

San Joaquin County Employees' Retirement Association

GASB 67/68 Report as of December 31, 2016

Produced by Cheiron

May 2017

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May 11, 2017

Retirement Board of San Joaquin County Employees' Retirement Association 6 South El Dorado, Street, Suite 400 Stockton, CA 95202

Dear Members of the Board:

The purpose of this report is to provide accounting and financial reporting information under GASB 67 for the San Joaquin County Employees' Retirement Association (SJCERA, the System, the Fund, the Plan) and under GASB 68 for the County of San Joaquin and the other participating employers. This information includes:

- Projection of SJCERA's Total Pension Liability from the valuation date to the measurement date,
- Note disclosures and required supplementary information under GASB 67 for SJCERA,
- 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

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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 San Joaquin County Employees' Retirement Association (the Plan) and the Plan's participating employers. This information includes:

- Projection of SJCERA's Total Pension Liability from the valuation date to the measurement date,
- Note disclosures and required supplementary information under GASB 67 for SJCERA,
- 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 San Joaquin County Employees' Retirement Association (SJCERA) is December 31, 2016. Measurements are based on the fair value of assets as of December 31, 2016 and the Total Pension Liability as of the valuation date, January 1, 2016, updated to December 31, 2016. There was an update to the actuarial assumptions as a result of the experience study performed by Cheiron for the period covering experience from January 1, 2013 through December 31, 2015. There were no other significant events between the valuation date and the measurement date, so the update procedures consisted of updated actuarial assumptions, plus the addition of service cost and interest cost offset by actual benefit payments.

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

Table I-1 Summary of Collective Results												
Measurement Date												
	12/31/2016 12/31/2015											
Net Pension Liability	\$	1,667,546,755	\$	1,538,339,848								
Deferred Outflows		(257,199,696)		(224,925,668)								
Deferred Inflows		23,588,696		20,602,136								
Net Impact on Statement of Net Position	\$	1,433,935,755	\$	1,334,016,316								
Pension Expense (\$ Amount)	\$	259,041,963	\$	219,216,251								
Pension Expense (% of Payroll)		66.04%		55.34%								

The Net Pension Liability (NPL) increased approximately \$129 million since the prior measurement date, primarily due to the change in actuarial assumptions. There were also investment losses that increased the NPL, partially offset by actuarial experience gains. The



SECTION I – BOARD SUMMARY

investment losses are recognized over five years, and the actuarial gains 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. As of the end of the reporting year, SJCERA and its participating employers would report a Net Pension Liability of \$1,667,546,755, Deferred Inflows of \$23,588,696, and Deferred Outflows of \$257,199,696. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to SJCERA would be \$1,433,935,755 at the end of the measurement year (\$1,667,546,755 + \$23,588,696 - \$257,199,696). 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 December 31, 2016, the collective annual pension expense is \$259,041,963 or 66.04% of covered-employee payroll. This amount is not related to participating employers' contributions to SJCERA (\$159,122,523), but instead represents the change in the net impact on participating employer's Statements of Net Position plus employer contributions (\$1,433,935,755 - \$1,334,016,316 + \$159,122,523). The collective pension expense is significantly 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, such as the impact of assumption changes. 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 San Joaquin County Employees' Retirement Association (SJCERA) and under GASB 68 for the employers that participate in SJCERA. This report is for the use of SJCERA, 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 SJCERA and estimating the price to settle SJCERA's obligations.

In preparing our report, we relied on information (some oral and some written) supplied by SJCERA. 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 SJCERA 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 Timothy S. Doyle, ASA, MAAA Associate Actuary

Anne D. Harper, FSA, EA, MAAA Consulting Actuary



SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.40%.

We have assumed that the employees will continue to contribute to the Plan at the required rates and the employers will continue the historical and legally required practice of contributing to the Plan based on an Actuarially Determined Contribution, reflecting a payment equal to annual Normal Cost, a portion of the expected Administrative Expenses, an amortization payment for the extraordinary losses of 2008 over a closed period (23 years remaining as of January 1, 2016), and an amount necessary to amortize the remaining January 1, 2014 Unfunded Actuarial Liability as a level percentage of payroll over a closed period (17 years remaining as of January 1, 2016). Any subsequent unexpected change in the Unfunded Actuarial Liability (UAL) after January 1, 2014 is amortized over 15 years, with new amortization layers each year. The amortization period for each layer of the remaining UAL will decrease each year.

We have not performed a formal cash flow projection as described under Paragraph 41 of GASB Statement 67. However, Paragraph 43 allows for alternative methods to confirm the sufficiency of the Net Position if the evaluations "can be made with sufficient reliability without a separate projection of cash flows into and out of the pension plan…" In our professional judgment, adherence to the actuarial funding policy described above will result in the pension plan's projected Fiduciary Net Position being greater than or equal to the benefit payments projected for each future period.

Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.



SECTION IV – PROJECTION OF TOTAL PENSION LIABILITY

The Total Pension Liability (TPL) at the end of the measurement year, December 31, 2016, is measured as of a valuation date of January 1, 2016 and projected to December 31, 2016. There were no significant events during the projection period of which we are aware. Because the TPL shown in the prior report was measured as of January 1, 2015 and projected to December 31, 2015 using the discount rate from the 2015 valuation (7.50%), it will not match the amounts measured as of January 1, 2016 that are shown in this exhibit.

The table below shows the projection of the TPL at discount rates equal to the rate used for disclosure and plus and minus one percent from the rate used for disclosure.

Table IV-1 Projection of Collective Total Pension Liability from Valuation to Measurement Date												
Discount Rate		6.40%		7.40%		8.40%						
Valuation Collective Total Pension Liability, 1/1/2016												
Actives	\$	1,816,622,216	\$	1,535,909,012	\$	1,309,904,408						
Deferred Vested		144,749,825		122,572,827		105,221,888						
Retirees		2,617,381,762		2,371,231,677		2,163,639,373						
Total	\$	4,578,753,803	\$	4,029,713,516	\$	3,578,765,669						
Service Cost		118,207,957		92,857,369		73,830,061						
Benefit Payments		194,719,177		194,719,177		194,719,177						
Interest		290,629,853		294,497,171		295,641,341						
Collective Total Pension Liability, 12/31/20)16 \$	4,792,872,436	\$	4,222,348,880	\$	3,753,517,894						



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.

	Increase (Decrease)										
		otal Pension Liability (a)		lan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)						
Balances at 12/31/2015	\$	3,951,582,395	\$	2,413,242,547	\$	1,538,339,848					
Changes for the year:											
Service cost		92,857,369				92,857,369					
Interest		295,197,992				295,197,992					
Changes of benefits		0				0					
Differences between expected and actual experience		(10,171,368)				(10,171,368					
Changes of assumptions		87,601,669				87,601,669					
Contributions - employer				159,122,523		(159,122,523					
Contributions - member				30,117,408		(30,117,408					
Transfer from healthcare plan				293,779		(293,779					
Net investment income				151,114,788		(151,114,788					
Benefit payments		(194,719,177)		(194,719,177)		0					
Administrative expense				(4,369,744)		4,369,744					
Net changes		270,766,485		141,559,577		129,206,908					
Balances at 12/31/2016	\$	4,222,348,880	\$	2,554,802,124	\$	1,667,546,755					

* Numbers may not sum to total due to rounding.

During the measurement year, the collective NPL increased by approximately \$129 million. The service cost and interest cost increased the collective NPL by approximately \$388 million while contributions and investment income offset by administrative expenses decreased the collective NPL by approximately \$336 million.

There were no changes in benefits during the year. The expected long-term return on assets was reduced from 7.50% to 7.40%. This change along with other actuarial assumption changes increased the TPL by approximately \$88 million. Differences between expected and actual experience decreased the NPL by approximately \$10 million.

The TPL as of December 31, 2016 was based upon the same data, actuarial methods and assumptions, and plan provisions as were used in the actuarial valuation as of January 1, 2016, and which are summarized in the Actuarial Valuation Report as of January 1, 2016. The one difference is that the TPL includes an estimate of liabilities for the Post-82 Settlement benefits, which were measured at approximately \$23.3 million as of January 1, 2016. The actuarial assumptions used in the January 1, 2016 valuation were based on the results of an actuarial



SECTION V – GASB 67 REPORTING INFORMATION

experience study for the period January 1, 2013 – December 31, 2015. A summary of the key assumptions is as follows:

- Inflation: 2.90%
- Amortization growth rate: 3.15%
- Salary increases: 3.15% plus merit component
- COLA increases: 2.60%
- Investment rate of return: 7.40%, net of investment expense
- Post-Retirement Mortality: Sex distinct tables from CALPERS' 2013 experience study, with generational mortality improvements projected from 2009 using Projection Scale MP-2015.

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 below shows the sensitivity of the collective NPL to the discount rate.

Table V-2 Sensitivity of Collective Net Pension Liability to Changes in Discount Rate*											
		1% Decrease 6.40%		Discount Rate 7.40%		1% Increase 8.40%					
Total Pension Liability Plan Fiduciary Net Position Collective Net Pension Liability Plan Fiduciary Net Position as a	\$ \$	4,792,872,436 2,554,802,124 2,238,070,312	\$ \$	4,222,348,880 2,554,802,124 1,667,546,755	\$ \$	3,753,517,894 2,554,802,124 1,198,715,770					
Percentage of the Total Pension Liability		53.3%		60.5%		68.1%					

* Numbers may not sum to total due to rounding.

