

Pension Trust

1000 Mill Street
San Luis Obispo, CA 93408
(805) 781-5465 Phone
(805) 781-5697 Fax
www.SLOPensionTrust.org



AGENDA

PENSION TRUST BOARD OF TRUSTEES

Monday, June 25, 2018 9:30 AM

Board of Supervisors Chambers
County Government Center
San Luis Obispo, CA 93408

*Materials for the meeting may be found at
<http://www.slocounty.ca.gov/Departments/Pension-Trust/Board-of-Trustees>*

PUBLIC COMMENT

1. Public Comment: Members of the public wishing to address the Board on matters other than scheduled items may do so when recognized by the Chair. Presentations are limited to three minutes per individual.

ORGANIZATIONAL

None

CONSENT

2. Minutes of the Regular Meeting of May 21, 2018 (Approve Without Correction).
3. Report of Deposits and Contributions for the month of May 2018 (Receive and File).
4. Report of Service Retirements, Disability Retirements and DROP Participants for the month of May 2018 (Receive, Approve and File).
5. Applications & Elections to participate in the Deferred Retirement Option Program (DROP) received through June 8, 2018 (Receive, Approve and File).
6. Request for Reinstatement from Retirement (Recommend Approval).

APPLICATIONS FOR DISABILITY RETIREMENT

None

OLD BUSINESS

None

NEW BUSINESS

- 7. Audited Financial Statements for the period ended December 31, 2017 – Comprehensive Annual Financial Report – presentation by Rosalva Flores and Alaina Sanchez, CPAs of Brown Armstrong Accountancy (Recommend Receive, File and Direct Staff to Distribute in accordance with the Retirement Plan).
- 8. January 1, 2018 Actuarial Valuation and Pension Contribution Rates (Approve, Receive and File).
- 9. Employer Contributions FY18-19 Prefunding Amount – (Recommend Approval)

INVESTMENTS

- 10. Monthly Investment Report for May 2018 (Receive and File).
- 11. Investment Consultant – Verus – Revised Consulting Agreement (Recommend Approval).
- 12. Asset Allocation - (Review, Discuss, and Direct Staff as necessary).

OPERATIONS

- 13. Staff Reports
- 14. General Counsel Reports
- 15. Committee Reports:

a. Audit Committee	Report
b. Personnel Committee	No Report
c. PAS Replacement Committee	No Report
- 16. Upcoming Board Topics (subject to change):

- a. July 23, 2018
 - i. Disability case(s)
 - ii. Auditor Engagement 2018-2023
 - iii. Alternative Investment Fee Disclosures
 - iv. FPI – Recommendation on 1000 Mill St.
 - v. Private Equity – additional commitments

- b. August 27, 2018
 - i. Mid-year financial statements
 - ii. 2Q18 Quarterly Investment Report
 - iii. Verus – organizational and research process update
 - iv. Investment educational presentations

- c. September 24, 2018 (room 161/162)
 - i. Strategic Planning Session

17. Trustee Comments

- a. Strategic Planning Session (September) topics

REFERRED ITEMS

None

ADDED ITEMS

None

CLOSED SESSION

None

ADJOURNMENT

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Board of Trustees

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MAY 21, 2018 MINUTES OF THE REGULAR MEETING OF THE PENSION TRUST BOARD OF TRUSTEES

BOARD MEMBERS PRESENT: Matt Janssen, President
Guy Savage
Gere Sibbach
Jim Hamilton
Jim Erb
Jeff Hamm

BOARD MEMBERS ABSENT: Will Clemens, Vice President

STAFF: Carl Nelson
Andrea Paley
Amy Burke

COUNSEL: Chris Waddell, Esq.

CONSULTANTS: Scott Whalen, Verus
Leslie Thompson, Gabriel Roeder Smith

OTHERS: Larry Batchelder, SLOCREA
Jennifer Alderete, Pension Trust
Michael Hobbs, Human Resources
Mark Zeltmann, Human Resources
Megan Fisher, Human Resources
Ashleigh Szkubiel, Human Resources
Teresa White McCarthy, Human Resources

The meeting was called to order by President Janssen at 9:30 AM, who presided over same.

AGENDA ITEM NO. 1: PUBLIC COMMENT.

None.

ORGANIZATIONAL:

None.

CONSENT:

AGENDA ITEM NO. 2 - 5: CONSENT.

Public comment: None

Upon the motion of Mr. Savage, seconded by Mr. Erb, and unanimously passed, the following action was taken:

- ITEM 2:** The Minutes of the Regular Meeting of April 23, 2018 were approved with a correction to the Committee reports: Ms. Burke's comments are associated with the Audit Committee, and "nothing to report" for the Personnel Committee.
- ITEM 3:** The Report of Deposits and Contributions for the Month of April 2018, was received and filed.
- ITEM 4:** The Report of Service Retirements, Disability and DROP Retirements for the month of April 2018, was received, approved and filed.
- ITEM 5:** The Report of Applications for participation in the Deferred Retirement Option Program received through May 4, 2018 was received, approved and filed.

APPLICATIONS FOR DISABILITY RETIREMENT:

**AGENDA ITEM NO. 6: APPLICATION FOR ORDINARY DISABILITY
RETIREMENT APRIL FRANKS CASE NO. 2017-07.**

Public Comment: None

Upon the motion of Mr. Sibbach, seconded by Mr. Janssen, and unanimously passed, the following action was taken:

- 1) Ms. April Franks was found to have become permanently disabled within the meaning of Retirement Plan Section 10.01 on June 3, 2017; and
- 2) That Ms. Franks was found to be entitled to an Ordinary Disability Retirement under Retirement Plan Section 10.02, effective October 10, 2017, the date specified on her application.

OLD BUSINESS:

None.

NEW BUSINESS:

**AGENDA ITEM NO. 7: JANUARY 1, 2018 EXPERIENCE STUDY
PRELIMINARY RESULTS.**

Ms. Leslie Thompson, Actuary with Gabriel, Roeder, Smith & Co., Inc. reviewed the January 1, 2018 Experience Study responding to questions from the Board and Staff.

Public comment: Mr. Larry Batcheldor spoke as a retiree living on a fixed income, commenting that the report states inflation is holding at 2% while the actual cost-of-living keeps going up.

Upon the motion of Mr. Janssen, seconded by Mr. Hamm, and unanimously passed, the January 1, 2018 Actuarial Experience Study was received and filed.

**AGENDA ITEM NO.8: ACTUARIAL VALUATION –
ACTUARIAL ASSUMPTIONS.**

Ms. Thompson reviewed the preliminary recommendations of the Actuary for assumptions to use in the 2018 actuarial valuation based on the 2018 experience study. Discussion ensued.

Public comment: None

Upon the motion of Mr. Sibbach, seconded by Mr. Hamm, and unanimously passed, the Board accepted the recommendations of the actuary, as referenced in the Actuarial Experience Study as of December 31, 2017 and detailed in the Staff memo on this item. The Board further directed the actuary to phase in the .625% decrease in Payroll Growth Rate over a two-year period utilizing a 0.375% decrease on January 1, 2018 and a 0.2500% decrease on January 1, 2019 (in the Payroll Growth Rate referenced on page 19 of the Actuarial Experience Study as of December 31, 2017).

**** 11:00 AM** – President Janssen called for a brief recess, the meeting resuming at 11:12 AM

**AGENDA ITEM NO. 9: PENSION TRUST ADMINISTRATIVE BUDGET
FOR FISCAL YEAR 2018 / 2019.**

Public comment: None

Upon the motion of Mr. Janssen, seconded by Mr. Savage, and unanimously passed, the Pension Trust Administrative Budget for Fiscal Year 2018 / 2019 was approved.

INVESTMENTS:

AGENDA ITEM NO. 10: INDEMNIFICATION AUTHORIZATION.

Public comment: None

Upon the motion of Mr. Hamm, seconded by Mr. Erb, and unanimously passed, the Board of Trustees approve indemnification pursuant to Section 16.02(j) of the Retirement Plan for the contract: Investment Management Agreement with TPG/TSSP Adjacent Opportunities Partners (D), L.P.

**AGENDA ITEM NO. 11: QUARTERLY INVESTMENT REPORT
PRESENTED BY VERUS.**

Mr. Scott Whalen, Investment Consultant with Verus reviewed the First Quarter 2018 investment landscape and portfolio performance with the board.

Public comment: None

Upon the motion of Mr. Savage, seconded by Mr. Erb, and unanimously passed, the Investment Report for the First Quarter, 2018 was received and filed.

AGENDA ITEM NO. 12: MONTHLY INVESTMENT REPORT FOR APRIL 2018.

Public comment: None

Upon the motion of Mr. Janssen, seconded by Mr. Savage, and unanimously passed, the Investment Report for the period ended April 30, 2018 was received and filed.

AGENDA ITEM NO. 13: PRIVATE EQUITY PROGRAM REVIEW.

Scott Whalen, Investment Consultant with Verus presented a review of the Private Equity Program and addressed current and target asset allocations.

Public comment: None

Upon the motion of Mr. Sibbach, seconded by Mr. Hamm, and unanimously passed the Board received the Private Equity Program review and directed staff and the Investment Consultant to bring back to the board at a future meeting alternative methods and implementation steps to bring the actual Private Equity allocation up to the target allocation of 5%.

AGENDA ITEM NO. 14: ASSET ALLOCATION.

Staff reported that no action regarding investment asset allocations were necessary at this time.

OPERATIONS:

AGENDA ITEM NO. 15: STAFF ORAL REPORTS.

- A)** Staff informed the Board that the trustee position held by Mr. Janssen is up for re-election and because there is a challenger there will be an election this year. The date of the election is June 19th which is when ballots are due to the Clerk & Records Office.
- B)** Staff informed the Board that the “Unrepresented Employees Committee” (formerly named the MCIC group) asked Pension Trust to meet and discuss actuarial recommendations and expressed their concern over increasing contribution rates.
- C)** The Audit Committee will be meeting with Brown Armstrong on May 30 to review the final draft of audit.

AGENDA ITEM NO. 16: GENERAL COUNSEL ORAL REPORTS.

Nothing to report.

AGENDA ITEM NO. 17: COMMITTEE REPORTS – AS NEEDED.

- A)** AUDIT COMMITTEE: Nothing to report.
- B)** PERSONNEL COMMITTEE: Nothing to report.
- C)** PENSION ADMINISTRATION SYSTEM ADMINISTRATION (PASR) COMMITTEE: The Steering Committee met and reported that the current schedule is about two weeks behind, but is not critical or of much concern.

AGENDA ITEM NO. 18: UPCOMING BOARD TOPICS.

The planned topics for the next three board meetings were included in the agenda summary. This is an information item, nothing further to report.

AGENDA ITEM NO. 19: TRUSTEE COMMENTS.

No Trustee comments this month.

REFERRED ITEMS: None.

ADDED ITEMS: None.

CLOSED SESSION: None.

ADJOURNMENT.

There being no further business, the meeting was adjourned at 12:38 PM. The next Regular Meeting was set for June 25, 2018, at 9:30 AM, in the Board of Supervisors Chambers, New County Government Center, San Luis Obispo, California 93408.

Respectfully submitted,

**Carl Nelson
Executive Secretary**

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**REPORT OF DEPOSITS AND CONTRIBUTIONS FOR THE MONTH OF
MAY 2018**

PP 10 5/11/2018	Pensionable Salary	Employer Contributions	Employer Rate	Employee Contributions	Employer for		Employee Rate	Combined Rate	Additional Contributions	Buy Backs	TOTAL Contributions
					Employee Contributions	Employee Rate					
By Employer and Tier:											
County Tier 1	3,923,400.75	917,381.51	23.38%	448,896.06	334,429.12	19.97%	43.35%	1,512.50	504.83	1,702,724.02	
County Tier 2	968,038.02	231,835.97	23.95%	48,336.87	81,605.49	13.42%	37.37%	67.90	709.70	362,555.93	
County Tier 3	2,329,136.52	519,851.52	22.32%	273,023.21	-	11.72%	34.04%	-	862.20	793,736.93	
Superior Court Tier 1	267,502.93	66,968.22	25.03%	43,331.68	-	16.20%	41.23%	-	-	110,299.90	
Superior Court Tier 3	70,068.10	16,619.41	23.72%	7,762.68	-	11.08%	34.80%	-	114.54	24,496.63	
APCD Tier 1	69,465.80	15,294.54	22.02%	8,870.43	4,646.31	19.46%	41.48%	-	-	28,811.28	
APCD Tier 3	9,464.01	2,052.07	21.68%	1,241.39	-	13.12%	34.80%	-	-	3,293.46	
Pension Trust Staff Tier 1	7,168.55	1,647.33	22.98%	873.13	665.96	21.47%	44.45%	-	-	3,186.42	
Pension Trust Staff Tier 2	9,599.20	2,205.89	22.98%	230.78	891.77	11.69%	34.67%	-	-	3,328.44	
Pension Trust Staff Tier 3	8,880.52	1,997.24	22.49%	1,139.09	-	12.83%	35.32%	-	-	3,136.33	
LAFCO Tier 1	12,494.29	3,378.46	27.04%	677.19	1,448.97	17.02%	44.06%	-	-	5,504.62	
	7,675,218.69	1,779,232.16	23.18%	834,382.51	423,687.62	16.39%	39.57%	1,580.40	2,191.27	\$ 3,041,073.96	
PP 11 5/25/2018											
By Employer and Tier:											
County Tier 1	3,910,876.52	914,496.54	23.38%	447,251.06	333,588.29	19.97%	43.35%	1,537.50	504.83	1,697,378.22	
County Tier 2	965,906.54	230,917.90	23.91%	47,761.76	81,862.72	13.42%	37.33%	67.90	709.70	361,319.98	
County Tier 3	2,358,796.90	526,941.20	22.34%	276,232.79	-	11.71%	34.05%	-	864.99	804,038.98	
Superior Court Tier 1	269,759.46	67,524.55	25.03%	43,819.34	-	16.24%	41.28%	-	-	111,343.89	
Superior Court Tier 3	61,993.17	14,801.72	23.88%	6,734.08	-	10.86%	34.74%	-	114.54	21,650.34	
APCD Tier 1	69,535.69	15,309.68	22.02%	8,881.97	4,650.33	19.46%	41.48%	-	-	28,841.98	
APCD Tier 3	8,415.28	1,825.25	21.69%	1,125.10	-	13.37%	35.06%	-	-	2,950.35	
Pension Trust Staff Tier 1	7,168.55	1,647.33	22.98%	873.13	665.96	21.47%	44.45%	-	-	3,186.42	
Pension Trust Staff Tier 2	9,193.99	2,112.77	22.98%	225.79	854.12	11.75%	34.73%	-	-	3,192.68	
Pension Trust Staff Tier 3	9,271.83	2,085.24	22.49%	1,187.02	-	12.80%	35.29%	-	-	3,272.26	
LAFCO Tier 1	12,494.29	3,378.46	27.04%	677.19	1,448.97	17.02%	44.06%	-	-	5,504.62	
	7,683,412.22	1,781,040.64	23.18%	834,769.23	423,070.39	16.37%	39.55%	1,605.40	2,194.06	\$ 3,042,679.72	
TOTAL FOR THE MONTH	15,358,630.91	3,560,272.80	23.18%	1,669,151.74	846,758.01	16.38%	39.56%	3,185.80	4,385.33	\$ 6,083,753.68	
TOTAL YEAR TO DATE	84,163,434.06	19,408,829.93	23.06%	9,045,161.17	4,695,414.60	16.33%	39.39%	18,285.77	61,539.82	33,229,231.29	

**REPORT OF SERVICE & DISABILITY RETIREMENTS &
DROP PARTICIPANTS FOR THE MONTH OF:**

MAY 2018

RETIREE NAME	DEPARTMENT	DATE	MONTHLY ALLOWANCE
BARBOSA, JANIE (DROP)	PUBLIC HEALTH	05-01-2018	3172.52 10.43*
COLLINS, KATHRYN	PUBLIC HEALTH	05-09-2018	1205.91
CRAWFORD, MARILYN	PUBLIC WORKS ISF	05-04-2018	2241.79
HALL, DYAN	SUPERIOR COURT / RESERVE	05-01-2018	Option selection
HARTNELL, KATHRYN	SOCIAL SERVICES	05-04-2018	2141.56
LE MAY, LINDA	SUPERIOR COURT	05-19-2018	2030.70
NADEL, REBECCA	LIBRARY	05-01-2018	1639.29
RAMOS, BEVERLY	MENTAL HEALTH / RECIPROCAL	05-01-2018	1170.30
RICE, CHRISTINE	CHILD SUPPORT SERVICES	05-19-2018	2237.10
RIGHETTI, THOMAS	SHERIFF-CORONER	05-06-2018	3047.91
TOLLE, BARRY	PLANNING / RECIPROCAL	05-19-2018	2989.03
ADDENDUM:			
OLSON, DEBBIE	SHERIFF-CORONER / ALTERNATE PAYEE	09-01-2017	Option selection
FRANKS, APRIL (Disability)	SOCIAL SERVICES	10-10-2017	1795.07
ACKER, STEPHANIE	DISTRICT ATTORNEY / RECIPROCAL	12-30-2017	129.61
FAHEY, DANA	PROBATION / RESERVE	02-01-2018	1461.10
OLIVIERI, DANIEL	MENTAL HEALTH / RECIPROCAL	02-11-2018	829.39
HANAN, TERESA	SOCIAL SERVICES / RECIPROCAL	03-01-2018	371.65 122.67**
BURGESON, ROBERT	SHERIFF-CORONER	03-09-2018	Awaiting calcs
BROOKINS, LEWIS	SUPERIOR COURT / RECIPROCAL	04-30-2018	Option selection
LOMELI, ROBERT (Disability)	SHERIFF-CORONER	04-11-2018	3809.00
ORR, SUSAN	ASSESSOR / RESERVE	04-01-2018	439.46 79.00*

* Employee Additional Contribution Allowance (per Sections 5.07, 27.12, 28.12, 29.12, 30.12, and 31.12 of the Plan)

** Social Security Coordinated Temporary Annuity (per Section 13.06 of the Plan)

Board of Trustees

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Date: June 25, 2018
To: Board of Trustees
From: Carl Nelson – Executive Secretary

Agenda Item 5: Applications & Elections to Participate in the Deferred Retirement Option Program (DROP)

Recomendation:

It is recommended that you receive and approve the Application & Election to Participate in DROP for the individuals listed below.

Discussion:

The San Luis Obispo County Pension Trust has received an Application & Election to Participate in DROP from the following members listed below:

JULY 1, 2018	Theodore Maxwell Keller, Public Works
JULY 1, 2018	Richard R. Rose, Public Works
JULY 1, 2018	Diana Smaw, Health Department
JULY 1, 2018	Deborah Aiello, Social Services

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Board of Trustees

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Date: June 25, 2018

To: Board of Trustees

From: Carl Nelson – Executive Secretary
Amy Burke – Deputy Executive Secretary
Andrea Paley – Retirement Program Specialist

Agenda Item Number 6: Request for Reinstatement from Service Retirement of Debbie Heilman.

Recommendation:

It is recommended that the Board approve the attached request for reinstatement from Regular Service Retirement submitted by Debbie Heilman.

Discussion:

Ms. Heilman applied for and has been receiving Service Retirement benefits since August 15, 2017. The opportunity for re-employment with the County of San Luis Obispo in a permanent capacity with the Department of Social Services has prompted Ms. Heilman's request for reinstatement from retirement effective July 1, 2018.

Article 11 of the Retirement Plan provides for reinstatement from retirement upon a member's application requesting same to the Board of Trustees. Ms. Heilman's letter dated May 11, 2018, requesting reinstatement from retirement, and the letter from the Department of Social Services dated May 7, 2018 confirming the offer of employment to Ms. Heilman, are attached for your review and approval.

Respectfully Submitted

Dear Board,

May 11, 2018

This letter is to inform you that I have been offered and accepted a job with the San Luis Obispo County Department of Social Services. I have been drawing a pension from the County of SLO since 08/15/17 and I am requesting that you reinstate me back to permanent employee status. My new position will begin on July 1, 2018.

If you have any questions, please contact me at the following:

Deborah Heilman

2820 Weymouth Ct.

Norman, OK 73071

Cell (805) 591-0705

Respectfully submitted,


Deborah Heilman

Board of Trustees

1000 Mill Street
San Luis Obispo, CA 93408
Phone: (805) 781-5465
Fax: (805) 781-5697
www.SLOPensionTrust.org



Date: June 25, 2018

To: Board of Trustees

From: Carl Nelson – Executive Secretary
Amy Burke – Deputy Executive Secretary
Jennifer Alderete – Financial Accountant

Agenda Item 7: Audited Financial Statements and Report to the Board for the period ended December 31, 2017 – Comprehensive Annual Financial Report –Presentation by Rosalva Flores and Alaina Sanchez, CPAs of Brown Armstrong Accountancy

Recommendation:

Staff recommends that the Board take the following actions:

1. Receive and File the audited Financial Statements for the period ended December 31, 2017 that are presented here as the 2017 Comprehensive Annual Financial Report (CAFR).
2. Authorize and Direct the Executive Secretary to transmit the 2017 CAFR to the following agencies as required by the Government Code and the Retirement Plan:
 - a.) One copy to the Office of the State Controller as required by Government Code Section 7504 (c).
 - b.) One copy to the Board of Supervisors pursuant to Retirement Plan Section 17.02: Annual Statement of Financial Condition.
 - c.) One copy to the County Auditor-Controller pursuant to Retirement Plan Section 17.02: Annual Statement of Financial Condition.

Discussion:

On May 30, 2018, the Audit Committee and Staff met by phone with SLOCPT's audit firm Brown Armstrong. Rosalva Flores and Alaina Sanchez represented the firm and presented a review of the results of the Financial Audit of SLOCPT for the year ended 2017. Brown Armstrong indicated that an unmodified audit opinion (the highest form of audit opinion) would be issued, with no material internal control weaknesses or deficiencies. Board members will receive the Report to the Board of Trustees under separate distribution.

Results:

Receipt and file, along with authorization from the Board to distribute the 2017 CAFR to the parties listed in the recommendation, will complete the activities of the 2017 Financial Audit.

Attachments:

1. Brown Armstrong 2017 Audit Results Presentation
2. Draft Comprehensive Annual Financial Report (CAFR) for year ended December 31, 2017

Respectfully Submitted,

The San Luis Obispo County Pension Trust

Results of the December 31, 2017 Financial Statement Audit

Brown Armstrong

Accountancy Corporation

4200 Truxtun Avenue, Suite 300 | Bakersfield, CA 93309 | 661.324.4971 | Fax 661.324.4997

23272 Mill Creek Drive, Suite 255 | Laguna Hills, CA 92653 | 949.652.5422

www.bacpas.com

Contacts: Rosalva Flores, CPA
Alaina Sanchez, CPA

BROWN ARMSTRONG
Certified Public Accountants

Agenda

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Scope of Services Recap

- ❖ Audit of SLOCPT's financial statements in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States
- ❖ Other communications and reports required by professional standards including:
 - Required Communication at the Conclusion of an Audit in Accordance with Professional Standards (SAS 114)
 - Report on Internal Control Over Financial Reporting and on Compliance and Other Matters in Accordance with GAS

Audit Timeline/Critical Date List

- ▶ Week of April 2nd – Fieldwork at SLOCPT
 - On-site testing of internal controls
 - Walkthroughs and understanding of key accounting areas
 - Updating minutes and agreements
 - Review confirmation responses
 - Substantiate material account balances and transactions
- ▶ April 3, 2018 – Entrance meeting with Audit Committee and Management
- ▶ April 5, 2018 – Exit meeting to discuss results with Management
- ▶ May and June, 2018 – CAFR Review

Audit Areas of Focus

Significant Risk Areas	Brown Armstrong's Response
Revenue Recognition	<ul style="list-style-type: none">• Test of controls was performed over contribution amounts as part of participant data• Confirmations from third parties• Other substantive analytics were also performed
Management override of controls	<ul style="list-style-type: none">• An understanding of controls over journal entries was obtained and a sample of individual journal entries was performed• Inquiries performed with individual(s) involved in the financial reporting process, and ensuring no inappropriate or unusual activity was noted relating to journal entry processing• Performed walkthroughs of significant audit areas to review segregation of duties

Audit Areas of Focus

Significant Audit Areas	Brown Armstrong's Response
Investments and Related Earnings	<ul style="list-style-type: none">• Walkthrough of controls performed• High level analytics performed on investment income• Confirmation with custodian, managers, and consultants• Reviewed Governmental Accounting Standards Board (GASB) Statement No. 72 valuation inputs and testing of Level determinations• Obtained audited financial statements and SOC reports
Participant Data and Actuary	<ul style="list-style-type: none">• Walkthrough and test of controls• Testing of participant data, including active and terminated members, and employer payroll• Confirmed with individual participants, actuary and employers• GASB Statement No. 67<ul style="list-style-type: none">✓ Money weighted return✓ Required Supplementary Information (RSI) schedules

Audit Areas of Focus (cont.)

Significant Audit Areas	Brown Armstrong's Response
Employer and Employee Contributions	<ul style="list-style-type: none">• Walkthrough and test of controls• Confirmed with employers• High level analytics
Benefit Payments	<ul style="list-style-type: none">• Walkthrough and test of controls• Testing of benefit payments• High level analytics

Results of the Audit

Communication	Summary
Required Communication at the Conclusion of an Audit in Accordance with Professional Standards (SAS 114)	<ul style="list-style-type: none">• New GASB pronouncements – none• Significant estimates reviewed<ul style="list-style-type: none">✓ Fair value of investments✓ Money weighted rate of return✓ Contributions and NPL Estimates• Significant audit adjustments – none• Disagreements with management – none

Results of the Audit

Report	Opinion or Result
Report on Financial Statements (Opinion)	Unmodified
Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With <i>Government Auditing Standards</i>	<ul style="list-style-type: none">• No noncompliance with laws and regulations noted• No material weaknesses or significant deficiencies identified

Results of the Audit (cont.)

Report	Summary
Agreed-Upon Conditions Report Designed to Increase Efficiency, Internal Controls, and/or Financial Reporting “AKA” Management Letter	<ul style="list-style-type: none">• One recurring item related to IT<ul style="list-style-type: none">✓ System, application and data✓ Disaster recovery<ul style="list-style-type: none">○ Anticipated to be fully implemented once new Pension Administration System (PAS) goes live

Financial Statement Review

- ▶ Review Process
- ▶ GFOA Award
- ▶ Questions on the CAFR

Thank Staff/Questions?



Rosalva Flores, CPA
Principal

BROWN ARMSTRONG
Certified Public Accountants
4200 Truxtun Avenue, Suite 300
Bakersfield, California 93309
Phone (661) 324-4971
Website: www.bacpas.com
Email: rflores@bacpas.com



Alaina Sanchez, CPA
Manager

BROWN ARMSTRONG
Certified Public Accountants
23272 Mill Creek Drive, Suite 255
Laguna Hills, California 92653
Phone (949) 652-5422
Website: www.bacpas.com
Email: asanchez@bacpas.com

San Luis Obispo County Pension Trust

*A Pension Trust Fund of the County of San Luis Obispo,
San Luis Obispo, California*



Comprehensive Annual Financial Report

**For the Year Ended
December 31, 2017**

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DRAFT

Comprehensive Annual Financial Report

For the Year Ended December 31, 2017

San Luis Obispo County Pension Trust

*A Pension Trust Fund of the County of San Luis Obispo,
San Luis Obispo, California*

Issued By:

Carl A. Nelson, CFA
Executive Secretary and Chief Investment Officer

Amy Burke
Deputy Executive Secretary

Jennifer Alderete
Financial Accountant

San Luis Obispo County
Pension Trust
1000 Mill Street
San Luis Obispo, CA 93408
(805) 781-5465
[www.slocounty.ca.gov/
Departments/Pension-Trust.aspx](http://www.slocounty.ca.gov/Departments/Pension-Trust.aspx)

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Photographs: Carl Nelson

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Introductory Section



June 25, 2018

San Luis Obispo County Pension Trust
Board of Trustees



Carl Nelson

Dear Board Trustees:

Executive Secretary and Chief Investment Officer

I am pleased to present this Comprehensive Annual Financial Report (“CAFR”) for the San Luis Obispo County Pension Trust (the “Pension Trust” or “SLOCPT”) for the year ended December 31, 2017.

The Pension Trust is a public employee retirement system established by the County of San Luis Obispo (the “County”) on November 1, 1958. Ten years later, the County Board of Supervisors adopted the present bylaws and the San Luis Obispo County Employees Retirement Plan (the “Plan”) to provide retirement benefits to employees of the County.

The Pension Trust is administered by the Board of Trustees (the “Board”) to provide retirement, disability, death, and survivor benefits for its members. The Pension Trust is established pursuant to Section 17 of Article XVI of the California Constitution and Government Code Sections 53215 et seq.

Responsibility for the accuracy of the data, along with the completeness and fairness of the presentation in this CAFR, rests with the Pension Trust’s management. To the best of our knowledge, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly both the Pension Trust’s financial position and its operating results.

The Pension Trust and its Services

SLOCPT was established and has evolved over the years to provide retirement allowances and other benefits to the Miscellaneous, Probation, and Safety members employed by the County and various agencies (collectively the “Plan Sponsor”) listed below:

- Superior Courts of California – County of San Luis Obispo
- Local Agency Formation Commission
- Air Pollution Control District – County of San Luis Obispo
- The Pension Trust

Introductory Section

The Pension Trust is governed by the California Constitution, the California Government Code, and its bylaws (including the Plan) adopted by the San Luis Obispo County Board of Supervisors. The Board of Supervisors may adopt amendments to the Plan which may alter the benefits provided to SLOCPT members.

The Board of Trustees is responsible for managing and administering the Pension Trust in accordance with the laws of the United States and California, the County Code, the bylaws, and the Plan. The Board is composed of seven Trustees. Three Board Trustees are appointed and serve at the pleasure of the County Board of Supervisors. The County Auditor/Controller/Treasurer/Tax Collector/Public Administrator serves as an ex-officio Trustee of the Board. The three remaining Board Trustees are elected by the Pension Trust's members at large for staggered three-year terms without term limits. Board of Trustee elections are administered by the County Clerk and Recorder. Newly elected or re-elected Board Trustees take office in July of the year they are elected.

The Board annually elects from its Trustees a President and a Vice President. The operational management of the Pension Trust lays with the Executive Secretary who is appointed and serves at the pleasure of the Board. The Executive Secretary also acts as Secretary to the Board.

Financial Information

Brown Armstrong Accountancy Corporation provides financial statement independent audit services to the Pension Trust. The independent audit states that the Pension Trust's financial statements are presented in accordance with Generally Accepted Accounting Principles (GAAP) and are free of material misstatement. Sufficient internal accounting controls exist to provide reasonable, but not absolute, assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. The concept of reasonable assurance recognizes that first, the cost of a control should not exceed the benefits likely to be derived and second, the valuation of costs and benefits requires estimates and judgments by management. Governmental Accounting Standards Board (GASB) Statement No. 34 requires that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of a Management's Discussion and Analysis (MD&A). This Letter of Transmittal complements the information in the MD&A and should be read in conjunction with it. The MD&A can be found on pages 20 through 24.

Actuarial Funding Status

The Pension Trust's funding objective is to meet its long-term benefit promises by targeting a well-funded status. Funded status refers to the difference between the level of actuarial accrued liability and the actuarial measurement of the Pension Trust's assets. The funded status of the Pension Trust is determined by two sources of funding:

- **Investment returns** obtained through investments with a level of risk consistent with the long-term objectives of the Pension Trust.
- **Employer appropriations** and **Employee contributions** as their respective portions of the Total Annually Required Contribution (ARC). The relative allocation of the Total ARC to the employer and the employee is typically the result of the collective bargaining process, or for unrepresented employees it is set by the Board of Supervisors.

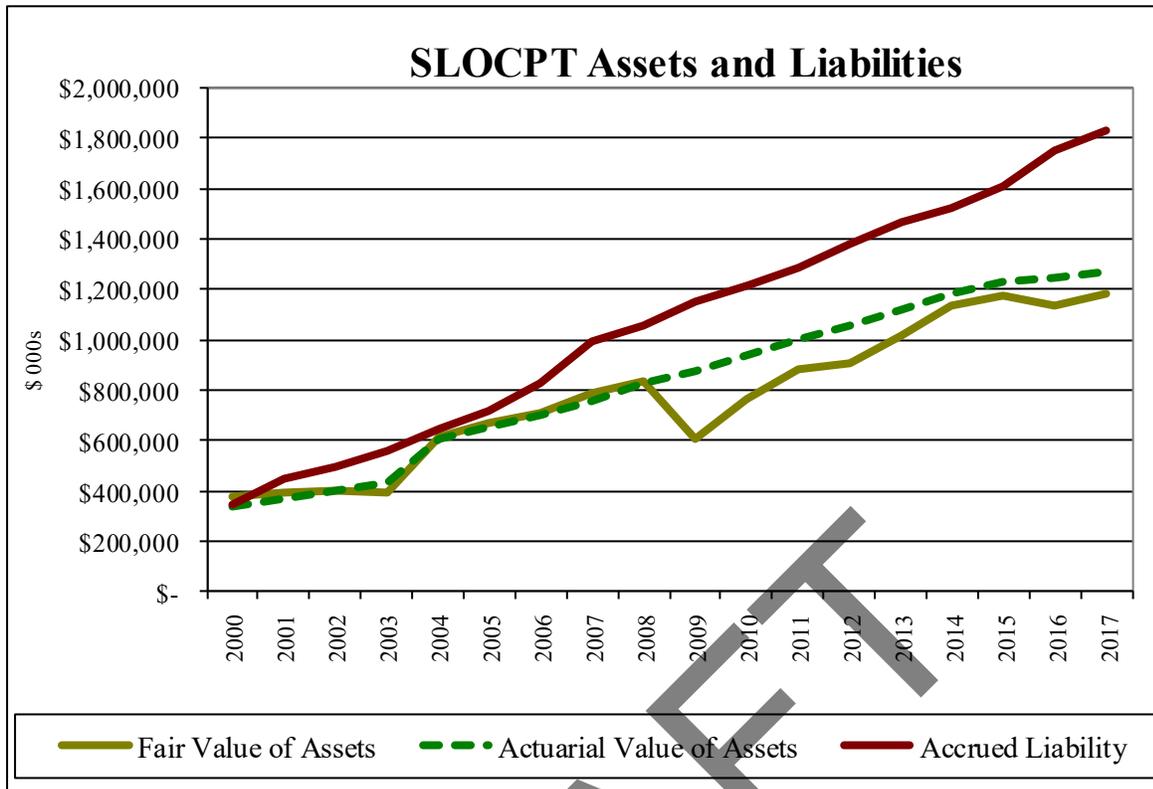
It is the policy of the County to contribute the full Total ARC each year through a combination of employer appropriations and employee contributions. The timing of when employer appropriation rate changes are implemented may vary depending on when the actuarial valuation is completed. Likewise, the timing and magnitude of employee contribution rate changes may vary depending on when various collective bargaining agreements are implemented.

The Pension Trust engages an independent actuarial firm to perform annual valuations on the Pension Trust. Additionally, actuarial experience studies are conducted biennially. The economic and demographic assumptions that are used in each annual actuarial valuation are approved by the Board and are typically based on the results of each biennial actuarial experience study and input from the Pension Trust's advisors. Each annual actuarial valuation serves as the basis for the Total ARC in aggregate to be collected from employer and employee contributions.

The most recent annual actuarial valuation available for financial reporting in this CAFR is the January 1, 2017 valuation. It is based on member data and financial results through December 31, 2016. The Pension Trust's actuary, Gabriel Roeder Smith & Company (GRS), completed this annual valuation prior to the preparation of this CAFR. The most recent biennial actuarial experience study was completed by GRS of January 1, 2016. At the time of preparation of this CAFR, the January 1, 2018 biennial experience study and the January 1, 2018 valuation were being prepared, but the results were not yet available.

Based on the most recent actuarial valuation, the actuary computes (among other things) a level of Actuarial Accrued Liability (AAL) and an Actuarial Value of Assets (AVA). The AVA is a smoothed measure of fair values of the Pension Trust's total assets that moderates yearly volatility in asset size. The difference between the AVA and the AAL (if negative) is referred to as the Unfunded Actuarial Accrued Liability (UAAL) and is a central focus of funding policy for the Retirement Plan. These actuarial measurements are discussed in more detail in the Actuarial Section of this CAFR.

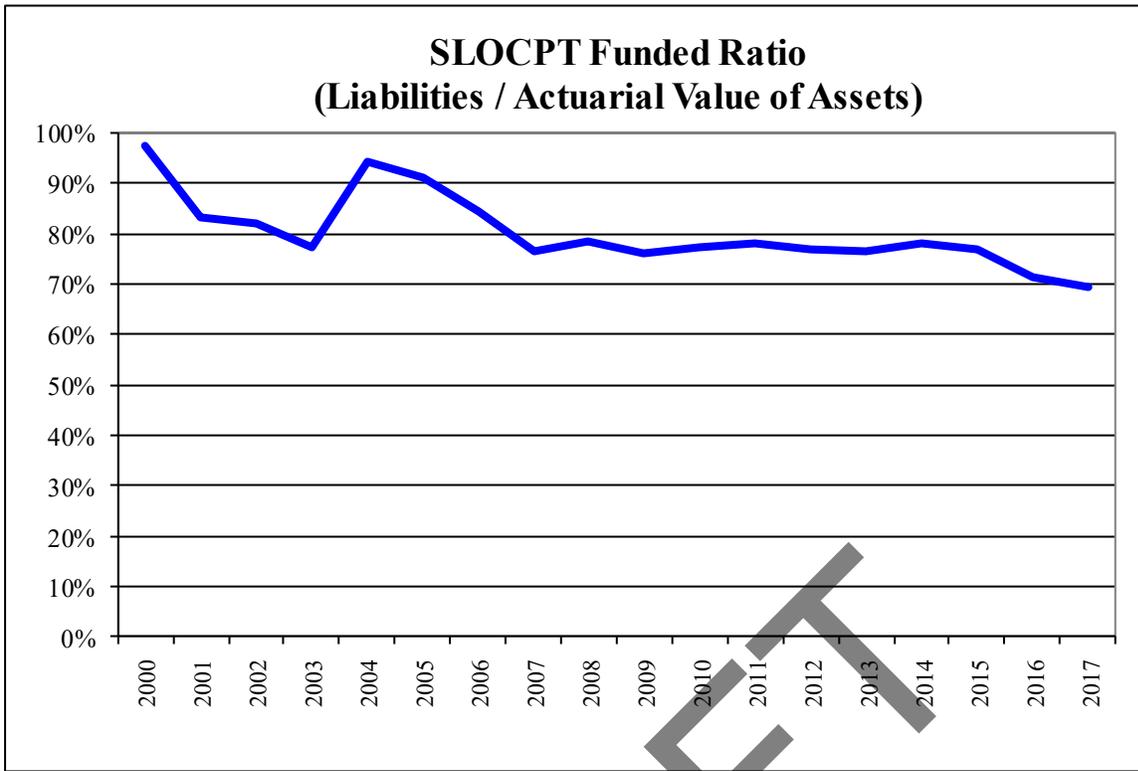
Combined with the year-end Fair Value of Assets (FVA), the history of these measures is shown in the following graph on the next page:



Source: Pension Trust financial records from annual actuarial valuations

Note that the measurement of Actuarial Accrued Liability is sensitive to the discount rate used. This discount rate is the expected investment return, also known as the Earnings Assumption. The Earnings Assumption used by the Pension Trust from 2000 to 2015 has varied from 7.25% (e.g., the rate in 2015) to 7.75%. With the 2016 and 2017 Annual Actuarial Valuations, the Earnings Assumption used was 7.125%. This reduced Earnings Assumption, combined with revised mortality assumptions in 2016 and numerous other actuarial gains and losses, contributed to the increase in the Actuarial Accrued Liability at year-end 2015 and 2016 which, in turn, contributed to the decline in the Funded Ratio discussed below.

The relationship of the AAL and AVA is the Funded Ratio of the Pension Trust which decreased from 71.4% at year-end 2015 to 69.4% as of year-end 2016. The decline in funded ratio reflected the change in Actuarial Accrued Liability discussed above which was increased due to a lowered Earnings Assumption and significant improvements in mortality assumptions (members living longer which increases costs). The history of the Pension Trust's funded ratio is shown in the following graph on the next page:



Source: Pension Trust financial records from annual actuarial valuations

This Letter of Transmittal complements the information in the Actuarial Section and should be read in conjunction with it. The Actuarial Section can be found on pages 72 through 92.

Investments

The Board has full authority over the investments of the Pension Trust and is responsible for the establishment of investment strategies and policies that align with the overall funding objective of the Plan. The Board may direct the investment of the Pension Trust into any form or type of investment deemed prudent in the informed opinion of the Board. Members of the Board serve in a fiduciary capacity to the Pension Trust and must discharge their duties accordingly.

The Board implements its investment function through the adoption of a written Investment Policy, the use of a professional Investment Consultant, the use of various professional investment managers, and direction to Pension Trust staff. The Pension Trust primarily uses external investment management firms to manage its portfolio. Additional information on the Pension Trust's Investment Policy and investment managers may be found in the Investment Section of this CAFR.

The Staff of the Pension Trust and the Investment Consultant (Verus) closely monitor the investment activities of the total Plan assets and report regularly to the Board. The Investment Policy adopted by the Board considers the advice and input of staff and the Investment Consultant and sets the asset allocation policy and management policies of the Board. The asset allocation policy incorporated into the Investment Policy is more fully discussed in the Investment Section of this CAFR.

For the years ended December 31, the total time-weighted rates of return gross of fees on the Pension Trust's assets as computed by the Investment Consultant are summarized below:

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
SLOCPT Total Returns	13.8%	5.1%	-0.8%	6.6%	15.5%

Source: Verus reports

For cumulative periods ending December 31, 2017, the annualized time-weighted total rates of return gross of fees are as follows:

	<u>1 year</u>	<u>3 years</u>	<u>5 years</u>	<u>10 years</u>
SLOCPT Total Returns	15.5%	6.9%	7.9%	5.7%

Source: Verus 4th Quarter 2017 report and Pension Trust records for pre-2006 returns

This Letter of Transmittal complements the information in the Investment Section and should be read in conjunction with it. The Investment Section can be found on pages 56 through 69.

Service Efforts and Accomplishments

Mission Statement

No discussion of service efforts and accomplishments would be complete without beginning with the core mission statement for the organization. The Pension Trust's mission statement is:

The mission of the San Luis Obispo County Pension Trust is to adequately fund and promptly pay the benefits accrued by Employees of San Luis Obispo County pursuant to the provisions of the San Luis Obispo County Employees Retirement Plan and consistent with Article 16, Section 17 of the California State Constitution.

Furthermore, Section 53216.6 of Article 1.5 of the California Government Code provides, in part:

"The assets of the pension trust are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system."

Also, Section 17 of Article XVI of the California Constitution, at subsection (b) states, in part:

"The retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty."

Secondarily, the Board, in discharging its duty, must also act, in so far as it is prudent to do so, to minimize employer appropriations.

Payment of Retirement Benefits

The timely payment of retirement benefits is the core objective of the Pension Trust and it is still worth noting that this is indeed what happens – month after month. It is also of interest to note where retiree benefits are paid geographically. As of December 2017, the Pension Trust paid benefit allowances to 2,745 retirees, disability recipients, beneficiaries, and survivors. During 2017, \$85.0 million was paid by the Pension Trust in recipients' benefits. Of this amount, approximately 79% was sent to addresses within San Luis Obispo County. The significance of this data is that the majority of retirement benefits paid by the Pension Trust is presumably spent within San Luis Obispo County and contributes in a material way to the local economy.

Pension Administration System Modernization

The systems that support the operation of a defined benefit pension system with multiple tiers of benefits and numerous bargaining units are necessarily complex. The Pension Trust went “live” in 2006 with a proprietary Pension Administration System (PAS) custom developed for the Pension Trust. At that time, there were no readily available off-the-shelf systems that could support the complexity of the Plan. Over the intervening years this PAS has served well, but as 2013-2014 progressed it became apparent that significant modernization of the proprietary software or its replacement would be necessary – a typical event for software systems as they age. The Pension Trust conducted a competitive Request for Proposal process for a semi-customized commercial-off-the-shelf PAS system. Since 2006, a number of such systems have emerged and several viable proposals were received. In December 2015, the Pension Trust selected LRS/PensionGold as the vendor for the replacement PAS. The implementation of the replacement PAS is expected to span the 2016-2019 timeframe and to result in the ability to continue to meet the operating mission of the Pension Trust into the foreseeable future. As of year-end 2017, the PAS replacement project was on-schedule and on-budget.

Investments

The Investment Section of this CAFR discusses the investment function of the Pension Trust in more detail including its Investment Policy and asset allocation. Some of the key service efforts and accomplishments related to the Pension Trust's investments in 2017 were:

- Asset Allocation and Investment Policy – The Investment Policy Statement (IPS) that incorporates the strategic asset allocation policy as an addendum was revised in 2016 and adopted most recently in September 2017. The revised IPS and its strategic asset allocation policy are discussed more fully in the Investment Section of this CAFR. There were no major changes to the asset allocation policy in 2017.
- Public Equity – domestic – At the end of 2016 and the beginning of 2017, a transition from a prior domestic equity investment manager to two replacements was completed. Loomis Sayles Large Cap Growth and Boston Partners Large Cap Value were added as style-complementing active equity managers.
- Public Equity – international – Early in 2017 a transition from a prior growth oriented international equity manager was completed with the addition of WCM International Growth.

- Fixed Income – domestic – Early in 2017 a transition from a prior domestic core fixed income investment manager was completed. Dodge & Cox Income fund and BlackRock Core Bond fixed income managers were added.
- Private Equity – Additional commitments within the targeted 5% allocation to Private Equity were initiated in 2017 with a commitment to the Pathway Private Equity Fund Investors IX, LP.
- Private Credit – A portion of the 2016 amendments to the IPS included the addition of a 5% allocation to Private Credit. Private Credit is distinct from the existing Pension Trust allocation to Private Equity, although both asset classes are typically structured as illiquid Limited Partnership interests. During 2017, the Pension Trust completed the implementation of its Private Credit allocation and initiated the funding of a diversified credit program LP structure managed by TPG Sixth Street Partners.
- Local Real Estate – The Pension Trust’s allocation to real estate is primarily invested in nationally diversified real estate funds. The Pension Trust also owned nine properties located in the San Luis Obispo area. These properties were the last internally managed portfolio in the Pension Trust. During 2014 the Board approved the hiring of an external portfolio management firm, American Realty Advisors, to manage the properties and initiate a multi-year process to sell most of the local real estate properties. During 2015-2016, American Realty Advisors positioned the local real estate portfolio for more advantageous sale via changes to tenant mix and physical improvements. Between 2015 and 2017, five of the local properties were sold with one more property sold in early 2018. The remainder of the local real estate portfolio is expected to be sold in the 2018-2019 timeframe and the proceeds deployed to more diversified real estate investments.

Actuarial Valuations

The Pension Trust and its Board consider the key assumptions in the annual actuarial valuation each year and generally expect to change assumptions biennially in conjunction with actuarial experience studies. The Board’s stated policy is to reconsider changing any actuarial assumptions following receipt of the biennial actuarial experience studies. Logically, all actuarial assumptions should be considered together since they are interrelated in many ways. Making necessary changes to the assumptions simultaneously may minimize the impact of such changes both financially and administratively.

The latest biennial actuarial experience study was completed in 2016 and its findings were considered in the setting of assumptions for the January 1, 2017 annual actuarial valuation. The current key actuarial assumptions used in the 2017 actuarial valuation (the most recent available as of the date of this writing) were as follows:

- 7.125% Earning Assumption
- 2.875% Salary Growth Assumption
- 3.375% Payroll Growth Assumption
- 2.625% Inflation Assumption

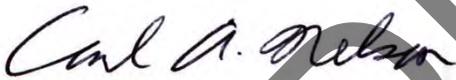
- Mortality Assumptions updated to latest available actuarial tables (RP-2014 base with MP-2015 projection tables), adjusted for actual plan experience and phased in over two Experience Study cycles in 2016 and 2018.

At the time of preparation of this CAFR, the January 1, 2018 actuarial valuation was being prepared but the results were not yet available. The January 1, 2018 actuarial valuation was anticipated to incorporate economic assumption changes of a decrease in both the Inflation Assumption and the Earnings Assumption with related changes to the Salary Growth and Payroll Growth Assumptions. Further changes are anticipated in the demographic assumptions – notably the completion of the update of Mortality Assumptions to the latest available RP-2014 base with MP-2017 projection tables.

Acknowledgements

I sincerely thank the Board for its leadership and dedication to provide a strong retirement system. The Pension Trust has an unusually experienced and highly professional Board that works together and with staff in an effective manner. I also thank the staff and advisors whose efforts make the successful operation of the Pension Trust possible. The Pension Trust is fortunate to have a small cadre of staff, legal counsel and advisors with long experience with the organization and in the public pension industry and a dedication to serving our members and our Board. Regarding this CAFR, I thank Amy Burke, Deputy Executive Secretary, and Jennifer Alderete, Financial Accountant, for their prodigious efforts in producing this eighth annual CAFR for the Pension Trust.

Respectfully submitted,



Carl A. Nelson, CFA
Executive Secretary and Chief Investment Officer
San Luis Obispo County Pension Trust



Government Finance Officers Association

**Certificate of
Achievement
for Excellence
in Financial
Reporting**

Presented to

**San Luis Obispo County
Pension Trust, California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2016

Christopher P. Morill

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2017***

Presented to

San Luis Obispo County Pension Trust

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

A handwritten signature in cursive script that reads "Alan H. Winkle".

