

Tulare County Employees' Retirement Association

GASB 67/68 Report as of June 30, 2016

Produced by Cheiron

November 2016

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November 8, 2016

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, 2016,
- 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

David Holland, FSA, EA, FCA, MAAA Consulting Actuary Graham A. Schmidt, ASA, EA, FCA, MAAA Consulting Actuary

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SECTION I – BOARD SUMMARY

The purpose of this report is to provide accounting and financial disclosure information under Government Accounting Standards Board Statements 67 and 68 for the Tulare County Employees' Retirement Association and the participating employers. This information includes:

- Determination of the discount rate as of June 30, 2016,
- 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, 2016. Measurements are based on the fair value of assets as of June 30, 2016 and the Total Pension Liability as of the valuation date, June 30, 2016.

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

Table I-1 Summary of Collective Results												
		Measuren	nent	Date								
		6/30/2016		6/30/2015								
Net Pension Liability	\$	419,382,866	\$	307,226,380								
Deferred Outflows		(166,574,008)		(70,477,639)								
Deferred Inflows		32,481,457		1,819,236								
Net Impact on Statement of Net Position	\$	285,290,316	\$	238,567,977								
Pension Expense (\$ Amount)	\$	78,019,579	\$	42,127,498								
Pension Expense (% of Payroll)		32.70%		18.36%								

The Net Pension Liability (NPL) increased by approximately \$112 million since the prior measurement date, primarily due to the decrease in discount rate and the interest on the liability exceeding the investment income. The investment 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 also five years. Unrecognized amounts are reported as deferred inflows and deferred outflows.



SECTION I – BOARD SUMMARY

As of the end of the reporting year, the participating employers in TCERA would report a Net Pension Liability of \$419,382,866, collective Deferred Inflows of \$32,481,457, and collective Deferred Outflows of \$166,574,008. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to TCERA would be \$285,290,316 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, 2016, the collective annual pension expense is \$78,019,579 or 32.70% of covered-employee payroll. This amount is not equal to the participating employers' contributions to TCERA (\$31,297,240), but instead represents the change in the net impact on participating employer's Statements of Net Position plus employer contributions (\$285,290,316 - \$238,567,977 + \$31,297,240). 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.



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.

David Holland, FSA, EA, FCA, MAAA Consulting Actuary Graham A. Schmidt, ASA, EA, FCA, MAAA Consulting Actuary



SECTION III - DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.58%.

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, 2016 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 2081 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 7.75% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.85% to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2016 is 7.58%.

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, 2016, is measured as of a valuation date of June 30, 2016.

Between the June 30, 2015 and June 30, 2016 measurement dates the discount rate was reduced from 7.70% to 7.58% due to the results of the crossover test. The details of this calculation are shown in Appendix D.

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 \$24 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.

Change in C		ole V-1 e Net Pension l	Liabi	lity								
	Increase (Decrease)											
	7	otal Pension Liability (a)		lan Fiduciary Net Position (b)		Net Pension Liability (a) - (b)						
Balances at 6/30/2015	\$	1,519,498,702	\$	1,212,272,322	\$	307,226,380						
Changes for the year:												
Service cost		38,307,485				38,307,485						
Interest		115,715,730				115,715,730						
Changes of benefits		0				0						
Differences between expected and actual experience		(40,601,821)				(40,601,821)						
Changes of assumptions		23,922,527				23,922,527						
Contributions - employer				31,297,240		(31,297,240)						
Contributions - member				16,814,551		(16,814,551)						
Net investment income				(20,308,501)		20,308,501						
Benefit payments		(72,332,422)		(72,332,422)		0						
Administrative expense				(2,615,856)		2,615,856						
Net changes		65,011,499		(47,144,988)		112,156,486						
Balances at 6/30/2016	\$	1,584,510,200	\$	1,165,127,334	\$	419,382,866						

During the measurement year, the collective NPL increased by approximately \$112 million. The service cost, interest cost, negative investment income, and recognition of administrative expense increased the collective NPL by approximately \$177 million while contributions and actuarial gains decreased the collective NPL by approximately \$89 million.

There were no changes in benefits during the year. As discussed in Section IV, there was an assumption change, which increased the TPL by approximately \$24 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.



