5.88%	8.82%	8.93%	13.40%	6.99%	10.48%	10.87%	16.31%	14.49%	20.95%
58	5.82%	8.73%	9.23%	13.84%	6.99%	10.48%	10.87%	16.31%	14.64%	20.95%
59	5.71%	8.57%	9.53%	14.30%	6.99%	10.48%	10.87%	16.31%	14.71%	20.95%
Assumptions:										
Interest:	7.00%		7.00%		7.00%		7.00%		7.00%	
Salary:	3.00% plus	s promotion	3.00% plus	promotion	3.00% plus	promotion	3.00% plus	promotion	3.00% plus	promotion
COLA:	2.60%		2.00%		2.60%		2.00%		2.00%	
Mortality:	Mortality: For General: Retired Pensioner (RP) 2014 Combined Healthy Table, with 20-year Generational improvement using Projection Scale MP-2019, increased by 2.2% for males and 8.0% for females to reflect Plan experience, and blended 30% male and 70% female For Safety: Retired Pensioner (RP) 2014 Combined Healthy Table with blue-collar adjustment, with 20-year Generational improvement using Projection Scale MP-2019, increased by 4.5% for males to reflect Plan experience, and blended 75% male and 25% female									



## **APPENDIX E – MEMBER CONTRIBUTION RATES**

The tables on the next six pages show the 2022 member contribution rates split into the Basic and COLA components, by tier.



	General Tier 1								
	Basic	Rate	COL	A Rate	Tota	Rate			
Entry Age	First \$161.54	Over \$161.54	First \$161.54	Over \$161.54	First \$161.54	Over \$161.54			
16	1.79%	2.68%	0.90%	1.35%	2.69%	4.03%			
17	1.83%	2.74%	0.92%	1.38%	2.75%	4.12%			
18	1.87%	2.80%	0.94%	1.41%	2.81%	4.21%			
19	1.90%	2.86%	0.96%	1.43%	2.86%	4.29%			
20	1.94%	2.92%	0.98%	1.46%	2.92%	4.38%			
21	1.99%	2.98%	1.00%	1.50%	2.99%	4.48%			
22	2.03%	3.04%	1.02%	1.53%	3.05%	4.57%			
23	2.07%	3.10%	1.04%	1.56%	3.11%	4.66%			
24	2.11%	3.17%	1.06%	1.59%	3.17%	4.76%			
25	2.16%	3.24%	1.08%	1.62%	3.24%	4.86%			
26	2.20%	3.30%	1.10%	1.66%	3.31%	4.96%			
27	2.25%	3.37%	1.13%	1.69%	3.37%	5.06%			
28	2.30%	3.44%	1.15%	1.73%	3.45%	5.17%			
29	2.34%	3.51%	1.17%	1.76%	3.51%	5.27%			
30	2.39%	3.58%	1.20%	1.80%	3.59%	5.38%			
31	2.44%	3.66%	1.22%	1.83%	3.66%	5.49%			
32	2.49%	3.74%	1.25%	1.87%	3.74%	5.61%			
33	2.54%	3.81%	1.27%	1.91%	3.81%	5.72%			
34	2.59%	3.89%	1.30%	1.95%	3.89%	5.84%			
35	2.65%	3.97%	1.33%	1.99%	3.97%	5.96%			
36	2.70%	4.05%	1.35%	2.03%	4.05%	6.08%			
37	2.76%	4.14%	1.38%	2.07%	4.14%	6.21%			
38	2.82%	4.22%	1.41%	2.12%	4.23%	6.34%			
39	2.87%	4.31%	1.44%	2.16%	4.31%	6.47%			
40	2.94%	4.40%	1.47%	2.21%	4.41%	6.61%			
41	3.00%	4.50%	1.50%	2.25%	4.50%	6.75%			
42	3.06%	4.60%	1.54%	2.30%	4.60%	6.90%			
43	3.13%	4.70%	1.57%	2.35%	4.70%	7.05%			
44	3.20%	4.80%	1.61%	2.41%	4.81%	7.21%			
45	3.25%	4.88%	1.63%	2.45%	4.89%	7.33%			
46	3.32%	4.98%	1.66%	2.49%	4.98%	7.47%			
47	3.37%	5.06%	1.69%	2.54%	5.07%	7.60%			
48	3.44%	5.16%	1.73%	2.59%	5.17%	7.75%			
49	3.51%	5.26%	1.76%	2.64%	5.27%	7.90%			
50	3.58%	5.37%	1.80%	2.70%	5.38%	8.07%			
51	3.66%	5.49%	1.83%	2.75%	5.49%	8.24%			
52	3.73%	5.59%	1.87%	2.81%	5.60%	8.40%			
53	3.80%	5.69%	1.90%	2.86%	5.70%	8.55%			
54	3.86%	5.79%	1.94%	2.91%	5.80%	8.70%			
55	3.91%	5.86%	1.96%	2.94%	5.87%	8.80%			
56	3.93%	5.90%	1.97%	2.96%	5.91%	8.86%			
57	3.92%	5.87%	1.96%	2.95%	5.88%	8.82%			
58	3.88%	5.81%	1.94%	2.92%	5.82%	8.73%			
59	3.81%	5.71%	1.91%	2.86%	5.71%	8.57%			
Assumptions:									
Interest:	7.00%								
Salary:	3.00% plus p	romotion							
COLA:	2.60%								
Mortality:	Retired Pensioner (RP) 2014 Combined Healthy Table, with 22-year Generational improvement using Projection Scale MP-2019, increased by 2.2% for males and 8.0% for females to reflect Plan experience, and blended 30% male and 70% female								



	General Tiers 2 and 3							
	Basic	: Rate	COL	A Rate	Tota	I Rate		
Entry Age	First \$161.54	Over \$161.54	First \$161.54	Over \$161.54	First \$161.54	Over \$161.54		
16	3.46%	5.20%	0.88%	1.31%	4.34%	6.51%		
17	3.53%	5.30%	0.89%	1.34%	4.43%	6.64%		
18	3.61%	5.41%	0.91%	1.37%	4.52%	6.78%		
19	3.69%	5.53%	0.93%	1.40%	4.62%	6.93%		
20	3.76%	5.64%	0.95%	1.43%	4.71%	7.07%		
21	3.84%	5.76%	0.97%	1.46%	4.81%	7.22%		
22	3.92%	5.88%	0.99%	1.49%	4.91%	7.37%		
23	4.00%	6.00%	1.01%	1.52%	5.01%	7.52%		
24	4.09%	6.13%	1.03%	1.55%	5.12%	7.68%		
25	4.17%	6.26%	1.05%	1.58%	5.23%	7.84%		
26	4.26%	6.39%	1.08%	1.61%	5.33%	8.00%		
27	4.34%	6.51%	1.10%	1.65%	5.44%	8.16%		
28	4.43%	6.65%	1.12%	1.68%	5.55%	8.33%		
29	4.52%	6.78%	1.14%	1.72%	5.67%	8.50%		
30	4.62%	6.93%	1.17%	1.75%	5.79%	8.68%		
31	4.71%	7.07%	1.19%	1.79%	5.91%	8.86%		
32	4.81%	7.22%	1.22%	1.82%	6.03%	9.04%		
33	4.91%	7.37%	1.24%	1.86%	6.15%	9.23%		
34	5.01%	7.52%	1.27%	1.90%	6.28%	9.42%		
35	5.11%	7.67%	1.29%	1.94%	6.41%	9.61%		
36	5.22%	7.83%	1.32%	1.98%	6.54%	9.81%		
37	5.33%	8.00%	1.35%	2.02%	6.68%	10.02%		
38	5.44%	8.16%	1.38%	2.06%	6.81%	10.22%		
39	5.56%	8.33%	1.40%	2.11%	6.96%	10.44%		
40	5.67%	8.51%	1.43%	2.15%	7.11%	10.66%		
41	5.79%	8.69%	1.47%	2.20%	7.26%	10.89%		
42	5.92%	8.88%	1.50%	2.24%	7.41%	11.12%		
43	6.04%	9.06%	1.53%	2.29%	7.57%	11.35%		
44	6.16%	9.23%	1.56%	2.34%	7.71%	11.57%		
45	6.26%	9.39%	1.58%	2.38%	7.85%	11.77%		
46	6.38%	9.57%	1.61%	2.42%	7.99%	11.99%		
47	6.50%	9.75%	1.64%	2.46%	8.14%	12.21%		
48	6.62%	9.93%	1.67%	2.51%	8.29%	12.44%		
49	6.75%	10.12%	1.71%	2.56%	8.45%	12.68%		
50	6.88%	10.32%	1.74%	2.61%	8.62%	12.93%		
51	7.00%	10.50%	1.77%	2.66%	8.77%	13.16%		
52	7.11%	10.67%	1.80%	2.70%	8.91%	13.37%		
53	7.21%	10.82%	1.82%	2.73%	9.03%	13.55%		
54	7.27%	10.90%	1.84%	2.76%	9.11%	13.66%		
55	7.28%	10.92%	1.84%	2.76%	9.12%	13.68%		
56	7.23%	10.85%	1.83%	2.74%	9.06%	13.59%		
57	7.13%	10.70%	1.80%	2.70%	8.93%	13.40%		
58	7.36%	11.05%	1.86%	2.79%	9.23%	13.84%		
59	7.61%	11.41%	1.92%	2.89%	9.53%	14.30%		
Assumptions <sup>.</sup>								
Interest:	7.00%							
Salary:	3.00% plus n	romotion						
COLA:	2.00%							
Mortality:	Retired Pensioner Projection Scale I blended 30% mab	(RP) 2014 Combi MP-2019, increased e and 70% female	ned Healthy Table d by 2.2% for male	with 22-year Gen s and 8.0% for fen	erational improver nales to reflect Plan	nent using n experience, and		



		General Tier 4	
Entry Age	Basic Rate	COLA Rate	Total Rate
16	3.62%	0.80%	4.42%
17	3.62%	0.80%	4.42%
18	3.62%	0.80%	4.42%
19	3.62%	0.80%	4.42%
20	3.62%	0.80%	4.42%
21	3.81%	0.86%	4.67%
22	4.01%	0.91%	4.92%
23	4.22%	0.95%	5.17%
24	4.43%	1.00%	5.43%
25	4.65%	1.04%	5.69%
26	4.83%	1.08%	5.91%
27	5.01%	1.12%	6.13%
28	5.20%	1.15%	6.35%
29	5.39%	1.19%	6.58%
30	5.57%	1.23%	6.80%
31	5.75%	1.26%	7.01%
32	5.93%	1.29%	7.22%
33	6.11%	1.33%	7.44%
34	6,30%	1.36%	7.66%
35	6.49%	1.40%	7.89%
36	6.69%	1.43%	8.12%
37	6.89%	1.47%	8.36%
38	7.11%	1.51%	8.62%
39	7 32%	1.56%	8 88%
40	7 54%	1.59%	9.13%
40	7.77%	1.63%	9.40%
42	7.99%	1.67%	9.66%
43	8 27%	1 72%	9.99%
44	8 55%	1.78%	10.33%
45	8.83%	1.84%	10.67%
46	9.17%	1.92%	11.09%
47	9.52%	1.99%	11.51%
48	9.81%	2.04%	11.85%
49	10.11%	2.08%	12.19%
50	10.40%	2.12%	12.52%
51	10.70%	2.16%	12.86%
52	10.99%	2.19%	13.18%
53	11.28%	2.12%	13 50%
54	11.54%	2.25%	13.79%
55	11.76%	2.23%	14.03%
56	12.01%	2.27%	14 29%
57	12.01%	2.20%	14.49%
58	12.21%	2.20%	14 64%
59	12.46%	2.25%	14,71%
5,	12.10/0	2.2570	1/1/0
Intions			
Interest	7.00%		
Salary	3.00% plue p	romotion	
	2.00% pius pi		
COLA.	Retired Pensioner	(RP) 2014 Combin	ed Healthy Table,
M - 1	with 22-year Gene	rational improvem	ent using
Mortality:	males and 8.0% fo	r females to reflect	Plan experience,
	and blended 30%	male and 70% fema	ıle