Alan H. Winkle
Program Administrator

Board of Trustees

As of December 31, 2017



Matt Janssen
President
Elected Member
Present term
expires July 2018



Gere Sibbach
Appointed Member



Will Clemens
Vice President
Elected Member
Present term
expires July 2019



James Hamilton
Elected Member
Present term
expires 2020



James Erb
Treasurer
Ex-Officio Member

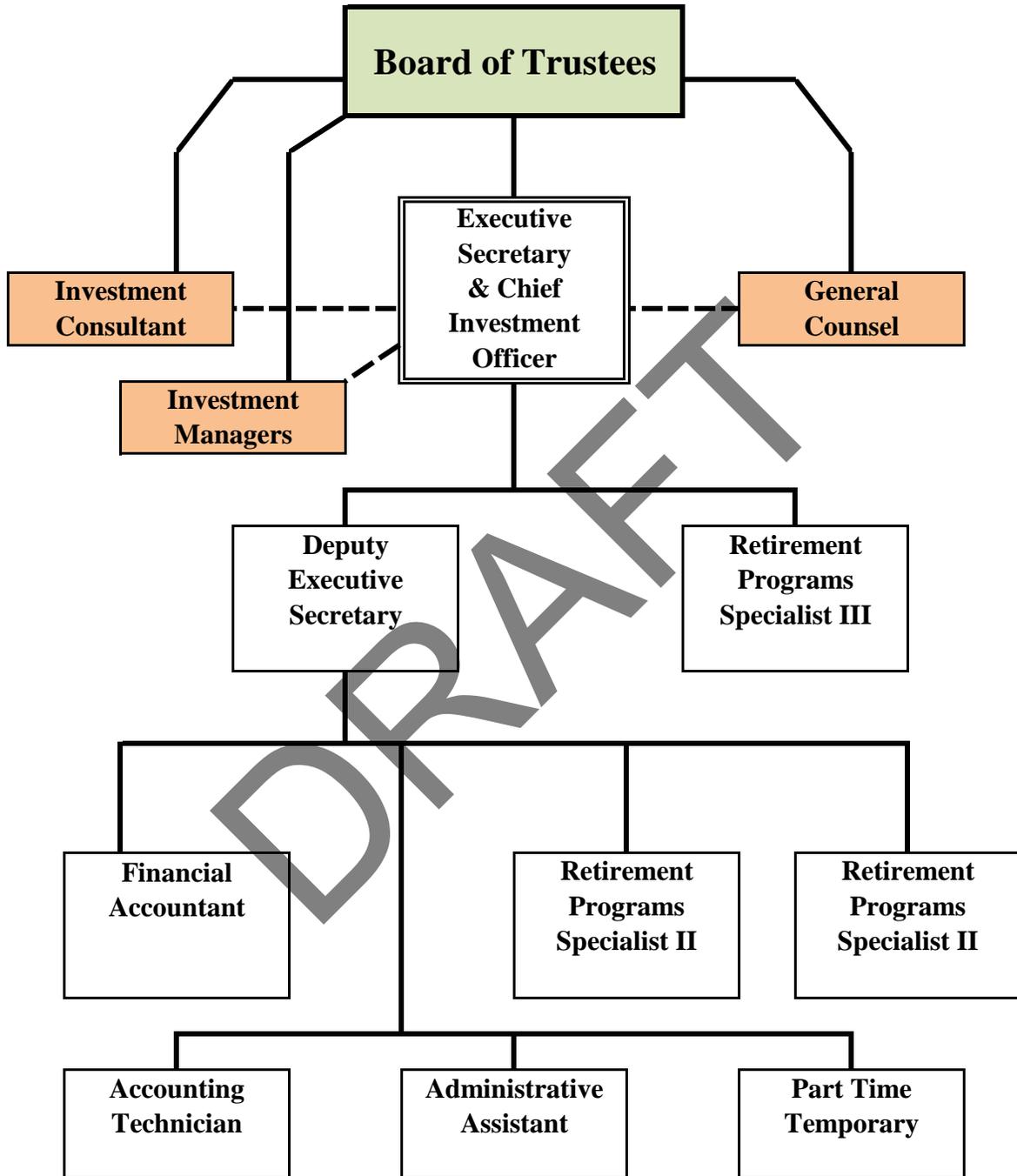


Jeff Hamm
Appointed Member



Guy Savage
Appointed Member

San Luis Obispo County Pension Trust
 Organization Chart - December 31, 2017



Additional information regarding investments can be found in the Schedule of Management Fees and Commissions, located on pages 66 and 67 of the Investment Section.

Professional Consultants

As of December 31, 2017

Actuary

Leslie Thompson, FSA
Gabriel, Roeder, Smith & Company

Legal Services

General Counsel
Chris Waddell
Olson Hagel & Fishburn, LLP

Litigation

Alan Blakeboro
Reicker, Pfau, Pyle & McRoy LLP

Plan Qualification & Fiduciary Counsel

Don Wellington
Step toe & Johnson, LLP

Auditor

Brown Armstrong Accountancy Corporation

Data Processing

Retirement Administration and Distribution
System (RAD) Software
Magenic Development Corp.

LRS Retirement Solutions

Replacement Pension Administration
System (work in progress)

General Information Technology Support

County of San Luis Obispo Information
Technology Department

General Investment Consultant

Scott Whalen, CFA
Verus

Investment Custodian

J.P. Morgan Chase

Investment Managers

Bonds, Notes, CMOs

BlackRock
Brandywine Global Investment Management
Dodge & Cox
Pacific Asset Management Bank Loan Fund
Stone Harbor Investment Partners

Domestic Equities

Atlanta Capital Management
Boston Partners
Loomis Sayles
PIMCO / Research Affiliates

International Equities

Dodge & Cox
WCM International

Commodities

Gresham Investment Management

Private Equity / Private Credit

Harbourvest Partners
KKR Mezzanine Partners
Pathway Private Equity
PIMCO
TPG Special Situation Partners

Real Estate

American Realty Advisors
J.P. Morgan Investment Management

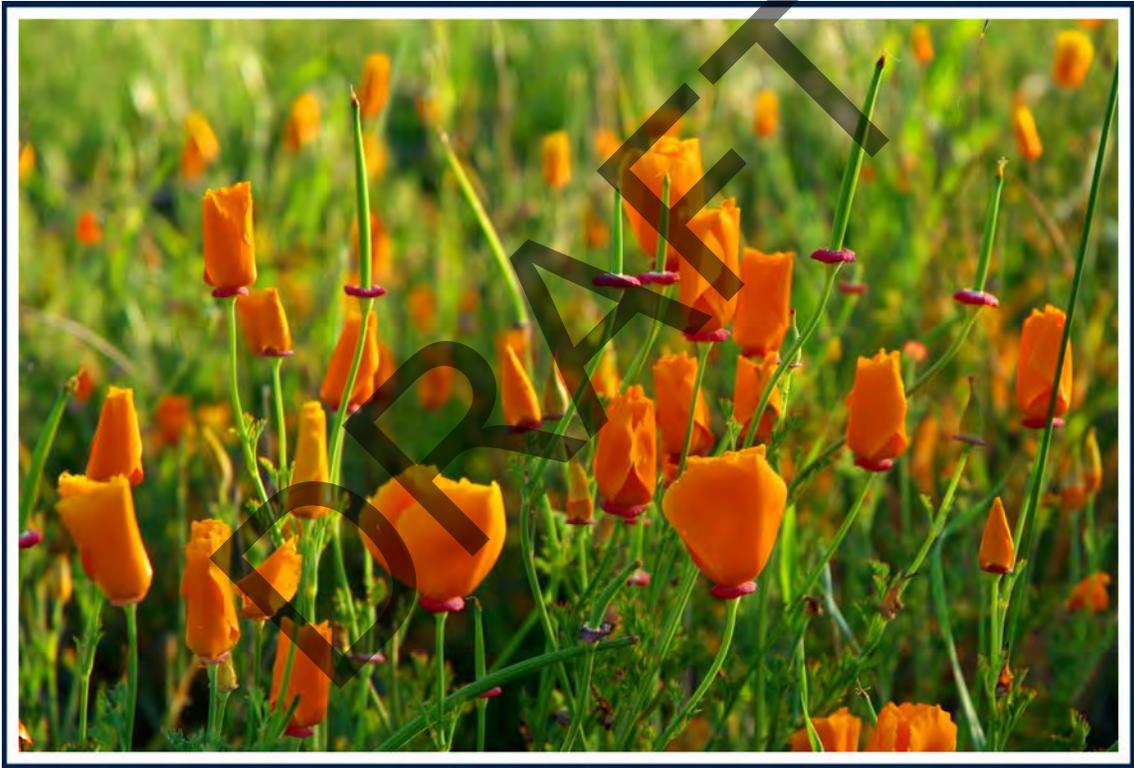
Cash Overlay

Parametric

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Financial Section



INDEPENDENT AUDITOR'S REPORT

To the Board of Trustees and Audit Committee
San Luis Obispo County Pension Trust
San Luis Obispo, California

Report on the Financial Statements

We have audited the accompanying Statement of Fiduciary Net Position of the San Luis Obispo County Pension Trust (the Plan), a pension trust fund of the County of San Luis Obispo, as of December 31, 2017, and the related Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these basic financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of basic financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these basic financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the basic financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the basic financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the basic financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the basic financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the basic financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the Fiduciary Net Position of the Plan as of December 31, 2017, and the Changes in Fiduciary Net Position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (MD&A) and required supplementary information (RSI), as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board (GASB), who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the RSI in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Plan's basic financial statements. The Schedule of Administrative Expenses, Schedule of Investment Expenses, and Schedule of Payments to Consultants (other supplementary information) and the introductory, investment, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Report on Summarized Comparative Information

We have previously audited the Plan's December 31, 2016 financial statements, and our report dated June 12, 2017, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of December 31, 2016 is consistent in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated _____, 2018, on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Plan's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Bakersfield, California
_____, 2018

**SAN LUIS OBISPO COUNTY
PENSION TRUST
MANAGEMENT'S DISCUSSION AND ANALYSIS
DECEMBER 31, 2017**

June 25, 2018

We are pleased to provide this overview and analysis of the financial activities of the San Luis Obispo County Pension Trust (SLOCPT) for the year ended December 31, 2017. SLOCPT was established on November 1, 1958. Some ten years later, the San Luis Obispo County Board of Supervisors adopted the present By-Laws and San Luis Obispo County Employees Retirement Plan (the Plan) in order to improve the benefits to employees retiring after January 1, 1968. One of the principal objectives of the new 1968 Plan, and of subsequent amendments to that Plan, has been to provide benefits substantially comparable to those that would have been provided had the original Plan Sponsor, San Luis Obispo County (the County), elected to join the California Public Employees' Retirement System, but at a lesser cost to the County and its employees and with greater local control. SLOCPT is established pursuant to Section 17 of Article XVI of the California Constitution and Government Code Sections 53215 et seq.

The Plan, as a defined benefit pension system, provides retirement benefits that vary by the class of member – Miscellaneous, Public Safety, or Probation employees. The Plan's benefits also vary within each class of membership by the date of hire of the members. Members hired generally prior to 2011 receive benefits under "Tier 1" benefit formulas. Members hired in 2011-2012 generally and some subsequently hired members with reciprocal membership from other California pension systems receive benefits under "Tier 2" benefit formulas that are lower than Tier 1 benefits. Members hired in 2013 and later years generally receive benefits under "Tier 3" benefit formulas that are lower than Tier 2 benefits. The Tier 3 benefit formulas were implemented by the County to comply with the provisions of the statewide Public Employees Pension Reform Act of 2012.

Financial Highlights

SLOCPT's Fiduciary Net Position as of December 31, 2017 was \$1.340 billion. This represents an increase of \$159.2 million or 13.5% from the year ended December 31, 2016. The Fiduciary Net Position represents the net position (total assets minus total liabilities) that is restricted for future payment of pension benefits to members and their beneficiaries as of the date reported.

Total additions to the Fiduciary Net Position in 2017 were \$251.4 million, which includes member and employer contributions of \$72.8 million and net investment income of \$178.6 million. Comparatively, in 2016, additions to the Fiduciary Net Position were \$129.8 million, which included member and employer contributions of \$60.8 million and net investment incomes of \$69.0 million. The \$169.2 million in realized and unrealized gains on investments was the main factor contributing to the net increase in total additions over prior year.

For the year ended December 31, 2017, deductions from the Fiduciary Net Position totaled \$92.2 million, consisting of \$88.7 million in payments to Plan members and their beneficiaries and \$3.5 million in administrative and other expenses. For the year ended December 31, 2016, deductions from the Fiduciary Net Position totaled \$84.3 million, consisting of \$80.7 million in payments to Plan members and their

beneficiaries and \$3.6 million in administrative and other expenses. An increase in the total number of retirees as well as the annual Cost of Living Adjustment (COLA) were the major causes of the increase in total Plan deductions.

The Plan's funding objective is to meet long-term benefit obligations through contributions and investment earnings. As of January 1, 2017, the date of the last actuarial valuation that was approved in June 2017, the funded ratio for the Plan was 69.4%. In general, this indicates that for every dollar of benefits due, SLOCPT had approximately 69.4 cents available for payment.

Overview of the Financial Statements

The following discussion and analysis is intended to serve as an introduction to SLOCPT's financial statements, which are comprised of these components:

- 1. Statement of Fiduciary Net Position**
- 2. Statement of Changes in Fiduciary Net Position**
- 3. Notes to the Financial Statements**
- 4. Required Supplementary Information**
- 5. Other Supplementary Information**

The **Statement of Fiduciary Net Position** is a snapshot of major account balances as of December 31, 2017. The statement indicates the value of assets available for future payments of benefits to retirees and their beneficiaries and any current liabilities that are owed at that date. This statement includes all assets and liabilities using a full accrual basis of accounting as required for fiduciary funds in governmental accounting.

The **Statement of Changes in Fiduciary Net Position** provides a detailed view of the current year additions to and deductions from the Fiduciary Net Position. All the year's additions and deductions are included regardless of when cash is received or paid. Investment gains and losses are reported on a trade-date basis, and both realized and unrealized gains and losses on investments are disclosed in this financial statement.

These two statements report the Fiduciary Net Position Restricted for Pension Benefits (the difference between assets and liabilities), which is used as a way to measure SLOCPT's financial position. Over time, increases and decreases in the Fiduciary Net Position are one indicator of the Plan's financial health improvement or deterioration.

The **Notes to the Financial Statements** provide additional information that is essential to a full understanding of the data provided in the financial statements including, but not limited to, a plan description, significant accounting policies, risk disclosures, and funded status. This section provides a detailed basis for assessing the Plan's overall financial health.

The **Required Supplementary Information** shows information concerning SLOCPT's progress in funding its obligations to provide pension benefits to members and their beneficiaries.

The **Other Supplementary Information** includes additional schedules that present more detailed information on the administrative and investment expenses of SLOCPT as well as information regarding each employer's pension expense and allocated pension liability.

These statements are presented in conformity with accounting principles generally accepted in the United States of America, as promulgated by the Governmental Accounting Standards Board (GASB). GASB requires certain disclosures and requires local government pensions to report using the accrual method of accounting. These statements comply with all material requirements of these pronouncements.

Financial Analysis

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through earnings in the investment portfolio (net of investment expense).

The Fiduciary Net Position restricted for pension benefits as of December 31, 2017 totaled \$1.340 billion, an increase of \$159.2 million from prior year end. This increase was due primarily to a continued rebound in unrealized income within the equity and global fixed income investment areas, which is consistent with the returns experienced in these markets in 2017. During 2017, the rate of return on investments, as measured by SLOCPT's investment consultant, was 15.5% gross of fees.

In comparison, the Fiduciary Net Position restricted for pension benefits as of December 31, 2016 totaled \$1.181 billion, an increase of \$45.4 million from the prior year. This increase was due mainly to a rebound in unrealized income within the equity and commodity investment areas, which is consistent with the volatility experienced in these markets during 2016. The rate of return on investments, as measured by SLOCPT's investment consultant, during 2016 was 6.6% gross of fees.

A table comparison of selected current and prior year balances follows:

	2017	2016	Increase (Decrease)
Cash	\$ 34,474,219	\$ 54,629,879	\$ (20,155,660)
Investments at Fair Value	1,319,057,884	1,173,848,424	145,209,460
Securities Sold	13,980,940	25,894,180	(11,913,240)
Other Receivables and Other Assets	6,537,255	4,495,005	2,042,250
Total Assets	1,374,050,298	1,258,867,488	115,182,810
Total Liabilities	33,579,276	77,624,630	(44,045,354)
Fiduciary Net Position	<u>\$ 1,340,471,022</u>	<u>\$ 1,181,242,858</u>	<u>\$ 159,228,164</u>

Additions to Fiduciary Net Position

There are three primary sources of funding for the payment of benefits: earnings on investments of assets, employer contributions, and active Plan member contributions. Income sources for the year ended December 31, 2017 totaled \$251.4 million. Employer and Plan member contributions continue to increase.

Pensionable salaries for active members increased \$12.0 million or 6.6% for the year ended December 31, 2017 when compared to those earned in 2016. This increase, due to prevailing wage adjustments, coupled with the addition of 127 active members and a contribution rate increase were the main driving factors for the \$12.0 million increase in total contributions during 2017. These increases are partially offset as Tier 1 members retire or terminate and are replaced with Tier 3 members who typically have lower member contribution rates but similar employer rates. Employer contribution rates are not determined by entry age as member rates are but rather by bargaining unit and Tier placement. All members in a particular bargaining unit will have the same employer contribution rate with only a very slight rate reduction for Tier 3 members. Conversely, member rates can fluctuate drastically within a particular bargaining unit depending on entry age of the member and Tier placement. A contribution rate

increase of 5.17% in aggregate was implemented on December 31, 2016 for the majority of Plan participants depending on bargaining unit with the remaining rate increases being implemented throughout the year in correlation with the bargaining process. This contribution rate increase along with the increase in active members were mostly responsible for the increase in employer and member contributions experienced in 2017.

A table comparison of current year and prior year additions in Fiduciary Net Position follows:

	Year Ended 2017	Year Ended 2016	Increase
Employer Contributions	\$ 42,340,904	\$ 35,451,409	\$ 6,889,495
Plan Member Contributions	30,467,232	25,359,069	5,108,163
Net Investment Income	178,639,524	68,949,306	109,690,218
Total Additions	<u>\$ 251,447,660</u>	<u>\$ 129,759,784</u>	<u>\$ 121,687,876</u>

Deductions from Fiduciary Net Position

The Plan was created to provide lifetime retirement annuities, survivor benefits, and permanent disability benefits to qualified members and their beneficiaries. The cost of such programs includes benefit payments, as designated by the Plan, refund of contributions to terminated employees, and the cost of administering the Plan. A steady increase in benefit payments can be expected as retired member participant counts increase and the annual COLA is applied.

In March 2014, an agreement to accept a prefunded or advance payment of employer contributions was established between SLOCPT's Board of Trustees and the County Board of Supervisors. The agreement allowed two of SLOCPT's employers to prepay their actuarially determined Employer contributions in July 2014 for fiscal year ended June 30, 2015. Per the terms of this agreement, the SLOCPT Board of Trustees is required to give 60 days' notice to the employers prior to the completion date of the current agreement in order to discontinue the arrangement to accept prefunded contributions in the subsequent year. In 2015, 2016, and 2017, a prefunding agreement for each respective subsequent fiscal year ending June 30 was established. The associated discount given for prepayment of these receivables is amortized over the time frame used to calculate the prefunded amount (in all cases, one year).

Below is a comparison of current and prior year deductions from the Plan:

	Year Ended 2017	Year Ended 2016	Increase
Monthly Benefit Payments	\$ 85,052,016	\$ 78,193,401	\$ 6,858,615
Refund of Contributions	2,857,104	2,247,166	609,938
Death Benefits	748,157	242,738	505,419
Administration and Actuarial	2,045,367	2,248,956	(203,589)
Prefunded Discount Amortization	1,516,852	1,387,369	129,483
Total Deductions	<u>\$ 92,219,496</u>	<u>\$ 84,319,630</u>	<u>\$ 7,899,866</u>

The Plan as a Whole

Management believes that SLOCPT is in reasonably sound financial position to meet its obligations to the Plan members and their beneficiaries. The current financial position results from a diversified investment

program that prudently balances expected risk and return, and an effective system of cost control and strategic planning.

New Pension Accounting and Financial Reporting Standards

No new GASB Statements were issued in 2017 that would affect SLOCPT's fiduciary net position or the presentation of its financial statements.

Requests for Information

This financial report is designed to provide the Board of Trustees, our membership, taxpayers, and investment managers with a general overview of SLOCPT's finances and to demonstrate the accountability for the funds under its stewardship. Please address any questions about this report or requests for additional financial information to:

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

Respectfully submitted,



Carl A. Nelson, CFA
Executive Secretary and Chief Investment Officer

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**SAN LUIS OBISPO COUNTY PENSION TRUST
STATEMENT OF FIDUCIARY NET POSITION
AS OF DECEMBER 31, 2017 (WITH COMPARATIVE TOTALS)**

	2017	2016
ASSETS		
Cash and Cash Equivalents	\$ 34,474,219	\$ 54,629,879
Receivables		
Accrued Interest and Dividends Receivable	765,062	1,077,861
Accounts Receivable	29,270	28,755
Contributions Receivable	2,826,010	2,334,164
Securities Sold	13,980,940	25,894,180
Total Receivables	17,601,282	29,334,960
Investments, at Fair Value		
Bonds and Notes	261,759,770	294,707,759
International Fixed Income	147,038,778	120,949,962
Collateralized Mortgage Obligations	2,656,107	3,290,234
Domestic Equities	302,662,187	246,898,942
International Equities	332,949,417	262,107,462
Alternative Investments	95,192,130	70,945,818
Real Estate	176,799,495	174,948,247
Total Investments	1,319,057,884	1,173,848,424
Other Assets		
Prepaid Expenses	61,759	62,182
Capital Assets - Net of Accumulated Depreciation	2,855,154	992,043
Total Other Assets	2,916,913	1,054,225
Total Assets	\$ 1,374,050,298	\$ 1,258,867,488
LIABILITIES		
Securities Purchased	\$ 8,528,679	\$ 52,248,170
Accrued Liabilities	1,013,394	1,137,458
Prefunded Contributions	24,037,203	24,239,002
Total Liabilities	\$ 33,579,276	\$ 77,624,630
FIDUCIARY NET POSITION		
Fiduciary Net Position Restricted for Pension Benefits	\$ 1,340,471,022	\$ 1,181,242,858

The accompanying notes are an integral part of these financial statements.

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**SAN LUIS OBISPO COUNTY PENSION TRUST
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED DECEMBER 31, 2017 (WITH COMPARATIVE TOTALS)**

	2017	2016
ADDITIONS		
Contributions		
Employer Contributions	\$ 42,340,904	\$ 35,451,409
Plan Member Contributions	30,467,232	25,359,069
	72,808,136	60,810,478
Investment Income (Loss)		
Realized and Unrealized Gains and Losses, Net	169,242,335	57,694,722
Interest	3,492,823	4,724,929
Dividends	8,768,901	9,579,900
Real Estate Management Trust Income (Loss), Net	(9,952)	94,037
Real Estate Operating Income, Net	464,978	908,420
Investment Expenses	(3,319,561)	(4,052,702)
	178,639,524	68,949,306
Net Investment Income	178,639,524	68,949,306
Total Additions	251,447,660	129,759,784
DEDUCTIONS		
Benefits		
Monthly Benefit Payments	85,052,016	78,193,401
Refund of Contributions	2,857,104	2,247,166
Death Benefits	748,157	242,738
	88,657,277	80,683,305
Total Benefits	88,657,277	80,683,305
Other Deductions		
Administration and Actuarial	2,045,367	2,248,956
Prefunded Discount Amortization	1,516,852	1,387,369
	3,562,219	3,636,325
Total Other Deductions	3,562,219	3,636,325
Total Deductions	92,219,496	84,319,630
Net Increase in Fiduciary Net Position	\$ 159,228,164	\$ 45,440,154
Fiduciary Net Position Restricted for Pension Benefits - Beginning of Year	\$ 1,181,242,858	\$ 1,135,802,704
Fiduciary Net Position Restricted for Pension Benefits - End of Year	\$ 1,340,471,022	\$ 1,181,242,858

The accompanying notes are an integral part of these financial statements.

**SAN LUIS OBISPO COUNTY PENSION TRUST
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2017**

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the San Luis Obispo County Pension Trust (SLOCPT) are prepared on the accrual basis of accounting. All assets are invested and held pursuant to, and in accordance with, the Investment Policy of the Plan. Employee contributions and employer appropriations are recognized as revenues in the period in which they are due pursuant to formal commitments and statutory or contractual requirements. Investment income is recognized as revenue when earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Other expenses are recognized when the corresponding liabilities are incurred. The net appreciation (depreciation) in fair value of investments held by the Plan is recorded as an increase (decrease) to investment income based on the valuation of investments at year-end.

Cash and Cash Equivalents

Cash and cash equivalents include deposits and short-term investments held in the San Luis Obispo County Pension Trust's (SLOCPT) operating bank accounts and custodian bank. Short-term investments include cash held in short-term investment funds and other highly liquid investments. Short-term investments considered cash are recorded at cost, which approximates fair value.

Securities

Securities include bonds and notes, international fixed income, collateralized mortgage obligations, and domestic and international equities. These are stated at fair value based upon closing sales prices reported on recognized securities exchanged on the last business day of the period or, for listed securities having no sales reported and for unlisted securities, based on last reported bid prices. All purchases and sales of securities are accounted for on a trade-date basis, and dividends declared but not received are accrued on the ex-dividend date. Realized gains or losses of securities are determined on the basis of average cost. The calculation of realized gains and losses is independent of the calculation of the change in the fair value of investments. Realized gains and losses of the current period may include unrealized amounts from prior periods.

Alternative Investments

Alternative investments are valued at estimated fair values as determined by the investment manager.

Real Estate

Investment properties are valued at estimated fair value, which has been determined by appraisals performed by individual real estate advisors. Depreciation is not recorded on investment properties. The Plan holds several real estate investments, the majority of which is in the form of real estate commingled funds. The Plan's direct real estate holdings not in commingled real estate funds are invested in properties located in the County of San Luis Obispo (the "County").

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Asset Allocation Policy and Long-Term Expected Rate of Return

The allocation of investment assets is reviewed and approved annually by the Board of Trustees (the Board) as outlined in the Investment Policy. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully-funded status for the benefits provided to SLOCPT's members and their beneficiaries. The following table displays the Board-approved asset allocation policy for 2017 and the long-term expected real rates of return:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Weighted Average Long-Term Expected Real Rate of Return</u>
Fixed Income	30%	1.58%
Domestic Equities	20%	2.38%
International Equities	20%	6.05%
Alternative Investments	15%	3.77%
Real Estate	15%	4.57%
	<u>100%</u>	

The long-term expected real rate of return is determined using a building-block method in which best estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

Prefunded Contributions

In June 2017, for the fourth consecutive year, the Board entered into an agreement with the County Board of Supervisors to accept advanced payment of the employer contributions and employer portions of employee contributions for the County and the San Luis Obispo County Air Pollution Control District (APCD). The advance payment amount is determined and calculated by the Plan's Actuary pursuant to the provisions of the Plan Section 16.05(c) and as instructed by the Trustees. The discount rate used by the Actuary was 6.125%, based on the current earning assumption of 7.125% less 1.00%.

As actual payroll (and hence required contributions) differs from the estimate in the agreement, a "true-up" process to determine any shortfalls or overages at the County's fiscal year end on June 30 is performed. Shortfalls are collected within five business days while overages will be used as credits to offset the next year's advance payment.

Administrative Expenses

Administrative expenses represent actuarial and professional fees, salaries of the Plan's administrative personnel, insurance, occupancy costs, and services purchased from the County and other vendors and are paid from the assets of the Plan. Administrative expenses paid from the assets of the Plan are financed from both investment earnings and contributions.

Income Taxes

The Internal Revenue Service has ruled that the Plan qualifies under Section 401(a) of the Internal Revenue Code and is therefore not subject to tax under income tax laws in effect at the time of its ruling.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Accordingly, no provision for income taxes has been made in the accompanying financial statements, as the Plan is exempt from federal and state income taxes.

Management’s Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions. These affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Concentrations of Market and Credit Risk

The Plan’s exposure to credit loss in the event of nonperformance of its investments is limited to the carrying value of such instruments. The Plan’s concentration of credit risk and market risk are dictated by the Plan’s Investment Policy. Investment securities are exposed to various risks, such as interest rate risk, market risk, and credit risk. Due to the level of risk associated with certain investment securities, and the level of uncertainty related to changes in the value of these investments, it is at least reasonably possible that changes in risks in the near-term could materially affect the amounts reported in the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position.

Implementation of New Accounting Standards

In March 2016, the Governmental Accounting Standards Board (GASB) issued Statement No. 82, “*Pension Issues – an amendment of GASB Statements No. 67, No. 68, and No. 73*”, which requires the presentation of covered payroll, defined as the payroll on which contributions to a pension plan are based, and ratios that use that measure. SLOCPT previously presented and will continue to present covered payroll under this definition. As such, SLOCPT’s fiduciary net position was not materially affected by the implementation of this Statement.

No new Statements were issued in 2017 that would affect the Pension Trust’s fiduciary net position or the presentation of its financial statements.

NOTE 2 – PLAN DESCRIPTION

General

The Plan is a multiple-employer cost sharing contributory defined benefit pension plan consisting of five participating employers. Permanent employees of the County, the San Luis Obispo County Superior Courts (the Courts), APCD, the San Luis Obispo County Local Agency Formation Commission (LAFCO), and SLOCPT are required to participate in the Plan. The Plan is a pension trust fund of the County and is reported as a fiduciary fund in the financial reports of the County. The Plan exists, operates, and is constituted under the authority of Section 53215 of Section 17 of Article XVI of the California Constitution and Government Code Article 1.5 (Pension Trusts), of Chapter 2 (Officers and Employees), of Part 1 (Powers and Duties Common to Cities, Counties and Other Agencies), of Division 2 (Cities, Counties and Other Agencies), of Title 5 (Local Agencies) of the California Government Code.

Pursuant to the foregoing Government Code provisions, the County Board of Supervisors established SLOCPT by the adoption of Chapter 2.56 of the San Luis Obispo County Code. Following the adoption of Chapter 2.56 of the County Code, the County Board of Supervisors adopted the By-Laws of the Plan.

NOTE 2 – PLAN DESCRIPTION (continued)

The Plan is a part of those By-Laws. The County Board of Supervisors has the sole authority to amend the Plan's provisions. Under terms of the Plan, governance of the Plan is assigned to the seven-member Board that consists of three members elected by Plan participants, three members appointed by the County's Board of Supervisors, and the County's current Auditor/Controller/Treasurer/Tax Collector/Public Administrator as the Ex-Officio member.

Membership

Active members are required to contribute to the Plan at rates currently ranging from 6.78% to 30.79% of includable compensation as defined in the Plan, depending upon the collective bargaining agreement under which the member is covered and their age of entry. Employers are required to contribute to the Plan at rates currently ranging from 18.13% to 34.64% of each employee's includable compensation as defined in the Plan, depending upon the collective bargaining agreement under which the employee is covered. The schedules of rates of contributions utilized are those adopted by the County Board of Supervisors upon recommendation of SLOCPT's Board. The Board bases its recommendations on the annual Actuarial Valuation Report. The employers' appropriations and members' contributions are designed to annually fund the Plan's Actuarially Determined Contribution. Such contributions are currently invested in corporate notes, bonds, collateralized mortgage obligations, equities, futures, real estate investment funds, equity real estate holdings, alternative investments, and short-term cash investments. Contributions are credited interest as approved by the Board, currently 6.125%, and accumulated for each individual active member until the member terminates employment.

At the time of employment termination, a member may choose to cash out the employee portion of their individual accrued balance, retire with a lifetime monthly benefit (depending on eligibility), or keep the money on deposit with SLOCPT until retirement eligibility is attained (depending on the member's vested status). A member becomes vested once they have accrued five Pension Trust Service Credits (PTSCs). PTSCs are accumulated with every "normal" hour worked for a participating employer. Normal hours include sick and vacation time but exclude overtime. A member will not receive credit for more than 80 hours during a two-week pay cycle.

Total members of the Plan were comprised of the following as of December 31, 2017:

Retirees and Beneficiaries Currently Receiving Benefits	2,745
Terminated Employees Entitled to but not yet Receiving Benefits	462
Active Plan Participants	
Vested	1,568
Nonvested	1,155
Total	<u>5,930</u>

The Plan has three tiers, which cover members classified as Miscellaneous, Safety, and Probation. In general, members hired prior to January 1, 2011 are in Tier 1, members hired January 1, 2011 through December 31, 2012 are in Tier 2, and members hired on or after January 1, 2013 are in Tier 3. It is important to note that not all employers and/or collective bargaining units adopted Tier 2 provisions so there are some instances where a Tier 2 classification is absent for a particular employee group.

NOTE 2 – PLAN DESCRIPTION (continued)

Benefits

The applicable retirement formula, minimum retirement age, compensation base, post-retirement COLA, COLA carryover, and final compensation maximum may differ depending upon the Plan provisions in effect at the member's date of hire, the member's classification, and the member's collective bargaining unit. The Plan permits retirement for most members at age 50 with five or more PTSCs. Tier 3 Miscellaneous members with at least five PTSCs are eligible to retire at age 52. A member's retirement formula is based on the following three components: 1) retirement age factor, 2) total accumulated PTSCs, and 3) final compensation. The retirement age factor is determined by the member's age at retirement, member class, Tier, and collective bargaining unit; these range anywhere from 1.000% to 3.165%. Final compensation is the highest one-year average for Tier 1 employees and may include a compensation pickup for various management bargaining units. Tier 2 and Tier 3 members' final compensation is based on the highest three-year average with no pickup. Members receive their accumulated benefits as a life annuity payable monthly upon retirement.

The Plan provides for an annual post-retirement COLA based on changes in the Consumer Price Index. The COLA is limited to a maximum 3% per year for Tier 1 members and 2% per year for Tier 2 and Tier 3 members. There is no minimum COLA requirement. The Board must approve the COLA annually.

In the event of total and permanent disability, upon satisfaction of membership requirements and other applicable provisions of the Plan, members may receive a disability allowance. Disability benefits are granted by the Board based upon medical evidence. There are two types of disability allowances available within the Plan: Ordinary Disability and Industrial Disability. Industrial Disability is granted only if the cause of the disability is determined to be incurred during on-the-job duties, and is limited to Safety and Probation members.

Tier 1 members are eligible to participate in a Deferred Retirement Option Plan (DROP). This option allows members to effectively retire from the Plan but remain an active employee with their current employer. When a member elects to enter DROP their monthly benefit is calculated using the same formulas as if they had elected to retire. However, their monthly payment is directed to and accumulated in an investment account held for that individual by a third party. The member is restricted from accessing these funds until they officially elect to retire from employment. If elected, the member must participate a minimum of six months and is required to enter official retirement by the end of five years from the date of entrance into DROP.

The Plan also provides death benefits for both active employees and retired members. The death benefit calculation is determined by the status of the member at the time of his/her passing, retirement option selection if applicable, and the status of eligible beneficiaries.

NOTE 3 – DEPOSITS AND INVESTMENT RISK DISCLOSURES

Investment Stewardship

Except as otherwise expressly restricted by the California Constitution and by law, the Board may, at its discretion, invest or delegate the investment of the assets of the Plan through the purchase, holding, or sale of any form or type of instrument or financial transaction when prudent in the informed opinion of the Board. In addition, the Board has established an Investment Policy, which establishes specific asset allocation parameters that govern the compositional mix of cash, fixed income and equity securities, alternative investments, and real estate investments. The Plan currently employs an external investment consultant and external investment managers to manage its assets subject to the guidelines of the Investment Policy.

NOTE 3 – DEPOSITS AND INVESTMENT RISK DISCLOSURES (continued)

Investment Risk

Investments are subject to certain types of risks, including interest rate risk, credit risk (including custody credit risk and concentrations of credit risk), and foreign currency risk. The following describes those risks:

Interest Rate Risk

The fair value of fixed income investments fluctuates in response to changes in market interest rates. Increases in prevailing interest rates generally translate into decreases in fair value of those investments. The fair value of interest sensitive instruments may also be affected by the creditworthiness of the issuer, prepayment options, relative values of alternative investments, and other general market conditions. Certain fixed income investments may have call provisions that could result in shorter maturity periods. The Plan's Investment Policy controls interest rate risk in general through its approved asset allocation to fixed income investments and investment guidelines approved for each investment manager. Although the policy does not formally specify maturity limitations, interest rate risk for any given fixed income portfolio is controlled by investment guidelines particular to each portfolio or investment manager that do specify permissible minimum and maximum maturities relative to the relevant fixed income market index benchmark.

The following schedule is a list of fixed income, bonds, collateralized mortgage obligations, and short-term investments and the related maturity schedule for the Plan as of December 31, 2017:

Investment Type	Investment Maturities (in years)				Fair Value
	Less Than 1 Year	1-5 Years	6-10 Years	More than 10 Years	
Collateralized Mortgages	\$ -	\$ 38,301	\$ 307,098	\$ 2,310,708	\$ 2,656,107
Corporate Bonds	5,765,603	42,429,113	75,057,778	19,319,909	142,572,403
Derivatives	374,943	-	-	-	374,943
Municipal Bonds	382,455	753,162	97,626	4,086,440	5,319,683
US Government & Agencies	5,194,835	17,018,093	9,786,694	59,915,562	91,915,184
Foreign Corporate Bonds	565,323	5,518,995	9,725,246	3,525,643	19,335,207
Foreign Government Bonds	22,166,112	46,649,923	38,811,666	31,400,414	139,028,115
Other Short Term Investments	10,253,013	-	-	-	10,253,013
Total	<u>\$ 44,702,284</u>	<u>\$ 112,407,587</u>	<u>\$ 133,786,108</u>	<u>\$ 120,558,676</u>	<u>\$ 411,454,655</u>

Custody Credit Risk

Custody credit risk for deposits is the risk that, in the event of a financial institution's failure, the Plan would not be able to recover its deposits. Deposits are exposed to custody credit risk if they are not insured or not collateralized. Under the California Government Code, a financial institution is required to secure deposits in excess of \$250,000 made by state or local government units by pledging securities held in the form of an undivided collateral pool. The fair value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure governmental deposits by pledging first deed mortgage notes having a value of 150% of the secured public deposits. Such collateral is held by the pledging financial institution's trust department or agent in the Plan's name.

NOTE 3 – DEPOSITS AND INVESTMENT RISK DISCLOSURES (continued)

At December 31, 2017, the carrying amount of the Plan's cash deposits was \$34.474 million (which includes cash equivalents) and the bank balance was \$33.885 million. The difference between the bank balance and the carrying amount represents cash and cash equivalents held in transition by the Investment Custodian and various investment managers. Of the bank balance, \$550 thousand was covered by the Federal Deposit Insurance Corporation, and \$27.039 million was collateralized by the pledging financial institutions as required by Section 53652 of the California Government Code. The Plan's policy is to confirm the existence and allocation of the bank's collateral with the State of California Local Agency Commission not less than annually, and to confirm the existence of insurance in the Plan's name.

Custody credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the Plan would not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custody credit risk if the securities are uninsured, not registered in the Plan's name, and held by the counterparty. The Plan's investment securities are not exposed to custody credit risk because all securities held by the Plan's custody bank are in the Plan's name.

The Board's investment policies and guidelines permit investments in numerous specified asset classes to take advantage of professional investment management advice and a well-diversified portfolio. The investment portfolio contained no concentration of investments in any one entity (other than those issued or guaranteed by the U.S. Government) that represented 5% or more of the Fiduciary Net Position.

Credit Risk

The Plan's general investment policy is to apply the prudent person rule. Investments are made as a prudent person would be expected to act, with discretion and for the exclusive purposes of providing benefits, minimizing contributions, and defraying reasonable expenses of administering the Plan. Investments should be diversified to minimize the risk of loss and to maximize the rate of return unless, under the circumstances, it is clearly prudent not to do so.

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NOTE 3 – DEPOSITS AND INVESTMENT RISK DISCLOSURES (continued)

The following is a schedule of the credit risk ratings comparison of the Plan’s fixed income, bonds, collateralized mortgage obligations, and short-term investments as of December 31, 2017, as rated by Standard & Poor’s equivalent ratings:

Quality Rating	%	Fair Value
AAA	9.29%	\$ 38,233,246
AA+	14.45%	59,459,162
AA	2.35%	9,659,004
AA-	1.18%	4,844,006
A+	0.13%	551,655
A	4.21%	17,340,471
A-	7.95%	32,707,273
BBB+	2.87%	11,819,397
BBB	10.12%	41,639,958
BBB-	4.61%	18,951,092
Subtotal Investment Grade	57.16%	235,205,264
BB+	4.78%	\$ 19,661,498
BB	5.17%	21,281,767
BB-	3.99%	16,397,067
B+	4.27%	17,559,155
B	3.60%	14,793,413
B-	0.98%	4,019,644
CCC+	0.77%	3,163,375
CCC	1.03%	4,253,583
CCC-	0.00%	-
D	0.00%	-
Not Rated	18.25%	75,119,889
Subtotal Non-Investment Grade	42.84%	176,249,391
Total Fixed Income, Bonds, Collateralized Mortgage Obligations, and Short-Term Investments	100.00%	\$ 411,454,655

Nationally recognized statistical rating organizations provide ratings of quality of debt securities based on a variety of factors. For example, the financial condition of the issuer provides investors with some idea of the issuer’s ability to meet its obligations. Fixed-maturity investments may consist of rated or non-rated securities. Ratings can range from AAA (highest quality) to D (default). Debt securities with ratings of BBB or higher are considered investment grade issues, and debt securities with ratings of BB or lower are non-investment grade issues. Debt securities in the non-investment grade category are more speculative and are often referred to as “high-yield”. This reference is made because lower-rated debt securities generally carry a higher interest rate to compensate the buyer for incurring additional risk.

NOTE 3 – DEPOSITS AND INVESTMENT RISK DISCLOSURES (continued)*Foreign Currency Risk*

Foreign currency risk is the risk that occurs when changes in exchange rates may adversely affect the fair value of an investment. The Plan's external investment managers may invest in international securities and must follow the Plan's Investment Policy pertaining to these types of investments. The Plan's policy on foreign currency risk is specified in its Investment Policy and does not place specific limitations on currency exposure. The Plan's Investment Policy controls currency exposure risk in general through its approved asset allocation to international investments that may be valued in various foreign currencies.

The Plan's exposure to foreign currency risk in U.S. Dollars as of December 31, 2017 was as follows:

<u>Currency</u>	<u>Fair Value</u>
Euro Currency	\$ 65,198,535
British Pound	47,413,202
Japanese Yen	32,753,550
Mexican Peso	24,196,762
Swiss Franc	23,959,771
South African Rand	22,708,257
Brazilian Real	22,688,995
Polish Zloty	13,659,626
Hong Kong Dollar	12,314,321
Danish Krone	11,591,369
South Korean Won	11,552,205
Australian Dollar	11,219,163
Swedish Krona	10,979,747
Russian Ruble	9,809,312
Norwegian Krone	9,726,829
Malaysian Ringgit	7,843,908
Indonesian Rupiah	7,306,784
Turkish Lira	6,162,616
Indian Rupee	5,846,578
Colombian Peso	5,382,829
Canadian Dollar	3,995,309
Thai Baht	3,626,231
Czech Koruna	3,609,644
New Zealand Dollar	2,162,921
Peruvian Nuevo Sol	1,914,184
Egyptian Pound	608,309
Ukrainian Hryvnia	587,089
Romanian Leu	537,576
Uruguayan Peso	537,576
Iraqi Dinar	495,135
Chilean Peso	141,467
Singapore Dollar	4,486
Total	<u>\$380,534,286</u>

NOTE 4 – INVESTMENTS

Fair Value Measurements

GASB Statement No. 72, “*Fair Value Measurement and Application*”, addresses accounting and financial reporting issues related to fair value measurements and provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements. This statement establishes a hierarchy of inputs to valuation techniques used to measure fair value. The hierarchy has three levels of inputs and gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are as follows:

Level 1: Inputs are based on quoted prices for identical assets or liabilities in an active market. An active market for the asset or liability is one in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis. A quoted price in an active market usually provides the most reliable evidence of fair value and is generally used without adjustment if available. This classification includes public equities with observable market prices.

Level 2: Inputs that are observable either directly or indirectly but are not Level 1 inputs. Level 2 inputs include quoted prices for similar instruments, broker quotes, or observable inputs that directly impact value such as interest rates, prepayment speeds, and credit risk. Pricing inputs, including broker quotes, are generally those other than exchange quoted prices in active markets, and fair values are determined through the use of models or other valuation methodologies. For investments in funds where there is an ability to redeem such investments at the Net Asset Value (NAV) per share (or its equivalent) at the measurement date or in the near term, and investments for which quoted prices are available for similar assets or liabilities in markets that are not active, the fair value of the investment is generally categorized as Level 2.

Level 3: Inputs that are unobservable. Level 3 inputs are generally used in situations where there is little, if any, market activity for the investment. The determination of fair value using these inputs requires significant management judgment and estimation. Due to the inherent uncertainty of these estimates, the values may differ significantly from the values that would have been used had a ready market for these investments existed. Investments that are included in this category generally include public entities and other fixed income securities where there is an inability to redeem such investments at the NAV per share (or its equivalent) at the measurement date or in the near term.

Equity and derivative securities classified as Level 1 are valued using prices quoted in active markets for those securities. Equity and debt securities classified in Level 2 and Level 3 use a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, observable market-based inputs and unobservable inputs (i.e., extrapolated data, proprietary models, and indicative quotes). Matrix pricing is used to value securities based on the securities’ relationship to benchmark quoted prices. Real Estate funds classified as Level 3 are based on periodic appraisals in accordance with industry practice. Investment derivative instruments categorized as Level 2 and Level 3 are valued using market approaches that consider, as applicable, benchmark interest rates or foreign exchange rates.

NOTE 4 – INVESTMENTS (continued)

The following table shows the fair value leveling of SLOCPT’s investments as of December 31, 2017:

Investment Type	Fair Value Measurements			Total
	Quoted Prices in Active Markets for Identical Assets Level 1	Quoted Prices for Similar Assets in Inactive Markets Level 2	Significant Unobservable Inputs Level 3	
Bonds and Notes	\$ 100,300,932	\$ 161,689,530	\$ -	\$ 261,990,462
International Fixed Income	-	75,418,864	-	75,418,864
Collateralized Mortgage Obligations	-	2,425,415	-	2,425,415
Domestic Equities	60,083,610	242,578,577	-	302,662,187
International Equities	171,958,176	160,991,241	-	332,949,417
Real Estate	-	-	151,102,074	151,102,074
Total	\$ 332,342,718	\$ 643,103,627	\$ 151,102,074	\$ 1,126,548,419

Investments in Entities that Calculate Net Asset Value Per Share

Commingled funds are valued based on NAV reported by the investment manager, which are generally calculated based on the last reported sale price of the underlying assets held by such funds. Alternative investments are typically structured as limited partnerships and limited liability companies. Since there is no readily available market for these investments, they are stated at fair value as estimated in an inactive market. These investments include securities of companies that may not be immediately liquid, such as private debt securities, real estate, or other assets. The valuations of these investments are based upon values provided by the investment managers, based on the guidelines established with the investment managers and in consideration of other factors related to SLOCPT’s interests in these investments.

Investments that are measured at fair value using the NAV (or its equivalent) per share as a practical expedient are not classified in the fair value hierarchy. In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. SLOCPT’s assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability.

The fair value measurement of investments in commingled global fixed income, commingled real estate, real estate held for investment, alternatives, and commodities are valued based on the investment’s net asset value (NAV) per share (or its equivalent) reported by the investment manager, which is generally calculated based on the last reported sale price of the underlying assets held by such funds, including those structured as limited partnerships.

NOTE 4 – INVESTMENTS (continued)

The following table shows the fair value measurement of those investments measured at NAV as of December 31, 2017:

Investment Type	Investments Measured at Net Asset Value (NAV)			
	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Commingled Fund - International Fixed Income	\$ 71,619,914	\$ -	Quarterly	30 days
Commingled Fund - Real Estate	11,657,191	-	Quarterly	30 days
Real Estate Held for Investment - Separate Account	14,040,230	-	Not Eligible	Not Eligible
Alternatives	95,192,130	111,246,699	Not Eligible	Not Eligible
Total	<u>\$ 192,509,465</u>	<u>\$ 111,246,699</u>		

The Real Estate Held for Investment – Separate Account is held in the form of a title holding corporation. Fiduciary Properties, Inc., or FPI, is a Delaware corporation and is qualified as tax-exempt under Internal Revenue Code § 501(c)(25). In the state of California, FPI is qualified as tax-exempt under California Revenue and Taxation Code § 23701x. The following is a summary of FPI's financial position as of December 31, 2017:

Assets	\$ 14,180,563
Less: Liabilities	(140,333)
Net Assets	<u>\$ 14,040,230</u>
Net Income	<u>\$ 2,930,777</u>

FPI's historical tax returns and determination letter are available for public inspection at the offices of SLOCPT.

Related Party Transactions

The Plan occupies a portion of one of the real properties owned by FPI. The monetary value of the real property is included in assets available to pay benefits to members and their beneficiaries. The Plan does not compensate FPI for occupancy and FPI's financial results are reported on a consolidated basis of accounting within these financial statements.

Derivatives

The Board has authorized certain investment managers to invest in, or otherwise enter into, transactions involving derivative financial instruments when, in the judgment of management, such transactions are consistent with the investment objectives established for a specific investment manager's assignment. A professional investment consultant is employed to monitor and review each investment manager's securities and derivative position as well as the manager's performance relative to established benchmark rates of return and risk measures. In management's opinion, derivative activities must be evaluated

NOTE 4 – INVESTMENTS (continued)

within the context of the overall portfolio performance and cannot be evaluated in isolation. Investment derivatives involve the following types of risks:

Derivatives Market Risk

Market risk is the risk of change in value of an instrument in response to changes in a market price or index. While all investments are subject to market risk, derivatives often have a higher degree of market risk than other types of investment instruments. Values of cash securities containing derivative features are often more susceptible to market risk than other types of fixed income securities because the amounts and/or timing of their scheduled cash flows may fluctuate under changing market conditions, according to their contractual terms. For other types of derivatives, amounts of contractual cash flows may be either positive or negative depending upon prevailing market conditions relative to the reference prices or rates; therefore, the values of such instruments may be positive or negative, despite the fact that little or no cash is initially exchanged to enter into such contracts.

