



Board of Trustees
San Luis Obispo County Pension Trust
1000 Mill Street
San Luis Obispo, CA 93408

Date: June 17, 2013

To: Board of Trustees

From: Tony Petruzzi - Executive Secretary
Carl Nelson – Deputy Executive Secretary

**Agenda Item Number 9: January 1, 2013 Actuarial Valuation – Final Report
Incorporating Board of Trustee’s Direction**

Recommendation:

Accompanying this memo is the draft January 1, 2013 Annual Actuarial Valuation prepared by Gabriel Roeder Smith.

It is recommended that your Board take the following actions:

1. Approve the January 1, 2013 Actuarial Valuation.
2. Approve the transfer of \$13,527,064 from the Current Reserve to the Retiree Reserve as recommended by GRS in Comment H of the Valuation.
3. Approve the recommendation of the plan actuary to increase the current level of County Appropriation and Employee Contribution rates such that a Total Contribution Rate of 35.18% effective January 1, 2013 is received - an increase of 0.94%. This increase subject to delayed implementation as may be requested by the Plan Sponsor with adjustments to the rate as calculated by the actuary to account for the deferred implementation.

Discussion:

Leslie Thompson of Gabriel Roeder Smith and Company will present:

- GRS's response to the findings of the Actuarial Audit of the January 1, 2012 Annual Actuarial Valuation performed by Cheiron and reported to the Board of Trustees at the May 20, 2013 meeting. A number of recommendations from that Actuarial Audit will be incorporated in the January 1, 2014 Actuarial Experience Study and the January 1, 2014 Annual Actuarial Valuation.
- The results of the January 1, 2013 Actuarial Valuation. Once your Board has approved her recommendations, the final Actuarial Valuation will be issued.

The valuation results indicate that it is necessary to increase the current level of County Appropriation and Employee Contribution rates such that a Total Contribution Rate of 35.18% effective January 1, 2013 is received. The Charged Rate of Total Contribution for 2012 was 34.24%, so an increase of 0.94% in the Total Contribution Rate will be necessary. The Total Contribution Rate to be charged for deferred effective dates (e.g., January 1, 2014 or July 1, 2014) will be higher to actuarially adjust for the deferred implementation date as may be requested by the plan sponsor.

As noted, Ms. Thompson will be in attendance to present her findings and hear questions from your Board.

Sincerely,

Tony Petruzzi
Executive Secretary

Carl Nelson
Deputy Executive Secretary

SAN LUIS OBISPO COUNTY PENSION TRUST
ACTUARIAL VALUATION REPORT
FOR THE YEAR BEGINNING JANUARY 1, 2013



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June 18, 2013

San Luis Obispo County Pension Trust
1000 Mill Street
San Luis Obispo, CA 93408

Members of the Board:

Submitted in this report are the results of the regular Annual Actuarial Valuation as of January 1, 2013 of the San Luis Obispo County Pension Trust (SLOCPT). The valuation is intended to provide a measure of the funding status of the pension trust. This valuation provides information relative to the employer appropriation rates for the County's fiscal year beginning July 1, 2013.

The member statistical data on which the valuation was based was furnished by the staff of the SLOCPT, together with pertinent data on financial operations. Data was reviewed for reasonableness, but was not audited by the actuary.

The valuation results are developed using the Entry Age Cost Method. Under this method, normal cost is calculated as a constant percentage of the member's year-by-year projected, covered pay. The amortization of the unfunded actuarial accrued liabilities is done as a level percent of payroll over 27 years (30 year closed amortization period beginning with the January 1, 2010 valuation) for funding computations. In addition, the 2008 asset losses are recognized over 10 years, with recognition accelerated if a contribution margin develops.

In the January 1, 2013 valuation, the Trust's funded status decreased from 76.7% to 76.4%. The total annual required contribution is 35.18% as of January 1, 2013, compared to total charged rates of 34.24%. Therefore, due to the difference between the charged rate and the Annual Required Contribution an increase in the charged rates is recommended at this time.

The actuarial calculations were prepared for purposes of complying with the requirements of Statements No. 25 and No. 27 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the SLOCPT's financial reporting requirements may produce significantly different results. This report may be provided to parties other than the SLOCPT only in its entirety and only with the permission of the SLOCPT.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. In our opinion, the combined operation of the assumptions and the methods applied in this valuation fairly represent past and anticipated future experience of the SLOCPT and meet the parameters required by GASB Statement No. 25. To the best of our

knowledge, the information supplied in this actuarial valuation is complete and accurate. The senior consultant is a member of the American Academy of Actuaries and meets the qualification requirements to render the actuarial opinion contained herein. We look forward to reviewing this report at your next meeting and to answering any questions.

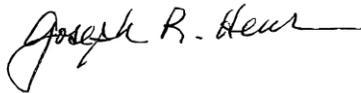
The cooperation of the Pension Trust Office in furnishing materials requested for this valuation is deeply acknowledged with appreciation.

Respectfully submitted,

Gabriel, Roeder, Smith & Company



Leslie L. Thompson, FSA, FCA, EA, MAAA
Senior Consultant



Joseph R. Herm
Senior Analyst

SECTION A

VALUATION COMMENTS & RECOMMENDATIONS

VALUATION COMMENTS & RECOMMENDATIONS

COMMENT A: This is the second valuation that includes members hired under the Tier 2 provisions. As of January 1, 2012, there are 245 Miscellaneous members and 30 Safety members hired under these provisions. As of January 1, 2013, Tier 2 is effectively closed since all new hires will enter under the provisions of Tier 3.

COMMENT B: There were no assumption or benefit provision changes since the prior valuation. The Tier 3 provisions (aka AB 340) have been adopted for members hired on or after January 1, 2013. Since there are no members in Tier 3 as of the valuation date of January 1, 2013, the provisions are not reflected in this report. The provisions and the impact of new members entering Tier 3 will begin to appear in the next valuation.

COMMENT C: The total normal cost decreased from 23.71% to 23.38% reflecting the addition of Tier 2 members. Employee contribution rates were unchanged since the prior valuation but the weighted average employee rate decreased from 14.79% to 14.61% as more Tier 2 members entered the plan. The County share of the normal cost decreased from 8.92% to 8.77%. Overall, the computed County Employer actuarial appropriation rate for the Pension Trust increased from 19.84% to 20.57% effective for the fiscal year beginning July 1, 2013. The funded ratio under the Entry Age Normal funding method decreased from 76.7% to 76.4%.

COMMENT D: The total charged rate for 2012 was 34.24%. The total annual required contribution is 35.18% as of January 1, 2013. Since the margin between the charged rate and the required rate has grown to 0.94%, an increase in the charged rate is recommended.

COMMENT E: As of the January 1, 2010 valuation, the total required contribution was based on smoothing the 2008 asset loss over a 10 year schedule. The funding policy of the Board is to accelerate the remaining deferred losses from the 2008 asset loss each valuation if a contribution margin develops between the actuarially determined rate and the charged rate. As of January 1, 2011, a margin had developed and an additional \$10 million of the 2008 loss was accelerated and recognized in the 2011 valuation. Since a margin does not exist this year, no additional acceleration has been recognized as of the January 1, 2013 valuation.

COMMENT F: The plan experienced a loss from investments and a net loss from demographic sources. Key sources of the gains and losses were:

- An actuarial loss of \$11.5 million from investments (described as the return on the actuarial value of assets less than the assumed 7.25% yield). The actuarial asset yield of 6.16% did not exceed the 7.25% benchmark for the prior year. In addition, the actuarial value of assets is 111% of the market value of assets, and there are \$108.7 million in deferred losses yet to be recognized. The return on the market value of assets was 12.02% using the same methodology as used to calculate the 6.16% return on the actuarial value of assets. The return on the market value of assets as calculated by the SLOCPT investment consultants was 12.8%.

VALUATION COMMENTS & RECOMMENDATIONS

- A \$13.6 million gain due to compensation increases for continuing active members being less than the expected increase. A continuing active member is a member who was active as of the last valuation date, and is active as of this valuation date. The average increase for continuing active members was 2.12%. The assumption for individual pay increases was changed as part of the Experience Study based on prior experience and the current economic environment for lower future expected increases.
- A \$7.5 million loss due to retirement. This loss reflects a lesser number of retirements than anticipated.
- A \$4.8 million loss on retiree mortality, meaning that retired participants in pay status lived slightly longer than assumed.

COMMENT G: The Pension Trust adopted a closed amortization period of 30 years as of January 1, 2010. Payments on the unfunded accrued liability are amortized over 27 years as of the January 1, 2013 valuation.

COMMENT H: We recommend that the reserve for Retirees and Beneficiaries be updated to reflect the computed liability in the most recent valuation. With the Trust's current accounting (the County pays for all COLA benefits), this can only be done for non-COLA benefits. The COLA reserve includes amounts attributable to current active and deferred vested members. According to the financial statements as of December 31, 2012, the reserve for retirees and beneficiaries is \$587,676,329. The non-COLA liabilities calculated were \$601,203,393. Accordingly, we recommend that the Trust transfer this \$13,527,064 difference out of the Current Reserve and back into the Retiree Reserve.

COMMENT I: Member rates change regularly as a result of collective bargaining negotiations. See Appendix A in Section L for a complete description of these rates for all bargaining units.

COMMENT J: Total pension costs also include the debt financing related to the 2003 pension obligation bond of \$135 million. The annual debt financing payment for calendar year 2013 is approximately \$8.7 million -- 5.30% of active member payroll (based on the payment made June 2012). When this percent is added to the valuation computed appropriation rate of 20.57%, the total rate of 25.87% more accurately reflects total County pension costs.

COMMENT K: Barring continued recovery in the equity markets to offset the losses realized in 2008 and 2011, upward pressure will continue to exist on the required contribution rate. There is a recommended rate increase of 0.94% for the 2013 valuation year.

SECTION B

EXECUTIVE SUMMARY AND RATE RECONCILIATION

EXECUTIVE SUMMARY

Valuation Date:	January 1, 2013	January 1, 2012
	(1)	(2)
Membership		
• Number of		
- Active Members	2,495	2,446
- Retirees and Beneficiaries	2,147	2,040
- Inactive, Vested	445	449
- Total	5,087	4,935
• Total Payroll (000s)	\$ 164,299	\$ 161,055
• Average Pay	\$ 65,851	\$ 65,844
Assets		
• Market Value (000s)	\$ 1,013,436	\$ 906,350
• Actuarial Value (000s)	\$ 1,122,151	\$ 1,057,922
• Return on Market Value	12.02%	2.74%
• Return on Actuarial Value	6.16%	5.53%
Actuarial Liabilities and Funded Ratio		
• Actuarial Accrued Liability (000s)		
- Active Members	\$ 623,662	\$ 618,113
- Retirees and Beneficiaries	\$ 788,046	\$ 701,729
- Inactive, Vested	\$ 56,293	\$ 58,707
- Total	\$ 1,468,001	\$ 1,378,549
• Unfunded Actuarial Accrued Liability (UAAL) (000s)	\$ 345,850	\$ 320,627
• Funded Ratio	76.4%	76.7%
• UAAL based on Market Value	\$ 454,565	\$ 472,199
• Funded Ratio Based on Market Value	69.0%	65.7%
Annual Required Contribution		
• Total Normal Cost	23.38%	23.71%
• Member Contributions	14.61%	14.79%
• County Normal Cost	8.77%	8.92%
• Amortization Payment	11.80%	10.92%
• Total County Cost (ARC)	20.57%	19.84%
• Total Combined ARC	35.18%	34.63%

RECONCILIATION OF CHARGED RATES AND TOTAL ARC

Valuation Date	January 1, 2013	January 1, 2012
Total Annual Required Contribution (ARC)	35.18%	34.63%
County Charged Rate	18.87%	18.70%
Member Charged Rate	<u>15.37%</u>	<u>15.90%</u>
Total Charged Rate	34.24%	34.60%
Total Charged Rate as of July 1	34.24%	34.60%
Difference between the ARC and the Charged Rate	0.94%	0.03%
Recommended Rate Increase as of July 1	0.94%	0.00%

SECTION C

FUNDING PROGRESS

FUNDING OBJECTIVE

The funding objective of the Pension Trust is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately, level from year to year and will not have to be increased for future generations of citizens.

CONTRIBUTION RATES

The Pension Trust is supported by member contributions, County appropriations, and investment income from Pension Trust assets.

Contributions and appropriations which satisfy the funding objective are determined by the annual actuarial valuation and are intended to finance over a period of future years the actuarial present value of benefits not covered by valuation assets as a level percentage of future payroll. The allocation of the contributions and appropriations between the County and employees is determined by negotiations between the County and the recognized bargaining units.

Computed contributions and appropriations as of the January 1, 2013 valuation are shown in the following section.

FUNDING POLICY

The policy adopted by the Board is to recommend the full funding of the Total Annual Required Contribution. This includes a 30 year closed amortization of the unfunded accrued liability. In addition, the 2008 asset loss was originally amortized over 10 years, with the understanding that, as contribution margin develops (the contribution margin is the difference between the charged rate and the total annual required contribution) then the recognition of the remaining deferred losses from the 2008 asset loss will be accelerated. As of the January 1, 2011 valuation, an additional \$10 million of the deferred losses was accelerated and recognized and the remaining losses will continue to be smoothed over the original 10 year period (6 years remaining as of January 1, 2013).