	Safety Tier 1							
	Basic	Rate	COLA	Rate	Tota	Rate		
Entry Age	First \$161.54	Over \$161.54	First \$161.54	Over \$161.54	First \$161.54	Over \$161.54		
16	2.76%	4.14%	1.89%	2.83%	4.65%	6.97%		
17	2.76%	4.14%	1.89%	2.83%	4.65%	6.97%		
18	2.76%	4.14%	1.89%	2.83%	4.65%	6.97%		
19	2.76%	4.14%	1.89%	2.83%	4.65%	6.97%		
20	2.76%	4.14%	1.89%	2.83%	4.65%	6.97%		
21	2.81%	4.21%	1.92%	2.88%	4.73%	7.09%		
22	2.85%	4.28%	1.95%	2.93%	4.81%	7.21%		
23	2.90%	4.35%	1.99%	2.98%	4.89%	7.33%		
24	2.95%	4.42%	2.02%	3.03%	4.97%	7.45%		
25	3.00%	4.49%	2.05%	3.08%	5.05%	7.57%		
26	3.05%	4.57%	2.09%	3.13%	5.13%	7.70%		
27	3.10%	4.65%	2.12%	3.18%	5.22%	7.83%		
28	3.15%	4.73%	2.16%	3.23%	5.31%	7.96%		
29	3.21%	4.81%	2.19%	3.29%	5.40%	8.10%		
30	3.26%	4.89%	2.23%	3.35%	5.49%	8.24%		
31	3.32%	4.97%	2.27%	3.41%	5.59%	8.38%		
32	3.37%	5.06%	2.31%	3.46%	5.68%	8.52%		
33	3.43%	5.15%	2.35%	3.52%	5.78%	8.67%		
34	3.49%	5.24%	2.39%	3.58%	5.88%	8.82%		
35	3.55%	5.33%	2.43%	3.65%	5.99%	8.98%		
36	3.62%	5.43%	2.48%	3.71%	6.09%	9.14%		
37	3.68%	5.53%	2.52%	3.78%	6.21%	9.31%		
38	3.76%	5.63%	2.57%	3.86%	6.33%	9.49%		
39	3.83%	5.74%	2.62%	3.93%	6.45%	9.67%		
40	3.91%	5.86%	2.67%	4.01%	6.58%	9.87%		
41	3.99%	5.99%	2.73%	4.10%	6.73%	10.09%		
42	4.05%	6.07%	2.77%	4.16%	6.82%	10.23%		
43	4.11%	6.16%	2.81%	4.22%	6.92%	10.38%		
44	4.18%	6.27%	2.86%	4.29%	7.04%	10.56%		
45	4.22%	6.33%	2.89%	4.33%	7.11%	10.66%		
46	4.27%	6.41%	2.93%	4.39%	7.20%	10.80%		
47	4.27%	6.41%	2.92%	4.38%	7.19%	10.79%		
48	4.25%	6.37%	2.91%	4.36%	7.15%	10.73%		
49	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
50	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
51	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
52	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
53	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
54	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
55	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
56	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
57	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
58	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
59	4.15%	6.22%	2.84%	4.26%	6.99%	10.48%		
Assumptions:								
Interest:	7.00%							
Salary:	3.00% plus p	promotion						
COLA:	2.60%							
Mortality:	Retired Pensioner Generational imp	(RP) 2014 Comb rovement using Pro	ined Healthy Table	with blue-collar a 2019, increased b	adjustment, with 22 y 4.5% for males to	2-year o reflect Plan		

	Safety Tiers 2 and 3							
	Basic	Rate	COL	A Rate	Tota	Rate		
Entry Age	First \$161.54	Over \$161.54	First \$161.54	Over \$161.54	First \$161.54	Over \$161.54		
16	5.31%	7.96%	1.65%	2.47%	6.95%	10.43%		
17	5.31%	7.96%	1.65%	2.47%	6.95%	10.43%		
18	5.31%	7.96%	1.65%	2.47%	6.95%	10.43%		
19	5.31%	7.96%	1.65%	2.47%	6.95%	10.43%		
20	5.31%	7.96%	1.65%	2.47%	6.95%	10.43%		
21	5.39%	8.09%	1.67%	2.51%	7.07%	10.60%		
22	5.49%	8.23%	1.70%	2.55%	7.19%	10.78%		
23	5.58%	8.37%	1.73%	2.59%	7.31%	10.96%		
24	5.67%	8.50%	1.76%	2.64%	7.43%	11.14%		
25	5.77%	8.65%	1.79%	2.68%	7.55%	11.33%		
26	5.86%	8.79%	1.82%	2.73%	7.68%	11.52%		
27	5.96%	8.95%	1.85%	2.77%	7.81%	11.72%		
28	6.06%	9.09%	1.88%	2.82%	7.94%	11.91%		
29	6.16%	9.24%	1.91%	2.87%	8.07%	12.11%		
30	6.27%	9.40%	1.94%	2.92%	8.21%	12.32%		
31	6.38%	9.56%	1.98%	2.97%	8.35%	12.53%		
32	6.49%	9.73%	2.01%	3.02%	8.50%	12.75%		
33	6.60%	9.90%	2.05%	3.07%	8.65%	12.97%		
34	6.71%	10.07%	2.08%	3.12%	8.79%	13.19%		
35	6.83%	10.25%	2.12%	3.18%	8.95%	13.43%		
36	6.96%	10.43%	2.16%	3.24%	9.11%	13.67%		
37	7.09%	10.63%	2.20%	3.30%	9.29%	13.93%		
38	7.22%	10.83%	2.24%	3.36%	9.46%	14.19%		
39	7.36%	11.05%	2.28%	3.42%	9.65%	14.47%		
40	7.49%	11.24%	2.32%	3.48%	9.81%	14.72%		
41	7.61%	11.41%	2.36%	3.54%	9.97%	14.95%		
42	7.71%	11.57%	2.39%	3.59%	10.11%	15.16%		
43	7.80%	11.70%	2.42%	3.63%	10.22%	15.33%		
44	7.88%	11.82%	2.44%	3.67%	10.33%	15.49%		
45	7.92%	11.88%	2.46%	3.68%	10.37%	15.56%		
46	7.90%	11.85%	2.45%	3.67%	10.35%	15.52%		
47	7.78%	11.66%	2.41%	3.62%	10.19%	15.28%		
48	8.03%	12.05%	2.49%	3.73%	10.52%	15.78%		
49	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
50	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
51	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
52	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
53	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
54	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
55	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
56	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
57	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
58	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
59	8.30%	12.45%	2.57%	3.86%	10.87%	16.31%		
Assumptions:								
Interest:	7.00%							
Salary:	3.00% plus promotion							
COLA:	2.00%							
Mortality:	Retired Pensioner improvement usin blended 75% male	(RP) 2014 Combi g Projection Scale e and 25% female	ned Healthy Table MP-2019, increase	with blue-collar ac d by 4.5% for mal	djustment, with 22- es to reflect Plan e	year Generational xperience, and		



		Safety Tier 4	
Entry Age	Basic Rate	COLA Rate	Total Rate
16	7.72%	1.91%	9.63%
17	7.72%	1.91%	9.63%
18	7.72%	1.91%	9.63%
19	7.72%	1.91%	9.63%
20	7.72%	1.91%	9.63%
21	8.02%	1.99%	10.01%
22	8.33%	2.06%	10.39%
23	8.64%	2.13%	10.77%
24	8.95%	2.21%	11.16%
25	9.27%	2.28%	11.55%
26	9.57%	2.35%	11.92%
27	9.87%	2.42%	12.29%
28	10.17%	2.49%	12.66%
29	10.46%	2.55%	13.01%
30	10.75%	2.61%	13.36%
31	11.06%	2.68%	13.74%
32	11.36%	2.76%	14.12%
33	11.66%	2.83%	14 49%
34	11.97%	2.90%	14.87%
35	12.28%	2.97%	15 25%
36	12.20%	3.03%	15.23%
37	12.50%	3.09%	15.96%
38	13.17%	3.15%	16.32%
39	13.48%	3 21%	16.69%
40	13.40%	3.28%	17.09%
41	14.13%	3 35%	17.48%
41	14.13%	3.42%	17.40%
43	14.85%	3.51%	18 36%
45	15.25%	3.58%	18.83%
45	15.64%	3.67%	19 31%
46	16.00%	3.70%	19.70%
47	16.36%	3 75%	20.11%
48	16.74%	3.79%	20.53%
49	17.12%	3.83%	20.95%
50	17.12%	3.83%	20.95%
51	17.12%	3.83%	20.95%
52	17.12%	3.83%	20.95%
53	17.12%	3.83%	20.95%
54	17.12%	3.83%	20.95%
55	17.12%	3.83%	20.95%
56	17.12%	3.83%	20.95%
57	17.12%	3.83%	20.95%
58	17 12%	3.83%	20.95%
59	17.12%	3.83%	20.95%
57	. 7.12/0	5.0570	20.7570
sumptions			
Interact:	7.00%		
Salarr	7.00% 3.00% -1	romotion	
COLA:	2.00% pius p	a oniou Oli	
COLA:	2.00%		
	Retired Pensioner	(RP) 2014 Combined	ned Healthy Table
Mortality:	improvement usin	g Projection Scale	MP-2019,
	increased by 4.5%	for males to reflect	rt Plan experience, ale
	and biended / 3%	maic and 2370 fell	uic