A one percent decrease in the discount rate increases the TPL by approximately 14% and increases the collective NPL by approximately 34%. A one percent increase in the discount rate decreases the TPL by approximately 11% and decreases the collective NPL by approximately 28%.

Required Supplementary Information

The schedules of Required Supplementary Information generally start with information as of the implementation of GASB 67, and eventually will build up to 10 years of information. The schedule on the next 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

Table V-3 Schedule of Changes in Collective Net	Per	nsion Liability	⁷ ar	nd Related F	Rat	ios*	
		FYE 2016		FYE 2015	FYE 2014		
<u>Total Pension Liability</u>							
Service cost (MOY)	\$	92,857,369	\$	94,377,630	\$	90,429,416	
Interest (includes interest on service cost)		295,197,992		280,581,484		266,668,435	
Changes of benefit terms		0		0		0	
Differences between expected and actual experience		(10,171,368)		(25,752,670)		0	
Changes of assumptions		87,601,669		0		0	
Benefit payments, including refunds of member contributions		(194,719,177)		(181,468,913)		(165,870,971)	
Net change in total pension liability	\$	270,766,485	\$	167,737,531	\$	191,226,880	
Total pension liability - beginning		3,951,582,395	3	3,783,844,864	3	3,592,617,98 <u>4</u>	
Total pension liability - ending	\$	4,222,348,880	\$3	3,951,582,395	\$3	3,783,844,864	
Plan fiduciary net position							
Contributions - employer	\$	159,122,523	\$	150,371,556	\$	136,686,133	
Contributions - member		30,117,408		29,026,901		27,367,908	
Transfer from healthcare plan		293,779		378,969		19,968,779	
Net investment income		151,114,788		(47,339,750)		110,728,303	
Benefit payments, including refunds of member contributions		(194,719,177)		(181,468,913)		(165,870,971)	
Administrative expense		(4,369,744)		(4,075,745)		(4,042,986)	
Net change in plan fiduciary net position	\$	141,559,577	\$	(53,106,982)	\$	124,837,166	
Plan fiduciary net position - beginning		2,413,242,547	2	2,466,349,529	2	2,341,512,363	
Plan fiduciary net position - ending	\$	2,554,802,124	\$2	2,413,242,547	\$2	2,466,349,529	
Net pension liability - ending	\$	1,667,546,755	<u>\$ 1</u>	,538,339,848	<u>\$ 1</u>	,317,495,335	
Plan fiduciary net position as a percentage of the total pension liability		60.51%		61.07%		65.18%	
Covered employee payroll	\$	392,227,314	\$	396,136,470	\$	376,030,944	
Net pension liability as a percentage of covered employee payroll		425.15%		388.34%		350.37%	

* Numbers may not sum to total due to rounding.

Because an Actuarially Determined Contribution (ADC) has been calculated historically, the full 10 years of information in the following schedule is required.



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	\$ 159,122,523	\$ 150,371,556	\$ 136,686,133	\$ 119,494,000	\$ 108,063,000	\$ 112,892,000	\$ 104,452,000	\$ 97,806,000	\$ 94,163,000	\$ 85,869,000				
Actuarially Determined Contribution	159,122,523	150,371,556	136,686,133	119,494,000	108,063,000	112,892,000	104,452,000	97,806,000	94,163,000	85,869,000				
Contribution Deficiency/(Excess) Covered-Employee Payroll	<u>\$0</u> \$392,227,314	<u>\$0</u> \$396.136.470	<u>\$0</u> \$376.030.944	<u>\$0</u> \$362,650,568	<u>\$0</u> \$356.419.000	<u>\$0</u> \$367,344,000	<u>\$0</u> \$385,442,000	$\frac{\$ 0}{\$ 377 559 000}$	<u>\$0</u> \$367,361,000	<u>\$0</u> \$340,828,000				
Contributions as a Percentage of Covered-Employee Payroll	40.57%	37.96%	36.35%	32.95%	30.32%	30.73%	27.10%	25.90%	25.63%	25.19%				

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

Notes to Schedule

Valuation Date Timing	1/1/2015 Actuarially determined contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the plan year
Key Methods and Assumptions Use	ed to Determine Contribution Rates for the Year Ending December 31, 2016:
Actuarial cost method	Entry Age Normal
Asset valuation method	Actuarial value: Excess earnings smoothed over five years, 80% / 120% corridor around market value
Amortization method	Level percentage of payroll (18 years as of 1/1/2015) with separate periods for Extraordinary Actuarial Gains or Losses (24 years for
	2008 losses as of 1/1/2015).
Discount rate	7.50%
Amortization growth rate	3.25%
Price inflation	3.00%
Salary increases	3.25% plus merit component based on employee classification and years of service
Mortality	Healthy: RP 2000 Combined Healthy Table, with Generational Projection using Projection Scale BB
	Disabled: RP 2000 Combined Healthy Table, with Generational Projection using Scale BB, set-forward eight years for males and females
A complete description of the method	ods and assumptions used to determine contribution rates for the year ending December 31, 2016 can be found in the January 1, 2015

Actuarial Valuation Report.