Derivatives Credit Risk

Credit risk of cash securities containing derivative features is based upon the creditworthiness of the issuers of such securities. The Plan establishes minimum credit requirements for such securities. Exchange-traded derivatives are generally considered to be of lower credit risk than over-the-counter derivatives due to the exchange's margin requirements.

Derivative financial instruments held by the Plan from time to time consist of the following:

Forward Contracts: A forward contract represents an agreement to buy or sell an underlying asset at a specified date in the future at a specified price. Payment for the transaction is delayed until the settlement or expiration date. A forward contract is a non-standardized contract that is tailored to each specific transaction. Forward contracts are privately negotiated and are intended to be held until the settlement date.

Futures Contracts: A futures contract represents an agreement to buy (long position) or sell (short position) an underlying asset, at a specified future date for a specified price. Payment for the transaction is delayed until a future date, which is referred to as the settlement or expiration date. Futures contracts are standardized contracts traded on organized exchanges.

Option Contracts: An option contract is a type of derivative security in which a buyer (purchaser) has the right, but not the obligation, to buy or sell a specified amount of an underlying security at a fixed price by exercising the option before its expiration date. The seller (writer) has an obligation to buy or sell the underlying security if the buyer decides to exercise the option.

Swap Agreements: A swap is an agreement between two or more parties to exchange a sequence of cash flows over a future period. No principal is exchanged at the beginning of the swap. The cash flows exchanged by the counterparties are tied to a "notional" amount. A swap agreement specifies the time period over which the periodic payments will be exchanged. The fair value represents the gains or losses as of the prior marking-to-market.

TBAs (To Be Announced): A TBA is an agreement to purchase mortgage-backed securities at a regular settlement date in the coming months. TBAs can settle up to three months forward, but are generally traded one month forward. In a TBA transaction, the specific mortgage pools that will be delivered to fulfill the forward contract are unknown at the time of the trade.

NOTE 4 – INVESTMENTS (continued)

The Investment Derivatives schedule below reports the fair value balances and notional amounts of derivatives outstanding as of December 31, 2017:

<u>Derivative Type</u>	<u>Notional Amount</u>	<u>Fair Value</u>
Forward Contracts	\$ (1,579)	\$ (1,579)
Swap Agreements	(432,277,988)	213,490
TBAs	6,961,620	6,949,532
	<u>\$ (425,317,947)</u>	<u>\$ 7,161,443</u>

Note: Value does not include offsetting liability or asset associated with the position(s).

All investment derivative positions are included in investments at fair value in the Statement of Fiduciary Net Position. All changes in fair value are reported in the Net Realized and Unrealized Gains and Losses of investments in the Statement of Changes in Fiduciary Net Position.

Commitments

The Plan participates in certain investments that require commitments of a specified amount of capital upfront that is then drawn down at a later time as the investment vehicle requires. The total unfunded capital commitment represents the amount of funds that the Plan could potentially be required to contribute at a future date. At December 31, 2017, the Plan had unfunded capital commitments totaling \$111.247 million.

Annual Money-Weighted Rate of Return

For the year ended December 31, 2017, the annual money-weighted rate of return on investments, net of investment expense, was 14.96%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTE 5 – CAPITAL ASSETS

Depreciation and amortization of capital assets are computed by the straight-line method based on the cost of the capital assets over the estimated useful lives of the capital assets, which range from 5 to 40 years. Capital assets are recorded at historical costs.

NOTE 5 – CAPITAL ASSETS (continued)

Changes in capital assets during the year ending December 31, 2017 were as follows:

	Beginning Balance January 1, 2017	Additions	Deletions	Ending Balance December 31, 2017
Office Equipment	\$ 58,468	\$ 7,967	\$ (11,921)	\$ 54,514
Software	2,524,414	-	-	2,524,414
Work in Progress	987,558	1,858,536	-	2,846,094
Accumulated Depreciation and Amortization	(2,578,397)	(3,392)	11,921	(2,569,868)
	<u>\$ 992,043</u>	<u>\$ 1,863,111</u>	<u>\$ -</u>	<u>\$ 2,855,154</u>

Depreciation and amortization expenses for the year ended December 31, 2017 were \$3,392.

NOTE 6 – CONTRIBUTIONS

Funding Requirement and Funding Policy

Periodic contributions to the Plan are determined on an actuarial basis using the Entry Age Normal Cost Method. The Entry Age Normal Cost Method identifies a normal cost and an accrued liability. This method was adopted in 2001 by the Board. The Board also elected an initial amortization period for the payment of the unfunded accrued liability of 30 years. The amortization of the Unfunded Actuarial Accrued Liability is done as a level percent of payroll over a closed 30-year period (22 years as of December 31, 2017) for funding computations. Changes in the value of Plan assets have generally been smoothed over a five-year period to arrive at the Actuarial Value of Assets under the Entry Age Normal Cost Method. The Actuarial Value of Assets as of the most recent Actuarial Valuation was \$1.268 million.

In June 2017, the Board unanimously passed the recommendation of an increase of 1.93% to the total contribution rate as recommended by the Actuary in the January 1, 2017 Actuarial Valuation. The increased total contribution rate took into consideration: a) continuing with the remaining 23 years of the 30-year amortization for unfunded liabilities that was reset in 2010 to 30 years and b) continuing the smoothing of the 2008 asset loss to a 10-year basis instead of the 5-year smoothing applied otherwise. With the County Board of Supervisors' approval, the employers implemented the shared employer and employee increased total contribution rates for the majority of members effective January 1, 2018. The increase was adjusted to an average of 2.38% to account for the deferred implementation.

It is the policy of the employers to contribute the full Annual Required Contribution (ARC) through a combination of employer appropriations and employee contributions.

NOTE 7 – NET PENSION LIABILITY

The components of net pension liability of the Plan at December 31, 2017 were as follows:

Net Pension Liability (dollars in thousands):

Total Pension Liability	\$ 1,905,246
Plan Fiduciary Net Position	<u>(1,340,471)</u>
Employers' Net Pension Liability	<u>\$ 564,775</u>

Plan Fiduciary Net Position as a percentage of Total Pension Liability was 70.36% as of December 31, 2017.

Actuarial Assumptions

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future. Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation. The total pension liability was determined by an actuarial valuation as of January 1, 2017 using the following actuarial assumptions applied to all prior periods included in the measurement in accordance with the requirements of GASB Statement No. 67. Key methods and assumptions used in the latest actuarial valuations are presented below:

Actuarial cost method	Entry Age Normal
Inflation	2.625 percent
Salary Increases	2.875 percent, including inflation, additional merit component applicable to first 7 years of service
Investment rate of return	7.125 percent, net of pension plan investment expense, including inflation

Mortality rates were based on the RP-2014 Healthy Annuitant Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on MP-2015. The actuarial assumptions used in the January 1, 2017 valuation were based on the results of an actuarial experience study for the period January 1, 2011 to December 31, 2015.

The long-term expected nominal rate of return on investments was determined using the same methodology as the long-term expected real rate of return calculation described in Note 1; however, the nominal rates of return will differ from the real rates of return presented in Note 1 because the nominal rates of return include an inflation assumption while real rates of return do not. Best estimates of arithmetic nominal rates of return for each major asset class included in the Plan's target asset allocation as of December 31, 2017 (see the discussion of the Plan's Investment Policy) are summarized in the following table on the next page:

NOTE 7 – NET PENSION LIABILITY (continued)

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Weighted Average Long-Term Expected Nominal Rate of Return</u>
Fixed Income	30%	4.21%
Domestic Equities	20%	5.01%
International Equities	20%	8.67%
Alternative Investments	15%	6.39%
Real Estate	15%	7.19%
	<u>100%</u>	

Discount Rate

The discount rate used to measure the total pension liability was 7.125%. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the Plan's net position was projected to be available to make all projected future benefit payments of current Plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the employers collectively, calculated using the discount rate of 7.125%, as well as what the employers' net pension liability would be if it were calculated using a discount rate that is one percentage-point lower (6.125%) or one percentage-point higher (8.125%) than the current rate:

Employers' Net Pension Liability as of December 31 (dollars in thousands)	1% Decrease (6.125%)	Current Discount Rate (7.125%)	1% Increase (8.125%)
2017	\$ 823,172	\$ 564,775	\$ 352,821

NOTE 8 – LITIGATION

The Plan is subject to legal proceedings and claims in the ordinary course of its business. As of December 31, 2017, Plan management and legal counsel are not aware of litigation that would have a material impact on the Plan's financial statements.

NOTE 9 – SUBSEQUENT EVENTS

In compliance with governmental accounting standards generally accepted in the United States of America, management has evaluated events that have occurred after year-end to determine if these events are required to be disclosed in these financial statements.

Management has determined that no events require disclosure in accordance with governmental accounting standards generally accepted in the United States of America. Subsequent events have been evaluated through June 25, 2018, which is the date the financial statements were available to be issued.

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REQUIRED SUPPLEMENTARY INFORMATION

SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS MULTIYEAR

Fiscal year ending December 31*	2017	2016	2015	2014
Total Pension Liability				
Service Cost	\$ 38,161,931	\$ 36,968,006	\$ 35,503,180	\$ 36,210,322
Interest on the Total Pension Liability	128,399,243	123,083,279	114,971,636	108,953,629
Differences Between Expected and Actual Experience	(1,367,931)	5,485,265	9,771,252	-
Assumption Changes	-	62,845,241	-	-
Benefit Payments	(85,052,016)	(78,193,401)	(72,441,811)	(66,162,944)
Refunds	(3,605,261)	(2,489,904)	(2,612,455)	(1,932,077)
Net Change in Total Pension Liability	76,535,966	147,698,486	85,191,802	77,068,930
Total Pension Liability - Beginning	1,828,710,245	1,681,011,759	1,595,819,957	1,518,751,027
Total Pension Liability - Ending (a)	\$ 1,905,246,211	\$ 1,828,710,245	\$ 1,681,011,759	\$ 1,595,819,957
Fiduciary Net Position				
Employer Contributions	\$ 42,340,904	\$ 35,451,409	\$ 33,618,330	\$ 32,046,545
Employee Contributions	30,467,232	25,359,069	24,586,735	24,415,512
Pension Plan Net Investment Income (Loss)	178,639,524	68,949,306	(16,705,852)	51,667,160
Benefit Payments	(85,052,016)	(78,193,401)	(72,441,811)	(66,162,944)
Refunds	(3,605,261)	(2,489,904)	(2,612,455)	(1,932,077)
Pension Plan Administrative Expense	(2,045,367)	(2,248,956)	(2,528,532)	(2,084,841)
Other	(1,516,852)	(1,387,369)	(1,449,773)	(331,910)
Net Change in Fiduciary Net Position	159,228,164	45,440,154	(37,533,358)	37,617,445
Fiduciary Net Position - Beginning	1,181,242,858	1,135,802,704	1,173,336,062	1,135,718,617
Fiduciary Net Position - Ending (b)	\$ 1,340,471,022	\$ 1,181,242,858	\$ 1,135,802,704	\$ 1,173,336,062
Net Pension Liability - Ending (a)-(b)	\$ 564,775,189	\$ 647,467,387	\$ 545,209,055	\$ 422,483,895
Fiduciary Net Position as a Percentage of Total Pension Liability	70.36%	64.59%	67.57%	73.53%
Covered Employee Payroll**	192,735,874	180,728,417	175,628,910	167,343,323
Net Pension Liability as a Percentage of Covered Employee Payroll	293.03%	358.25%	310.43%	252.47%

* Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

** Figures represent actual compensation on which contributions were made for the fiscal years presented. The covered payroll reported in the Actuarial Section is based on a projected payrate for the subsequent year at the valuation date.

**SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF EMPLOYER CONTRIBUTIONS**

Fiscal Year Ended December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess) **	Covered Employee Payroll	Actual Contribution as a % of Covered Employee Payroll
2008	\$ 34,933,644	\$ 30,860,282	\$ 4,073,362	\$ 162,435,795 *	19.00%
2009	\$ 30,957,311	\$ 31,427,297	\$ (469,986)	\$ 168,677,088 *	18.63%
2010	\$ 30,278,179	\$ 32,148,424	\$ (1,870,245)	\$ 160,443,939 *	20.04%
2011	\$ 30,051,687	\$ 30,435,940	\$ (384,253)	\$ 161,783,273 *	18.81%
2012	\$ 31,122,541	\$ 30,942,038	\$ 180,503	\$ 161,054,639 *	19.21%
2013	\$ 33,416,725	\$ 30,795,872	\$ 2,620,853	\$ 164,299,413 *	18.74%
2014	\$ 32,466,504	\$ 32,046,545	\$ 419,959	\$ 167,343,323	19.15%
2015	\$ 35,318,974	\$ 33,618,330	\$ 1,700,644	\$ 175,628,910	19.14%
2016	\$ 37,663,802	\$ 35,451,409	\$ 2,212,393	\$ 180,728,417	19.62%
2017	\$ 48,203,242	\$ 42,340,904	\$ 5,862,338	\$ 192,735,874	21.97%

* Covered employee payroll shown for fiscal years prior to 2014 is based on expected covered payroll.

** A portion of the deficiency for the years ending December 31, 2014, 2015, 2016, and 2017 was due to the pre-funding arrangement.

**SAN LUIS OBISPO COUNTY PENSION TRUST
ACTUARIAL METHODS AND ASSUMPTIONS**

Valuation Date	January 1, 2017
Notes	Actuarially determined contribution rates are calculated as of January 1, 2017. Members and employers contribute based on fixed rates. There were no benefit changes during the year.
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll
Remaining Amortization Period	Amortized over a closed 23-year period from January 1, 2017 ending December 31, 2039
Asset Valuation Method	5-year smoothed market
Investment Rate of Return	7.125%
Inflation Rate Assumption	2.625% per year
Salary Increases	2.875% Composed of 2.625% inflation, plus 0.25% productivity increase rate, plus step-rate promotional increases for members with less than 8 years of service.
Cost of Living Adjustments	Tier 1 - 2.625% Tiers 2 & 3 - 2.00% (limit)
Retirement Age	Experience-based table for rates based on age and service. Adopted by the Board in 2016 in conjunction with the five-year experience study for the period ending December 31, 2015.
Mortality	Males: RP-2014 with generational mortality improvements using scale MP-2015, a 105% multiplier and white collar adjustment. Females: RP-2014 with generational mortality improvements using scale MP-2015, a 115% multiplier and white collar adjustment.

**SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF ANNUAL MONEY-WEIGHTED RATE OF RETURN**

Year Ended December 31*	Annual Money-Weighted Rate of Return Net of Investment Expense
2017	14.96%
2016	6.04%
2015	-1.42%
2014	4.54%

The money-weighted rate of return expresses investment performance, net of investment expenses, adjusted for timing of cash flows and the changing amounts actually invested.

** Schedule is intended to show information for 10 years. Data prior to 2014 is not available in comparable format. Additional years will be displayed as they become available.*

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OTHER SUPPLEMENTARY INFORMATION

**SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF ADMINISTRATIVE EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2017 (WITH COMPARATIVE TOTALS)**

	2017	2016
Personnel Services		
Salaries and Benefits	\$ 1,192,260	\$ 1,202,914
Total Personnel Services	1,192,260	1,202,914
 Office Expenses		
Office Supplies	18,976	16,704
Postage	23,190	24,255
Telephone	3,842	3,854
Utilities	7,095	7,119
Total Office Expenses	53,103	51,932
 Professional Services		
Accounting and Auditing	59,475	58,025
Actuarial	149,382	109,454
Data Processing	166,518	197,042
Legal	195,585	227,417
Medical	20,601	10,375
Human Resources Consulting	5,000	441
Other	9,217	9,185
Bank Charges	13,137	7,407
Total Professional Services	618,915	619,346
 Other Administrative Expenses		
Maintenance and Custodial	20,525	26,041
Insurance	117,425	114,360
Memberships, Subscriptions, and Publications	4,919	4,718
Printing and Reprographics	10,488	18,284
Transportation, Travel, and Education	23,989	19,606
Miscellaneous Administrative Expenses	351	599
Total Other Administrative Expenses	177,697	183,608
 Depreciation and Amortization	3,392	191,156
 TOTAL ADMINISTRATIVE EXPENSES	\$ 2,045,367	\$ 2,248,956

**SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF INVESTMENT EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2017 (WITH COMPARATIVE TOTALS)**

	2017	2016
Investment Manager Fees	\$ 2,821,161	\$ 3,618,677
Custody Fees	173,398	136,143
Investment Consultant	324,903	297,773
Other Investment Expenses	99	109
	3,319,561	4,052,702
Additional Investment Expenses Netted Against Investment Income and Gains/Losses		
Broker Commissions	17,974	16,383
Broker Fees	119	464
	\$ 3,337,654	\$ 4,069,549
TOTAL INVESTMENT EXPENSES		

**SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF PAYMENTS TO CONSULTANTS
FOR THE YEAR ENDED DECEMBER 31, 2017 (WITH COMPARATIVE TOTALS)**

	2017	2016
Custody Fees	\$ 173,398	\$ 136,143
Investment Consulting Services	324,903	297,773
Accounting and Auditing Services	59,475	58,025
Actuarial Services	149,382	109,454
Data Processing Services	166,518	197,042
Legal Services	195,585	227,417
Disability Medical Services	20,601	10,375
Human Resources Services	5,000	441
Payroll Processing Services	7,143	7,255
	\$ 1,102,005	\$ 1,043,925
TOTAL PAYMENTS TO CONSULTANTS		

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Investment Section



Investment Section Overview

The Investment Section of the Comprehensive Annual Financial Report (CAFR) provides additional detailed information regarding the San Luis Obispo County Pension Trust's (SLOCPT's) investments. Included is a letter from SLOCPT's Investment Consultant addressing investment activities and the capital markets. Additionally, information is provided on:

- Investment Objectives
- Asset Allocation Policy
- Investment Results
- Investment Results Based on Fair Value
- Schedule of Management Fees and Commissions
- Investments at Fair Value
- Schedule of Largest Stock and Bond Holdings

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March 21, 2018

The Board of Retirement
c/o Mr. Carl Nelson
Executive Secretary
San Luis Obispo County Pension Trust
1000 Mill Street
San Luis Obispo, CA 93408

Dear Mr. Nelson:

Verus is pleased to have had the opportunity to serve the San Luis Obispo County Pension Trust for many years and to provide this investment review for the year ending December 31, 2017.

Capital Markets Review

The theme of synchronized global economic growth continued through the end of 2017 and into the beginning of 2018, providing optimism as GDP forecasts have trended higher, most notably in the Eurozone and emerging market economies. Lending and investment, strong external demand, and accommodative monetary policy have helped fuel economic recovery in the Eurozone. GDP grew 2.6% in Q3 from the previous year and the unemployment rate fell to 8.8% in the region, the lowest level in nine years. Within emerging markets, Brazil and Russia make up a significant component of the segment and both economies recently pulled out of recession. Concerns of a hard landing in China remain because the central bank has been tightening to reign in excessive borrowing. So far, the process is working favorably with economic growth slowing only moderately.

In the U.S., economic growth picked up meaningfully in 2017. During the third quarter, all major components of the economy (consumption, investment, government spending, etc.) were positive contributors to growth. This has only happened in 6% of quarters since 1974. Core inflation ticked up to 1.8% at the end of 2017 but remains low relative to historical standards. Unemployment also continued to improve, as the headline figure decreased to 4.1% to reach the lowest level in 17 years. Consumer confidence also moved up and in February 2018 reached the highest reading since December 2000. With many positive signals throughout the economy, it is expected the Fed will increase rates three times in 2018. Moreover, the media has shifted its narrative by focusing less on the sluggishness of the U.S. economy and low inflation to a perspective that is now concerned with the Fed's ability to navigate through an overheating economy, the possibility of spiking inflation, and doing so without stunting the economy's growth. Despite the media's concern, 2017 was a good year for institutional investors.

Performance Summary

Verus independently calculates the Plan’s performance using portfolio market valuation and transaction data provided by the Plan’s custodian bank, J.P. Morgan.

San Luis Obispo County Pension Trust’s momentum from 2016 carried into 2017, as the Total Fund returned 15.5% before expenses and investment management fees. The investment environment over the calendar year was favorable for the portfolio, and SLOCPT was positioned to capitalize on the opportunity. The largest contributors were international and domestic equity, which returned 26.6% and 25.1% respectively. Fixed income is typically associated with anchoring a portfolio during volatile times. However, the Plan’s global fixed income made a meaningful contribution to returns, as the asset class chipped in 14.4% driven by underlying managers in emerging markets debt and global credit. Lastly, although real estate returns have moderated a bit in recent years, the Plan’s holdings combined to return a solid 7.8% over the year.

Asset Allocation

In August of 2016, the Board adopted a revised strategic asset allocation, which is reflected in the following table:

ASSET CLASS	TARGET ALLOCATION
Domestic Equity	20%
International Equity	20%
Fixed Income	30%
Real Estate	15%
Alternatives*	15%

*Commodities, Private Equity, Private Credit

Plan Structure

After adopting an updated strategic asset allocation in the latter part of 2016, the Board has focused on implementing that strategy throughout 2017. Through the implementation phase, a new private credit and private equity manager were added to the portfolio. Additionally, a value-add real estate manager was brought into the fold to augment and diversify the current real estate line-up. These three portfolio managers are ramping up activity by calling capital and sourcing investments for their respective funds.

All of us here at Verus appreciate the opportunity to assist the SLOCPT Board in meeting the Plan's investment objectives. We look forward to continuing in our role of investment advisor and providing guidance to help navigate ever-changing markets.

Sincerely,



Scott J. Whalen, CFA
Executive Vice President, Senior Consultant

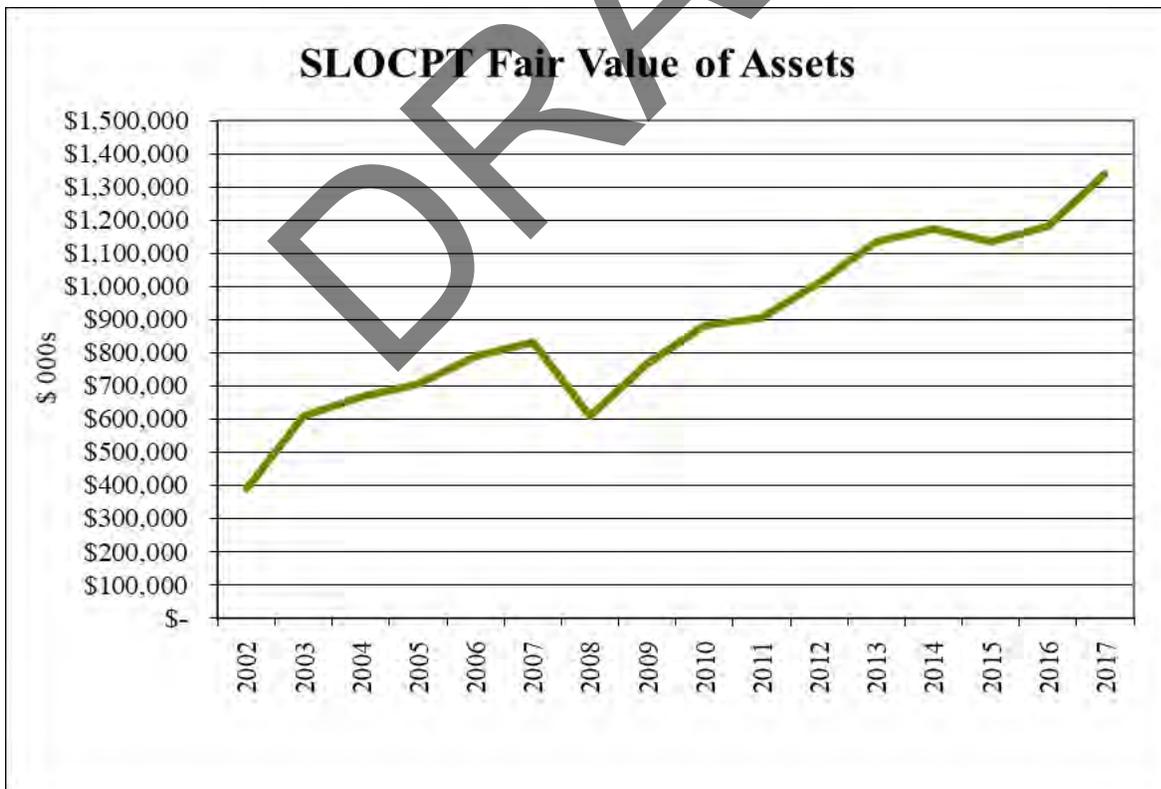
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Summary of Investment Objectives

The Board of Trustees (Board) has adopted an Investment Policy that governs the management of SLOCPT's investments. The Board, through its adopted Investment Policy, directing staff and consultants, and receiving regular reporting on investments, is responsible for overseeing the investments of SLOCPT. This policy includes, but is not limited to, selecting acceptable asset classes; defining allowable ranges of holdings by asset class and by individual investment managers as a percent of assets; defining acceptable securities within each class; and establishing investment performance expectations. The Board will revise the Investment Policy as necessary based on the advice of its investment consultant and staff. A copy of the current Investment Policy is available at www.SLOPensionTrust.org.

The primary objective for the investments of SLOCPT is to exceed the actuarial assumption used for asset returns over the long run. The time horizon for SLOCPT's Investment Policy is very long reflecting the long-term nature of the liabilities funded by SLOCPT. This long-term horizon influences the level of investment risk deemed appropriate by the Board. The investment policies and practices of SLOCPT are intended to be consistent with the primary mission of SLOCPT: to pay benefits as they become due. A fundamental tenet underlying the Investment Policy is the prudent balancing of risk through broad diversification.

The following graph shows the change in fair value of the Net Position Restricted for Pension Benefits for SLOCPT over the last fifteen years as of December 31:



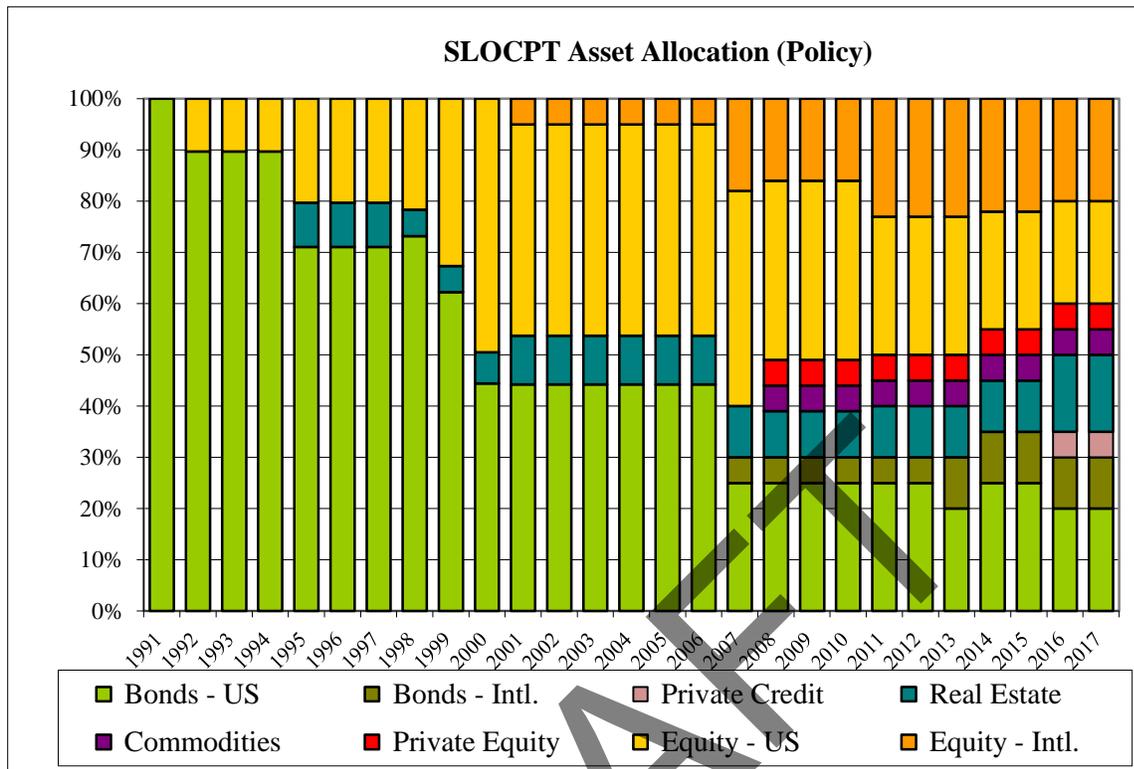
Asset Allocation Policy

The Strategic Asset Allocation (SAA) asset mix incorporated into the Investment Policy is shown below (amended May 2017):

Asset Allocation Policy Adopted May 22, 2017	2017 Policy	2017		Performance Benchmark
		Min.	Max.	
Equities - US				
Large Cap US Equity	16%	11%	21%	varies with Mgr.
Small / Mid Cap US Equity	4%	2%	9%	varies with Mgr.
Equities - US - Total	20%	15%	30%	Russell 3000
Equities - International				
International	13%	8%	18%	MSCI EAFE
International - Emerging Mkt.s	7%	0%	12%	
Equities - Intl. - Total	20%	15%	30%	MSCI ACWI ex. US
EQUITIES - Total	40%	30%	50%	
Fixed Income				
Bonds - Core+	15%	10%	20%	BC Aggregate Bond
Bank Loans	5%	0%	10%	S&P LSTA
Bonds - Global	5%	0%	10%	Citi World Govt. Bond
Bonds - Emerging Market	5%	0%	10%	JPM GBI EM
BONDS - Total	30%	25%	45%	BC Aggregate Bond
Real Estate				
Real Estate - Core	10%	5%	15%	NCREIF
Real Estate - Value Add	5%	0%	10%	NCREIF
Real Estate - Directly owned	0%	0%	4%	NCREIF
REAL ESTATE - Total	15%	5%	20%	NCREIF
Commodities				
Commodities - Active	5%	0%	10%	DJ UBS Commodities
COMMODITIES - Total	5%	0%	10%	DJ UBS Commodities
Alternative Assets				
Private Equity	5%	0%	10%	Russell 3000 + 3%
Private Credit	5%	0%	10%	BC High Yield +2%
ALT. ASSETS - Total	10%	0%	20%	Russell 3000 + 3%
Opportunistic				
Opportunistic	varies	0%	10%	Russell 3000 + 3%
Liquidity				
Cash Equivalents	0% *	0%	5% *	T-Bills
Cash Overlay	0% *	NA	NA *	Policy Mix
LIQUIDITY - Total	0%	0%	5%	T-Bills
TOTAL	100%			

* Net 0% exposure due to Cash Overlay when activated.
Policy level of Treasury cash = 3 mth.s benefits = ~2% of total

The SAA adopted by SLOCPT has changed over the years as shown in the following chart:

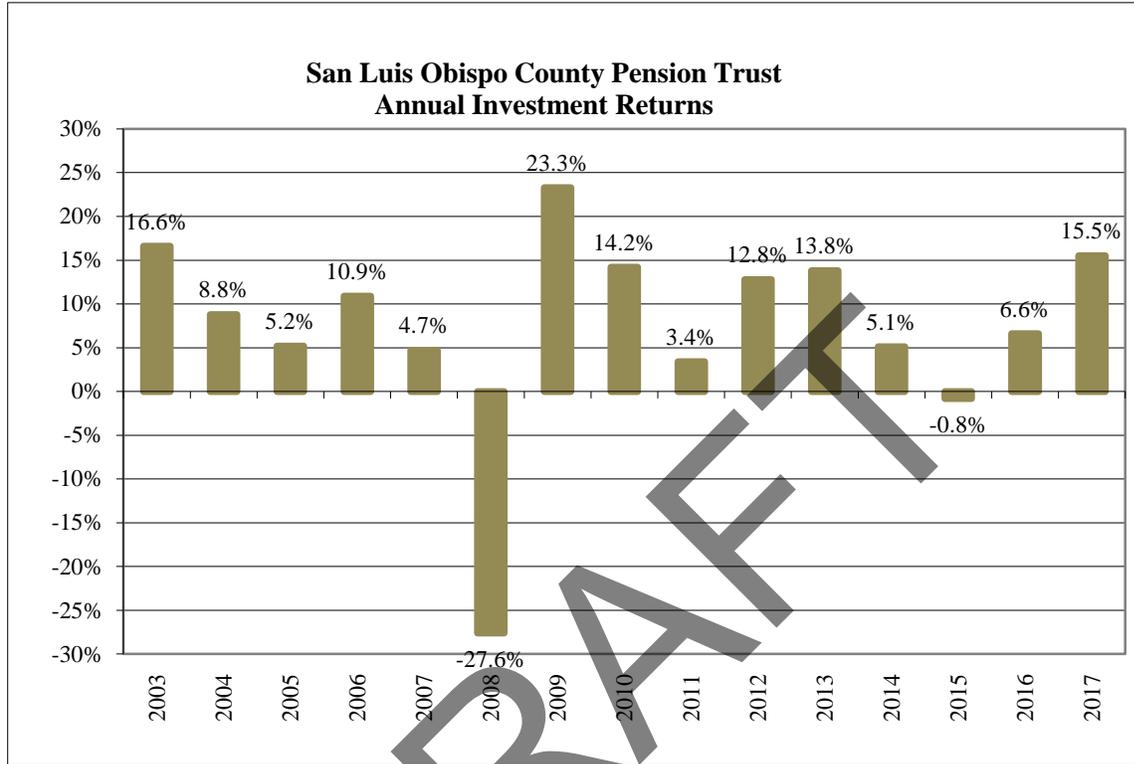


SLOCPT employs multiple investment managers in different asset classes and with different styles of investing. Combined with strict limitations in the Investment Policy on the maximum exposure to individual investments and with regular rebalancing of the asset mix the diversification level of the investments is maintained. The investments of SLOCPT may be held in separate accounts with the custody bank for SLOCPT and with the investments managed by an external investment manager. SLOCPT investments may also be held in commingled funds, mutual funds or in limited partnerships.

Proxy voting for securities held for SLOCPT is specifically delegated by the Investment Policy to the investment manager for each portfolio (separate account or commingled fund / mutual fund). The investment managers are instructed to vote proxies purely in the best investment interests of SLOCPT.

Investment Results

For 2017, SLOCPT achieved a rate of return of 15.5% gross of fees as measured by SLOCPT's investment consultant:



For periods ended December 31, the total fair-value based time-weighted rates of return on SLOCPT's assets as computed by the Investment Consultant gross of fees are summarized below:

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
SLOCPT Total Returns	13.8%	5.1%	-0.8%	6.6%	15.5%

Source: Verus reports

For cumulative periods, the annualized time-weighted total rates of return are as follows:

	<u>1 year</u>	<u>3 years</u>	<u>5 years</u>	<u>10 years</u>	<u>15 years</u>
SLOCPT Total Returns	15.5%	6.9%	7.9%	5.7%	6.8%

Source: Verus 4th Quarter 2017 report and Pension Trust records for pre-2006 returns

San Luis Obispo County Pension Trust

Investment Results Based on Fair Value

For the Fiscal Year Ended December 31, 2017

Annualized time-weighted rates of return based on fair value

Investment Account		Current Year	3 Years	5 Years	Inception
Domestic Equities					
Research Affiliates	g	17.0%	9.7%	15.1%	11/2007
<i>Index: S&P 500</i>		21.8%	11.4%	15.8%	
Loomis Sayles Large Cap Growth	g	34.1%	< 3 yrs		12/2016
<i>Index: Russell 1000 Growth</i>		30.2%			
Boston Partners Large Cap Value	g	< 1 yr			2/2017
<i>Index: Russell 1000 Value</i>					
Atlanta Capital	g	26.6%	16.3%	18.1%	8/2010
<i>Index: Russell 2500</i>		16.8%	10.1%	14.3%	
International Equities					
Dodge & Cox	g	24.7%	6.6%	9.2%	12/2007
<i>Index: MSCI EAFE</i>		25.6%	8.3%	8.4%	
WCM International Growth	g	< 1 yr			2/2017
<i>Index: MSCI ACWI ex US</i>					
Domestic Fixed Income					
BlackRock Core Bond	g	< 1 yr			01/2017
Dodge & Cox Income Fund	g	< 1 yr			01/2017
<i>Index: BBgBarc US Aggregate TR</i>					
PAM Bank Loan Fund	g	4.9%	5.5%	< 5 yrs	9/2014
<i>Index: S&P/LSTA Leveraged Loan Index</i>		4.1%	4.4%		
International Fixed Income					
Brandywine	g	12.5%	1.4%	1.1%	11/2007
<i>Index: Citi WGBI ex US</i>		10.3%	2.0%	-0.3%	
Stone Harbor (emerging market debt)	g	16.4%	3.1%	< 5 yrs	7/2013
<i>Index: JPM GBI EM Global Div</i>		15.2%	2.5%		
Real Estate					
Direct Real Estate Owned	g	20.6%	16.1%	11.8%	
ARA American Strategic Value Realty Fund	g	7.4%	< 3 yrs		6/2016
JP Morgan Strategic Properties Fund	g	6.1%	9.9%	11.3%	3/2008
<i>Index: NCREIF Property</i>		7.0%	9.4%	10.2%	
Commodities					
Gresham MTAP	g	6.2%	-3.7%	< 5 yrs	8/2013
<i>Index: Bloomberg Commodity</i>		1.7%	-5.0%		

San Luis Obispo County Pension Trust
Investment Results Based on Fair Value (continued)
 For the Fiscal Year Ended December 31, 2017
 Annualized time-weighted rates of return based on fair value

Investment Account		Current Year	3 Years	5 Years	Inception
Private Equity					
HarbourVest Fund IX (buyout)					6/2011
Pathway Private Equity Fund					4/2017
Combined Private Equity	g	19.9%	18.3%	18.8%	
<i>Index: Russell 3000 + 300BP</i>		24.7%	14.4%	19.0%	
Private Credit					
TSSP Diversified Credit Programs					11/2016
Combined Private Credit	g	0.3%	< 3 yrs		
<i>Index: BBgBarc High Yield + 200BP</i>		11.0%			
Opportunistic					
PIMCO Distressed Credit Fund					7/2010
KKR Mezzanine Debt Fund I					4/2011
Combined Opportunistic	g	6.5%	5.1%	9.6%	
<i>Index: Russell 3000 + 300BP</i>		24.7%	14.4%	19.0%	
Cash Account					
Treasury Pool		1.0%	0.6%	0.5%	
<i>Index: 91 day T-Bills</i>		0.9%	0.4%	0.3%	
TOTAL FUND (including Parametric Cash Overlay)					
Total Fund		15.5%	6.9%	7.9%	
<i>Index: Policy Index at 12/31/17:</i>		13.4%	6.7%	7.7%	
<i>20% Russell 3000</i>					
<i>20% MSCI ACWI ex. US</i>					
<i>30% BC Aggregate Bond</i>					
<i>15% NCREIF</i>					
<i>5% DJ UBS Commodities</i>					
<i>10% Russell 3000+300BP</i>					

Note - Policy Index based on Asset Allocation Policy in place for each particular year.

g = Gross of fees

Includes only investment managers in place at December 31, 2017; however, investment results of terminated managers are included in the Total Fund rate of return.

Source: Quarterly investment reports from Verus, investment consultant

San Luis Obispo County Pension Trust
Schedule of Management Fees and Commissions
For the Fiscal Year Ended December 31, 2017 (Dollars in Thousands)

Management Fees	2017 Fees	Year End Assets Under Mgmt.	Fees as % of Year End Assets (a)
Domestic Equity			
Research Affiliates	N/A (d)	\$ 59,415	
SSGA S&P 500 Index Fund	10	-	N/A
Loomis Sayles	272	96,817	0.28%
Boston Partners	N/A (d)	86,347	
Atlanta Capital	446	60,083	0.74%
Total Domestic Equity	728	302,662	
International Equity			
Dodge & Cox (mutual fund)	N/A (d)	171,958	
Vontobel	71	-	N/A
WCM International (mutual fund)	N/A (d)	160,991	
Total International Equity	71	332,949	
Domestic Fixed Income			
PIMCO	12	-	N/A
BlackRock Core Bond	196	100,329	0.20%
Dodge & Cox Income Fund	N/A (d)	100,301	
SSGA TIPS Index Fund	9	-	N/A
PAM Bank Loan Fund	N/A (d)	68,471	
Total Domestic Fixed Income	217	269,101	
International and Global Fixed Income			
Brandywine	284	71,620	0.40%
Stone Harbor	N/A (d)	70,734	
Total Intl. and Global Fixed Income	284	142,354	
Real Estate			
Direct Real Estate Owned	115	14,040	0.82%
ARA American Strategic Value Realty Fund	N/A (d)	11,657	
FREG III Fund	6	-	N/A
JP Morgan Strategic Properties Fund	1,310	151,102	0.87%
Total Real Estate	1,431	176,799	
Commodities			
Gresham	N/A (d)	38,772	
Private Equity/Credit			
HarbourVest Fund IX (buyout)	N/A (d)	12,897	
Pathway Private Equity	N/A (d)	5,043	
TSSP Diversified Credit Programs	N/A (d)	32,002	
PIMCO Distressed Credit Fund	-	1,249	0.00%
KKR Mezzanine Debt Fund I	60	5,229	1.15%
Total Private Equity	60	56,420	
Cash Overlay			
Parametric	30	- (b)	N/A
Total Management Fees	2,821		

San Luis Obispo County Pension Trust
Schedule of Management Fees and Commissions (continued)
 For the Fiscal Year Ended December 31, 2017 (Dollars in Thousands)

	2017 Fees	Year End Assets Under Mgmt.	Fees as % of Year End Assets
Other Investment Expenses			
Custodian Fees	173		0.01%
Investment Consultant	325		0.02%
Total Other Investment Expenses	498		0.04%
TOTAL INVESTMENT EXPENSES AND ASSETS UNDER MANAGEMENT	\$ 3,319	\$ 1,319,057	0.25%

	Commissions Fees
Broker Commissions	
Broker Commissions	\$ 18 (c)
Broker Fees	-
Total Broker Commissions	\$ 18

- (a) Investment management fees are typically charged quarterly based on fair value and on a graduated scale; therefore, management fees compared to year end asset values is a simplified presentation that approximates the average fee rate.
- (b) Parametric Cash Overlay strategy has all of its underlying assets held in the "Cash" portion of the Fiduciary Net Position so is not reflected in "Investments" as presented in this schedule.
- (c) Included brokerage commissions for separate accounts only. Significant portions of the Pension Trust's investments are held in commingled funds. Brokerage commissions for commingled funds are netted against investment returns and are therefore not included in the total of commissions presented here.
- (d) Fees included in net asset value of investments.

SLOCPT participates in a commission recapture program offered by BNY/Convergex. No recapture services were used during the year ended December 31, 2017.

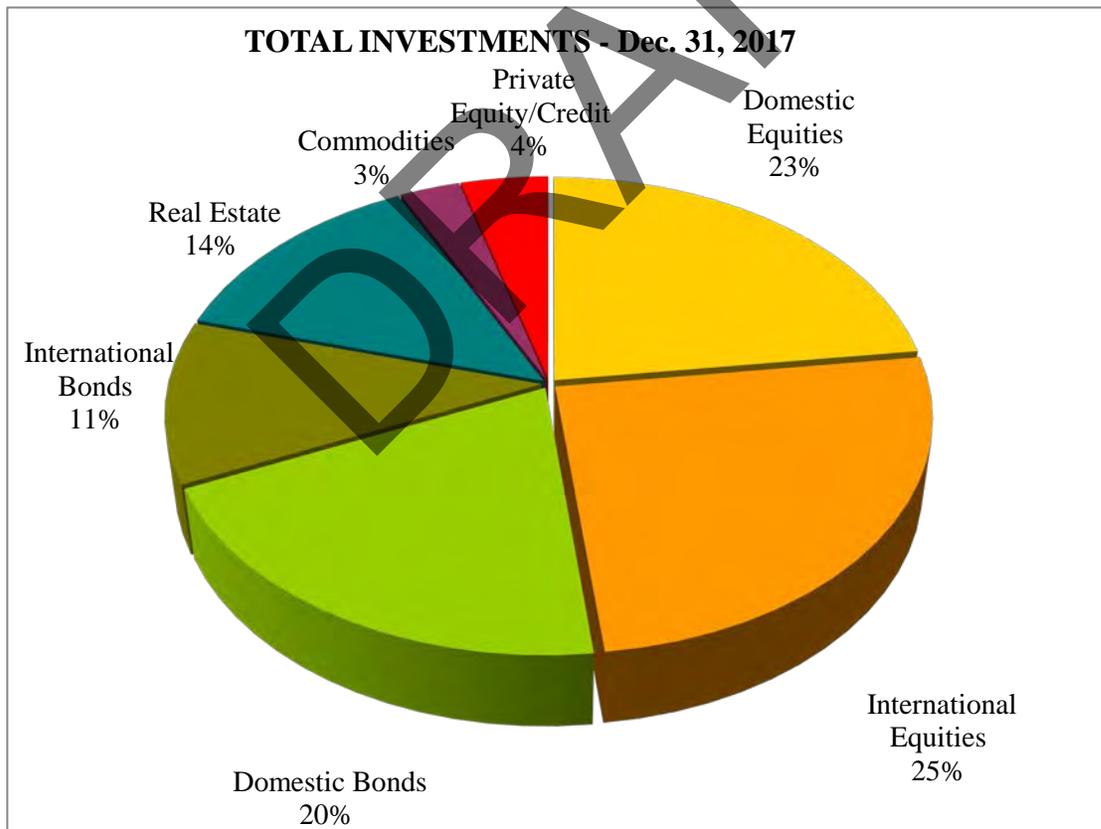
Investment managers are instructed to seek best execution and to seek to minimize commission and market impact costs when trading securities.

San Luis Obispo County Pension Trust

Investments at Fair Value

As of December 31, 2017 (Dollars in Thousands)

	Fair Value	%
Equities		
Domestic Equities	\$ 302,662	22.94%
International Equities	332,949	25.24%
Fixed Income		
Domestic Bonds, Mortgages, Notes	264,416	20.05%
International Bonds	147,039	11.15%
Real Estate		
	176,799	13.40%
Alternatives		
Commodities	38,772	2.94%
Private Equity/Credit	56,420	4.28%
TOTAL INVESTMENTS	\$ 1,319,057	100.00%



San Luis Obispo County Pension Trust
Schedule of Largest Stock and Bond Holdings
 As of December 31, 2017 By Fair Value

Largest Stock Holdings	Shares	Fair Value
1 MARKEL CORP COMMON STOCK USD 0	2,174	\$ 2,476,469
2 ANSYS INC COMMON STOCK USD 0.01	16,744	2,471,247
3 TELEFLEX INC COMMON STOCK USD 1	9,698	2,413,056
4 SEI INVESTMENTS CO COMMON STOCK USD 0.01	33,473	2,405,370
5 TRANSUNION COMMON STOCK USD 0.01	38,746	2,129,480
6 JB HUNT TRANSPORT SERVICES INC COMMON STOCK USD 0.01	16,539	1,901,654
7 ARAMARK COMMON STOCK USD 0.01	40,656	1,737,637
8 BIO-RAD LABORATORIES INC COMMON STOCK USD 0.0001	7,264	1,733,699
9 BLACKBAUD INC COMMON STOCK USD 0.001	17,999	1,700,726
10 CDW CORP/DE COMMON STOCK USD 0.01	24,269	1,686,453
Total of 10 Largest Stock Holdings		<u><u>\$ 20,655,791</u></u>

Largest Bond Holdings	Par Value	Fair Value
1 UNITED STATES OF AMERICA NOTES FIXED 2.25%	\$ 7,100,000	\$ 7,086,936
2 UNITED STATES OF AMERICA NOTES FIXED 2.125%	2,500,000	2,500,500
3 FNMA MORTPASS 3.5% 01/JAN/2047	2,457,164	2,524,170
4 GOVERNMENT NATIONAL MORTGAGE ASSOCIATION TBA FIXED	2,326,000	2,404,502
5 FNMA MORTPASS 4.5% 01/FEB/2045	1,807,239	1,950,462
6 FNMA MORTPASS 4% 01/NOV/2041	1,728,900	1,835,747
7 GNMA II MORTPASS 4.5% 20/AUG/2047	1,708,992	1,803,072
8 FNMA MORTPASS 4% 01/NOV/2046	1,358,268	1,445,237
9 FHLMCGLD MORTPASS 4.5% 01/SEP/2046	1,327,434	1,432,952
10 JP MORGAN CHASE CMS MONTHLY 4.106% 07/15/2046	1,129,864	1,133,817
Total of 10 Largest Bond Holdings		<u><u>\$ 24,117,395</u></u>

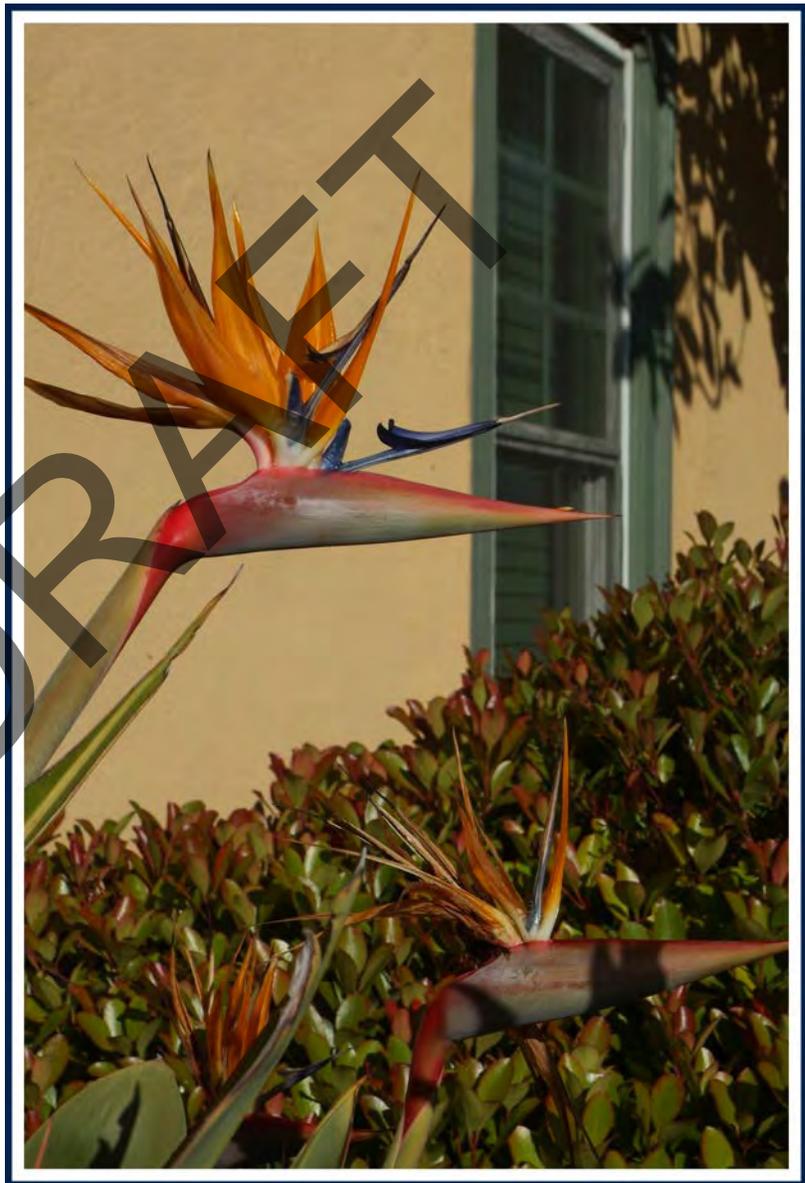
Significant portions of the Pension Trust's investments are held in commingled funds. The securities listed above are from those held in separate accounts for the Pension Trust and do not include securities held in commingled funds.