## **APPENDIX E – MEMBER CONTRIBUTION RATES**

## 2021 Member Contribution Rates (for fiscal year ending 2023)

	Genera	al Tier 1	General T	iers 2 and 3	Safety	Tier 1	Safety Tie	ers 2 and 3	Tier 4 M	Iembers
Entry Age	First	Over	First	Over	First	Over	First	Over	General	Safety
16	\$161.54 2.75%	\$161.54 4 13%	\$161.54 4 3404	\$161.54 6 51%	\$161.54 4 65%	\$161.54 6.07%	\$161.54 6.05%	\$161.54 10.43%	4 4 2 9/	0.61%
10	2.75%	4.13%	4.54%	6.64%	4.05%	6.97%	6.95%	10.43%	4.42%	9.61%
18	2.81%	4.22%	4.43%	6.78%	4.65%	6.97%	6.95%	10.43%	4.42%	9.61%
19	2.93%	4 40%	4 62%	6.93%	4.65%	6.97%	6.95%	10.43%	4 42%	9.61%
20	2.99%	4.49%	4.71%	7.07%	4.65%	6.97%	6.95%	10.43%	4.42%	9.61%
21	3.05%	4.58%	4.81%	7.22%	4.73%	7.09%	7.07%	10.60%	4.67%	9.99%
22	3.12%	4.68%	4.91%	7.37%	4.81%	7.21%	7.19%	10.78%	4.92%	10.38%
23	3.18%	4.77%	5.01%	7.52%	4.89%	7.33%	7.31%	10.96%	5.17%	10.76%
24	3.25%	4.87%	5.12%	7.68%	4.97%	7.45%	7.43%	11.14%	5.43%	11.15%
25	3.31%	4.97%	5.23%	7.84%	5.05%	7.57%	7.55%	11.33%	5.69%	11.54%
26	3.39%	5.08%	5.33%	8.00%	5.13%	7.70%	7.68%	11.52%	5.91%	11.91%
27	3.45%	5.18%	5.44%	8.16%	5.22%	7.83%	7.81%	11.72%	6.13%	12.28%
28	3.53%	5.29%	5.55%	8.33%	5.31%	7.96%	7.94%	11.91%	6.35%	12.64%
29	3.60%	5.40%	5.67%	8.50%	5.40%	8.10%	8.07%	12.11%	6.58%	12.99%
30	3.67%	5.51%	5.79%	8.68%	5.49%	8.24%	8.21%	12.32%	6.80%	13.34%
31	3.75%	5.62%	5.91%	8.86%	5.59%	8.38%	8.35%	12.53%	7.01%	13.72%
32	3.83%	5.74%	6.03%	9.04%	5.68%	8.52%	8.50%	12.75%	7.22%	14.10%
33	3.91%	5.86%	6.15%	9.23%	5.78%	8.67%	8.65%	12.97%	7.44%	14.47%
34	3.99%	5.98%	6.28%	9.42%	5.88%	8.82%	8.79%	13.19%	7.66%	14.85%
35	4.07%	6.10%	6.41%	9.61%	5.99%	8.98%	8.95%	13.43%	7.89%	15.24%
36	4.15%	6.23%	6.54%	9.81%	6.09%	9.14%	9.11%	13.67%	8.12%	15.59%
37	4.24%	6.36%	6.68%	10.02%	6.21%	9.31%	9.29%	13.93%	8.36%	15.94%
38	4.33%	6.49%	6.81%	10.22%	6.33%	9.49%	9.46%	14.19%	8.62%	16.30%
39	4.42%	6.63%	6.96%	10.44%	6.45%	9.67%	9.65%	14.47%	8.88%	16.67%
40	4.51%	6.77%	7.11%	10.66%	6.58%	9.87%	9.81%	14.72%	9.14%	17.07%
41	4.61%	6.91%	7.26%	10.89%	6.73%	10.09%	9.97%	14.95%	9.40%	17.46%
42	4./1%	7.06%	7.41%	11.12%	6.82%	10.23%	10.11%	15.16%	9.66%	1 / .86%
43	4.81%	7.22%	7.57%	11.35%	6.92%	10.38%	10.22%	15.33%	9.99%	18.33%
44	4.92% 5.01%	7.58%	7.71%	11.57%	7.04%	10.50%	10.33%	15.49%	10.55%	10.28%
45	5.01%	7.51%	7.83%	11.7770	7.11%	10.00%	10.37%	15.50%	11.00%	19.20%
40	5.19%	7.04%	8 14%	12 21%	7.19%	10.30%	10.19%	15.32%	11.02%	20.09%
48	5 29%	7.93%	8 29%	12.21%	7.15%	10.75%	10.12%	15.20%	11.51%	20.09%
49	5 39%	8.09%	8 45%	12.68%	6 99%	10.48%	10.87%	16 31%	12.19%	20.93%
50	5.51%	8.26%	8.62%	12.93%	6.99%	10.48%	10.87%	16.31%	12.52%	20.93%
51	5.63%	8.44%	8.77%	13.16%	6.99%	10.48%	10.87%	16.31%	12.86%	20.93%
52	5.73%	8.59%	8.91%	13.37%	6.99%	10.48%	10.87%	16.31%	13.18%	20.93%
53	5.83%	8.75%	9.03%	13.55%	6.99%	10.48%	10.87%	16.31%	13.50%	20.93%
54	5.94%	8.91%	9.11%	13.66%	6.99%	10.48%	10.87%	16.31%	13.79%	20.93%
55	6.01%	9.01%	9.12%	13.68%	6.99%	10.48%	10.87%	16.31%	14.03%	20.93%
56	6.05%	9.07%	9.06%	13.59%	6.99%	10.48%	10.87%	16.31%	14.29%	20.93%
57	6.02%	9.03%	8.93%	13.40%	6.99%	10.48%	10.87%	16.31%	14.49%	20.93%
58	5.96%	8.94%	9.23%	13.84%	6.99%	10.48%	10.87%	16.31%	14.65%	20.93%
59	5.85%	8.77%	9.53%	14.30%	6.99%	10.48%	10.87%	16.31%	14.71%	20.93%
Assumptions:										
Interest:	7.00%		7.00%		7.00%		7.00%		7.00%	
Salary:	3.00% plus	s promotion	3.00% plus	promotion	3.00% plus	promotion	3.00% plus	promotion	3.00% plus	promotion
COLA:	2.60%		2.00%		2.60%		2.00%		2.00%	
Mortality:	Mortality: For General: Retired Pensioner (RP) 2014 Combined Healthy Table, with 20-year Generational improvement using Projection Scale MP-2019, increased by 2.2% for males and 8.0% for females to reflect Plan experience, and blended 30% male and 70% female For Safety: Retired Pensioner (RP) 2014 Combined Healthy Table with blue-collar adjustment, with 20-year Generational improvement using Projection Scale MP-2019, increased by 4.5% for males to reflect Plan experience, and blended 75% male and 25% female									



## **APPENDIX F – SUPPLEMENTAL TABLES FOR REPORTING PURPOSES**

The tables on this page and the next three pages show selected demographic assumption rates based on age or service as reflected in the June 30, 2022 actuarial valuation.

General - I	Male			
	Demog	aphic Assum	ption Rates	- Age
		Mortality	of Active	Withdrawal
	Service Retirement	Member	s Rate	(Termination)
Age	Rate*	Ordinary	Service	Rate**
25	0.000	0.000594	0.000000	0.0800
30	0.000	0.000610	0.000000	0.0800
35	0.000	0.000737	0.000000	0.0800
40	0.000	0.000825	0.000000	0.0800
45	0.000	0.001092	0.000000	0.0800
50	0.050	0.001690	0.000000	0.0500
55	0.060	0.002770	0.000000	0.0500
60	0.150	0.004864	0.000000	0.0500
65	0.350	0.008629	0.000000	0.0000
70	0.350	0.013784	0.000000	0.0000

\*The Service Retirement Rates above assume less than 30 years of service.

\*\*The Withdrawal Rates above assume at least 3 but less than 5 years of service.

	Demographic Assumption Rates - Age							
		Mortality	of Active	Withdrawal				
	Service Retirement	Member	rs Rate	(Termination)				
Age	Rate*	Ordinary	Service	Rate**				
25	0.000	0.000224	0.000000	0.0800				
30	0.000	0.000300	0.000000	0.0800				
35	0.000	0.000398	0.000000	0.0800				
40	0.000	0.000505	0.000000	0.0800				
45	0.000	0.000735	0.000000	0.0800				
50	0.050	0.001155	0.000000	0.0500				
55	0.060	0.001823	0.000000	0.0500				
60	0.150	0.002775	0.000000	0.0500				
65	0.350	0.004013	0.000000	0.0000				
70	0.350	0.006442	0.000000	0.0000				

#### **General - Female**

\*The Service Retirement Rates above assume less than 30 years of service.

\*\*The Withdrawal Rates above assume at least 3 but less than 5 years of service.



### **APPENDIX F – SUPPLEMENTAL TABLES FOR REPORTING PURPOSES**

Bullety III	uic								
	Demog	raphic Assum	ption Rates	- Age					
		Mortality	Mortality of Active Withdrawal						
	Service Retirement	Member	s Rate	(Termination)					
Age	Rate*	Ordinary	Service	Rate**					
25	0.000	0.000456	0.000330	0.0700					
30	0.000	0.000469	0.000339	0.0700					
35	0.000	0.000488	0.000488	0.0700					
40	0.000	0.000546	0.000546	0.0700					
45	0.070	0.000694	0.000751	0.0600					
50	0.070	0.000940	0.001297	0.0600					
55	0.100	0.001466	0.002200	0.0600					
60	0.200	0.002382	0.004055	0.0000					
65	0.400	0.004224	0.007193	0.0000					
70	1.000	0.006505	0.011075	0.0000					

#### Safety - Male

\*The Service Retirement Rates above assume less than 20 years of service.

\*\*The Withdrawal Rates above assume at least 3 but less than 5 years of service.

Safety	- Female	e

	Demographic Assumption Rates - Age							
		Mortality	of Active	Withdrawal				
	Service Retirement	Member	rs Rate	(Termination)				
Age	Rate*	Ordinary	Service	Rate**				
25	0.000	0.000135	0.000098	0.0700				
30	0.000	0.000180	0.000131	0.0700				
35	0.000	0.000207	0.000207	0.0700				
40	0.000	0.000262	0.000262	0.0700				
45	0.070	0.000366	0.000397	0.0600				
50	0.070	0.000504	0.000695	0.0600				
55	0.100	0.000757	0.001136	0.0600				
60	0.200	0.001066	0.001816	0.0000				
65	0.400	0.001542	0.002625	0.0000				
70	1.000	0.002440	0.004155	0.0000				

\*The Service Retirement Rates above assume less than 20 years of service.

\*\*The Withdrawal Rates above assume at least 3 but less than 5 years of service.



## **APPENDIX F – SUPPLEMENTAL TABLES FOR REPORTING PURPOSES**

General - Male							
Demographic Assumption Rates - Years of Service							
	Service Retirement	Withdrawal					
Service	Rate*	(Termination) Rate**					
5	0.150	0.050					
10	0.150	0.030					
15	0.150	0.030					
20	0.150	0.030					
25	0.150	0.030					
30	0.200	0.030					
35	0.200	0.030					
40	0.200	0.030					
45	0.200	0.030					
50	0.200	0.030					

\*The Service Retirement Rates above apply to a member at age 60. \*\*The Withdrawal Rates above apply to a member at age 40.

General	- Female
---------	----------

Demographic Assumption Rates - Years of Service*						
Service Retirement Withdrawal Service Rate* (Termination) Rate**						
5	0.150	0.050				
10	0.150	0.030				
15	0.150	0.030				
20	0.150	0.030				
25	0.150	0.030				
30	0.200	0.030				
35	0.200	0.030				
40	0.200	0.030				
45	0.200	0.030				
50	0.200	0.030				

\*The Service Retirement Rates above apply to a member at age 60. \*\*The Withdrawal Rates above apply to a member at age 40.



## **APPENDIX F – SUPPLEMENTAL TABLES FOR REPORTING PURPOSES**

Safety - Male							
Demographic Assumption Rates - Years of Service*							
	Service Retirement	Withdrawal					
Service	Rate*	(Termination) Rate**					
5	0.200	0.040					
10	0.200	0.040					
15	0.200	0.040					
20	0.400	0.040					
25	0.400	0.040					
30	0.400	0.040					
35	0.400	0.040					
40	0.400	0.040					
45	0.400	0.040					
50	0.400	0.040					

\*The Service Retirement Rates above apply to a member at age 60. \*\*The Withdrawal Rates above apply to a member at age 40.

#### Safety - Female

Demographic Assumption Rates - Years of Service*					
Service Retirement Withdrawal					
Service	Rate*	(Termination) Rate**			
5	0.200	0.040			
10	0.200	0.040			
15	0.200	0.040			
20	0.400	0.040			
25	0.400	0.040			
30	0.400	0.040			
35	0.400	0.040			
40	0.400	0.040			
45	0.400	0.040			
50	0.400	0.040			

\*The Service Retirement Rates above apply to a member at age 60. \*\*The Withdrawal Rates above apply to a member at age 40.





Classic Values, Innovative Advice



Celebrating 20 years

**Tulare County Employees' Retirement Association** 

# GASB 67/68 Report as of June 30, 2022

**Produced by Cheiron** 

October 2022

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October 27, 2022

Board of Retirement Tulare County Employees' Retirement Association 136 N. Akers St. Visalia, California 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, 2022,
- 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, ASA, FCA, MAAA, EA Consulting Actuary

Stim Mr. Hustings

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



## **SECTION I – BOARD SUMMARY**

The measurement date for the Tulare County Employees' Retirement Association (TCERA) is June 30, 2022. Measurements are based on the fair value of assets as of June 30, 2022 and the Total Pension Liability as of the valuation date, June 30, 2022. The table below provides a summary of the key collective results during this measurement period.