SECTION V – GASB 67 REPORTING INFORMATION

Sensitivity of Collective Ne	t Pei	Table V-2 ision Liability	to (Changes in Dis	cou	nt Rate
		1% Decrease 6.58%		Discount Rate 7.58%		1% Increase 8.58%
Total Pension Liability Plan Fiduciary Net Position	\$	1,809,161,716 1,165,127,334	\$	1,584,510,200 1,165,127,334	\$	1,401,863,927 1,165,127,334
Collective Net Pension Liability Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	<u>\$</u>	644,034,382	<u>\$</u>	419,382,866 73.5%	<u>\$</u>	236,736,593

A one percent decrease in the discount rate increases the TPL by approximately 14% and increases the collective NPL by approximately 54%. A one percent increase in the discount rate decreases the TPL by approximately 12% and decreases the collective NPL by approximately 44%.

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 three years since implementation.



SECTION V – GASB 67 REPORTING INFORMATION

	ole V					
Schedule of Changes in Collective N	et P		y ai		ios	
T. I. D. A. MANNE		FYE 2016		FYE 2015		FYE 2014
Total Pension Liability	•	20 207 405	e.	25 177 705	e.	20 (72 22 (
Service cost (MOY)	\$	38,307,485	3	35,167,785	3	39,672,236
Interest (includes interest on service cost)		115,715,730		97,472,957		94,276,973
Changes of benefit terms		0		0		0
Differences between expected and actual experience		(40,601,821)		7,590,593		0
Changes of assumptions		23,922,527		180,186,807		13,587,893
Benefit payments, including refunds of member contributions		(72,332,422)		(68,559,888)		(65,954,107)
Net change in total pension liability	\$	65,011,499	\$	251,858,254	\$	81,582,995
Total pension liability - beginning		1,519,498,702		1,267,640,448		1,186,057,453
Total pension liability - ending	\$	1,584,510,200	\$	1,519,498,702	\$	1,267,640,448
Plan fiduciary net position						
Contributions - employer	\$	31,297,240	\$	30,992,069	\$	25,953,288
Contributions - member		16,814,551		18,887,422		18,968,800
Change of Assumptions / Other Income		0		111,357,446		2,993,705
Net investment income		(20,308,501)		11,043,009		176,883,870
Benefit payments, including refunds of member contributions		(72,332,422)		(68,559,888)		(65,954,107)
Administrative expense		(2,615,856)		(2,408,394)		(1,638,772)
Net change in plan fiduciary net position	\$	(47,144,988)	\$	101,311,664	\$	157,206,784
Plan fiduciary net position - beginning		1,212,272,322		1,110,960,658		953,753,874
Plan fiduciary net position - ending	\$	1,165,127,334	\$	1,212,272,322	\$	1,110,960,658
Net pension liability - ending	\$	419,382,866	\$	307,226,380	\$	156,679,790
Plan fiduciary net position as a percentage of the total pension liability		73.53%		79.78%		87.64%
Covered employee payroll*	\$	238,558,790	\$	229,430,663	\$	234,438,456
Net pension liability as a percentage of covered employee payroll		175.80%		133.91%		66.83%

^{*} 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 below.



SECTION V – GASB 67 REPORTING INFORMATION

	Table V-4 Schedule of Collective Employer Contributions														
	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010	FYE 2009	FYE 2008	FYE 2007					
Actuarially Determined Contribution Contributions in Relation to the	\$ 31,297,240	\$ 30,992,069	\$ 25,953,288	\$ 29,847,226	, ,	\$ 23,434,240	, ,	, ,		\$ 17,975,005					
Actuarially Determined Contribution	31,297,240	30,992,069	25,953,288	29,847,226	25,257,124	23,434,240	25,339,346	22,430,788	22,691,963	17,975,005					
Contribution Deficiency/(Excess)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0					
Covered-Employee Payroll	\$238,558,790	\$229,430,663	\$234,438,456	\$230,954,756	\$222,634,628	\$219,853,614	\$217,811,354	\$227,305,938	\$226,836,234	\$204,802,798					
Contributions as a Percentage of Covered-Employee Payroll	13.12%	13.51%	11.07%	12.92%	11.34%	10.66%	11.63%	9.87%	10.00%	8.78%					

^{*} Payroll figures for FYE 2014 and earlier were determined by the prior actuary. Subsequent payroll figures are based on amounts provided by the participating employers for the respective fiscal year.

The notes below summarize the key methods and assumptions used to determine the ADC for FYE 2016.