A complete listing of the Pension Trust's investments is available upon request.

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Actuarial Section



Actuarial Section Overview

The Actuarial Section of the Comprehensive Annual Financial Report (CAFR) provides expanded reporting on the actuarial measures and valuations relative to the San Luis Obispo County Pension Trust (SLOCPT) and the San Luis Obispo County Employees Retirement Plan (the Plan). This section is based on the latest available actuarial valuation which, in this case, is the Annual Actuarial Valuation as of January 1, 2017.

The Pension Trust engages an independent actuarial firm to perform annual valuations on the Pension Trust. Additionally, actuarial experience studies are conducted biennially. The economic and demographic assumptions that are used in each annual actuarial valuation are approved by the Board of Trustees (the Board) with the advice of the actuary and are typically based on the results of each biennial actuarial experience study and input from the Pension Trust's consultants and staff.

The most recent annual actuarial valuation available for financial reporting in this CAFR is the January 1, 2017 valuation. It is based on member data and financial results through December 31, 2016. The Pension Trust's actuary, Gabriel Roeder Smith & Company (GRS), completed this annual valuation during 2017. The most recent Biennial Actuarial Experience Study was completed by GRS as of December 31, 2015. Results of this Biennial Actuarial Experience Study were used in developing the assumptions used in the January 1, 2017 Annual Actuarial Valuation.

The Annual Actuarial Valuation as of January 1, 2017 including actuarial assumptions was approved by the Board on June 26, 2017.

The Annual Actuarial Valuation as of January 1, 2018, based on data through December 31, 2017, is in the process of being developed at the time of the publication of this CAFR. The Biennial Actuarial Experience Study as of December 31, 2017 was completed subsequent to year-end.

March 20, 2018

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 Actuarial Valuation as of January 1, 2017 of the San Luis Obispo County Pension Trust (SLOCPT). The valuation is performed annually and is intended to provide a measure of the funding status of the pension trust. This valuation provides information relative to the employer appropriation rates as of January 1, 2017.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. 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 Nos. 67 and 68. In addition the assumptions and methods used for funding purposes meet the requirements set by the Actuarial Standards of Practice (ASOPs). 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.

Financial Objectives and Funding Policy

The funding objective of the Pension Trust is to establish and receive contributions, expressed as a percent 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. In the January 1, 2017 valuation, the Trust's funded status decreased from 71.4% to 69.4%. The total actuarially determined contribution is 40.32% as of January 1, 2017, compared to total charged rates of 38.39%. A rate increase of 2.38% was implemented as of January 1, 2018 bringing the total charged rate to 40.77%.

The Board of Trustees has assumed the responsibility for establishing and maintaining the written Funding Policy. It is the policy of the Board to make recommendations regarding rate changes based on the actuarially determined rate of the Trust. This rate is based on the valuation results as of each annual actuarial valuation, with any determined rate change effective in the future, and with the rate change adjusted for any delay past the valuation date. The actuarially determined contribution is based on a normal cost derived from the entry age normal funding method, and a closed amortization period of 30 years.

As part of the funding policy, the Board amortized the 2008 asset loss over a 10 year period effective January 1, 2009. The Board also recommended as part of this amortization policy to accelerate the recognition of the asset loss should a contribution margin develop between the actuarially determined rate and the rate actually being charged. The Board is clear in its policy that it does not involve itself in recommending who should bear the rate increase.

Demographic Data and Asset Information

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 and year-to-year consistency of certain key data elements, but was not audited by the actuary.

Assumptions and Methods

Actuarial assumptions and methods are set by the Board of Trustees, based upon recommendations made by the Plan's actuary. Those assumptions and methods are used for funding purposes, and may differ from those used for financial reporting purposes. This valuation includes assumption changes adopted by the Board based on the Experience Study performed for the five-year period ending December 31, 2015. These changes include changing the retirement rates for Tier 2 members to match the Tier 3 rates and a change to the DROP methodology to more closely reflect actual experience.

The valuation results and the results used for financial reporting are developed using the Entry Age Cost Method. The Board has adopted this method, based upon the recommendation of the actuary, since it produces the most stable contribution rates year over year. 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 23 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 positive contribution margin develops. As of the January 1, 2011 valuation and again as of the January 1, 2014 valuation, an additional \$10 million of the deferred losses was accelerated and recognized.

The enclosed exhibits provide further related information necessary to complete your filing. All other necessary information is available in the January 1, 2017 actuarial valuation report. The enclosed exhibits include:

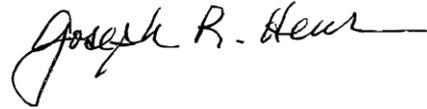
- Summary of Assumptions and Funding Methods
- Schedule of Active Members
- Schedule of Retirees and Beneficiaries
- Solvency Test
- Schedule of Funding Progress
- Development of Actuarial Value of Assets
- Analysis of Financial Experience
- Summary of Plan Provisions

We prepared the above tables but the SLOCPT prepared the other supporting schedules and the trend tables in the financial section based on information supplied in our report.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



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



Joseph R. Herm
Senior Analyst

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ACTUARIAL METHODS AND ASSUMPTIONS USED FOR THE JANUARY 1, 2017 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 2.625% 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 (23 years as of January 1, 2017) 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 positive 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 (changes effective January 1, 2016, based on the December 31, 2015 experience study)

A. Economic Assumptions

1. Investment return: 7.125%, compounded annually, net of administrative expenses. This is made up of a 2.625% inflation rate and a 4.50% real rate of return.
2. Salary increase rate: Inflation rate of 2.625% plus productivity increase rate of 0.25% plus an additional service-related merit component as shown below:

% Merit Increases in Salaries Next Year		% Total Increases in Salaries Next Year	
Service Index	Rate	Service Index	Rate
1	5.25%	1	8.13%
2	5.00%	2	7.88%
3	4.00%	3	6.88%
4	3.00%	4	5.88%
5	2.00%	5	4.88%
6	1.00%	6	3.88%
7	0.50%	7	3.38%
8 +	0.00%	8 +	2.88%

3. Cost-of-living increases:

Assumed to increase the full 2.625% each year (2% for Tier 2 and Tier 3)

4. Payroll growth:

3.375% per year (Inflation 2.625%, productivity of 0.25%, geographic differential of 0.50%)

5. Increase to maximum earnings limit for Tier 3 members:

2.625% per year

6. Contribution accumulation: Contributions are credited with 6.625% interest, compounded biweekly.

B. Demographic Assumptions

1. Mortality projection – The projection calculation for MP-2015 has an additional multiplier applied to future years for all of the mortality tables:

Year	Multiplier
2017	90%
2018	85%
2019	80%
2020	75%
2021	75%
2022	70%
2023	70%
2024	65%
2025	60%
2026	55%
2027+	50%

2. Mortality after termination or retirement –
 - a. Healthy males – RP-2014 with generational mortality improvements using scale MP-2015, a 105% multiplier and white collar adjustment applied to RP-2014
 - b. Healthy females – RP-2014 with generational mortality improvements using scale MP-2015, a 115% multiplier and white collar adjustment applied to RP-2014

See sample rates below:

Ages	% Dying Within Next Year Retirees	
	Men	Women
45	0.18%	0.17%
50	0.27%	0.23%
55	0.40%	0.31%
60	0.54%	0.44%
65	0.78%	0.73%
70	1.26%	1.17%
75	2.16%	1.96%
80	3.80%	3.41%
85	6.98%	6.13%

3. Mortality rates of active members – RP-2014 Employee Mortality Tables, with generational improvements using scale MP-2015, setback one year with a 105% multiplier for males, and setback two years with a 50% multiplier for females, applied to RP-2014, as shown below for selected ages:

Ages	% of Active Members Dying Within Next Year	
	Men	Women
30	0.04%	0.01%
35	0.05%	0.01%
40	0.06%	0.02%
45	0.09%	0.03%
50	0.15%	0.04%
55	0.26%	0.07%
60	0.44%	0.10%
65	0.76%	0.15%
70	1.27%	0.25%

4. Disability mortality after termination or retirement – RP-2014 Disabled Mortality Tables, with generational improvements using scale MP-2015, with setback of one year and a 100% multiplier for males, and setback one year with a 75% multiplier for females, applied to RP-2014, as shown below for selected ages:

Ages	% of Disabled Members Dying Within Next Year	
	Men	Women
30	0.40%	0.15%
35	0.75%	0.29%
40	1.13%	0.45%
45	1.51%	0.62%
50	1.87%	0.82%
55	2.22%	1.04%
60	2.56%	1.22%
65	2.98%	1.45%
70	3.71%	1.91%

5. Retirement –

- a. As shown below for Tier 1 members 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%	20.0%
51	4.0%	7.5%	14.0%
52	4.0%	7.5%	10.0%
53	4.0%	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.

b. As shown below for Tier 2 and future Tier 3 members 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	3.0%	7.5%	9.0%
51	3.0%	7.5%	9.0%
52	3.0%	7.5%	10.0%
53	3.0%	7.5%	10.0%
54	3.0%	7.5%	10.0%
55	6.0%	7.5%	10.0%
56	6.0%	7.5%	10.0%
57	6.0%	7.5%	10.0%
58	6.0%	9.0%	11.0%
59	6.0%	9.0%	15.0%
60	8.0%	10.0%	20.0%
61	8.0%	10.0%	25.0%
62	20.0%	20.0%	30.0%
63	20.0%	20.0%	40.0%
64	20.0%	20.0%	60.0%
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%	

6. 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 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 and Probation 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 the 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.

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. 80% of men and 60% 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.

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

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Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Average Annual Earnings	Percent Increase In Average Earnings
1/01/2007	2,620	\$152,116,782	\$58,060	4.2
1/01/2008	2,662	162,435,795	61,020	5.1
1/01/2009	2,657	168,677,088	63,484	4.0
1/01/2010	2,506	160,443,939	64,024	0.9
1/01/2011	2,479	161,783,273	65,262	1.9
1/01/2012	2,446	161,054,639	65,844	0.9
1/01/2013	2,495	164,299,413	65,851	0.0
1/01/2014	2,521	164,704,467	65,333	-0.8
1/01/2015	2,550	167,695,432	65,763	0.7
1/01/2016	2,609	177,003,887	67,844	3.2
1/01/2017	2,675	185,019,748	69,166	6.0

Schedule of Retirees and Beneficiaries Added to and Removed from Retiree Payroll*

Valuation Date	Number Added Since Last Valuation Date	Allowances for Additional Retirees and Beneficiaries	Number Removed Since Last Valuation Date	Allowances for Retirees and Beneficiaries Removed	Pension Benefit Amount	Average Annual Benefit	Percent Increase in Average Benefit
1/01/2007					\$28,922,336	\$18,744	7.3%
1/01/2008					34,884,890	21,028	12.2%
1/01/2009	108	\$3,340,063	26	\$277,689	38,693,412	22,225	5.7%
1/01/2010	205	6,258,612	56	732,196	44,940,354	23,778	7.0%
1/01/2011	113	3,290,962	57	530,316	48,431,618	24,888	4.7%
1/01/2012	134	4,109,419	40	568,150	51,967,375	25,474	2.4%
1/01/2013	150	5,235,834	43	813,919	57,242,887	26,662	4.7%
1/01/2014	152	4,469,386	49	890,436	62,026,694	27,567	3.4%
1/01/2015	200	6,983,929	49	877,814	69,067,723	28,766	4.3%
1/01/2016	168	5,858,191	52	1,099,047	74,864,386	29,743	3.4%
1/01/2017	161	5,982,085	60	1,350,465	80,486,911	30,744	3.4%

* These values were not separately tracked until plan year commencing January 1, 2009.

Solvency Test

Valuation Date	Actuarial Accrued Liabilities			Valuation Assets	Portion of Accrued Liabilities Covered by Valuation Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
	Retirees and Beneficiaries	Terminated Vested Members	Active Members				
1/01/2007	\$373,943,523	\$53,191,715	\$567,725,915	\$759,758,136	100%	100%	59%
1/01/2008	453,878,074	45,733,758	557,512,516	829,763,572	100%	100%	59%
1/01/2009	507,043,008	52,398,299	590,772,838	875,602,263	100%	100%	54%
1/01/2010	582,967,652	51,802,198	581,383,207	937,278,758	100%	100%	52%
1/01/2011	620,202,009	55,563,786	606,292,540	1,000,168,850	100%	100%	54%
1/01/2012	701,729,018	58,707,055	618,113,241	1,057,921,875	100%	100%	48%
1/01/2013	788,045,517	56,293,118	623,662,043	1,122,150,539	100%	100%	45%
1/01/2014	847,672,409	58,811,804	612,266,814	1,182,923,978	100%	100%	45%
1/01/2015	946,455,151	60,711,979	598,424,079	1,231,473,577	100%	100%	37%
1/01/2016	1,059,302,163	61,709,450	628,330,652	1,248,327,560	100%	100%	20%
1/01/2017	1,134,942,637	64,502,981	627,896,696	1,268,404,900	100%	100%	11%

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Schedule of Funding Progress

(\$ in Thousands)

Valuation Date	Valuation Assets ¹	Actuarial Liability ¹	Funded Ratio	Unfunded Actuarial Liability	Member Payroll	Ratio to Payroll
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 ^{2,3}	759,758	994,861	76.4%	235,103	152,117	154.6%
12/31/2006 ⁴	759,758	962,828	78.9%	501,015	152,117	329.4%
12/31/2007	829,764	1,055,868	78.6%	226,104	162,436	139.2%
12/31/2007 ⁵	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 ^{2,6}	1,057,922	1,378,549	76.7%	320,627	161,055	199.1%
12/31/2012 ⁶	1,122,151	1,468,001	76.4%	345,850	164,299	210.5%
12/31/2013 ⁷	1,182,924	1,518,751	77.9%	335,827	164,704	203.9%
12/31/2014	1,231,474	1,605,591	76.7%	374,117	167,695	223.1%
12/31/2015	1,248,328	1,686,497	74.0%	438,169	177,004	247.5%
12/31/2015 ²	1,248,328	1,749,342	71.4%	501,014	177,004	283.1%
12/31/2016	1,268,405	1,827,342	69.4%	558,937	185,020	302.1%

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

12/31/2016	\$3,961,371	12/31/2011	\$7,462,567	12/31/2006	\$12,181,467
12/31/2015	4,362,000	12/31/2010	8,558,571		
12/31/2014	5,295,316	12/31/2009	9,341,043		
12/31/2013	5,942,492	12/31/2008	10,397,974		
12/31/2012	6,606,149	12/31/2007	11,507,242		

² Reflects assumption changes.

³ Reflects benefit increases for Probation and Safety members.

⁴ Reflects assumption change to 7.75%.

⁵ Reflects benefit increases for Miscellaneous Court employees in BU #18 and BU #20.

⁶ Reflects benefit provisions under Tier 2 for certain new members.

⁷ Reflects benefit provisions under Tier 3 for new members, and assumption changes.

Development of Actuarial Value of Assets

San Luis Obispo County Pension Trust Development of Funding Value of Assets - January 1, 2017

	Plan Year Ended <u>December 31, 2012</u>	Plan Year Ended <u>December 31, 2013</u>	Plan Year Ended <u>December 31, 2014</u>	Plan Year Ended <u>December 31, 2015</u>	Plan Year Ended <u>December 31, 2016</u>
A. Funding Value Beginning of Year	\$1,057,921,875	\$1,122,150,539	\$1,182,923,978	\$1,231,473,577	\$1,248,327,560
B. Gross Market Value End of Year	1,013,436,059	1,135,718,617	1,173,336,063	1,135,802,704	1,181,242,858
C. Gross Market Value Beginning of Year	906,350,380	1,013,436,059	1,135,718,617	1,173,336,063	1,135,802,704
D. Non-Investment Cash Flow	(1,761,812)	(9,565,801)	(14,055,197)	(20,827,506)	(23,509,152)
E. Investment Income					
E1. Market Total =B-C-D	108,847,491	131,848,359	51,672,643	(16,705,853)	68,949,306
E2 Immediate Recognition	<u>76,635,470</u>	<u>81,009,154</u>	<u>85,252,488</u>	<u>88,526,837</u>	<u>88,105,825</u>
E3. Phased-in Recognition	\$32,212,021	\$50,839,205	(\$33,579,845)	(\$105,232,690)	(\$19,156,519)
F. Phased-in Recognition					
F1. Current Year=E3x20%*	6,442,404	10,167,841	(6,715,969)	(21,046,538)	(3,831,304)
F2. First Prior Year	(10,690,006)	6,442,404	10,167,841	(6,715,969)	(21,046,538)
F3. Second Prior Year	7,437,258	(10,690,006)	6,442,404	10,167,841	(6,715,969)
F4. Third Prior Year	15,245,328	7,437,258	(10,690,006)	6,442,404	10,167,841
F5. Fourth Prior Year	(29,936,396)	15,245,328	7,437,258	(10,690,006)	6,442,404
F6. Continued Recognition of 2008 Asset Loss	0	(29,936,396)	(29,936,396)	(29,936,396)	(29,936,396)
F7. Additional Recognition of 2008 Asset Loss	<u>0</u>	<u>(10,000,000) *</u>	<u>0</u>	<u>0</u>	<u>0</u>
F8. Total Recognized Gain/(Loss)	(\$11,501,412)	(\$11,333,571)	(\$23,294,868)	(\$51,778,664)	(\$44,919,962)
G. Preliminary Funding Value					
=A+D+E2+F8	\$1,121,294,121	\$1,182,260,321	\$1,230,826,401	\$1,247,394,244	\$1,268,004,271
H. Excludable Assets					
H1. End of Year	6,606,149	5,942,492	5,295,316	4,362,000	3,961,371
H2. Beginning of Year	7,462,567	6,606,149	5,942,492	5,295,316	4,362,000
H3. Change=H1-H2	(856,418)	(663,657)	(647,176)	(933,316)	(400,629)
I. Final Funding Value=G-H3	\$1,122,150,539	\$1,182,923,978	\$1,231,473,577	\$1,248,327,560	\$1,268,404,900
J. Investment Return=(E2+F8)/(A+D/2)	6.16%	6.24%	5.27%	3.01%	3.49%

*The Board originally decided to recognize the 2008 asset loss over 10 years with acceleration of the recognition in future years when the funding margin allowed it. The Board elected to accelerate recognition of \$10 million of the 2008 loss base for the year ending December 31, 2010 and an additional \$10 million for the year ending December 31, 2013.

Actuarial Analysis of Financial Experience

Composite Gain (Loss) for January 1, 2007 through 2017

Valuation Date	Actuarial Gain (Loss)	Beginning of Prior Year Accrued Liabilities	Gain (Loss) Percentage Attributable to Investments	Gain (Loss) Percentage Not Attributable to Investments	Total Gain (Loss) Percentage
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	(85,180,942)	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)%
1/1/2014	(1,139,190)	1,468,000,678	(0.77)%	0.69 %*	(0.08)%
1/1/2015	(32,743,994)	1,518,751,027	(1.53)%	(0.63)%	(2.16)%
1/1/2016	(58,036,495)	1,605,591,209	(3.22)%	(0.39)%	(3.61)%
1/1/2017	(44,978,787)	1,749,342,265	(2.57)%	(0.00)%	(2.57)%

*The Board elected to accelerate recognition of \$10 million of the 2008 loss for the year ending December 31, 2010 and December 31, 2013.

DRAFT

BRIEF SUMMARY OF BENEFIT PROVISIONS EVALUATED EFFECTIVE JANUARY 1, 2017

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. Tiers

Tier 1 generally includes new members hired before January 1, 2011.

Tier 2 generally includes new members hired on or after January 1, 2011 and before January 1, 2013. Tier 2 only applies to members hired after the date each particular bargaining unit adopted Tier 2. Members hired in a bargaining unit that did not adopt Tier 2 are considered Tier 1 members.

Tier 3 includes all new members hired on or after January 1, 2013.

3. 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, 99

Pick Up Percentage included in final average compensation:

<u>Bargaining Unit</u>	<u>Pick Up</u>
4,7,8,9,11,12,99	9.29%
10	13.55%
17	13.59%

Highest three-year average for employees in Tier 2 and Tier 3

4. Member Contributions

Employee contribution rates used in the January 1, 2017 valuation have increased since the January 1, 2016 valuation for most members.

5. Service Retirement

- A. Eligibility - Age 50 with 5 years of service (Age 52 with 5 years of service for Miscellaneous members in Tier 3).
- B. Benefit Formula - Final Compensation multiplied by Years of Credited Service multiplied by Retirement Age Factor.

BRIEF SUMMARY OF BENEFIT PROVISIONS EVALUATED EFFECTIVE JANUARY 1, 2017

C. Retirement Age Factors

Safety						Probation		
Age	Tier 1 ¹	Tier 1 ²	Tier 2 ³	Tier 2 ⁴	Tier 3	Age	Tier 1	Tier 3
50	2.300%	3.000%	2.000%	2.300%	2.000%	50	2.300%	2.000%
51	2.440	3.000	2.140	2.440	2.100	51	2.440	2.100
52	2.580	3.000	2.280	2.580	2.200	52	2.580	2.200
53	2.720	3.000	2.420	2.720	2.300	53	2.720	2.300
54	2.860	3.000	2.560	2.860	2.400	54	2.860	2.400
55	3.000	3.000	2.700	3.000	2.500	55	3.000	2.500
56	3.000	3.000	2.700	3.000	2.600	56	3.000	2.600
57+	3.000	3.000	2.700	3.000	2.700	57+	3.000	2.700

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

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

3 Non-Sworn Safety members

4 Sworn Safety members

Miscellaneous			
Age	Tier 1	Tier 2	Tier 3
50	1.426%	1.092%	-
51	1.541	1.156	-
52	1.656	1.224	1.000%
53	1.770	1.296	1.100
54	1.885	1.376	1.200
55	2.000	1.460	1.300
56	2.117	1.552	1.400
57	2.233	1.650	1.500
58	2.350	1.758	1.600
59	2.466	1.874	1.700
60	2.583	2.000	1.800
61	2.699	2.134	1.900
62	2.816	2.272	2.000
63	2.932	2.418	2.100
64	3.049	2.458	2.200
65	3.165	2.500	2.300
66	3.165	2.500	2.400
67+	3.165	2.500	2.500

BRIEF SUMMARY OF BENEFIT PROVISIONS EVALUATED EFFECTIVE JANUARY 1, 2017

- D. Maximum Benefit
 - a. Tier 1
 - 80% of Final Compensation for San Luis Obispo County Employees' Association (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.
 - c. Tier 3
 - No maximum benefit applies but pensionable compensation is capped at \$118,775 for 2017 and adjusted annually based on Consumer Price Index (CPI).
- 6. 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).
- 7. 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).
- 8. 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.
- 9. 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.
- 10. 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.
- 11. 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.

BRIEF SUMMARY OF BENEFIT PROVISIONS EVALUATED EFFECTIVE JANUARY 1, 2017

12. 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.

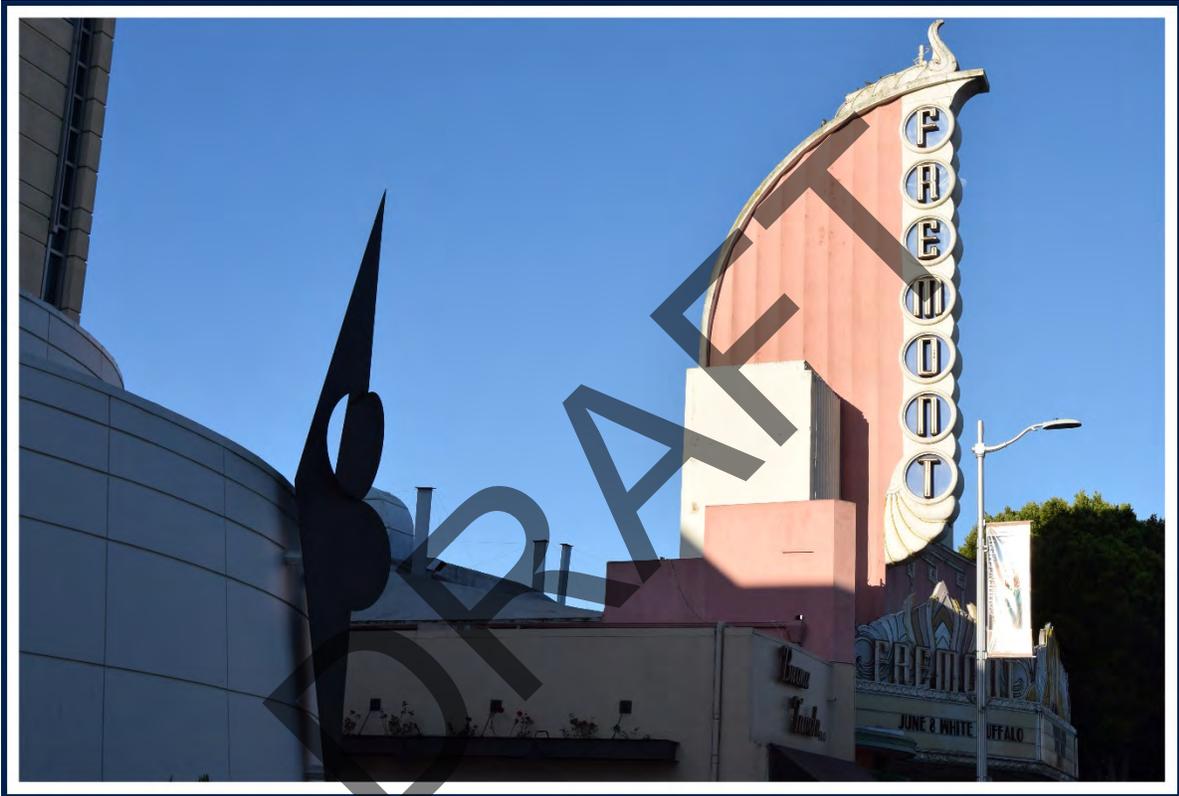
13. Post-Retirement Cost-of-Living Benefits

Based on changes in Consumer Price Index to a maximum of 3% per year (maximum of 2% per year for Tier 2 and Tier 3).

14. Deferred Retirement Option Program (DROP): A Tier 1 member (excluding Court employees) 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 DROP account is a separate defined contribution account with investments controlled by the DROP participant. The Pension Trust incurs no additional costs and credits no interest to the 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.

Statistical Section



Statistical Section Overview

The Statistical Section of the Comprehensive Annual Financial Report (CAFR) provides additional detailed information to promote a more comprehensive understanding of this year's financial statements, note disclosures, and supplemental information. In addition, this section provides multi-year trends for the financial and operational information important to an understanding of how the San Luis Obispo County Pension Trust's (SLOCPT) financial position has changed over time.

SLOCPT and the benefit provisions of the Plan account for active and retired members in three broad classes –

- Miscellaneous – members not included in the categories of Probation or Safety
- Probation – members employed to supervise offenders who are on probation and similar positions
- Safety - members employed as sworn public safety officers (e.g., Deputy Sheriffs)

The different classes generally have different retirement benefit levels, different employer appropriation rates and different employee contribution rates. Members may have blended service between the three membership classes. For example, a member may work a portion of their career as a Miscellaneous member and then change jobs to become a member of the Safety class. In such a case, their retirement would be a blend of the different retirement benefits under which they accrued benefits during the different portions of their career. Within each membership class there are also numerous bargaining units and unrepresented labor groups that may have differing retirement benefit provisions. Employer appropriation rates and employee contribution rates may also differ between the various bargaining units as determined by the employer, typically as part of a collective bargaining process.

Beginning at the end of 2010 and throughout 2011, a “Tier 2” level of retirement benefits was adopted by the Plan Sponsor for Miscellaneous and Safety membership classes. Tier 2 retirement benefits provide a lower level of retirement benefits for new-hire employees. The pension benefit in place for existing employees was not modified. The Tier 2 benefits put in place through year-end 2012 apply to new hires through December 31, 2012 in the majority of the County's Miscellaneous and Safety member workforce. Tier 2 benefits also apply to new hires with the Air Pollution Control District and SLOCPT staff. The San Luis Obispo County Superior Court did not implement its participation in Tier 2 benefits.

Beginning January 1, 2013, a new “Tier 3” level of benefits was added to the Retirement Plan in compliance with the California Public Employees Pension Reform Act put into law in 2012. This new Tier affects all new employees hired on or after January 1, 2013 and provides a lower level of benefits.

The actuarial data presented in this Statistical Section is based on the January 1, 2017 Annual Actuarial Valuation which reflects data as of year-end 2016.

San Luis Obispo County Pension Trust
Changes in Fiduciary Net Position
 Last 10 fiscal years (Dollars in Thousands)

	2017	2016	2015	2014	2013
Additions					
Employer Contributions	\$ 42,341	\$ 35,452	\$ 33,618	\$ 32,047	\$ 30,796
Plan Member Contributions	30,467	25,359	24,587	24,415	24,460
Net Investment Income (Loss)	178,640	68,949	(16,706)	51,667	131,842
Total Additions	<u>\$ 251,448</u>	<u>\$ 129,760</u>	<u>\$ 41,499</u>	<u>\$ 108,129</u>	<u>\$ 187,098</u>
Deductions					
Service Retirement Benefits	\$ 72,074	\$ 66,623	\$ 61,796	\$ 56,186	\$ 50,919
Disability Retirement Benefits	3,305	3,214	3,150	2,972	2,879
Beneficiary Retirement Benefits	4,435	4,156	3,824	3,541	3,352
Deferred Retirement Option Program	5,238	4,201	3,672	3,464	3,087
Total Retirement Benefits	\$ 85,052	\$ 78,194	\$ 72,442	\$ 66,163	\$ 60,237
Refunds	2,857	2,247	1,613	1,629	2,374
Death Benefit	748	243	999	303	150
Administrative Expense	2,046	2,249	2,528	2,085	2,054
Discount Amortization	1,517	1,387	1,450	332	-
Total Deductions	<u>\$ 92,220</u>	<u>\$ 84,320</u>	<u>\$ 79,032</u>	<u>\$ 70,512</u>	<u>\$ 64,815</u>
Net Increase (Decrease) in Fiduciary Net Position	<u>\$ 159,228</u>	<u>\$ 45,440</u>	<u>\$ (37,533)</u>	<u>\$ 37,617</u>	<u>\$ 122,283</u>
	2012	2011	2010	2009	2008
Additions					
Employer Contributions	\$ 30,942	\$ 30,436	\$ 32,148	\$ 31,427	\$ 30,860
Plan Member Contributions	25,207	25,262	24,549	24,171	22,841
Net Investment Income (Loss)	108,818	24,113	110,054	144,482	(234,539)
Total Additions	<u>\$ 164,967</u>	<u>\$ 79,811</u>	<u>\$ 166,751</u>	<u>\$ 200,080</u>	<u>\$ (180,838)</u>
Deductions					
Service Retirement Benefits	\$ 46,535	\$ 42,739	\$ 39,807	\$ 35,688	\$ 31,907
Disability Retirement Benefits	2,746	2,692	2,662	2,555	2,335
Beneficiary Retirement Benefits	2,905	2,769	2,486	2,131	1,788
Deferred Retirement Option Program	2,362	2,215	1,846	1,654	1,068
Total Retirement Benefits	\$ 54,548	\$ 50,415	\$ 46,801	\$ 42,028	\$ 37,098
Refunds	1,138	1,659	1,642	1,575	2,016
Death Benefit	125	430	362	45	197
Administrative Expense	2,070	1,910	1,981	1,730	1,771
Total Deductions	<u>\$ 57,881</u>	<u>\$ 54,414</u>	<u>\$ 50,786</u>	<u>\$ 45,378</u>	<u>\$ 41,082</u>
Net Increase (Decrease) in Fiduciary Net Position	<u>\$ 107,086</u>	<u>\$ 25,397</u>	<u>\$ 115,965</u>	<u>\$ 154,702</u>	<u>\$ (221,920)</u>

Source: SLOCPT audited financial statements and detailed retiree payroll journals

San Luis Obispo County Pension Trust

Benefits by Class and Type

Last 10 fiscal years (Dollars in Thousands)

As of December 31		Service Retirement	Disability Retirement	Beneficiary Retirement	DROP Retirement	Termination Refunds	Death Benefit	TOTAL
2017	Miscellaneous	\$ 58,698	\$ 1,422	\$ 3,402	\$ 2,839	\$ 1,970	\$ 746	\$ 69,077
	Probation	2,623	139	185	-	426	-	3,373
	Safety	10,753	1,744	848	2,399	461	2	16,207
	TOTAL	\$ 72,074	\$ 3,305	\$ 4,435	\$ 5,238	\$ 2,857	\$ 748	\$ 88,657
2016	Miscellaneous	\$ 54,584	\$ 1,385	\$ 3,256	\$ 2,244	\$ 1,796	\$ 237	\$ 63,502
	Probation	2,553	120	126	-	219	2	3,020
	Safety	9,486	1,709	774	1,957	232	4	14,162
	TOTAL	\$ 66,623	\$ 3,214	\$ 4,156	\$ 4,201	\$ 2,247	\$ 243	\$ 80,684
2015	Miscellaneous	\$ 50,845	\$ 1,371	\$ 2,999	\$ 1,792	\$ 1,456	\$ 628	\$ 59,091
	Probation	2,261	136	117	-	6	-	2,520
	Safety	8,690	1,643	708	1,880	151	371	13,443
	TOTAL	\$ 61,796	\$ 3,150	\$ 3,824	\$ 3,672	\$ 1,613	\$ 999	\$ 75,054
2014	Miscellaneous	\$ 46,500	\$ 1,353	\$ 2,760	\$ 1,332	\$ 1,311	\$ 300	\$ 53,556
	Probation	1,923	146	99	-	60	1	2,229
	Safety	7,763	1,473	682	2,132	258	2	12,310
	TOTAL	\$ 56,186	\$ 2,972	\$ 3,541	\$ 3,464	\$ 1,629	\$ 303	\$ 68,095
2013	Miscellaneous	\$ 42,243	\$ 1,315	\$ 2,629	\$ 1,333	\$ 1,798	\$ 146	\$ 49,464
	Probation	1,727	143	94	-	263	-	2,227
	Safety	6,949	1,421	629	1,754	313	4	11,070
	TOTAL	\$ 50,919	\$ 2,879	\$ 3,352	\$ 3,087	\$ 2,374	\$ 150	\$ 62,761
2012	Miscellaneous	\$ 38,206	\$ 1,242	\$ 2,379	\$ 1,216	\$ 1,125	\$ 121	\$ 44,289
	Probation	1,642	129	91	-	-	-	1,862
	Safety	6,687	1,375	435	1,146	13	4	9,660
	TOTAL	\$ 46,535	\$ 2,746	\$ 2,905	\$ 2,362	\$ 1,138	\$ 125	\$ 55,811
2011	Miscellaneous	\$ 35,289	\$ 1,221	\$ 2,317	\$ 1,006	\$ 1,238	\$ 427	\$ 41,498
	Probation	1,445	105	90	-	85	-	1,725
	Safety	6,005	1,366	362	1,209	336	3	9,281
	TOTAL	\$ 42,739	\$ 2,692	\$ 2,769	\$ 2,215	\$ 1,659	\$ 430	\$ 52,504
2010	Miscellaneous	\$ 32,957	\$ 1,208	\$ 2,111	\$ 756	\$ 1,358	\$ 190	\$ 38,580
	Probation	1,341	88	70	-	161	171	1,831
	Safety	5,509	1,366	305	1,090	123	1	8,394
	TOTAL	\$ 39,807	\$ 2,662	\$ 2,486	\$ 1,846	\$ 1,642	\$ 362	\$ 48,805
2009	Miscellaneous	\$ 29,503	\$ 1,176	\$ 1,812	\$ 650	\$ 1,377	\$ 40	\$ 34,558
	Probation	1,153	76	49	-	79	1	1,358
	Safety	5,032	1,303	270	1,004	119	4	7,732
	TOTAL	\$ 35,688	\$ 2,555	\$ 2,131	\$ 1,654	\$ 1,575	\$ 45	\$ 43,648
2008	Miscellaneous	\$ 26,219	\$ 1,075	\$ 1,519	\$ 411	\$ 1,445	\$ 197	\$ 30,866
	Probation	960	66	35	-	207	-	1,268
	Safety	4,728	1,194	234	657	364	-	7,177
	TOTAL	\$ 31,907	\$ 2,335	\$ 1,788	\$ 1,068	\$ 2,016	\$ 197	\$ 39,311

Source: SLOCPT detailed retiree payroll journals 2008-2017 data

San Luis Obispo County Pension Trust

Retiree Average Age and Average Monthly Benefit by Class

Last 10 fiscal years

As of most recent completed actuarial valuation dated January 1, 2017,
based on data as of December 31, 2016.

As of December 31		Avg. Age on Dec. 31st	Avg. Age at retirement ⁽¹⁾	Number of Recipients	Average Monthly Benefit
2016	Miscellaneous	69.7	59.1	2,260	\$ 2,332
	Probation	64.6	56.0	71	3,323
	Safety	64.2	52.6	287	4,188
	TOTAL	68.9	58.3	2,618	\$ 2,562
2015	Miscellaneous	69.4	59.0	2,178	\$ 2,261
	Probation	63.9	56.1	69	3,277
	Safety	64.3	52.5	270	4,030
	TOTAL	68.8	58.2	2,517	\$ 2,479
2014	Miscellaneous	69.1	58.9	2,074	\$ 2,177
	Probation	63.8	56.3	66	3,087
	Safety	63.8	52.5	261	3,972
	TOTAL	68.4	58.1	2,401	\$ 2,397
2013	Miscellaneous	69.0	58.7	1,968	\$ 2,099
	Probation	63.5	56.0	53	3,114
	Safety	64.4	52.7	229	3,809
	TOTAL	68.5	58.0	2,250	\$ 2,297
2012	Miscellaneous	68.9	58.7	1,875	\$ 2,026
	Probation	62.9	56.0	50	3,098
	Safety	64.0	52.5	222	3,677
	TOTAL	68.2	58.0	2,147	\$ 2,222
2011	Miscellaneous	68.7	58.6	1,785	\$ 1,927
	Probation	62.0	55.4	45	3,137
	Safety	63.8	52.3	210	3,567
	TOTAL	68.0	57.9	2,040	\$ 2,123
2010	Miscellaneous	68.4	58.6	1,711	\$ 1,879
	Probation	61.3	55.2	41	3,051
	Safety	63.3	52.0	194	3,585
	TOTAL	67.8	57.9	1,946	\$ 2,074
2009	Miscellaneous	68.1	58.6	1,665	\$ 1,803
	Probation	61.5	55.8	38	3,051
	Safety	63.3	51.8	187	3,355
	TOTAL	67.5	57.9	1,890	\$ 1,982
2008	Miscellaneous	68.3	58.5	1,532	\$ 1,670
	Probation	61.4	56.0	33	2,787
	Safety	63.3	51.8	176	3,260
	TOTAL	67.6	57.8	1,741	\$ 1,852
2007	Miscellaneous	67.9	58.4	1,461	\$ 1,579
	Probation	60.7	55.8	30	2,635
	Safety	62.8	51.8	168	3,106
	TOTAL	67.3	57.7	1,659	\$ 1,752

(1) For Service, DROP, and Disability Retirees; does not include Beneficiaries

Source: SLOCPT annual actuarial valuations - Annualized benefits as of December 31

San Luis Obispo County Pension Trust
Retired Members by Benefit Type and Amount
as of December 31, 2017

Annual Benefit Range and Class	Service Retirement Recipients	Disability Retirement Recipients	Beneficiary Retirement Recipients	DROP Retirement Recipients	TOTAL	% of Total
\$0-\$9,999						
<i>Miscellaneous</i>	430	23	58	-	511	18.6%
<i>Probation</i>	9	-	-	-	9	0.3%
<i>Safety</i>	16	1	3	2	22	0.8%
subtotal	455	24	61	2	542	19.7%
\$10,000-\$19,999						
<i>Miscellaneous</i>	525	43	53	2	623	22.7%
<i>Probation</i>	11	-	1	-	12	0.4%
<i>Safety</i>	26	1	9	-	36	1.3%
subtotal	562	44	63	2	671	24.4%
\$20,000-\$29,999						
<i>Miscellaneous</i>	365	15	24	4	408	14.9%
<i>Probation</i>	9	1	2	-	12	0.4%
<i>Safety</i>	25	12	8	1	46	1.7%
subtotal	399	28	34	5	466	17.0%
\$30,000-\$39,999						
<i>Miscellaneous</i>	226	4	17	5	252	9.2%
<i>Probation</i>	7	4	1	-	12	0.4%
<i>Safety</i>	21	14	5	-	40	1.5%
subtotal	254	22	23	5	304	11.1%
\$40,000-\$49,999						
<i>Miscellaneous</i>	129	1	8	7	145	5.3%
<i>Probation</i>	6	-	2	-	8	0.3%
<i>Safety</i>	24	12	5	3	44	1.6%
subtotal	159	13	15	10	197	7.2%
\$50,000-\$59,999						
<i>Miscellaneous</i>	109	1	3	12	125	4.6%
<i>Probation</i>	9	-	-	-	9	0.3%
<i>Safety</i>	17	5	-	5	27	1.0%
subtotal	135	6	3	17	161	5.9%

San Luis Obispo County Pension Trust
Retired Members by Benefit Type and Amount (continued)
as of December 31, 2017

Annual Benefit Range and Class	Service Retirement Recipients	Disability Retirement Recipients	Beneficiary Retirement Recipients	DROP Retirement Recipients	TOTAL	% of Total
\$60,000-\$69,999						
<i>Miscellaneous</i>	91	-	3	6	100	3.6%
<i>Probation</i>	3	-	-	-	3	0.1%
<i>Safety</i>	22	-	-	6	28	1.0%
subtotal	116	-	3	12	131	4.8%
\$70,000-\$79,999						
<i>Miscellaneous</i>	54	-	1	3	58	2.1%
<i>Probation</i>	5	-	-	-	5	0.2%
<i>Safety</i>	26	-	-	5	31	1.1%
subtotal	85	-	1	8	94	3.4%
\$80,000-\$89,999						
<i>Miscellaneous</i>	30	-	2	-	32	1.2%
<i>Probation</i>	2	-	-	-	2	0.1%
<i>Safety</i>	16	-	-	3	19	0.7%
subtotal	48	-	2	3	53	1.9%
\$90,000-\$99,999						
<i>Miscellaneous</i>	21	-	-	1	22	0.8%
<i>Probation</i>	1	-	-	-	1	0.0%
<i>Safety</i>	9	-	-	1	10	0.4%
subtotal	31	-	-	2	33	1.2%
\$100,000+						
<i>Miscellaneous</i>	61	-	2	6	69	2.5%
<i>Probation</i>	3	-	-	-	3	0.1%
<i>Safety</i>	15	-	1	5	21	0.8%
subtotal	79	-	3	11	93	3.4%
CUMULATIVE TOTAL						
<i>Miscellaneous</i>	2,041	87	171	46	2,345	85.5%
<i>Probation</i>	65	5	6	-	76	2.7%
<i>Safety</i>	217	45	31	31	324	11.8%
	2,323	137	208	77	2,745	100.0%

Source: SLOCPT Pension Administration Software (RAD)

San Luis Obispo County Pension Trust

Member Data

Last 10 fiscal years

As of most recent completed actuarial valuation dated January 1, 2017,
based on data as of December 31, 2016.

Active Members (all classes)	Average Age	Average Service	Average Annual Pay			
2016	45.5	9.7	\$ 69,166			
2015	46.1	10.1	67,844			
2014	46.6	10.4	65,763			
2013	47.1	10.9	65,333			
2012	47.4	10.9	65,851			
2011	47.7	11.1	65,844			
2010	47.2	10.8	65,262			
2009	46.8	10.3	64,024			
2008	46.7	10.0	63,484			
2007	46.3	9.7	61,020			

Number of Members	Active Members	Deferred Vested Members	Retiree and Beneficiary	Disability Recipients	TOTAL
2016	2,675	460	2,481	137	5,753
2015	2,609	450	2,382	135	5,576
2014	2,550	451	2,262	139	5,402
2013	2,521	460	2,117	133	5,231
2012	2,495	445	2,015	132	5,087
2011	2,446	449	1,911	129	4,935
2010	2,479	475	1,817	129	4,900
2009	2,506	476	1,758	132	4,872
2008	2,657	489	1,610	131	4,887
2007	2,662	481	1,532	127	4,802

Source: SLOCPT annual actuarial valuations
- Data as of December 31 each year

San Luis Obispo County Pension Trust
Covered Employees by Employer
 Last 10 fiscal years

Active Members (all classes)	San Luis Obispo County	Superior Courts of CA	Air Pollution Control District	Local Agency Formation Comm.	Oceano Services District	Pension Trust	TOTAL
2017							
Tier 1	1,284	97	20	3	-	1	1,405
Tier 2	312	-	-	-	-	2	314
Tier 3	974	22	4	-	-	4	1,004
Total	2,570	119	24	3	-	7	2,723
% of total	94.3%	4.4%	0.9%	0.1%	0.0%	0.3%	
2016							
Tier 1	1,426	110	21	3	-	2	1,562
Tier 2	313	-	-	-	-	2	315
Tier 3	769	22	3	-	-	4	798
Total	2,508	132	24	3	-	8	2,675
% of total	93.8%	4.9%	0.9%	0.1%	0.0%	0.3%	
2015							
Tier 1	1,568	114	21	3	-	2	1,708
Tier 2	306	-	-	-	-	3	309
Tier 3	571	17	1	-	-	3	592
Total	2,445	131	22	3	-	8	2,609
% of total	93.8%	5.0%	0.8%	0.1%	0.0%	0.3%	
2014							
Tier 1	1,712	119	24	3	-	3	1,861
Tier 2	301	-	-	-	-	1	302
Tier 3	380	5	-	-	-	2	387
Total	2,393	124	24	3	-	6	2,550
% of total	93.8%	5.0%	0.9%	0.1%	0.0%	0.2%	
2013 (a)							
Tier 1	1,884	129	24	3	-	5	2,045
Tier 2	281	-	-	-	-	1	282
Tier 3	189	4	-	-	-	1	194
Total	2,354	133	24	3	-	7	2,521
% of total	93.4%	5.3%	1.0%	0.1%	0.0%	0.3%	
2012							
Tier 1	2,054	134	24	3	-	5	2,220
Tier 2	274	-	-	-	-	1	275
Total	2,328	134	24	3	-	6	2,495
% of total	93.3%	5.3%	1.0%	0.1%	0.0%	0.2%	
2011 (b)							
Tier 1	2,184	147	24	3	-	7	2,365
Tier 2	81	-	-	-	-	-	81
Total	2,265	147	24	3	-	7	2,446
% of total	92.6%	6.0%	1.0%	0.1%	0.0%	0.3%	
2010 (c)	2,320	149	-	3	-	7	2,479
% of total	93.6%	6.0%	0.0%	0.1%	0.0%	0.3%	
2009	2,341	154	-	3	1	7	2,506
% of total	93.5%	6.1%	0.0%	0.1%	0.0%	0.3%	
2008	2,491	156	-	3	1	6	2,657
% of total	93.8%	5.9%	0.0%	0.1%	0.0%	0.2%	

- (a) Beginning in 2013, all employers instituted a reduced level of "Tier 3" retirement benefits for new hires.
- (b) Beginning in 2011, some employers instituted a reduced level of "Tier 2" retirement benefits for new hires.
- (c) Prior to 2011, the Air Pollution Control District members were employees of San Luis Obispo County.

Source: SLOCPT payroll records - as of December 31st of each year

San Luis Obispo County
Pension Trust
SLOCTPT

San Luis Obispo County
Pension Trust
1000 Mill Street
San Luis Obispo, CA 93408
(805) 781-5465
www.slocounty.ca.gov/Departments/Pension-Trust.aspx



Board of Trustees

1000 Mill Street
San Luis Obispo, CA 93408
Phone: (805) 781-5465
Fax: (805) 781-5697
www.SLOPensionTrust.org



Date: June 25, 2018

To: Board of Trustees

From: Carl Nelson – Executive Secretary
Amy Burke – Deputy Executive Secretary

Agenda Item 8: January 1, 2018 Actuarial Valuation and Pension Contribution Rates

Accompanying this memo are –

- **Draft January 1, 2018 Annual Actuarial Valuation** prepared by GRS with additional supplementary tables of data.
- **Actuarial Valuation presentation** by Leslie Thompson, Actuary, of Gabriel Roeder Smith (GRS) on the results of the 2018 Annual Actuarial Valuation of the Plan.
- **Deferred Implementation Date** for rate increases and adjusted amounts of pension contribution rate increase as well as allocation of rate increases by class of Member (Miscellaneous, Probation, Safety).
- **Funding Projections** –
 - **Baseline** 30-year projection of funded status and contribution rates for the Plan
 - Earnings Assumption (discount rate) of 7.00%
 - Forecast investment returns of 7.00% long term
 - Inflation Assumption of 2.50%
 - Salary Growth Assumption of 2.75% (+ merit increase scale)
 - Payroll Growth Assumption of 3.00% in 2018 and 2.75% thereafter
 - Mortality Tables updated to latest available.
 - Illustrative 30 year projection similar to the Baseline projection, but with an Earnings Assumption (discount rate) of 7.00% and forecast returns of 6.50%.
 - Illustrative 30 year projection similar to the Baseline projection, but with an Earnings Assumption (discount rate) of 6.50% and forecast returns of 6.50%.