Table I-1   Summary of Collective Results						
Measurement Date						
		06/30/2022		06/30/2021		
Net Pension Liability	\$	427,018	\$	271,543		
Deferred Outflows		(168,633)		(123,493)		
Deferred Inflows		118,364		198,592		
Net Impact on Statement of Net Position	\$	376,749	\$	346,642		
Pension Expense/(Income) Pension Expense/(Income) (% of Payroll)	\$	70,499 24.43%	\$	61,253 22.18%		

Numbers may not add to totals due to rounding.

Amounts in Thousands

The Net Pension Liability (NPL) increased by approximately \$155.5 million since the prior measurement date, primarily due to poor asset performance over the last year. 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 \$427,018,000, collective Deferred Inflows of \$118,364,000, and collective Deferred Outflows of \$168,633,000. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to TCERA would be \$376,749,000 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, 2022, the collective annual pension expense is 70,499,000 or 24.43% of covered payroll. This amount is not equal to the participating employers' contributions to TCERA (40,392,000), but instead represents the change in the net impact on participating employer's Statements of Net Position plus employer contributions (376,749,000 - 3346,642,000 + 40,392,000). The collective pension expense is larger than the collective expense for the prior year. Volatility in pension expense will largely be driven by investment gains or losses, but other changes can also have a significant impact. 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, FCA, MAAA, EA Consulting Actuary Steven M. Hastings, FSA, FCA, MAAA, EA Consulting Actuary



## SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.09%.

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, 2022 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 Board elected to phase-in the impact of the 2020 assumption changes on the employer contribution rate over the following three fiscal years, with the assumption changes fully recognized as of June 30, 2022.

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.

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 2089, 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 3.54% 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, 2022 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 3.54% municipal bond rate is based on the Bond Buyer 20-year Bond GO Index as of June 30, 2022.

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 2089), and 3.54% thereafter, is 7.09%. The discount rate used to determine the Total Pension Liability as of June 30, 2022 is therefore 7.09%. 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, 2022, is measured as of a valuation date of June 30, 2022.

Between the June 30, 2021 and June 30, 2022 measurement dates, the discount rate was increased from 6.95% to 7.09% due to the results of the crossover test. The details of this calculation are shown in Appendix D. The change in the discount rate was the only assumption change this year. Please see Appendix B of the June 30, 2022 actuarial valuation report for a more detailed description of 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 change decreased the TPL measurement by approximately \$41 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.

Table V-1 Change in Collective Net Pension Liability									
	Increase (Decrease)								
	Total PensionPlan FiduciaryNet PensionLiabilityNet PositionLiability(a)(b)(a) - (b)								
Balances at 6/30/2021	\$	2,247,728	\$	1,976,185	\$	271,543			
Changes for the year:									
Service cost		56,123				56,123			
Interest		154,625				154,625			
Changes of benefits		0				0			
Differences between expected and actual									
experience		(69,048)				(69,048)			
Changes of assumptions		(40,693)				(40,693)			
Contributions - employer				40,392		(40,392)			
Contributions - member				25,880		(25,880)			
Net investment income				(117,773)		117,773			
Benefit payments		(102,708)		(102,708)		0			
Administrative expense				(2,967)		2,967			
Net changes		(1,701)		(157,176)		155,475			
Balances at 6/30/2022	\$	2,246,027	\$	1,819,009	\$	427,018			

Numbers may not add to totals due to rounding.

Amounts in Thousands

During the measurement year, the collective NPL increased by approximately \$155 million. The service cost, interest cost, investment losses, and recognition of administrative expense increased the collective NPL by approximately \$331 million while contributions and actuarial experience gains decreased the collective NPL by approximately \$135 million. Actuarial gains are due primarily to a reduction in the estimated impact of future SRBR transfers.

There were no changes in benefits during the year. As discussed in Section IV, there was an assumption change, which decreased the TPL by approximately \$41 million.

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



## SECTION V – GASB 67 REPORTING INFORMATION

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.

Table V-2   Sensitivity of Collective Net Pension Liability to Changes in Discount Rate													
		1% Decrease 6.09%		Discount Rate 7.09%		1% Increase 8.09%							
Total Pension Liability Plan Fiduciary Net Position	\$ •	2,564,601 1,819,009 745 592	\$ \$	2,246,027 1,819,009 427,018	\$ •	1,986,547 1,819,009							
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	<u>\$</u>	70.9%	<u>\$</u>	81.0%	<u>\$</u>	91.6%							

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 75%. A 1% increase in the discount rate decreases the TPL by approximately 12% and decreases the collective NPL by approximately 61%.

## **Required Supplementary Information**

The schedules of Required Supplementary Information generally start with information as of the implementation of GASB 67, and eventually will build up to 10 years of information. The schedule on the following page shows the changes in collective NPL and related ratios required by GASB for the nine years since implementation.



## SECTION V – GASB 67 REPORTING INFORMATION

							1	able V-3										
			S	chedule of Ch	an	ges in Collecti	ive	Net Pension I	Lia	bility and Rel	late	ed Ratios						
		FYE 2022		FYE 2021		FYE 2020		FYE 2019		FYE 2018		FYE 2017		FYE 2016	I	FYE 2015	F	YE 2014
<b>Total Pension Liability</b>																		
Service cost (MOY)	\$	56,123	\$	54,859	\$	49,424	\$	49,484	\$	46,838	\$	38,203	\$	38,307	\$	35,168	\$	39,672
Interest (includes interest on service																		
cost)		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
Differences between expected and		((0,049)		05 474		(54.001)				10.242		11.026		(40 (02)		7 501		0
Changes of assumptions		(69,048)		85,474		(54,091)		(0,00/)		10,342		11,936		(40,602)		190,197		12 500
Benefit payments, including refunds		(40,093)		2,930		/0,/88		(37,990)		41,149		09,008		25,925		160,187		15,388
of member contributions		(102,708)		(96.276)		(91 427)		(85,097)		(80,716)		(76.961)		(72 332)		(68 560)		(65 954)
		(102,700)		(50,270)		()1,427)		(05,077)		(00,710)		(70,901)		(12,552)		(00,500)		(05,554)
Net change in total pension liability	\$	(1,701)	\$	188,867	\$	115,084	\$	53,619	\$	144,199	\$	161,449	\$	65,011	\$	251,858	\$	81,583
Total pension liability - beginning		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	\$	2,246,027	\$	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 not position		<u> </u>			-	<u> </u>							-					
Contributions employer	¢	40 202	¢	26 766	¢	25 210	¢	22 404	¢	286 262	¢	22 616	¢	21 207	¢	20.002	¢	25 052
Contributions - member	φ	25 880	φ	23 536	φ	23 104	φ	22 325	φ	18 512	φ	18 190	φ	16 815	φ	18 887	φ	18 969
Net investment income		(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		(102,708)		(96,276)		(91,427)		(85,097)		(80,716)		(76,961)		(72,332)		(68,560)		(65,954)
Administrative expense		(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	\$	(157,176)	\$	356,365	\$	(26,351)	\$	58,695	\$	317,250	\$	105,098	\$	(47,145)	\$	101,312	\$	157,207
Plan fiduciary net position -																		
beginning		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	\$	1,819,009	\$	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	\$	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		80.99%		87.92%		78.68%		84.69%		83.99%		72.75%		73.53%		79.78%		87.64%
Covered payroll*	\$	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		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.

\* Payroll for FYE 2014 was determined by the prior actuary. Subsequent payroll figures are based on amounts provided by the participating employers for the respective fiscal year.



Amounts in Thousands

## SECTION V – GASB 67 REPORTING INFORMATION

Because an Actuarially Determined Contribution (ADC) has been calculated historically, the full 10 years of information in the following schedule is required. Information prior to FYE 2015 was determined by the prior actuary.

	Table V-4     Schedule of Collective Employer Contributions																		
	F	YE 2022	F	YE 2021	F	YE 2020	I	FYE 2019	I	FYE 2018*		FYE 2017		FYE 2016	FYE 2015	I	YE 2014	F	YE 2013
Actuarially Determined Contribution Contributions in Relation to the	\$	40,392	\$	36,766	\$	35,310	\$	33,494	\$	36,263	\$	33,616	\$	31,297	\$ 30,992	\$	25,953	\$	29,847
Actuarially Determined Contribution		40,392		36,766		35,310		33,494		36,263		33,616		31,297	 30,992		25,953		29,847
Contribution Deficiency/(Excess)	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$ 0	\$	0	\$	0
Covered Payroll	\$	288,629	\$	276,127	\$	283,640	\$	264,218	\$	256,049	\$	243,366	\$	238,559	\$ 229,431	\$	234,438	\$	230,955
Contributions as a Percentage of Covered Payroll		13.99%		13.31%		12.45%		12.68%		14.16%		13.81%		13.12%	13.51%		11.07%		12.92%

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 2022.

#### Notes to Schedule

Valuation Date	06/30/2020
Timing	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 I	Jsed to Determine Contribution Rates:
Actuarial cost method	Entry Age
Asset valuation method	10-year smoothed market, with a 30% corridor around the market value
A montization mothed	Level percentage of payroll with separate periods for the UAL as of June 30, 2015 (15 years remaining as of 6/30/19), and additional 19-year layers for unexpected
Amortization method	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
	For General: RP-2014 Combined Healthy Sex Distinct Table, with Generational improvement using Projection Scale MP-2019, increased by 2.2% for males and
34 4 14	8.0% for females to reflect Plan experience
Mortality	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, 2022 can be found in the June 30, 2020 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 2022 disclosures can be based on either the June 30, 2021 or 2022 measurement dates. If an employer elects to base its 2022 disclosures on the June 30, 2021 measurement date, the GASB 68 schedules in this report with a measurement date of June 30, 2022 will be used for its 2023 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

Table V Schedule of Collective Deferred Infl	[-1 ows and	l Outflows of F	Resour	ces
	(	Deferred Outflows of Resources	D In Re	eferred flows of esources
Differences between expected and actual experience Changes in assumptions	\$	51,284 30,072	\$	78,210 40,154
pension plan investments		87,277		0
Total	\$	168,633	\$	118,364
Amounts reported as deferred outflows and deferred inflov expense as follows:	ws of reso	urces will be recog	nized in p	pension
Measurement year ended Jur	ie 30:			
2	023	12,854		
2	024	16,680		
2	025	(8,858)		
2	026	29,593		
2	027	0		

Numbers may not add to totals due to rounding.

Amounts in Thousands

0

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.

Thereafter \$

	Table VI-2(a)   Recognition of Experience (Gains) and Losses														
Experience Year	Recognition Period	Total Amount	Beginning Remaining Amount	Ending Remaining Amount	2022	2023	Recogni 2024	tion Year 2025	2026	Thereafter					
2022	5.0	\$ (69,048)	\$ (69,048)	\$ (55,238)	\$ (13,810)	\$ (13,810)	\$ (13,810)	\$ (13,810)	\$ (13,808)	\$ 0					
2021	5.0	85,474	68,379	51,284	17,095	17,095	17,095	17,094	0	0					
2020	5.0	(54,091)	(32,455)	(21,637)	(10,818)	(10,818)	(10,819)	0	0	0					
2019	5.0	(6,667)	(2,668)	(1,335)	(1,333)	(1,335)	0	0	0	0					
2018	5.0	10,342	2,068	0	2,068	0	0	0	0	0					
Deferred Ou	tflows		70,447	51,284	19,163	17,095	17,095	17,094	0	0					
Deferred (In	flows)		(104,171)	(78,210)	(25,961)	(25,963)	(24,629)	(13,810)	(13,808)	0					
Net Change	in Pension Exp	ense	\$ (33,724)	\$ (26,926)	\$ (6,798)	\$ (8,868)	\$ (7,534)	\$ 3,284	\$ (13,808)	\$ 0					

Numbers may not add to totals due to rounding.