SECTION VI – GASB 68 COLLECTIVE INFORMATION

Employers that participate in SJCERA 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 not more than 12 months prior to their reporting date. For employers with a reporting date of June 30, their 2017 disclosures can be based on the December 31, 2016 measurement date.

Because SJCERA is a cost-sharing multiple-employer pension plan, each employer participating in SJCERA 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 SJCERA. As of the measurement date, the remaining service life is 4.96 years, which has been rounded to five years for determining the recognition period.

During the year, there was an experience gain of approximately \$10 million. Approximately \$2 million of that gain was recognized as a reduction 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 deferred inflow of resources as of December 31, 2016 of approximately \$8 million. Unrecognized amounts due to experience gain from prior periods were reductions to the TPL of approximately \$21 million, of which approximately \$5 million was recognized as a decrease in collective pension expense in the current year, leaving a collective deferred inflow of resources as of December 31, 2016 of approximately \$15 million. The combination of unrecognized experience gains this year and from prior periods results in a collective deferred outflow of resources as of December 31, 2016 of approximately \$21 million.

Assumption changes since the last measurement date increased the TPL approximately \$88 million. Approximately \$18 million of that increase was recognized as an increase in 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 December 31, 2016 of approximately \$70 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 \$27 million. Approximately \$5 million of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years, resulting in a deferred outflow of resources as of December 31, 2016 of approximately \$22 million. Unrecognized investment losses from prior periods were approximately \$225 million of which \$60 million was recognized as an increase in collective pension expense in the current year, with \$165 million to be recognized in the future. The combination of unrecognized investment losses this year and unrecognized net investment losses from prior periods results in a collective deferred outflow of resources as of December 31, 2016 of approximately \$187 million.



SECTION VI – GASB 68 COLLECTIVE INFORMATION

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 Inflow		vs of Resources
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual		
experience	\$ 0	\$ 23,588,696
Changes in assumptions	70,081,335	0
Net difference between projected and actual		
earnings on pension plan investments	187,118,361	0
Total	\$ 257,199,696	\$ 23,588,696
Amounts reported as deferred outflows and deferred in pension expense as follows: Measurement year ended June 30:	inflows of resource	s will be recognized
2017	75,260,760	
2018	75,260,762	
2019	62,179,829	
2020	20,909,648	
2021	20,505,010	
Thereafter	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 SJCERA 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 INFORMATION

Table V Calculation of Collective	ension Expe	nse	*
	Measurement	t Ye	
	2016		2015
Change in Net Pension Liability	\$ 129,206,908	\$	220,844,512
Change in Deferred Outflows	(32,274,028)		(172,601,954)
Change in Deferred Inflows	2,986,560		20,602,136
Employer Contributions	 159,122,523		150,371,556
Pension Expense	\$ 259,041,963	\$	219,216,251
Pension Expense as % of Payroll	66.04%		55.34%
Operating Expenses			
Service cost	\$ 92,857,369	\$	94,377,630
Employee contributions	(30,117,408)		(29,026,901)
Transfers	(293,779)		(378,969)
Administrative expenses	 4,369,744		4,075,745
Total	\$ 66,815,926	\$	69,047,505
Financing Expenses			
Interest cost	\$ 295,197,992	\$	280,581,484
Expected return on assets	 (178,232,715)		(184,763,853)
Total	\$ 116,965,277	\$	95,817,631
Changes			
Benefit changes	\$ 0	\$	0
Recognition of assumption changes	17,520,334		0
Recognition of liability gains and losses	(7,184,808)		(5,150,534)
Recognition of investment gains and losses	 64,925,234		59,501,649
Total	\$ 75,260,760	\$	54,351,115
Pension Expense	\$ 259,041,963	\$	219,216,251

* Numbers may not sum to total 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 and other transfers represents the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating SJCERA for the year.



SECTION VI – GASB 68 COLLECTIVE INFORMATION

Second, there are the financing expenses: the interest on the Total Pension Liability less the expected return on assets. Since the discount rate is equal to the long-term expected return on assets, the financing expense is just the interest on the Net Pension Liability.