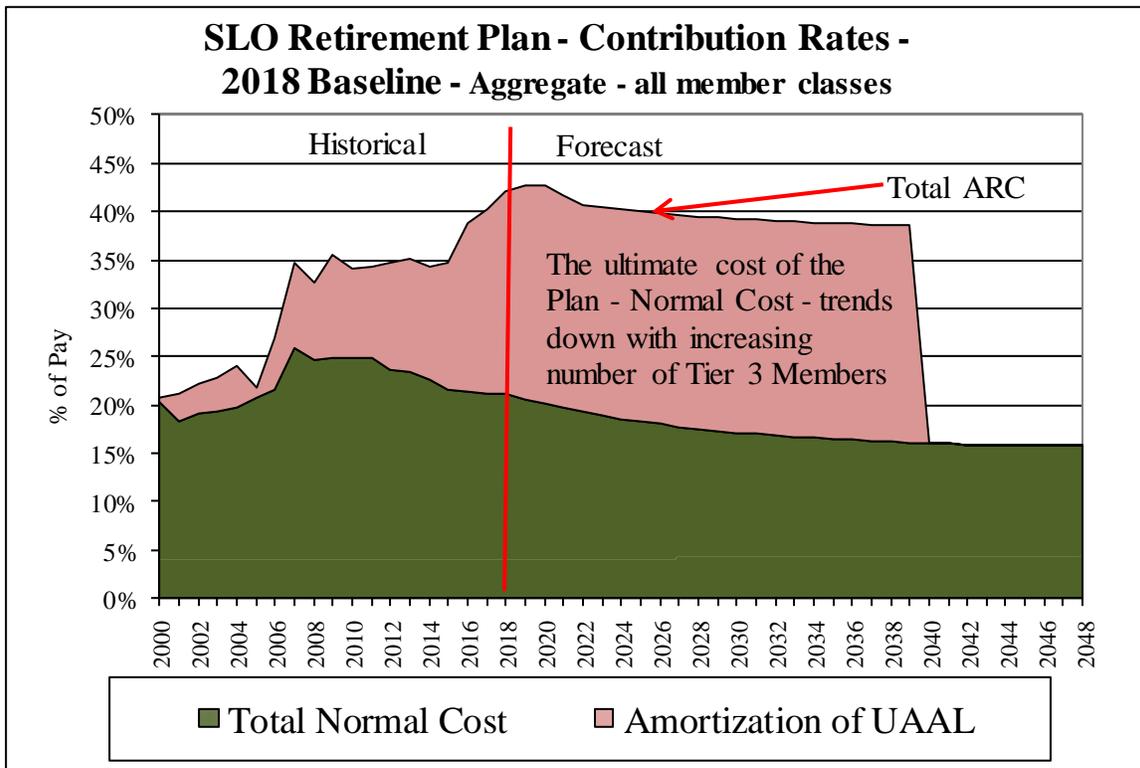
Recommendation:

It is recommended that the Board take the following actions:

1. Approve the January 1, 2018 Actuarial Valuation.
2. Approve the transfer of \$209,903,231 from the Current Reserve to the Retiree Reserve as recommended by GRS in the Reserves Comment of the Valuation (page A-7).
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 42.19% effective January 1, 2018 is received - an increase of 2.51% over the current Charged Rate of contributions as of 1/1/18** as recommended by GRS in the Contribution Rate Comment of the Valuation (page A-6). This increase is subject to delayed implementation as may be requested by the Plan Sponsor, with adjustments to the rate calculated by GRS to account for the deferred implementation. In addition, this rate increase is the aggregate pension contribution rate increase for all classes of Members. Different contribution rate increases are recommended for Miscellaneous, Probation and Safety classes of Members due to their differing benefit formulas. **See the attached Deferred Implementation Date exhibit to this memo for the applicable pension contribution rate increases.**

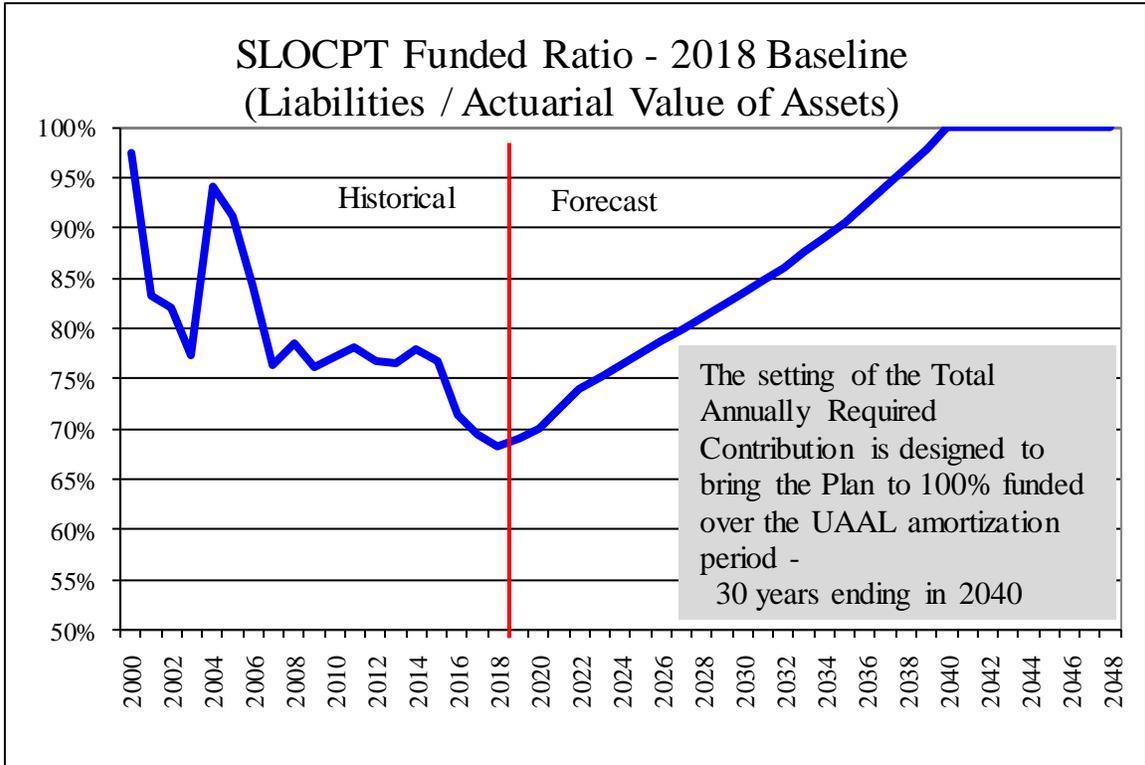
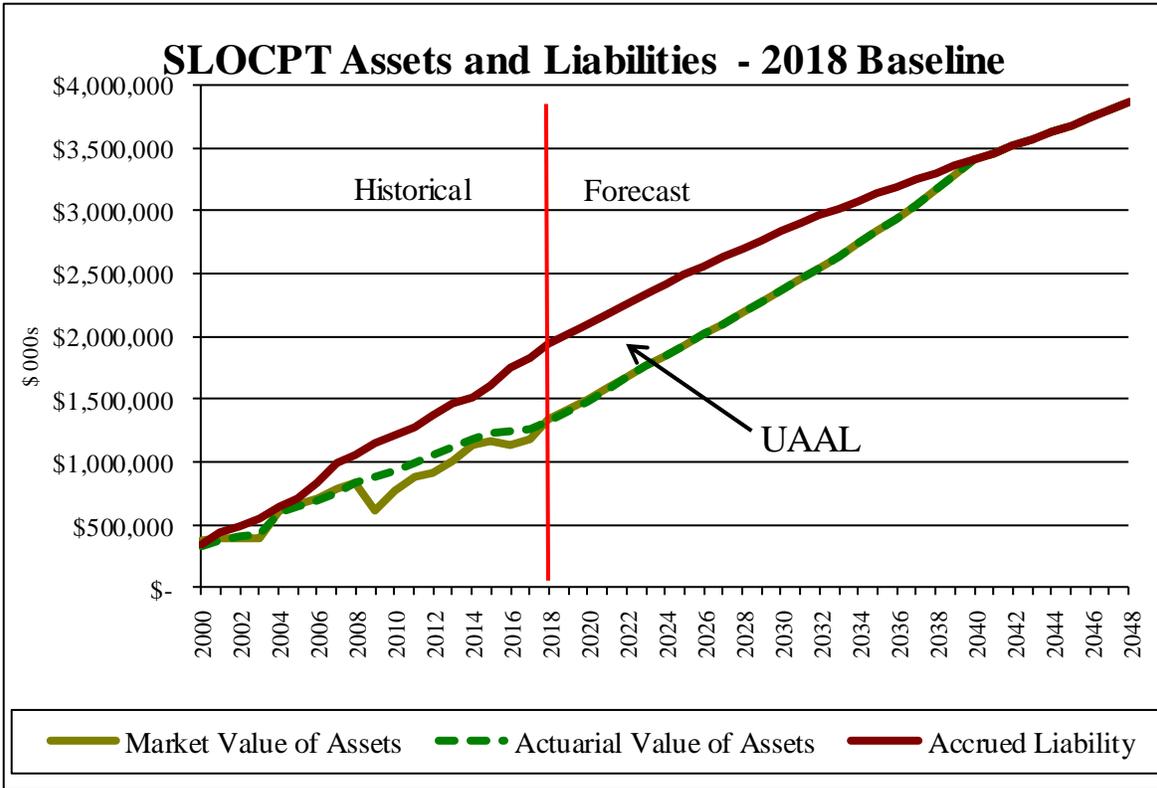
Discussion – Contribution Rate:

The valuation results indicate that it is necessary to increase the Total Required Contribution Rate to 42.19% effective January 1, 2018. This **increase of 2.51%** as compared to the January 1, 2018 Charged Rate of 39.68% is attributable actuarial assumption changes (+1.24% of pay) and to experience losses (+1.27% of pay). See the attached Actuarial Valuation presentation for further detail on the sources of the increase. The Baseline projections of Total Required Contribution Rates are shown in the following graph.



Discussion – Funded Ratio:

The valuation results also indicate that the funded ratio of the Plan – Accrued Liabilities (AL) vs. Actuarial Value of Assets (AVA) has declined from 69.4% in 2017 to 68.3% in 2018. See the attached Actuarial Valuation presentation for further detail on the sources of the increase. The Baseline projections of assets and liabilities and funded rations are shown in the following graphs.



Respectfully submitted

San Luis Obispo County Pension Trust

Actuarial Valuation Report
As of January 1, 2018

Draft





June 8, 2018

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, 2018 of the San Luis Obispo County Pension Trust (SLOCPT). The valuation is intended to provide a measure of the funding status of the SLOCPT. This valuation provides information relative to the employer appropriation rates for the County's fiscal year beginning July 1, 2018.

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 22 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 positive contribution margin develops. This is the last year for this recognition period for the 2008 asset losses.

In the January 1, 2018 valuation, the Trust's funded status decreased from 69.4% to 68.3%. The total actuarially determined contribution rate is 42.19% of pay as of January 1, 2018, compared to the total charged rates of 39.68%. Therefore, due to the difference between the charged rate and the Actuarially Determined Contribution rate, an increase in the charged rate is recommended at this time.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of state law and, where applicable, the Internal Revenue Code and ERISA. The undersigned are independent actuaries and consultants. Leslie Thompson, Paul Wood, and Thomas Lyle are Members of the American Academy of Actuaries, and meet all the Qualification Standards of the American Academy of Actuaries.

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

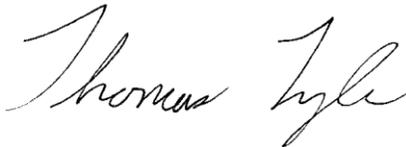
Respectfully submitted,
Gabriel, Roeder, Smith & Company



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



Paul Wood, ASA, FCA, MAAA
Consultant



Thomas A. Lyle, ASA, MAAA
Senior Analyst

Draft

Cover Letter

Section A	Valuation Comments & Recommendations
Section B	Executive Summary & Rate Reconciliation
Section C	Valuation Results
Section D	Summary of Member Data
Section E	Valuation Methods & Assumptions
Section F	Summary of Benefit Provisions
Section G	Definitions of Technical Terms

Draft

SECTION A

VALUATION COMMENTS & RECOMMENDATIONS

Valuation Comments & Recommendations

Benefits: As of January 1, 2013, Tier 2 was effectively closed and most new hires enter under the provisions of Tier 3 (known as AB 340; some new members enter Tier 2 by virtue of reciprocity). As of January 1, 2018, there are 1,003 active members covered under Tier 3 compared to 798 active members covered as of the prior valuation. See Section D for additional details regarding the active membership in each tier.

Assumptions: This valuation includes assumption changes adopted by the Board based on the Experience Study performed for the five-year period ending December 31, 2017. These changes include changing the discount rate, inflation rate, salary scale, payroll growth, COLA assumptions, and mortality projection scale. The net impact of these changes is a \$8.5 million increase in the accrued liability.

Payroll Growth: The payroll growth rate assumption is being decreased by 5/8% over a two-year period. In the January 1, 2018 valuation, the payroll growth assumption decreases 3/8%, from 3.375% to 3.00%. In the January 1, 2019 valuation, the payroll growth assumption will decrease 2/8%, from 3.00% to 2.75%. This is a Board adopted policy, adopted in connection with the 2018 experience study.

Normal Cost: The total normal cost increased from 21.08% to 21.15% of pay reflecting the assumption changes. Employee contribution rates were increased since the prior valuation for most members in all Tiers. As a result, when combined with the expected decrease as Tier 3 members entered the plan, the weighted average employee rate increased from 15.76% to 16.41%. The net result is the County share of the normal cost decreased from 5.32% to 4.74%. Investment losses increased the amortization payment and overall the January 1, 2018 computed County Employer actuarial appropriation rate for the SLOCPT increased from 24.56% to 25.78%. While the cost for the Tier 3 members is expected to bring down the total normal cost of the plan, the blended member contribution rate due to the additional Tier 3 members declined as well. The funded ratio under the Entry Age Normal funding method decreased from 69.4% to 68.3%.

Contribution Rate: The total charged rate in 2018 was 37.30%. Adding to that the 2.38% increase that was effective January 1, 2018 creates a charged rate for 2018 of 39.68%. The total actuarially determined contribution rate is 42.19% as of January 1, 2018. Since the margin between the charged rate and the actuarially determined contribution rate has grown to 2.51%, an increase in the charged rate is recommended.

2008 Asset Loss: As of the January 1, 2010 valuation, the total actuarially determined contribution was based on smoothing the 2008 asset loss over a 10-year schedule. This year, the 2008 asset loss will be fully recognized.

Changes to Assets & Liabilities: The plan experienced a loss from investments and a small net loss from demographic sources. The key sources of the gains and losses were an actuarial loss of \$14.3 million from investments (described as the return on the actuarial value of assets less than the assumed 7.125%). The actuarial asset return of 5.99% did not exceed the 7.125% benchmark for the prior year. The return on the market value of assets as calculated by the SLOCPT investment consultants was 14.92%.

- A \$14.4 million loss due to compensation increases for continuing active members being more 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 7.97% while assumed increases range from 2.88% to 8.13%.
- A \$10.9 million loss due to retirement. This loss reflects more retirements than anticipated.
- A \$4.8 million loss on retiree mortality, meaning that retired participants in pay status lived longer than assumed.

Funding Policy: The SLOCPT adopted a 30 year closed amortization period of as of January 1, 2010. Payments on the unfunded accrued liability are amortized over 22 years as of the January 1, 2018 valuation.

Reserves: 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, 2017, the reserve for retirees and beneficiaries is \$952,429,721. The non-COLA liabilities calculated were \$1,252,332,952. Accordingly, we recommend that the Trust transfer this \$299,903,231 difference out of the Current Reserve and back into the Retiree Reserve.

Member Rates: Member rates change regularly as a result of collective bargaining negotiations. See Section F for a complete description of these rates for all bargaining units.

Pension Obligation Bond: 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 2018 is approximately \$11.1 million -- 5.65% of active member payroll. When this percent is added to the valuation computed appropriation rate of 25.78%, the total rate of 31.43% more accurately reflects total County pension costs.

Assets: There is approximately \$12 million in deferred asset losses yet to be recognized. Absent returns in excess of the assumed 7.00%, upward pressure will continue to exist on the actuarially determined contribution rate.

SECTION B

EXECUTIVE SUMMARY AND RATE RECONCILIATION

Draft

Executive Summary

Valuation Date:	January 1, 2018	January 1, 2017
	(1)	(2)
Membership		
<ul style="list-style-type: none"> • Number of <ul style="list-style-type: none"> - Active Members - Retirees and Beneficiaries - Inactive, Vested - Total • Total Payroll (000s) • Average Pay 	2,722 2,745 464 <hr style="width: 100px; margin: 0 auto;"/> 5,931 \$ 196,848 \$ 72,317	2,675 2,618 460 <hr style="width: 100px; margin: 0 auto;"/> 5,753 \$ 185,020 \$ 69,166
Assets		
<ul style="list-style-type: none"> • Market Value (000s) • Actuarial Value (000s) • Return on Market Value • Return on Actuarial Value 	\$ 1,340,471 \$ 1,328,750 14.92% 5.99%	\$ 1,181,243 \$ 1,268,405 6.13% 3.49%
Actuarial Liabilities and Funded Ratio		
<ul style="list-style-type: none"> • Actuarial Accrued Liability (000s) <ul style="list-style-type: none"> - Active Members - Retirees and Beneficiaries - Inactive, Vested - Total* • Unfunded Actuarial Accrued Liability (UAAL) (000s) • Funded Ratio • UAAL based on Market Value • Funded Ratio Based on Market Value 	\$ 627,112 1,252,333 66,235 <hr style="width: 100px; margin: 0 auto;"/> \$ 1,945,681 \$ 616,930 68.3% \$ 605,210 68.9%	\$ 627,897 1,134,943 64,503 <hr style="width: 100px; margin: 0 auto;"/> \$ 1,827,342 \$ 558,937 69.4% \$ 646,099 64.6%
Actuarially Determined Contribution**		
<ul style="list-style-type: none"> • Total Normal Cost • Member Contributions • County Normal Cost • Amortization Payment • Total County Cost (ADC) • Total Combined ADC 	21.15% 16.41% 4.74% 21.04% 25.78% 42.19%	21.08% 15.76% 5.32% 19.24% 24.56% 40.32%

* Total may not add due to rounding.

**Percentage of active payroll

Reconciliation of Charged Rates and the Actuarially Determined Contribution

Valuation Date	January 1, 2018	January 1, 2017
Actuarially Determined Contribution (ADC)	42.19%	40.32%
County Charged Rate	21.82%	19.51%
Member Charged Rate	<u>15.48%</u>	<u>13.71%</u>
Total Charged Rate	37.30%	33.22%
Increase to Charged Rate as of January 1, 2017*	2.38%	5.17%
Total Charged Rate as of January 1	39.68%	38.39%
Difference between the ARC and the Charged Rate	2.51%	1.93%
Recommended Rate Increase as of January 1	2.51%	1.93%

Draft

*The recommended rate increase as of January 1, 2017 was 1.93%. However, the rate increase was implemented on January 1, 2018 and therefore was increased to 2.38%.

SECTION C

VALUATION RESULTS

Draft

Funding Objective

The funding objective of the SLOCPT is to establish and receive contributions, expressed as a percent 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 SLOCPT 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, 2018 valuation are shown in the following exhibits.

FUNDING POLICY

Draft

The policy adopted by the Board is to recommend the full funding of the Total Actuarially Determined Contribution. This includes a 30 year closed amortization of the unfunded accrued liability that was effective as of January 1, 2010.

Elements of Normal Cost January 1, 2018

MISCELLANEOUS VALUATION GROUPS

	Other	Management				SLOCEA				TOTAL MISC.
	BU #21-22	Non Court	Court BU #18	Court BU #24-27	Total Mgmt	Non Court	Court BU #19	Court BU #20	Total SLOCEA	
Service Retirement	13.32%	17.91%	21.23%	21.58%	18.16%	15.62%	13.61%	15.70%	15.61%	16.35%
Vesting	1.87%	1.82%	1.19%	1.74%	1.80%	1.64%	2.40%	1.81%	1.65%	1.70%
Death-In-Service	0.17%	0.26%	0.11%	0.25%	0.26%	0.20%	0.06%	0.09%	0.19%	0.21%
Disability	0.26%	0.30%	0.27%	0.35%	0.30%	0.26%	0.28%	0.28%	0.26%	0.27%
Refunds	<u>1.67%</u>	<u>1.65%</u>	<u>1.75%</u>	<u>1.20%</u>	<u>1.62%</u>	<u>1.61%</u>	<u>1.72%</u>	<u>1.65%</u>	<u>1.61%</u>	<u>1.62%</u>
Total Normal Cost	17.29%	21.94%	24.55%	25.12%	22.14%	19.33%	18.07%	19.53%	19.32%	20.15%
Less										
Employee Contribution Rate	13.43%	16.66%	17.30%	16.13%	16.64%	15.17%	14.61%	14.45%	15.14%	15.57%
Equals										
County Normal Cost	3.86%	5.28%	7.25%	8.99%	5.50%	4.16%	3.46%	5.08%	4.18%	4.58%

Elements of Normal Cost January 1, 2018

	Probation			Management		Safety			GRAND TOTAL
	Mgmt	Non Mgmt	Total Probation	Sworn	Non-Sworn	Sworn	Non-Sworn	Total Safety	
	Service Retirement	17.24%	16.06%	16.17%	28.27%	15.59%	20.74%	19.17%	
Vesting	4.86%	3.88%	3.97%	1.64%	2.90%	2.31%	2.07%	2.17%	1.86%
Death-In-Service	0.30%	0.23%	0.24%	0.69%	0.20%	0.44%	0.34%	0.40%	0.24%
Disability	0.34%	0.29%	0.30%	3.11%	2.30%	2.95%	3.04%	3.00%	0.62%
Refunds	<u>3.02%</u>	<u>2.52%</u>	<u>2.56%</u>	<u>1.02%</u>	<u>1.58%</u>	<u>1.21%</u>	<u>0.96%</u>	<u>1.08%</u>	<u>1.59%</u>
Total Normal Cost	25.76%	22.98%	23.24%	34.73%	22.57%	27.65%	25.58%	26.95%	21.15%
				Less					
Employee Contribution Rate	23.05%	19.28%	19.63%	26.62%	24.77%	22.21%	19.10%	20.96%	16.41%
				Equals					
County Normal Cost	2.71%	3.70%	3.61%	8.11%	-2.20%	5.44%	6.48%	5.99%	4.74%

Draft

Pension Costs Summary - 2018
Normal Cost by Tier
(Expressed as Percentage of Active Payroll)

NORMAL COST (NC)	Tier 1	Tier 2	Tier 3	2018 Combined
MISCELLANEOUS				
Member Contributions *	18.94%	12.25%	11.10%	15.57%
Employer Paid Normal Cost	4.17%	6.20%	4.72%	4.58%
Total Normal Cost	23.11%	18.45%	15.82%	20.15%
Note: COLA portion of NC	5.02%	3.26%	2.64%	4.19%
PROBATION				
Member Contributions *	21.73%	NA	12.57%	19.63%
Employer Paid Normal Cost	2.93%	NA	5.98%	3.61%
Total Normal Cost	24.66%	NA	18.55%	23.24%
Note: COLA portion of NC	5.47%	NA	3.35%	5.06%
SAFETY				
Member Contributions *	23.40%	18.01%	16.73%	20.96%
Employer Paid Normal Cost	4.23%	9.15%	8.08%	5.99%
Total Normal Cost	27.63%	27.16%	24.81%	26.95%
Note: COLA portion of NC	6.66%	5.31%	4.58%	6.18%
TOTAL				
Member Contributions *	19.69%	13.37%	11.62%	16.41%
Employer Paid Normal Cost	4.11%	6.78%	5.06%	4.74%
Total Normal Cost	23.80%	20.15%	16.68%	21.15%
Note: COLA portion of NC	5.26%	3.66%	2.83%	4.49%

* Average of all active members in group

Note - Member Contributions may include a portion of Employer Paid for Employee Contribution for applicable bargaining units.

Actuarial Balance Sheet January 1, 2018

Present Resources and Expected Future Resources

	(thousands)			
	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand</u>
A. Actuarial value of system assets	\$1,032,437	\$53,743	\$242,570	\$1,328,750
B. Present value of expected future County appropriations				
1. Unfunded past service	479,354	24,953	112,624	616,930
2. Expected future service	<u>47,499</u>	<u>2,496</u>	<u>11,981</u>	<u>61,977</u>
3. Total future County	\$526,853	\$27,449	\$124,605	\$678,907
C. Present value of expected future member contributions	<u>185,953</u>	<u>13,968</u>	<u>43,961</u>	<u>243,881</u>
D. Total Present and Expected Future Resources	<u>\$1,745,243</u>	<u>\$95,160</u>	<u>\$411,136</u>	<u>\$2,251,538</u>

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Present Value of Expected Future Benefit Payments and Reserve

	(thousands)			
	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand Total*</u>
A. To Retirees and Beneficiaries	\$952,689	\$45,752	\$253,892	\$1,252,333
B. To Deferred and Reciprocal	57,965	1,937	6,333	66,235
C. Active members				
1. Service rendered prior to valuation date	501,138	31,007	94,968	627,112
2. Expected future service	<u>233,451</u>	<u>16,464</u>	<u>55,943</u>	<u>305,858</u>
D. Total Present Value of Expected Future Benefits	<u>\$1,745,243</u>	<u>\$95,160</u>	<u>\$411,136</u>	<u>\$2,251,538</u>

* Grand Total may not add due to rounding.

Summary of Reported Asset Information Submitted for the January 1, 2018 Valuation

Market Value of Reported Assets as of January 1, 2018

Cash/Short-term	\$ 34,474,219
Receivables	17,601,282
Equities	635,611,604
Bonds	409,029,240
Mortgages	2,425,415
Alternative Investments	95,192,130
Real Estate	176,799,495
Other	2,916,913
	\$ 1,374,050,298
Liabilities	(33,579,276)
Total Market Value	\$ 1,340,471,022

Reserves as of January 1, 2018

Member Deposit Reserve	\$ 343,843,112
Appropriation Reserves	62,632,669
Retired Members Reserve	952,429,721
Cost-of Living	387,144,189
Contingency Reserves	(684,749,430)
Market Value Adjustments	279,170,761
Total Reserves	\$ 1,340,471,022

Draft

Summary of Reported Asset Information Submitted for the January 1, 2018 Valuation

Total Reserves	
Beginning of Year	\$ 1,181,242,858
 Revenues	
Employer Contributions	\$ 42,340,904
Employee Contributions	30,467,232
Interest	3,492,823
Dividends	8,768,901
Real Estate Income	455,026
Realized and Unrealized Gains and Losses	169,242,335
Investment Expenses	(3,319,561)
	\$ 251,447,660
 Disbursements	
Benefit Payments	\$ 85,052,016
Refunds of Member Contributions	2,857,104
Death Benefits	748,157
Administration	3,562,219
	\$ 92,219,496
 Net Increase	 \$ 159,228,164
 Total Reserves - End of year	 \$ 1,340,471,022

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Schedule of Recognition of 2008 Asset Loss

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 actuarially determined contribution rate), then the recognition of the remaining deferred losses from the 2008 asset loss will be accelerated. As of the January 1, 2011 valuation and again as of the January 1, 2014 valuation, an additional \$10 million of the deferred losses was accelerated and recognized. The remaining losses will continue to be smoothed over the original 10-year period (1 year remaining as of January 1, 2018).

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	39,936,396	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	39,936,396	99,745,584
2015	119,745,584	29,936,396	89,809,188	99,745,584	29,936,396	69,809,188
2016	89,809,188	29,936,396	59,872,792	69,809,188	29,936,396	39,872,792
2017	59,872,792	29,936,396	29,936,396	39,872,792	29,936,396	9,936,396
2018	29,936,396	29,936,396	0	9,936,396	9,936,396	0

Development of Funding Value of Assets January 1, 2018

	Plan Year Ended December 31, 2013	Plan Year Ended December 31, 2014	Plan Year Ended December 31, 2015	Plan Year Ended December 31, 2016	Plan Year Ended December 31, 2017
A. Funding Value Beginning of Year	\$1,122,150,539	\$1,182,923,978	\$1,231,473,577	\$1,248,327,560	\$1,268,404,900
B. Gross Market Value End of Year	1,135,718,617	1,173,336,063	1,135,802,704	1,181,242,858	1,340,471,022
C. Gross Market Value Beginning of Year	1,013,436,059	1,135,718,617	1,173,336,063	1,181,242,858	1,181,242,858
D. Non-Investment Cash Flow	(9,565,801)	(14,055,197)	(20,827,506)	(23,509,152)	(15,849,141)
E. Investment Income					
E1. Market Total =B-C-D	131,848,359	51,672,643	(16,705,853)	23,509,152	175,077,305
E2 Immediate Recognition	<u>81,009,154</u>	<u>85,252,488</u>	<u>88,526,837</u>	<u>88,105,825</u>	<u>89,809,223</u>
E3. Phased-in Recognition	\$50,839,205	(\$33,579,845)	(\$105,232,690)	(\$19,156,519)	\$85,268,082
F. Phased-in Recognition					
F1. Current Year=E3x20%*	10,167,841	(6,715,969)	(21,046,538)	(3,831,304)	17,053,616
F2. First Prior Year	6,442,404	10,167,841	(6,715,969)	(21,046,538)	(3,831,304)
F3. Second Prior Year	(10,690,006)	6,442,404	10,167,841	(6,715,969)	(21,046,538)
F4. Third Prior Year	7,437,258	(10,690,006)	6,442,404	10,167,841	(6,715,969)
F5. Fourth Prior Year	15,245,328	7,437,258	(10,690,006)	6,442,404	10,167,841
F6. Continued Recognition of 2008 Asset Loss	(29,936,396)	(29,936,396)	(29,936,396)	(29,936,396)	(9,936,396)
F7. Additional Recognition of 2008 Asset Loss	<u>(10,000,000)</u> *	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
F8. Total Recognized Gain/(Loss)	(\$11,333,571)	(\$23,294,868)	(\$51,778,664)	(\$44,919,962)	(\$14,308,750)
G. Preliminary Funding Value					
=A+D+E2+F8	\$1,182,260,321	\$1,230,826,401	\$1,247,394,244	\$1,268,004,271	\$1,328,056,232
H. Excludable Assets					
H1. End of Year	5,942,492	5,295,316	4,362,000	3,961,371	3,267,574
H2. Beginning of Year	6,606,149	5,942,492	5,295,316	4,362,000	3,961,371
H3. Change=H1-H2	(663,657)	(647,176)	(933,316)	(400,629)	(693,797)
I. Final Funding Value=G-H3	\$1,182,923,978	\$1,231,473,577	\$1,248,327,560	\$1,268,404,900	\$1,328,750,029
J. Investment Return=(E2+F8)/(A+D/2)	6.24%	5.27%	3.01%	3.49%	5.99%

*The Board originally decided to recognize the 2008 asset loss over 10 years with acceleration of the recognition in future years when the funding margin allowed it. The Board elected to accelerate recognition of an additional \$10 million of the 2008 loss base for the year ending December 31, 2010 and another additional \$10 million for the year ending December 31, 2013.

Allocation of Valuation Assets January 1, 2018

	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand Total</u>
1) Valuation Assets as of December 31, 2016	\$983,887,658	\$51,102,672	\$233,414,571	\$1,268,404,901
2) Preliminary member contributions including pickups by group	\$24,024,417	\$1,382,313	\$4,669,579	\$30,076,309
3) Member contributions from financials, subgroups split in proportion to (2)	\$24,336,679	\$1,400,280	\$4,730,273	\$30,467,232
4) Preliminary employer contributions by group	\$33,378,726	\$1,570,098	\$7,111,358	\$42,060,182
5) Employer contributions from financials, subgroups split in proportion to (4)	\$33,601,505	\$1,580,578	\$7,158,821	\$42,340,904
6) Benefit Payments based on data - avg LY & TY	\$66,242,238	\$2,930,886	\$15,246,879	\$84,420,003
7) Benefit payments from financials, subgroups split in proportion to (6)	\$69,567,120	\$3,077,995	\$16,012,162	\$88,657,277
8) Subtotal = (1) + (3) + (5) - (7)	\$972,258,722	\$51,005,535	\$229,291,503	\$1,252,555,760
9) Valuation Assets as of December 31, 2017				\$1,328,750,029
10) Residual to allocate among groups (9) - (8)				\$76,194,269
11) Allocation of residual to equalize funded ratios	\$60,178,618	\$2,737,434	\$13,278,217	\$76,194,269
12) Valuation Assets Allocated by group: (8) + (11)	\$1,032,437,340	\$53,742,969	\$242,569,720	\$1,328,750,029

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Development of Unfunded Actuarial Accrued Liability January 1, 2018

	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Total</u>
	(1)	(2)	(3)	(4)
1. Actuarial Accrued Liability for active members				
a. PVB	\$ 734,589,089	\$ 47,470,407	\$ 150,911,067	\$ 932,970,563
b. Less: PVFNC	(233,451,412)	(16,463,818)	(55,942,998)	(305,858,228)
c. Actuarial accrued liability (AAL)	\$ 501,137,677	\$ 31,006,589	\$ 94,968,069	\$ 627,112,335
2. Total AAL for:				
a. Retirees and beneficiaries	\$ 952,688,896	\$ 45,751,772	\$ 253,892,284	\$ 1,252,332,952
b. Inactive members	57,965,087	1,937,138	6,332,999	66,235,224
c. Active members (Item 1c)	501,137,677	31,006,589	94,968,069	627,112,335
d. Total AAL	\$ 1,511,791,660	\$ 78,695,499	\$ 355,193,352	\$ 1,945,680,511
3. Actuarial value of assets	\$ 1,032,437,340	\$ 53,742,969	\$ 242,569,720	\$ 1,328,750,029
4. Funded ratio	68.3%	68.3%	68.3%	68.3%
5. UAAL (Item 2d - Item 3)	\$ 479,354,320	\$ 24,952,530	\$ 112,623,632	\$ 616,930,482

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Pension Costs Summary - 2018
(Expressed as Percentage of Active Payroll)

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) AMORTIZATION* & TOTAL ADC**	2018 Combined	2017 Combined
MISCELLANEOUS		
Total Normal Cost	20.15%	20.14%
UAAL Amortization	19.65%	18.19%
Total ADC - Miscellaneous	39.79%	38.33%
UAAL attributable to Miscellaneous (000's)	\$ 479,354	\$ 433,562
PROBATION		
Total Normal Cost	23.24%	22.72%
UAAL Amortization	19.52%	17.32%
Total ADC - Probation	42.76%	40.04%
UAAL attributable to Probation (000's)	\$ 24,953	\$ 22,519
SAFETY		
Total Normal Cost	26.95%	26.27%
UAAL Amortization	30.89%	26.30%
Total ADC - Safety	57.84%	52.57%
UAAL attributable to Safety (000's)	\$ 112,624	\$ 102,857
TOTAL		
Total Normal Cost	21.15%	21.08%
UAAL Amortization	21.04%	19.24%
Total ADC - Combined	42.19%	40.32%
UAAL Total (000's)	\$ 616,930	\$ 558,937

* UAAL Amortization calculated on 30 year closed period with 22 years remaining as of January 1, 2018

** Liabilities can be allocated to various Classes and Tiers of active members.

Assets are not allocable to Tiers therefore allocation of the UAAL and its amortization as a component of pension cost by Tier is not available.

Development of Experience Gain/(Loss) December 31, 2017

The actuarial gains or losses realized in the operation of the SLOCPT 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	\$558,937,413
(2) County normal cost	10,140,477
(3) County contributions made during year	42,340,904
(4) Interest accrual $[(1) + ((2) - (3))/2] * 7.125\%$	38,677,150
(5) Increase/(Decrease) in UAAL due to assumption changes	8,507,420
(6) Increase in UAAL due to provision changes	0
(7) Expected UAAL at end of year	\$573,921,556
$[(1) + (2) - (3) + (4) + (5) + (6)]$	
(8) Actual UAAL at end of year	\$616,930,482
(9) Experience Gain/(Loss): (7) - (8)	(\$43,008,926)
(10) Gain (loss) as percentage of actuarial accrued liabilities at beginning of year	
\$1,827,342,314	-2.35%

Components of Experience Gain/(Loss) December 31, 2017

Detail on the components of the actuarial gain/(loss) are shown below.

Components of Experience Gain/(Loss)

Gain/(Loss) due to:	
Compensation increases	(\$14,404,529)
Investment experience	(14,308,750)
Accelerated recognition of 2008 loss	0
Retirement incidence	(10,902,053)
Termination experience	998,337
Active mortality experience	(23,383)
Disability experience	(194,963)
Retiree & beneficiary mortality experience and miscellaneous retiree data changes	(4,794,344)
New members	(1,014,694)
COLAs	5,655,334
Other data changes and miscellaneous factors	<u>(4,019,881)</u>
Total Experience Gain/(Loss)	<u>(\$43,008,926)</u>

Funding Progress Indicators Historic Comparison

(\$ in Thousands)

Valuation Date	Valuation Assets ¹	Actuarial Liability ¹	Funded Ratio	Unfunded		Ratio to Payroll
				Actuarial Liability	Member Payroll	
12/31/2007	\$829,764	\$1,055,868	78.6%	\$226,104	\$162,436	139.2%
12/31/2007 ³	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 ^{2,4}	1,057,922	1,378,549	76.7%	320,627	161,055	199.1%
12/31/2012 ⁴	1,122,151	1,468,001	76.4%	345,850	164,299	210.5%
12/31/2013 ⁵	1,182,924	1,518,751	77.9%	335,827	164,704	203.9%
12/31/2014	1,231,474	1,605,591	76.7%	374,117	167,695	223.1%
12/31/2015	1,248,328	1,686,497	74.0%	438,169	177,004	247.5%
12/31/2015 ⁶	1,248,328	1,749,342	71.4%	501,014	177,004	283.1%
12/31/2016	1,268,405	1,827,342	69.4%	558,937	185,020	302.1%
12/31/2017	1,328,750	1,937,173	68.6%	608,423	196,848	309.1%
12/31/2017 ⁶	1,328,750	1,945,681	68.3%	616,930	196,848	313.4%

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

12/31/2017	\$3,267,574	12/31/2012	6,606,149
12/31/2016	3,961,371	12/31/2011	7,462,567
12/31/2015	4,362,000	12/31/2010	8,558,571
12/31/2014	5,295,316	12/31/2009	9,341,043
12/31/2013	5,942,492	12/31/2008	10,397,974

² Reflects assumption changes.

³ Reflects benefit increases for Miscellaneous Court employees in BU #18 and BU #20.

⁴ Reflects benefit provisions under Tier 2 for certain new members.

⁵ Reflects benefit provisions under Tier 3 for new members, and assumption changes.

⁶ Reflects assumptions changes

Risk Metrics January 1, 2018

As a plan matures, the retiree population is projected to grow, the active population to stabilize, and the total liabilities of the plan are projected to become more leveraged in relation to the active member payroll. As a result, contribution requirements may become more volatile due to possible future adverse experience. The following ratios give some indication of the possible future volatility:

(\$ in Thousands)

Volatility Ratios:

a. Payroll	\$ 196,848
b. Market value of assets	\$ 1,340,471
c. Accrued Liability	\$ 1,945,681
d. Funded ratio, market value basis	68.89%
e. Asset volatility ratio (MVA / Payroll)	6.81
f. Liability volatility ratio (AAL / Payroll)	9.88

Asset Volatility Ratio: MVA/Payroll – This ratio provides an indication of the potential contribution volatility for any given level of investment volatility. The asset volatility ratio is intended to help plan sponsors anticipate the impact of investment volatility of the actuarially determined contribution. A lower ratio means that plan assets are relatively small compared with payroll; this implies that a single year variance in asset performance may not have as large an impact on contribution rates. As the plan has matured a greater amount of assets have accumulated. With such large retiree liabilities and assets, a change in the asset value becomes a much greater factor relative to payroll.

For SLOCPT, using this volatility measure, an asset loss of 10% (a loss of \$134 million) is 68.1% of payroll. This 68.1% of payroll does not need to be contributed in one year. Five-year asset smoothing as well as the amortization of experience losses would spread the contributions toward that loss over time. The following exhibit provides an estimate of the impact on the contribution rate for a 10% loss, assuming 15-year amortization, with and without the five-year asset smoothing.

Asset Volatility Ratio (in Thousands)					
Fiscal Year ending 12/31/-	2017	2016	2015	2014	2013
Market Value of Assets	\$1,340,471	\$1,181,243	\$1,135,803	\$1,173,336	\$1,135,719
Covered Payroll	\$196,848	\$185,020	\$177,004	\$167,695	\$164,704
Asset Volatility Ratio=Assets/Payroll	6.81	6.38	6.42	7.00	6.90
Increase in contribution rate resulting from a 10% asset loss (using 15-year level percent of pay amortization and five-year asset smoothing)	1.21%	1.14%	1.14%	1.25%	1.23%
Increase in contribution rate resulting from a 10% asset loss (using 15-year level percent of pay amortization without asset smoothing)	6.07%	5.70%	5.72%	6.24%	6.15%

If a plan has an asset volatility ratio of 10, a 10% gain or loss on assets translates to 100% of payroll. This will have a substantial impact on determined contributions regardless of the asset smoothing or UAAL amortization mechanisms in use. However, for a plan with an asset volatility ratio of 5, a 10% gain or loss on assets translates to 50% of payroll and would only have half the impact on contributions of a plan with an asset volatility ratio of 10. This is a current measure since it is based on the current level of assets.

Liability Volatility Ratio: AAL/Payroll – This ratio provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because the assets should track the liabilities over an extended period. If a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded. In addition, this ratio provides an indication of the potential contribution volatility due to liability experience (gains and losses) and liability re-measurements (assumption changes).

For SLOCPT, the liability volatility measure has stayed fairly constant over the last five years. The liabilities and the assets have grown at similar rates. To illustrate the sensitivity of liability losses, the following chart shows a possible change in the amortization payment due to and experience loss of 1% for a given year.

Liability Volatility Ratio (in Thousands)					
Fiscal Year ending 12/31/-	2017	2016	2015	2014	2013
Accrued Liability	\$1,945,681	\$1,827,342	\$1,749,342	\$1,686,497	\$1,605,591
Covered Payroll	\$196,848	\$185,020	\$177,004	\$167,695	\$164,704
Liability Volatility Ratio=Liability/Payroll	9.88	9.88	9.88	10.06	9.75
Increase in contribution rate resulting from a 1% liability loss (using 15-year level percent of pay amortization)	0.88%	0.88%	0.88%	0.90%	0.87%

SECTION D

SUMMARY OF MEMBER DATA

Draft

Reconciliation of Members From January 1, 2017 to January 1, 2018

	Terminated						Total
	Actives	Disability	Vested	Retiree	DROP	Beneficiary	
Counts as of January 1, 2017	2,675	137	460	2,204	73	204	5,753
Actives	4		(4)				0
Disability	(4)	4					0
Terminated Vested	(37)		37				0
Terminated Nonvested	(101)		6				(95)
Retiree	(96)		(24)	150	(30)		0
DROP	(34)				34		0
Beneficiary							0
Deceased	(3)	(4)	(4)	(37)	(1)	(12)	(61)
Refund			(12)				(12)
New Beneficiaries						16	16
New Actives	312						312
Return to Work	6						6
Missing							0
Not included last year			5	6	1		12
Counts as of January 1, 2018	2,722	137	464	2,323	77	208	5,931

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**Summary of Active Members Included
January 1, 2018 Valuation
By Attained Ages and Years of Service
Total Membership**

Age Group	Years of Accrued Service							Compensation	
	<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>	<u>No.</u>	<u>Totals</u>
20-24	54	0	0	0	0	0	0	54	\$2,728,461
25-29	219	17	0	0	0	0	0	236	13,310,377
30-34	236	81	34	0	0	0	0	351	22,436,066
35-39	186	80	96	21	1	0	0	384	27,293,614
40-44	108	77	78	62	10	0	0	335	25,828,999
45-49	88	44	76	70	44	12	1	335	25,635,813
50-54	78	41	64	82	57	31	6	359	28,632,235
55-59	78	51	63	63	47	33	26	361	27,803,386
60-64	40	32	53	47	24	26	10	232	17,606,024
65-69	12	10	12	14	7	1	3	59	4,559,672
70-74	1	4	6	3	1	0	0	15	936,333
75+	0	1	0	0	0	0	0	1	77,106
Totals	1,100	438	482	362	191	103	46	2,722	\$196,848,084

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

Averages

Age: 45.1
 Service: 9.3
 Compensation: \$72,317

Summary of Active Members Included in the January 1, 2018 Valuation

	<u>No.</u>	<u>Total Payroll</u>	<u>Averages</u>		
			<u>Annual Compensation</u>	<u>Age</u>	<u>Service</u>
Miscellaneous Members					
1/1/2018	2,340	\$163,791,934	\$69,997	45.9	9.1
1/1/2017	2,281	\$151,823,503	\$66,560	46.4	9.6
Percent Increase	2.6%	7.9%	5.2%		
Probation Members					
1/1/2018	115	\$8,580,686	\$74,615	39.5	9.6
1/1/2017	116	\$8,282,830	\$71,404	39.6	9.3
Percent Increase	-0.9%	3.6%	4.5%		
Safety Members					
1/1/2018	267	\$24,475,464	\$91,668	40.8	10.6
1/1/2017	278	\$24,913,415	\$89,617	41.1	11.2
Percent Increase	-4.0%	-1.8%	2.3%		
All Active Members					
1/1/2018	2,722	\$196,848,084	\$72,317	45.1	9.3
1/1/2017	2,675	\$185,019,748	\$69,166	45.5	9.7
Percent Increase	1.8%	6.4%	4.6%		

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 valuation 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.

Pensionable compensation is capped at \$121,388 for 2018 for Tier 3 members.

Summary of Active Members by Valuation Group January 1, 2018 Valuation

	Counts				Total Payroll (000s*)			
	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total
Miscellaneous Members								
1/1/2018	1,174	262	904	2,340	\$ 90,953	\$20,061	\$52,778	\$163,792
1/1/2017	1,303	264	714	2,281	\$ 95,822	\$18,375	\$37,627	\$151,824
Percent Increase				2.6%				7.9%
Probation Members								
1/1/2018	80	0	35	115	\$ 6,634	\$ -	\$ 1,947	\$ 8,581
1/1/2017	84	0	32	116	\$ 6,563	\$ -	\$ 1,720	\$ 8,283
Percent Increase				-0.9%				3.6%
Safety Members								
1/1/2018	151	52	64	267	\$ 14,675	\$ 4,805	\$ 4,996	\$ 24,475
1/1/2017	175	51	52	278	\$ 16,542	\$ 4,474	\$ 3,897	\$ 24,913
Percent Increase				-4.0%				-1.8%
All Active Members								
1/1/2018	1,405	314	1,003	2,722	\$112,262	\$24,866	\$59,720	\$196,848
1/1/2017	1,562	315	798	2,675	\$118,926	\$22,850	\$43,244	\$185,020
Percent Increase				1.8%				6.4%

* Total may not add due to rounding.