Amounts in Thousands



## SECTION VI – GASB 68 COLLECTIVE AMOUNTS

	Table VI-2(b)   Recognition of Assumption Changes																	
Change Year	Recognition Period		Total Amount	B Re	eginning emaining Amount	R	Ending emaining Amount		2022		2023		Recogni 2024	tio	n Year 2025	2026	The	reafter
2022	5.0	\$	(40,693)	\$	(40,693)	\$	(32,554)	\$	(8,139)	\$	(8,139)	\$	(8,139)	\$	(8,139)	\$ (8,137)	\$	0
2021	5.0		2,930		2,344		1,758		586		586		586		586	0		0
2020	5.0		70,788		42,472		28,314		14,158		14,158		14,156		0	0		0
2019	5.0		(37,996)		(15,199)		(7,600)		(7,599)		(7,600)		0		0	0		0
2018	5.0		41,149		8,230		0		8,230		0		0		0	 0		0
Deferred Out	flows				53,046		30,072		22,974		14,744		14,742		586	0		0
Deferred (Int Net Change i	lows) n Pension Exp	ense	e	\$	(55,892) (2,846)	\$	(40,154) (10,082)	\$	(15,738) 7,236	\$	(15,739) (995)	\$	(8,139) 6,603	\$	(8,139) (7,553)	\$ (8,137) (8,137)	\$	<u>0</u> 0

Numbers may not add to totals due to rounding.

Amounts in Thousands

Amounts in Thousands

	Table VI-2(c)   Recognition of Investment (Gains) and Losses														
Experience Year	Recognition Period	Total Amount	Beginning Remaining Amount	Ending Remaining Amount	2022	2023	Recognitio 2024	on Year 2025	2026	Thereafter					
2022 2021 2020 2019 2018	5.0 5.0 5.0 5.0 5.0 5.0	\$ 257,686 (280,622) 110,998 25,528 (2,900)	\$ 257,686 (224,498) 66,598 10,210 (580)	\$ 206,149 (168,374) 44,398 5,104 0	\$ 51,537 (56,124) 22,200 5,106 (580)	\$ 51,537 (56,124) 22,200 5,104 0	\$ 51,537 \$ (56,124) 22,198 0 0	5 51,537 (56,126) 0 0 0	\$ 51,538 0 0 0 0	\$ 0 0 0 0					
Net Change i	n Pension Exp	ense	\$ 109,416	\$ 87,277	\$ 22,139	\$ 22,717	\$ 17,611 \$	6 (4,589)	\$ 51,538	\$ 0					

Numbers may not add to totals due to rounding.

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

Tab Calculation of Colle	le VI-3 ctive Pens	ion Expense		
		Measurement 2022	Year	Ending 2021
Change in Net Pension Liability Change in Deferred Outflows Change in Deferred Inflows Employer Contributions	\$	155,475 (45,140) (80,228) 40,392	\$	(167,498) 63,465 128,520 36,766
Pension Expense Pension Expense as % of Payroll	\$	70,499 24.43%	\$	61,253 22.18%
<b>Operating Expenses</b> Service cost Employee contributions Administrative expenses Total	\$ 	56,123 (25,880) <u>2,967</u> 33,210	\$ \$	54,859 (23,536) <u>2,740</u> 34,063
<b>Financing Expenses</b> Interest cost Expected return on assets Total	\$ \$	154,625 (139,913) 14,712	\$ \$	141,880 (114,457) 27,423
Changes Benefit changes Recognition of assumption changes Recognition of liability gains and losses Recognition of investment gains and losses Total	\$ \$	0 7,236 (6,798) 22,139 22,577	\$ 	0 29,297 9,399 (38,929) (233)
Pension Expense	\$	70,499	\$	61,253

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



#### SECTION VI – GASB 68 COLLECTIVE AMOUNTS

assumption changes, gains or losses on the TPL, and investment gains or losses. The total collective pension expense increased by about \$9.2 million. In the current year pension expense, the recognition of changes increased by approximately \$22.8 million and was offset by decreases in operating expenses of approximately \$0.9 million and financing expenses of approximately \$12.7 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, 2022 has been determined using this method.

	Determinat	Tat ion of Empl	ole VII-1  oyers' Proportio	nate S	hare								
		June 30	, 2022		June 30	, 2021							
	E	mployer	Proportionate	E	mployer	Proportionate							
Employer	Co	Contribution Share Contribution Share											
County	\$	37,014	91.6370%	\$	33,586	91.3507%							
Courts		3,129	7.7466%		2,965	8.0645%							
SPUD		36	0.0891%		34	0.0925%							
TCAG		213	0.5273%		181	0.4923%							
Total	\$	40,392	100.0000%	\$	36,766	100.0000%							

Numbers may not add to totals due to rounding.



#### SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

Sche	dule of Employers	s' Proportion	Table VII-2 ate Share of C	ollective Amo	unts at June 3	0, 2022	
Employer	Proportionate Share	Share of NPL @ 6.09%	Share of NPL @ 7.09%	Share of NPL @ 8.09%	Share of Deferred Outflows	Share of Deferred Inflows	Pension Expense
County	91.6370%	\$ 683,238	\$ 391,306	\$ 153,527	\$ 154,530	\$ 108,465	\$ 64,603
Courts	7.7466%	57,758	33,079	12,978	13,063	9,169	5,461
SPUD	0.0891%	665	381	149	150	105	63
TCAG	0.5273%	3,932	2,252	883	889	624	372
Total	100.0000%	\$ 745,592	\$ 427,018	\$ 167,538	\$ 168,633	\$ 118,364	\$ 70,499

Numbers may not add to totals due to rounding.

Amounts in Thousands

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.

	Sched	ule of Emplo	yers'	Change	Ta s in	able VII-3 Proport	ion	and Con	trib	oution Dif	ere	nces				
	Proportion	ate Shares		In	npac	ct of Chang	ge i	n Proportio	on				Co	ntributions		
			Net	Net Pension Deferred Deferred									Pr	oportionate		
Employer	06/30/2021	06/30/2022	L	iability	0	outflows		Inflows	Ν	et Effect		Actual		Share	Differe	nce
County	91.3507%	91.6370%	\$	777	\$	354	\$	(568)	\$	992	\$	37,014	\$	37,014	\$	0
Courts	8.0645%	7.7466%		(863)		(393)		631		(1,102)		3,129		3,129		0
SPUD	0.0925%	0.0891%		(9)		(4)		7		(12)		36		36		0
TCAG	0.4923%	0.5273%	95 43 (70) 121							213		213		0		
Total	100.0000%	100.0000%	\$	\$ 0 \$ 0 \$ 0 \$ 0 \$ 40,39								40,392	\$	40,392	\$	0

Numbers may not add to totals due to rounding.

Amounts in Thousands

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.

Table VII-4   Reconciliation of Deferred Outflows and Inflows Due to Proportion Change															
Deferred Outflows												Deferre	d Inflows		
Employer	Current Year 06/30/2021 Net Effect Recognition 06/30/2							5/30/2022	Current Year 30/2022 06/30/2021 Net Effect Recogn						/30/2022
County Courts SPUD TCAG Total	\$ <b>\$</b>	1,902 3,520 87 303 <b>5,811</b>	\$ \$	992 0 121 <b>1,114</b>	\$ \$	949 3,273 43 321 <b>4,586</b>	\$ \$	1,945 246 44 103 <b>2,339</b>	\$ \$	(3,853) (1,650) (19) (289) (5,811)	\$ \$	0 (1,102) (12) 0 (1,114)	\$ (3,599) (831) (12) (144) \$ (4,586)	\$ \$	(255) (1,921) (19) (145) (2,339)

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.

	Table VII-5     Reconciliation of Deferred Outflows and Inflows Due to Contribution Differences														
	Deferred Outflows										Deferre	d In	iflows		
Employer	Current Year 06/30/2021 Difference Recognition 06/30							06	/30/2021	Current Year Difference			ecognition	06/30/2022	
County	\$	5,492	\$ 0	\$	5,492	\$	0	\$	0	\$	0	\$	0	\$	0
Courts		0	0		0		0		(4,958)		0		(4,958)		0
SPUD		0	0		0		0		(51)		0		(51)		0
TCAG		0	0		0		0		(483)		0		(483)		0
Total	\$	5,492	<b>\$</b> 0	\$	5,492	\$	0	\$	(5,492)	\$	0	\$	(5,492)	\$	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.

	Table VII-6   Schedule of Employers' Deferred Outflows at June 30, 2022													
Employer	Proportionate Assumption Investment Proportion Contribution Employer Shares Experience Changes Return Change Difference													
County	91.6370%	\$	46,995	\$	27,557	\$	79,978	\$	1,945	\$	0			
Courts	7.7466%		3,973		2,330		6,761		246		0			
SPUD	0.0891%		46		27		78		44		0			
TCAG	0.5273%		270		159		460		103		0			
Total	100.0000%	\$	51,284	\$	30,072	\$	87,277	\$	2,339	\$	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.

	Table VII-7   Schedule of Employers' Deferred Inflows at June 30, 2022												
Employer	Proportionate Shares	Ex	xperience	A	Assumption Changes	Ir	ivestment Return	]	Proportion Change	C ]	ontribution Difference		
County	91.6370%	\$	71,669	\$	36,796	\$	0	\$	255	\$	0		
Courts	7.7466%		6,059		3,111		0		1,921		0		
SPUD	0.0891%		70		36		0		19		0		
TCAG	0.5273%		412		212		0		145		0		
Total	100.0000%	\$	78,210	\$	40,154	\$	0	\$	2,339	\$	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 o	of Employers	Recognit	tioi	Table V 1 of Defer	11-8 red	3 Outflows an	d Inflows	at	June 30,	<b>202</b> 2	2
				Recog	nitio	on for Measure	ment Year I	End	ing		
Employer		2023		2024		2025	2026		2027	The	ereafter
County	\$	12,600	\$	15,557	\$	(7,718) \$	27,317	\$	C	\$	0
Courts		288		981		(1,121)	2,072		0		0
SPUD		15		28		4	24		0		0
TCAG		(49)		115		(23)	180		0		0
Total	\$	12,854	\$	16,680	\$	(8,858) \$	29,593	\$	0	\$	0

Numbers may not add to totals due to rounding.



#### SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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.

	Table VII-9 Schedule of Employers' Pension Expense for the Measurement Year Ending June 30, 2022																	
	С	ollective						Employer		С	hai	nge in Employ	er				I	Employer
		Pension	Cl	ange in	Co	ontribution		Pension	N	let Pension		Deferred		Deferred		Employer		Pension
Employer	ŀ	Expense	Pr	oportion	D	Difference		Expense		Liability		Outflows		Inflows	Co	ontributions		Expense
County	\$	64,603	\$	(2,650)	\$	5,492	\$	67,445	\$	143,250	\$	(36,270)	\$	(76,549)	\$	37,014	\$	67,445
Courts		5,461		2,442		(4,958)		2,946		11,181		169		(11,533)		3,129		2,946
SPUD		63		31		(51)		43		129		6		(129)		36		43
TCAG		372		177		(483)		66		915		(82)		(981)		213		66
Total	\$	70,499	\$	0	\$	0	\$	70,500	\$	155,475	\$	(36,176)	\$	(89,192)	\$	40,392	\$	70,500

Numbers may not add to totals due to rounding.

Amounts in Thousands

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

	Table VII-10     Schedule of Employers' RSI Information at June 30, 2022												
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 Contributions	Contribution Deficiency	Contributions as a % of Payroll				
County	91.6370%	\$ 391,306	\$ 270,630	144.6%	81.0%	\$ 37,014	\$ 37,014	\$ 0	13.7%				
Courts	7.7466%	33,079	16,061	206.0%	81.0%	3,129	3,129	0	19.5%				
SPUD	0.0891%	381	180	211.9%	81.0%	36	36	0	20.0%				
TCAG	0.5273%	2,252	1,758	128.1%	81.0%	213	213	0	12.1%				
Total	100.0000%	\$ 427,018	\$ 288,629	147.9%	81.0%	\$ 40,392	\$ 40,392	\$ 0	14.0%				

Numbers may not add to totals due to rounding.