Notes to Schedule

Valuation Date 6/30/2014

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

Amortization method The unfunded actuarial liability is amortized over a rolling 15-year periods as a level percentage of payroll

Discount rate 7.70%
Amortization growth rate 3.00%
Price inflation 3.00%

Salary increases 3.00% plus merit component based on employee classification and years of service

Mortality RP-2014 Combined Mortality (sex-distinct and no collar adjustment for General members, male blue-collar for Safety members)

with generational projections using Scale MP-2014

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2016 can be found in Buck Consultants' June 30, 2014 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 2016 disclosures can be based on either the June 30, 2015 or 2016 measurement dates. If an employer elects to base their 2016 disclosures on the June 30, 2015 measurement date, the GASB 68 schedules in this report with a measurement date of June 30, 2016 will be used for their 2017 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 gain of approximately \$40.6 million. Approximately \$8.1 million of that gain was recognized as a decrease 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 inflow of resources as of June 30, 2016 of approximately \$32.5 million. Unrecognized experience losses from prior periods were approximately \$6.1 million, of which \$1.5 million was recognized as an increase 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 collective deferred inflow of resources as of June 30, 2016 of approximately \$27.9 million.

During the year, there were changes in the assumptions that increased the NPL by approximately \$23.9 million. Approximately \$4.8 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 \$64.4 million, of which \$15.9 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, 2016 of approximately \$67.7 million.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of approximately \$113.2 million. Approximately \$22.6 million of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized net investment gains from prior periods were approximately \$1.8 million, and the net recognition of prior investment experience resulted in a \$5.6 million reduction in collective pension expense in the current year. The combination of unrecognized investment losses this year and unrecognized net investment gains from prior periods results in a collective deferred outflow of resources as of June 30, 2016 of approximately \$94.4 million.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

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- Schedule of Collective Deferred Inflo		nd Outflows o	of Res	ources		
		Deferred Outflows of Resources	Deferred Inflows of Resources			
Differences between expected and actual experience Changes in assumptions	\$	4,554,356 67,654,207	\$	32,481,457 0		
Net difference between projected and actual earnings on pension plan investments Total		94,365,446 166,574,008	<u> </u>	<u>0</u> 32,481,457		
Amounts reported as deferred outflows and deferred inflovexpense as follows:	ws of	resources will be re	ecognize	ed in pension		
Measurement year ended June 30	:					
2017		31,125,654				
2018		31,125,652				
2019		51,680,039				
2020		20,161,205				
2021	Ф	0				
Thereafte	r \$	0				

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

Table Calculation of Collect	nsion Expens	se	
	Measurement	Year	
	2016		2015
Change in Net Pension Liability	\$ 112,156,486	\$	150,546,590
Change in Deferred Outflows	(96,096,369)		(59,012,855)
Change in Deferred Inflows	30,662,221		(80,398,306)
Employer Contributions	31,297,240		30,992,069
Pension Expense	\$ 78,019,579	\$	42,127,498
Pension Expense as % of Payroll	32.70%		18.36%
Operating Expenses			
Service cost	\$ 38,307,485	\$	35,167,785
Employee contributions	(16,814,551)		(18,887,422)
Administrative expenses	2,615,856		2,408,394
Total	\$ 24,108,790	\$	18,688,757
Financing Expenses			
Interest cost	\$ 115,715,730	\$	97,472,957
Expected return on assets	 (92,930,595)		(85,847,910)
Total	\$ 22,785,135	\$	11,625,047
Changes			
Benefit changes	\$ 0	\$	0
Recognition of assumption changes	20,673,485		15,888,980
Recognition of liability gains and losses	(6,602,245)		1,518,119
Recognition of investment gains and losses	 17,054,414		(5,593,405)
Total	\$ 31,125,654	\$	11,813,694
Pension Expense	\$ 78,019,579	\$	42,127,498

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



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 \$36 million. The recognition of changes increased by approximately \$19 million, which is more than half the total increase in pension expense.



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.

Proportionate shares for each participating employer are 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 amortization share as of June 30, 2016 and June 30, 2015 is determined using this method.

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. Our understanding is that TCERA and the employers have not elected early implementation of GASB 82, so we have not removed those contributions (if there are any) in the calculation of the employers' proportionate shares.

	Table VII-1 Determination of Employers' Proportionate Share													
		June 30), 2016		June 30), 2015								
	Employer Proportionate Employer Proportionat													
Employer	Co	ontribution	Share	C	ontribution	Share								
County	\$	29,741,640	95.02959555%	\$	29,506,401	95.20629617%								
Courts		1,405,066	4.48942558%		1,348,686	4.35171334%								
SPUD		15,778	0.05041211%		18,629	0.06010893%								
TCAG		134,756	0.43056676%		118,353	0.38188157%								
Total	\$	31,297,240	100.00000000%	\$	30,992,069	100.00000000%								

¹ http://www.aicpa.org/interestareas/governmentalauditquality/resources/gasbmatters/dowloadabledocuments/aicpaslgep_cs_er_reporting_whitepaper.pdf



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the proportionate share of the collective NPL (under three discount rates), the collective deferred outflows, the collective deferred inflows, and the collective pension expense allocated to each participating employer as of June 30, 2016.