Summary of Deferred and Reciprocal members Included in the January 1, 2018 Valuation

	<u>No.</u>	<u>Member Contributions</u>	<u>Contribution Balance</u>	<u>Averages</u>		
				<u>Attained Age</u>	<u>Age at Termination</u>	<u>Service</u>
Miscellaneous						
Reciprocals	195	\$11,773,854	\$60,379	49.2	39.3	4.6
Deferred	<u>210</u>	<u>20,618,599</u>	98,184	51.3	40.7	9.2
Total	405	\$32,392,453	\$79,981	50.3	40.1	7.0
Probation						
Reciprocals	8	\$302,118	\$37,765	44.2	34.6	3.5
Deferred	<u>8</u>	<u>817,814</u>	102,227	44.1	35.9	8.7
Total	16	\$1,119,932	\$69,996	44.2	35.2	6.1
Safety						
Reciprocals	18	\$1,237,225	\$68,735	43.2	33.5	4.1
Deferred	<u>25</u>	<u>2,936,283</u>	117,451	45.3	36.5	8.4
Total	43	\$4,173,508	\$97,058	44.4	35.2	6.6
Total						
Reciprocals						
1/1/2018	221	\$13,313,197	\$60,241	48.6	38.7	4.5
1/1/2017	213	\$12,424,167	\$58,329	49.0	39.1	4.6
Percent Change	3.8%	7.2%	3.3%			
Deferred						
1/1/2018	243	\$24,372,696	\$100,299	50.4	40.1	9.1
1/1/2017	247	\$22,794,431	\$92,285	50.3	40.2	8.9
Percent Change	-1.6%	6.9%	8.7%			
Grand Total 1/1/2018	464	\$37,685,893	\$81,220	49.5	39.4	6.9
Grand Total 1/1/2017	460	\$35,218,598	\$76,562	49.7	39.7	6.9
Percent Change	0.9%	7.0%	6.1%			

Summary of Retirees Included in the January 1, 2018 Valuation

	<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>
Miscellaneous								
1/1/2018	2,179	\$65,658,991	\$30,133	69.5	59.2	132	\$41,992	61.0
1/1/2017	2,085	\$59,728,572	\$28,647	69.2	59.1	120	\$34,242	61.2
Percent Change	4.5%	9.9%	5.2%				22.6%	
Probation								
1/1/2018	70	\$2,864,113	\$40,916	64.3	55.8	4	\$34,976	54.0
1/1/2017	66	\$2,668,177	\$40,427	63.9	56.0	2	\$54,148	51.5
Percent Change	6.1%	7.3%	1.2%				-35.4%	
Safety								
1/1/2018	288	\$15,294,071	\$53,104	63.5	52.9	29	\$50,996	54.5
1/1/2017	263	\$13,731,944	\$52,213	63.4	52.6	22	\$57,299	53.8
Percent Change	9.5%	11.4%	1.7%				-11.0%	
All Retirees								
1/1/2018	2,537	\$83,817,175	\$33,038	68.7	58.4	165	\$42,821	60.1
1/1/2017	2,414	\$76,128,693	\$31,536	68.4	58.3	144	\$38,041	59.9
Percent Change	5.1%	10.1%	4.8%				12.6%	

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

Summary of Beneficiaries Included in the January 1, 2018 Valuation

	<u>No.</u>	<u>Averages</u>		
		<u>Annual Allowance</u>	<u>Annual Allowance</u>	<u>Attained Age</u>
Miscellaneous				
1/1/2018	176	\$3,594,654	\$20,424	75.5
1/1/2017	175	\$3,502,258	\$20,013	75.7
Percent Change	0.6%	2.6%	2.1%	
Probation				
1/1/2018	5	\$166,452	\$33,290	74.2
1/1/2017	5	\$163,029	\$32,606	73.2
Percent Change	0.0%	2.1%	2.1%	
Safety				
1/1/2018	27	\$774,811	\$28,697	72.8
1/1/2017	24	\$692,931	\$28,872	73.4
Percent Change	12.5%	11.8%	-0.6%	
All Beneficiaries				
1/1/2018	208	\$4,535,918	\$21,807	75.1
1/1/2017	204	\$4,358,218	\$21,364	75.4
Percent Change	2.0%	4.1%	2.1%	

Retirees and Beneficiaries January 1, 2018 Total Tabulated by Type of Allowances Being Paid

<u>Type of Allowance</u>	<u>No.</u>	<u>Annual Allowances</u>
SERVICE RETIREMENT		
Unmodified	1,026	\$31,145,017
Cash Refund	167	4,923,476
100% Continuance	699	27,385,657
50% Continuance	260	10,725,673
Benefits Coordinated with Social Security		
Unmodified	134	\$2,765,265
Cash Refund	25	394,086
100% Continuance	53	1,886,470
50% Continuance	<u>36</u>	<u>1,274,690</u>
Total Service Retirement	2,400	\$80,500,334
DISABILITY RETIREMENT		
Unmodified	77	\$1,956,858
Cash Refund	14	240,602
100% Continuance	37	930,266
50% Continuance	<u>9</u>	<u>189,114</u>
Total Disability Retirement	137	\$3,316,841
BENEFICIARIES	<u>208</u>	<u>\$4,535,917</u>
Total Allowances	<u>2,745</u>	<u>\$88,353,092</u>

SECTION E

VALUATION METHODS AND ASSUMPTIONS

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Actuarial Methods and Assumptions Used in the January 1, 2018 Valuation

I. Valuation Date

The valuation date is December 31 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 2.50% 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 (22 years as of January 1, 2018) 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. Pursuant to Board policy, the asset losses that occurred in 2008 are smoothed over a ten-year period with recognition accelerated if a positive 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 (changes effective January 1, 2018, based on the December 31, 2017 experience study)

A. Economic Assumptions

1. Investment return: 7.00%, compounded annually, net of administrative expenses. This is made up of a 2.50% inflation rate and a 4.50% real rate of return.
2. Salary increase rate: Inflation rate of 2.50% plus productivity increase rate of 0.25% plus an additional service-related merit component as shown below:

% Merit Increases in Salaries Next Year		% Total Increases in Salaries Next Year	
Service Index	Rate	Service Index	Rate
1	5.25%	1	8.00%
2	5.00%	2	7.75%
3	4.00%	3	6.75%
4	3.00%	4	5.75%
5	2.00%	5	4.75%
6	1.00%	6	3.75%
7	0.50%	7	3.25%
8 +	0.00%	8 +	2.75%

3. Cost-of-living increases:

Assumed to increase the full 2.50% each year (2% for Tier 2 and Tier 3)

4. Payroll growth:

3.00% per year (inflation 2.50%, productivity of 0.50%) for the January 1, 2018 actuarial valuation.

2.75% per year (inflation 2.50%; productivity of .25%) for the January 1, 2019 actuarial valuation.

5. Increase to maximum earnings limit for Tier 3 members:

2.50% per year

6. Contribution accumulation: Contributions are credited with 6.00% interest, compounded biweekly.

B. Demographic Assumptions

1. Mortality projection – The projection calculation for MP-2017
2. Mortality after termination or retirement -
 - a. Healthy males – RP-2014 with generational mortality improvements using scale MP-2017, a 105% multiplier
 - b. Healthy females - RP-2014 with generational mortality improvements using scale MP-2017, a 115% multiplier

See sample rates for 2018 below:

Ages	% Dying Within Next Year Retirees	
	Men	Women
45	0.19%	0.18%
50	0.28%	0.23%
55	0.40%	0.32%
60	0.55%	0.46%
65	0.80%	0.74%
70	1.27%	1.17%
75	2.15%	1.95%
80	3.77%	3.40%
85	6.95%	6.16%

3. Mortality rates of active members – RP-2014 Employee Mortality Tables, with generational improvements using scale MP-2017, setback one year with a 105% multiplier for males, and setback two years with a 50% multiplier for females, applied to RP-2014, as shown below for selected ages:

See sample rates for 2018 below:

Ages	% of Active Members Dying Within Next Year	
	Men	Women
30	0.05%	0.01%
35	0.06%	0.01%
40	0.06%	0.02%
45	0.09%	0.03%
50	0.15%	0.04%
55	0.26%	0.07%
60	0.44%	0.11%
65	0.78%	0.15%
70	1.28%	0.24%

4. Disability mortality after termination or retirement- RP-2014 Disabled Mortality Tables, with generational improvements using scale MP-2017, with setback of one year and a 100% multiplier for males, and setback one year with a 75% multiplier for females, applied to RP-2014, as shown below for selected ages:

See sample rates for 2018 below:

Ages	% of Disabled Members Dying Within Next Year	
	Men	Women
30	0.44%	0.15%
35	0.83%	0.30%
40	1.23%	0.47%
45	1.56%	0.64%
50	1.88%	0.83%
55	2.23%	1.06%
60	2.61%	1.26%
65	3.06%	1.47%
70	3.74%	1.90%

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5. Retirement –

a. As shown below for Tier 1 members 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%	20.0%
51	4.0%	7.5%	14.0%
52	4.0%	7.5%	10.0%
53	4.0%	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 Reciprocal and Reserve members are assumed to retire at the later of age 60 (age 55 for Tier 1 Reserve Members) or attained age.

b. As shown below for Tier 2 and future Tier 3 members 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	3.0%	7.5%	9.0%
51	3.0%	7.5%	9.0%
52	3.0%	7.5%	10.0%
53	3.0%	7.5%	10.0%
54	3.0%	7.5%	10.0%
55	6.0%	7.5%	10.0%
56	6.0%	7.5%	10.0%
57	6.0%	7.5%	10.0%
58	6.0%	9.0%	11.0%
59	6.0%	9.0%	15.0%
60	8.0%	10.0%	20.0%
61	8.0%	10.0%	25.0%
62	20.0%	20.0%	30.0%
63	20.0%	20.0%	40.0%
64	20.0%	20.0%	60.0%
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%	

6. 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 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 and Probation 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 SLOCPT, we are assuming that 1.00% 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.

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. 80% of men and 60% 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.

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		
	2017	2016	2015	2014	2013	3 Year	5 Year	10 Year
Inflation ¹	3.3%	2.8%	2.6%	1.7%	1.9%	2.9%	2.5%	2.1%
Current Assumption	2.500%							
Average Pay Increase	4.6%	1.9%	3.2%	0.7%	-0.8%	3.2%	1.9%	1.7%
Current Assumption	2.750%							
Merit & Longevity Pay Increase	1.3%	-0.9%	0.6%	-1.0%	-2.7%	0.3%	-0.6%	-0.4%
Current Assumption	0.250%							
Total Payroll	6.4%	4.5%	5.6%	1.8%	0.2%	5.5%	3.7%	1.9%
Current Assumption	3.000%							
Investment Return Rate ²	6.0%	3.5%	3.0%	5.3%	6.2%	4.2%	4.8%	5.1%
Current Assumption	7.000%							
Real Rate of Investment Return	2.7%	0.7%	0.4%	3.6%	4.3%	1.3%	2.3%	3.0%
Current Assumption	4.500%							

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 F

SUMMARY OF BENEFIT PROVISIONS AND CURRENT MEMBER CONTRIBUTION RATES

Draft

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

Brief Summary of Benefit Provisions Evaluated Effective January 1, 2018

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 SLOCPT

2. Tiers
 Tier 1 generally includes new members hired before January 1, 2011.

 Tier 2 generally includes new members hired on or after January 1, 2011 and before January 1, 2013. Tier 2 only applies to members hired after the date each particular bargaining unit adopted Tier 2. Members hired in a bargaining unit that did not adopt Tier 2 are considered Tier 1 members.

 Tier 3 includes all new members hired on or after January 1, 2013.

3. 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, 99

Pick Up Percentage included in final average compensation:

<u>Bargaining Unit</u>	<u>Pick Up</u>
4,7,8,9,11,12,99	9.29%
10	13.55%
17	13.59%

Highest three-year average for employees in Tier 2 and Tier 3

4. Member Contributions
 Please refer to Appendix A. Employee contribution rates used in the January 1, 2018 valuation have increased since the January 1, 2017 valuation for most members.

5. Service Retirement
 - A. Eligibility - Age 50 with 5 years of service (Age 52 with 5 years of service for Miscellaneous members in Tier 3).

 - B. Benefit Formula - Final Compensation multiplied by Years of Credited Service multiplied by Retirement Age Factor.

Brief Summary of Benefit Provisions Evaluated Effective January 1, 2018

C. Retirement Age Factors

Safety					
Age	Tier 1 ¹	Tier 1 ²	Tier 2 ³	Tier 2 ⁴	Tier 3
50	2.300%	3.000%	2.000%	2.300%	2.000%
51	2.440	3.000	2.140	2.440	2.100
52	2.580	3.000	2.280	2.580	2.200
53	2.720	3.000	2.420	2.720	2.300
54	2.860	3.000	2.560	2.860	2.400
55	3.000	3.000	2.700	3.000	2.500
56	3.000	3.000	2.700	3.000	2.600
57+	3.000	3.000	2.700	3.000	2.700

Probation		
Age	Tier 1	Tier 3
50	2.300%	2.000%
51	2.440	2.100
52	2.580	2.200
53	2.720	2.300
54	2.860	2.400
55	3.000	2.500
56	3.000	2.600
57+	3.000	2.700

¹ Safety Bargaining Units 6 & 7 and Non-Sworn Bargaining Units 3, 14, 15

² Safety Bargaining Units 10 & 16 and Sworn Bargaining Units 15, 27, 28

³ Non-Sworn Safety members

⁴ Safety Bargaining Units 6 & 7 and Sworn Safety members

Miscellaneous			
Age	Tier 1	Tier 2	Tier 3
50	1.426%	1.092%	-
51	1.541	1.156	-
52	1.656	1.224	1.000%
53	1.770	1.296	1.100
54	1.885	1.376	1.200
55	2.000	1.460	1.300
56	2.117	1.552	1.400
57	2.233	1.650	1.500
58	2.350	1.758	1.600
59	2.466	1.874	1.700
60	2.583	2.000	1.800
61	2.699	2.134	1.900
62	2.816	2.272	2.000
63	2.932	2.418	2.100
64	3.049	2.458	2.200
65	3.165	2.500	2.300
66	3.165	2.500	2.400
67+	3.165	2.500	2.500

Brief Summary of Benefit Provisions Evaluated Effective January 1, 2018

- 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
 - c. Tier 3
 - No maximum benefit applies but pensionable compensation is capped at \$121,388 for 2018 and adjusted annually based on CPI.
6. 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).
7. 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).
8. 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.
9. Ordinary Death After Eligible for Retirement
50% of earned benefit payable to surviving eligible spouse or children until age 18, or benefit in (8) above if greater. Spouse can elect an actuarially-reduced 100% Joint and Survivor benefit.
10. 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.
11. Death After Retirement
50% of member's unmodified allowance continued to eligible spouse. Optional forms of payment are also available.
\$1,000 payable in lump sum to the beneficiary or the estate of the retiree.

Brief Summary of Benefit Provisions Evaluated Effective January 1, 2018

12. 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.

13. 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 and Tier 3).

14. Deferred Retirement Option Program (DROP): A Tier 1 member (excluding Court employees) may elect to participate in the SLOCPT'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.

January 1, 2018 Actuarial Valuation Member Contribution Rates*

MISCELLANEOUS - TIER 1

BU Entry	14,21,22	7 (LAFCO)	4,7,8,9,10, 11,17,99	12	17C (Interpreter)	18	20	24,26,27	25	1,5,13	2	19	98	99
	Age	Other	Non-Court Management	Non-Court Management	Court Other	Court Other	Court Other	Court Management	Court Management	Non-Court SLOCEA	Non-Court SLOCEA	Court SLOCEA	Non-Court SLOCEA	Non-Court Management
18	17.69%	14.59%	18.19%	17.30%	16.75%	16.75%	14.23%	15.52%	14.53%	17.88%	17.32%	13.67%	16.84%	17.15%
19	17.76%	14.66%	18.26%	17.37%	16.82%	16.82%	14.30%	15.59%	14.60%	17.95%	17.39%	13.74%	16.91%	17.22%
20	17.83%	14.73%	18.33%	17.44%	16.89%	16.89%	14.37%	15.66%	14.67%	18.02%	17.46%	13.81%	16.98%	17.29%
21	17.89%	14.79%	18.39%	17.50%	16.95%	16.95%	14.43%	15.72%	14.73%	18.08%	17.52%	13.87%	17.04%	17.35%
22	17.91%	14.81%	18.41%	17.52%	16.97%	16.97%	14.45%	15.74%	14.75%	18.10%	17.54%	13.89%	17.06%	17.37%
23	17.93%	14.83%	18.43%	17.54%	16.99%	16.99%	14.47%	15.76%	14.77%	18.12%	17.56%	13.91%	17.08%	17.39%
24	17.96%	14.86%	18.46%	17.57%	17.02%	17.02%	14.50%	15.79%	14.80%	18.15%	17.59%	13.94%	17.11%	17.42%
25	18.00%	14.90%	18.50%	17.61%	17.06%	17.06%	14.54%	15.83%	14.84%	18.19%	17.63%	13.98%	17.15%	17.46%
26	18.05%	14.95%	18.55%	17.66%	17.11%	17.11%	14.59%	15.88%	14.89%	18.24%	17.68%	14.03%	17.20%	17.51%
27	18.10%	15.00%	18.60%	17.71%	17.16%	17.16%	14.64%	15.93%	14.94%	18.29%	17.73%	14.08%	17.25%	17.56%
28	18.16%	15.06%	18.66%	17.77%	17.22%	17.22%	14.70%	15.99%	15.00%	18.35%	17.79%	14.14%	17.31%	17.62%
29	18.23%	15.13%	18.73%	17.84%	17.29%	17.29%	14.77%	16.06%	15.07%	18.42%	17.86%	14.21%	17.38%	17.69%
30	18.30%	15.20%	18.80%	17.91%	17.36%	17.36%	14.84%	16.13%	15.14%	18.49%	17.93%	14.28%	17.45%	17.76%
31	18.38%	15.28%	18.88%	17.99%	17.44%	17.44%	14.92%	16.21%	15.22%	18.57%	18.01%	14.36%	17.53%	17.84%
32	18.47%	15.37%	18.97%	18.08%	17.53%	17.53%	15.01%	16.30%	15.31%	18.66%	18.10%	14.45%	17.62%	17.93%
33	18.56%	15.46%	19.06%	18.17%	17.62%	17.62%	15.10%	16.39%	15.40%	18.75%	18.19%	14.54%	17.71%	18.02%
34	18.66%	15.56%	19.16%	18.27%	17.72%	17.72%	15.20%	16.49%	15.50%	18.85%	18.29%	14.64%	17.81%	18.12%
35	18.76%	15.66%	19.26%	18.37%	17.82%	17.82%	15.30%	16.59%	15.60%	18.95%	18.39%	14.74%	17.91%	18.22%
36	18.86%	15.76%	19.36%	18.47%	17.92%	17.92%	15.40%	16.69%	15.70%	19.05%	18.49%	14.84%	18.01%	18.32%
37	18.97%	15.87%	19.47%	18.58%	18.03%	18.03%	15.51%	16.80%	15.81%	19.16%	18.60%	14.95%	18.12%	18.43%
38	19.08%	15.98%	19.58%	18.69%	18.14%	18.14%	15.62%	16.91%	15.92%	19.27%	18.71%	15.06%	18.23%	18.54%
39	19.20%	16.10%	19.70%	18.81%	18.26%	18.26%	15.74%	17.03%	16.04%	19.39%	18.83%	15.18%	18.35%	18.66%
40	19.32%	16.22%	19.82%	18.93%	18.38%	18.38%	15.86%	17.15%	16.16%	19.51%	18.95%	15.30%	18.47%	18.78%
41	19.45%	16.35%	19.95%	19.06%	18.51%	18.51%	15.99%	17.28%	16.29%	19.64%	19.08%	15.43%	18.60%	18.91%
42	19.58%	16.48%	20.08%	19.19%	18.64%	18.64%	16.12%	17.41%	16.42%	19.77%	19.21%	15.56%	18.73%	19.04%
43	19.72%	16.62%	20.22%	19.33%	18.78%	18.78%	16.26%	17.55%	16.56%	19.91%	19.35%	15.70%	18.87%	19.18%
44	19.86%	16.76%	20.36%	19.47%	18.92%	18.92%	16.40%	17.69%	16.70%	20.05%	19.49%	15.84%	19.01%	19.32%
45	20.00%	16.90%	20.50%	19.61%	19.06%	19.06%	16.54%	17.83%	16.84%	20.19%	19.63%	15.98%	19.15%	19.46%
46	20.15%	17.05%	20.65%	19.76%	19.21%	19.21%	16.69%	17.98%	16.99%	20.34%	19.78%	16.13%	19.30%	19.61%
47	20.31%	17.21%	20.81%	19.92%	19.37%	19.37%	16.85%	18.14%	17.15%	20.50%	19.94%	16.29%	19.46%	19.77%
48	20.47%	17.37%	20.97%	20.08%	19.53%	19.53%	17.01%	18.30%	17.31%	20.66%	20.10%	16.45%	19.62%	19.93%
49	20.63%	17.53%	21.13%	20.24%	19.69%	19.69%	17.17%	18.46%	17.47%	20.82%	20.26%	16.61%	19.78%	20.09%
50	20.80%	17.70%	21.30%	20.41%	19.86%	19.86%	17.34%	18.63%	17.64%	20.99%	20.43%	16.78%	19.95%	20.26%
51	20.97%	17.87%	21.47%	20.58%	20.03%	20.03%	17.51%	18.80%	17.81%	21.16%	20.60%	16.95%	20.12%	20.43%
52	21.14%	18.04%	21.64%	20.75%	20.20%	20.20%	17.68%	18.97%	17.98%	21.33%	20.77%	17.12%	20.29%	20.60%
53	21.32%	18.22%	21.82%	20.93%	20.38%	20.38%	17.86%	19.15%	18.16%	21.51%	20.95%	17.30%	20.47%	20.78%
54	21.50%	18.40%	22.00%	21.11%	20.56%	20.56%	18.04%	19.33%	18.34%	21.69%	21.13%	17.48%	20.65%	20.96%
55	21.69%	18.59%	22.19%	21.30%	20.75%	20.75%	18.23%	19.52%	18.53%	21.88%	21.32%	17.67%	20.84%	21.15%
56	21.88%	18.78%	22.38%	21.49%	20.94%	20.94%	18.42%	19.71%	18.72%	22.07%	21.51%	17.86%	21.03%	21.34%
57	22.07%	18.97%	22.57%	21.68%	21.13%	21.13%	18.61%	19.90%	18.91%	22.26%	21.70%	18.05%	21.22%	21.53%
58	22.27%	19.17%	22.77%	21.88%	21.33%	21.33%	18.81%	20.10%	19.11%	22.46%	21.90%	18.25%	21.42%	21.73%
59+	22.47%	19.37%	22.97%	22.08%	21.53%	21.53%	19.01%	20.30%	19.31%	22.66%	22.10%	18.45%	21.62%	21.93%

* 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, 2018 Actuarial Valuation Member Contribution Rates*

BU Entry Age	PROBATION - TIER 1		
	8	9	31,32 Non-
	<u>Management</u>	<u>Management</u>	<u>Management</u>
18	22.07%	22.07%	20.83%
19	22.15%	22.15%	20.91%
20	22.23%	22.23%	20.99%
21	22.30%	22.30%	21.06%
22	22.32%	22.32%	21.08%
23	22.34%	22.34%	21.10%
24	22.37%	22.37%	21.13%
25	22.42%	22.42%	21.18%
26	22.47%	22.47%	21.23%
27	22.53%	22.53%	21.29%
28	22.59%	22.59%	21.35%
29	22.67%	22.67%	21.43%
30	22.75%	22.75%	21.51%
31	22.84%	22.84%	21.60%
32	22.94%	22.94%	21.70%
33	23.04%	23.04%	21.80%
34	23.15%	23.15%	21.91%
35	23.26%	23.26%	22.02%
36	23.37%	23.37%	22.13%
37	23.49%	23.49%	22.25%
38	23.61%	23.61%	22.37%
39	23.74%	23.74%	22.50%
40	23.88%	23.88%	22.64%
41	24.02%	24.02%	22.78%
42	24.16%	24.16%	22.92%
43	24.32%	24.32%	23.08%
44	24.47%	24.47%	23.23%
45	24.63%	24.63%	23.39%
46	24.80%	24.80%	23.56%
47	24.97%	24.97%	23.73%
48	25.15%	25.15%	23.91%
49	25.33%	25.33%	24.09%
50	25.51%	25.51%	24.27%
51	25.70%	25.70%	24.46%
52	25.89%	25.89%	24.65%
53	26.09%	26.09%	24.85%
54	26.29%	26.29%	25.05%
55	26.50%	26.50%	25.26%
56	26.71%	26.71%	25.47%
57	26.92%	26.92%	25.68%
58	27.14%	27.14%	25.90%
59+	27.36%	27.36%	26.12%

* 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, 2018 Actuarial Valuation Member Contribution Rates*

SAFETY - TIER 1

BU Entry Age	6 Non- Management	3,14 Non- Management	27,28 Non- Management	7 Management	10 (Sheriff-Coroner) Management	15 (non-sworn) Management#	15 (sworn) Management@	16 (sworn) Management
18	19.12%	19.78%	24.35%	21.96%	26.61%	24.04%	28.79%	28.79%
19	19.23%	19.89%	24.46%	22.07%	26.72%	24.15%	28.90%	28.90%
20	19.34%	20.00%	24.57%	22.18%	26.83%	24.26%	29.01%	29.01%
21	19.45%	20.11%	24.68%	22.29%	26.94%	24.37%	29.12%	29.12%
22	19.56%	20.22%	24.79%	22.40%	27.05%	24.48%	29.23%	29.23%
23	19.68%	20.34%	24.91%	22.52%	27.17%	24.60%	29.35%	29.35%
24	19.80%	20.46%	25.03%	22.64%	27.29%	24.72%	29.47%	29.47%
25	19.92%	20.58%	25.15%	22.76%	27.41%	24.84%	29.59%	29.59%
26	20.04%	20.70%	25.27%	22.88%	27.53%	24.96%	29.71%	29.71%
27	20.16%	20.82%	25.39%	23.00%	27.65%	25.08%	29.83%	29.83%
28	20.28%	20.94%	25.51%	23.12%	27.77%	25.20%	29.95%	29.95%
29	20.40%	21.06%	25.63%	23.24%	27.89%	25.32%	30.07%	30.07%
30	20.52%	21.18%	25.75%	23.36%	28.01%	25.44%	30.19%	30.19%
31	20.64%	21.30%	25.87%	23.48%	28.13%	25.56%	30.31%	30.31%
32	20.76%	21.42%	25.99%	23.60%	28.25%	25.68%	30.43%	30.43%
33	20.88%	21.54%	26.11%	23.72%	28.37%	25.80%	30.55%	30.55%
34	21.00%	21.66%	26.23%	23.84%	28.49%	25.92%	30.67%	30.67%
35	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
36	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
37	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
38	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
39	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
40	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
41	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
42	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
43	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
44	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
45	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
46	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
47	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
48	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
49	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
50	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
51	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
52	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
53	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
54	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
55	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
56	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
57	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
58	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%
59+	21.12%	21.78%	26.35%	23.96%	28.61%	26.04%	30.79%	30.79%

* 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, 2018 Actuarial Valuation Member Contribution Rates

Tier 2								
BU	12	7	98, 99	all others	3, 14	6	all others	all
Entry Age	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Safety	Safety	Safety	Safety
18	8.41%	9.31%	8.26%	9.30%	14.01%	13.01%	14.19%	14.88%
19	8.53%	9.43%	8.38%	9.42%	14.36%	13.36%	14.54%	15.28%
20	8.65%	9.55%	8.50%	9.54%	14.71%	13.71%	14.89%	15.68%
21	8.80%	9.70%	8.65%	9.69%	15.06%	14.06%	15.24%	16.08%
22	8.91%	9.81%	8.76%	9.80%	15.41%	14.41%	15.59%	16.48%
23	9.07%	9.97%	8.92%	9.96%	15.76%	14.76%	15.94%	16.88%
24	9.19%	10.09%	9.04%	10.08%	16.11%	15.11%	16.29%	17.29%
25	9.33%	10.23%	9.18%	10.22%	16.46%	15.46%	16.64%	17.69%
26	9.53%	10.43%	9.38%	10.42%	16.81%	15.81%	16.99%	18.09%
27	9.63%	10.53%	9.48%	10.52%	17.16%	16.16%	17.34%	18.49%
28	9.82%	10.72%	9.67%	10.71%	17.51%	16.51%	17.69%	18.89%
29	9.97%	10.87%	9.82%	10.86%	17.86%	16.86%	18.04%	19.29%
30	10.27%	11.17%	10.12%	11.16%	18.21%	17.21%	18.39%	19.69%
31	10.43%	11.33%	10.28%	11.32%	18.56%	17.56%	18.74%	20.09%
32	10.72%	11.62%	10.57%	11.61%	18.91%	17.91%	19.09%	20.50%
33	10.87%	11.77%	10.72%	11.76%	19.26%	18.26%	19.44%	20.90%
34	11.05%	11.95%	10.90%	11.94%	19.61%	18.61%	19.79%	21.30%
35	11.37%	12.27%	11.22%	12.26%	19.96%	18.96%	20.14%	21.70%
36	11.52%	12.42%	11.37%	12.41%	19.96%	18.96%	20.14%	21.70%
37	11.73%	12.63%	11.58%	12.62%	19.96%	18.96%	20.14%	21.70%
38	11.96%	12.86%	11.81%	12.85%	19.96%	18.96%	20.14%	21.70%
39	12.17%	13.07%	12.02%	13.06%	19.96%	18.96%	20.14%	21.70%
40	12.37%	13.27%	12.22%	13.26%	19.96%	18.96%	20.14%	21.70%
41	12.52%	13.42%	12.37%	13.41%	19.96%	18.96%	20.14%	21.70%
42	12.55%	13.45%	12.40%	13.44%	19.96%	18.96%	20.14%	21.70%
43	12.78%	13.68%	12.63%	13.67%	19.96%	18.96%	20.14%	21.70%
44	13.01%	13.91%	12.86%	13.90%	19.96%	18.96%	20.14%	21.70%
45	13.10%	14.00%	12.95%	13.99%	19.96%	18.96%	20.14%	21.70%
46	13.38%	14.28%	13.23%	14.27%	19.96%	18.96%	20.14%	21.70%
47	13.62%	14.52%	13.47%	14.51%	19.96%	18.96%	20.14%	21.70%
48	13.72%	14.62%	13.57%	14.61%	19.96%	18.96%	20.14%	21.70%
49	14.00%	14.90%	13.85%	14.89%	19.96%	18.96%	20.14%	21.70%
50	14.04%	14.94%	13.89%	14.93%	19.96%	18.96%	20.14%	21.70%
51	14.25%	15.15%	14.10%	15.14%	19.96%	18.96%	20.14%	21.70%
52	14.31%	15.21%	14.16%	15.20%	19.96%	18.96%	20.14%	21.70%
53	14.51%	15.41%	14.36%	15.40%	19.96%	18.96%	20.14%	21.70%
54	14.70%	15.60%	14.55%	15.59%	19.96%	18.96%	20.14%	21.70%
55	15.00%	15.90%	14.85%	15.89%	19.96%	18.96%	20.14%	21.70%
56	15.06%	15.96%	14.91%	15.95%	19.96%	18.96%	20.14%	21.70%
57	15.08%	15.98%	14.93%	15.97%	19.96%	18.96%	20.14%	21.70%
58	15.10%	16.00%	14.95%	15.99%	19.96%	18.96%	20.14%	21.70%
59	15.12%	16.02%	14.97%	16.01%	19.96%	18.96%	20.14%	21.70%
60	15.14%	16.04%	14.99%	16.03%	19.96%	18.96%	20.14%	21.70%
61	15.16%	16.06%	15.01%	16.05%	19.96%	18.96%	20.14%	21.70%
62+	15.18%	16.08%	15.03%	16.07%	19.96%	18.96%	20.14%	21.70%

January 1, 2018 Actuarial Valuation Member Contribution Rates

BU Entry Age	Tier 3										
	all other Miscellaneous	17,18,19,20,24,26,27 Miscellaneous	12 Miscellaneous	25 Miscellaneous	98, 99 Miscellaneous	7 LAFCO Miscellaneous	3, 14 Safety	6 Safety	all other Safety	8, 9 Probation	31, 32 Probation
18	7.68%	7.77%	6.79%	6.78%	6.64%	7.69%	12.81%	11.81%	12.99%	9.64%	9.59%
19	7.93%	8.02%	7.04%	7.03%	6.89%	7.94%	13.31%	12.31%	13.49%	9.89%	9.84%
20	7.93%	8.02%	7.04%	7.03%	6.89%	7.94%	13.56%	12.56%	13.74%	10.14%	10.09%
21	8.18%	8.27%	7.29%	7.28%	7.14%	8.19%	13.81%	12.81%	13.99%	10.14%	10.09%
22	8.18%	8.27%	7.29%	7.28%	7.14%	8.19%	14.06%	13.06%	14.24%	10.39%	10.34%
23	8.43%	8.52%	7.54%	7.53%	7.39%	8.44%	14.56%	13.56%	14.74%	10.64%	10.59%
24	8.43%	8.52%	7.54%	7.53%	7.39%	8.44%	14.81%	13.81%	14.99%	10.89%	10.84%
25	8.68%	8.77%	7.79%	7.78%	7.64%	8.69%	15.06%	14.06%	15.24%	11.14%	11.09%
26	8.93%	9.02%	8.04%	8.03%	7.89%	8.94%	15.56%	14.56%	15.74%	11.39%	11.34%
27	8.93%	9.02%	8.04%	8.03%	7.89%	8.94%	15.81%	14.81%	15.99%	11.64%	11.59%
28	9.18%	9.27%	8.29%	8.28%	8.14%	9.19%	16.06%	15.06%	16.24%	12.14%	12.09%
29	9.43%	9.52%	8.54%	8.53%	8.39%	9.44%	16.56%	15.56%	16.74%	12.39%	12.34%
30	9.43%	9.52%	8.54%	8.53%	8.39%	9.44%	16.81%	15.81%	16.99%	12.64%	12.59%
31	9.68%	9.77%	8.79%	8.78%	8.64%	9.69%	17.06%	16.06%	17.24%	13.14%	13.09%
32	9.93%	10.02%	9.04%	9.03%	8.89%	9.94%	17.56%	16.56%	17.74%	13.39%	13.34%
33	10.18%	10.27%	9.29%	9.28%	9.14%	10.19%	17.81%	16.81%	17.99%	13.64%	13.59%
34	10.43%	10.52%	9.54%	9.53%	9.39%	10.44%	18.06%	17.06%	18.24%	14.14%	14.09%
35	10.43%	10.52%	9.54%	9.53%	9.39%	10.44%	18.56%	17.56%	18.74%	14.39%	14.34%
36	10.68%	10.77%	9.79%	9.78%	9.64%	10.69%	18.56%	17.56%	18.74%	14.89%	14.84%
37	10.93%	11.02%	10.04%	10.03%	9.89%	10.94%	18.56%	17.56%	18.74%	15.14%	15.09%
38	11.18%	11.27%	10.29%	10.28%	10.14%	11.19%	18.56%	17.56%	18.74%	15.39%	15.34%
39	11.43%	11.52%	10.54%	10.53%	10.39%	11.44%	18.56%	17.56%	18.74%	15.64%	15.59%
40	11.68%	11.77%	10.79%	10.78%	10.64%	11.69%	18.56%	17.56%	18.74%	15.89%	15.84%
41	11.93%	12.02%	11.04%	11.03%	10.89%	11.94%	18.56%	17.56%	18.74%	16.14%	16.09%
42	11.93%	12.02%	11.04%	11.03%	10.89%	11.94%	18.56%	17.56%	18.74%	16.39%	16.34%
43	12.18%	12.27%	11.29%	11.28%	11.14%	12.19%	18.56%	17.56%	18.74%	16.64%	16.59%
44	12.43%	12.52%	11.54%	11.53%	11.39%	12.44%	18.56%	17.56%	18.74%	16.89%	16.84%
45	12.68%	12.77%	11.79%	11.78%	11.64%	12.69%	18.56%	17.56%	18.74%	17.14%	17.09%
46	12.93%	13.02%	12.04%	12.03%	11.89%	12.94%	18.56%	17.56%	18.74%	17.39%	17.34%
47	13.18%	13.27%	12.29%	12.28%	12.14%	13.19%	18.56%	17.56%	18.74%	17.64%	17.59%
48	13.43%	13.52%	12.54%	12.53%	12.39%	13.44%	18.56%	17.56%	18.74%	17.89%	17.84%
49	13.68%	13.77%	12.79%	12.78%	12.64%	13.69%	18.56%	17.56%	18.74%	17.89%	17.84%
50	13.93%	14.02%	13.04%	13.03%	12.89%	13.94%	18.56%	17.56%	18.74%	18.14%	18.09%
51	14.18%	14.27%	13.29%	13.28%	13.14%	14.19%	18.56%	17.56%	18.74%	18.39%	18.34%
52	14.43%	14.52%	13.54%	13.53%	13.39%	14.44%	18.56%	17.56%	18.74%	18.39%	18.34%
53	14.68%	14.77%	13.79%	13.78%	13.64%	14.69%	18.56%	17.56%	18.74%	18.64%	18.59%
54	14.93%	15.02%	14.04%	14.03%	13.89%	14.94%	18.56%	17.56%	18.74%	18.64%	18.59%
55	15.18%	15.27%	14.29%	14.28%	14.14%	15.19%	18.56%	17.56%	18.74%	18.89%	18.84%
56	15.43%	15.52%	14.54%	14.53%	14.39%	15.44%	18.56%	17.56%	18.74%	19.14%	19.09%
57	15.43%	15.52%	14.54%	14.53%	14.39%	15.44%	18.56%	17.56%	18.74%	19.14%	19.09%
58	15.43%	15.52%	14.54%	14.53%	14.39%	15.44%	18.56%	17.56%	18.74%	19.39%	19.34%
59	15.43%	15.52%	14.54%	14.53%	14.39%	15.44%	18.56%	17.56%	18.74%	19.64%	19.59%
60	15.43%	15.52%	14.54%	14.53%	14.39%	15.44%	18.56%	17.56%	18.74%	19.64%	19.59%
61	15.43%	15.52%	14.54%	14.53%	14.39%	15.44%	18.56%	17.56%	18.74%	19.64%	19.59%
62+	15.43%	15.52%	14.54%	14.53%	14.39%	15.44%	18.56%	17.56%	18.74%	19.64%	19.59%

Summary of Benefits by Collective Bargaining Unit As of January 1, 2018

Tier 1

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 Other Court	2% @ 55	One year	80%
18	Miscellaneous Other Court	2% @ 55	One year	80%
20	Miscellaneous Other Court	2% @ 55	One year	80%
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%
8	Probation Management	3% @ 55	One year	90%
9	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	Non Sworn Safety Non Management	3% @ 55	One year	90%
7	Non Sworn Safety Management	3% @ 55	One year	90%
10	Sworn 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	Sworn Safety Management	3% @ 50	One year	90%

Summary of Benefits by Collective Bargaining Unit As of January 1, 2018

Collective Bargaining Unit	Valuation Group	Benefit % at age	FAC Period	Benefit Maximum
Tier 2	Miscellaneous Non-Court	2% @ 60	Three year	90%
Tier 2	Non Sworn Safety	2.7% @ 55	Three year	90%
Tier 2	Sworn Safety	3.0% @ 55	Three year	90%
Tier 2	DAIA	3.0% @ 55	Three year	90%
Tier 3	Miscellaneous	2% @ 62	Three year	N/A*
Tier 3	Safety	2.7% @ 57	Three year	N/A*
Tier 3	Probation	2.7% @ 57	Three year	N/A*

* No benefit maximum but pensionable compensation is capped at \$121,388 for 2018 and annually adjusted based on inflation.

Draft

SECTION G

DEFINITIONS OF TECHNICAL TERMS

Draft

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 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 that 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 SLOCPT 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 SLOCPT 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 an unfunded actuarial accrued liability. A UAL arises each time new benefits are added and each time an actuarial loss occurs.

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2018 Annual Actuarial Valuation

Supplementary Exhibits

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Date: June 14, 2018

To: Carl Nelson, Executive Secretary, San Luis Obispo County Pension Trust

Re: **Supplemental Exhibits for the January 1, 2018 Actuarial Valuation**

Attached please find supplemental data exhibits, which relate to the January 1, 2018 actuarial valuation. These exhibits previously have been included in the actuarial valuation report. In 2017 the report was redesigned, with selected exhibits moving to this supplemental report.

Summary of Active Members by Valuation Group in the January 1, 2018 Actuarial Valuation

Miscellaneous Members

Probation and Safety Members

(Formerly pages 26 and 27 in the 2017 valuation report)

Average Pay by Years of Service

Miscellaneous Members

Probation Members

Safety Members

(Formerly pages 37-39 in the 2017 valuation report)

Elements of Normal Cost

Miscellaneous Tier 1 Members

Miscellaneous Tier 2 Members

Miscellaneous Tier 3 Members

Probation & Safety Tier 1 Members

Probation & Safety Tier 2 Members

Probation & Safety Tier 3 Members

(New tables since the 2017 valuation)

Respectfully submitted,



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

Summary of Active Members by Valuation Group In the January 1, 2018 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					
1/1/2018	31	\$2,374,445	\$76,595	39.0	5.7
1/1/2017	26	\$1,926,600	\$74,100	44.4	8.4
2 Management Non-Court - Units # 4, 7, 8, 9, 10, 11, 12, 17, 99					
1/1/2018	462	\$46,064,522	\$99,707	48.4	11.6
1/1/2017	443	\$43,082,356	\$97,251	48.6	11.8
3 Management Court - Unit # 18					
1/1/2018	10	\$893,069	\$89,307	49.1	8.1
1/1/2017	11	\$972,442	\$88,404	50.8	9.6
4 Management Court - Units # 24, 25, 26, 27					
1/1/2018	24	\$2,652,249	\$110,510	52.6	14.4
1/1/2017	28	\$3,227,890	\$115,282	53.5	15.3
5 SLOCEA Non-Court - Units # 1, 2, 5, 13, 31, 98					
1/1/2018	1,733	\$107,196,331	\$61,856	45.2	8.3
1/1/2017	1,685	\$97,631,035	\$57,941	45.7	8.8
6 SLOCEA Court - Unit # 19					
1/1/2018	9	\$652,662	\$72,518	51.2	19.7
1/1/2017	11	\$779,750	\$70,886	50.5	17.0
7 SLOCEA Court - Unit # 20					
1/1/2018	71	\$3,958,656	\$55,756	46.8	11.0
1/1/2017	77	\$4,203,430	\$54,590	45.9	10.6

Summary of Active Members by Valuation Group In the January 1, 2018 Actuarial Valuation

			<u>Averages</u>		
	<u>No.</u>	<u>Total Payroll</u>	<u>Annual Compensation</u>	<u>Age</u>	<u>Service</u>
Probation Members					
8 Probation Management - Units # 8, 9					
1/1/2018	6	\$800,238	\$133,373	51.8	22.5
1/1/2017	6	\$752,752	\$125,459	50.8	21.5
9 Probation Non-Management - Units # 31, 32					
1/1/2018	109	\$7,780,448	\$71,380	38.8	8.9
1/1/2017	110	\$7,530,078	\$68,455	39.0	8.6
Safety Members					
10 Safety Management - Units # 7, 10, 15, 16					
1/1/2018	10	\$1,501,906	\$150,191	52.2	17.7
1/1/2017	9	\$1,311,676	\$145,742	51.7	16.7
11 Safety Non-Management - Units # 3, 6, 14, 27, 28					
1/1/2018	257	\$22,973,558	\$89,391	40.3	10.3
1/1/2017	269	\$23,601,739	\$87,739	40.7	11.0

Average Pay by Years of Service

Miscellaneous Members

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	55	119	174	\$9,627,966	\$55,333
1	71	169	240	14,153,110	58,971
2	72	150	222	13,734,573	61,867
3	59	134	193	12,548,141	65,016
4	37	110	147	9,445,654	64,256
5	15	81	96	6,712,243	69,919
6	35	44	79	5,609,906	71,011
7	17	56	73	5,356,790	73,381
8	13	29	42	3,180,008	75,714
9	27	55	82	6,415,386	78,236
10	26	68	94	7,091,828	75,445
11	23	77	100	7,036,593	70,366
12	38	63	101	7,421,606	73,481
13	20	37	57	4,092,764	71,803
14	21	37	58	4,490,158	77,417
15 & Up	211	371	582	46,875,208	80,542
Totals	740	1,600	2,340	\$163,791,934	\$69,997

Average Pay by Years of Service

Probation Members

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	2	5	7	\$365,248	\$52,178
1	10	5	15	787,197	52,480
2	2	3	5	296,733	59,347
3	4	3	7	431,954	61,708
4	2	4	6	410,280	68,380
5	3	4	7	506,106	72,301
6	2	4	6	474,427	79,071
7	2	0	2	151,278	75,639
8	1	2	3	221,291	73,764
9	2	2	4	294,819	73,705
10	3	4	7	546,208	78,030
11	2	0	2	150,467	75,234
12	3	1	4	316,742	79,186
13	3	1	4	317,512	79,378
14	0	2	2	177,736	88,868
15 & Up	18	16	34	3,132,688	92,138
Totals	59	56	115	\$8,580,686	\$74,615

Average Pay by Years of Service

Safety Members

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	12	1	13	\$962,083	\$74,006
1	13	1	14	1,115,421	79,673
2	12	7	19	1,401,234	73,749
3	18	1	19	1,649,398	86,810
4	16	3	19	1,707,306	89,858
5	11	3	14	1,294,530	92,466
6	14	5	19	1,796,122	94,533
7	2	0	2	301,746	150,873
8	2	1	3	260,270	86,757
9	6	0	6	546,250	91,042
10	19	0	19	1,832,563	96,451
11	11	2	13	1,162,949	89,458
12	5	3	8	772,117	96,515
13	8	0	8	728,250	91,031
14	5	0	5	469,248	93,850
15 & Up	75	11	86	8,475,977	98,558
Totals	229	38	267	\$24,475,464	\$91,668

Elements of Normal Cost

Miscellaneous Tier 1 Members

	Other	Management			SLOCEA				TOTAL MISC.	
	BU #21-22	Non Court	Court BU #18	Court BU #24-27	Total Mgmt	Non Court	Court BU #19	Court BU #20		Total SLOCEA
Total Normal Cost	23.64%	24.27%	25.82%	25.94%	24.41%	22.49%	18.07%	20.78%	22.35%	23.11%
				Less						
Employee Contribution Rate	19.02%	19.33%	18.39%	16.60%	19.11%	19.09%	14.61%	15.44%	18.84%	18.94%
				Equals						
County Normal Cost	4.62%	4.94%	7.43%	9.34%	5.30%	3.40%	3.46%	5.34%	3.51%	4.17%

Elements of Normal Cost

Miscellaneous Tier 2 Members

	Other	Management			SLOCEA				TOTAL MISC.	
	BU #21-22	Non Court	Court BU #18	Court BU #24-27	Total Mgmt	Non Court	Court BU #19	Court BU #20		Total SLOCEA
Total Normal Cost	16.33%	18.87%	0.00%	0.00%	18.87%	18.33%	0.00%	0.00%	18.33%	18.45%
Less										
Employee Contribution Rate	11.42%	12.01%	0.00%	0.00%	12.01%	12.41%	0.00%	0.00%	12.41%	12.25%
Equals										
County Normal Cost	4.91%	6.86%	0.00%	0.00%	6.86%	5.92%	0.00%	0.00%	5.92%	6.20%

Elements of Normal Cost

Miscellaneous Tier 3 Members

	Other	Management			SLOCEA				TOTAL MISC.	
	BU #21-22	Non Court	Court BU #18	Court BU #24-27	Total Mgmt	Non Court	Court BU #19	Court BU #20		Total SLOCEA
Total Normal Cost	11.89%	16.77%	19.19%	16.23%	16.80%	15.68%	0.00%	15.15%	15.68%	15.82%
				Less						
Employee Contribution Rate	9.35%	11.43%	12.62%	11.03%	11.44%	11.06%	0.00%	10.95%	11.06%	11.10%
				Equals						
County Normal Cost	2.54%	5.34%	6.57%	5.20%	5.36%	4.62%	0.00%	4.20%	4.62%	4.72%

Elements of Normal Cost

Probation & Safety Tier 1 Members

	Probation			Management		Safety		Total Safety	GRAND TOTAL
	Mgmt	Non Mgmt	Total Probation	Sworn	Non-Sworn	Sworn	Non-Sworn		
Total Normal Cost	25.76%	24.51%	24.66%	33.82%	22.57%	28.20%	26.45%	27.63%	23.80%
	Less								
Employee Contribution Rate	23.05%	21.55%	21.73%	29.39%	24.77%	25.26%	20.71%	23.40%	19.69%
	Equals								
County Normal Cost	2.71%	2.96%	2.93%	4.43%	-2.20%	2.94%	5.74%	4.23%	4.11%

Elements of Normal Cost

Probation & Safety Tier 2 Members

	Probation			Safety				GRAND TOTAL	
	Mgmt	Non Mgmt	Total Probation	Management		Non-Mgmt			Total Safety
				Sworn	Non-Sworn	Sworn	Non-Sworn		
Total Normal Cost	0.00%	0.00%	0.00%	38.09%	0.00%	27.26%	25.88%	27.16%	20.15%
				Less					
Employee Contribution Rate	0.00%	0.00%	0.00%	18.09%	0.00%	18.31%	17.55%	18.01%	13.37%
				Equals					
County Normal Cost	0.00%	0.00%	0.00%	20.00%	0.00%	8.95%	8.33%	9.15%	6.78%

Elements of Normal Cost

Probation & Safety Tier 3 Members

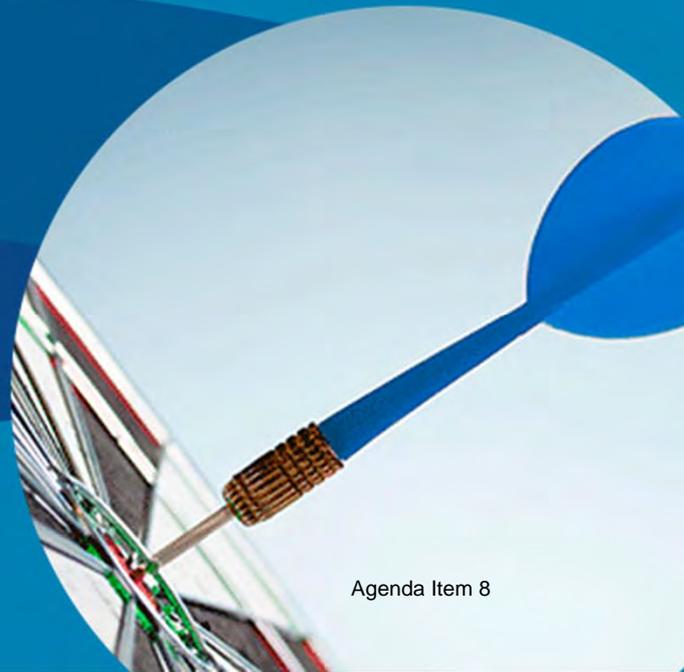
	Probation			Safety				GRAND TOTAL	
	Mgmt	Non Mgmt	Total Probation	Management		Non-Mgmt			Total Safety
				Sworn	Non-Sworn	Sworn	Non-Sworn		
Total Normal Cost	0.00%	18.55%	18.55%	36.18%	0.00%	26.25%	23.57%	24.81%	16.68%
				Less					
Employee Contribution Rate	0.00%	12.57%	12.57%	18.74%	0.00%	16.91%	16.56%	16.73%	11.62%
				Equals					
County Normal Cost	0.00%	5.98%	5.98%	17.44%	0.00%	9.34%	7.01%	8.08%	5.06%

**2018 Annual Actuarial Valuation
Presentation**

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San Luis Obispo County Pension Trust

Actuarial Valuation As of January 1, 2018



Actuarial Valuation

Rate Increase

- Rate increase of 2.51% recommended
 - The Actuarially Determined Contribution (ADC) is 42.19%, while the rate being charged is 39.68%
 - Charged rate includes 2.38% total increase recommended as of prior valuation
- The rate increase comes from two primary sources
 - First, from assumption changes (1.24% of pay)
 - Second, from experience loss (1.27% of pay)

Actuarial Valuation

Development of the ADC and Recommended Rate Increase

	Jan 1, 2018	Jan 1, 2017	Change
1. Total Normal Cost	21.15%	21.08%	0.07%
2. Less Employee Rate	16.41%	15.76%	0.65%
3. County Normal Cost (1.-2.)	4.74%	5.32%	(0.58)%
4. Amortization Payment	21.04%	19.24%	1.80%
5. ADC (3.+4.)	25.78%	24.56%	1.22%
6. Total Required Contribution (2.+5.)	42.19%	40.32%	1.87%
7. Total Charged Rate (actual)	39.68%	38.39%	1.29%
8. Difference in Rate (6.-7.)	2.51%	1.93%	
9. Recommended Rate Increase	2.51%	1.93%	

