



Tulare County Employees' Retirement Association

GASB 67/68 Report as of June 30, 2018

Produced by Cheiron

November 2018

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November 9, 2018

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

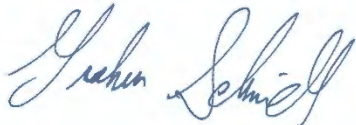
Dear Members of the Board:

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

- Determination of the discount rate as of June 30, 2018,
- 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, EA, FCA, MAAA
Consulting Actuary



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

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

SECTION I – BOARD SUMMARY

The purpose of this report is to provide accounting and financial disclosure information under Governmental Accounting Standards Board Statements 67 and 68 (as amended by Statement 82) for the Tulare County Employees' Retirement Association and the participating employers. This information includes:

- Determination of the discount rate as of June 30, 2018,
- Disclosure of 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.

Highlights

The measurement date for the Tulare County Employees' Retirement Association (TCERA) is June 30, 2018. Measurements are based on the fair value of assets as of June 30, 2018 and the Total Pension Liability as of the valuation date, June 30, 2018.

The table below provides a summary of the key collective results during this measurement period.

Table I-1 Summary of Collective Results			
		Measurement Date	
		06/30/2018	06/30/2017
Net Pension Liability	\$	302,682,071	\$ 475,733,526
Deferred Outflows		(147,287,548)	(154,439,351)
Deferred Inflows		16,240,729	24,361,093
Net Impact on Statement of Net Position	\$	171,635,253	\$ 345,655,269
Pension Expense (\$ Amount)	\$	112,242,984	\$ 93,980,837
Pension Expense (% of Payroll)		43.84%	38.62%

Numbers may not add to totals due to rounding.

The Net Pension Liability (NPL) decreased by approximately \$173 million since the prior measurement date, primarily due to additional employer contributions from pension obligation bond funds. The investment gains or losses are recognized over five years, and the 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.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

SECTION I – BOARD SUMMARY

As of the end of the reporting year, the participating employers in TCERA would report a Net Pension Liability of \$302,682,071, collective Deferred Inflows of \$16,240,729, and collective Deferred Outflows of \$147,287,548. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to TCERA would be \$171,635,523 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, 2018, the collective annual pension expense is \$112,242,984 or 43.84% of covered payroll. This amount is not equal to the participating employers' contributions to TCERA (\$286,263,000), but instead represents the change in the net impact on participating employer's Statements of Net Position plus employer contributions (\$171,635,253 – \$345,655,269 + \$286,263,000). The collective pension expense is larger than the collective expense for the prior year. Volatility in pension expense from year to year is to be expected. It 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 the report.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

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.

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.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. 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.

This report was prepared for TCERA for the purposes described herein and for the 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 any other user.

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

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

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.15%.

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, 2018 actuarial valuation. That policy includes contributions equal to the actuarially determined contribution, reflecting a payment equal to annual normal cost and an amount necessary to amortize the total June 30, 2015 Unfunded Actuarial Liability (UAL) as a level percentage of payroll over a closed 19-year period with payments as a level percentage of payroll, assuming payroll increases of 3.00% per year. Subsequent gains and losses are being amortized over new 19-year closed periods, also as a level percentage of payroll.

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

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 2077, 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 7.40% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 3.87% to the extent they are not available. The 7.40% expected return on assets is equal to the 7.25% investment return assumption used in the June 30, 2018 actuarial valuation, plus 0.15% for administrative expenses. The administrative expense adjustment results from the fact that the 7.25% 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 3.87% municipal bond rate is based on the Bond Buyer 20-year Bond GO Index as of June 28, 2018.

The single rate that is equivalent to a 7.40% discount rate until the projected fiduciary net position is no longer available to make benefit payments (in FYE 2077), and 3.87% thereafter, is 7.15%. The discount rate used to determine the Total Pension Liability as of June 30, 2018 is therefore 7.15%.

Appendix D shows the details of this calculation.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

SECTION IV – DETERMINATION OF TOTAL PENSION LIABILITY

The Total Pension Liability (TPL) at the end of the measurement year, June 30, 2018, is measured as of a valuation date of June 30, 2018.

Between the June 30, 2017 and June 30, 2018 measurement dates the discount rate was reduced from 7.32% to 7.15% due to the results of the crossover test. The details of this calculation are shown in Appendix D. There were no other assumption changes as of the June 30, 2018 valuation date. Please see Appendix B of the June 30, 2018 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 change in discount rate increased the TPL measurement by approximately \$41 million as of the end of the measurement year.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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 Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/2017	\$ 1,745,959,304	\$ 1,270,225,778	\$ 475,733,526
Changes for the year:			
Service cost	46,838,435		46,838,435
Interest	126,586,198		126,586,198
Changes of benefits	0		0
Differences between expected and actual experience	10,341,596		10,341,596
Changes of assumptions	41,148,538		41,148,538
Contributions - employer		286,263,000	(286,263,000)
Contributions - member		18,512,000	(18,512,000)
Net investment income		95,857,222	(95,857,222)
Benefit payments	(80,716,000)	(80,716,000)	0
Administrative expense		(2,666,000)	2,666,000
Net changes	<u>144,198,767</u>	<u>317,250,222</u>	<u>(173,051,455)</u>
Balances at 6/30/2018	<u>\$ 1,890,158,071</u>	<u>\$ 1,587,476,000</u>	<u>\$ 302,682,071</u>

Numbers may not add to totals due to rounding.