Schedule of Recognition of 2008 Asset Loss

Plan Year	Original Schedule			Updated Schedule		
	Remaining Loss at Beginning of Plan Year	Amount Recognized	Remaining Loss at End of Plan Year	Remaining Loss at Beginning of Plan Year	Amount Recognized	Remaining Loss at End of Plan Year
2009	\$ 299,363,960	\$ 29,936,396	\$ 269,427,564	\$ 299,363,960	\$ 29,936,396	\$ 269,427,564
2010	269,427,564	29,936,396	239,491,168	269,427,564	29,936,396	239,491,168
2011	239,491,168	29,936,396	209,554,772	239,491,168	29,936,396	199,554,772
2012	209,554,772	29,936,396	179,618,376	199,554,772	29,936,396	169,618,376
2013	179,618,376	29,936,396	149,681,980	169,618,376	29,936,396	139,681,980
2014	149,681,980	29,936,396	119,745,584	139,681,980	29,936,396	109,745,584
2015	119,745,584	29,936,396	89,809,188	109,745,584	29,936,396	79,809,188
2016	89,809,188	29,936,396	59,872,792	79,809,188	29,936,396	49,872,792
2017	59,872,792	29,936,396	29,936,396	49,872,792	29,936,396	19,936,396
2018	29,936,396	29,936,396	0	19,936,396	19,936,396	0

SECTION D

VALUATION RESULTS

ELEMENTS OF NORMAL COST

January 1, 2013

MISCELLANEOUS VALUATION GROUPS

	<u>Other</u>	<u>Management</u>				<u>SLOCEA</u>				<u>TOTAL MISC.</u>
	<u>BU #21-22</u>	<u>Non Court</u>	<u>Court BU #18</u>	<u>Court BU #24-27</u>	<u>Total Mgmt</u>	<u>Non Court</u>	<u>Court BU #19</u>	<u>Court BU #20</u>	<u>Total SLOCEA</u>	
Service Retirement	16.07%	18.90%	21.73%	22.68%	19.24%	17.57%	16.64%	15.33%	17.47%	17.99%
Vesting	2.65%	2.85%	1.89%	2.19%	2.78%	2.41%	2.74%	2.68%	2.42%	2.53%
Death-In-Service	0.12%	0.22%	0.16%	0.20%	0.22%	0.17%	0.09%	0.09%	0.17%	0.18%
Disability	0.28%	0.31%	0.28%	0.31%	0.31%	0.27%	0.32%	0.28%	0.27%	0.28%
Refunds	<u>1.84%</u>	<u>1.64%</u>	<u>1.36%</u>	<u>1.20%</u>	<u>1.60%</u>	<u>1.61%</u>	<u>1.14%</u>	<u>1.48%</u>	<u>1.60%</u>	<u>1.60%</u>
Total Normal Cost	20.96%	23.92%	25.42%	26.58%	24.15%	22.03%	20.93%	19.86%	21.93%	22.58%
Less										
Employee Contribution Rate	14.01%	14.64%	14.30%	12.91%	14.52%	14.19%	10.68%	11.18%	14.04%	14.19%
Equals										
County Normal Cost	6.95%	9.28%	11.12%	13.67%	9.63%	7.84%	10.25%	8.68%	7.89%	8.39%

ELEMENTS OF NORMAL COST

January 1, 2013

	Probation			Safety				GRAND TOTAL	
	Mgmt	Non	Total	Management		Non-Mgmt			Total
		Mgmt	Probation	Sworn	Non-Sworn	Sworn	Non-Sworn		Safety
Service Retirement	14.01%	15.21%	15.11%	26.57%	18.32%	21.75%	21.17%	21.61%	18.40%
Vesting	5.40%	4.63%	4.70%	1.87%	2.55%	2.32%	1.95%	2.14%	2.56%
Death-In-Service	0.28%	0.18%	0.19%	0.42%	0.18%	0.35%	0.28%	0.32%	0.20%
Disability	0.27%	0.28%	0.28%	3.23%	2.56%	2.64%	2.86%	2.76%	0.65%
Refunds	<u>3.44%</u>	<u>2.77%</u>	<u>2.82%</u>	<u>1.22%</u>	<u>1.30%</u>	<u>1.20%</u>	<u>0.83%</u>	<u>1.04%</u>	<u>1.57%</u>
Total Normal Cost	23.40%	23.07%	23.10%	33.31%	24.91%	28.26%	27.09%	27.87%	23.38%
				Less					
Employee Contribution Rate	18.04%	16.81%	16.92%	21.15%	17.31%	18.07%	13.95%	16.31%	14.61%
				Equals					
County Normal Cost	5.36%	6.26%	6.18%	12.16%	7.60%	10.19%	13.14%	11.56%	8.77%

**COMPUTED COUNTY APPROPRIATION RATES
TOTAL (EXPRESSED AS PERCENTS OF ACTIVE PAYROLL)**

County Appropriations	Miscellaneous		Probation	
	2013	2012	2013	2012
Total normal costs	8.39%	8.73%	6.18%	5.92%
Amortization (27 years)	<u>11.27%</u>	<u>10.36%</u>	<u>10.59%</u>	<u>9.83%</u>
Total Cost	19.66%	19.09%	16.77%	15.75%
Unfunded Liability (000's)	\$ 268,009	\$ 248,094	\$ 13,146	\$ 11,838

County Appropriations	Safety		Total Plan	
	2013	2012	2013	2012
Total normal costs	11.56%	11.20%	8.77%	8.92%
Amortization (27 years)	<u>15.14%</u>	<u>14.40%</u>	<u>11.80%</u>	<u>10.92%</u>
Total Cost	26.70%	25.60%	20.57%	19.84%
Unfunded Liability (000's)	\$ 64,695	\$ 60,696	\$ 345,850	\$ 320,627

Breakdown of Total normal cost between the Basic Allowance and Cost of Living

<u>County Appropriations</u>	<u>Misc.</u>	<u>Prob.</u>	<u>Safety</u>	<u>2013</u>	<u>2012</u>
Basic Allowance	3.32%	0.75%	4.41%	3.36%	<u>3.38%</u>
Cost of Living	<u>5.07%</u>	<u>5.43%</u>	<u>7.15%</u>	<u>5.41%</u>	<u>5.54%</u>
Total Normal Costs	8.39%	6.18%	11.56%	8.77%	8.92%

UNFUNDED ACTUARIAL ACCRUED LIABILITY
DECEMBER 31, 2012

The actuarial gains or losses realized in the operation of the Pension Trust provide an experience test. Gains and losses are expected to cancel each other over a period of years (in the absence of double-digit inflation) and sizable year-to-year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below.

(1) UAAL at beginning of the year	\$320,627,439
(2) County normal cost	14,586,206
(3) County contributions made during year	30,942,038
(4) Interest accrual $[(1) + ((2) - (3))/2] * 7.25\%$	22,652,590
(5) Increase in UAAL due to assumption changes	0
(6) Increase in UAAL due to provision changes	0
(7) Expected UAAL at end of year	\$326,924,197
$[(1) + (2) - (3) + (4) + (5) + (6)]$	
(8) Actual UAAL at end of year	\$345,850,139
(9) Experience Gain/(Loss): (7) - (8)	(\$18,925,942)
(10) Gain (loss) as percentage of actuarial accrued liabilities at beginning of year	
\$1,378,549,314	-1.37%

Estimated Components of Experience Gain/(Loss)

Gain/(Loss) due to compensation increases	\$13,553,259
Gain/(Loss) due to investment experience	(11,501,412)
Gain/(Loss) due to retirement incidence	(7,505,543)
Gain/(Loss) due to termination experience	(1,436,876)
Gain/(Loss) due to active mortality experience	1,805,876
Gain/(Loss) due to disability experience	(291,873)
Gain/(Loss) due to retiree & beneficiary mortality experience and miscellaneous retiree data changes	(4,797,913)
Gain/(Loss) due to new members	(1,676,783)
Gain/(Loss) due to active data changes and miscellaneous factors	(7,074,677)
Total Estimated Experience Gain/(Loss)	<u>(\$18,925,942)</u>

EXPERIENCE GAIN (LOSS) – COMPARATIVE SCHEDULE
JANUARY 1, 2013

Percentage of Accrued Liabilities

Valuation Date	Actuarial Gain (Loss)	Beginning of Year Accrued Liabilities	Gain (Loss) Percentage Attributable to Investments	Gain (Loss) Percentage Not Attributable to Investments	Total Gain (Loss) Percentage
1/1/2002	(\$7,090,396)	\$446,333,883	(0.30)%	(1.29)%	(1.59)%
1/1/2003	(31,319,034)	492,795,245	(2.79)%	(3.57)%	(6.36)%
1/1/2004	(19,544,002)	556,320,953	(1.45)%	(2.06)%	(3.51)%
1/1/2005	(10,820,472)	642,734,312	(1.15)%	(0.53)%	(1.68)%
1/1/2006	(36,097,371)	715,084,943	(1.34)%	(3.71)%	(5.05)%
1/1/2007	(12,682,702)	831,289,683	0.01 %	(1.54)%	(1.53)%
1/1/2008	(8,713,157)	962,827,691	0.50 %	(1.40)%	(0.90)%
1/1/2009	(39,999,218)	1,057,124,348	(3.09)%	(0.70)%	(3.78)%
1/1/2010	3,281,208	1,150,214,145	(1.55)%	1.84 %	0.29 %
1/1/2011	3,596,270	1,216,153,057	(0.55)%	0.85 %*	0.30 %
1/1/2012	12,704,448	1,282,058,335	(1.73)%	2.72 %	0.99 %
1/1/2013	(18,925,942)	1,378,549,314	(0.83)%	(0.54)%	(1.37)%

*The Board elected to accelerate recognition of \$10 million of the 2008 loss base for the year ending December 31, 2010.

ACTUARIAL BALANCE SHEET
JANUARY 1, 2013

Present Resources and Expected Future Resources

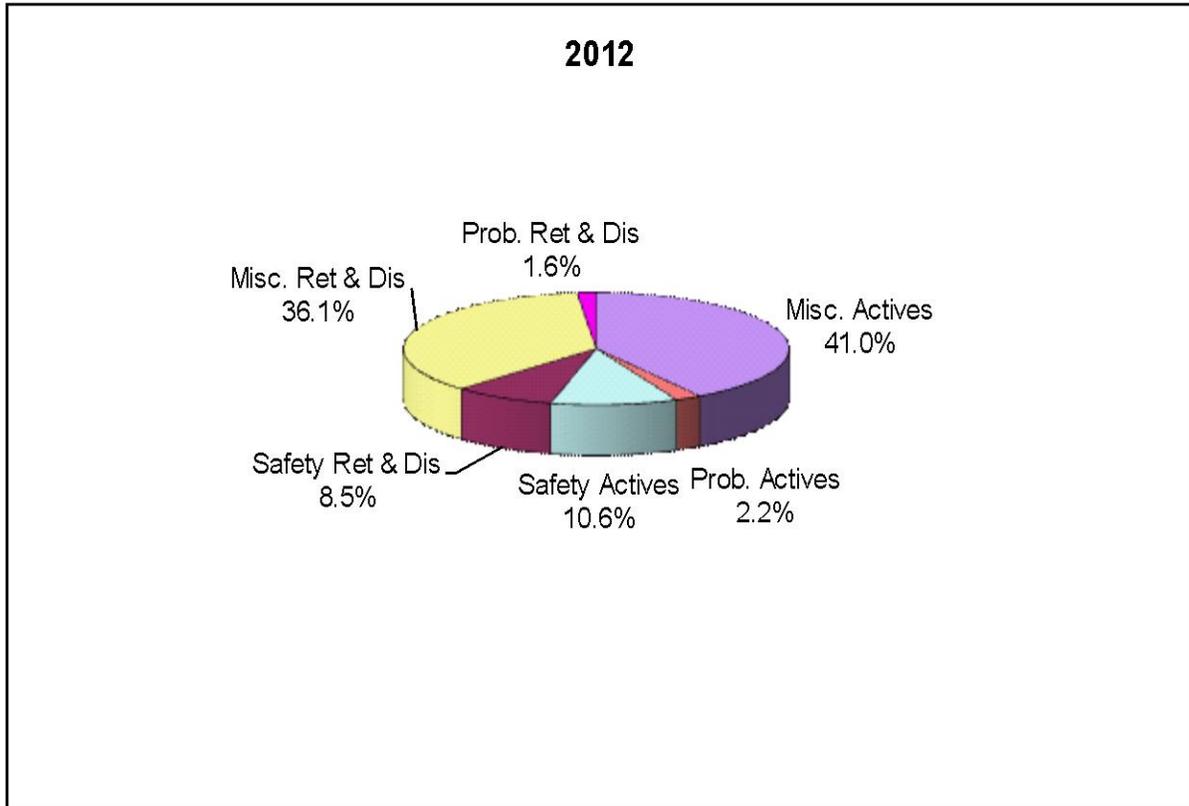
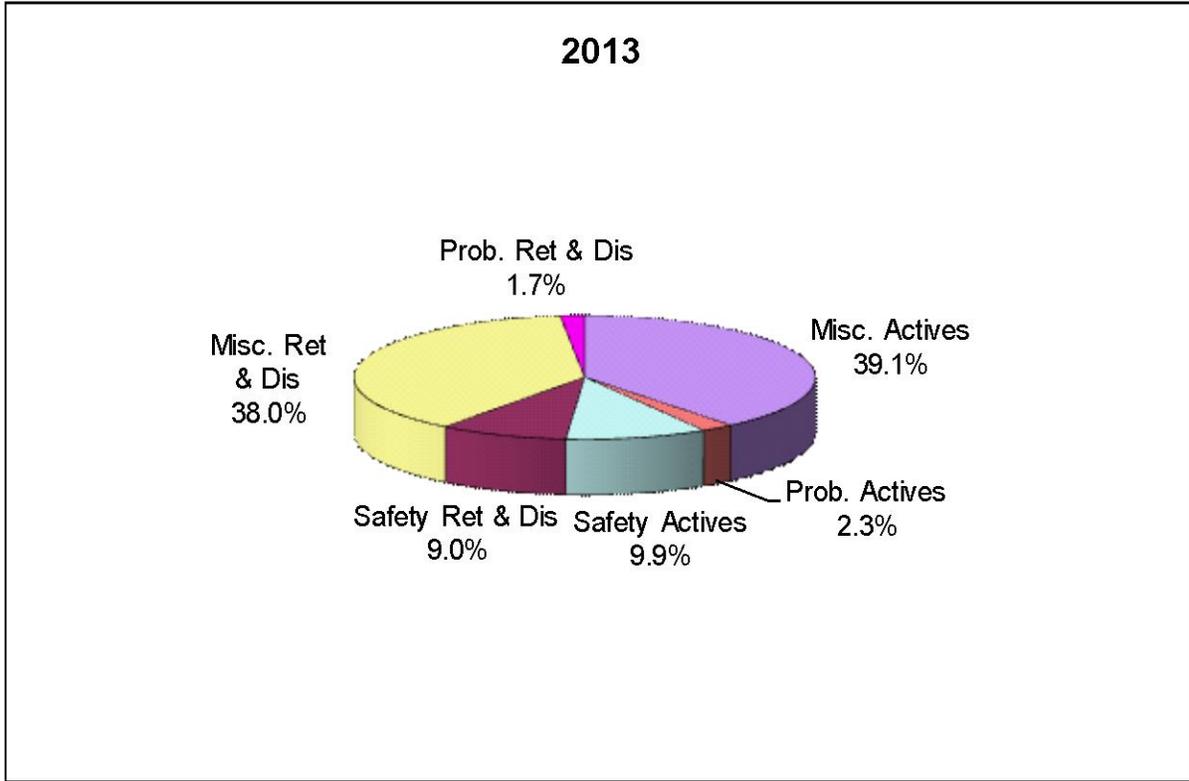
	(thousands*)			
	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand Total</u>
A. Actuarial value of system assets	\$869,586	\$42,654	\$209,911	\$1,122,151
B. Present value of expected future County appropriations				
1. Unfunded past service	268,009	13,146	64,695	345,850
2. Expected future service	<u>69,279</u>	<u>3,183</u>	<u>22,416</u>	<u>94,878</u>
3. Total future County appropriations	\$337,288	\$16,329	\$87,111	\$440,728
C. Present value of expected future member contributions	<u>131,399</u>	<u>9,378</u>	<u>33,058</u>	<u>173,835</u>
D. Total Present and Expected Future Resources	<u>\$1,338,273</u>	<u>\$68,361</u>	<u>\$330,080</u>	<u>\$1,736,714</u>

Present Value of Expected Future Benefit Payments and Reserve

	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand Total</u>
A. To Retirees and Beneficiaries	\$608,999	\$28,184	\$150,863	\$788,046
B. To Deferred and Reciprocal	50,463	1,001	4,828	56,293
C. Active members				
1. Service rendered prior to valuation date	478,133	26,615	118,915	623,662
2. Expected future service	<u>200,678</u>	<u>12,561</u>	<u>55,474</u>	<u>268,713</u>
D. Total Present Value of Expected Future Benefits	<u>\$1,338,273</u>	<u>\$68,361</u>	<u>\$330,080</u>	<u>\$1,736,714</u>

* Grand Total may not add due to rounding.