Actuarial Valuation

Development of the Charged Rate

Category	Dollar Amounts	Rates as a Percent of Payroll
Employee Contributions	\$30,467,232	15.48%
Employer Appropriations	\$42,340,904	21.82%
Total	\$73,424,335	37.30%
Increase at 1/1/2018	\$4,684,984	2.38%
Grand Total Contributions	\$78,109,320	39.68%
Total Reported Payroll	\$196,848,084	

Actuarial Valuation

Charged Rate Summary

- The current charged rate is not adequate to meet the Total Actuarially Determined Contribution
- The normal cost will continue to decrease with more Tier 3 members
- The total charged rate will also continue to decrease as more Tier 3 members enter the plan with their lower employee contribution rates
- Losses are still being smoothed into the actuarial value of assets, thus an upward rate pressure still exists
 - Last year of recognition of the 2008 asset loss

Actuarial Valuation

Assumption Changes

- Rate of return decreased from 7.125% to 7.00%
- The rate of salary increases decreased by 0.125%
- Payroll growth decreased by 0.375%, and planned to decrease by 0.25% next valuation
- The mortality projection scale was updated to the MP-2017 projection scale

Membership

Summary

2018	Tier 1	Tier 2	Tier 3	Total
Miscellaneous	1,174	262	904	2,340
Probation	80	0	35	115
Safety	151	52	64	267
Total	1,405	314	1,003	2,722

2017	Tier 1	Tier 2	Tier 3	Total
Miscellaneous	1,303	264	714	2,281
Probation	84	0	32	116
Safety	175	51	52	278
Total	1,562	315	798	2,675

Membership

Average Age and Service

Average Age	1/1/2018	1/1/2017
Miscellaneous Members	45.9	46.4
Probation Members	39.5	39.6
Safety Members	40.8	41.1
All Active Members	45.1	45.5

Average Service	1/1/2018	1/1/2017
Miscellaneous Members	9.1	9.6
Probation Members	9.6	9.3
Safety Members	10.6	11.2
All Active Members	9.3	9.7

- Average pay for all **continuing** active members increased 7.97%

Membership

Reconciliation

- The year started with 2,675 actives
 - 312 new hires (into Tier 3)
 - 10 returned to work
 - 275 actives exited
- Implication
 - Tier 3 members pay a lesser amount
 - Fixed cost of UAL remains the same

Assets

Returns

- Market value return was 14.92%
 - Fair market value increased from \$1,181 million to \$1,340 million
 - The amount of investment income “expected” was \$90 million
 - The actual amount of investment income received was \$175 million
 - The \$85 million gain is to be phased in over 5 years
- The actuarial value return was 5.99%
 - This is less than the assumption and produces a loss in this year

Assets

Gains and Losses

- The portion of each year's investment gains and losses being recognized is:
 - Current \$ 17.1
 - 2016 \$ (3.8)
 - 2015 \$ (21.0)
 - 2014 \$ (6.7)
 - 2013 \$ 10.2
 - 2008 \$ (9.9)
 - Total recognized for this year \$(14.3) million
- Total yet to be recognized
 - *the difference between the actuarial and market value*
 - \$ 11.7 million in deferred gains
- Actuarial value of assets is 99% of market value

Results

Tiers and Class-Normal Costs

Class/Tier	Tier 1	Tier 2	Tier 3	Total
Misc.	23.11%	18.45%	15.82%	20.15%
Probation	24.66%	N/A	18.55%	23.24%
Safety	27.63%	27.16%	24.81%	26.95%
Blended	23.80%	20.15%	16.68%	21.15%

Results

Liabilities

	Jan 1, 2018	Jan 1, 2017	Change
Accrued Liability	\$1.95B	\$1.83B	\$120M
Unfunded Accrued Liability	\$617M	\$559M	\$58M
Actuarial Value of Assets (AVA)	\$1.33B	\$1.27B	\$60M
Funded Ratio (AVA Basis)	68.3%	69.4%	(1.1%)
Market Value of Assets (MVA)	\$1.34B	\$1.18B	\$160M
Funded Ratio (MVA Basis)	68.9%	64.6%	4.3%

Results

Attribution of Change in Determined Contribution

	Increase/ (Decrease)	Rate
Actuarially Determined Contribution at 1/1/2017		40.32%
Expected at 1/1/2018	0.14%	40.47%
Expected at 1/1/2018 (with actual payroll)	(0.55%)	39.92%
Experience items during 2017:		
Decrease in normal cost	(0.40)%	39.52%
Due to investment experience	0.48%	40.00%
Due to pay increases	0.48%	40.48%
Due to retirement experience	0.36%	40.84%
Due to mortality experience	0.16%	41.00%
Due to lower actual COLA	(0.19%)	40.81%
Due to other factors	0.14%	40.95%
1/1/2018 after assumption change	1.24%	42.19%
Actuarially Determined Contribution Rate at 1/1/2018		42.19%

Results

Components of Experience Gains/(Loss)

Gain/(Loss) due to:	In millions*
Compensation increases	(\$14.40)
Investment experience	(14.31)
Accelerated recognition of 2008 loss	0
Retirement incidence	(10.90)
Termination experience	1.00
Active mortality experience	(0.02)
Disability experience	(0.19)
Retiree & beneficiary mortality experience and misc. retiree data changes	(4.79)
New members	(1.01)
COLAs	5.66
Other data changes and misc. factors	<u>(4.02)</u>
Total Experience Gain/(Loss)	(\$43.01)

**Numbers may not add due to rounding*

Results

Change in Funded Ratio

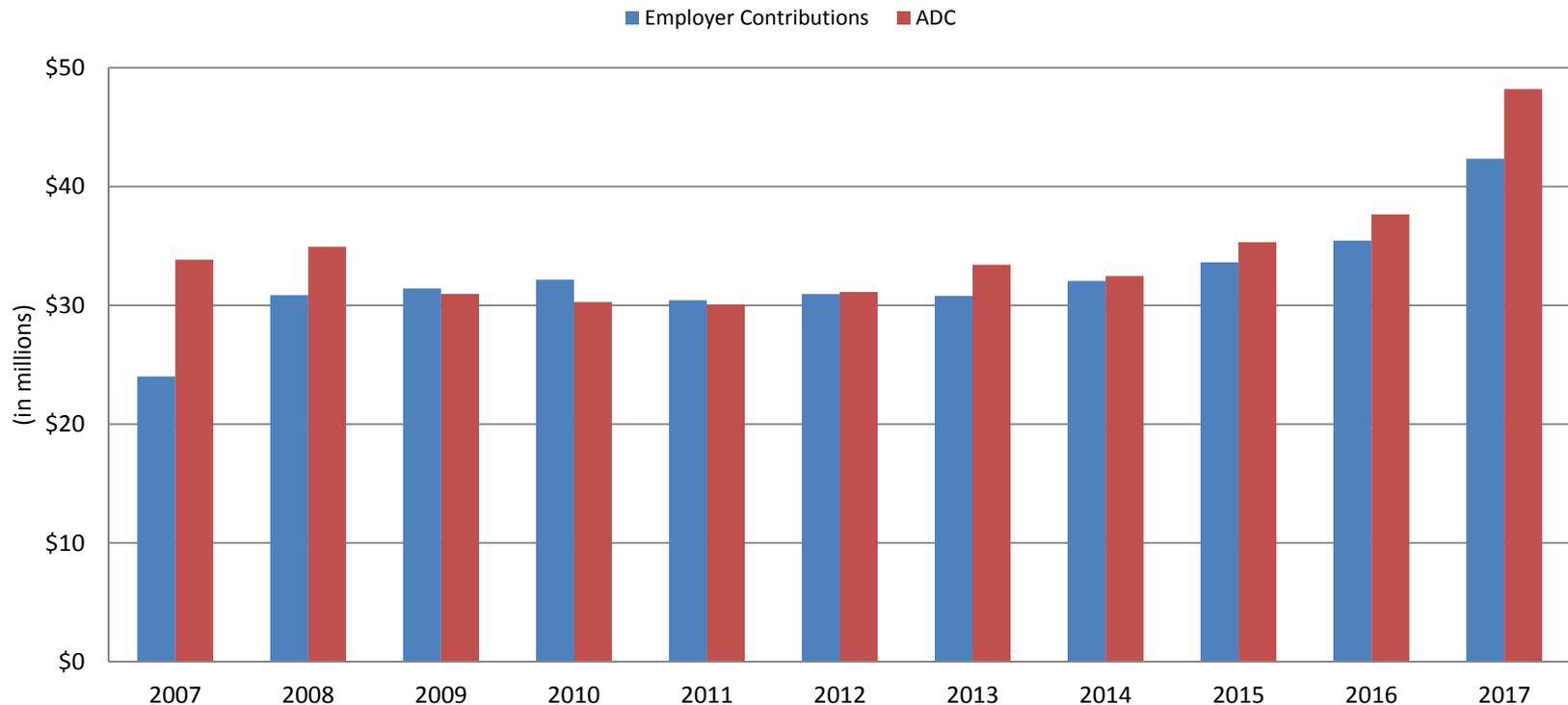
	Increase/ (Decrease)	Ratio
Funded Ratio at 1/1/2017		69.40%
Funded Ratio expected at 1/1/2018	0.96%	70.36%
Change in Funded Ratio due to:		
Investment experience	(0.74%)	69.62%
Pay increases	(0.52%)	69.10%
Retirement experience	(0.40%)	68.70%
Mortality experience	(0.17%)	68.53%
Lower actual COLA	0.21%	68.74%
Other factors	(0.15)%	68.59%
Funded Ratio at 1/1/2018 with New Assumptions	(0.30)%	68.29%
Actual Funded Ratio at 1/1/2018		68.29%

Historical Perspective

Historical Perspective

How Has The Trust Done In Meeting Its Long Term Obligations?

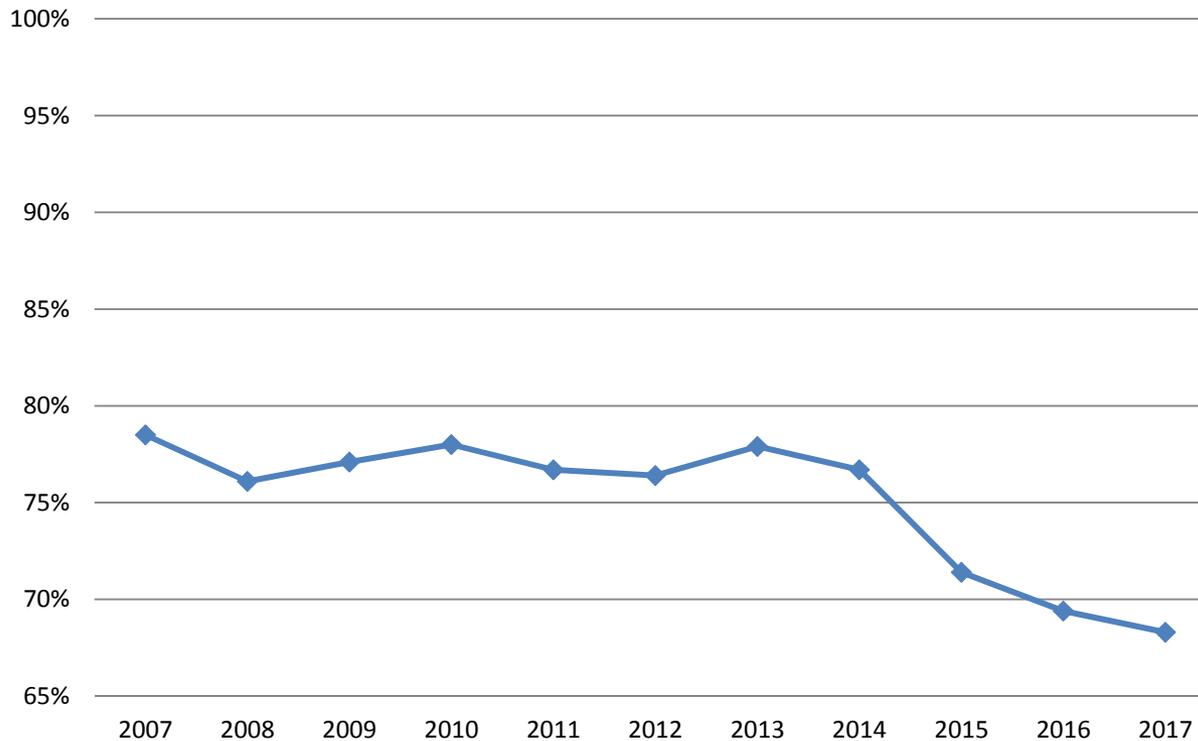
Actuarially Determined Contribution vs Actual Contribution Made



Historical Perspective

How Well Are The Assets Of The Trust Covering The Accrued Liabilities?

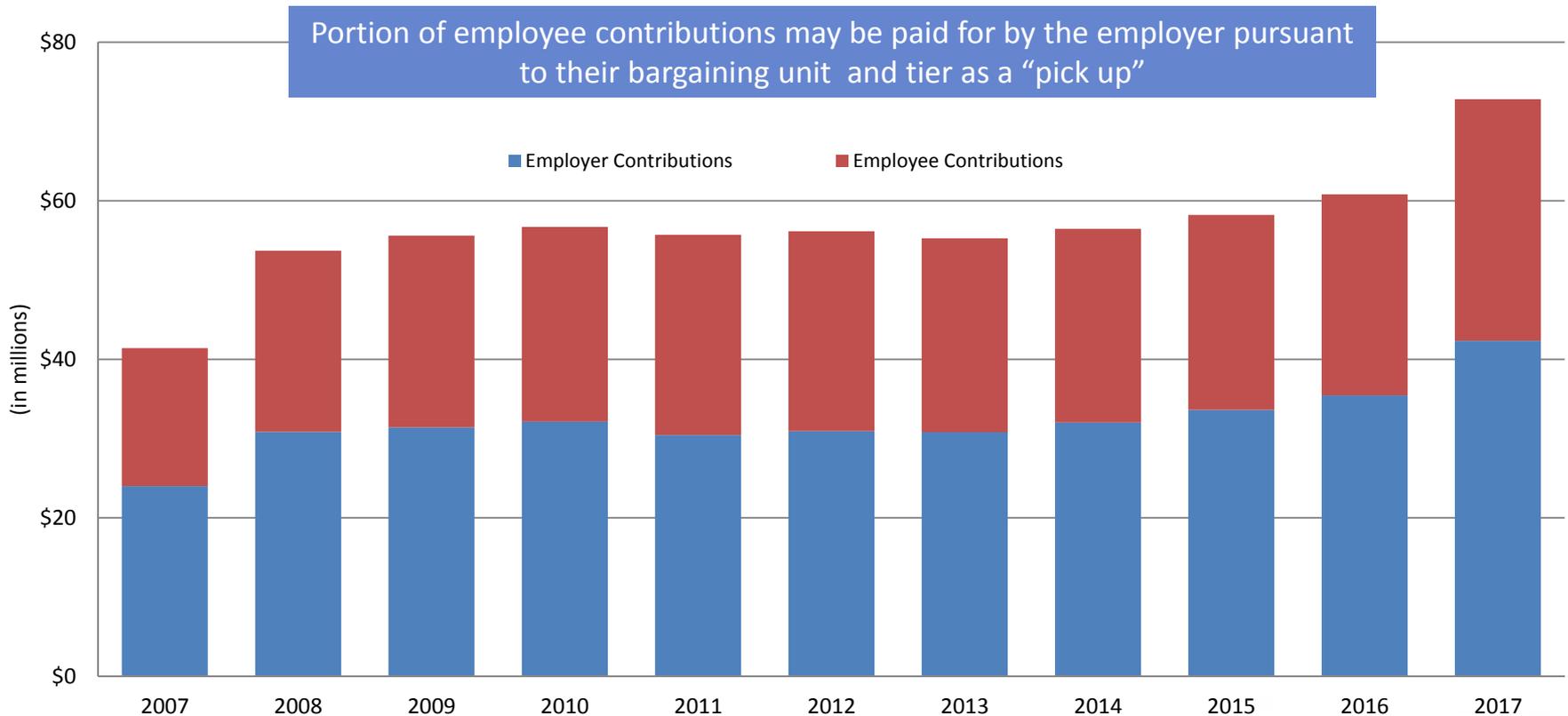
A year by year summary of the funded ratio



Historical Perspective

How Has The Cost Of The Plan Been Shared?

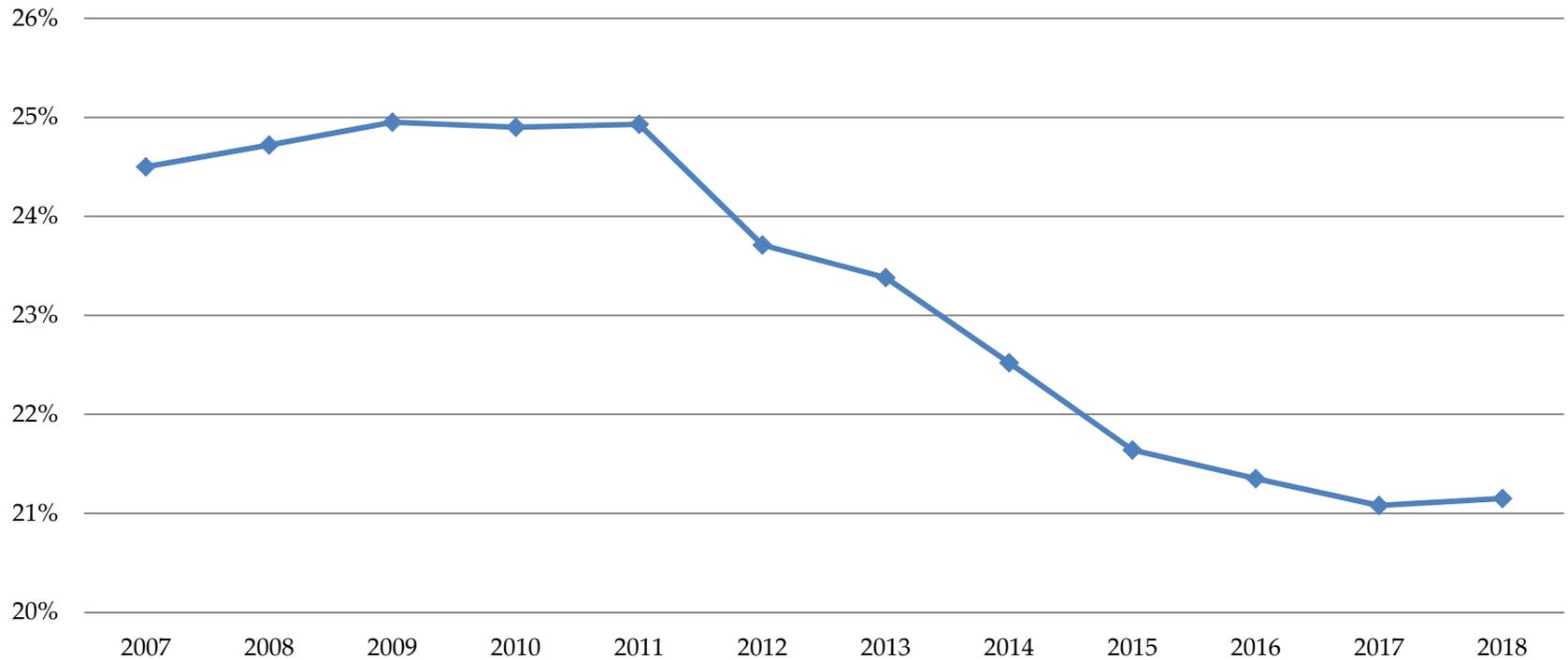
Member Contributions and Employer Contributions



Historical Perspective

Has The Plan's Normal Cost Been Stabilized?

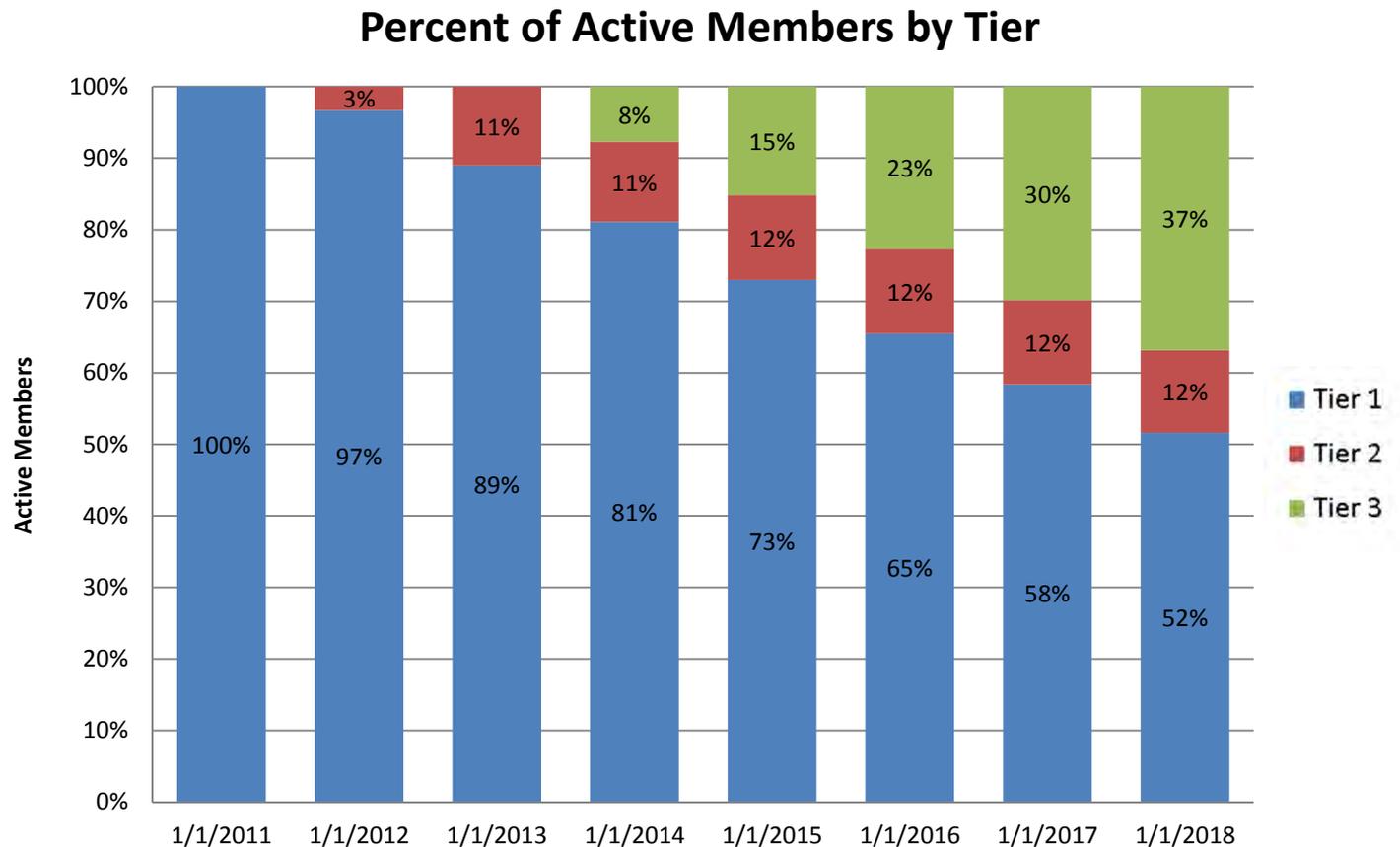
Year by year total normal cost as a percent of payroll*



*Total blended normal cost of 21.15% as of January 1, 2018 including Tier 2 and Tier 3 members.

Historical Perspective

Active Members By Tier

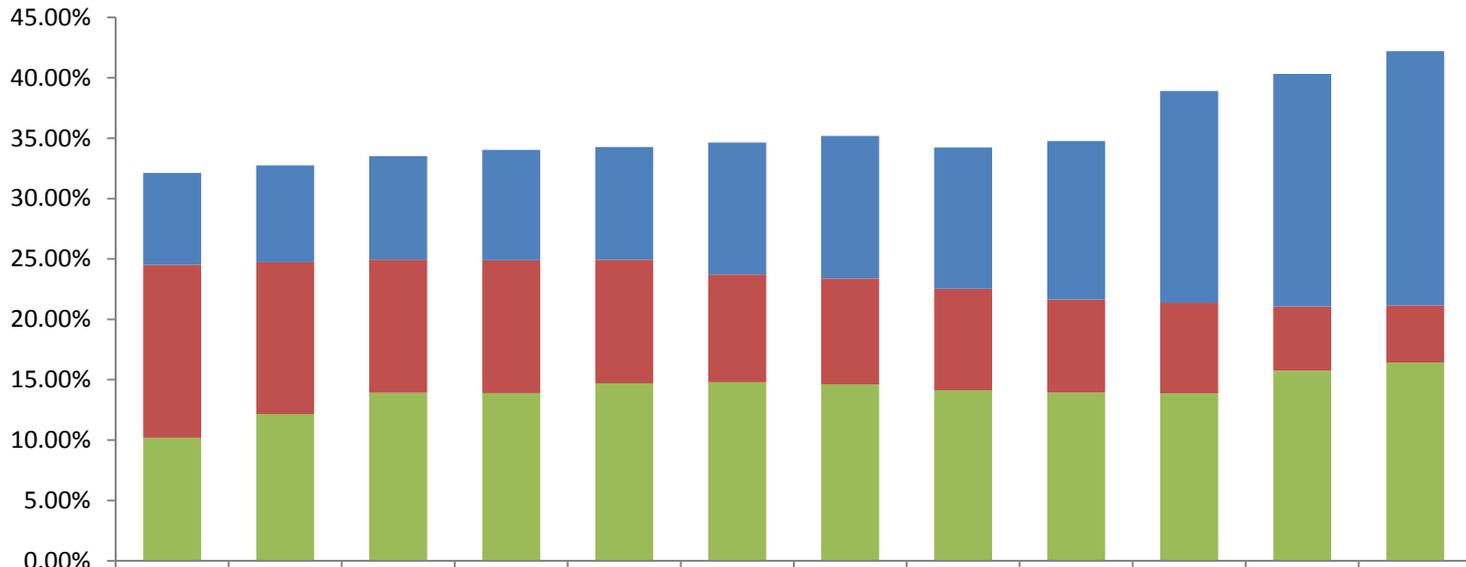


Historical Perspective

How Are County Costs Split Between Current Costs And Amortization Of Past Costs?

Normal Cost and UAAL Amortization

■ Employee Normal Cost ■ Employer Normal Cost ■ UAAL Amortization



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
UAAL Amortization	7.62%	8.02%	8.55%	9.13%	9.34%	10.92%	11.80%	11.71%	13.13%	17.55%	19.24%	21.04%
Employer Normal Cost	14.30%	12.57%	11.04%	11.01%	10.22%	8.92%	8.77%	8.40%	7.71%	7.47%	5.32%	4.74%
Employee Normal Cost	10.20%	12.15%	13.91%	13.89%	14.71%	14.79%	14.61%	14.12%	13.93%	13.88%	15.76%	16.41%

Historical Perspective

Asset Volatility Ratio

- Measures impact of asset volatility on contribution rates
- Higher ratios mean more significant impact on rates from asset volatility

	2008	2013	2018
Market Value of Assets	\$832,236	\$1,013,436	\$1,340,471
Covered Payroll	\$162,436	\$164,299	\$196,848
Asset Volatility = Assets / Payroll	5.12	6.17	6.81
Increase in Actuarially Determined Contribution Resulting From a 10% Asset Loss	0.91%	1.10%	1.21%

Projections

Projections

- Results based on a closed 22 year amortization period
- Total contribution rate drops significantly once the UAL is fully paid off
- Results based on level percent of pay financing – means the contribution will remain level as a percent of pay and therefore, will increase each year as a dollar amount.

2018 Projection—With All Future Members In Tier 3

San Luis Obispo County Pension Trust

Projection Based on January 1, 2018 Actuarial Valuation with Tier 3 (AB 340)

7.00% Investment Rate of Return Assumption and Payroll Growth Assumption of 3.00% in 2018 and 2.75% Thereafter - 7.00% Actual Returns

Valuation as of January 1,	Input Market Return for Past Fiscal Year	Total Determined Contribution Rate	Compensation at Valuation	Total Determined Contribution (3)x(4)	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL (6)-(7)	Funded Ratio (7)/(6)	Total Normal Cost Rate	Market Value of Assets (MVA)	Funded Ratio Using MVA (11)/(6)	Percent Tier 3 Members
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2018	14.922%	42.19%	\$ 197	\$ 83	\$ 1,946	\$ 1,329	\$ 617	68.3%	21.15%	\$ 1,340	68.9%	36.8%
2019	7.00%	42.80%	202	86	2,026	1,399	627	69.0%	20.54%	1,421	70.2%	42.3%
2020	7.00%	42.62%	207	88	2,105	1,475	631	70.0%	20.09%	1,505	71.5%	47.1%
2021	7.00%	41.71%	212	88	2,184	1,573	611	72.0%	19.67%	1,590	72.8%	51.3%
2022	7.00%	40.69%	217	88	2,262	1,675	587	74.0%	19.24%	1,675	74.0%	55.8%
2023	7.00%	40.42%	222	90	2,339	1,759	580	75.2%	18.87%	1,759	75.2%	59.7%
2024	7.00%	40.18%	227	91	2,415	1,843	571	76.3%	18.54%	1,843	76.3%	63.3%
2025	7.00%	39.98%	233	93	2,489	1,928	561	77.5%	18.25%	1,928	77.5%	66.7%
2026	7.00%	39.80%	238	95	2,561	2,014	547	78.6%	17.98%	2,014	78.6%	69.8%
2027	7.00%	39.62%	244	97	2,632	2,100	532	79.8%	17.73%	2,100	79.8%	72.7%
2028	7.00%	39.48%	250	99	2,701	2,187	514	81.0%	17.51%	2,187	81.0%	75.3%
2033	7.00%	38.95%	282	110	3,019	2,641	378	87.5%	16.68%	2,641	87.5%	85.7%
2038	7.00%	38.61%	320	124	3,300	3,164	136	95.9%	16.17%	3,164	95.9%	92.4%
2043	7.00%	15.86%	365	58	3,569	3,569	-	100.0%	15.86%	3,569	100.0%	96.8%
2048	7.00%	15.73%	417	66	3,860	3,860	(0)	100.0%	15.73%	3,860	100.0%	99.2%

Amortization Study

Amortization Study

January 1, 2018 Valuation

	Unfunded Liability	Amortization Cost
Legacy Base Established 12/31/2016 (22-Years Remaining)	\$565,414,136	19.28%
2017 base of assumption changes	8,507,420	0.29%
2017 base for experience (gains)/loss	43,008,926	1.47%
Total	\$616,930,482	21.04%
Normal Cost		21.15%
Total Actuarial Determined Contribution		42.19%

Amortization Study

Scenario #1 – 20-Year Assumptions/15-Year Experience

	Unfunded Liability	Amortization Cost
Legacy Base Established 12/31/2016 (22-Years Remaining)	\$565,414,136	19.28%
2017 base of assumption changes (20-Yr)	8,507,420	0.31%
2017 base for experience (gains)/loss (15-Yr)	43,008,926	1.91%
Total	\$616,930,482	21.50%
Normal Cost		21.15%
Total Actuarial Determined Contribution		42.65%

Amortization Study

Scenario #2 – 20-Year Assumptions/20-Year Experience

	Unfunded Liability	Amortization Cost
Legacy Base Established 12/31/2016 (22-Years Remaining)	\$565,414,136	19.28%
2017 base of assumption changes (20-Yr)	8,507,420	0.31%
2017 base for experience (gains)/loss (20-Yr)	43,008,926	1.56%
Total	\$616,930,482	21.15%
Normal Cost		21.15%
Total Actuarial Determined Contribution		42.30%

Amortization Study

Scenario #3 – 15-Year Assumptions/15-Year Experience

	Unfunded Liability	Amortization Cost
Legacy Base Established 12/31/2016 (22-Years Remaining)	\$565,414,136	19.28%
2017 base of assumption changes (15-Yr)	8,507,420	0.38%
2017 base for experience (gains)/loss (15-Yr)	43,008,926	1.91%
Total	\$616,930,482	21.57%
Normal Cost		21.15%
Total Actuarial Determined Contribution		42.72%

Disclaimers

- This presentation is intended to be used in conjunction with the actuarial valuation report issued on June 25, 2018. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.

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2018 Annual Actuarial Valuation

Implementation Date Alternatives

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Date: June 8, 2018

To: Board of Trustees

Re: **Delayed Implementation for Rate Increase
Two dates for rate increase implementation-January 1, 2019 and July 1, 2019**

The purpose of this letter is to provide the rate increases required for two different implementation dates.

The actuarial valuation recommended a rate increase of 2.51%. This rate increase would be effective January 1, 2018. The Board has requested a recalculation of the recommended rate increase for a January 1, 2019 and a July 1, 2019 implementation date.

The contribution rate increase is adjusted for interest as well as for the underlying change in payroll.

For an implementation date of January 1, 2019 the rate increase would be 2.70% of pay. For an implementation date of July 1, 2019 the rate increase would be 2.80% of pay. The following chart illustrates the increase as well as the increase on the Miscellaneous, Probation and Safety divisions.

San Luis Obispo Pension Trust-Rate Increases for Alternate Implementation Dates							
	2017 Total Charged Rates	2018 Val.		January 1, 2019		July 1, 2019	
		Total ADC	Rate Change	Total ADC	Rate Change	Total ADC	Rate Change
ALL CATEGORIES	39.68%	42.19%	2.51%	42.38%	2.70%	42.48%	2.80%
All Miscellaneous	37.83%	39.82%	1.99%	40.00%	2.17%	40.09%	2.26%
All Probation	39.09%	42.79%	3.70%	42.98%	3.89%	43.08%	3.99%
All Safety	52.24%	57.87%	5.63%	58.13%	5.89%	58.27%	6.03%

These calculations are based upon assumptions regarding future events, which may or may not materialize. Please bear in mind that actual results could deviate from the assumptions, depending on actual plan experience.

Respectfully submitted,



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

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2018 Annual Actuarial Valuation

30 Year Funding Projections

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San Luis Obispo County Pension Trust
Projection Based on January 1, 2018 Actuarial Valuation with Tier 3 (AB 340)

7.00% Discount Rate Assumption and Payroll Growth Assumption of 3.00% in 2018 and 2.75% Thereafter - 7.00% Actual Returns

Valuation as of January 1,	Input Market Return for Past Fiscal Year	Determined Contribution Rate	Compensation at Valuation	Determined Contribution (3)x(4)	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL (6)-(-7)	Funded Ratio (7)/(6)	Total Normal Cost Rate	Market Value of Assets (MVA)	Funded Ratio Using MVA (11)/(6)	Percent Tier 3 Members
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2018	14.922%	42.19%	\$ 197	\$ 83	\$ 1,946	\$ 1,329	\$ 617	68.3%	21.15%	\$ 1,340	68.9%	36.8%
2019	7.000%	42.80%	202	86	2,026	1,399	627	69.0%	20.54%	1,421	70.2%	42.3%
2020	7.000%	42.62%	207	88	2,105	1,475	631	70.0%	20.09%	1,505	71.5%	47.1%
2021	7.000%	41.71%	212	88	2,184	1,573	611	72.0%	19.67%	1,590	72.8%	51.3%
2022	7.000%	40.69%	217	88	2,262	1,675	587	74.0%	19.24%	1,675	74.0%	55.8%
2023	7.000%	40.42%	222	90	2,339	1,759	580	75.2%	18.87%	1,759	75.2%	59.7%
2024	7.000%	40.18%	227	91	2,415	1,843	571	76.3%	18.54%	1,843	76.3%	63.3%
2025	7.000%	39.98%	233	93	2,489	1,928	561	77.5%	18.25%	1,928	77.5%	66.7%
2026	7.000%	39.80%	238	95	2,561	2,014	547	78.6%	17.98%	2,014	78.6%	69.8%
2027	7.000%	39.62%	244	97	2,632	2,100	532	79.8%	17.73%	2,100	79.8%	72.7%
2028	7.000%	39.48%	250	99	2,701	2,187	514	81.0%	17.51%	2,187	81.0%	75.3%
2029	7.000%	39.35%	256	101	2,768	2,275	493	82.2%	17.31%	2,275	82.2%	77.8%
2030	7.000%	39.23%	262	103	2,834	2,364	470	83.4%	17.13%	2,364	83.4%	80.0%
2031	7.000%	39.13%	268	105	2,897	2,454	443	84.7%	16.97%	2,454	84.7%	82.1%
2032	7.000%	39.03%	275	107	2,959	2,547	412	86.1%	16.81%	2,547	86.1%	84.0%
2033	7.000%	38.95%	282	110	3,019	2,641	378	87.5%	16.68%	2,641	87.5%	85.7%
2034	7.000%	38.86%	289	112	3,077	2,738	339	89.0%	16.55%	2,738	89.0%	87.3%
2035	7.000%	38.79%	297	115	3,134	2,838	296	90.6%	16.44%	2,838	90.6%	88.8%
2036	7.000%	38.73%	304	118	3,190	2,942	248	92.2%	16.34%	2,942	92.2%	90.1%
2037	7.000%	38.67%	312	121	3,246	3,050	195	94.0%	16.25%	3,050	94.0%	91.3%
2038	7.000%	38.61%	320	124	3,300	3,164	136	95.9%	16.17%	3,164	95.9%	92.4%
2039	7.000%	38.57%	329	127	3,354	3,283	71	97.9%	16.09%	3,283	97.9%	93.4%
2040	7.000%	16.02%	337	54	3,408	3,408	-	100.0%	16.02%	3,408	100.0%	94.4%
2041	7.000%	15.96%	346	55	3,461	3,461	-	100.0%	15.96%	3,461	100.0%	95.3%
2042	7.000%	15.91%	355	57	3,515	3,515	-	100.0%	15.91%	3,515	100.0%	96.0%
2043	7.000%	15.86%	365	58	3,569	3,569	-	100.0%	15.86%	3,569	100.0%	96.8%
2044	7.000%	15.83%	375	59	3,624	3,624	-	100.0%	15.83%	3,624	100.0%	97.4%
2045	7.000%	15.79%	385	61	3,681	3,681	-	100.0%	15.79%	3,681	100.0%	97.9%
2046	7.000%	15.77%	395	62	3,738	3,738	-	100.0%	15.77%	3,738	100.0%	98.4%
2047	7.000%	15.74%	406	64	3,798	3,798	-	100.0%	15.74%	3,798	100.0%	98.8%
2048	7.000%	15.73%	417	66	3,860	3,860	(0)	100.0%	15.73%	3,860	100.0%	99.2%

**San Luis Obispo County Pension Trust
Projection Based on January 1, 2018 Actuarial Valuation with Tier 3 (AB 340)**

7.00% Discount Rate Assumption and Payroll Growth Assumption of 3.00% in 2018 and 2.75% Thereafter - 6.5% Actual Returns

Valuation as of January 1,	Input Market Return for Past Fiscal Year	Determined Contribution Rate	Compensation at Valuation	Determined Contribution (3)x(4)	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL (6)-(7)	Funded Ratio (7)/(6)	Total Normal Cost Rate	Market Value of Assets (MVA)	Funded Ratio Using MVA (11)/(6)	Percent Tier 3 Members
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2018	14.922%	42.19%	\$ 197	\$ 83	\$ 1,946	\$ 1,329	\$ 617	68.3%	21.15%	\$ 1,340	68.9%	36.8%
2019	6.500%	42.85%	202	87	2,026	1,398	628	69.0%	20.54%	1,415	69.8%	42.3%
2020	6.500%	42.78%	207	89	2,105	1,470	635	69.8%	20.09%	1,491	70.8%	47.1%
2021	6.500%	42.04%	212	89	2,184	1,564	621	71.6%	19.67%	1,568	71.8%	51.3%
2022	6.500%	41.27%	217	90	2,262	1,659	603	73.3%	19.24%	1,644	72.7%	55.8%
2023	6.500%	41.32%	222	92	2,339	1,735	604	74.2%	18.87%	1,719	73.5%	59.7%
2024	6.500%	41.42%	227	94	2,415	1,811	604	75.0%	18.54%	1,794	74.3%	63.3%
2025	6.500%	41.58%	233	97	2,489	1,887	602	75.8%	18.25%	1,870	75.1%	66.7%
2026	6.500%	41.79%	238	100	2,561	1,964	598	76.7%	17.98%	1,946	76.0%	69.8%
2027	6.500%	42.04%	244	103	2,632	2,041	591	77.6%	17.73%	2,023	76.9%	72.7%
2028	6.500%	42.36%	250	106	2,701	2,120	581	78.5%	17.51%	2,101	77.8%	75.3%
2029	6.500%	42.72%	256	109	2,768	2,199	569	79.4%	17.31%	2,179	78.7%	77.8%
2030	6.500%	43.15%	262	113	2,834	2,281	553	80.5%	17.13%	2,260	79.8%	80.0%
2031	6.500%	43.66%	268	117	2,897	2,364	533	81.6%	16.97%	2,343	80.9%	82.1%
2032	6.500%	44.23%	275	122	2,959	2,450	508	82.8%	16.81%	2,428	82.1%	84.0%
2033	6.500%	44.90%	282	127	3,019	2,540	479	84.1%	16.68%	2,517	83.4%	85.7%
2034	6.500%	45.70%	289	132	3,077	2,634	443	85.6%	16.55%	2,610	84.8%	87.3%
2035	6.500%	46.68%	297	138	3,134	2,734	400	87.2%	16.44%	2,709	86.4%	88.8%
2036	6.500%	47.90%	304	146	3,190	2,841	350	89.0%	16.34%	2,815	88.2%	90.1%
2037	6.500%	49.55%	312	155	3,246	2,956	290	91.1%	16.25%	2,929	90.2%	91.3%
2038	6.500%	52.02%	320	167	3,300	3,082	218	93.4%	16.17%	3,054	92.6%	92.4%
2039	6.500%	57.00%	329	187	3,354	3,224	130	96.1%	16.09%	3,195	95.3%	93.4%
2040	6.500%	21.11%	337	71	3,408	3,391	17	99.5%	16.02%	3,361	98.6%	94.4%
2041	6.500%	21.13%	346	73	3,461	3,444	17	99.5%	15.96%	3,412	98.6%	95.3%
2042	6.500%	21.13%	355	75	3,515	3,497	18	99.5%	15.91%	3,464	98.6%	96.0%
2043	6.500%	21.10%	365	77	3,569	3,551	18	99.5%	15.86%	3,517	98.5%	96.8%
2044	6.500%	21.06%	375	79	3,624	3,605	19	99.5%	15.83%	3,571	98.5%	97.4%
2045	6.500%	20.98%	385	81	3,681	3,661	19	99.5%	15.79%	3,627	98.5%	97.9%
2046	6.500%	20.89%	395	83	3,738	3,719	20	99.5%	15.77%	3,684	98.5%	98.4%
2047	6.500%	20.81%	406	84	3,798	3,778	20	99.5%	15.74%	3,743	98.5%	98.8%
2048	6.500%	20.74%	417	86	3,860	3,840	20	99.5%	15.73%	3,804	98.5%	99.2%

San Luis Obispo County Pension Trust
Projection Based on January 1, 2018 Actuarial Valuation with Tier 3 (AB 340)

6.50% Discount Rate Assumption and Payroll Growth Assumption of 3.00% in 2018 and 2.75% Thereafter - 6.50% Actual Returns

Valuation as of January 1,	Input Market Return for Past Fiscal Year	Determined Contribution Rate	Compensation at Valuation	Determined Contribution (3)x(4)	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL (6)-(-7)	Funded Ratio (7)/(6)	Total Normal Cost Rate	Market Value of Assets (MVA)	Funded Ratio Using MVA (11)/(6)	Percent Tier 3 Members
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2018	14.922%	47.88%	\$ 197	\$ 94	\$ 2,073	\$ 1,329	\$ 745	64.1%	23.60%	\$ 1,340	64.7%	36.8%
2019	6.500%	48.58%	202	98	2,157	1,404	753	65.1%	22.96%	1,426	66.1%	42.3%
2020	6.500%	48.36%	207	100	2,240	1,485	755	66.3%	22.46%	1,515	67.6%	47.1%
2021	6.500%	47.44%	212	101	2,323	1,589	734	68.4%	22.00%	1,606	69.1%	51.3%
2022	6.500%	46.42%	217	101	2,404	1,696	708	70.6%	21.53%	1,696	70.6%	55.8%
2023	6.500%	46.14%	222	103	2,484	1,787	698	71.9%	21.13%	1,787	71.9%	59.7%
2024	6.500%	45.88%	227	104	2,563	1,877	686	73.2%	20.77%	1,877	73.2%	63.3%
2025	6.500%	45.66%	233	106	2,640	1,969	672	74.6%	20.44%	1,969	74.6%	66.7%
2026	6.500%	45.47%	238	108	2,716	2,061	655	75.9%	20.15%	2,061	75.9%	69.8%
2027	6.500%	45.28%	244	110	2,789	2,154	635	77.2%	19.87%	2,154	77.2%	72.7%
2028	6.500%	45.13%	250	113	2,861	2,249	612	78.6%	19.63%	2,249	78.6%	75.3%
2029	6.500%	44.98%	256	115	2,931	2,344	586	80.0%	19.40%	2,344	80.0%	77.8%
2030	6.500%	44.86%	262	118	2,999	2,442	557	81.4%	19.20%	2,442	81.4%	80.0%
2031	6.500%	44.75%	268	120	3,065	2,541	524	82.9%	19.02%	2,541	82.9%	82.1%
2032	6.500%	44.64%	275	123	3,129	2,642	487	84.4%	18.86%	2,642	84.4%	84.0%
2033	6.500%	44.55%	282	126	3,192	2,746	445	86.1%	18.71%	2,746	86.1%	85.7%
2034	6.500%	44.46%	289	129	3,253	2,854	399	87.7%	18.57%	2,854	87.7%	87.3%
2035	6.500%	44.39%	297	132	3,312	2,965	348	89.5%	18.45%	2,965	89.5%	88.8%
2036	6.500%	44.32%	304	135	3,371	3,080	291	91.4%	18.34%	3,080	91.4%	90.1%
2037	6.500%	44.25%	312	138	3,429	3,201	228	93.4%	18.24%	3,201	93.4%	91.3%
2038	6.500%	44.20%	320	142	3,486	3,327	159	95.4%	18.14%	3,327	95.4%	92.4%
2039	6.500%	44.15%	329	145	3,542	3,459	83	97.7%	18.06%	3,459	97.7%	93.4%
2040	6.500%	17.99%	337	61	3,599	3,599	-	100.0%	17.99%	3,599	100.0%	94.4%
2041	6.500%	17.93%	346	62	3,655	3,655	-	100.0%	17.93%	3,655	100.0%	95.3%
2042	6.500%	17.87%	355	64	3,712	3,712	-	100.0%	17.87%	3,712	100.0%	96.0%
2043	6.500%	17.82%	365	65	3,769	3,769	-	100.0%	17.82%	3,769	100.0%	96.8%
2044	6.500%	17.78%	375	67	3,827	3,827	-	100.0%	17.78%	3,827	100.0%	97.4%
2045	6.500%	17.75%	385	68	3,887	3,887	-	100.0%	17.75%	3,887	100.0%	97.9%
2046	6.500%	17.72%	395	70	3,948	3,948	-	100.0%	17.72%	3,948	100.0%	98.4%
2047	6.500%	17.69%	406	72	4,012	4,012	-	100.0%	17.69%	4,012	100.0%	98.8%
2048	6.500%	17.68%	417	74	4,077	4,077	-	100.0%	17.68%	4,077	100.0%	99.2%

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Board of Trustees

1000 Mill Street
San Luis Obispo, CA 93408
Phone: (805) 781-5465
Fax: (805) 781-5697
www.SLOPensionTrust.org



Date: June 25, 2018

To: Board of Trustees

From: Carl Nelson – Executive Secretary
Amy Burke – Deputy Executive Secretary

Agenda Item 9: Employer Contributions FY18-19 Prefunding Amount

Recommendation:

Staff recommends that the Board of Trustees approve the amount calculated for FY18-19 by SLOCPT's actuary, Gabriel Roeder Smith (GRS), for the prefunding of Employer Contributions and Employer for Employee Contributions ("pick up") for the County and APCD. The total estimated amount will be dependent on when the Plan sponsor elects to implement the contribution rate increase recommended as part of the January 1, 2018 Actuarial Evaluation. For this reason, GRS has prepared two scenarios for the Employer Contributions based on rate increase implementation dates of January 1, 2019 and July 1, 2019. Pick up rates are not affected by the rate increase and thus only one estimate has been prepared for each of the County and APCD.

Discussion:

The agreement between the County Board of Supervisors and SLOCPT to facilitate annual prefunding of the County's and APCD's Employer Contributions and Employer for Employee Contributions was approved in 2014. At the March 26th, 2018 regular meeting, SLOCPT's Board of Trustees approved the discount rate to be used to calculate the prefunding amount to be set at the Plan's then current Earnings Assumption less 1.125%. For FY18-19 a discount rate of 6.00% (7.125% less 1.125%) was used to calculate prefunding payment.

In addition, SLOCPT and the County's Auditor Office will calculate a "true-up" of contributions at the end of the fiscal year comparing actual results to those estimated in the prior year's prefunding calculation. If the true-up amount is negative (overpayment) then that amount is credited towards the subsequent year's contributions. If the true-up amount is positive (underpayment) then the County is obligated to pay SLOCPT the difference.