During the measurement year, the collective NPL decreased by approximately \$173 million. The service cost, interest cost, actuarial losses, and recognition of administrative expense increased the collective NPL by approximately \$186 million while contributions and investment income decreased the collective NPL by approximately \$401 million.

There were no changes in benefits during the year. As discussed in Section IV, there were assumption changes, which increased 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 affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The table on the next page shows the sensitivity of the collective NPL to the discount rate.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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SECTION V – GASB 67 REPORTING INFORMATION

Table V-2			
Sensitivity of Collective Net Pension Liability to Changes in Discount Rate			
	1% Decrease 6.15%	Discount Rate 7.15%	1% Increase 8.15%
Total Pension Liability	\$ 2,164,575,694	\$ 1,890,158,071	\$ 1,667,396,096
Plan Fiduciary Net Position	<u>1,587,476,000</u>	<u>1,587,476,000</u>	<u>1,587,476,000</u>
Collective Net Pension Liability	<u>\$ 577,099,694</u>	<u>\$ 302,682,071</u>	<u>\$ 79,920,096</u>
 Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	 73.3%	 84.0%	 95.2%

Numbers may not add to totals due to rounding.

A one percent decrease in the discount rate increases the TPL by approximately 15% and increases the collective NPL by approximately 91%. A one percent increase in the discount rate decreases the TPL by approximately 12% and decreases the collective NPL by approximately 74%.

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 ten years of information. The schedule on the following page shows the changes in collective NPL and related ratios required by GASB for the five years since implementation.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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SECTION V – GASB 67 REPORTING INFORMATION

Table V-3 Schedule of Changes in Collective Net Pension Liability and Related Ratios					
	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014
Total Pension Liability					
Service cost (MOY)	\$ 46,838,435	\$ 38,202,834	\$ 38,307,485	\$ 35,167,785	\$ 39,672,236
Interest (includes interest on service cost)	126,586,198	118,663,755	115,715,730	97,472,957	94,276,973
Changes of benefit terms	0	0	0	0	0
Differences between expected and actual experience	10,341,596	11,935,775	(40,601,821)	7,590,593	0
Changes of assumptions	41,148,538	69,608,066	23,922,527	180,186,807	13,587,893
Benefit payments, including refunds of member contributions	(80,716,000)	(76,961,326)	(72,332,422)	(68,559,888)	(65,954,107)
Net change in total pension liability	\$ 144,198,767	\$ 161,449,104	\$ 65,011,499	\$ 251,858,254	\$ 81,582,995
Total pension liability - beginning	1,745,959,304	1,584,510,200	1,519,498,702	1,267,640,448	1,186,057,453
Total pension liability - ending	\$ 1,890,158,071	\$ 1,745,959,304	\$ 1,584,510,200	\$ 1,519,498,702	\$ 1,267,640,448
Plan fiduciary net position					
Contributions - employer	\$ 286,263,000	\$ 33,615,885	\$ 31,297,240	\$ 30,992,069	\$ 25,953,288
Contributions - member	18,512,000	18,190,415	16,814,551	18,887,422	18,968,800
Change of Assumptions / Other Income	0	0	0	111,357,446	2,993,705
Net investment income	95,857,222	132,865,033	(20,308,501)	11,043,009	176,883,870
Benefit payments, including refunds of member contributions	(80,716,000)	(76,961,326)	(72,332,422)	(68,559,888)	(65,954,107)
Administrative expense	(2,666,000)	(2,611,562)	(2,615,856)	(2,408,394)	(1,638,772)
Net change in plan fiduciary net position	\$ 317,250,222	\$ 105,098,444	\$ (47,144,988)	\$ 101,311,664	\$ 157,206,784
Plan fiduciary net position - beginning	1,270,225,778	1,165,127,334	1,212,272,322	1,110,960,658	953,753,874
Plan fiduciary net position - ending	\$ 1,587,476,000	\$ 1,270,225,778	\$ 1,165,127,334	\$ 1,212,272,322	\$ 1,110,960,658
Net pension liability - ending	\$ 302,682,071	\$ 475,733,526	\$ 419,382,866	\$ 307,226,380	\$ 156,679,790
Plan fiduciary net position as a percentage of the total pension liability	83.99%	72.75%	73.53%	79.78%	87.64%
Covered payroll*	\$ 256,048,706	\$ 243,366,102	\$ 238,558,790	\$ 229,430,663	\$ 234,438,456
Net pension liability as a percentage of covered employee payroll	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.*

If an actuarially determined contribution is calculated, the following schedule (Table V-4) is required. An actuarially determined contribution is a contribution amount determined in accordance with Actuarial Standards of Practice. The full 10 years of information should be shown in this schedule, if it is available. While we cannot confirm whether contribution amounts calculated by the prior actuary were determined in accordance with Actuarial Standards of Practice, we have provided the full 10-year schedule on the next page.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

SECTION V – GASB 67 REPORTING INFORMATION

Table V-4 Schedule of Collective Employer Contributions										
	FYE 2018*	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010	FYE 2009
Actuarially Determined Contribution	\$ 36,263,000	\$ 33,615,885	\$ 31,297,240	\$ 30,992,069	\$ 25,953,288	\$ 29,847,226	\$ 25,257,124	\$ 23,434,240	\$ 25,339,346	\$ 22,430,788
Contributions in Relation to the Actuarially Determined Contribution	<u>36,263,000</u>	<u>33,615,885</u>	<u>31,297,240</u>	<u>30,992,069</u>	<u>25,953,288</u>	<u>29,847,226</u>	<u>25,257,124</u>	<u>23,434,240</u>	<u>25,339,346</u>	<u>22,430,788</u>
Contribution Deficiency/(Excess)	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>
Covered Payroll	\$ 256,048,706	\$ 243,366,102	\$ 238,558,790	\$ 229,430,663	\$ 234,438,456	\$ 230,954,756	\$ 222,634,628	\$ 219,853,614	\$ 217,811,354	\$ 227,305,938
Contributions as a Percentage of Covered Payroll	14.16%	13.81%	13.12%	13.51%	11.07%	12.92%	11.34%	10.66%	11.63%	9.87%

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

The notes below summarize the key methods and assumptions used to determine the ADC for FYE 2018.