PRESENT VALUE OF BENEFIT ALLOCATION



FUNDING PROGRESS INDICATORS HISTORIC COMPARISON

(\$ in Thousands)

Valuation Date	Valuation Assets ¹	Actuarial Liability ¹	Unfunded		Member Payroll	Ratio to Payroll
			Funded Ratio	Actuarial Liability		
12/31/2001	\$404,751	\$492,795	92.1%	\$88,044	\$120,637	73.0%
12/31/2002	430,351	556,321	77.4%	125,970	131,997	95.4%
12/31/2003	604,808	619,257	97.7%	14,449	136,364	10.6%
12/31/2003 ⁵	604,808	637,075	94.9%	32,267	136,364	23.7%
12/31/2003 ^{2,5}	604,808	642,734	94.1%	37,926	136,364	27.8%
12/31/2004 ²	651,751	713,683	91.3%	61,932	135,189	45.8%
12/31/2004 ⁶	651,751	715,085	91.1%	63,334	135,189	46.8%
12/31/2005	700,060	803,124	87.2%	103,064	143,902	71.6%
12/31/2005 ⁷	700,060	818,864	85.5%	118,804	143,902	82.6%
12/31/2005 ^{2,7}	700,060	831,290	84.2%	131,230	143,902	91.2%
12/31/2006	759,758	912,458	83.3%	152,700	152,117	100.4%
12/31/2006 ²	759,758	920,285	82.6%	160,527	152,117	105.5%
12/31/2006 ^{2,8}	759,758	994,861	76.4%	235,103	152,117	154.6%
12/31/2006 ⁹	759,758	962,828	78.9%	320,627	152,117	210.8%
12/31/2007	829,764	1,055,868	78.6%	226,104	162,436	139.2%
12/31/2007 ¹⁰	829,764	1,057,124	78.5%	227,360	162,436	140.0%
12/31/2008	875,602	1,150,214	76.1%	274,612	168,677	162.8%
12/31/2009	937,279	1,216,153	77.1%	278,874	160,444	173.8%
12/31/2010	1,000,169	1,282,058	78.0%	281,889	161,783	174.2%
12/31/2011	1,057,922	1,334,545	79.3%	276,623	161,055	171.8%
12/31/2011 ^{2,11}	1,057,922	1,378,549	76.7%	320,627	161,055	199.1%
12/31/2012 ¹¹	1,122,151	1,468,001	76.4%	345,850	164,299	210.5%

¹ Assets and liabilities do not include Employee Additional Reserve amounts (in \$) of:

12/31/2012	\$6,606,149	12/31/2007	\$11,507,242	12/31/2003	\$13,558,875
12/31/2011	7,462,567	12/31/2006	12,181,467	12/31/2002	13,510,256
12/31/2010	8,558,571	12/31/2005	12,773,875	12/31/2001	13,734,603
12/31/2009	9,341,043	12/31/2004	13,601,745	12/31/2000	13,584,256
12/31/2008	10,397,974				

² Reflects assumption changes.

³ Reflects change to Entry Age Normal Funding.

⁴ Reflects benefit increases for most Miscellaneous and Probation active members.

⁵ Reflects benefit increases for all management employees, excluding Court management.

⁶ Reflects benefit increases for Safety management; and Court employees in BU #19 and BU #24-#27.

⁷ Reflects benefit increases for Safety non-management; Miscellaneous "Other" and SLOCEA Non-Court.

⁸ Reflects benefit increases for Probation and Safety members.

⁹ Reflects assumption change to 7.75%.

¹⁰ Reflects benefit increases for Miscellaneous Court employees in BU #18 and BU #20.

¹¹ Reflects benefit provisions under Tier 2 for certain new members.

SECTION E

SUMMARY OF BENEFIT PROVISIONS

**BRIEF SUMMARY OF BENEFIT PROVISIONS EVALUATED
EFFECTIVE JANUARY 1, 2013**

1. Membership Requirements - All regular permanent employees of the County or district covered by the County or agencies that have contracted with the County to participate in the Pension Trust.
2. Final Compensation - Highest one-year average for employees in Tier 1 and “Pick Up” included as compensation for various management employees. Bargaining Units #4, 7, 8, 9, 10, 11, 12, 17, 24-27

Pick Up Percentage included in final average compensation:

<u>Bargaining Unit</u>	<u>Pick Up</u>
4,7,8,9,11,12	9.29%
10	13.55%
17	13.59%
17C	7.74%
24-27	7.74%

Highest three-year average for employees in Tier 2

3. Service Retirement
 - A. Eligibility - Age 50 with 5 years of service.
 - B. Benefit Formula - Final Compensation multiplied by Years of Credited Service multiplied by Retirement Age Factor.
 - C. Retirement Age Factors

	Tier 1				Tier 2	
	All				Non-Court	
	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety*</u>	<u>Safety#</u>	<u>Miscellaneous</u>	<u>Safety^</u>
50	1.426%	2.300%	2.300%	3.000%	1.092%	2.000%
51	1.541	2.440	2.440	3.000	1.156	2.140
52	1.656	2.580	2.580	3.000	1.224	2.280
53	1.770	2.720	2.720	3.000	1.296	2.420
54	1.885	2.860	2.860	3.000	1.376	2.560
55	2.000	3.000	3.000	3.000	1.460	2.700
56	2.117	3.000	3.000	3.000	1.552	2.700

**BRIEF SUMMARY OF BENEFIT PROVISIONS EVALUATED
EFFECTIVE JANUARY 1, 2013**

	Tier 1				Tier 2	
	All				Non-Court	
	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety*</u>	<u>Safety#</u>	<u>Miscellaneous</u>	<u>Safety^</u>
57	2.233%	3.000%	3.000%	3.000%	1.650%	2.700%
58	2.350	3.000	3.000	3.000	1.758	2.700
59	2.466	3.000	3.000	3.000	1.874	2.700
60	2.583	3.000	3.000	3.000	2.000	2.700
61	2.699	3.000	3.000	3.000	2.134	2.700
62	2.816	3.000	3.000	3.000	2.272	2.700
63	2.932	3.000	3.000	3.000	2.418	2.700
64	3.049	3.000	3.000	3.000	2.458	2.700
65+	3.165	3.000	3.000	3.000	2.500	2.700

* Safety Bargaining Units 6 & 7 and Non-Sworn Bargaining Units 3, 14, 15

Safety Bargaining Units 10 & 16 and Sworn Bargaining Units 15, 27, 28

^ Non-Sworn Safety Bargaining Units 3, 14

- D. Maximum Benefit
- a. Tier 1
- 80% of Final Compensation for SLOCEA, and Misc. Other.
90% of Final Compensation for Safety and Probation.
100% of Final Compensation for Miscellaneous Management.
- b. Tier 2
- 90% of Final Compensation for all of Tier 2
4. Ordinary Disability
- A. Eligibility - Five years of service and less than 65 years old.
- B. Benefit Formula - Greater of (1) 1.5% of Final Compensation times Credited Service, (2) 1/3 of Final Compensation if Credited Service is between 10 and 22.222 years, or (3) the earned Service Retirement Allowance (if eligible).
5. Line-of-Duty Disability
- A. Eligibility - No age or service requirement for Safety members.
- B. Benefit Formula - Greater of (1) 50% of Final Compensation, or (2) Service Retirement Allowance (if eligible).

BRIEF SUMMARY OF BENEFIT PROVISIONS EVALUATED
EFFECTIVE JANUARY 1, 2013

6. Ordinary Death Before Eligible for Retirement (Basic Death Benefit)
Refund of employee contributions with interest plus lump sum of one and one-half month's compensation for each year of service to a maximum of eighteen months' Compensation.
7. Ordinary Death After Eligible for Retirement
50% of earned benefit payable to surviving eligible spouse or children until age 18, or benefit in (6) above if greater. Spouse can elect an actuarially-reduced 100% Joint and Survivor benefit.
8. Line-of-Duty Death (Safety only)
50% of Final Compensation. Benefit increased to 62.5%, 70% or 75% respectively if violent death and 1, 2, or 3 children.
9. Death After Retirement
50% of member's unmodified allowance continued to eligible spouse.
\$1,000 payable in lump sum to the beneficiary or the estate of the retiree.
10. Withdrawal Benefits
 - A. Less than Five Years of Service
Refund of accumulated employee contributions with interest.
 - B. Five or More Years of Service
If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire.
11. Post-Retirement Cost-of-Living Benefits
Based on changes in Consumer Price Index to a maximum of 3% per year (maximum of 2% per year for Tier 2).

BRIEF SUMMARY OF BENEFIT PROVISIONS EVALUATED
EFFECTIVE JANUARY 1, 2013

12. Member Contributions

Please refer to Appendix A. Employee contribution rates used in the January 1, 2013 valuation have not increased since the January 1, 2012 valuation.

13. Deferred Retirement Option Program (DROP): A member may elect to participate in the Pension Trust's DROP. A member age 50 or more with 5 or more years of service may participate. An amount equal to the amount that would have been paid had the member retired, is deposited into a DROP account. The annual addition to the DROP account is increased each year by the Cost of Living Adjustment approved by the Board of trustees not to exceed 3% per year. Deposits into the DROP account and participation in DROP cease at the earlier of 5 years of DROP participation or separation from service. Upon actual retirement the member may receive the DROP account balance in the form of a lump sum or as an annuity payment.

NOTE: The summary of major plan provisions is designed to outline principal plan benefits. If the County should find the plan summary not in accordance with the actual provisions, the County should alert the actuary **IMMEDIATELY** so proper provisions are valued.

**SUMMARY OF REPORTED ASSET INFORMATION
SUBMITTED FOR THE JANUARY 1, 2013 VALUATION**

Market Value of Reported Assets		Reserves as of January 1, 2013	
as of January 1, 2013			
Cash/Short-term	\$26,729,382	Member Deposit Reserve	\$282,721,430
Receivables	29,923,190	Appropriation Reserves	136,456,443
Mutual Funds	548,970,407	Retired Members Reserve	587,676,329
Bonds	311,844,630	Cost-of Living	292,117,907
Mortgages	11,310,166	Contingency Reserves	(459,717,470)
Alternative Investments	64,954,235	Market Value Adjustments	<u>174,181,418</u>
Real Estate	91,896,741		
Other	<u>1,155,809</u>		
	\$1,086,784,560		
Liabilities	<u>(73,348,501)</u>		
Total Market Value	\$1,013,436,059	Total Reserves	\$1,013,436,057

REVENUES AND DISBURSEMENTS

Total Reserves	
Beginning of Year	\$ 906,350,380
Revenues	
Employer Contributions	\$ 30,942,038
Employee Contributions	25,207,165
Interest	5,930,403
Dividends	14,698,049
Real Estate Income	1,512,745
Realized and Unrealized Gains and Losses	90,761,642
Investment Expenses	<u>(4,055,348)</u>
Total Revenues	\$ 164,996,694
Disbursements	
Benefit Payments	\$ 54,547,801
Refunds of Member Contributions	1,138,238
Death Benefits	125,658
Administration	<u>2,099,318</u>
Total Disbursements	\$ 57,911,015
Net Increase	\$ 107,085,679
Total Reserves - End of year	\$ 1,013,436,059

San Luis Obispo County Pension Trust
Development of Funding Value of Assets - January 1, 2013

	<u>Plan Year Ended</u> <u>December 31, 2007</u>	<u>Plan Year Ended</u> <u>December 31, 2008</u>	<u>Plan Year Ended</u> <u>December 31, 2009</u>	<u>Plan Year Ended</u> <u>December 31, 2010</u>	<u>Plan Year Ended</u> <u>December 31, 2011</u>	<u>Plan Year Ended</u> <u>December 31, 2012</u>
A. Funding Value Beginning of Year	\$759,758,136	\$829,763,572	\$875,602,263	\$937,278,758	\$1,000,168,850	\$1,057,921,875
B. Gross Market Value End of Year	832,236,083	610,286,800	764,988,635	880,953,414	906,350,380	1,013,436,059
C. Gross Market Value Beginning of Year	788,996,990	832,236,083	610,286,800	764,988,635	880,953,414	906,350,380
D. Non-Investment Cash Flow	5,380,162	12,619,013	10,219,995	5,910,357	1,284,151	(1,761,812)
E. Investment Income						
E1. Market Total =B-C-D	37,858,931	(234,568,296)	144,481,840	110,054,422	24,112,815	108,847,491
E2 Immediate Recognition	59,089,737	64,795,664	68,255,200	72,868,130	77,562,847	76,635,470
E3. Phased-in Recognition	(21,230,806)	(299,363,960)	76,226,640	37,186,292	(53,450,032)	32,212,021
F. Phased-in Recognition						
F1. Current Year=E3x20%	(4,246,161)	(29,936,396)	15,245,328	7,437,258	(10,690,006)	6,442,404
F2. First Prior Year	4,829,104	(4,246,161)	(29,936,396)	15,245,328	7,437,258	(10,690,006)
F3. Second Prior Year	(3,747,506)	4,829,104	(4,246,161)	(39,936,396) *	15,245,328	7,437,258
F4. Third Prior Year	415,705	(3,747,506)	4,829,104	(4,246,161)	(29,936,396)	15,245,328
F5. Fourth Prior Year	7,610,170	415,705	(3,747,506)	4,829,104	(4,246,161)	(29,936,396)
F6. Total Recognized Gain/(Loss)	4,861,312	(32,685,254)	(17,855,631)	(16,670,867)	(22,189,977)	(11,501,412)
G. Preliminary Funding Value						
=A+D+E2+F6	829,089,347	874,492,995	936,221,827	999,386,378	1,056,825,871	1,121,294,121
H. Excludable Assets						
H1. End of Year	11,507,242	10,397,974	9,341,043	8,558,571	7,462,567	6,606,149
H2. Beginning of Year	12,181,467	11,507,242	10,397,974	9,341,043	8,558,571	7,462,567
H3. Change=H1-H2	(674,225)	(1,109,268)	(1,056,931)	(782,472)	(1,096,004)	(856,418)
I. Final Funding Value=G-H3	\$829,763,572	\$875,602,263	\$937,278,758	\$1,000,168,850	\$1,057,921,875	\$1,122,150,539
J. Investment Return=(E2+F6)/(A+D/2)	8.39%	3.84%	5.72%	5.98%	5.53%	6.16%

*The Board elected to accelerate recognition of \$10 million of the 2008 loss base for the year ending December 31, 2010.