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 amounts due to assumption changes, gains, or losses on the TPL, and investment gains or losses. The total collective pension expense increased substantially, by about \$40 million. The recognition of changes increased by approximately \$21 million, representing the largest portion of the total increase in pension expense.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

Proportionate Shares

Because SJCERA is a cost-sharing multiple-employer pension plan, each employer participating in SJCERA must reflect a portion of the collective Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows in their financial statements. GASB 68 requires that the Proportionate Share for each employer shall 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 the Plan's GASB 67 reporting requirements, SJCERA is following the advice of the AICPA and making a determination of each employer's Proportionate Share, which will be reviewed by the Plan's auditor.

The following schedules include the proportionate shares for each employer, reflecting a methodology that allocates the NPL and Pension Expense based on each employer's share of the Unfunded Liability amortization payments. In Table VII-1, each employer's amortization share as of December 31, 2016 is determined by multiplying the actual pensionable payroll for the current Plan year by the employer's amortization rate from the most recent actuarial valuation report (the report as of January 1, 2016).

	Det	ermination	of Employe		ible VII-1 rtionate Shai	e (As of De	cember 31, 2	016)			
		ded Liability 4 January 1, 201				Pensiona	ble Payroll				
Employer	General Tier 1	General Tier 2	Safety Tier 1	Safety Tier 2	General Tier 1	General Tier 2	Safety Tier 1	Safety Tier 2	А	mortization Share (Rate x Pay)	Proportionate Share
County of San Joaquin	23.33%	23.33%	46.70%	46.70%	\$ 232,350,347	\$ 78,946,978	\$ 52,732,107	\$ 2,753,441	\$	98,537,417	93.5831%
Superior Courts	23.33%	23.33%	46.70%	46.70%	13,976,926	3,571,046	0	0		4,093,942	3.8881%
Manteca-Lathrop Rural Fire Protection District	23.33%	23.33%	46.70%	46.70%	0	46,829	2,197,184	355,277		1,202,924	1.1424%
Waterloo-Morada Rural Fire Protection District	23.33%	23.33%	46.70%	46.70%	0	36,932	685,919	272,558		456,225	0.4333%
Tracy Public Cemetery District	23.33%	23.33%	46.70%	46.70%	105,363	129,357	0	0		54,760	0.0520%
SJC Mosquito & Vector Control District	23.33%	23.33%	46.70%	46.70%	1,905,124	461,274	0	0		552,081	0.5243%
SJC Historical Society & Museum	23.33%	23.33%	46.70%	46.70%	129,147	0	0	0		30,130	0.0286%
Mountain House Community Services District	23.33%	23.33%	46.70%	46.70%	679,508	848,353	0	0		356,450	0.3385%
Local Agency Formation Commission	23.33%	23.33%	46.70%	46.70%	0	0	0	0		0	0.0000%
San Joaquin County Law Library	23.33%	23.33%	46.70%	46.70%	43,645	0	0	0		10,182	0.0097%
Total					\$249,190,060	\$ 84,040,769	\$ 55,615,210	\$ 3,381,276	\$	105,294,111	100.0000%



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 December 31, 2016.

Schedule of Em	Table VII-2 Schedule of Employers' Proportionate Share of Collective Amounts at December 31, 2016*											
Employer	Proportionate Share	Share of NPL @ 6.40%	Share of NPL @ 7.40%	Share of NPL @ 8.40%	Share of Deferred Outflows	Share of Deferred Inflows	Pension Expense					
County of San Joaquin	93.5831%	\$ 2,094,455,578	\$ 1,560,541,948	\$ 1,121,795,378	\$ 240,695,449	\$ 22,075,033	\$ 242,419,499					
Superior Courts	3.8881%	87,018,412	64,835,885	46,607,268	10,000,181	917,152	10,071,811					
Manteca-Lathrop Rural Fire Protection District	1.1424%	25,567,715	19,050,054	13,694,129	2,938,249	269,477	2,959,295					
Waterloo-Morada Rural Fire Protection District	0.4333%	9,697,559	7,225,480	5,194,035	1,114,446	102,210	1,122,429					
Tracy Public Cemetery District	0.0520%	1,163,797	867,124	623,332	133,744	12,266	134,702					
SJC Mosquito & Vector Control District	0.5243%	11,734,203	8,742,948	6,284,867	1,348,498	123,676	1,358,157					
SJC Historical Society & Museum	0.0286%	640,088	476,918	342,833	73,559	6,746	74,086					
Mountain House Community Services District	0.3385%	7,575,868	5,644,646	4,057,653	870,621	79,848	876,857					
Local Agency Formation Commission	0.0000%	0	0	0	0	0	0					
San Joaquin County Law Library	0.0097%	217,093	161,752	116,275	24,948	2,288	25,127					
Total	100.0000%	\$ 2,238,070,312	\$ 1,667,546,755	\$1,198,715,770	\$ 257,199,696	\$ 23,588,696	\$ 259,041,963					

* Numbers may not sum to total 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 SJCERA's active and inactive members (4.96 years, which has been rounded to five years).