	Table VII-2 Schedule of Employers' Proportionate Share of Collective Amounts at June 30, 2016													
Employer	Proportionate Share		nare of NPL @ 6.58%		nare of NPL @ 7.58%		hare of NPL @ 8.58%		Share of Deferred Outflows		Share of Deferred Inflows		Pension Expense	
County	95.0296%	\$	612,023,268	\$	398,537,842	\$	224,969,827	\$	158,294,606	\$	30,866,998	\$	74,141,690	
Courts	4.4894%		28,913,444		18,827,882		10,628,113		7,478,216		1,458,231		3,502,631	
SPUD	0.0504%		324,671		211,420		119,344		83,973		16,375		39,331	
TCAG	0.4306%		2,772,998		1,805,723		1,019,309		717,212		139,854		335,926	
Total	100.0000%	\$	644,034,382	\$	419,382,866	\$	236,736,593	\$	166,574,008	\$	32,481,457	\$	78,019,579	

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.

Table VII-3 Schedule of Employers' Changes in Proportion and Contribution Differences																
	Proportions	ate Shares		In	ıpac	ct of Chan	ge i	n Proporti	on				Co	ntributions		
Employer	6/30/2015	6/30/2016		t Pension Jiability		Deferred Outflows		Deferred Inflows	N	let Effect		Actual	Pr	oportionate Share		erence
County	95.2063%	95.0296%	\$	(542,871)	\$	(124,534)	\$	3,215	\$	(421,551)	\$	29,741,640	\$	29,741,640	\$	0
Courts	4.3517%	4.4894%		423,088		97,056		(2,505)		328,537		1,405,066		1,405,066		0
SPUD	0.0601%	0.0504%		(29,791)		(6,834)		176		(23,133)		15,778		15,778		0
TCAG	0.3819%	0.4306%		149,574		34,312		(886)		116,147		134,756		134,756		0
Total	100.0000%	100.0000%	\$	0	\$	0	\$	0	\$	0	\$	31,297,240	\$	31,297,240	\$	0



SECTION VII - GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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	Deferred Inflows								
			Current Year				Current Year					
Employer	6	/30/2015	Net Effect	Recognition	6/30/2016	6/30/2015	Net Effect	Recognition	6/30/2016			
County	\$	475,974	\$ 0	\$ 118,993	\$ 356,980	\$ (1,623,858	(421,551)	\$ (453,369)	\$ (1,592,041)			
Courts		1,602,681	328,537	429,953	1,501,265	(1,155,041) 0	(288,760)	(866,281)			
SPUD		21,177	0	4,813	16,364	(15,751) (23,133)	(8,564)	(30,320)			
TCAG		694,818	116,147	196,934	614,032	C	0	0	0			
Total	\$	2,794,651	\$ 444,685	\$ 750,694	\$ 2,488,642	\$ (2,794,651) \$ (444,685)	\$ (750,694)	\$ (2,488,642)			

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	Deferred Inflows								
Employer	6/30/2		Current Year Difference	Recognition	6/30/2016	6/30/2015	Current Year Difference	Recognition	6/30/2016				
County	\$	0 \$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0				
Courts		0	0	0	0	0	0	0	0				
SPUD		0	0	0	0	0	0	0	0				
TCAG		0	0	0	0	0	0	0	0				
Total	\$	0 \$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0				



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, 2016												
Employer	Proportionate Shares	E	xperience		ssumption Changes	I	nvestment Return		roportion Change		ontribution Difference	
County	95.0296%	\$	4,327,986	\$	64,291,519	\$	89,675,101	\$	356,980	\$	0	
Courts	4.4894%		204,464		3,037,285		4,236,466		1,501,265		0	
SPUD	0.0504%		2,296		34,106		47,572		16,364		0	
TCAG	0.4306%		19,610		291,297		406,306		614,032		0	
Total	100.0000%	\$	4,554,356	\$	67,654,207	\$	94,365,446	\$	2,488,642	\$	0	

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, 2016												
Employer	Proportionate Shares	Ex	xperience		ssumption Changes	1	nvestment Return		roportion Change		ontribution Difference	
County	95.0296%	\$	30,866,998	\$	0	\$	0	\$	1,592,041	\$	0	
Courts	4.4894%		1,458,231		0		0		866,281		0	
SPUD	0.0504%		16,375		0		0		30,320		0	
TCAG	0.4306%		139,854		0		0		0		0	
Total	100.0000%	\$	32,481,457	\$	0	\$	0	\$	2,488,642	\$	0	