Allocation of Valuation Assets
January 1, 2013 Valuation

	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand Total</u>
1) Valuation Assets as of December 31, 2011	\$818,595,077	\$39,059,392	\$200,267,406	\$1,057,921,875
	77%	4%	19%	
2) Preliminary member contributions including pickups by group	\$19,864,451	\$1,160,928	\$4,012,788	\$25,038,167
3) Member contributions from financials, subgroups split in proportion to (2)	\$19,998,528	\$1,168,764	\$4,039,873	\$25,207,165
4) Preliminary employer contributions by group	\$24,063,277	\$1,008,020	\$5,835,056	\$30,906,353
5) Employer contributions from financials, subgroups split in proportion to (4)	\$24,091,061	\$1,009,184	\$5,841,793	\$30,942,038
6) Benefit Payments based on data - avg LY & TY	\$43,436,400	\$1,776,382	\$9,392,350	\$54,605,132
7) Benefit payments from financials, subgroups split in proportion to (6)	\$44,396,179	\$1,815,633	\$9,599,885	\$55,811,697
8) Subtotal = (1) + (3) + (5) - (7)	\$818,288,487	\$39,421,707	\$200,549,187	\$1,058,259,381
9) Valuation Assets as of December 31, 2012				1,122,150,539
10) Residual to allocate among groups (9) - (8)				63,891,158
11) Allocation of residual to equalize funded ratios	51,297,524	3,232,021	9,361,613	63,891,158
12) Valuation Assets Allocated by group: (8) + (11)	\$869,586,011	\$42,653,728	\$209,910,800	\$1,122,150,539

SECTION F

SUMMARY OF MEMBER DATA

RECONCILIATION OF MEMBERS FROM
JANUARY 1, 2012 TO JANUARY 1, 2013

	Actives	Disability	Terminated		DROP	Beneficiary	Total
			Vested	Retiree			
Counts as of January 1, 2012	2,446	129	449	1,693	36	182	4,935
Actives	4		(3)	(1)			0
Disability	(3)	3					0
Terminated Vested	(23)		23				0
Terminated Nonvested	(36)		(1)				(37)
Retiree	(85)		(27)	119	(7)		0
DROP	(17)				17		0
Deceased	(3)	(1)		(28)	(1)	(12)	(45)
Refund			(1)				(1)
New Beneficiaries						10	10
New Actives	200						200
Return to Work	11						11
Not in last year's file	1	1	5	7			14
Counts as of January 1, 2013	2,495	132	445	1,790	45	180	5,087

**SUMMARY OF ACTIVE MEMBERS INCLUDED
IN THE JANUARY 1, 2013 ACTUARIAL VALUATION**

	<u>No.</u>	<u>Total Payroll</u>	<u>Averages</u>		
			<u>Annual Compensation</u>	<u>Age</u>	<u>Service</u>
Miscellaneous Members					
1/1/2013	2,118	\$133,374,909	\$62,972	48.4	10.7
1/1/2012	2,090	\$131,333,228	\$62,839	48.6	10.8
Percent Increase	1.3%	1.6%	0.2%		
Probation Members					
1/1/2013	105	\$6,963,070	\$66,315	41.0	10.5
1/1/2012	98	\$6,605,872	\$67,407	41.8	10.8
Percent Increase	7.1%	5.4%	-1.6%		
Safety Members					
1/1/2013	272	\$23,961,434	\$88,094	41.9	12.7
1/1/2012	258	\$23,115,539	\$89,595	42.3	13.4
Percent Increase	5.4%	3.7%	-1.7%		
All Active Members					
1/1/2013	2,495	\$164,299,413	\$65,851	47.4	10.9
1/1/2012	2,446	\$161,054,639	\$65,844	47.7	11.1
Percent Increase	2.0%	2.0%	0.0%		

For affected Management employees, pick ups are not included as valuation compensation in these figures, even though such pick ups are used to determine their benefits.

Payroll represents the total pay of all covered members. Payroll changes year by year based on new hires, departures, and pay for continuing actives. The assumption for payroll growth is used in amortizing the UAL.

Salaries represent the pay earned by an individual member in the system. The salary growth assumption is an assumption for an individual member's increase in salary.

SUMMARY OF ACTIVE MEMBERS BY VALUATION GROUP
IN THE JANUARY 1, 2013 ACTUARIAL VALUATION

	<u>No.</u>	<u>Total Payroll</u>	<u>Averages</u>			
			<u>Annual Compensation</u>	<u>Age</u>	<u>Service</u>	
Miscellaneous Members						
1 Other - Units # 14, 21, 22						
	1/1/2013	23	\$1,749,280	\$76,056	45.7	10.1
	1/1/2012	25	\$1,904,635	\$76,185	44.9	9.3
2 Management Non-Court - Units # 4, 7, 8, 9, 10, 11, 12, 17, 99						
	1/1/2013	398	\$36,689,858	\$92,186	49.7	12.8
	1/1/2012	383	\$35,767,025	\$93,386	50.3	13.1
3 Management Court - Unit # 18						
	1/1/2013	16	\$1,298,086	\$81,130	51.2	9.8
	1/1/2012	17	\$1,358,157	\$79,892	49.0	8.4
4 Management Court - Units # 24, 25, 26, 27						
	1/1/2013	28	\$2,729,246	\$97,473	52.1	11.2
	1/1/2012	30	\$2,887,539	\$96,251	52.3	11.0
5 SLOCEA Non-Court - Units # 1, 2, 5, 13, 31, 98						
	1/1/2013	1,566	\$86,604,513	\$55,303	48.1	10.2
	1/1/2012	1,538	\$84,641,627	\$55,034	48.3	10.4
6 SLOCEA Court - Unit # 19						
	1/1/2013	9	\$574,912	\$63,879	52.8	16.2
	1/1/2012	11	\$700,835	\$63,712	52.5	16.4
7 SLOCEA Court - Unit # 20						
	1/1/2013	78	\$3,729,014	\$47,808	45.6	9.8
	1/1/2012	86	\$4,073,410	\$47,365	45.2	8.8

SUMMARY OF ACTIVE MEMBERS BY VALUATION GROUP
IN THE JANUARY 1, 2013 ACTUARIAL VALUATION

		<u>No.</u>	<u>Total Payroll</u>	<u>Averages</u>		
				<u>Annual Compensation</u>	<u>Age</u>	<u>Service</u>
Probation Members						
8 Probation Management - Units # 8, 9, 29						
1/1/2013	5	\$596,149	\$119,230	49.3	20.7	
1/1/2012	5	\$589,118	\$117,824	48.3	19.7	
9 Probation Non-Management - Units # 31, 32						
1/1/2013	100	\$6,366,921	\$63,669	40.6	10.0	
1/1/2012	93	\$6,016,754	\$64,696	41.5	10.3	
Safety Members						
10 Safety Management - Units # 7, 10, 15, 16						
1/1/2013	9	\$1,249,435	\$138,826	49.5	19.0	
1/1/2012	9	\$1,261,000	\$140,111	49.6	21.4	
11 Safety Non-Management - Units # 3, 6, 14, 27, 28						
1/1/2013	263	\$22,711,999	\$86,357	41.6	12.5	
1/1/2012	249	\$21,854,539	\$87,769	42.0	13.1	

SUMMARY OF DEFERRED AND RECIPROCAL MEMBERS INCLUDED
IN THE JANUARY 1, 2013 ACTUARIAL VALUATION

	<u>No.</u>	<u>Member Contributions</u>	<u>Averages</u>			
			<u>Contribution Balance</u>	<u>Attained Age</u>	<u>Age at Termination</u>	<u>Service</u>
Miscellaneous						
Reciprocals	177	\$7,561,109	\$42,718	51.2	40.4	4.8
Deferred	<u>223</u>	<u>14,762,028</u>	66,197	51.1	41.1	9.0
Total	400	\$22,323,137	\$55,808	51.1	40.8	7.1
Probation						
Reciprocals	3	\$168,827	\$56,276	41.8	35.6	6.2
Deferred	<u>6</u>	<u>376,038</u>	62,673	43.7	37.2	8.1
Total	9	\$544,865	\$60,541	43.1	36.7	7.5
Safety						
Reciprocals	14	\$722,820	\$51,630	44.1	33.5	4.3
Deferred	<u>22</u>	<u>2,299,576</u>	104,526	43.5	37.6	9.8
Total	36	\$3,022,396	\$83,955	43.8	36.0	7.7
Total						
Reciprocals						
1/1/2013	194	\$8,452,756	\$43,571	50.5	39.8	4.7
1/1/2012	202	\$8,503,904	\$42,099	50.2	40.1	4.9
Percent Change	-4.0%	-0.6%	3.5%			
Deferred						
1/1/2013	251	\$17,437,642	\$69,473	50.2	40.7	9.0
1/1/2012	247	\$16,589,849	\$67,165	50.5	41.1	9.3
Percent Change	1.6%	5.1%	3.4%			
Grand Total 1/1/2013	445	\$25,890,398	\$58,181	50.3	40.3	7.1
Grand Total 1/1/2012	449	\$25,093,753	\$55,888	50.4	40.7	7.3
Percent Change	-0.9%	3.2%	4.1%			

SUMMARY OF RETIRED MEMBERS AND BENEFICIARIES INCLUDED
IN THE JANUARY 1, 2013 ACTUARIAL VALUATION

MISCELLANEOUS

	<u>No.</u>	<u>Annual Allowance</u>	<u>Averages</u>			<u>New Retirees Only</u>		
			<u>Annual Allowance</u>	<u>Attained Age</u>	<u>Age at Retirement*</u>	<u>No.</u>	<u>Average Annual Allowance</u>	<u>Average Age at Retirement</u>
Retired Members								
1/1/2013	1,721	\$43,097,544	\$25,042	68.3	58.7	121	\$33,320	60.6
1/1/2012	1,627	\$38,936,479	\$23,931	68.1	58.6	103	\$31,773	59.2
Percent Change	5.8%	10.7%	4.6%				4.9%	
Beneficiaries								
1/1/2013	154	\$2,491,349	\$16,178	75.1	N/A	N/A	N/A	N/A
1/1/2012	158	\$2,347,427	\$14,857	74.8	N/A	N/A	N/A	N/A
Percent Change	-2.5%	6.1%	8.9%					
Total 1/1/2013	1,875	\$45,588,893	\$24,314	68.9	58.7	121	\$33,320	60.6
Total 1/1/2012	1,785	\$41,283,906	\$23,128	68.7	58.6	103	\$31,773	59.2
Percent Change	5.0%	10.4%	5.1%				4.9%	

* For retired and disabled members only; does not include beneficiaries.

SUMMARY OF RETIRED MEMBERS AND BENEFICIARIES INCLUDED
IN THE JANUARY 1, 2013 ACTUARIAL VALUATION

PROBATION

	<u>No.</u>	<u>Averages</u>				<u>New Retirees Only</u>		
		<u>Annual Allowance</u>	<u>Annual Allowance</u>	<u>Attained Age</u>	<u>Age at Retirement*</u>	<u>No.</u>	<u>Average Annual Allowance</u>	<u>Average Age at Retirement</u>
Retired Members								
1/1/2013	47	\$1,767,200	\$37,600	62.4	56.0	5	\$26,265	60.9
1/1/2012	42	\$1,603,800	\$38,186	61.5	55.4	4	\$45,934	57.7
Percent Change	11.9%	10.2%	-1.5%				-42.8%	
Beneficiaries								
1/1/2013	3	\$91,782	\$30,594	70.0	N/A	N/A	N/A	N/A
1/1/2012	3	\$89,982	\$29,994	69.0	N/A	N/A	N/A	N/A
Percent Change	0.0%	2.0%	2.0%					
Total 1/1/2013	50	\$1,858,982	\$37,180	62.9	56.0	5	\$26,265	60.9
Total 1/1/2012	45	\$1,693,782	\$37,640	62.0	55.4	4	\$45,934	57.7
Percent Change	11.1%	9.8%	-1.2%				-42.8%	

* For retired and disabled members only; does not include beneficiaries.

SUMMARY OF RETIRED MEMBERS AND BENEFICIARIES INCLUDED
IN THE JANUARY 1, 2013 ACTUARIAL VALUATION

SAFETY

	<u>No.</u>	<u>Averages</u>				<u>New Retirees Only</u>		
		<u>Annual Allowance</u>	<u>Annual Allowance</u>	<u>Attained Age</u>	<u>Age at Retirement*</u>	<u>No.</u>	<u>Average Annual Allowance</u>	<u>Average Age at Retirement</u>
Retired Members								
1/1/2013	199	\$9,356,642	\$47,018	63.1	52.5	14	\$57,729	54.6
1/1/2012	189	\$8,647,203	\$45,752	62.7	52.3	22	\$49,483	55.2
Percent Change	5.3%	8.2%	2.8%				16.7%	
Beneficiaries								
1/1/2013	23	\$438,370	\$19,060	72.1	N/A	N/A	N/A	N/A
1/1/2012	21	\$342,484	\$16,309	73.2	N/A	N/A	N/A	N/A
Percent Change	9.5%	28.0%	16.9%					
Total 1/1/2013	222	\$9,795,012	\$44,122	64.0	52.5	14	\$57,729	54.6
Total 1/1/2012	210	\$8,989,687	\$42,808	63.8	52.3	22	\$49,483	55.2
Percent Change	5.7%	9.0%	3.1%				16.7%	

* For retired and disabled members only; does not include beneficiaries.

SUMMARY OF RETIRED MEMBERS AND BENEFICIARIES INCLUDED
IN THE JANUARY 1, 2013 ACTUARIAL VALUATION

TOTAL

	<u>No.</u>	<u>Averages</u>				<u>New Retirees Only</u>		
		<u>Annual Allowance</u>	<u>Annual Allowance</u>	<u>Attained Age</u>	<u>Age at Retirement*</u>	<u>No.</u>	<u>Average Annual Allowance</u>	<u>Average Age at Retirement</u>
Retired Members								
1/1/2013	1,967	\$54,221,386	\$27,566	67.6	58.0	140	\$35,509	60.0
1/1/2012	1,858	\$49,187,482	\$26,473	67.4	57.9	129	\$35,232	58.5
Percent Change	5.9%	10.2%	4.1%				0.8%	
Beneficiaries								
1/1/2013	180	\$3,021,501	\$16,786	74.6	N/A	N/A	N/A	N/A
1/1/2012	182	\$2,779,893	\$15,274	74.5	N/A	N/A	N/A	N/A
Percent Change	-1.1%	8.7%	9.9%					
Total 1/1/2013	2,147	\$57,242,887	\$26,662	68.2	58.0	140	\$35,509	60.0
Total 1/1/2012	2,040	\$51,967,375	\$25,474	68.0	57.9	129	\$35,232	58.5
Percent Change	5.2%	10.2%	4.7%				0.8%	

* For retired and disabled members only; does not include beneficiaries.

SECTION G

ACTIVE DATA TABLES

ACTIVE MEMBERS JANUARY 1, 2013
BY ATTAINED AGES AND YEARS OF SERVICE

MISCELLANEOUS MEMBERS

Age Group	Years of Accrued Service							No.	Compensation Totals
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>		
20-24	16	1	0	0	0	0	0	17	\$641,659
25-29	82	34	0	0	0	0	0	116	5,408,790
30-34	87	93	16	2	0	0	0	198	10,726,830
35-39	68	75	51	3	0	0	0	197	11,647,173
40-44	47	83	68	21	9	1	0	229	14,686,662
45-49	42	88	83	48	29	7	0	297	20,063,778
50-54	53	83	76	51	51	35	8	357	23,003,547
55-59	47	79	90	44	70	46	23	399	27,198,169
60-64	26	53	63	45	40	20	2	249	16,240,318
65-69	11	16	19	2	1	2	2	53	3,420,217
70-74	2	1	1	0	0	0	0	4	280,426
75+	0	1	1	0	0	0	0	2	57,340
Totals	481	607	468	216	200	111	35	2,118	\$133,374,909

While not used in the financial computations, the following averages are computed and shown for their general interest.

Averages

Age: 48.4
Service: 10.7
Compensation: \$62,972

ACTIVE MEMBERS JANUARY 1, 2013
BY ATTAINED AGES AND YEARS OF SERVICE

PROBATION MEMBERS

Age Group	Years of Accrued Service							No.	Compensation Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
20-24	1	0	0	0	0	0	0	1	\$43,763
25-29	9	5	0	0	0	0	0	14	749,112
30-34	3	10	0	0	0	0	0	13	751,878
35-39	7	7	7	0	0	0	0	21	1,338,937
40-44	4	4	6	6	0	0	0	20	1,292,429
45-49	0	0	6	6	1	1	0	14	1,105,811
50-54	0	0	3	2	3	6	0	14	1,163,365
55-59	0	1	2	0	2	0	0	5	341,994
60-64	0	0	1	2	0	0	0	3	175,781
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0
Totals	24	27	25	16	6	7	0	105	\$6,963,070

While not used in the financial computations, the following averages are computed and shown for their general interest.