Notes to Schedule

Valuation Date 06/30/2016
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 Used to Determine Contribution Rates:

Actuarial cost method Entry Age
Asset valuation method 10-year smoothed market
Level percentage of payroll with separate periods for the UAL as of June 30, 2015 (18 years remaining as of 6/30/16), and additional 19-year layers for unexpected changes in UAL after 6/30/15
Amortization method 7.60%
Discount rate 3.00%
Amortization growth rate 3.00%
Price inflation 3.00% plus merit component based on employee classification and years of service
Salary increases For General: RP-2014 Combined Healthy Sex Distinct Table, with Generational improvement using Projection Scale MP-2015, increased by 12.1% to reflect Plan experience
Mortality For Safety: RP-2014 Combined Healthy Male Table with blue-collar adjustment, with Generational improvement using Projection Scale MP-2015, increased by 4.5% to reflect Plan experience

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2018 can be found in the June 30, 2016 actuarial valuation report



**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

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 2018 disclosures can be based on either the June 30, 2017 or 2018 measurement dates. If an employer elects to base their 2018 disclosures on the June 30, 2017 measurement date, the GASB 68 schedules in this report with a measurement date of June 30, 2018 will be used for their 2019 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 their 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 measurement date, this recognition period was five years.

During the year, there was an experience loss of approximately \$10.3 million. Approximately \$2.1 million of that loss was recognized as an increase in collective pension expense in the current year and an identical amount will be recognized in each of the next four years, resulting in a collective deferred outflow of resources as of June 30, 2018 of approximately \$8.3 million. Unrecognized net experience gains and losses from prior periods were a net gain of approximately \$11.8 million, of which \$4.2 million was recognized as a decrease in the collective pension expense in the current year. The combination of gains and losses from this year and in prior periods results in a net collective deferred outflow of resources as of June 30, 2018 of approximately \$17.0 million and a net collective deferred inflow of approximately \$16.2 million.

During the year, there were changes in the assumptions that increased the NPL by approximately \$41.1 million. Approximately \$8.2 million of that increase is recognized as an increase in collective pension expense in the current year and an identical amount will be recognized in each of the next four years. Unrecognized assumption changes from prior periods were approximately \$102.7 million, of which \$34.6 million was recognized as an increase in the collective pension expense in the current year. The combination of changes from assumptions this year and in prior periods results in a collective deferred outflow of resources as of June 30, 2018 of approximately \$101.0 million.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment gain of approximately \$2.9 million. Approximately \$0.6 million of that gain was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized net investment losses from prior periods were approximately \$39.2 million, and the net recognition of prior investment experience resulted in a \$7.5 million increase in collective pension expense in the current year. The combination of unrecognized investment gains this year and unrecognized net investment losses

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SECTION VI – GASB 68 COLLECTIVE AMOUNTS

from prior periods results in a collective deferred outflow of resources as of June 30, 2018 of approximately \$29.3 million.

The table below summarizes the current balances of collective deferred outflows and deferred inflows of resources along with the net recognition over the next five years.

Table VI-1		
Schedule of Collective Deferred Inflows and Outflows of Resources		
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 16,952,861	\$ 16,240,729
Changes in assumptions	100,990,906	0
Net difference between projected and actual earnings on pension plan investments	29,343,782	0
Total	<u>\$ 147,287,548</u>	<u>\$ 16,240,729</u>
Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:		
Measurement year ended June 30:		
	2019	68,175,892
	2020	36,657,058
	2021	16,495,854
	2022	9,718,014
	2023	0
	Thereafter \$	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.

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SECTION VI – GASB 68 COLLECTIVE AMOUNTS

Table VI-2 Calculation of Collective Pension Expense		
	Measurement Year Ending	
	2018	2017
Change in Net Pension Liability	\$ (173,051,455)	\$ 56,350,660
Change in Deferred Outflows	7,151,803	12,134,657
Change in Deferred Inflows	(8,120,364)	(8,120,364)
Employer Contributions	286,263,000	33,615,885
Pension Expense	\$ 112,242,984	\$ 93,980,837
Pension Expense as % of Payroll	43.84%	38.62%
Operating Expenses		
Service cost	\$ 46,838,435	\$ 38,202,834
Employee contributions	(18,512,000)	(18,190,415)
Administrative expenses	2,666,000	2,611,562
Total	\$ 30,992,435	\$ 22,623,981
Financing Expenses		
Interest cost	\$ 126,586,198	\$ 118,663,755
Expected return on assets	(92,957,154)	(85,210,393)
Total	\$ 33,629,044	\$ 33,453,362
Changes		
Benefit changes	\$ 0	\$ 0
Recognition of assumption changes	42,824,806	34,595,098
Recognition of liability gains and losses	(2,146,771)	(4,215,090)
Recognition of investment gains and losses	6,943,470	7,523,486
Total	\$ 47,621,505	\$ 37,903,494
Pension Expense	\$ 112,242,984	\$ 93,980,837

Numbers may not add to totals due to rounding.