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	Table VII-8 Schedule of Employers' Recognition of Deferred Outflows and Inflows at June 30, 2016														
Recognition for Measurement Year Ending															
Employer		2017		2018		2019		2020		2021		Thereafter			
County	\$	29,244,208	\$	29,244,206	\$	48,776,957	\$	18,927,178	\$		0	\$	0		
Courts		1,538,556		1,538,556		2,461,330		1,116,528			0		0		
SPUD		11,940		11,940		22,302		7,462			0		0		
TCAG		330,951		330,951		419,451		110,037			0		0		
Total	\$	31,125,654	\$	31,125,652	\$	51,680,039	\$	20,161,205	\$		0	\$	0		



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.

	Schedule	of E	mployers	s' Pension Exp	pe	Table VII-9 nse for the M	eas	urement Ye	ar i	Ending June 3	80, 20	16				
	Collective					Employer		C	nan	ge in Employer					- 1	Employer
	Pension	Cl	hange in	Contribution		Pension	1	Net Pension		Deferred	Defe	rred		Employer		Pension
Employer	Expense	Pr	oportion	Difference		Expense		Liability		Outflows	Infl	ows	C	ontributions		Expense
County	\$ 74,141,690	\$	(334,375)	\$ 0	9	\$ 73,807,315	\$	106,038,985	\$	(91,076,462) \$	29,	103,152	\$	29,741,640	\$	73,807,315
Courts	3,502,631		141,193	0		3,643,824		5,458,270		(4,309,815)	1,0	090,303		1,405,066		3,643,824
SPUD	39,331		(3,751)	0		35,580		26,749		(36,797)		29,850		15,778		35,580
TCAG	335,926		196,934	0		532,860		632,482		(367,284)		132,907		134,756		532,860
Total	\$ 78,019,579	\$	0	\$ 0	9	8 78,019,579	\$	112,156,486	\$	(95,790,359) \$	30,3	56,212	\$	31,297,240	\$	78,019,579

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, 2016													
Employer	Proportionate Shares	Proportionate Share of NPL		Covered- Employee Payroll	Share of NPL as a % of Payroll	Plan Fiduciary Net Position as % of TPL		ontractually Required Contribution	C	Actual ontributions		ontribution Deficiency	Contributions as a % of Payroll	
County	95.0296%	\$ 398,537,842	\$	225,138,907	177.0%	73.5%	\$	29,741,640	\$	29,741,640	\$	0	13.2%	
Courts	4.4894%	18,827,882		12,092,366	155.7%	73.5%		1,405,066		1,405,066		0	11.6%	
SPUD	0.0504%	211,420		136,201	155.2%	73.5%		15,778		15,778		0	11.6%	
TCAG	0.4306%	1,805,723		1,191,316	151.6%	73.5%		134,756		134,756		0	11.3%	
Total	100.0000%	\$ 419,382,866	\$	238,558,790	175.8%	73.5%	\$	31,297,240	\$	31,297,240	\$	0	13.1%	



APPENDIX A – MEMBERSHIP INFORMATION

SUMMARY	OF ACT	IVE GENERAL	ME	MBERSHIP	
	J	une 30, 2015	J	une 30, 2016	Change
General Tier 1					
Count		36		26	-27.8%
Average Age		61.8		62.3	0.8%
Average Service		36.2		37.8	4.3%
Annual Projected Payroll	\$	2,462,988	\$	1,680,430	-31.8%
Average Annual Pay	\$	68,416	\$	64,632	-5.5%
General Tier 2 & 3					
Count		2,689		2,481	-7.7%
Average Age		45.6		46.2	1.3%
Average Service		11.8		12.6	7.4%
Annual Projected Payroll	\$	147,588,454	\$	142,081,908	-3.7%
Average Annual Pay	\$	54,886	\$	57,268	4.3%
General Tier 4					
Count		781		1,098	40.6%
Average Age		34.3		34.2	-0.2%
Average Service		1.3		1.6	27.2%
Annual Projected Payroll	\$	30,927,134	\$	45,617,162	47.5%
Average Annual Pay	\$	39,599	\$	41,546	4.9%
General Total					
Count		3,506		3,605	2.8%
Average Age		43.3		42.7	-1.4%
Average Service		9.7		9.4	-2.3%
Annual Projected Payroll	\$	180,978,576	\$	189,379,500	4.6%
Average Annual Pay	\$	51,620	\$	52,532	1.8%