Averages

Age: 41.0
Service: 10.5
Compensation: \$66,315

ACTIVE MEMBERS JANUARY 1, 2013
BY ATTAINED AGES AND YEARS OF SERVICE

SAFETY MEMBERS

Age Group	Years of Accrued Service							No.	Compensation Totals
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>		
20-24	5	0	0	0	0	0	0	5	\$352,602
25-29	12	13	0	0	0	0	0	25	1,958,944
30-34	11	22	9	0	0	0	0	42	3,478,842
35-39	7	11	13	8	0	0	0	39	3,281,803
40-44	3	15	5	20	7	0	0	50	4,331,454
45-49	1	3	7	18	21	10	0	60	5,719,647
50-54	2	1	6	14	9	8	0	40	3,773,890
55-59	0	1	3	2	2	2	0	10	986,190
60-64	0	0	0	0	1	0	0	1	78,062
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0
Totals	41	66	43	62	40	20	0	272	\$23,961,434

While not used in the financial computations, the following averages are computed and shown for their general interest.

Averages

Age: 41.9
Service: 12.7
Compensation: \$88,094

ACTIVE MEMBERS JANUARY 1, 2013
BY ATTAINED AGES AND YEARS OF SERVICE

TOTAL MEMBERS

Age Group	Years of Accrued Service							No.	Compensation Totals
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>		
20-24	22	1	0	0	0	0	0	23	\$1,038,024
25-29	103	52	0	0	0	0	0	155	8,116,846
30-34	101	125	25	2	0	0	0	253	14,957,550
35-39	82	93	71	11	0	0	0	257	16,267,913
40-44	54	102	79	47	16	1	0	299	20,310,545
45-49	43	91	96	72	51	18	0	371	26,889,236
50-54	55	84	85	67	63	49	8	411	27,940,802
55-59	47	81	95	46	74	48	23	414	28,526,353
60-64	26	53	64	47	41	20	2	253	16,494,161
65-69	11	16	19	2	1	2	2	53	3,420,217
70-74	2	1	1	0	0	0	0	4	280,426
75+	0	1	1	0	0	0	0	2	57,340
Totals	546	700	536	294	246	138	35	2,495	\$164,299,413

While not used in the financial computations, the following averages are computed and shown for their general interest.

Averages

Age: 47.4
Service: 10.9
Compensation: \$65,851

AVERAGE PAY BY YEARS OF SERVICE

MISCELLANEOUS MEMBERS

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	18	71	89	\$4,368,957	\$49,089
1	45	88	133	6,486,750	48,773
2	23	76	99	5,329,688	53,835
3	19	43	62	3,521,669	56,801
4	33	65	98	6,356,085	64,858
5	37	112	149	8,670,994	58,195
6	41	115	156	9,380,670	60,133
7	49	90	139	8,908,468	64,090
8	27	46	73	4,545,632	62,269
9	36	54	90	5,900,456	65,561
10	27	45	72	5,035,524	69,938
11	45	83	128	8,032,861	62,757
12	23	70	93	5,789,274	62,250
13	38	60	98	6,580,668	67,150
14	18	58	76	4,637,240	61,016
15 & Up	213	350	563	39,829,973	70,746
Totals	692	1,426	2,118	\$133,374,909	\$62,972

AVERAGE PAY BY YEARS OF SERVICE

PROBATION MEMBERS

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	2	3	5	\$225,014	\$45,003
1	2	4	6	276,307	46,051
2	3	1	4	205,837	51,459
3	1	1	2	97,469	48,735
4	3	4	7	386,443	55,206
5	6	3	9	547,893	60,877
6	3	2	5	309,899	61,980
7	4	1	5	285,210	57,042
8	3	2	5	341,078	68,216
9	0	3	3	211,307	70,436
10	5	3	8	570,419	71,302
11	1	3	4	273,728	68,432
12	0	2	2	137,883	68,942
13	1	0	1	68,432	68,432
14	6	4	10	799,885	79,989
15 & Up	16	13	29	2,226,266	76,768
Totals	56	49	105	\$6,963,070	\$66,315

AVERAGE PAY BY YEARS OF SERVICE

SAFETY MEMBERS

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	12	0	12	\$908,086	\$75,674
1	14	8	22	1,610,794	73,218
2	2	0	2	262,704	131,352
3	0	0	0	0	N/A
4	5	0	5	392,850	78,570
5	21	1	22	1,886,227	85,738
6	14	1	15	1,246,502	83,100
7	10	4	14	1,223,435	87,388
8	9	0	9	765,794	85,088
9	6	0	6	500,760	83,460
10	7	0	7	609,586	87,084
11	9	3	12	1,045,720	87,143
12	6	2	8	697,341	87,168
13	5	2	7	618,758	88,394
14	8	1	9	794,643	88,294
15 & Up	107	15	122	11,398,234	93,428
Totals	235	37	272	\$23,961,434	\$88,094

AVERAGE PAY BY YEARS OF SERVICE

TOTAL MEMBERS

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	32	74	106	\$5,502,058	\$51,906
1	61	100	161	8,373,851	52,011
2	28	77	105	5,798,229	55,221
3	20	44	64	3,619,138	56,549
4	41	69	110	7,135,378	64,867
5	64	116	180	11,105,114	61,695
6	58	118	176	10,937,072	62,142
7	63	95	158	10,417,113	65,931
8	39	48	87	5,652,504	64,971
9	42	57	99	6,612,523	66,793
10	39	48	87	6,215,529	71,443
11	55	89	144	9,352,309	64,947
12	29	74	103	6,624,498	64,316
13	44	62	106	7,267,858	68,565
14	32	63	95	6,231,768	65,598
15 & Up	336	378	714	53,454,472	74,866
Totals	983	1,512	2,495	\$164,299,413	\$65,851

SECTION H

RETIREE DATA TABLES

RETIREES AND BENEFICIARIES JANUARY 1, 2013
MISCELLANEOUS
TABULATED BY TYPE OF ALLOWANCES BEING PAID

<u>Type of Allowance</u>	<u>No.</u>	<u>Annual Allowances</u>
SERVICE RETIREMENT		
Unmodified	739	\$17,875,002
Cash Refund	127	2,557,756
100% Continuance	379	11,575,684
50% Continuance	154	5,214,019
Benefits Coordinated with Social Security		
Unmodified	135	\$2,179,110
Cash Refund	31	436,232
100% Continuance	43	1,175,252
50% Continuance	<u>25</u>	<u>782,952</u>
Total Service Retirement	1,633	\$41,796,008
DISABILITY RETIREMENT		
Unmodified	46	\$705,849
Cash Refund	15	192,228
100% Continuance	20	289,710
50% Continuance	<u>7</u>	<u>113,749</u>
Total Disability Retirement	88	\$1,301,536
BENEFICIARIES	<u>154</u>	<u>\$2,491,349</u>
Total Allowances	<u><u>1,875</u></u>	<u><u>\$45,588,893</u></u>

RETIREES AND BENEFICIARIES JANUARY 1, 2013
 PROBATION
 TABULATED BY TYPE OF ALLOWANCES BEING PAID

<u>Type of Allowance</u>	<u>No.</u>	<u>Annual Allowances</u>
SERVICE RETIREMENT		
Unmodified	12	\$397,886
Cash Refund	3	71,029
100% Continuance	19	899,231
50% Continuance	3	136,459
Benefits Coordinated with Social Security		
Unmodified	2	\$49,200
100% Continuance	1	32,508
50% Continuance	<u>2</u>	<u>40,703</u>
Total Service Retirement	42	\$1,627,015
DISABILITY RETIREMENT		
Unmodified	5	\$140,185
BENEFICIARIES	<u>3</u>	<u>\$91,782</u>
Total Allowances	<u><u>50</u></u>	<u><u>\$1,858,982</u></u>

RETIREES AND BENEFICIARIES JANUARY 1, 2013
SAFETY
TABULATED BY TYPE OF ALLOWANCES BEING PAID

<u>Type of Allowance</u>	<u>No.</u>	<u>Annual Allowances</u>
SERVICE RETIREMENT		
Unmodified	38	\$1,836,369
Cash Refund	9	579,680
100% Continuance	55	2,943,256
50% Continuance	19	1,029,666
Benefits Coordinated with Social Security		
Unmodified	12	\$446,385
Cash Refund	1	47,573
100% Continuance	15	643,016
50% Continuance	11	482,940
Total Service Retirement	160	\$8,008,886
DISABILITY RETIREMENT		
Unmodified	23	\$835,869
Cash Refund	1	28,215
100% Continuance	12	388,747
50% Continuance	3	94,926
Total Disability Retirement	39	\$1,347,756
BENEFICIARIES	23	\$438,370
Total Allowances	<u>222</u>	<u>\$9,795,012</u>

RETIREES AND BENEFICIARIES JANUARY 1, 2013
TOTAL
TABULATED BY TYPE OF ALLOWANCES BEING PAID

<u>Type of Allowance</u>	<u>No.</u>	<u>Annual Allowances</u>
SERVICE RETIREMENT		
Unmodified	789	\$20,109,256
Cash Refund	139	3,208,465
100% Continuance	453	15,418,172
50% Continuance	176	6,380,144
Benefits Coordinated with Social Security		
Unmodified	149	\$2,674,696
Cash Refund	32	483,805
100% Continuance	59	1,850,775
50% Continuance	38	1,306,596
Total Service Retirement	1,835	\$51,431,909
DISABILITY RETIREMENT		
Unmodified	74	\$1,681,903
Cash Refund	16	220,443
100% Continuance	32	678,456
50% Continuance	10	208,675
Total Disability Retirement	132	\$2,789,477
BENEFICIARIES	180	\$3,021,501
Total Allowances	<u>2,147</u>	<u>\$57,242,887</u>

RETIREES AND BENEFICIARIES JANUARY 1, 2013
TABULATED BY ATTAINED AGES AND YEAR OF RETIREMENT

MISCELLANEOUS

Year Retired	Age Groups								Totals
	0-49	50-59	60-64	65-69	70-74	75-79	80-89	90+	
Pre 1993	0	1	3	2	6	24	134	59	229
1993	1	1	0	4	7	10	21	1	45
1994	0	1	0	3	4	6	7	1	22
1995	1	1	2	6	10	9	6	0	35
1996	0	1	0	8	6	9	11	2	37
1997	1	1	1	10	5	19	9	0	46
1998	1	3	6	15	14	15	12	0	66
1999	0	3	2	11	14	17	2	0	49
2000	0	2	10	6	10	4	5	1	38
2001	0	5	22	21	36	11	3	1	99
2002	1	9	15	19	24	3	3	0	74
2003	0	5	22	27	25	2	2	0	83
2004	3	22	25	36	23	5	2	3	119
2005	1	17	34	52	25	2	2	1	134
2006	2	33	31	45	13	3	1	0	128
2007	0	32	32	41	6	2	1	0	114
2008	0	28	22	37	7	0	3	0	97
2009	0	30	52	57	14	2	0	1	156
2010	3	32	31	20	5	0	0	0	91
2011	0	40	47	15	3	0	0	0	105
2012	2	37	42	22	5	0	0	0	108
TOTALS	16	304	399	457	262	143	224	70	1,875

Age at Retirement¹: 58.7
 Attained Age: 68.9
 Average Annual Pension: \$24,314

¹ For retired and disabled members only; does not include beneficiaries.

RETIREES AND BENEFICIARIES JANUARY 1, 2013
TABULATED BY ATTAINED AGES AND YEAR OF RETIREMENT

PROBATION

Year <u>Retired</u>	<u>Age Groups</u>								<u>Totals</u>
	<u>0-49</u>	<u>50-59</u>	<u>60-64</u>	<u>65-69</u>	<u>70-74</u>	<u>75-79</u>	<u>80-89</u>	<u>90+</u>	
Pre 2003	0	0	0	8	2	0	0	0	10
2003	0	1	1	2	0	0	0	0	4
2004	0	1	1	0	1	0	0	0	3
2005	0	0	1	2	1	0	0	0	4
2006	0	0	2	0	0	0	0	0	2
2007	0	2	2	2	1	0	0	0	7
2008	0	2	0	1	0	0	0	0	3
2009	0	3	2	0	0	0	0	0	5
2010	1	1	1	0	0	0	0	0	3
2011	0	2	1	1	0	0	0	0	4
2012	0	2	1	2	0	0	0	0	5
TOTALS	1	14	12	18	5	0	0	0	50

Age at Retirement¹: 56.0
 Attained Age: 62.9
 Average Annual Pension: \$37,180

¹ For retired and disabled members only; does not include beneficiaries.

RETIREES AND BENEFICIARIES JANUARY 1, 2013
TABULATED BY ATTAINED AGES AND YEAR OF RETIREMENT

SAFETY

Year <u>Retired</u>	Age Groups								<u>Totals</u>
	<u>0-49</u>	<u>50-59</u>	<u>60-64</u>	<u>65-69</u>	<u>70-74</u>	<u>75-79</u>	<u>80-89</u>	<u>90+</u>	
Pre 1993	0	2	1	8	10	6	9	0	36
1993	0	0	0	2	2	1	2	0	7
1994	0	3	0	1	4	0	1	0	9
1995	1	2	0	2	0	0	0	0	5
1996	0	0	0	4	3	2	0	0	9
1997	0	0	0	1	1	0	1	1	4
1998	1	0	2	1	1	1	0	0	6
1999	0	0	1	0	0	1	0	0	2
2000	0	0	0	3	1	0	2	0	6
2001	0	1	1	4	0	0	0	0	6
2002	0	0	1	4	1	0	0	0	6
2003	2	1	5	2	1	0	0	0	11
2004	2	2	3	1	3	0	0	0	11
2005	0	1	7	9	0	0	0	0	17
2006	0	1	3	1	0	0	0	0	5
2007	0	11	7	2	0	0	0	0	20
2008	1	5	3	0	0	0	0	0	9
2009	2	10	0	0	0	0	0	0	12
2010	0	11	1	0	0	0	0	0	12
2011	0	9	7	0	0	0	0	0	16
2012	0	11	2	0	0	0	0	0	13
TOTALS	9	70	44	45	27	11	15	1	222

Age at Retirement¹: 52.5
 Attained Age: 64.0
 Average Annual Pension: \$44,122

¹ For retired and disabled members only; does not include beneficiaries.

RETIREES AND BENEFICIARIES JANUARY 1, 2013
TABULATED BY ATTAINED AGES AND YEAR OF RETIREMENT

TOTAL

Year Retired	Age Groups							Totals	
	0-49	50-59	60-64	65-69	70-74	75-79	80-89		90+
Pre 1993	0	3	4	10	16	30	143	59	265
1993	1	1	0	6	9	11	23	1	52
1994	0	4	0	6	9	6	8	1	34
1995	2	3	2	10	10	9	6	0	42
1996	0	1	0	12	9	11	11	2	46
1997	1	1	1	11	6	19	10	1	50
1998	2	3	8	16	15	16	12	0	72
1999	0	3	3	11	14	18	2	0	51
2000	0	2	10	9	11	4	7	1	44
2001	0	6	23	25	37	11	3	1	106
2002	1	9	16	27	25	3	3	0	84
2003	2	7	28	31	26	2	2	0	98
2004	5	25	29	37	27	5	2	3	133
2005	1	18	42	63	26	2	2	1	155
2006	2	34	36	46	13	3	1	0	135
2007	0	45	41	45	7	2	1	0	141
2008	1	35	25	38	7	0	3	0	109
2009	2	43	54	57	14	2	0	1	173
2010	4	44	33	20	5	0	0	0	106
2011	0	51	55	16	3	0	0	0	125
2012	2	50	45	24	5	0	0	0	126
TOTALS	26	388	455	520	294	154	239	71	2,147

Age at Retirement¹: 58.0
 Attained Age: 68.2
 Average Annual Pension: \$26,662

¹ For retired and disabled members only; does not include beneficiaries.