If the proportionate share for an employer increases, a portion of the resulting increase in the NPL will be recognized in the current year as an increase in the employer's pension expense, with the remainder acting as deferred outflows to be recognized in future years' pension expense. The reverse will be true for reductions in the proportionate share; i.e., reductions in the NPL will be recognized as offset to current and future years' pension expense.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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 SJCERA's active and inactive members (4.96 years, which has been rounded to five years).

If an employer contributes an amount greater than their proportionate share of the total contributions, the difference increases the current year pension expense and results in deferred outflows to be recognized in future years' pension expense. The reverse will be true for contributions less than the proportionate share; the difference will be recognized as a decrease to current and future years' pension expense.

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

Sched	Table VII-3 Schedule of Employers' Changes in Proportion and Contribution Differences*													
	Proportion	ate Shares	Impa	ict of Chang	e in Propor	Contributions								
Employer	12/31/2015	12/31/2016	Net Pension Liability	Deferred Outflows		Net Effect	Actual	Proportionate Share	Difference					
County of San Joaquin	93.9134%	93.5831%	\$ (5,081,137)	\$ (742,929)	\$ 68,049	\$(4,406,256)	\$ 148,646,778	\$ 148,911,790	\$ (265,012)					
Superior Courts	3.7061%	3.8881%	2,799,779	409,365	(37,496)	2,427,910	6,602,870	6,186,843	416,027					
Manteca-Lathrop Rural Fire Protection District	1.0494%	1.1424%	1,430,656	209,181	(19,160)	1,240,635	1,715,421	1,817,816	(102,395)					
Waterloo-Morada Rural Fire Protection District	0.4405%	0.4333%	(110,760)	(16,195)	1,483	(96,049)	659,624	689,478	(29,853)					
Tracy Public Cemetery District	0.0382%	0.0520%	212,291	31,040	(2,843)	184,094	81,241	82,744	(1,503)					
SJC Mosquito & Vector Control District	0.5265%	0.5243%	(33,843)	(4,948)	453	(29,348)	846,452	834,279	12,173					
SJC Historical Society & Museum	0.0287%	0.0286%	(1,538)	(225)	21	(1,334)	47,941	45,509	2,432					
Mountain House Community Services District	0.2869%	0.3385%	793,783	116,062	(10,631)	688,352	505,575	538,630	(33,054)					
Local Agency Formation Commission	0.0000%	0.0000%	0	0	0	0	C	0	0					
San Joaquin County Law Library	0.0103%	0.0097%	(9,230)	(1,350)	124	(8,004)	16,621	15,435	1,187					
Total	100.0000%	100.0000%	\$ O	\$ O	\$ O	\$0	\$ 159,122,523	\$ 159,122,523	\$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.

Reconcil	iation of De	ferred Outf	Table VII-4 lows and Inf	lows Due to	Proportion (Change*				
		Deferred	l Outflows		Deferred Inflows					
Employer	12/31/2015	Current Year Net Effect	Recognition	12/31/2016	12/31/2015	Current Year Net Effect	Recognition	12/31/2016		
County of San Joaquin	\$ 0	\$ 0	\$ 0	\$ 0	\$ (3,295,229)	\$ (4,406,256)	\$ (1,744,163)	\$ (5,957,322)		
Superior Courts	3,100,997	2,427,910	1,302,871	4,226,036	0	0	0	0		
Manteca-Lathrop Rural Fire Protection District	431,822	1,240,635	359,677	1,312,780	0	0	0	0		
Waterloo-Morada Rural Fire Protection District	106,019	0	37,070	68,949	0	(96,049)	(19,210)	(76,839)		
Tracy Public Cemetery District	37,548	184,094	49,948	171,694	(53,643)	0	(13,411)	(40,232)		
SJC Mosquito & Vector Control District	71,129	0	20,131	50,998	0	(29,348)	(5,870)	(23,478)		
SJC Historical Society & Museum	6,073	0	1,518	4,555	(737)	(1,334)	(524)	(1,547)		
Mountain House Community Services District	0	688,352	137,670	550,682	(196,750)	0	(62,540)	(134,210)		
Local Agency Formation Commission	0	0	0	0	(212,852)	0	(66,860)	(145,992)		
San Joaquin County Law Library	39,021	0	13,644	25,377	(33,401)	(8,004)	(9,951)	(31,454)		
Total	\$ 3,792,609	\$ 4,540,992	\$ 1,922,529	\$ 6,411,072	\$(3,792,611)	\$(4,540,992)	\$ (1,922,529)	\$(6,411,074)		