APPENDIX A – MEMBERSHIP INFORMATION

SUMMAR	Y OF AC	TIVE SAFETY 1	MEM	BERSHIP	
	Jı	me 30, 2015	Jı	me 30, 2016	Change
Safety Tier 1					
Count		2		2	0.0%
Average Age		61.8		62.8	1.6%
Average Service		36.5		37.6	2.8%
Annual Projected Payroll	\$	228,548	\$	210,707	-7.8%
Average Annual Pay	\$	114,274	\$	105,354	-7.8%
Safety Tier 2 & 3					
Count		764		713	-6.7%
Average Age		40.5		41.3	1.8%
Average Service		11.7		12.5	7.3%
Annual Projected Payroll	\$	51,187,710	\$	49,658,562	-3.0%
Average Annual Pay	\$	67,000	\$	69,647	4.0%
Safety Tier 4					
Count		133		176	32.3%
Average Age		30.2		30.6	1.4%
Average Service		1.3		1.8	34.1%
Annual Projected Payroll	\$	6,659,933	\$	9,265,110	39.1%
Average Annual Pay	\$	50,075	\$	52,643	5.1%
Safety Total					
Count		899		891	-0.9%
Average Age		39.1		39.2	0.4%
Average Service		10.2		10.5	2.5%
Annual Projected Payroll	\$	58,076,191	\$	59,134,379	1.8%
Average Annual Pay	\$	64,601	\$	66,369	2.7%



APPENDIX A – MEMBERSHIP INFORMATION

SUMMAR	Y OF I	NACTIVE ME	MBEI	RSHIP*	
	Jı	me 30, 2015	Jı	me 30, 2016	Change
General					
Count		1,535		1,607	4.7%
Average Age		44.9		44.7	-0.5%
Total Contribution Balance	\$	36,089,104	\$	38,126,000	5.6%
Average Contribution Balance	\$	23,511	\$	23,725	0.9%
Safety					
Count		232		244	5.2%
Average Age		40.2		40.2	0.0%
Total Contribution Balance	\$	6,685,902	\$	7,616,801	13.9%
Average Contribution Balance	\$	28,819	\$	31,216	8.3%
Total					
Count		1,767		1,851	4.8%
Average Age		44.3		44.1	-0.4%
Total Contribution Balance	\$	42,775,005	\$	45,742,801	6.9%
Average Contribution Balance	\$	24,208	\$	24,712	2.1%

^{*}Includes unclaimed accounts.



APPENDIX A – MEMBERSHIP INFORMATION

SUMM	ARY OF	RETIRED ME	MBE	RSHIP	
	Jı	me 30, 2015	Jı	me 30, 2016	Change
General					
Count		2,381		2,473	3.9%
Average Age		70.2		70.4	0.2%
Total Annual Allowance	\$	45,238,106	\$	48,616,638	7.5%
Average Annual Allowance	\$	19,000	\$	19,659	3.5%
Safety					
Count		440		467	6.1%
Average Age		63.9		63.9	0.0%
Total Annual Allowance	\$	14,722,461	\$	15,675,740	6.5%
Average Annual Allowance	\$	33,460	\$	33,567	0.3%
Total					
Count		2,821		2,940	4.2%
Average Age		69.3		69.4	0.2%
Total Annual Allowance	\$	59,960,567	\$	64,292,378	7.2%
Average Annual Allowance	\$	21,255	\$	21,868	2.9%

Please refer to the June 30, 2016 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, 2016 is provided below. Please refer to the June 30, 2016 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 mortality improvement projection scale, discount rate, administrative expense assumption, and the municipal bond yield, the assumptions used in this report and the June 30, 2016 actuarial valuation report reflect the results of the Experience Study performed by the prior actuary, Buck Consultants, covering the period July 1, 2011 through June 30, 2014.

Key Actuarial Assumptions

Expected Return on

7.75 percent net of investment expenses as of June 30, 2016.

Assets

Municipal Bond Yield

2.85 percent net of investment expenses as of June 30, 2016 (Bond

Buyer 20-year Bond GO Index, June 30, 2016).

7.58 percent. **Discount Rate**

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

Benefits are assumed to increase after retirement at the rate of the COLA

Consumer Price Index (CPI) subject to the maximum of 3% per year for

Tier 1 and 2% per year for Tiers 2-4.