SECTION I

VALUATION METHODS AND ASSUMPTIONS

ACTUARIAL METHODS AND ASSUMPTIONS USED FOR THE JANUARY 1, 2013 VALUATION

I. Valuation Date

The valuation date is December 31st of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an individual entry age actuarial cost method having the following characteristics:

- (i) the annual normal costs for each active member, payable from the date of entry into the system to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Deferred and Reciprocal Member Actuarial Accrued Liability. Data provided includes date of birth, service credit, reciprocal status, and hourly pay rates at termination. The estimated benefit was used to compute the liabilities for reserve members. For reciprocal members, the estimated benefits were projected with 3.25% inflation from their date of termination to their assumed retirement date to compute those liabilities.

Amortization of Unfunded Actuarial Accrued Liabilities is done as a level percent of payroll over a closed 30 year period (27 years as of January 1, 2013) for funding computations.

III. Actuarial Value of Assets

The funding value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. The asset losses that occurred in 2008 are smoothed over a ten year period with recognition accelerated if a contribution margin develops. Expected investment income is determined using the assumed investment return rate and the actuarial value of assets (adjusted for receipts and disbursements during the year). Returns are measured net of all administrative expenses.

IV. Actuarial Assumptions

A. Economic Assumptions

1. Investment return: 7.25%, compounded annually, net of administrative expenses. This is made up of a 2.75% inflation rate and a 4.50% real rate of return.
2. Salary increase rate: Inflation rate of 2.75% plus productivity increase rate of 0.5% plus an additional service-related merit component as shown below:

% Merit Increases in Salaries Next Year	
Service Index	Rate
1	5.25%
2	5.00%
3	4.00%
4	3.00%
5	2.00%
6	1.00%
7	0.50%
8 +	0.00%

3. Cost-of-living increases:

Assumed to increase the full 2.75% each year (2% for Tier 2).

4. Payroll growth:

3.75% per year

5. Contribution accumulation: Member contribution rates are recalculated on an actuarial basis at each actuarial study. Contributions are credited with 7.25% interest, compounded biweekly.

B. Demographic Assumptions

1. Mortality after termination or retirement -

- a. Healthy males – RP-2000 with generational mortality improvements using scale AA, a 105% multiplier and white collar adjustment
- b. Healthy females - RP-2000 with generational mortality improvements using scale AA, a 105% multiplier and white collar adjustment

See sample rates below:

Ages	% Dying Within Next Year Retirees	
	Men	Women
45	0.12%	0.09%
50	0.17%	0.14%
55	0.28%	0.25%
60	0.48%	0.46%
65	0.98%	0.86%
70	1.69%	1.50%
75	2.98%	2.45%
80	5.53%	4.16%
85	10.10%	7.25%

2. Mortality rates of active members – RP-2000 Employee Mortality Tables, projected to 2020 using scale AA, setback one year with a 90% multiplier for males, and setback three years with a 50% multiplier for females, as shown below for selected ages:

Ages	% of Active Members Dying Within Next Year	
	Men	Women
30	0.03%	0.01%
35	0.06%	0.01%
40	0.08%	0.02%
45	0.10%	0.03%
50	0.13%	0.05%
55	0.17%	0.07%
60	0.29%	0.14%
65	0.48%	0.21%
70	0.65%	0.30%

3. Disability mortality after termination or retirement- RP-2000 Disabled Mortality Tables, projected to 2020 using scale AA, with no setback and an 80% multiplier for males, and setback one year with a 50% multiplier for females, as shown below for selected ages:

Ages	% of Disabled Members Dying Within Next Year	
	Men	Women
30	1.63%	0.29%
35	1.63%	0.30%
40	1.54%	0.28%
45	1.39%	0.28%
50	1.61%	0.37%
55	1.93%	0.63%
60	2.44%	0.94%
65	3.03%	1.20%
70	3.70%	1.60%

4. Retirement - As shown below for selected ages (rates are only applied to members eligible for retirement):

Age	Percent of Eligible Active Members Retiring Within Next Year		
	Miscellaneous	Probation	Safety
50	4.0%	7.5%	12.0%
51	3.0%	7.5%	14.0%
52	3.0%	7.5%	10.0%
53	3.0%	7.5%	10.0%
54	4.0%	7.5%	12.0%
55	6.0%	10.0%	15.0%
56	6.0%	12.0%	12.0%
57	8.0%	12.0%	12.0%
58	8.0%	12.0%	12.0%
59	8.0%	12.0%	18.0%
60	10.0%	15.0%	25.0%
61	10.0%	15.0%	30.0%
62	20.0%	20.0%	40.0%
63	20.0%	20.0%	50.0%
64	20.0%	20.0%	75.0%
65	40.0%	40.0%	100.0%
66	30.0%	20.0%	
67	25.0%	20.0%	
68	25.0%	40.0%	
69	25.0%	50.0%	
70	100.0%	100.0%	

Current deferred vested members are assumed to retire at the later of age 60 (age 55 for Reserve Members) or attained age.

5. Rates of separation from active membership (for causes other than death or retirement) - As shown below for selected ages:

Sample Ages	% of Active Members Separating Within Next Year			
	Miscellaneous and Probation Members			
	Disability	Withdrawal < 5 years	Withdrawal ≥ 5 years	Vested Termination
20	0.00%	12.50%	8.50%	0.00%
25	0.00%	11.00%	7.75%	3.50%
30	0.01%	9.50%	3.75%	4.00%
35	0.04%	8.00%	2.00%	3.50%
40	0.06%	7.00%	1.25%	3.00%
45	0.09%	6.00%	0.50%	3.00%
50	0.11%	6.00%	0.00%	2.50%
55	0.14%	6.00%	0.00%	2.00%
60	0.16%	6.00%	0.00%	0.00%
64	0.18%	6.00%	0.00%	0.00%
GRS Table No.	762			1188

Sample Ages	% of Active Members Separating Within Next Year			
	Safety Members			
	Disability	Withdrawal < 5 years	Withdrawal ≥ 5 years	Vested Termination
20	0.00%	5.20%	1.50%	3.00%
25	0.03%	5.00%	1.50%	2.00%
30	0.13%	4.70%	1.00%	1.50%
35	0.23%	4.00%	0.50%	1.50%
40	0.33%	3.50%	0.50%	1.50%
45	0.43%	2.50%	0.00%	1.50%
50	0.53%	1.50%	0.00%	1.50%
55	0.63%	0.00%	0.00%	0.00%
60	0.73%	0.00%	0.00%	0.00%
64	0.81%	0.00%	0.00%	0.00%
GRS Table No.	761			1189

Vested termination rates and disability rates are applied after the member is eligible for reduced or unreduced retirement benefits. 100% of the Safety disabilities and 0% of the Miscellaneous and Probation disabilities are duty-related.

40% of Vested Terminations are assumed to be Reciprocal.

Based on Member Contribution Totals provided by Pension Trust, we are assuming that 10% of members' contribution account balances are for supplemental/additional benefits.

C. Other Assumptions

Member Refunds. All or part of the employee contribution rate is subject to potential "Pick Up" by the employer. Our understanding is that "Pick Ups", and related interest, are subject to refund.

DROP. Members are assumed to choose a DROP date that maximizes their retirement benefit including the DROP account balance. Account balances are credited with 7.25% interest per year. 40% of Miscellaneous and 80% of Safety members are assumed to enter the DROP.

Deferral Age. The assumed retirement age for future Reserve and Reciprocal members is age 57.

Active Death. 100% of active deaths are assumed to be duty related.

Survivor Benefits. Marital status and spouses' census data were imputed with respect to active and deferred members.

Marital Status - 70% of men and 50% of women were assumed married at retirement.

Spouse Census - Women were assumed to be 3 years younger than men for active employees.

Disability Benefits. Benefits are not assumed to be offset by Social Security benefits.

Line-of-Duty Death. Social Security offset equal to 27.5% of Final Compensation.

IRC Section 415 Limits. We are assuming that IRC Section 415 limits, although applicable to this plan, will not impact any individual benefits.

ANALYSIS OF SELECTED ACTUARIAL ASSUMPTIONS COMPARED TO ACTUAL EXPERIENCE

Assumed and actual changes experienced in areas related to the following assumptions are shown:

	Year Ended December 31					Averages		
	2012	2011	2010	2009	2008	3 Year	5 Year	10 Year
Inflation ¹	2.1%	2.6%	1.4%	2.2%	0.1%	2.0%	1.7%	2.3%
Current Assumption	2.75%							
Average Pay Increase	0.0%	0.9%	1.9%	0.9%	4.0%	0.9%	1.5%	3.6%
Current Assumption	3.25%							
Merit & Longevity Pay Increase	-2.1%	-1.7%	0.5%	-1.3%	3.9%	-1.1%	-0.2%	1.3%
Current Assumption	0.50%							
Total Payroll	2.0%	-0.5%	0.8%	-4.9%	3.8%	0.8%	0.2%	2.2%
Current Assumption	3.75%							
Investment Return Rate ²	6.2%	5.5%	6.0%	5.7%	3.8%	5.9%	5.4%	6.2%
Current Assumption	7.25%							
Real Rate of Investment Return	4.1%	2.9%	4.6%	3.5%	3.7%	3.9%	3.7%	3.9%
Current Assumption	4.50%							

¹ Based on the average of the Consumer Price Index for Los Angeles –Riverside-Orange County and the San Francisco-Oakland-San Jose, All Items, 1982-84=100.

² Based on actuarial value of assets NOT market value or book value.

SECTION J

DEFINITIONS OF TECHNICAL TERMS

DEFINITIONS OF TECHNICAL TERMS

Actuarial Accrued Liability. The difference between the actuarial present value of system benefits and the actuarial value of future normal costs. Also referred to as "accrued liability" or "actuarial liability".

Actuarial Assumptions. Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and Compensation increases. Actuarial assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (Compensation increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Accrued Service. Service credited under the system which was rendered before the date of the actuarial valuation.

Actuarial Equivalent. A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial funding method".

Actuarial Gain (Loss). The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

Actuarial Present Value. The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

Amortization. Paying off an interest-discounted amount with periodic payments of interest and principal -- as opposed to paying off with lump sum payment.

Normal Cost. The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.

Unfunded Actuarial Accrued Liability. The difference between actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded actuarial liability" or "unfunded accrued liability".

Most retirement systems have unfunded actuarial accrued liability. They arise each time new benefits are added and each time an actuarial loss is realized.

SECTION K

DISCLOSURES REQUIRED BY STATEMENTS NO. 25 AND 27 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

This information is presented in draft form for review by the County's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the County's financial statements.

CONTRIBUTIONS MADE JANUARY 1, 2012 TO DECEMBER 31, 2012

The Pension Trust’s funding policy provides for periodic employer appropriations at actuarially determined rates that, expressed as percentages of annual covered payroll, are designed to accumulate sufficient assets to pay benefits when due.

During the period January 1, 2012 to December 31, 2012 applicable contributions of \$55,945,080 were made. The contribution breakdown is as follows:

Contributions Made*

Employer Appropriations	\$30,942,038
Member Contributions	<u>25,003,042</u>
Grand Totals	\$55,945,080

- * Does not include Employee Additional Voluntary (\$107,470) and County Additional for Employee Contributions (\$96,653). These contributions are excluded as both assets and liabilities.

ACCOUNTING DISCLOSURE

The following numbers are consistent with our understanding of the accounting provisions of GASB Statements #25 and #27, based on the figures supplied to Gabriel, Roeder, Smith and Company.

Year Ended	Total Annual Required Contribution	Actual Employee Contribution	Actuarially Required Contributions (ARC) ⁵	Employer Contributions Made	Percent Contributed	Investment Return ¹	NPO Balance/(Asset)
31-Dec	Contribution	Contribution	(ARC) ⁵	Made	Contributed	Return ¹	Balance/(Asset)
2001	\$6,776,216	\$9,200,681	\$15,976,897	\$12,639,251 ²	79%	7.4%	\$6,069,723
2002	6,927,576	10,636,366	17,563,942	14,628,625	83%	4.4%	9,303,300
2003	8,036,014	12,136,923	20,172,937	150,813,215	748%	6.1%	(126,038,417) ³
2004	4,227,686	12,663,198	16,890,884	16,520,585	98%	6.5%	(129,305,544)
2005	5,874,058	14,133,919	20,007,977	18,209,481	91%	6.4%	(131,184,818)
2006	6,520,975	15,496,805	22,017,780	19,177,491	87%	7.8%	(132,036,486)
2007	16,434,264	17,406,316	33,840,580 ⁴	24,014,202	71%	8.4%	(124,651,921)
2008	12,093,156	22,840,488	34,933,644	30,860,282	88%	0.3%	(122,266,199)
2009	55,127,772	24,170,461	30,957,311 ⁶	31,427,297	102%	5.7%	(125,154,822)
2010	54,826,804	24,548,625	30,278,179 ⁶	32,148,424	106%	6.0%	(129,971,714)
2011	55,314,049	25,262,362	30,051,687 ⁶	30,435,940	101%	5.5%	(133,213,404)
2012	56,329,706	25,207,165	31,122,541 ⁶	30,942,038	99%	6.2%	(135,119,408)

¹ Based on actuarial value of assets.

² Excludes County Employee Additional Contributions.

³ Due to 2003 issuance of Pension Obligation Bond (POB).

⁴ The figures represent the valuation year commencing January 1, 2007.

⁵ Effective July 1, 2008, the three part funding rate increase has been completed.

⁶ The ARC shown is the difference between the total annual required contribution and the actual employee contributions made.

2009 is the first year the disclosure has been shown to reflect the funding policy of the trust to fund the total annual required contribution through a combination of employer and employee contributions.

SECTION L

APPENDIX A: CURRENT MEMBER CONTRIBUTION RATES AND COLLECTIVE BARGAINING UNITS

Note: The following rates are the rates submitted in the data and used in the valuation.