First, there are components referred to as operating expenses. These 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.

Second, there are the financing expenses: the interest on the Total Pension Liability less the expected return on assets.

The final category is changes. This category 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

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SECTION VI – GASB 68 COLLECTIVE AMOUNTS

amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses. The total collective pension expense increased by about \$18 million. Operating expenses increased by approximately \$8 million and the recognition of assumption changes increased by approximately \$8 million, which were the most significant items contributing to the change in pension expense.

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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 AICPA¹ 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, 2017 has been determined using this method.

¹ http://www.aicpa.org/interestareas/governmentauditquality/resources/gasbmatters/downloadabledocuments/aicpaslgep_cs_er_reporting_whitepaper.pdf

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Table VII-1 Determination of Employers' Proportionate Share					
Employer	June 30, 2018			June 30, 2017	
	Employer Contribution	Proportionate Share	Adjusted Proportionate Share*	Employer Contribution	Proportionate Share
County	\$ 284,216,000	99.28492330%	89.69275042%	\$ 31,839,050	94.71429953%
Courts	1,848,000	0.64556020%	9.30522580%	1,596,198	4.74834385%
SPUD	19,000	0.00663725%	0.09567061%	18,790	0.05589685%
TCAG	180,000	0.06287924%	0.90635316%	161,847	0.48145977%
Total	\$ 286,263,000	100.00000000%	100.00000000%	\$ 33,615,885	100.00000000%

Numbers may not add to totals due to rounding.

** For FYE 2018, the shares have been adjusted to account for an additional contribution of \$250 million made by the County*

However, for the fiscal year ending June 30, 2018, the County made a significant additional contribution (\$250 million) at the end of the fiscal year. As a result, the use of this method for determining the proportionate share (based on the proportion of the actual contributions made) would produce a proportionate share for the County significantly different from the County's projected long-term contribution effort.

Therefore, for FYE 2018, the proportionate shares have been calculated under an alternative method. Under this method, the proportionate share and the resulting NPL for each employer has been determined, after excluding the additional \$250 million from both the contributions and the Plan's Fiduciary Net Position. The NPL for the County was the reduced by the full amount of the \$250 million contribution, and the resulting NPLs for each employer are then used to determine an adjusted proportionate share for the FYE 2018. The details of these calculations are shown in Table VII-1a.

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SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

**Table VII-1a
Determination of Employers' Adjusted Proportionate Share (FYE 2018)**

Employer	Employer Contribution	Amounts Excluding Additional Contributions			Including Additional Contribution		
		Employer Contribution	Proportionate Share	Preliminary Net Pension Liability	Adjusted Net Pension Liability	Adjusted Proportionate Share	
County	\$ 284,216,000	\$ 34,216,000	94.35512782%	\$ 521,483,875	\$ 271,483,875	89.69275042%	
Courts	1,848,000	1,848,000	5.09610347%	28,165,250	28,165,250	9.30522580%	
SPUD	19,000	19,000	0.05239500%	289,578	289,578	0.09567061%	
TCAG	180,000	180,000	0.49637371%	2,743,369	2,743,369	0.90635316%	
Total	\$ 286,263,000	\$ 36,263,000	100.00000000%	\$ 552,682,071	\$ 302,682,071	100.00000000%	

Numbers may not add to totals due to rounding.

As the employer contribution rates for FY 2018-2019 will reflect the impact of the additional contribution on the County's long-term contribution effort, it is expected that the original method for determining the proportionate shares (based on the proportion of the contributions paid by each employer) can be used to determine the proportionate shares for the June 30, 2019 measurement date.

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SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

**Table VII-2
Schedule of Employers' Proportionate Share of Collective Amounts at June 30, 2018**

Employer	Proportionate Share	Share of NPL @ 6.15%	Share of NPL @ 7.15%	Share of NPL @ 8.15%	Share of Deferred Outflows	Share of Deferred Inflows	Pension Expense
County	89.6928%	\$ 517,616,588	\$ 271,483,875	\$ 71,682,532	\$ 132,106,253	\$ 14,566,757	\$ 100,673,820
Courts	9.3052%	53,700,430	28,165,250	7,436,745	13,705,439	1,511,237	10,444,463
SPUD	0.0957%	552,115	289,578	76,460	140,911	15,538	107,384
TCAG	0.9064%	5,230,561	2,743,369	724,358	1,334,945	147,198	1,017,318
Total	100.0000%	\$ 577,099,694	\$ 302,682,071	\$ 79,920,096	\$ 147,287,548	\$ 16,240,729	\$ 112,242,984

Numbers may not add to totals due to rounding.

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

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

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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.

Table VII-3 Schedule of Employers' Changes in Proportion and Contribution Differences									
Employer	Proportionate Shares		Impact of Change in Proportion				Contributions		
	06/30/2017	06/30/2018	Net Pension Liability	Deferred Outflows	Deferred Inflows	Net Effect	Actual	Share	Difference
County	94.7143%	89.6928%	\$(23,889,193)	\$ (7,755,248)	\$ 1,223,304	\$(17,357,249)	\$ 284,216,000	\$ 256,757,158	\$ 27,458,842
Courts	4.7483%	9.3052%	21,678,615	7,037,619	(1,110,106)	15,751,103	1,848,000	26,637,419	(24,789,419)
SPUD	0.0559%	0.0957%	189,217	61,426	(9,689)	137,480	19,000	273,870	(254,870)
TCAG	0.4815%	0.9064%	2,021,360	656,203	(103,509)	1,468,666	180,000	2,594,554	(2,414,554)
Total	100.0000%	100.0000%	\$ 0	\$ 0	\$ 0	\$ 0	\$ 286,263,000	\$ 286,263,000	\$ 0

Numbers may not add to totals due to rounding.