Administrative

Administrative Expenses used in the cashflow projection are assumed

Expenses 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 ten-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, 2016 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 a certain 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
2017*	\$ 1,165,127	\$ 33,273	\$ 19,340	\$ 1,748	\$ 89,524	\$ 88,827	\$ 1,215,295	\$ 89,524	\$ 0
2018	1,215,295	32,845	23,515	1,823	88,103	92,909	1,274,639	88,103	0
2019	1,274,639	31,470	27,637	1,912	91,629	97,475	1,337,681	91,629	0
2020	1,337,681	30,112	29,742	2,007	96,227	102,211	1,401,511	96,227	0
2021	1,401,511	28,779	31,679	2,102	101,143	106,990	1,465,714	101,143	0
2022	1,465,714	27,436	34,540	2,199	106,084	111,832	1,531,240	106,084	0
2023	1,531,240	26,093	36,730	2,297	111,766	116,723	1,596,722	111,766	0
2024	1,596,722	24,724	39,135	2,395	117,579	121,612	1,662,219	117,579	0
2025	1,662,219	23,386	42,413	2,493	123,415	126,536	1,728,646	123,415	0
2026	1,728,646	22,065	45,027	2,593	129,125	131,513	1,795,532	129,125	0
2027	1,795,532	20,761	46,719	2,693	134,646	136,497	1,862,170	134,646	0
2028	1,862,170	19,478	48,469	2,793	140,185	141,465	1,928,604	140,185	0
2029	1,928,604	18,175	50,280	2,893	145,823	146,415	1,994,757	145,823	0
2030	1,994,757	16,897	52,150	2,992	151,874	151,330	2,060,268	151,874	0
2031	2,060,268	15,696	54,084	3,090	157,638	156,212	2,125,533	157,638	0
2032	2,125,533	14,544	56,080	3,188	163,303	161,083	2,190,749	163,303	0
2033	2,190,749	13,447	58,142	3,286	168,641	165,967	2,256,378	168,641	0
2034	2,256,378	12,384	60,268	3,385	173,892	170,891	2,322,644	173,892	0
2035	2,322,644	11,359	34,627	3,484	179,011	174,814	2,360,949	179,011	0
2036	2,360,949	10,389	30,808	3,541	183,497	177,428	2,392,536	183,497	0
2037	2,392,536	9,471	25,814	3,589	188,377	179,463	2,415,319	188,377	0
2038	2,415,319	8,598	20,984	3,623	193,294	180,824	2,428,808	193,294	0
2039	2,428,808	7,767	19,762	3,643	197,732	181,622	2,436,583	197,732	0
2040	2,436,583	6,990	18,904	3,655	202,748	181,971	2,438,046	202,748	0
2041	2,438,046	6,258	16,500	3,657	206,407	181,826	2,432,565	206,407	0

^{*} Fiduciary Net Position based on Chief Investment Officer's Report as of October 28, 2016.



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
2042	2,432,565	5,566	15,348	3,649	209,871	181,200	2,421,159	209,871	0
2043	2,421,159	4,909	13,892	3,632	213,024	180,116	2,403,421	213,024	0
2044	2,403,421	4,294	10,982	3,605	215,622	178,509	2,377,979	215,622	0
2045	2,377,979	3,726	9,317	3,567	217,802	176,371	2,346,025	217,802	0
2046	2,346,025	3,205	9,346	3,519	219,493	173,814	2,309,378	219,493	0
2047	2,309,378	2,731	9,354	3,464	220,672	170,913	2,268,239	220,672	0
2048	2,268,239	2,301	9,341	3,402	221,413	167,682	2,222,747	221,413	0
2049	2,222,747	1,915	9,306	3,334	221,572	164,137	2,173,199	221,572	0
2050	2,173,199	1,573	9,250	3,260	221,283	160,296	2,119,775	221,283	0
2051	2,119,775	1,277	9,171	3,180	220,392	156,178	2,062,829	220,392	0
2052	2,062,829	1,022	9,071	3,094	218,980	151,808	2,002,657	218,980	0
2053	2,002,657	802	8,951	3,004	217,090	147,207	1,939,523	217,090	0
2054	1,939,523	619	8,811	2,909	214,700	142,397	1,873,740	214,700	0
2055	1,873,740	470	8,652	2,811	211,799	137,401	1,805,655	211,799	0
2056	1,805,655	351	8,478	2,708	208,511	132,242	1,735,505	208,511	0
2057	1,735,505	258	8,287	2,603	204,766	126,941	1,663,622	204,766	0
2058	1,663,622	187	8,080	2,495	200,657	121,520	1,590,257	200,657	0
2059	1,590,257	133	7,861	2,385	196,216	115,997	1,515,646	196,216	0
2060	1,515,646	93	7,630	2,273	191,471	110,389	1,440,012	191,471	0
2061	1,440,012	63	7,389	2,160	186,445	104,712	1,363,571	186,445	0
2062	1,363,571	42	7,139	2,045	181,158	98,983	1,286,532	181,158	0
2063	1,286,532	26	6,882	1,930	175,627	93,217	1,209,101	175,627	0
2064	1,209,101	16	6,620	1,814	169,867	87,429	1,131,485	169,867	0
2065	1,131,485	9	6,353	1,697	163,896	81,635	1,053,889	163,896	0
2066	1,053,889	5	6,084	1,581	157,723	75,850	976,525	157,723	0