JANUARY 1, 2013 ACTUARIAL VALUATION
MEMBER CONTRIBUTION RATES*

MISCELLANEOUS											
BU	14,21,22	7 (LAFCO)	7,8,9,10,11,17,99	4,12	17C (Interpreter)	24,25,26,27	18	15,13,98	2	19	20
Entry		Non-Court	Non-Court	Non-Court	Non-Court	Court	Court	Non-Court	Non-Court	Court	Court
Age	Other	Management	Management	Management	Management	Management	Management	SLOCEA	SLOCEA	SLOCEA	SLOCEA
18	9.01%	10.17%	13.78%	13.22%	12.41%	11.18%	12.41%	13.47%	12.91%	9.33%	9.89%
19	9.08%	10.24%	13.85%	13.29%	12.48%	11.25%	12.48%	13.54%	12.98%	9.40%	9.96%
20	9.15%	10.31%	13.92%	13.36%	12.55%	11.32%	12.55%	13.61%	13.05%	9.47%	10.03%
21	9.21%	10.37%	13.98%	13.42%	12.61%	11.38%	12.61%	13.67%	13.11%	9.53%	10.09%
22	9.23%	10.39%	14.00%	13.44%	12.63%	11.40%	12.63%	13.69%	13.13%	9.55%	10.11%
23	9.25%	10.41%	14.02%	13.46%	12.65%	11.42%	12.65%	13.71%	13.15%	9.57%	10.13%
24	9.28%	10.44%	14.05%	13.49%	12.68%	11.45%	12.68%	13.74%	13.18%	9.60%	10.16%
25	9.32%	10.48%	14.09%	13.53%	12.72%	11.49%	12.72%	13.78%	13.22%	9.64%	10.20%
26	9.37%	10.53%	14.14%	13.58%	12.77%	11.54%	12.77%	13.83%	13.27%	9.69%	10.25%
27	9.42%	10.58%	14.19%	13.63%	12.82%	11.59%	12.82%	13.88%	13.32%	9.74%	10.30%
28	9.48%	10.64%	14.25%	13.69%	12.88%	11.65%	12.88%	13.94%	13.38%	9.80%	10.36%
29	9.55%	10.71%	14.32%	13.76%	12.95%	11.72%	12.95%	14.01%	13.45%	9.87%	10.43%
30	9.62%	10.78%	14.39%	13.83%	13.02%	11.79%	13.02%	14.08%	13.52%	9.94%	10.50%
31	9.70%	10.86%	14.47%	13.91%	13.10%	11.87%	13.10%	14.16%	13.60%	10.02%	10.58%
32	9.79%	10.95%	14.56%	14.00%	13.19%	11.96%	13.19%	14.25%	13.69%	10.11%	10.67%
33	9.88%	11.04%	14.65%	14.09%	13.28%	12.05%	13.28%	14.34%	13.78%	10.20%	10.76%
34	9.98%	11.14%	14.75%	14.19%	13.38%	12.15%	13.38%	14.44%	13.88%	10.30%	10.86%
35	10.08%	11.24%	14.85%	14.29%	13.48%	12.25%	13.48%	14.54%	13.98%	10.40%	10.96%
36	10.18%	11.34%	14.95%	14.39%	13.58%	12.35%	13.58%	14.64%	14.08%	10.50%	11.06%
37	10.29%	11.45%	15.06%	14.50%	13.69%	12.46%	13.69%	14.75%	14.19%	10.61%	11.17%
38	10.40%	11.56%	15.17%	14.61%	13.80%	12.57%	13.80%	14.86%	14.30%	10.72%	11.28%
39	10.52%	11.68%	15.29%	14.73%	13.92%	12.69%	13.92%	14.98%	14.42%	10.84%	11.40%
40	10.64%	11.80%	15.41%	14.85%	14.04%	12.81%	14.04%	15.10%	14.54%	10.96%	11.52%
41	10.77%	11.93%	15.54%	14.98%	14.17%	12.94%	14.17%	15.23%	14.67%	11.09%	11.65%
42	10.90%	12.06%	15.67%	15.11%	14.30%	13.07%	14.30%	15.36%	14.80%	11.22%	11.78%
43	11.04%	12.20%	15.81%	15.25%	14.44%	13.21%	14.44%	15.50%	14.94%	11.36%	11.92%
44	11.18%	12.34%	15.95%	15.39%	14.58%	13.35%	14.58%	15.64%	15.08%	11.50%	12.06%
45	11.32%	12.48%	16.09%	15.53%	14.72%	13.49%	14.72%	15.78%	15.22%	11.64%	12.20%
46	11.47%	12.63%	16.24%	15.68%	14.87%	13.64%	14.87%	15.93%	15.37%	11.79%	12.35%
47	11.63%	12.79%	16.40%	15.84%	15.03%	13.80%	15.03%	16.09%	15.53%	11.95%	12.51%
48	11.79%	12.95%	16.56%	16.00%	15.19%	13.96%	15.19%	16.25%	15.69%	12.11%	12.67%
49	11.95%	13.11%	16.72%	16.16%	15.35%	14.12%	15.35%	16.41%	15.85%	12.27%	12.83%
50	12.12%	13.28%	16.89%	16.33%	15.52%	14.29%	15.52%	16.58%	16.02%	12.44%	13.00%
51	12.29%	13.45%	17.06%	16.50%	15.69%	14.46%	15.69%	16.75%	16.19%	12.61%	13.17%
52	12.46%	13.62%	17.23%	16.67%	15.86%	14.63%	15.86%	16.92%	16.36%	12.78%	13.34%
53	12.64%	13.80%	17.41%	16.85%	16.04%	14.81%	16.04%	17.10%	16.54%	12.96%	13.52%
54	12.82%	13.98%	17.59%	17.03%	16.22%	14.99%	16.22%	17.28%	16.72%	13.14%	13.70%
55	13.01%	14.17%	17.78%	17.22%	16.41%	15.18%	16.41%	17.47%	16.91%	13.33%	13.89%
56	13.20%	14.36%	17.97%	17.41%	16.60%	15.37%	16.60%	17.66%	17.10%	13.52%	14.08%
57	13.39%	14.55%	18.16%	17.60%	16.79%	15.56%	16.79%	17.85%	17.29%	13.71%	14.27%
58	13.59%	14.75%	18.36%	17.80%	16.99%	15.76%	16.99%	18.05%	17.49%	13.91%	14.47%
59+	13.79%	14.95%	18.56%	18.00%	17.19%	15.96%	17.19%	18.25%	17.69%	14.11%	14.67%

* Rates do not include Auto Allowance for certain individuals. These are the rates in effect at the time of the valuation and which were increased through the collective bargaining process.

**JANUARY 1, 2013 ACTUARIAL VALUATION
MEMBER CONTRIBUTION RATES***

BU Entry	PROBATION		
	8	9	31,32 Non-
<u>Age</u>	<u>Management</u>	<u>Management</u>	<u>Management</u>
18	17.19%	18.69%	16.00%
19	17.27%	18.77%	16.08%
20	17.35%	18.85%	16.16%
21	17.42%	18.92%	16.23%
22	17.44%	18.94%	16.25%
23	17.46%	18.96%	16.27%
24	17.49%	18.99%	16.30%
25	17.54%	19.04%	16.35%
26	17.59%	19.09%	16.40%
27	17.65%	19.15%	16.46%
28	17.71%	19.21%	16.52%
29	17.79%	19.29%	16.60%
30	17.87%	19.37%	16.68%
31	17.96%	19.46%	16.77%
32	18.06%	19.56%	16.87%
33	18.16%	19.66%	16.97%
34	18.27%	19.77%	17.08%
35	18.38%	19.88%	17.19%
36	18.49%	19.99%	17.30%
37	18.61%	20.11%	17.42%
38	18.73%	20.23%	17.54%
39	18.86%	20.36%	17.67%
40	19.00%	20.50%	17.81%
41	19.14%	20.64%	17.95%
42	19.28%	20.78%	18.09%
43	19.44%	20.94%	18.25%
44	19.59%	21.09%	18.40%
45	19.75%	21.25%	18.56%
46	19.92%	21.42%	18.73%
47	20.09%	21.59%	18.90%
48	20.27%	21.77%	19.08%
49	20.45%	21.95%	19.26%
50	20.63%	22.13%	19.44%
51	20.82%	22.32%	19.63%
52	21.01%	22.51%	19.82%
53	21.21%	22.71%	20.02%
54	21.41%	22.91%	20.22%
55	21.62%	23.12%	20.43%
56	21.83%	23.33%	20.64%
57	22.04%	23.54%	20.85%
58	22.26%	23.76%	21.07%
59+	22.48%	23.98%	21.29%

* Rates for Bargaining Unit 9 include an Auto Allowance component. These are the rates in effect at the time of the valuation and which were increased through the collective bargaining process.

JANUARY 1, 2013 ACTUARIAL VALUATION
MEMBER CONTRIBUTION RATES*

BU Entry	SAFETY							
	6 Non- Management	3,14 Non- Management	27,28 Non- Management	7 Management	10 (Sheriff-Coroner) Management	15 Management#	15 Management@	16 Management
18	13.46%	10.08%	17.51%	15.12%	19.77%	17.20%	21.95%	21.95%
19	13.57%	10.19%	17.62%	15.23%	19.88%	17.31%	22.06%	22.06%
20	13.68%	10.30%	17.73%	15.34%	19.99%	17.42%	22.17%	22.17%
21	13.79%	10.41%	17.84%	15.45%	20.10%	17.53%	22.28%	22.28%
22	13.90%	10.52%	17.95%	15.56%	20.21%	17.64%	22.39%	22.39%
23	14.02%	10.64%	18.07%	15.68%	20.33%	17.76%	22.51%	22.51%
24	14.14%	10.76%	18.19%	15.80%	20.45%	17.88%	22.63%	22.63%
25	14.26%	10.88%	18.31%	15.92%	20.57%	18.00%	22.75%	22.75%
26	14.38%	11.00%	18.43%	16.04%	20.69%	18.12%	22.87%	22.87%
27	14.50%	11.12%	18.55%	16.16%	20.81%	18.24%	22.99%	22.99%
28	14.62%	11.24%	18.67%	16.28%	20.93%	18.36%	23.11%	23.11%
29	14.74%	11.36%	18.79%	16.40%	21.05%	18.48%	23.23%	23.23%
30	14.86%	11.48%	18.91%	16.52%	21.17%	18.60%	23.35%	23.35%
31	14.98%	11.60%	19.03%	16.64%	21.29%	18.72%	23.47%	23.47%
32	15.10%	11.72%	19.15%	16.76%	21.41%	18.84%	23.59%	23.59%
33	15.22%	11.84%	19.27%	16.88%	21.53%	18.96%	23.71%	23.71%
34	15.34%	11.96%	19.39%	17.00%	21.65%	19.08%	23.83%	23.83%
35	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
36	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
37	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
38	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
39	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
40	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
41	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
42	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
43	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
44	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
45	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
46	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
47	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
48	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
49	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
50	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
51	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
52	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
53	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
54	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
55	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
56	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
57	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
58	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%
59+	15.46%	12.08%	19.51%	17.12%	21.77%	19.20%	23.95%	23.95%

* Rates do not include Auto Allowance for certain individuals. These are the rates in effect at the time of the valuation and which were increased through the collective bargaining process.

#Includes Non Sworn members of Bargaining Unit 15.

@ Includes Sworn members of Bargaining Unit 15.

JANUARY 1, 2013 ACTUARIAL VALUATION
MEMBER CONTRIBUTION RATES

<u>Entry Age</u>	Tier 2		
	<u>Miscellaneous</u>	<u>Safety - Non-Sworn</u>	<u>Safety - Sworn</u>
18	4.89%	7.35%	8.04%
19	5.01%	7.70%	8.44%
20	5.13%	8.05%	8.84%
21	5.28%	8.40%	9.24%
22	5.39%	8.75%	9.64%
23	5.55%	9.10%	10.04%
24	5.67%	9.45%	10.45%
25	5.81%	9.80%	10.85%
26	6.01%	10.15%	11.25%
27	6.11%	10.50%	11.65%
28	6.30%	10.85%	12.05%
29	6.45%	11.20%	12.45%
30	6.75%	11.55%	12.85%
31	6.91%	11.90%	13.25%
32	7.20%	12.25%	13.66%
33	7.35%	12.60%	14.06%
34	7.53%	12.95%	14.46%
35	7.85%	13.30%	14.86%
36	8.00%	13.30%	14.86%
37	8.21%	13.30%	14.86%
38	8.44%	13.30%	14.86%
39	8.65%	13.30%	14.86%
40	8.85%	13.30%	14.86%
41	9.00%	13.30%	14.86%
42	9.03%	13.30%	14.86%
43	9.26%	13.30%	14.86%
44	9.49%	13.30%	14.86%
45	9.58%	13.30%	14.86%
46	9.86%	13.30%	14.86%
47	10.10%	13.30%	14.86%
48	10.20%	13.30%	14.86%
49	10.48%	13.30%	14.86%
50	10.52%	13.30%	14.86%
51	10.73%	13.30%	14.86%
52	10.79%	13.30%	14.86%
53	10.99%	13.30%	14.86%
54	11.18%	13.30%	14.86%
55	11.48%	13.30%	14.86%
56	11.54%	13.30%	14.86%
57	11.56%	13.30%	14.86%
58	11.58%	13.30%	14.86%
59	11.60%	13.30%	14.86%
60	11.62%	13.30%	14.86%
61	11.64%	13.30%	14.86%
62+	11.66%	13.30%	14.86%

**SUMMARY OF BENEFITS
BY COLLECTIVE BARGAINING UNIT
AS OF JANUARY 1, 2013**

Collective Bargaining Unit	Valuation Group	Benefit % at age	FAC Period	Benefit Maximum
14	Miscellaneous Other	2% @ 55	One year	80%
21	Miscellaneous Other	2% @ 55	One year	80%
22	Miscellaneous Other	2% @ 55	One year	80%
4	Miscellaneous Management Non-Court	2% @ 55	One year	100%
7	Miscellaneous Management Non-Court	2% @ 55	One year	100%
8	Miscellaneous Management Non-Court	2% @ 55	One year	100%
9	Miscellaneous Management Non-Court	2% @ 55	One year	100%
10	Miscellaneous Management Non-Court	2% @ 55	One year	100%
11	Miscellaneous Management Non-Court	2% @ 55	One year	100%
12	Miscellaneous Management Non-Court	2% @ 55	One year	100%
17	Miscellaneous Management Non-Court	2% @ 55	One year	100%
99	Miscellaneous Management Non-Court	2% @ 55	One year	100%
17C	Miscellaneous Management Non-Court	2% @ 55	One year	80%
18	Miscellaneous Management Court	2% @ 55	One year	100%
24	Miscellaneous Management Court	2% @ 55	One year	100%
25	Miscellaneous Management Court	2% @ 55	One year	100%
26	Miscellaneous Management Court	2% @ 55	One year	100%
27	Miscellaneous Management Court	2% @ 55	One year	100%
1	SLOCEA Non Court	2% @ 55	One year	80%
2	SLOCEA Non Court	2% @ 55	One year	80%
5	SLOCEA Non Court	2% @ 55	One year	80%
13	SLOCEA Non Court	2% @ 55	One year	80%
98	SLOCEA Non Court	2% @ 55	One year	80%
19	SLOCEA Court	2% @ 55	One year	80%
20	SLOCEA Court	2% @ 55	One year	80%
8	Probation Management	3% @ 55	One year	90%
9	Probation Management	3% @ 55	One year	90%
29	Probation Management	3% @ 55	One year	90%
31	Probation Non Management	3% @ 55	One year	90%
32	Probation Non Management	3% @ 55	One year	90%
3	Non Sworn Safety Non Management	3% @ 55	One year	90%
27	Sworn Safety Non Management	3% @ 50	One year	90%
6	Safety Non Management	3% @ 55	One year	90%
7	Safety Management	3% @ 55	One year	90%
10	Safety Management	3% @ 50	One year	90%
14	Non Sworn Safety Non Management	3% @ 55	One year	90%
28	Sworn Safety Non Management	3% @ 50	One year	90%
15	Non Sworn Safety Management	3% @ 55	One year	90%
15	Sworn Safety Management	3% @ 50	One year	90%
16	Safety Management	3% @ 50	One year	90%
Tier 2	Miscellaneous Non-Court	2% @ 60	Three year	90%
Tier 2	Non Sworn Safety Non Management	2.7% @ 55	Three year	90%

The following pages are exhibits that are not formally a part of the Actuarial Valuation report. They are included here as supplementary information

San Luis Obispo County Pension Trust

Projection Based on January 1, 2013 Actuarial Valuation with Tier 3 (AB 340)