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									
Employer	Deferred Outflows				Deferred Inflows				
	06/30/2017	Current Year Net		06/30/2018	06/30/2017	Current Year Net		06/30/2018	06/30/2018
		Effect	Recognition			Effect	Recognition		
County	\$ 237,987	\$ 0	\$ 118,993	\$ 118,993	\$ (1,858,279)	\$ (17,357,249)	\$ (4,104,721)	\$ (15,110,807)	
Courts	1,662,247	15,751,103	3,727,907	13,685,442	(577,521)	0	(288,760)	(288,760)	
SPUD	24,069	137,480	35,438	126,111	(21,756)	0	(8,564)	(13,191)	
TCAG	533,252	1,468,666	519,706	1,482,212	0	0	0	0	
Total	\$ 2,457,555	\$ 17,357,249	\$ 4,402,045	\$ 15,412,759	\$ (2,457,555)	\$ (17,357,249)	\$ (4,402,045)	\$ (15,412,759)	

Numbers may not add to totals due to rounding.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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											
Employer	Deferred Outflows					Deferred Inflows					
	Current		Recognition	06/30/2018	Current		Recognition	06/30/2018			
	Year	06/30/2017			Difference	Year			06/30/2017	Difference	
County	\$	0	\$ 27,458,842	\$ 5,491,768	\$ 21,967,074	\$	0	\$	0	\$	0
Courts		0	0	0	0	0	(24,789,419)	(4,957,884)	(19,831,535)		
SPUD		0	0	0	0	0	(254,870)	(50,974)	(203,896)		
TCAG		0	0	0	0	0	(2,414,554)	(482,911)	(1,931,643)		
Total	\$	0	\$ 27,458,842	\$ 5,491,768	\$ 21,967,074	\$	0	\$ (27,458,842)	\$ (5,491,769)	\$	(21,967,073)

Numbers may not add to totals due to rounding.

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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, 2018**

Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference
County	89.6928%	\$ 15,205,487	\$ 90,581,521	\$ 26,319,245	\$ 118,993	\$ 21,967,074
Courts	9.3052%	1,577,502	9,397,432	2,730,505	13,685,442	0
SPUD	0.0957%	16,219	96,619	28,073	126,111	0
TCAG	0.9064%	153,653	915,334	265,958	1,482,212	0
Total	100.0000%	\$ 16,952,861	\$ 100,990,906	\$ 29,343,782	\$ 15,412,759	\$ 21,967,074

Numbers may not add to totals due to rounding.

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, 2018**

Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference
County	89.6928%	\$ 14,566,757	\$ 0	\$ 0	\$ 15,110,807	\$ 0
Courts	9.3052%	1,511,237	0	0	288,760	19,831,535
SPUD	0.0957%	15,538	0	0	13,191	203,896
TCAG	0.9064%	147,198	0	0	0	1,931,643
Total	100.0000%	\$ 16,240,729	\$ 0	\$ 0	\$ 15,412,759	\$ 21,967,073

Numbers may not add to totals due to rounding.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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.

Table VII-8						
Schedule of Employers' Recognition of Deferred Outflows and Inflows at June 30, 2018						
Employer	Recognition for Measurement Year Ending					Thereafter
	2019	2020	2021	2022	2023	
County	\$ 62,285,815	\$ 34,856,265	\$ 16,636,002	\$ 10,736,674	\$ 0	\$ 0
Courts	5,189,430	1,598,252	(124,953)	(903,379)	0	0
SPUD	45,937	7,207	(4,567)	(14,180)	0	0
TCAG	654,709	195,333	(10,628)	(101,097)	0	0
Total	\$ 68,175,891	\$ 36,657,057	\$ 16,495,853	\$ 9,718,018	\$ 0	\$ 0

Numbers may not add to totals due to rounding.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2018									
Employer	Collective			Employer Pension Expense	Change in Employer			Employer Contributions	Employer Pension Expense
	Pension Expense	Change in Proportion	Contribution Difference		Net Pension Liability	Deferred Outflows	Deferred Inflows		
County	\$ 100,673,820	\$ (3,985,727)	\$ 5,491,768	\$ 102,179,861	\$ (179,103,802)	\$ (7,678,184)	\$ 4,745,846	\$ 284,216,000	\$ 102,179,860
Courts	10,444,463	3,439,147	(4,957,884)	8,925,726	5,575,787	(18,395,323)	19,897,262	1,848,000	8,925,726
SPUD	107,384	26,874	(50,974)	83,284	23,658	(156,626)	197,252	19,000	83,284
TCAG	1,017,318	519,706	(482,911)	1,054,113	452,903	(1,540,343)	1,961,552	180,000	1,054,113
Total	\$ 112,242,984	\$ 0	\$ (1)	\$ 112,242,983	\$ (173,051,455)	\$ (27,770,474)	\$ 26,801,913	\$ 286,263,000	\$ 112,242,983

Numbers may not add to totals due to rounding.