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
2067	976,525	2	5,814	1,465	151,365	70,090	899,601	151,365	0
2068	899,601	0	5,542	1,349	144,838	64,371	823,327	144,838	0
2069	823,327	0	5,272	1,235	138,156	58,708	747,917	138,156	0
2070	747,917	(0)	5,004	1,122	131,336	53,117	673,580	131,336	0
2071	673,580	0	4,740	1,010	124,401	47,614	600,523	124,401	0
2072	600,523	0	4,479	901	117,372	42,213	528,942	117,372	0
2073	528,942	0	4,223	793	110,279	36,930	459,022	110,279	0
2074	459,022	0	3,972	689	103,152	31,777	390,930	103,152	0
2075	390,930	0	3,727	586	96,024	26,765	324,813	96,024	0
2076	324,813	0	3,488	487	88,930	21,905	260,789	88,930	0
2077	260,789	0	3,256	391	81,911	17,205	198,948	81,911	0
2078	198,948	0	3,031	298	75,006	12,670	139,345	75,006	0
2079	139,345	0	2,813	209	68,256	8,303	81,996	68,256	0
2080	81,996	0	2,603	123	61,700	4,103	26,877	61,700	0
2081	26,877	0	2,400	40	55,382	67	(26,078)	26,877	28,504
2082	(26,078)	0	2,205	0	49,337	0	(47,132)	0	49,337
2083	(47,132)	0	2,019	0	43,603	0	(41,583)	0	43,603
2084	(41,583)	0	1,842	0	38,209	0	(36,368)	0	38,209
2085	(36,368)	0	1,673	0	33,182	0	(31,509)	0	33,182
2086	(31,509)	0	1,513	0	28,540	0	(27,027)	0	28,540
2087	(27,027)	0	1,362	0	24,295	0	(22,933)	0	24,295
2088	(22,933)	0	1,220	0	20,455	0	(19,235)	0	20,455
2089	(19,235)	0	1,088	0	17,018	0	(15,931)	0	17,018
2090	(15,931)	0	964	0	13,980	0	(13,015)	0	13,980
2091	(13,015)	0	850	0	11,327	0	(10,477)	0	11,327



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
2092	(10,477)	0	745	0	8,962	0	(8,217)	0	8,962
2093	(8,217)	0	647	0	7,045	0	(6,399)	0	7,045
2094	(6,399)	0	558	0	5,445	0	(4,888)	0	5,445
2095	(4,888)	0	477	0	4,132	0	(3,654)	0	4,132
2096	(3,654)	0	405	0	3,074	0	(2,669)	0	3,074
2097	(2,669)	0	341	0	2,240	0	(1,899)	0	2,240
2098	(1,899)	0	285	0	1,597	0	(1,312)	0	1,597
2099	(1,312)	0	236	0	1,111	0	(875)	0	1,111
2100	(875)	0	193	0	754	0	(561)	0	754
2101	(561)	0	156	0	498	0	(343)	0	498
2102	(343)	0	124	0	320	0	(196)	0	320
2103	(196)	0	97	0	200	0	(102)	0	200
2104	(102)	0	75	0	121	0	(46)	0	121
2105	(46)	0	57	0	71	0	(14)	0	71
2106	(14)	0	42	0	40	0	2	0	40
2107	2	0	30	0	22	0	10	0	22
2108	10	0	20	0	12	1	19	0	12
2109	19	0	11	0	6	2	26	0	6
2110	26	0	5	0	3	2	31	0	3
2111	31	0	0	0	1	2	32	0	1
2112	32	0	0	0	1	2	34	0	1
2113	34	0	0	0	0	3	36	0	0
2114	36	0	0	0	0	3	39	0	0
2115	39	0	0	0	0	3	43	0	0
2116	43	0	0	0	0	3	46	0	0
						To	Discount Rate: Present Value: otal Present Value:		2.85% \$ 49,302 \$ 1,872,216
						GAS	SB Discount Rate:		7.58%



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.