7.25% Investment Rate of Return Assumption

3.75% Payroll Growth Assumption

Valuation as of January 1,	Input Market Return for Past Fiscal Year	Market Return for Past Fiscal Year	Total Contribution Rate	Compensation at Valuation	Total Contribution	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL	Funded Ratio	Total Normal Cost Rate	Market Value of Assets (MVA)	Funded Ratio Using MVA
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2013	7.25%	12.02%	35.18%	\$ 164	\$ 57.8	\$ 1,468	\$ 1,122	\$ 346	76.4%	23.38%	\$ 1,013	69.0%
2014	7.25%	7.25%	35.09%	169	59.2	1,549	1,184	365	76.5%	22.69%	1,081	69.8%
2015	7.25%	7.25%	35.57%	174	61.8	1,629	1,230	400	75.5%	22.03%	1,148	70.5%
2016	7.25%	7.25%	36.37%	179	65.1	1,710	1,266	444	74.1%	21.40%	1,218	71.2%
2017	7.25%	7.25%	36.87%	185	68.1	1,790	1,313	477	73.3%	20.81%	1,289	72.0%
2018	7.25%	7.25%	37.30%	190	71.0	1,868	1,362	507	72.9%	20.24%	1,361	72.9%
2019	7.25%	7.25%	37.05%	196	72.7	1,945	1,431	515	73.5%	19.72%	1,434	73.7%
2020	7.25%	7.25%	36.80%	203	74.5	2,021	1,501	520	74.3%	19.25%	1,507	74.6%
2021	7.25%	7.25%	36.54%	209	76.4	2,094	1,572	522	75.1%	18.82%	1,579	75.4%
2022	7.25%	7.25%	36.28%	216	78.4	2,165	1,643	523	75.9%	18.43%	1,651	76.2%
2023	7.25%	7.25%	36.03%	223	80.5	2,235	1,714	521	76.7%	18.07%	1,722	77.0%
2024	7.25%	7.25%	35.82%	231	82.7	2,302	1,785	518	77.5%	17.75%	1,793	77.9%
2025	7.25%	7.25%	35.63%	239	85.1	2,368	1,856	513	78.4%	17.47%	1,864	78.7%
2026	7.25%	7.25%	35.47%	247	87.7	2,433	1,927	505	79.2%	17.22%	1,936	79.6%
2027	7.25%	7.25%	35.33%	256	90.4	2,495	2,000	495	80.1%	16.99%	2,008	80.5%
2028	7.25%	7.25%	35.21%	265	93.3	2,556	2,073	483	81.1%	16.78%	2,081	81.4%
2029	7.25%	7.25%	35.11%	274	96.3	2,615	2,147	468	82.1%	16.59%	2,155	82.4%
2030	7.25%	7.25%	35.03%	284	99.5	2,673	2,223	450	83.2%	16.42%	2,232	83.5%
2031	7.25%	7.25%	34.97%	294	102.9	2,730	2,302	428	84.3%	16.27%	2,310	84.6%
2032	7.25%	7.25%	34.94%	305	106.6	2,786	2,383	403	85.5%	16.14%	2,392	85.8%
2033	7.25%	7.25%	34.91%	316	110.3	2,841	2,468	373	86.9%	16.01%	2,476	87.2%
2034	7.25%	7.25%	34.92%	328	114.4	2,896	2,557	339	88.3%	15.90%	2,565	88.6%
2035	7.25%	7.25%	34.96%	340	118.8	2,950	2,650	300	89.8%	15.81%	2,659	90.1%
2036	7.25%	7.25%	35.04%	352	123.4	3,004	2,750	255	91.5%	15.72%	2,758	91.8%
2037	7.25%	7.25%	35.18%	365	128.5	3,059	2,855	204	93.3%	15.65%	2,864	93.6%
2038	7.25%	7.25%	35.42%	379	134.1	3,114	2,969	145	95.3%	15.58%	2,977	95.6%
2039	7.25%	7.25%	35.98%	393	141.3	3,171	3,092	79	97.5%	15.52%	3,100	97.8%
2040	7.25%	7.25%	16.10%	407	65.6	3,229	3,226	3	99.9%	15.47%	3,235	100.2%
2041	7.25%	7.25%	15.69%	423	66.3	3,289	3,288	1	100.0%	15.43%	3,296	100.2%
2042	7.25%	7.25%	15.65%	438	68.6	3,351	3,350	1	100.0%	15.39%	3,358	100.2%
2043	7.25%	7.25%	15.63%	455	71.1	3,416	3,415	1	100.0%	15.36%	3,423	100.2%

Projection assumes no actuarial gains and losses, other than from assets. Projection based on constant population.

Tier 3 changes include No DROP, 2% COLA, pay limited to Social Security Taxable Wage Base (\$113,700 for 2013), 3 year Final Average Compensation for members hired on or after January 1, 2013.

All dollar amounts in millions.

San Luis Obispo County Pension Trust

**Projection Based on January 1, 2013 Actuarial Valuation with Tier 3 (AB 340)
7.25% Investment Rate of Return Assumption & 7.75% Projected Market Returns
3.75% Payroll Growth Assumption**

Valuation as of January 1,	Input Market Return for Past Fiscal Year	Market Return for Past Fiscal Year	Total Contribution Rate	Compensation at Valuation	Total Contribution	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL	Funded Ratio	Total Normal Cost Rate	Market Value of Assets (MVA)	Funded Ratio Using MVA
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2013	12.02%	12.02%	35.18%	\$ 164	\$ 57.8	\$ 1,468	\$ 1,122	\$ 346	76.4%	23.38%	\$ 1,013	69.0%
2014	7.75%	7.75%	35.06%	169	59.2	1,549	1,185	364	76.5%	22.69%	1,086	70.1%
2015	7.75%	7.75%	35.46%	174	61.6	1,629	1,233	397	75.7%	22.03%	1,159	71.1%
2016	7.75%	7.75%	36.15%	179	64.7	1,710	1,273	437	74.4%	21.40%	1,235	72.2%
2017	7.75%	7.75%	36.49%	185	67.4	1,790	1,324	466	74.0%	20.81%	1,313	73.4%
2018	7.75%	7.75%	36.70%	190	69.8	1,868	1,379	489	73.8%	20.24%	1,393	74.5%
2019	7.75%	7.75%	36.22%	196	71.1	1,945	1,456	490	74.8%	19.72%	1,474	75.8%
2020	7.75%	7.75%	35.71%	203	72.3	2,021	1,533	487	75.9%	19.25%	1,555	77.0%
2021	7.75%	7.75%	35.18%	209	73.6	2,094	1,612	482	77.0%	18.82%	1,636	78.1%
2022	7.75%	7.75%	34.62%	216	74.8	2,165	1,691	474	78.1%	18.43%	1,717	79.3%
2023	7.75%	7.75%	34.06%	223	76.1	2,235	1,771	464	79.2%	18.07%	1,798	80.4%
2024	7.75%	7.75%	33.51%	231	77.4	2,302	1,851	452	80.4%	17.75%	1,878	81.6%
2025	7.75%	7.75%	32.97%	239	78.8	2,368	1,931	437	81.5%	17.47%	1,960	82.7%
2026	7.75%	7.75%	32.43%	247	80.2	2,433	2,012	421	82.7%	17.22%	2,041	83.9%
2027	7.75%	7.75%	31.88%	256	81.6	2,495	2,093	402	83.9%	16.99%	2,123	85.1%
2028	7.75%	7.75%	31.32%	265	83.0	2,556	2,174	381	85.1%	16.78%	2,206	86.3%
2029	7.75%	7.75%	30.75%	274	84.3	2,615	2,257	358	86.3%	16.59%	2,290	87.6%
2030	7.75%	7.75%	30.15%	284	85.7	2,673	2,341	332	87.6%	16.42%	2,375	88.8%
2031	7.75%	7.75%	29.53%	294	86.9	2,730	2,426	304	88.9%	16.27%	2,461	90.1%
2032	7.75%	7.75%	28.87%	305	88.0	2,786	2,513	273	90.2%	16.14%	2,549	91.5%
2033	7.75%	7.75%	28.14%	316	88.9	2,841	2,602	240	91.6%	16.01%	2,638	92.8%
2034	7.75%	7.75%	27.34%	328	89.6	2,896	2,692	204	93.0%	15.90%	2,729	94.2%
2035	7.75%	7.75%	26.42%	340	89.7	2,950	2,784	166	94.4%	15.81%	2,822	95.7%
2036	7.75%	7.75%	25.31%	352	89.1	3,004	2,878	127	95.8%	15.72%	2,917	97.1%
2037	7.75%	7.75%	23.90%	365	87.3	3,059	2,973	86	97.2%	15.65%	3,013	98.5%
2038	7.75%	7.75%	21.84%	379	82.7	3,114	3,068	46	98.5%	15.58%	3,110	99.9%
2039	7.75%	7.75%	17.86%	393	70.1	3,171	3,162	9	99.7%	15.52%	3,204	101.1%
2040	7.75%	7.75%	15.47%	407	63.0	3,229	3,245	(16)	100.5%	15.47%	3,288	101.8%
2041	7.75%	7.75%	15.43%	423	65.2	3,289	3,322	(34)	101.0%	15.43%	3,367	102.4%
2042	7.75%	7.75%	15.39%	438	67.5	3,351	3,404	(53)	101.6%	15.39%	3,450	102.9%
2043	7.75%	7.75%	15.36%	455	69.8	3,416	3,491	(74)	102.2%	15.36%	3,537	103.5%

Projection assumes no actuarial gains and losses, other than from assets. Projection based on constant population.

Tier 3 changes include No DROP, 2% COLA, pay limited to Social Security Taxable Wage Base (\$113,700 for 2013), 3 year Final Average Compensation for members hired on or after January 1, 2013.

All dollar amounts in millions.

San Luis Obispo County Pension Trust

**Projection Based on January 1, 2013 Actuarial Valuation with Tier 3 (AB 340)
7.25% Investment Rate of Return Assumption & 6.75% Projected Market Returns
3.75% Payroll Growth Assumption**

Valuation as of January 1,	Input Market Return for Past Fiscal Year	Market Return for Past Fiscal Year	Total Contribution Rate	Compensation at Valuation	Total Contribution	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL	Funded Ratio	Total Normal Cost Rate	Market Value of Assets (MVA)	Funded Ratio Using MVA
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2013	12.02%	12.02%	35.18%	\$ 164	\$ 57.8	\$ 1,468	\$ 1,122	\$ 346	76.4%	23.38%	\$ 1,013	69.0%
2014	6.75%	6.75%	35.12%	169	59.3	1,549	1,183	366	76.4%	22.69%	1,076	69.4%
2015	6.75%	6.75%	35.68%	174	62.0	1,629	1,226	403	75.3%	22.03%	1,138	69.8%
2016	6.75%	6.75%	36.60%	179	65.5	1,710	1,260	450	73.7%	21.40%	1,201	70.2%
2017	6.75%	6.75%	37.26%	185	68.8	1,790	1,301	488	72.7%	20.81%	1,265	70.7%
2018	6.75%	6.75%	37.89%	190	72.1	1,868	1,344	525	71.9%	20.24%	1,330	71.2%
2019	6.75%	6.75%	37.88%	196	74.4	1,945	1,406	539	72.3%	19.72%	1,396	71.7%
2020	6.75%	6.75%	37.87%	203	76.7	2,021	1,469	551	72.7%	19.25%	1,460	72.3%
2021	6.75%	6.75%	37.87%	209	79.2	2,094	1,533	561	73.2%	18.82%	1,524	72.8%
2022	6.75%	6.75%	37.89%	216	81.9	2,165	1,596	570	73.7%	18.43%	1,587	73.3%
2023	6.75%	6.75%	37.94%	223	84.7	2,235	1,659	576	74.2%	18.07%	1,649	73.8%
2024	6.75%	6.75%	38.03%	231	87.8	2,302	1,721	581	74.8%	17.75%	1,711	74.3%
2025	6.75%	6.75%	38.17%	239	91.2	2,368	1,784	584	75.3%	17.47%	1,774	74.9%
2026	6.75%	6.75%	38.36%	247	94.8	2,433	1,847	585	75.9%	17.22%	1,836	75.5%
2027	6.75%	6.75%	38.59%	256	98.7	2,495	1,911	584	76.6%	16.99%	1,900	76.1%
2028	6.75%	6.75%	38.87%	265	103.0	2,556	1,977	579	77.3%	16.78%	1,964	76.8%
2029	6.75%	6.75%	39.20%	274	107.5	2,615	2,044	572	78.1%	16.59%	2,030	77.6%
2030	6.75%	6.75%	39.58%	284	112.5	2,673	2,113	560	79.0%	16.42%	2,099	78.5%
2031	6.75%	6.75%	40.03%	294	117.8	2,730	2,186	544	80.1%	16.27%	2,171	79.5%
2032	6.75%	6.75%	40.56%	305	123.7	2,786	2,263	523	81.2%	16.14%	2,247	80.7%
2033	6.75%	6.75%	41.17%	316	130.1	2,841	2,345	497	82.5%	16.01%	2,328	81.9%
2034	6.75%	6.75%	41.90%	328	137.3	2,896	2,433	463	84.0%	15.90%	2,415	83.4%
2035	6.75%	6.75%	42.79%	340	145.4	2,950	2,528	422	85.7%	15.81%	2,510	85.1%
2036	6.75%	6.75%	43.92%	352	154.7	3,004	2,632	372	87.6%	15.72%	2,613	87.0%
2037	6.75%	6.75%	45.45%	365	166.0	3,059	2,748	311	89.8%	15.65%	2,728	89.2%
2038	6.75%	6.75%	47.75%	379	180.8	3,114	2,879	236	92.4%	15.58%	2,857	91.7%
2039	6.75%	6.75%	52.43%	393	205.9	3,171	3,028	143	95.5%	15.52%	3,005	94.8%
2040	6.75%	6.75%	20.32%	407	82.8	3,229	3,209	19	99.4%	15.47%	3,185	98.6%
2041	6.75%	6.75%	19.72%	423	83.3	3,289	3,271	18	99.5%	15.43%	3,245	98.7%
2042	6.75%	6.75%	19.70%	438	86.3	3,351	3,332	19	99.4%	15.39%	3,305	98.6%
2043	6.75%	6.75%	19.67%	455	89.4	3,416	3,397	19	99.4%	15.36%	3,369	98.6%

Projection assumes no actuarial gains and losses, other than from assets. Projection based on constant population.

Tier 3 changes include No DROP, 2% COLA, pay limited to Social Security Taxable Wage Base (\$113,700 for 2013), 3 year Final Average Compensation for members hired on or after January 1, 2013.

All dollar amounts in millions.

**San Luis Obispo County Pension Trust
Valuation Results as of January 1, 2013**

Based on Delay of Increase to Charged Rate (34.24%) to Total Combined ARC

Valuation Date:	January 1, 2013	If Use Charged Rate Until July 1, 2013	If Use Charged Rate Until January 1, 2014	If Use Charged Rate Until July 1, 2014
Annual Required Contribution				
• Total Normal Cost	23.38%	23.38%	23.38%	23.38%
• Member Contributions	14.61%	14.61%	14.61%	14.61%
• County Normal Cost	8.77%	8.77%	8.77%	8.77%
• Amortization Payment	11.80%	11.83%	11.86%	11.90%
• Total County Cost (ARC)	20.57%	20.60%	20.63%	20.66%
• Total Combined ARC	35.18%	35.21%	35.24%	35.28%