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

		Deferred Outflows							Deferred Inflows							
Employer	12/3	1/2015		rrent Year ifference		cognition	12	2/31/2016	12	2/31/2015		rent Year fference	Rec	cognition	12/	/31/2016
County of San Joaquin	\$	0	\$	0	\$	0	\$	0	\$	(425,783)	\$	(265,012)	\$	(178,795)	\$	(512,000
Superior Courts		493,311		416,027		226,707		682,631		0		0		0		(
Manteca-Lathrop Rural Fire Protection District		0		0		0		0		(40,884)		(102,395)		(32,678)		(110,601
Waterloo-Morada Rural Fire Protection District		0		0		0		0		(53,074)		(29,853)		(22,332)		(60,595
Tracy Public Cemetery District		456		0		114		342		(5,859)		(1,503)		(2,350)		(5,012
SJC Mosquito & Vector Control District		0		12,173		2,435		9,738		(7,719)		0		(2,584)		(5,135
SJC Historical Society & Museum		1,098		2,432		781		2,749		0		0		0		(
Mountain House Community Services District		0		0		0		0		(36,331)		(33,054)		(17,648)		(51,737
Local Agency Formation Commission		68,106		0		23,814		44,292		0		0		0		C
San Joaquin County Law Library		6,679		1,187		2,535		5,330		0		0		0		(
Total	\$ 5	69,650	\$	431,818	\$	256,386	\$	745,082	\$	(569,650)	\$	(431,818)	\$	(256,387)	\$	(745,081



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 December 31, 2016*												
Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference						
County of San Joaquin	93.5831%	\$ 0	\$ 65,584,286	\$ 175,111,163	\$ 0	\$ 0						
Superior Courts	3.8881%	0	2,724,832	7,275,349	4,226,036	682,631						
Manteca-Lathrop Rural Fire Protection District	1.1424%	0	800,609	2,137,640	1,312,780	0						
Waterloo-Morada Rural Fire Protection District	0.4333%	0	303,662	810,784	68,949	0						
Tracy Public Cemetery District	0.0520%	0	36,442	97,302	171,694	342						
SJC Mosquito & Vector Control District	0.5243%	0	367,436	981,062	50,998	9,738						
SJC Historical Society & Museum	0.0286%	0	20,043	53,516	4,555	2,749						
Mountain House Community Services District	0.3385%	0	237,225	633,396	550,682	0						
Local Agency Formation Commission	0.0000%	0	0	0	0	44,292						
San Joaquin County Law Library	0.0097%	0	6,798	18,150	25,377	5,330						
Total	100.0000%	\$ 0	\$ 70,081,335	\$ 187,118,361	\$ 6,411,072	\$ 745,082						



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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 December 31, 2016*											
Employer	ProportionateSharesExperience		Assumption Changes	Investment Return	Proportion Change	Contribution Difference					
County of San Joaquin	93.5831%	\$ 22,075,033	\$ 0	\$ 0	\$ 5,957,322	\$ 512,000					
Superior Courts	3.8881%	917,152	0	0	0	0					
Manteca-Lathrop Rural Fire Protection District	1.1424%	269,477	0	0	0	110,601					
Waterloo-Morada Rural Fire Protection District	0.4333%	102,210	0	0	76,839	60,595					
Tracy Public Cemetery District	0.0520%	12,266	0	0	40,232	5,012					
SJC Mosquito & Vector Control District	0.5243%	123,676	0	0	23,478	5,135					
SJC Historical Society & Museum	0.0286%	6,746	0	0	1,547	0					
Mountain House Community Services District	0.3385%	79,848	0	0	134,210	51,737					
Local Agency Formation Commission	0.0000%	0	0	0	145,992	0					
San Joaquin County Law Library	0.0097%	2,288	0	0	31,454	0					
Total	100.0000%	\$23,588,696	\$ O	\$ 0	\$ 6,411,074	\$ 745,081					



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 December 31, 2016*												
Employer	Recognition for Measurement Year Ending 2017 2018 2019 2020 2021 Thereaf											
County of San Joaquin	\$ 68,508,394	\$ 68,537,113	\$ 56,471,946	\$ 18,633,641	\$	0 \$						
Superior Courts	4,455,792	4,425,232	⁽⁴⁾ 30,471,940 3,728,896	1,381,777	Ψ	0	, 0					
Manteca-Lathrop Rural Fire Protection District	1,186,778	1,185,983	1,031,670	466,520		0	0					
Waterloo-Morada Rural Fire Protection District	321,633	317,962	238,733	65,423		0	0					
Tracy Public Cemetery District	73,437	71,886	55,555	47,392		0	0					
SJC Mosquito & Vector Control District	408,704	407,871	334,176	106,193		0	0					
SJC Historical Society & Museum	23,300	23,324	19,745	6,202		0	0					
Mountain House Community Services District	312,240	319,757	321,671	201,841		0	0					
Local Agency Formation Commission	(43,046)	(39,678)	(18,976)	0		0	0					
San Joaquin County Law Library	13,528	11,308	(3,589)	667		0	0					
Total	\$75,260,759	\$75,260,756	\$62,179,827	\$20,909,656	\$	0 \$	6 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.