#### **APPENDIX A – MEMBERSHIP INFORMATION**

SUMMARY OF ACTIVE GENERAL MEMBERSHIP												
	J	une 30, 2021	J	une 30, 2022	Change							
General Tier 1												
Count		7		7	0.0%							
Average Age		68.0		69.0	1.5%							
Average Service		36.8		37.8	2.7%							
Annual Projected Payroll	\$	476,784	\$	490,633	2.9%							
Average Annual Pay	\$	68,112	\$	70,090	2.9%							
General Tier 2 & 3												
Count		1,776		1,619	-8.8%							
Average Age		49.0		49.6	1.3%							
Average Service		16.9		17.8	5.1%							
Annual Projected Payroll	\$	119,402,048	\$	113,469,216	-5.0%							
Average Annual Pay	\$	67,231	\$	70,043	4.2%							
General Tier 4												
Count		1,855		1,985	7.0%							
Average Age		37.4		37.8	0.9%							
Average Service		4.0		4.2	4.2%							
Annual Projected Payroll	\$	101,344,393	\$	113,443,582	11.9%							
Average Annual Pay	\$	54,633	\$	57,150	4.6%							
General Total												
Count		3,638		3,611	-0.7%							
Average Age		43.1		43.2	0.0%							
Average Service		10.4		10.4	-0.3%							
Annual Projected Payroll	\$	221,223,225	\$	227,403,431	2.8%							
Average Annual Pay	\$	60,809	\$	62,975	3.6%							



#### **APPENDIX A – MEMBERSHIP INFORMATION**

	SUMMARY (	OF ACTI	VE SAFETY MI	EMBE	RSHIP			
_	Iune 30, 2021 – June 30, 2022							
S - f - f - T	· 1	JL	ine 30, 2021	JL	ine 30, 2022	Change		
Salety I	ier i		0		0	0.00/		
C	ount		0		0	0.0%		
A	verage Age		0		0	0.0%		
A	verage Service		0		0	0.0%		
А	nnual Projected Payroll	\$	0	\$	0	0.0%		
А	verage Annual Pay	\$	0	\$	0	0.0%		
Safety T	ier 2 & 3							
C	ount		468		428	-8.5%		
А	verage Age		44.7		45.4	1.7%		
А	verage Service		16.6		17.4	4.5%		
А	nnual Projected Payroll	\$	39,977,926	\$	38,249,543	-4.3%		
А	verage Annual Pay	\$	85,423	\$	89,368	4.6%		
Safety T	ier 4							
Ċ	ount		378		393	4.0%		
А	verage Age		32.6		32.7	0.4%		
А	verage Service		3.9		4.3	8.7%		
А	nnual Projected Payroll	\$	25,685,216	\$	27,791,979	8.2%		
А	verage Annual Pay	\$	67,950	\$	70,710	4.1%		
Safety T	otal							
Ċ	ount		846		821	-3.0%		
А	verage Age		39.3		39.4	0.2%		
А	verage Service		11.0		11.1	1.3%		
А	nnual Projected Pavroll	\$	65,663,142	\$	66,041,522	0.6%		
А	verage Annual Pay	\$	77,616	\$	80,440	3.6%		



#### **APPENDIX A – MEMBERSHIP INFORMATION**

SUMMARY OF INACTIVE MEMBERSHIP*							
	Jı	ıne 30, 2021	June 30, 2022		Change		
General							
Count		1.935		2.083	7.6%		
Average Age		43.9		43.9	-0.2%		
Total Contribution Balance	\$	46,297,586	\$	52,984,947	14.4%		
Average Contribution Balance	\$	23,926	\$	25,437	6.3%		
Safety							
Count		360		384	6.7%		
Average Age		39.3		39.3	0.1%		
Total Contribution Balance	\$	14,311,843	\$	15,792,000	10.3%		
Average Contribution Balance	\$	39,755	\$	41,125	3.4%		
Total							
Count		2,295		2,467	7.5%		
Average Age		43.2		43.2	-0.1%		
Total Contribution Balance	\$	60,609,429	\$	68,776,947	13.5%		
Average Contribution Balance	\$	26,409	\$	27,879	5.6%		

\*Includes unclaimed accounts.



#### **APPENDIX A – MEMBERSHIP INFORMATION**

SUMMARY OF RETIRED MEMBERSHIP							
	Jı	ıne 30, 2021	Jı	ıne 30, 2022	Change		
General							
Count		2,865		2,947	2.9%		
Average Age		71.5		71.8	0.4%		
Total Annual Allowance	\$	65,750,480	\$	69,411,269	5.6%		
Average Annual Allowance	\$	22,950	\$	23,553	2.6%		
Safety							
Count		607		638	5.1%		
Average Age		65.0		65.3	0.5%		
Total Annual Allowance	\$	22,872,888	\$	24,727,646	8.1%		
Average Annual Allowance	\$	37,682	\$	38,758	2.9%		
Total							
Count		3,472		3,585	3.3%		
Average Age		70.4		70.6	0.3%		
Total Annual Allowance	\$	88,623,368	\$	94,138,915	6.2%		
Average Annual Allowance	\$	25,525	\$	26,259	2.9%		

Please refer to the June 30, 2022 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, 2022 is provided below. Please refer to the June 30, 2022 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, the administrative expense assumption, and the municipal bond yield, the assumptions used in this report and the June 30, 2022 actuarial valuation report reflect the results of the Experience Study performed by Cheiron covering the period July 1, 2017 through June 30, 2020.

#### **Key Actuarial Assumptions**

Expected Return on Assets	7.15% net of investment expenses as of June 30, 2022.
Municipal Bond Yield	3.54% net of investment expenses as of June 30, 2022 (Bond Buyer 20- year Bond GO Index, June 30, 2022).
Discount Rate	7.09%
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 the Consumer Price Index (CPI) subject to the maximum of 2.60% per year for Tier 1 and 2.00% per year for Tiers 2-4.
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, 2022 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
2023	\$ 1,819,009	\$ 49,521	\$ 20,438	\$ 2,729	\$ 124,867	\$ 128,034	\$ 1,889,407	\$ 124,867	\$ 0
2024	1,889,407	48,681	23,831	2,834	122,182	133,248	1,970,151	122,182	0
2025	1,970,151	46,733	27,786	2,955	127,947	138,885	2,052,653	127,947	0
2026	2,052,653	44,885	31,252	3,079	133,734	144,633	2,136,610	133,734	0
2027	2,136,610	43,069	33,910	3,205	139,471	150,459	2,221,372	139,471	0
2028	2,221,372	41,273	36,711	3,332	145,263	156,347	2,307,109	145,263	0
2029	2,307,109	39,484	39,830	3,461	151,442	162,303	2,393,824	151,442	0
2030	2,393,824	37,748	42,341	3,591	158,042	168,294	2,480,573	158,042	0
2031	2,480,573	36,070	44,872	3,721	164,455	174,296	2,567,636	164,455	0
2032	2,567,636	34,432	48,549	3,851	170,899	180,362	2,656,228	170,899	0
2033	2,656,228	32,829	51,765	3,984	177,073	186,531	2,746,297	177,073	0
2034	2,746,297	31,236	54,093	4,119	183,439	192,769	2,836,836	183,439	0
2035	2,836,836	29,654	29,732	4,255	189,836	198,101	2,900,232	189,836	0
2036	2,900,232	28,110	26,373	4,350	195,754	202,250	2,956,861	195,754	0
2037	2,956,861	26,571	44,472	4,435	202,107	206,655	3,028,016	202,107	0
2038	3,028,016	25,014	43,448	4,542	208,525	211,423	3,094,833	208,525	0
2039	3,094,833	23,444	43,912	4,642	214,914	215,933	3,158,567	214,914	0
2040	3,158,567	21,902	37,374	4,738	221,564	219,969	3,211,511	221,564	0
2041	3,211,511	20,385	39,443	4,817	227,726	223,555	3,262,350	227,726	0
2042	3,262,350	18,881	39,562	4,894	233,897	226,922	3,308,926	233,897	0
2043	3,308,926	17,384	36,622	4,963	240,182	229,873	3,347,660	240,182	0
2044	3,347,660	15,894	32,776	5,021	246,485	232,231	3,377,055	246,485	0
2045	3,377,055	14,434	29,866	5,066	252,362	233,972	3,397,900	252,362	0
2046	3,397,900	12,999	28,454	5,097	258,251	235,154	3,411,159	258,251	0
2047	3,411,159	11,606	26,871	5,117	263,936	235,797	3,416,381	263,936	0

\* Fiduciary Net Position based on financial statements provided by TCERA dated October 7, 2022.



#### **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
2048	3.416.381	10.267	24,811	5.125	269.514	235.855	3.412.675	269.514	0
2049	3.412.675	8,971	23.901	5,119	274,888	235,324	3,400,864	274.888	0
2050	3,400,864	7,734	23,042	5,101	280,029	234,226	3,380,734	280,029	0
2051	3,380,734	6,565	20,257	5,071	284,858	232,479	3,350,106	284,858	0
2052	3,350,106	5,488	18,369	5,025	288,931	230,043	3,310,049	288,931	0
2053	3,310,049	4,513	18,128	4,965	292,486	227,014	3,262,253	292,486	0
2054	3,262,253	3,641	17,853	4,893	295,208	223,463	3,207,109	295,208	0
2055	3,207,109	2,884	17,543	4,811	297,263	219,413	3,144,874	297,263	0
2056	3,144,874	2,240	17,201	4,717	298,225	214,898	3,076,271	298,225	0
2057	3,076,271	1,709	16,829	4,614	298,400	209,959	3,001,754	298,400	0
2058	3,001,754	1,279	16,428	4,503	297,791	204,627	2,921,795	297,791	0
2059	2,921,795	938	16,001	4,383	296,235	198,942	2,837,058	296,235	0
2060	2,837,058	673	15,549	4,256	293,959	192,942	2,748,008	293,959	0
2061	2,748,008	472	15,076	4,122	290,968	186,661	2,655,127	290,968	0
2062	2,655,127	327	14,586	3,983	287,339	180,131	2,558,850	287,339	0
2063	2,558,850	223	14,080	3,838	283,121	173,379	2,459,572	283,121	0
2064	2,459,572	148	13,562	3,689	278,371	166,431	2,357,653	278,371	0
2065	2,357,653	97	13,036	3,536	273,090	159,315	2,253,474	273,090	0
2066	2,253,474	62	12,505	3,380	267,340	152,054	2,147,375	267,340	0
2067	2,147,375	39	11,971	3,221	261,140	144,672	2,039,695	261,140	0
2068	2,039,695	24	11,436	3,060	254,509	137,192	1,930,780	254,509	0
2069	1,930,780	15	10,904	2,896	247,460	129,639	1,820,981	247,460	0
2070	1,820,981	8	10,376	2,731	240,007	122,037	1,710,663	240,007	0
2071	1,710,663	5	9,854	2,566	232,161	114,412	1,600,207	232,161	0
2072	1,600,207	3	9,341	2,400	223,943	106,791	1,489,998	223,943	0

\* Fiduciary Net Position based on financial statements provided by TCERA dated October 7, 2022.