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, 2018									
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	89.6928%	\$ 271,483,875	\$ 241,199,630	112.6%	84.0%	\$ 284,216,000	\$ 284,216,000	\$ 0	117.8%
Courts	9.3052%	28,165,250	13,343,981	211.1%	84.0%	1,848,000	1,848,000	0	13.8%
SPUD	0.0957%	289,578	134,254	215.7%	84.0%	19,000	19,000	0	14.2%
TCAG	0.9064%	2,743,369	1,370,841	200.1%	84.0%	180,000	180,000	0	13.1%
Total	100.0000%	\$ 302,682,071	\$ 256,048,706	118.2%	84.0%	\$ 286,263,000	\$ 286,263,000	\$ 0	111.8%

Numbers may not add to totals due to rounding.

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX A – MEMBERSHIP INFORMATION

SUMMARY OF ACTIVE GENERAL MEMBERSHIP			
	June 30, 2017	June 30, 2018	Change
General Tier 1			
Count	19	16	-15.8%
Average Age	62.5	63.9	2.4%
Average Service	34.2	34.2	0.0%
Annual Projected Payroll	\$ 1,242,253	\$ 1,085,586	-12.6%
Average Annual Pay	\$ 65,382	\$ 67,849	3.8%
General Tier 2 & 3			
Count	2,288	2,146	-6.2%
Average Age	46.8	47.3	1.2%
Average Service	13.2	14.2	7.1%
Annual Projected Payroll	\$ 135,243,680	\$ 130,674,232	-3.4%
Average Annual Pay	\$ 59,110	\$ 60,892	3.0%
General Tier 4			
Count	1,353	1,546	14.3%
Average Age	34.8	35.5	1.9%
Average Service	2.0	2.4	21.7%
Annual Projected Payroll	\$ 59,069,274	\$ 71,284,514	20.7%
Average Annual Pay	\$ 43,658	\$ 46,109	5.6%
General Total			
Count	3,660	3,708	1.3%
Average Age	42.4	42.5	0.1%
Average Service	9.2	9.4	1.8%
Annual Projected Payroll	\$ 195,555,207	\$ 203,044,332	3.8%
Average Annual Pay	\$ 53,430	\$ 54,758	2.5%

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APPENDIX A – MEMBERSHIP INFORMATION

SUMMARY OF ACTIVE SAFETY MEMBERSHIP			
	June 30, 2017	June 30, 2018	Change
Safety Tier 1			
Count	2	-	-100.0%
Average Age	63.8	-	-100.0%
Average Service	38.5	-	-100.0%
Annual Projected Payroll	\$ 215,881	\$ -	-100.0%
Average Annual Pay	\$ 107,941	\$ -	-100.0%
Safety Tier 2 & 3			
Count	658	602	-8.5%
Average Age	42.1	42.6	1.4%
Average Service	13.3	14.2	6.2%
Annual Projected Payroll	\$ 47,346,276	\$ 44,280,283	-6.5%
Average Annual Pay	\$ 71,955	\$ 73,555	2.2%
Safety Tier 4			
Count	216	271	25.5%
Average Age	30.6	30.9	1.1%
Average Service	2.2	2.4	10.6%
Annual Projected Payroll	\$ 11,823,408	\$ 15,416,106	30.4%
Average Annual Pay	\$ 54,738	\$ 56,886	3.9%
Safety Total			
Count	876	873	-0.3%
Average Age	39.3	39.0	-0.7%
Average Service	10.7	10.5	-1.1%
Annual Projected Payroll	\$ 59,385,565	\$ 59,696,389	0.5%
Average Annual Pay	\$ 67,792	\$ 68,381	0.9%

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APPENDIX A – MEMBERSHIP INFORMATION

SUMMARY OF INACTIVE MEMBERSHIP*			
	June 30, 2017	June 30, 2018	Change
General			
Count	1,686	1,741	3.3%
Average Age	44.6	44.2	-0.8%
Total Contribution Balance	\$ 39,175,585	\$ 40,050,143	2.2%
Average Contribution Balance	\$ 23,236	\$ 23,004	-1.0%
Safety			
Count	268	291	8.6%
Average Age	39.9	39.7	-0.6%
Total Contribution Balance	\$ 8,887,900	\$ 9,707,077	9.2%
Average Contribution Balance	\$ 33,164	\$ 33,358	0.6%
Total			
Count	1,954	2,032	4.0%
Average Age	43.9	43.6	-0.8%
Total Contribution Balance	\$ 48,063,485	\$ 49,757,220	3.5%
Average Contribution Balance	\$ 24,597	\$ 24,487	-0.4%

*Includes unclaimed accounts.

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APPENDIX A – MEMBERSHIP INFORMATION

SUMMARY OF RETIRED MEMBERSHIP			
	June 30, 2017	June 30, 2018	Change
General			
Count	2,579	2,658	3.1%
Average Age	70.4	70.7	0.4%
Total Annual Allowance	\$ 51,970,685	\$ 55,107,749	6.0%
Average Annual Allowance	\$ 20,151	\$ 20,733	2.9%
Safety			
Count	493	534	8.3%
Average Age	64.3	64.5	0.2%
Total Annual Allowance	\$ 16,699,239	\$ 18,624,022	11.5%
Average Annual Allowance	\$ 33,873	\$ 34,876	3.0%
Total			
Count	3,072	3,192	3.9%
Average Age	69.4	69.6	0.3%
Total Annual Allowance	\$ 68,669,924	\$ 73,731,771	7.4%
Average Annual Allowance	\$ 22,353	\$ 23,099	3.3%

Please refer to the June 30, 2018 actuarial valuation report for a more complete summary of the data.