Table VII-9 Schedule of Employers' Pension Expense for the Measurement Year Ending December 31, 2016*											
Employer	Collective Pension Expense	Change in Proportion	Contribution Difference	Employer Pension Expense	Cha Net Pension Liability	ange in Employe Deferred Outflows	r Deferred Inflows	Employer Contributions	Employer Pension Expense		
County of San Joaquin	\$ 242,419,499	\$ (1,744,163)	\$ (178,795)	\$ 240,496,541	\$ 115,834,693	\$ (29,460,106)	\$ 5,475,177	\$ 148,646,778	\$ 240,496,541		
Superior Courts	10,071,811	1,302,871	226,707	11,601,389	7,823,472	(2,978,570)	153,616	6,602,870	11,601,389		
Manteca-Lathrop Rural Fire Protection District	2,959,295	359,677	(32,678)	3,286,294	2,906,716	(1,458,838)	122,995	1,715,421	3,286,294		
Waterloo-Morada Rural Fire Protection District	1,122,429	17,860	(22,332)	1,117,957	449,093	(86,579)	95,818	659,624	1,117,957		
Tracy Public Cemetery District	134,702	36,537	(2,236)	169,003	279,478	(181,854)	(9,862)	81,241	169,003		
SJC Mosquito & Vector Control District	1,358,157	14,261	(149)	1,372,269	643,588	(153,871)	36,100	846,452	1,372,269		
SJC Historical Society & Museum	74,086	994	781	75,861	35,415	(9,138)	1,644	47,941	75,861		
Mountain House Community Services District	876,857	75,130	(17,648)	934,339	1,231,149	(775,992)	(26,394)	505,575	934,339		
Local Agency Formation Commission	0	(66,860)	23,814	(43,046)	0	23,814	(66,860)	0	(43,046)		
San Joaquin County Law Library	25,127	3,693	2,535	31,355	3,303	13,211	(1,781)	16,621	31,355		
Total	\$ 259,041,963	\$0	\$ (1)	\$ 259,041,962	\$ 129,206,908	\$ (35,067,922)	\$5,780,453	\$ 159,122,523	\$ 259,041,962		



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

Table VII-10 Schedule of Employers' RSI Information at December 31, 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	Contractually Required Contribution	Actual Contributions	Contribution Deficiency	Contributions as a % of Payroll		
County of San Joaquin	93.5831%	\$ 1,560,541,948	\$ 366,782,873	425.5%	60.5%	\$ 148,646,778	\$ 148,646,778	\$ 0	40.5%		
Superior Courts	3.8881%	64,835,885	17,547,971	369.5%	60.5%	6,602,870	6,602,870	0	37.6%		
Manteca-Lathrop Rural Fire Protection District	1.1424%	19,050,054	2,599,290	732.9%	60.5%	1,715,421	1,715,421	0	66.0%		
Waterloo-Morada Rural Fire Protection District	0.4333%	7,225,480	995,408	725.9%	60.5%	659,624	659,624	0	66.3%		
Tracy Public Cemetery District	0.0520%	867,124	234,720	369.4%	60.5%	81,241	81,241	0	34.6%		
SJC Mosquito & Vector Control District	0.5243%	8,742,948	2,366,398	369.5%	60.5%	846,452	846,452	0	35.8%		
SJC Historical Society & Museum	0.0286%	476,918	129,147	369.3%	60.5%	47,941	47,941	0	37.1%		
Mountain House Community Services District	0.3385%	5,644,646	1,527,861	369.4%	60.5%	505,575	505,575	0	33.1%		
Local Agency Formation Commission	0.0000%	0	0	N/A	60.5%	0	0	0	N/A		
San Joaquin County Law Library	0.0097%	161,752	43,645	370.6%	60.5%	16,621	16,621	0	38.1%		
Total	100.0000%	\$ 1,667,546,755	\$ 392,227,314	425.1%	60.5%	\$ 159,122,523	\$ 159,122,523	\$0	40.6%		



APPENDIX A – 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 A – 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.

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. This measurement generally is not appropriate for estimating the cost to settle the Plan's liabilities.





Classic Values, Innovative Advice