#### **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
2073	1,489,998	1	8,836	2,235	215,371	99,200	1,380,429	215,371	0
2074	1,380,429	0	8,341	2,071	206,469	91,667	1,271,897	206,469	0
2075	1,271,897	0	7,857	1,908	197,269	84,219	1,164,795	197,269	0
2076	1,164,795	0	7,383	1,747	187,806	76,883	1,059,508	187,806	0
2077	1,059,508	0	6,921	1,589	178,119	69,684	956,406	178,119	0
2078	956,406	0	6,472	1,435	168,252	62,649	855,840	168,252	0
2079	855,840	0	6,035	1,284	158,253	55,800	758,138	158,253	0
2080	758,138	0	5,611	1,137	148,173	49,158	663,596	148,173	0
2081	663,596	0	5,201	995	138,071	42,744	572,475	138,071	0
2082	572,475	0	4,805	859	128,003	36,573	484,991	128,003	0
2083	484,991	0	4,423	727	118,033	30,660	401,314	118,033	0
2084	401,314	0	4,057	602	108,220	25,013	321,563	108,220	0
2085	321,563	0	3,707	482	98,623	19,640	245,806	98,623	0
2086	245,806	0	3,374	369	89,300	14,543	174,054	89,300	0
2087	174,054	0	3,057	261	80,306	9,722	106,266	80,306	0
2088	106,266	0	2,757	159	71,691	5,171	42,344	71,691	0
2089	42,344	0	2,475	64	63,501	881	(17,864)	42,344	21,157
2090	(17,864)	0	2,211	0	55,777	0	(53,566)	0	55,777
2091	(53,566)	0	1,965	0	48,554	0	(46,589)	0	48,554
2092	(46,589)	0	1,737	0	41,861	0	(40,124)	0	41,861
2093	(40,124)	0	1,527	0	35,720	0	(34,193)	0	35,720
2094	(34,193)	0	1,334	0	30,144	0	(28,810)	0	30,144
2095	(28,810)	0	1,159	0	25,141	0	(23,982)	0	25,141
2096	(23,982)	0	1,001	0	20,706	0	(19,705)	0	20,706
2097	(19,705)	0	859	0	16,827	0	(15,968)	0	16,827

\* Fiduciary Net Position based on financial statements provided by TCERA dated October 7, 2022.



#### **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
2098	(15.968)	0	732	0	13 482	0	(12 750)	0	13 482
2099	(12,750)	0	620	0	10.642	ů 0	(12,730) (10.022)	ů 0	10.642
2100	(12,,700) (10.022)	ů 0	522	0	8,269	0	(7.747)	ů 0	8.269
2101	(7,747)	0	437	0	6.319	0	(5,882)	0	6,319
2102	(5,882)	0	363	0	4,745	0	(4,382)	0	4,745
2103	(4,382)	0	300	0	3,499	0	(3,199)	0	3,499
2104	(3,199)	0	247	0	2,531	0	(2,284)	0	2,531
2105	(2,284)	0	202	0	1,794	0	(1,592)	0	1,794
2106	(1,592)	0	165	0	1,246	0	(1,081)	0	1,246
2107	(1,081)	0	134	0	846	0	(713)	0	846
2108	(713)	0	108	0	562	0	(454)	0	562
2109	(454)	0	88	0	365	0	(277)	0	365
2110	(277)	0	71	0	231	0	(160)	0	231
2111	(160)	0	57	0	142	0	(85)	0	142
2112	(85)	0	46	0	85	0	(39)	0	85
2113	(39)	0	38	0	50	0	(12)	0	50
2114	(12)	0	31	0	28	0	2	0	28
2115	2	0	25	0	16	1	12	0	16
2116	12	0	20	0	8	1	26	0	8
2117	26	0	17	0	4	2	40	0	4
2118	40	0	14	0	2	3	55	0	2
2119	55	0	11	0	1	4	70	0	1
2120	70	0	9	0	1	5	83	0	1
2121	83	0	7	0	0	6	97	0	0
2122	97	0	6	0	0	7	110	0	0
							Discount Rate: Present Value: S	7.15% \$ 2,659,049	3.54% \$ 29,734
						To GAS	tal Present Value: SB Discount Rate:		\$ 2,688,782 7.09%

\* Fiduciary Net Position based on financial statements provided by TCERA dated October 7, 2022.



#### **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



# COUNTY OF TULARE BOARD OF RETIREMENT

Leanne Malison Retirement Administrator

136 N AKERS STREET VISALIA, CALIFORNIA 93291 TELEPHONE (559) 713-2900 FAX (559) 730-2631 www.tcera.org

## INVOICE APPROVAL POLICY

#### **SUMMARY**

The Board of Retirement has the authority to delegate administrative matters to the Retirement Administrator. In order to efficiently procure services and materials and pay expenses necessary to the administration of the pension system, the Board of Retirement has established parameters for the delegation of approval for TCERA expenditures.

#### POLICY

The Board of Retirement:

- Authorizes the Retirement Administrator or designee to approve the payment of expenses included in the TCERA and TCERA Property, Inc. approved budget. Expenses greater than \$7,500 require the approval of the Retirement Administrator and the Assistant Retirement Administrator. In the absence of one or both of these staff members, the Board Chair and Board Vice Chair are authorized to approve such expenses.
- Authorizes the Retirement Administrator to approve the payment of expenses not included in the TCERA and TCERA Property, Inc. approved budget of \$7,500 or less. Any expenses in excess of \$7,500 will be presented to the Board of Retirement for approval.
- Authorizes the Retirement Administrator to approve Independent Medical Examination (IME) expenses of \$7,500 or less. If an IME is projected to exceed the limit, the item will be presented to the Board of Retirement for approval.
- Authorizes the Retirement Administrator to preapprove independent counsel expenses required to review investment contracts and agreements. Such expenses are not subject to the \$7,500 limit.
- Authorizes the Retirement Administrator and Assistant Retirement Administrator to approve each other's expense claims subject to TCERA policy. The Administrative Committee is authorized to review and ratify the approval of such expense claims. Any expenses determined to be reimbursed in error will be repaid by the staff member. If the Committee is unavailable, the Board of Retirement may ratify the expenses.
- Retains its approval of payments to the following vendors: Investment Consultant, Actuary, Custodian Bank, Investment Managers, Independent Auditor, Outside Counsel, and County Counsel. These invoices will be included in the Consent Calendar section of Board of Retirement agendas for review and approval.

Approved by Board of Retirement \_\_\_\_\_, 2022.



# COUNTY OF TULARE BOARD OF RETIREMENT

Leanne Malison Retirement Administrator

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# STUDENT STATUS POLICY

#### SUMMARY

County Employees' Retirement Law of 1937 provides a death benefit to a member's minor children under the age of 18 if there is no eligible spouse at the date of death. (Government Code Sections 31760.1, 31781.1, 31781.3, 31787.5, 31787.6 and 31786). The benefit may be extended to a child after the age of 18 if the following requirements are met:

- The child remains unmarried
- The child is regularly enrolled as a full-time student in an accredited school as determined by the board.

#### **POLICY**

The Board of retirement has determined that eligibility for an unmarried minor child will be determined by receiving documentation of the following:

- 1. Proof of enrollment in an accredited school as determined by the board as of the date of death of the member and annually thereafter, or
- 2. If the minor child graduated from high school and has not yet enrolled in an accredited school for the term immediately following graduation, proof of enrollment in an accredited school as determined by the board prior to the beginning of that term. (Example: Minor child graduates from high school in May and provides documentation in August for enrollment in the school term beginning in September.) Proof of enrollment is required annually thereafter.

For purposes of this policy, an accredited school is defined as any school listed as an accredited postsecondary education institution by the U.S. Department of Education (<u>www.ed.gov/accrediation</u>).

Approved by Board of Retirement \_\_\_\_\_, 2022.

# TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

SUMMARY EDUCATION REPORT

NAME OF ATTENDEE: <u>Leanne Malison</u>	
CONFERENCE/SEMINAR ATTENDED:	Nossaman – 2022 Public Pensions &
INVESTMENTS FIDUCIARIES' FORUM	
DATES ATTENDED: OCTOBER 17-18, 2022	2
NUMBER OF CONTINUING EDUCATION HOUR	S OBTAINED:7
TOPICS OF DISCUSSION: <u>Ashley Dunn</u>	ing and her colleagues at Nossaman reviewed
important proposed SEC rules, private ec	mity investment structures, real estate investment
considerations, current litigation, fiducian	y governance and employment law updates.
REASON MEETING WAS BENEFICIAL TO RET	TREMENT SYSTEM: Nossaman is one of
TCERA's outside counsel legal firms.	The firm offers periodic seminars to keep clients

informed. The information provided is always timely and important.

**RECOMMENDATION REGARDING FUTURE ATTENDANCE:** (I.E., SHOULD WE SEND A REPRESENTATIVE IN THE FUTURE? IF SO, WHO SHOULD ATTEND?)

The Retirement Administrator should participate in this webinar/conference whenever schedules allow.

Signature

21/22

NOTE: Attachments to this report will be held on file in the Retirement Office for review by interested parties, but will not be photocopied for the Retirement Board. RETBD/EDUC-SUM.RPT



# 2022 Public Pensions & Investments Fiduciaries' Forum

#### October 17, 2022

9:30 – 10:00 a.m. Registration

#### 10:00 – 11:30 a.m.

New SEC Rules & Their Impact on Public Pension Plan Investors in Private Funds Presented by Yuliya Oryol & Neal Prunier, ILPA

11:30 a.m. – 1:00 p.m. Lunch

#### 1:00 – 2:15 p.m.

Fund of One vs. Commingled Funds & Tax Developments Presented by Yuliya Oryol, Courtney Krause & Douglas Schwartz

# 2:15 – 2:45 p.m.

Break

#### 2:45 – 4:00 p.m.

Global & National Perspectives on Real Estate Developments & Investment Opportunities for Public Pension Funds Presented by Courtney Krause, Karla MacCary & Victor Marquez

5:00 – 7:30 p.m. Reception & Dinner

#### October 18, 2022

8:30 – 9:00 a.m. Breakfast

#### 9:00 – 9:50 a.m.

Litigation Against Public Retirement Systems: What Are The Trends & How Do Fiduciaries Prepare? Presented by Ashley Dunning, Peter Mixon, Alex Westerfield & Aalia Menes

#### 10:00 – 10:50 a.m.

Fiduciary Governance: Mitigating Organizational, Operational & Investment Risk Presented by Ashley Dunning, Peter Mixon & Yuliya Oryol

#### 11:00 – 11:50 a.m.

Tales from the Trenches: Insights on Best Practices for Supervisors from Seasoned Employment Counsel Presented by Allison Callaghan & John Kennedy

11:50 a.m. – 12:00 p.m. Closing Remarks

12:00 – 1:00 p.m. Boxed Lunches Available



# **EDUCATIONAL EVENTS - Board of Retirement**

# <u>2022</u>

- 1. SACRS, Fall Conference, November 8-11, Hyatt Regency Long Beach, Long Beach, CA.
- 2. **Invesco Real Estate**, Global Conference, Nov 15-17, The Lodge at Torrey Pines, San Diego. Only a Save-the-Date currently.

# <u>2023</u>

1. CALAPRS, General Assembly, March 4-7, 2023, Monterey

Edelstein Gilbert Robson & Smith  $^{ ext{llc}}$ 

Donald B. Gilbert Michael R. Robson Trent E. Smith Jason D. Ikerd Bridget E. McGowan

# 2022 General Election Preview Part 1 -- Partisan Races October 17, 2022

The November 8 General Election will have one of the greatest impacts on the long-term composition of the California Legislature since the imposition of term limits in 1990. A combination decennial redistricting and term limits has resulted in 37 of the 120 current legislators leaving their seats to seek higher office, local office, or simply walking away from elected office altogether. With several incumbents in tight races, it is possible that fully one-third of the Legislature will be comprised of brand-new legislators. This class of legislators will likely serve together for the next decade and, as a group, will shape the action and leadership of the Legislature during their time in office together.

Despite this enormous change in individual representation, there will be no significant change in the partisan makeup of the Legislature. The California electorate is overwhelmingly comprised of Democrats, with approximately 47 percent of the 21 million registered voters being Democrats and only 24 percent registered as Republicans. With the Republican Party consistently losing registered voters over the years, this has led to more and more legislative seats for Democrats and fewer seats for Republicans. At this time, three-quarters of the Legislature is comprised of Democrats. As outlined below, and depending on voter turnout, those numbers will not likely improve for the Republicans, and in fact, could get a lot worse.