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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, 2018 is provided below. Please refer to the June 30, 2018 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, administrative expense assumption, and the municipal bond yield, the assumptions used in this report and the June 30, 2018 actuarial valuation report reflect the results of the Experience Study performed by Cheiron covering the period July 1, 2014 through June 30, 2017.

Key Actuarial Assumptions

Expected Return on Assets	7.40 percent net of investment expenses as of June 30, 2018.
Municipal Bond Yield	3.87 percent net of investment expenses as of June 30, 2018 (Bond Buyer 20-year Bond GO Index, June 28, 2018).
Discount Rate	7.15 percent.
Inflation	The cost-of-living as measured by the Consumer Price Index (CPI) will increase at the rate of 3.00% 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 2.7% per year for Tier 1 and 2.0% 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.

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

The plan provisions are the same as those summarized in the June 30, 2018 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)

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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
2019	\$ 1,587,476	\$ 42,653	\$ 11,966	\$ 2,381	\$ 99,710	\$ 115,748	\$ 1,655,752	\$ 99,710	\$ 0
2020	1,655,752	41,020	13,200	2,484	99,521	120,789	1,728,757	99,521	0
2021	1,728,757	39,361	14,763	2,593	104,482	126,004	1,801,810	104,482	0
2022	1,801,810	37,749	16,910	2,703	109,620	131,238	1,875,384	109,620	0
2023	1,875,384	36,062	18,412	2,813	115,425	136,461	1,948,082	115,425	0
2024	1,948,082	34,353	20,205	2,922	121,059	141,635	2,020,295	121,059	0
2025	2,020,295	32,634	22,677	3,030	126,870	146,791	2,092,496	126,870	0
2026	2,092,496	30,977	24,664	3,139	132,677	151,931	2,164,252	132,677	0
2027	2,164,252	29,358	25,839	3,246	138,535	157,008	2,234,676	138,535	0
2028	2,234,676	27,780	27,177	3,352	144,439	161,992	2,303,834	144,439	0
2029	2,303,834	26,247	28,867	3,456	150,225	166,902	2,372,169	150,225	0
2030	2,372,169	24,744	30,474	3,558	156,525	171,730	2,439,034	156,525	0
2031	2,439,034	23,293	32,139	3,659	162,645	176,459	2,504,622	162,645	0
2032	2,504,622	21,911	33,863	3,757	168,923	181,094	2,568,809	168,923	0
2033	2,568,809	20,563	35,645	3,853	174,901	185,639	2,631,902	174,901	0
2034	2,631,902	19,246	37,485	3,948	180,721	190,111	2,694,075	180,721	0
2035	2,694,075	17,951	12,222	4,041	186,564	193,531	2,727,174	186,564	0
2036	2,727,174	16,688	8,254	4,091	191,968	195,593	2,751,649	191,968	0
2037	2,751,649	15,471	26,084	4,127	198,003	197,787	2,788,860	198,003	0
2038	2,788,860	14,282	24,448	4,183	204,027	200,217	2,819,597	204,027	0
2039	2,819,597	13,105	24,419	4,229	209,847	202,234	2,845,279	209,847	0
2040	2,845,279	11,952	23,871	4,268	216,688	203,823	2,863,969	216,688	0
2041	2,863,969	10,840	22,361	4,296	222,410	204,902	2,875,365	222,410	0
2042	2,875,365	9,772	22,038	4,313	228,042	205,489	2,880,310	228,042	0
2043	2,880,310	8,743	21,266	4,320	233,490	205,591	2,878,100	233,490	0

* Fiduciary Net Position based on financial statements provided by TCERA dated October 12, 2018.

Amounts in Thousands

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

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
2044	2,878,100	7,748	19,360	4,317	238,555	205,139	2,867,474	238,555	0
2045	2,867,474	6,785	18,365	4,301	243,145	204,115	2,849,293	243,145	0
2046	2,849,293	5,870	18,850	4,274	247,675	202,590	2,824,654	247,675	0
2047	2,824,654	5,010	19,110	4,237	251,647	200,602	2,793,493	251,647	0
2048	2,793,493	4,206	18,813	4,190	255,343	198,124	2,755,102	255,343	0
2049	2,755,102	3,470	18,720	4,133	258,371	195,145	2,709,934	258,371	0
2050	2,709,934	2,815	18,585	4,065	260,775	191,689	2,658,182	260,775	0
2051	2,658,182	2,248	18,411	3,987	262,409	187,775	2,600,221	262,409	0
2052	2,600,221	1,767	18,196	3,900	263,260	183,433	2,536,458	263,260	0
2053	2,536,458	1,366	17,944	3,805	263,448	178,688	2,467,202	263,448	0
2054	2,467,202	1,035	17,655	3,701	262,756	173,569	2,393,005	262,756	0
2055	2,393,005	770	17,331	3,590	261,478	168,108	2,314,146	261,478	0
2056	2,314,146	561	16,976	3,471	259,469	162,329	2,231,072	259,469	0
2057	2,231,072	400	16,590	3,347	256,706	156,266	2,144,276	256,706	0
2058	2,144,276	279	16,174	3,216	253,526	149,944	2,053,930	253,526	0
2059	2,053,930	191	15,731	3,081	249,820	143,379	1,960,330	249,820	0
2060	1,960,330	128	15,265	2,940	245,676	136,589	1,863,696	245,676	0
2061	1,863,696	85	14,779	2,796	241,157	129,588	1,764,196	241,157	0
2062	1,764,196	55	14,277	2,646	236,281	122,389	1,661,989	236,281	0
2063	1,661,989	35	13,761	2,493	231,068	115,001	1,557,224	231,068	0
2064	1,557,224	22	13,234	2,336	225,532	107,436	1,450,047	225,532	0
2065	1,450,047	13	12,700	2,175	219,680	99,703	1,340,608	219,680	0
2066	1,340,608	8	12,163	2,011	213,517	91,815	1,229,066	213,517	0
2067	1,229,066	4	11,624	1,844	207,045	83,782	1,115,588	207,045	0
2068	1,115,588	2	11,086	1,673	200,270	75,618	1,000,350	200,270	0

* Fiduciary Net Position based on financial statements provided by TCERA dated October 12, 2018.