#### **State Senate Elections**

The California State Senate is comprised of 40 Senators, each representing approximately 1 million residents. The current partisan makeup of the Senate is 31 Democrats and 9 Republicans. With Senators elected every four years on a staggered basis, this election will feature the 20 even-numbered districts. Of these 20 races, there are nine races deemed to be competitive in November, but only four of those races will be between a Democrat and Republican candidate. Three are between two Democrats and one is between two Republicans.

**SD 16 Senator Melissa Hurtado (D) vs. David Shepard (R)**. This agricultural-focused district comprising parts of Kern, Tulare and Kings counties is the one seat where Republicans could possibly gain a seat, as Democrats in this Central Valley district often cross over party lines and vote Republican.

**SD 40 Senator Brian Jones (R) vs. Joseph Rocha (D).** Senator Jones was redrawn into a San Diego County district that is much less Republican than the seat he was originally elected to in 2018, thereby making this race competitive. He is running against a Navy veteran and attorney named Joe Rocha. It is an exact replay of the primary which Jones won by 9 percentage points.

**SD 38 Catherine Blakespear (D) vs. Matt Gunderson (R)**. This is currently a Republican seat held by Senator Pat Bates who is leaving due to term limits. This newly drawn seat includes coastal Orange and San Diego counties seat and now favors Democrats by 6 percentage points. To hold this seat, the Republicans are counting on a self-described moderate and former car dealer, Matt Gunderson. The Democrats are hoping to elect the current Encinitas Mayor, Catherine Blakespear. This is a priority race for parties and spending in this race could exceed \$10 million.

**SD 6 Roger Niello (R) vs. Paula Villescaz (D).** This Sacramento County Senate district is an almost evenly split seat in terms of voter registration and is trending more and more Democratic. Republican Roger Niello has significant name recognition in the area as a member of the well-known Niello family of car dealers and as a former Assemblymember representing parts of this district. Paula Villescaz is a school board member, health care advocate and former legislative staffer.

#### **State Assembly Elections**

The California State Assembly is comprised of 80 members, each representing about 500,000 residents. The current partisan divide in the Assembly is 60 Democrats to 20 Republicans. As a larger body, there are many more open and contested seats in this general election than in the Senate. There are 59 safe Democratic seats and 9 competitive races between the two parties, with several involving Republican incumbents and only two with incumbent Democrats. When votes are finally tallied, it is very likely that the Democrats will increase their current numbers in Sacramento.

**AD 7 Assemblyman Ken Cooley (D) vs. Josh Hoover (R).** Redistricting was not kind to Assemblymember Cooley. His seat was redrawn to lose 6 points of Democratic registration and he picked up areas of Sacramento County that he has not previously represented. He is being strongly challenged by legislative staffer and Folsom Cordova School Board trustee, Josh Hoover.

**AD 22 Juan Alanis (R) vs. Jessica Self (D)**. This Central Valley seat favors Democrats by 8 percentage points but, like many seats in the Valley, voters tend to vote more conservative, so this seat is potentially winnable for the Republicans. Neither candidate has held elective office before, and with no incumbent, this race is wide open.

**AD 27 Esmeralda Soria (D) vs. Mark Pazin (R)**. AD 27 is another Central Valley seat with no incumbent running. This Merced, Madera and Fresno County seat pits Fresno City Councilmember Esmeralda Soria against former Merced County Deputy Sheriff Mark Pazin. Voter registration strongly favors the Democrats by 16 points., but the vote totals between all Democrats and all Republicans in the primary were nearly evenly split which suggests this is a competitive race.

**AD 40 Assemblymember Suzette Valladares (R) vs. Pilar Schiavo (D).** Assemblymember Valladares won election to this Santa Clarita area Democratic seat in 2020 when the Democrats failed to place a candidate in the General Election. Redistricting increased the Democratic voter registration and added new communities, thereby reducing the power of incumbency to Valladares. This will be a hard seat for the Republicans to hold.

**AD 47 Christy Holstege (D) vs. Greg Wallis (R)**. This seat encompassing Riverside and San Bernardino desert towns is currently occupied former Republican and current Independent Chad Mayes. Redistricting turned this seat into one that solidly favors Democrats. Assemblyman Mayes, who eked out a win in 2020 as an Independent, chose not to run in this new seat. His former district staffer Greg Wallis will face Palm Springs Mayor Christy Holstege.

**AD 70 Diedre Nguyen (D) vs. Tri Ta (R)**. This Orange County seat favors Democrats by 5 points, however almost 25 percent of voters in this district are registered with neither party. This race features two Vietnamese-born and current local government candidates – Westminster Mayor Tri Ta

on the Republican side and Garden Grove Mayor Pro Tem Diedre Nguyen on the Democratic side. While the Democrats have a 5 point registration advantage, the total votes for Republican candidates far exceeded the vote total of Nguyen who was the lone Democrat in June which suggests that Ta should prevail in November.

**AD 72 Assemblymember Laura Davies (R) vs. Chris Duncan (D)**. Republican Laura Davies is seeking to hold on this coastal Orange County seat, which after redistricting is now about evenly divided between Democrats and Republicans. As the only two candidates in the primary, Davies won decisively which suggests that she should prevail in November.

**AD 76 Assemblymember Brian Maienschein (D) vs. Kristie Bruce-Lane (R)**. Redistricting pushed former Republican and current Democrat Maienschein further north into areas of San Diego County that have traditionally voted for Republicans. This new territory, combined with a lackluster primary showing, suggests that Maienschein is vulnerable. However, as one of the few seats they need to defend, the Democrats are expected to spend what it takes to keep this seat in their column.

#### Voter Turnout

As noted at the outset, if Republican voters show up and vote and Democrats do not, we could expect a fairly status quo election result. However, over the years the California Democratic Party and their labor union allies have demonstrated an ability to exceed voter turnout expectations. If that happens in November, we could see significant losses for the Republicans.

Typically, the top of the ticket dictates voter turnout, but polling shows that Governor Newsom will easily win and that race is not generating much discussion or interest. If the Governor's race does not inspire interest, how will that affect voter turnout? Will Democrats bother to turn in their ballots if the Governor's race is uninspiring? The same question also applies for Republican voters.

What effect will the hyper-competitive Congressional races that overlap with some of the partisan legislative races have on turnout and voter preference? The Congressional races are generating significant interest and spending because the outcomes in California could decide the balance of power in the House of Representatives. Will that drive higher voter turnout in those races?

Finally, there are seven statewide ballot measures with advertising that has flooded the airwaves. Despite record spending, voters are not energized by measures dealing with sports betting and dialysis clinics. However, there is one statewide ballot measure that could inspire younger, more progressive, pro-choice voters to vote – Proposition 1 would enshrine in the State Constitution a woman's right to seek and receive an abortion and choose birth control. Will this initiative help the Democrat candidates further up the ticket?

Edelstein Gilbert Robson & Smith  $^{ ext{llc}}$ 

Donald B. Gilbert Michael R. Robson Trent E. Smith Jason D. Ikerd Bridget E. McGowan

# 2022 General Election Preview Part II -- Democrat vs. Democrat Races October 17, 2022

As noted in our part 1 report, the November 8 General Election will have lasting, long-term implications on the functions of the Legislature because approximately one-third of the Legislature will be newly elected. Those who win will be key in determining the tenor of the Legislature for the next decade and will be largely responsible for determining who the leaders of Assembly and Senate will be during that time.

Democrats are in full control of the legislative process with three-quarters of the Legislature comprised of Democrats. Therefore, questions of leadership and policy direction depend on who and what type of Democrat is elected. For the most part, all Democrats support labor and are pro-choice. However, Democrats do divide on issues of taxes, environmental and business regulation, government spending, public safety, and occasionally on labor and employment matters. In recent years, and especially during Governor Newsom's time in office, progressive Democratic policies and politicians have been on the rise, with the impact of moderate Democrats in decline.

California's unique political primary system allowing the top-two vote getters, regardless of party, to advance to the General Election, the November election features eight competitive races where a Democrat is facing another Democrat for the privilege of representing a district in the Legislature. In some cases, there might be little or no difference between the candidates and in others, there appears to be some ideological difference between the two.

#### Senate Democrat v. Democrat Races

**SD 4 Marie Alvarado-Gil vs. Tim Robertson**. This Sierra mountains and foothills Republican seat will be won by a Democrat because the six Republican candidates in the primary split up the vote so evenly, the top two vote getters ended up being the two Democratic candidates. It will be interesting to see how and if Republicans vote in this race between labor union leader Tim Robertson and a charter school administrator Marie Alvarado-Gil.

**SD 8 Angelique Ashby v. Dave Jones**. While this is a replay of the primary which Jones won by 5 points, recent developments suggest it could be a lot closer in November. Ashby has earned recent endorsements from both Governor Newsom and former Governor Jerry Brown. Spending in this intraparty race could exceed \$10 million.

**SD 10 Lily Mei vs. Aisha Wahab**. This Santa Clara and Alameda County race exemplifies the ideological divide in the Democratic Party between moderates and progressives with Fremont Mayor Lily Mei representing the moderate, business voice of the party and Hayward City Councilmember Aisha Wahab representing the progressive, labor union voice.

**SD 20 Daniel Hertzberg vs. Caroline Menjivar**. This San Fernando Valley race is less about the ideological divide in the Democratic Party as both candidates would likely be progressive votes in the Legislature.

Instead, this race questions whether a legislative seat should be handed down to the offspring of the existing seat holder at the expense of other aspiring activists and leaders. Daniel Hertzberg is the son of outgoing Senator Bob Hertzberg, and he is facing community activist Caroline Menjivar.

#### Assembly Democrat vs. Democrat Races

**AD 10 Stephanie Nguyen vs. Eric Guerra**. This Sacramento County race between two locally elected city councilmembers is a proxy fight between the established Democratic party machine and its labor union allies and the moderates in the party. Guerra has the backing of the party while Nguyen has the backing of business interests and public safety unions.

**AD 12 Sara Aminzadeh vs. Damon Connolly**. This is a race between two Marin County progressive Democrats whose voting records would likely be identical if elected to office. Connolly, as a current Marin County Supervisor, enjoys more financial support from the unions, while Aminzadeh is generating support from a statewide network of women and environmentalists.

**AD 20 Liz Ortega vs. Shawn Kumagai**. This East Bay race is another proxy fight between the moderate wing of the Democratic Party and the progressive wing. Ortega is a leader of the Alameda County Labor Council and is running with full support of the party apparatus. Kumagai is a former legislative staffer and gay, military veteran, running with support from business interests and Asian-American and LGBTQ political activists.

**AD 35 Leticia Perez vs. Dr. Jasmeet Bains**. This Kern County race to replace Assemblyman Rudy Salas is another fight between a traditional, union supported Democrat and a new Democrat. Leticia Perez is a Kern County Supervisor with strong Party and union support. Dr. Bains is a family physician running with support from the California Medical Association and other business interests. It is a replay of the June primary which Perez won by just a couple hundred votes.

#### **Summary**

With a couple of weeks to go, it is difficult to handicap who will prevail in these races. Some of the moderates running in these races are vying to replace other moderates but, in some cases, the outgoing legislator is a progressive and that could be a significant change. But how it plays out won't be evident until bills are introduced, committee memberships are formed, and votes on bills begin to happen. The more immediate impact will be in the Assembly when votes for Speaker are cast when session reconvenes. Before the summer recess Assemblymember Robert Rivas made an unsuccessful run at unseating Speaker Rendon as the leader of the Assembly. The outcome of these races could be critical in how the votes for Speaker play out between Rendon, Rivas or another Democrat.