Amounts in Thousands

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

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
2069	1,000,350	1	10,551	1,501	193,195	67,334	883,540	193,195	0
2070	883,540	0	10,022	1,325	185,832	58,945	765,350	185,832	0
2071	765,350	(0)	9,501	1,148	178,193	50,464	645,975	178,193	0
2072	645,975	(0)	8,989	969	170,296	41,905	525,604	170,296	0
2073	525,604	0	8,488	788	162,167	33,281	404,418	162,167	0
2074	404,418	0	7,997	607	153,834	24,605	282,580	153,834	0
2075	282,580	0	7,518	424	145,330	15,887	160,231	145,330	0
2076	160,231	0	7,052	240	136,695	7,137	37,484	136,695	0
2077	37,484	0	6,598	56	127,972	0	(83,946)	37,484	90,488
2078	(83,946)	0	6,157	0	119,208	0	(113,051)	0	119,208
2079	(113,051)	0	6,360	0	110,454	0	(104,093)	0	110,454
2080	(104,093)	0	8,441	0	101,761	0	(93,320)	0	101,761
2081	(93,320)	0	10,356	0	93,188	0	(82,832)	0	93,188
2082	(82,832)	0	12,105	0	84,791	0	(72,685)	0	84,791
2083	(72,685)	0	13,693	0	76,626	0	(62,934)	0	76,626
2084	(62,934)	0	15,122	0	68,749	0	(53,627)	0	68,749
2085	(53,627)	0	16,400	0	61,210	0	(44,810)	0	61,210
2086	(44,810)	0	17,534	0	54,053	0	(36,520)	0	54,053
2087	(36,520)	0	18,530	0	47,319	0	(28,789)	0	47,319
2088	(28,789)	0	19,399	0	41,041	0	(21,642)	0	41,041
2089	(21,642)	0	20,150	0	35,244	0	(15,094)	0	35,244
2090	(15,094)	0	20,793	0	29,946	0	(9,153)	0	29,946
2091	(9,153)	0	21,340	0	25,156	0	(3,816)	0	25,156
2092	(3,816)	0	21,801	0	20,876	34	958	0	20,876
2093	958	0	22,186	1	17,099	256	6,299	0	17,099

* Fiduciary Net Position based on financial statements provided by TCERA dated October 12, 2018.

Amounts in Thousands

**TULARE COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
GASB 67 AND 68 REPORTING FOR JUNE 30, 2018 MEASUREMENT DATE**

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
2094	6,299	0	22,507	9	13,812	782	15,767	0	13,812
2095	15,767	0	22,774	24	10,992	1,594	29,119	0	10,992
2096	29,119	0	22,997	44	8,611	2,676	46,138	0	8,611
2097	46,138	0	23,185	69	6,633	4,013	66,633	0	6,633
2098	66,633	0	22,241	100	5,020	5,553	89,307	0	5,020
2099	89,307	0	18,035	134	3,728	7,124	110,603	0	3,728
2100	110,603	0	14,236	166	2,715	8,597	130,556	0	2,715
2101	130,556	0	10,843	196	1,936	9,978	149,245	0	1,936
2102	149,245	0	7,846	224	1,351	11,272	166,787	0	1,351
2103	166,787	0	5,235	250	921	12,490	183,341	0	921
2104	183,341	0	2,997	275	614	13,644	199,093	0	614
2105	199,093	0	1,115	299	399	14,748	214,259	0	399
2106	214,259	0	(430)	321	253	15,819	229,073	0	253
2107	229,073	0	(1,659)	344	156	16,873	243,788	0	156
2108	243,788	0	(2,593)	366	94	17,929	258,664	0	94
2109	258,664	0	(3,257)	388	55	19,007	273,970	0	55
2110	273,970	0	(3,674)	411	32	20,124	289,977	0	32
2111	289,977	0	(3,868)	435	18	21,301	306,957	0	18
2112	306,957	0	(3,863)	460	10	22,557	325,181	0	10
2113	325,181	0	(3,682)	488	6	23,912	344,917	0	6
2114	344,917	0	(3,348)	517	3	25,383	366,431	0	3
2115	366,431	0	(2,882)	550	2	26,991	389,988	0	2
2116	389,988	0	(2,304)	585	1	28,754	415,853	0	1
2117	415,853	0	(1,631)	624	1	30,691	444,289	0	1
2118	444,289	0	(925)	666	1	32,820	475,517	0	1
Discount Rate:								7.40%	3.87%
Present Value:								\$ 2,178,953	\$ 98,620
Total Present Value:								\$ 2,277,573	
GASB Discount Rate:								7.15%	

* Fiduciary Net Position based on financial statements provided by TCERA dated October 12, 2018.

Amounts in Thousands



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