Estimated contributions are based on the results of the 2018 Actuarial Valuation with the assumption that the recommended rate increase will be split 50/50 between Employers and Employees. The following tables summarize the proposed prefunding of FY18-19 Employer Contributions and the pick-up contributions assuming rate increase implementation dates of January 1, 2019 and July 1, 2019:

<u>If recommended rate increase is implemented 01/01/2019:</u>	Estimated FY18-19 Contributions <u>Undiscounted</u>	Estimated FY18-19 Contributions <u>Discounted</u>
County ER Contributions	\$45,172,026	\$43,905,820
County ER paid EE Contrib.	10,823,674	10,528,473
APCD ER Contributions	544,602	529,317
APCD ER Paid EE Contrib.	191,945	186,713
	-----	-----
TOTAL	\$56,732,247	\$55,150,323

Aggregate Employer Savings = \$1,581,924

<u>If recommended rate increase is implemented 07/01/2019:</u>	Estimated FY18-19 Contributions <u>Undiscounted</u>	Estimated FY18-19 Contributions <u>Discounted</u>
County ER Contributions	\$43,875,427	\$42,663,272
County ER paid EE Contrib.	10,823,674	10,528,473
APCD ER Contributions	527,090	512,529
APCD ER Paid EE Contrib.	191,945	186,713
	-----	-----
TOTAL	\$55,418,136	\$53,890,987

Aggregate Employer Savings = \$1,527,149

Attached are a letter from GRS and the tables used to calculate the prefunding amounts.

Respectfully Submitted,

Date: June 8, 2018

To: Board of Trustees

**Re: Prefunding of Contributions for Fiscal Year Ending June 30, 2019
Two dates for rate increase implementation-January 1, 2019 and July 1, 2019**

Historically, the County makes regular contributions to the Pension Trust on a pay-period-by-pay-period basis based on the required contribution rate determined in the annual valuation. For the FYE June 30, 2019 the actuarially determined rate is based on the results of the January 1, 2018 actuarial valuation. Because the valuation is completed after the effective date of any recommended rate increase, the County must also determine the date at which the rate increases will be effective. Details of the rate increases by date of implementation are illustrated in a letter under separate cover.

The agreement between the County Board of Supervisors and SLOCPT to facilitate annual prefunding of the County's and APCD's Employer Contributions and Employer for Employee Contributions was approved in 2014. At the March 26th, 2018 regular meeting, SLOCPT's Board of Trustees approved the discount rate to be used to calculate the prefunding amount to be set at the Plan's then current Earnings Assumption less 1.125%. Thus, for FY18-19, a discount rate of 6.00% (7.125% less 1.125%) was used to calculate prefunding payment.

This contribution rate is determined such that the regular contributions, along with the member contributions and the future investment earnings on those contributions, will be sufficient to fully fund the retirement benefits for all members upon their retirement. The Plan allows the County to pay contributions up to one year in advance (Section 16.05(c) of the Plan). By accelerating payments through the lump-sum payment following the final fiscal year 2018-19 pay period ending on June 30, 2019, the County can achieve long-term contribution savings.

Two sets of exhibits (payroll dates starting July 1, 2018 and ending June 30, 2019) have been prepared, based on (1) if the County implements the recommended rate increase from the January 1, 2018 valuation as of January 1, 2019, or (2) if the County delays the recommended rate increase until July 1, 2019. For the first set (rate increase not in effect until January 1, 2019), the County appropriation rate for the first half of the fiscal year is based on the 21.82% County charged rate as of January 1, 2018 plus 1.19% of the total 2.38% rate increase effective January 1, 2018. This results in a total rate of 23.01% for the first half of the year. The County appropriation rate for the second half of the fiscal year is based on the 23.01% plus 1.35% of the

2.70% increase effective January 1, 2019. (This assumes the rate increases will be split 50/50). For the second set (rate increase not in effect until July 1, 2019), the County appropriation rate for the year is based on the 23.01%.

2018 Rate Increase Effective Date	Rate Increase (from the June 15, 2018 delay rate increase letter)	Total County Rate	Addition to rate during FYE 19 as of the Rate Increase Effective Date
January 1, 2018	2.51%	23.01%	NA
January 1, 2019	2.70%	24.36%	1/2 of 2.70% for 6 months
July 1, 2019	2.80%	24.41%	None, not effective until after year end

A summary of the savings calculation for the County is illustrated in the following table:

Contribution Basis	Rate Increase January 1, 2019	Rate Increase July 1, 2019
Pay period non-discounted contribution for FYE 2019	\$56,732,247	\$55,418,136
Pre-funding single sum contribution made on July 15, 2018	\$55,150,323	\$53,890,987
Contribution savings due to prefunding	\$1,581,924	\$1,527,149

This pre-funding calculation has been done using the Board prescribed interest rate of 6.00%. If the County prefunds the contribution at the beginning of the fiscal year 2019, the County can contribute \$1,581,924 less (based on a rate increase effective January 1, 2019) or \$1,527,149 less (based on a rate increase effective July 1, 2019). If the Trust earns 6.00% for the year, then the total assets in the Trust will be the same at the end of the year for either contribution basis.

Also attached are schedules detailing the additional amount of estimated savings based on prefunding the employer paid employee contributions (the "Pick Up"), and similar schedules for prefunding the contributions for just the APCD group.



These calculations are based upon assumptions regarding future events, which may or may not materialize. Please bear in mind that actual results could deviate from the assumptions, depending on actual plan experience. The above discussion is only in regard to an actuarial gain or loss from actual contributions to the Trust being different than anticipated. Even with a potential gain from the prefunding contribution, the Plan may still experience an overall actuarial loss due to other factors.

Respectfully submitted,



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

San Luis Obispo County Pension Trust

Prepayment of County Contributions

Discount Rate = 6.000%

Rate Increase Delayed to January 1, 2019

Fiscal Year 2018-2019 beginning July 15, 2018 Biweekly Pay Period	County Biweekly Payroll Estimate*	County Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2018 Factor	Biweekly Contribution Discounted
1	\$ 7,230,093	23.01%	\$ 1,663,644	1.00000000	\$ 1,663,644
2	7,238,317	23.01%	1,665,537	0.99776140	1,661,808
3	7,246,551	23.01%	1,667,431	0.99552781	1,659,974
4	7,254,794	23.01%	1,669,328	0.99329922	1,658,142
5	7,263,046	23.01%	1,671,227	0.99107561	1,656,312
6	7,271,308	23.01%	1,673,128	0.98885699	1,654,484
7	7,279,579	23.01%	1,675,031	0.98664333	1,652,658
8	7,287,860	23.01%	1,676,937	0.98443463	1,650,834
9	7,296,150	23.01%	1,678,844	0.98223087	1,649,013
10	7,304,450	23.01%	1,680,754	0.98003205	1,647,193
11	7,312,759	23.01%	1,682,666	0.97783815	1,645,375
12	7,321,077	23.01%	1,684,580	0.97564915	1,643,559
13	7,329,405	23.01%	1,686,496	0.97346506	1,641,745
14	7,337,743	24.36%	1,787,474	0.97128586	1,736,148
15	7,346,089	24.36%	1,789,507	0.96911154	1,734,232
16	7,354,446	24.36%	1,791,543	0.96694208	1,732,318
17	7,362,812	24.36%	1,793,581	0.96477749	1,730,406
18	7,371,187	24.36%	1,795,621	0.96261773	1,728,497
19	7,379,572	24.36%	1,797,664	0.96046281	1,726,589
20	7,387,966	24.36%	1,799,709	0.95831272	1,724,684
21	7,396,370	24.36%	1,801,756	0.95616744	1,722,780
22	7,404,784	24.36%	1,803,805	0.95402696	1,720,879
23	7,413,207	24.36%	1,805,857	0.95189127	1,718,980
24	7,421,640	24.36%	1,807,911	0.94976037	1,717,083
25	7,430,082	24.36%	1,809,968	0.94763423	1,715,188
26	7,438,534	24.36%	1,812,027	0.94551285	1,713,295
Totals:	\$ 190,679,820		\$ 45,172,026		\$ 43,905,820

Contribution Amount for FY 2018-19	\$ 45,172,026	\$ 43,905,820
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2018-19		\$ 1,266,206

* Payroll and all contribution calculations are based on the County only and do not include amounts for the Courts, APCD, LAFCO, and the Pension Trust staff. The County includes Miscellaneous, Probation & Safety employers. The calculation of the annual required contribution assumes the payroll grows at a continuous annual rate of 3.00% per year to reflect turnover and pay increases during the year.

** County appropriation rate for the first half of the year is based on an expected 21.82% County charged rate as of January 1, 2018 plus 1.19% of the total 2.38% rate increase effective January 1, 2018. County appropriation rate for the second half of the year is based 23.01% plus 1.35% of the 2.70% increase effective January 1, 2019.



San Luis Obispo County Pension Trust

Prepayment of County Contributions

Discount Rate = 6.000%

Rate Increase Delayed to July 1, 2019

Fiscal Year 2018-2019 beginning July 15, 2018 Biweekly Pay Period	County Biweekly Payroll Estimate*	County Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2018 Factor	Biweekly Contribution Discounted
1	\$ 7,230,093	23.01%	\$ 1,663,644	1.00000000	\$ 1,663,644
2	7,238,317	23.01%	1,665,537	0.99776140	1,661,808
3	7,246,551	23.01%	1,667,431	0.99552781	1,659,974
4	7,254,794	23.01%	1,669,328	0.99329922	1,658,142
5	7,263,046	23.01%	1,671,227	0.99107561	1,656,312
6	7,271,308	23.01%	1,673,128	0.98885699	1,654,484
7	7,279,579	23.01%	1,675,031	0.98664333	1,652,658
8	7,287,860	23.01%	1,676,937	0.98443463	1,650,834
9	7,296,150	23.01%	1,678,844	0.98223087	1,649,013
10	7,304,450	23.01%	1,680,754	0.98003205	1,647,193
11	7,312,759	23.01%	1,682,666	0.97783815	1,645,375
12	7,321,077	23.01%	1,684,580	0.97564915	1,643,559
13	7,329,405	23.01%	1,686,496	0.97346506	1,641,745
14	7,337,743	23.01%	1,688,415	0.97128586	1,639,933
15	7,346,089	23.01%	1,690,335	0.96911154	1,638,123
16	7,354,446	23.01%	1,692,258	0.96694208	1,636,315
17	7,362,812	23.01%	1,694,183	0.96477749	1,634,510
18	7,371,187	23.01%	1,696,110	0.96261773	1,632,706
19	7,379,572	23.01%	1,698,039	0.96046281	1,630,904
20	7,387,966	23.01%	1,699,971	0.95831272	1,629,104
21	7,396,370	23.01%	1,701,905	0.95616744	1,627,306
22	7,404,784	23.01%	1,703,841	0.95402696	1,625,510
23	7,413,207	23.01%	1,705,779	0.95189127	1,623,716
24	7,421,640	23.01%	1,707,719	0.94976037	1,621,924
25	7,430,082	23.01%	1,709,662	0.94763423	1,620,134
26	7,438,534	23.01%	1,711,607	0.94551285	1,618,346
Totals:	\$ 190,679,820		\$ 43,875,427		\$ 42,663,272

Contribution Amount for FY 2018-19	\$ 43,875,427 (Undiscounted)	\$ 42,663,272 (Discounted)
Savings due to Prepayment for FY 2018-19		\$ 1,212,155

* Payroll and all contribution calculations are based on the County only and do not include amounts for the Courts, APCD, LAFCO, and the Pension Trust staff. The County includes Miscellaneous, Probation & Safety employers. The calculation of the annual required contribution assumes the payroll grows at a continuous annual rate of 3.00% per year to reflect turnover and pay increases during the year.

** County appropriation rate for the first half of the year is based on the 21.82% County charged rate as of January 1, 2018 plus 1.19% of the total 2.38% rate increase effective January 1, 2018.



San Luis Obispo County Pension Trust

Prepayment of Employer Paid Portion of
Employee Normal Cost ("Pick-up") Contributions
Discount Rate = 6.000%

Fiscal Year 2018-2019 beginning July 15, 2018 Biweekly Pay Period	County Biweekly Payroll Estimate*	County Paid EE NC Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2018 Factor	Biweekly Contribution Discounted
1	\$ 5,075,372	**	\$ 425,451	1.00000000	\$ 425,451
2	5,066,512	**	424,708	0.99776140	423,757
3	5,057,667	**	423,967	0.99552781	422,071
4	5,048,837	**	423,227	0.99329922	420,391
5	5,040,023	**	422,488	0.99107561	418,718
6	5,031,224	**	421,750	0.98885699	417,050
7	5,022,441	**	421,014	0.98664333	415,391
8	5,013,673	**	420,279	0.98443463	413,737
9	5,004,920	**	419,545	0.98223087	412,090
10	4,996,183	**	418,813	0.98003205	410,450
11	4,987,461	**	418,082	0.97783815	408,817
12	4,978,753	**	417,352	0.97564915	407,189
13	4,970,062	**	416,623	0.97346506	405,568
14	4,961,385	**	415,896	0.97128586	403,954
15	4,952,724	**	415,170	0.96911154	402,346
16	4,944,077	**	414,445	0.96694208	400,744
17	4,935,446	**	413,721	0.96477749	399,149
18	4,926,830	**	412,999	0.96261773	397,560
19	4,918,229	**	412,278	0.96046281	395,978
20	4,909,642	**	411,558	0.95831272	394,401
21	4,901,071	**	410,840	0.95616744	392,832
22	4,892,515	**	410,123	0.95402696	391,268
23	4,883,974	**	409,407	0.95189127	389,711
24	4,875,447	**	408,692	0.94976037	388,159
25	4,866,936	**	407,979	0.94763423	386,615
26	4,858,439	**	407,267	0.94551285	385,076
Totals:	\$ 129,119,845		\$ 10,823,674		\$ 10,528,473

Contribution Amount for FY 2018-19	\$ 10,823,674	\$ 10,528,473
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2018-19		\$ 295,201

* Payroll and all contribution calculations are based on the County only and do not include amounts for the Courts, APCD, LAFCO, and the Pension Trust staff. The County includes Miscellaneous, Probation & Safety employers. The calculation of the annual required contribution assumes the payroll grows at a continuous annual rate of 3.00% per year to reflect turnover and pay increases during the year.

** County paid portion of the employee normal cost ("pick-up") contributions vary by bargaining unit ranging from 4.20% to 13.59%. County pickup contributions only apply to tier 1 and tier 2 members.



San Luis Obispo County Pension Trust
Air Pollution Control District
 Prepayment of Employer Contributions
 Discount Rate = 6.000%
 Rate Increase Delayed to January 1, 2019

Fiscal Year 2018-2019 beginning July 15, 2018	APCD Biweekly Payroll Estimate*	APCD Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2018 Factor	Biweekly Contribution Discounted
1	\$ 86,857	23.01%	\$ 19,986	1.00000000	\$ 19,986
2	86,981	23.01%	20,014	0.99776140	19,969
3	87,104	23.01%	20,043	0.99552781	19,953
4	87,227	23.01%	20,071	0.99329922	19,936
5	87,351	23.01%	20,099	0.99107561	19,920
6	87,475	23.01%	20,128	0.98885699	19,904
7	87,599	23.01%	20,156	0.98664333	19,887
8	87,723	23.01%	20,185	0.98443463	19,871
9	87,847	23.01%	20,214	0.98223087	19,854
10	87,971	23.01%	20,242	0.98003205	19,838
11	88,096	23.01%	20,271	0.97783815	19,822
12	88,221	23.01%	20,300	0.97564915	19,805
13	88,346	23.01%	20,328	0.97346506	19,789
14	88,471	24.36%	21,552	0.97128586	20,933
15	88,596	24.36%	21,582	0.96911154	20,915
16	88,722	24.36%	21,613	0.96694208	20,898
17	88,848	24.36%	21,643	0.96477749	20,881
18	88,974	24.36%	21,674	0.96261773	20,864
19	89,100	24.36%	21,705	0.96046281	20,847
20	89,226	24.36%	21,735	0.95831272	20,829
21	89,352	24.36%	21,766	0.95616744	20,812
22	89,479	24.36%	21,797	0.95402696	20,795
23	89,606	24.36%	21,828	0.95189127	20,778
24	89,733	24.36%	21,859	0.94976037	20,761
25	89,860	24.36%	21,890	0.94763423	20,744
26	89,987	24.36%	21,921	0.94551285	20,726
Totals:	\$ 2,298,749		\$ 544,602		\$ 529,317

Contribution Amount for FY 2018-19	\$ 544,602	\$ 529,317
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2018-19		\$ 15,285

* Payroll and all contribution calculations are based on the APCD only and do not include amounts for the Courts, County, LAFCO, and the Pension Trust staff. The calculation of the annual required contribution assumes the payroll grows at a continuous annual rate of 3.00% per year to reflect turnover and pay increases during the year.

** County appropriation rate for the first half of the year is based on an expected 21.82% County charged rate as of January 1, 2018 plus 1.19% of the total 2.38% rate increase effective January 1, 2018. County appropriation rate for the second half of the year is based 23.01% plus 1.35% of the 2.70% increase effective January 1, 2019.



San Luis Obispo County Pension Trust
Air Pollution Control District
 Prepayment of Employer Contributions
 Discount Rate = 6.000%
 Rate Increase Delayed to July 1, 2019

Fiscal Year 2018-2019 beginning July 15, 2018	APCD Biweekly Payroll Estimate*	APCD Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2018 Factor	Biweekly Contribution Discounted
1	\$ 86,857	23.01%	\$ 19,986	1.00000000	\$ 19,986
2	86,956	23.01%	20,009	0.99776140	19,964
3	87,055	23.01%	20,031	0.99552781	19,942
4	87,154	23.01%	20,054	0.99329922	19,920
5	87,253	23.01%	20,077	0.99107561	19,898
6	87,353	23.01%	20,100	0.98885699	19,876
7	87,452	23.01%	20,123	0.98664333	19,854
8	87,551	23.01%	20,146	0.98443463	19,832
9	87,651	23.01%	20,169	0.98223087	19,810
10	87,751	23.01%	20,191	0.98003205	19,788
11	87,851	23.01%	20,214	0.97783815	19,766
12	87,950	23.01%	20,237	0.97564915	19,745
13	88,051	23.01%	20,260	0.97346506	19,723
14	88,151	23.01%	20,283	0.97128586	19,701
15	88,251	23.01%	20,307	0.96911154	19,679
16	88,351	23.01%	20,330	0.96694208	19,658
17	88,452	23.01%	20,353	0.96477749	19,636
18	88,552	23.01%	20,376	0.96261773	19,614
19	88,653	23.01%	20,399	0.96046281	19,593
20	88,754	23.01%	20,422	0.95831272	19,571
21	88,855	23.01%	20,446	0.95616744	19,549
22	88,956	23.01%	20,469	0.95402696	19,528
23	89,057	23.01%	20,492	0.95189127	19,506
24	89,159	23.01%	20,515	0.94976037	19,485
25	89,260	23.01%	20,539	0.94763423	19,463
26	89,362	23.01%	20,562	0.94551285	19,442
Totals:	\$ 2,290,699		\$ 527,090		\$ 512,529

Contribution Amount for FY 2018-19	\$ 527,090	\$ 512,529
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2018-19		\$ 14,561

* Payroll and all contribution calculations are based on the APCD only and do not include amounts for the Courts, County, LAFCO, and the Pension Trust staff. The calculation of the annual required contribution assumes the payroll grows at a continuous annual rate of 3.00% per year to reflect turnover and pay increases during the year.

** County appropriation rate for the first half of the year is based on the 21.82% County charged rate as of January 1, 2018 plus 1.19% of the total 2.38% rate increase effective January 1, 2018.



San Luis Obispo County Pension Trust
Air Pollution Control District
 Prepayment of Employer Paid Portion of
 Employee Normal Cost ("Pick-up") Contributions
 Discount Rate = 6.000%

Fiscal Year 2018-2019 beginning July 15, 2018	APCD Biweekly Payroll Estimate*	APCD Paid EE NC Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2018 Factor	Biweekly Contribution Discounted
1	\$ 86,857	**	\$ 7,545	1.00000000	\$ 7,545
2	86,706	**	7,532	0.99776140	7,515
3	86,554	**	7,519	0.99552781	7,485
4	86,403	**	7,506	0.99329922	7,456
5	86,253	**	7,493	0.99107561	7,426
6	86,102	**	7,480	0.98885699	7,397
7	85,952	**	7,467	0.98664333	7,367
8	85,802	**	7,454	0.98443463	7,338
9	85,652	**	7,441	0.98223087	7,309
10	85,502	**	7,428	0.98003205	7,280
11	85,353	**	7,415	0.97783815	7,251
12	85,204	**	7,402	0.97564915	7,222
13	85,055	**	7,389	0.97346506	7,193
14	84,907	**	7,376	0.97128586	7,164
15	84,759	**	7,363	0.96911154	7,136
16	84,611	**	7,350	0.96694208	7,107
17	84,463	**	7,337	0.96477749	7,079
18	84,315	**	7,324	0.96261773	7,050
19	84,168	**	7,311	0.96046281	7,022
20	84,021	**	7,298	0.95831272	6,994
21	83,875	**	7,285	0.95616744	6,966
22	83,728	**	7,272	0.95402696	6,938
23	83,582	**	7,259	0.95189127	6,910
24	83,436	**	7,246	0.94976037	6,882
25	83,290	**	7,233	0.94763423	6,854
26	83,145	**	7,220	0.94551285	6,827
Totals:	\$ 2,209,694		\$ 191,945		\$ 186,713

Contribution Amount for FY 2018-19	\$ 191,945	\$ 186,713
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2018-19		\$ 5,232

* Payroll and all contribution calculations are based on the APCD only and do not include amounts for the Courts, County, LAFCO, and the Pension Trust staff. The calculation of the annual required contribution assumes the payroll grows at a continuous annual rate of 3.00% per year to reflect turnover and pay increases during the year.

** Employer paid portion of the employee normal cost ("pick-up") contributions vary by bargaining unit ranging from 6.24% to 10.08% for APCD. Employer pickup contributions only apply to Tier 1 and Tier 2 members.



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Board of Trustees

1000 Mill Street
San Luis Obispo, CA 93408
Phone: (805) 781-5465
Fax: (805) 781-5697
www.SLOPensionTrust.org



Date: June 25, 2018

To: Board of Trustees

From: Carl Nelson – Executive Secretary
Amy Burke – Deputy Executive Secretary

Agenda Item 10: Investment Report for May 2018

	May	Year to Date 2018	2017	2016	2015	2014	2013
Total Trust Investments (\$ millions)	\$1,333		\$1,351 year end	\$1,196 year end	\$1,148 year end	\$1,190 year end	\$1,131 year end
Total Fund Return	-0.2% Gross	0.8% Gross	15.5 % Gross	6.6 % Gross	-0.8 % Gross	5.1 % Gross	13.8% Gross
Policy Index Return (r)	0.5%	0.5%	13.4 %	7.7 %	-0.5 %	5.2 %	13.4%

(r) Policy index as of Aug. 2016 revision to Strategic Asset Allocation Policy: 20% domestic equity, 20% international equity, 15% core bonds, 5% bank loans, 5% global bonds, 5% emerging market debt, 15% real estate, 5% commodities, 5% private equity, 5% private credit.

The Economy and Capital Markets:

Some significant factors in the economy for May and into mid-June have been –

- **Fed Policy** – For May and June news from the Fed reflected the continued rate normalization policy – albeit with some increased expectations for further 2018 rate increases based on inflation data -
 - The Fed met the market’s expectations with a second interest rate increase for the year at its June 13th meeting. The 0.25% increase brought the targeted Fed Funds rate to a range of 1.75% to 2.00%.

- With inflation data suggesting long awaited increases in prices, the Fed hinted at two additional rate increases for 2018 bringing the expectation for increases this year from three to four.
- In addition, the strong June jobs report further suggests an increase in the pace of Fed rate normalization through the course of the year.

- **Interest Rates** – Interest rates have risen in recent months in the expectation of future Fed increases, but May and June saw a pullback in rates as the market turmoil of volatile trade war unpredictability triggered a bit of “flight to quality” risk-off trade. The 10 year Treasury that had been trading as high as a 3.10% yield in April closed June 21st at 2.89%

- **Trade Protectionism, International Tensions** – Capital market volatility continued in May and June due in part to concerns over unclear trade policy from the Administration. Capital markets do not respond positively to uncertainty and on-again / off-again trade restriction negotiating stances taken by the U.S. created just such a lack of predictability

- **Employment and Wages** –
 - The May DOL report on nonfarm employment showed -
 - Jobs up 223k – above market expectations.
 - Unemployment declined further to 3.8%, while the labor force participation rate changed little from its historically low range of under 63%.

SLOCPT Investment Returns:

The attached report from Verus covers the investment returns of the SLOCPT portfolio and general market conditions through the end of May. Subsequent market movements in June have been mixed and will be reported on in next month’s investment report.

Respectfully submitted

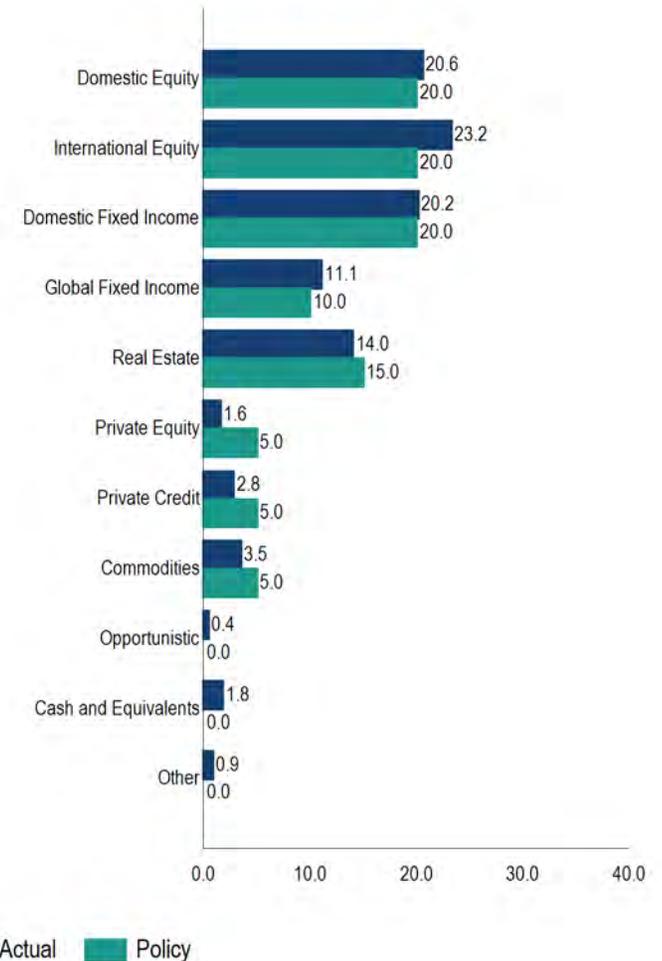
San Luis Obispo County Pension Trust

Executive Summary - Preliminary (Gross of Fees)

Period Ending: May 31, 2018

	Market Value	% of Portfolio	1 Mo	YTD
Total Fund	1,333,080,453	100.0	-0.2	0.8
Total Fund ex Overlay	1,321,543,811	99.1	-0.3	0.8
Policy Index			0.5	0.5
Total Domestic Equity	274,067,552	20.6	1.8	1.9
Russell 3000			2.8	2.5
PIMCO RAE Fundamental PLUS Instl	59,733,825	4.5	1.5	0.7
S&P 500			2.4	2.0
Loomis Sayles Large Cap Growth	78,928,884	5.9	3.6	3.9
Russell 1000 Growth			4.4	6.2
Boston Partners Large Cap Value	75,613,198	5.7	-0.4	-1.0
Russell 1000 Value			0.6	-1.9
Atlanta Capital Mgmt	59,791,644	4.5	2.8	4.1
Russell 2500			4.7	4.7
Total International Equity	309,926,840	23.2	-1.3	-0.8
MSCI ACWI ex USA Gross			-2.2	-1.6
Dodge & Cox Intl Stock	148,242,656	11.1	-4.8	-5.2
MSCI EAFE Gross			-2.1	-1.2
WCM International Growth	161,684,184	12.1	2.1	3.8
MSCI ACWI ex USA Gross			-2.2	-1.6
Total Domestic Fixed Income	268,810,966	20.2	0.5	-0.2
BBgBarc US Aggregate TR			0.7	-1.5
BlackRock Core Bond	99,550,850	7.5	0.8	-1.1
BBgBarc US Aggregate TR			0.7	-1.5
Dodge & Cox Income Fund	99,112,750	7.4	0.3	-0.9
BBgBarc US Aggregate TR			0.7	-1.5
Pacific Asset Corporate Loan	70,147,366	5.3	0.2	2.2
S&P/LSTA Leveraged Loan Index			0.2	2.0
Total Global Fixed	147,621,600	11.1	-4.5	-2.6
Citi World Govt Bond Index			-1.2	-0.7
Brandywine Global Fixed Income	75,347,166	5.7	-3.2	-1.2
Citi WGBI ex US			-2.3	-0.5
Stone Harbor Local Markets Ins	72,274,434	5.4	-5.7	-4.0
JPM GBI-EM Global Diversified TR USD			-5.0	-3.7

Actual vs Target Allocation (%)



*Other balance represents Clifton Group.

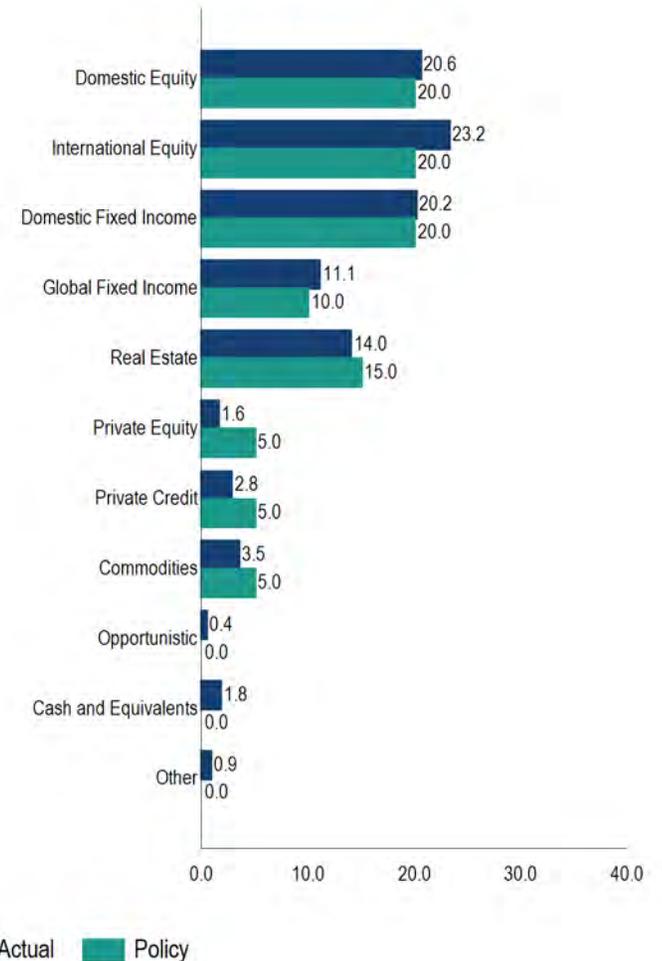
Policy Index (10/1/2016): 20% Russell 3000, 20% MSCI ACWI ex. US, 30% BBgBarc Aggregate, 15% NCREIF Property, 5% Bloomberg Commodity, 5% Russell 3000 + 300 bp, 5% BBgBarc High Yield + 200 bp lagged. Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. Boston Partners funded 2/1/2017. WCM Intl Growth replaced Vontobel on 2/15/2017. Pathway 9 funded 4/7/2017. SSGA TIPS liquidated on 12/7/2017. Fidelity Real Estate Growth III liquidated on 12/29/2017. SSGA Flagship S&P 500 liquidated 2/1/2018. Most recently reported market values for private equity/credit, opportunistic, and illiquid real estate funds adjusted for calls and distributions through 5/31/2018. All data is preliminary.

San Luis Obispo County Pension Trust
 Executive Summary - Preliminary (Gross of Fees)

Period Ending: May 31, 2018

	Market Value	% of Portfolio	1 Mo	YTD
Total Real Estate	186,720,315	14.0	0.6	3.6
NCREIF Property Index			0.0	1.7
JP Morgan Core Real Estate	156,536,789	11.7	0.7	3.2
NCREIF-ODCE			0.0	2.2
NCREIF Property Index			0.0	1.7
ARA American Strategic Value Realty	15,708,425	1.2	0.0	4.2
NCREIF-ODCE			0.0	2.2
NCREIF Property Index			0.0	1.7
Direct Real Estate	14,475,101	1.1	0.0	7.5
NCREIF-ODCE			0.0	2.2
NCREIF Property Index			0.0	1.7
Total Commodities	46,379,659	3.5	1.0	3.9
Bloomberg Commodity Index TR USD			1.4	3.6
Gresham MTAP Commodity Builder	46,379,659	3.5	1.0	3.9
Bloomberg Commodity Index TR USD			1.4	3.6
Total Private Equity	20,850,916	1.6		
Harbourvest Partners IX Buyout Fund L.P.	14,029,323	1.1		
Pathway Private Equity Fund Investors 9 L.P.	6,821,593	0.5		
Total Private Credit	37,423,604	2.8		
TPG Diversified Credit Program	37,423,604	2.8		
Total Cash	23,769,953	1.8	0.0	0.6
91 Day T-Bills			0.2	0.7
Cash Account	23,769,953	1.8	0.0	0.6
91 Day T-Bills			0.2	0.7
Total Opportunistic	5,972,406	0.4		
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	5,822,514	0.4		
PIMCO Distressed Credit Fund	149,892	0.0		
CPI + 5%				

Actual vs Target Allocation (%)



*Other balance represents Clifton Group.

Policy Index (10/1/2016): 20% Russell 3000, 20% MSCI ACWI ex. US, 30% BBgBarc Aggregate, 15% NCREIF Property, 5% Bloomberg Commodity, 5% Russell 3000 + 300 bp, 5% BBgBarc High Yield + 200 bp lagged. Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. Boston Partners funded 2/1/2017. WCM Intl Growth replaced Vontobel on 2/15/2017. Pathway 9 funded 4/7/2017. SSGA TIPS liquidated on 12/7/2017. Fidelity Real Estate Growth III liquidated on 12/29/2017. SSGA Flagship S&P 500 liquidated 2/1/2018. Most recently reported market values for private equity/credit, opportunistic, and illiquid real estate funds adjusted for calls and distributions through 5/31/2018. All data is preliminary.



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

MAY 2018
Capital Markets Update

Market commentary

U.S. ECONOMICS

- The U.S. added 223,000 jobs to payrolls in May, well above the consensus estimate of 180,000 and the expansion average of around 200,000. Sector job gains were broad based, led by health care, business services, and retail.
- The U-3 unemployment rate fell further from 3.9% to 3.8% against expectations of no change. The decline was influenced by a drop in the participation rate from 62.8% to 62.7%.
- The broader U-6 unemployment rate, which includes part-time workers for economic reasons and discouraged workers, declined from 7.8% to 7.6%, the lowest level since 2000.
- The ISM Manufacturing PMI rose from 57.3 to 58.7 in May, driven by increases in the employment and new orders sub-components. This index remains elevated, indicating a strong level of economic activity for manufacturers.

U.S. EQUITIES

- Equities moved higher in May (S&P 500 +2.4%), but still traded within a relatively narrow range between 2600 and 2800 on the S&P 500 Index.
- Small cap equities (Russell 2000 Index +6.1%) significantly outperformed large cap equities, possibly influenced by insulation from a stronger U.S. dollar and global trade concerns.
- Analysts are expecting strong earnings growth again in the second quarter. According to FactSet, the year-over-year Q2 earnings growth rate for the S&P 500 is 18.9%.

U.S. FIXED INCOME

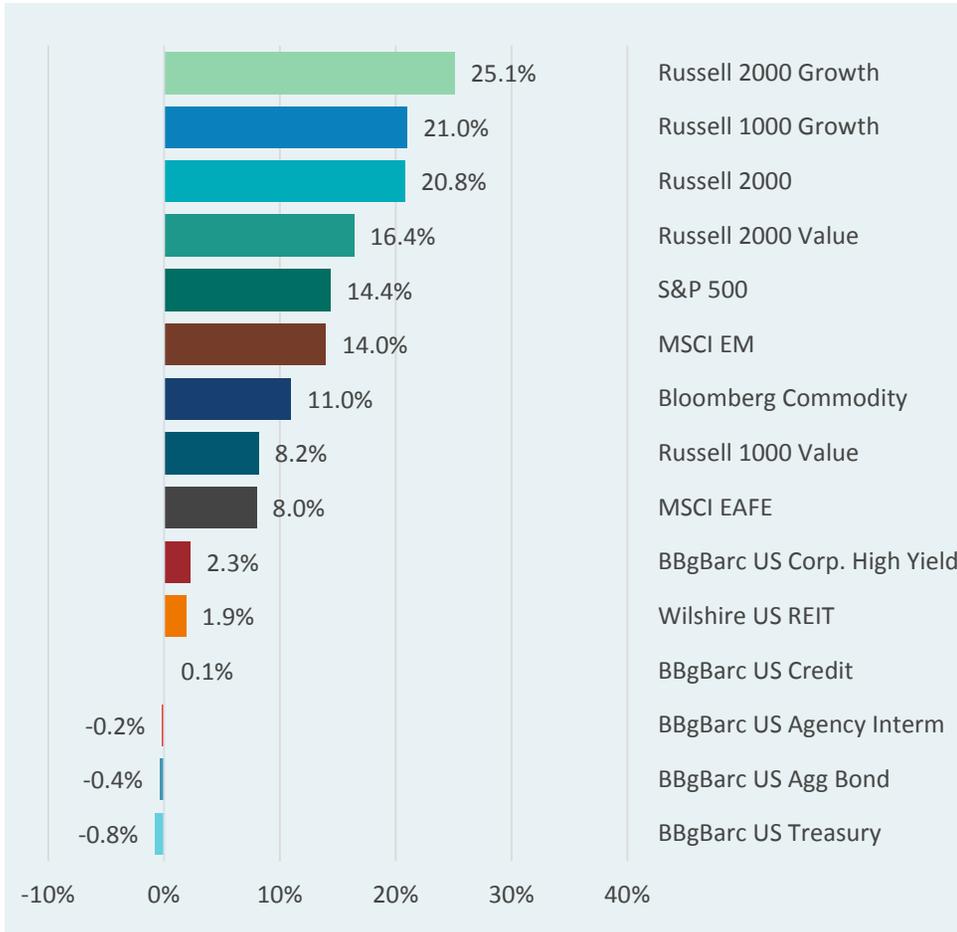
- After peaking at 3.11% on May 17th, the 10-year Treasury yield fell sharply to finish the month down 9 bps to 2.86%. The move lower was influenced by a global risk-off sentiment created by uncertainty surrounding Italian politics.
- The yield curve steepened in the first half of the month before reversing during the latter half as long-term yields fell. The 2-10 Treasury yield spread peaked at 55 bps before finishing the month at 43 bps.
- High yield spreads widened by 23 bps to 3.6%, driven by concerns over the financial sector's exposure to Italian banks.

INTERNATIONAL MARKETS

- Italian politics took center stage during a tumultuous attempt to form a coalition government between the Five Star and the League parties. It appeared the country was headed for new elections this year after a surprise presidential veto of the proposed finance minister over his anti-EU views, but a government was created in the end.
- Weakness in Italian markets spilled over to the rest of the Eurozone, which was one of the reasons international developed equities (MSCI EAFE -2.3%) underperformed U.S. equities.
- Global trade war concerns resurfaced after the White House decided to impose steel and aluminum tariffs on Canada, Mexico, and the European Union after a two month exemption period. The tariffs went into effect on June 1st.

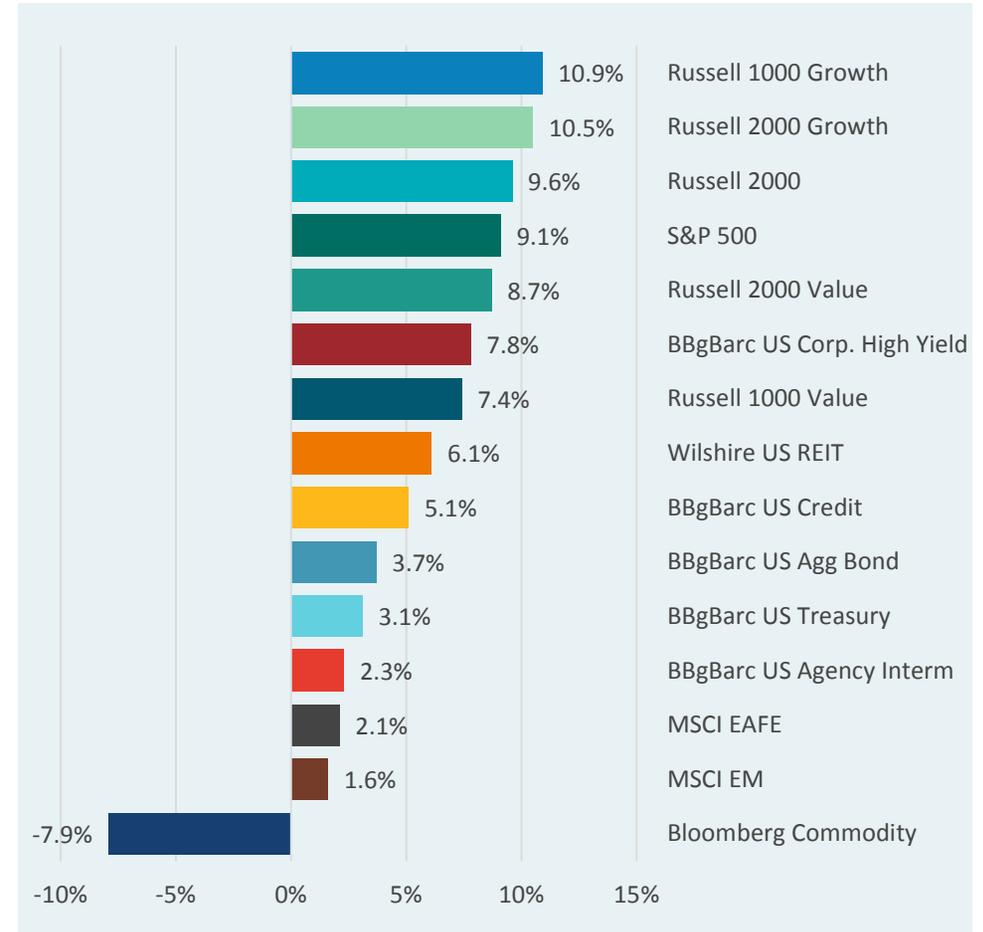
Major asset class returns

ONE YEAR ENDING MAY



Source: Morningstar, as of 5/31/18

TEN YEARS ENDING MAY



Source: Morningstar, as of 5/31/18

U.S. large cap equities

- The S&P 500 Index gained 2.4% in May, driven once again by mega cap tech companies such as Apple, Netflix, and Amazon. The S&P 500 Information Technology Index returned 7.4%.
- U.S. equities have traded in a relatively narrow range since the February sell off and volatility has returned back to below average levels. The S&P 500 Index has been within 2600 and 2800 and closed the month in the middle of this range at 2705.
- Realized volatility was 11.2% (annualized) in May and the VIX Index (implied volatility) closed the month at 15.3, below the year-to-date average of 16.7. A lack of clear direction on trade negotiations and few surprises in economic data or monetary policy expectations likely contributed to the low volatility.
- Analysts are expecting another strong earnings season in the second quarter. According to FactSet, the YoY Q2 earnings growth rate for the S&P 500 Index is 18.9%.

Mega cap tech companies drove market gains

S&P 500 PRICE INDEX



Source: Bloomberg, as of 5/31/18

IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 5/31/18

S&P 500 VALUATION SNAPSHOT



Source: Bloomberg, as of 5/31/18

Domestic equity size and style

- Small cap equities outperformed large cap equities for the third consecutive month. The Russell 2000 Index and Russell 1000 Index returned 6.1% and 2.6%, respectively. Small cap outperformance has been influenced by insulation from a stronger U.S. dollar and global trade concerns.
- The strong month for small caps (Russell 2000) pushed the trailing 1-year return differential between large cap equities (Russell 1000) into positive territory for the first time since shortly after the 2016 U.S. presidential election.

- Mainly due to a large exposure to the tech sector, growth equities materially outperformed value equities in May. The Russell 1000 Growth Index and Russell 1000 Value Index returned 4.4% and 0.6%, respectively.
- Value equities have been out of favor for much of the current bull market, but there does not yet appear to be a catalyst for this trend to reverse based on valuations. The current ratio between value and growth P/E multiples are in line with the long-term historical average.

Small cap and growth equities outperformed

VALUE VS. GROWTH RELATIVE VALUATIONS



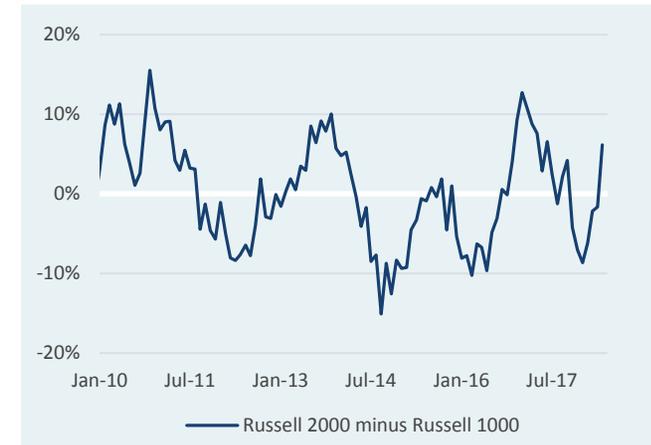
Source: Russell, Bloomberg, as of 5/31/18

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, as of 5/31/18

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, as of 5/31/18

Fixed income

- The Bloomberg Barclays Aggregate Index returned 0.7% in May, reversing losses from the previous month. The yield on the index fell from 3.3% to 3.2%, below the 20-year average of 4.0%.
- Long duration strategies outperformed (Bloomberg Barclays Long Treasury Index +2.1%) as long-term Treasury yields fell and the yield curve flattened. Although yields are expected to continue to move gradually higher, investors should be aware that short-term pullbacks such as this are likely.
- The market is pricing in a 100% chance of a rate hike at the June Fed meeting and two more hikes by the end of the year based on fed fund futures.
- Local currency emerging market debt came under pressure in May as yields rose and currencies depreciated – the JPMorgan GBI-EM Diversified Index returned -5.0%. While the economic fundamentals remain positive in most emerging countries, continued U.S. dollar strength and Fed tightening are a concern.

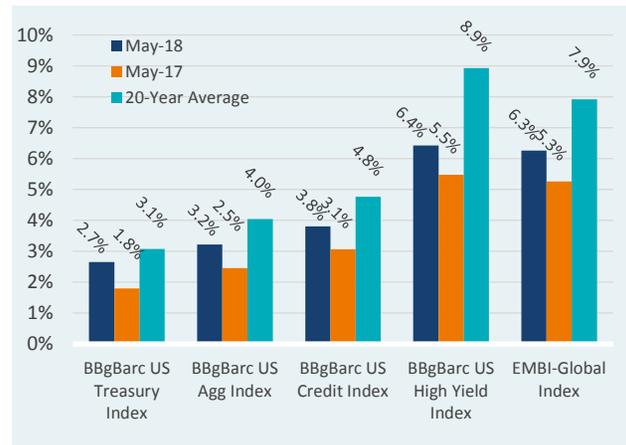
EM local debt underperformed

U.S. TREASURY YIELD CURVE



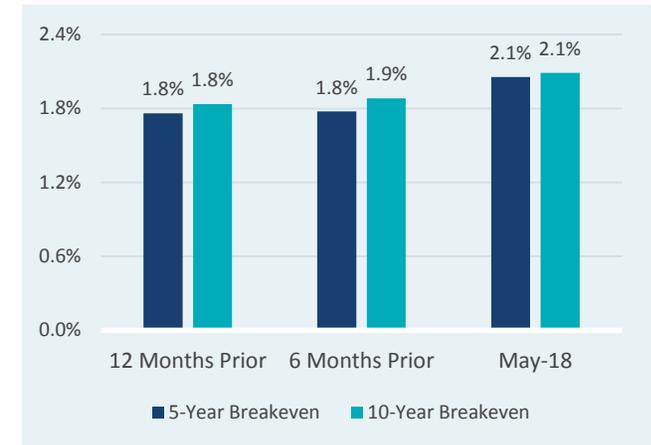
Source: Bloomberg, as of 5/31/18

NOMINAL YIELDS



Source: Morningstar, as of 5/31/18

BREAKEVEN INFLATION RATES



Source: Bloomberg, as of 5/31/18

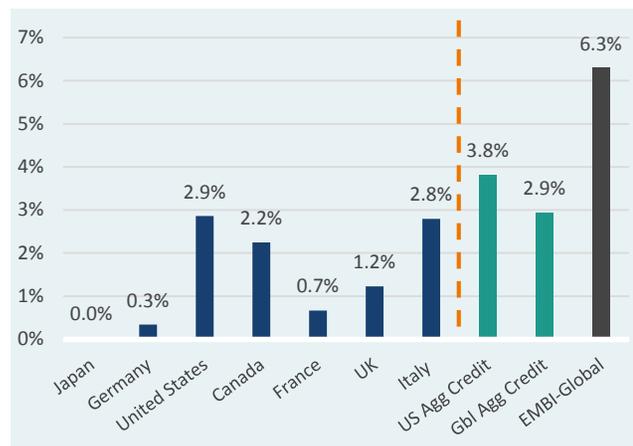
Global markets

- The political environment in Italy led to extreme volatility in Italian sovereign debt, influenced by rising risk premiums and the ECB taking a pause from buying the country's bonds. The 2-year yield spiked 186 bps in one day to 2.77% before falling to finish the month at 1.07%.
- Weakness in Italian markets spilled over to the rest of the Eurozone, which was one of the reasons international equities (MSCI EAFE -2.2%) underperformed domestic equities.

- The U.S. dollar continued to strengthen against both developed and emerging currencies, especially relative to the euro. The Dollar Spot Index (DXY) rose 2.3% during the month.
- Trade negotiations between China and the U.S. remain fluid with little concrete progress. The White House asked the U.S. Trade Commission to look into placing an additional \$50 billion in tariffs on Chinese tech goods. Chinese officials stated negotiations would cease if any tariffs went into effect.

Italian politics placed stress on global markets

GLOBAL SOVEREIGN 10-YEAR YIELDS



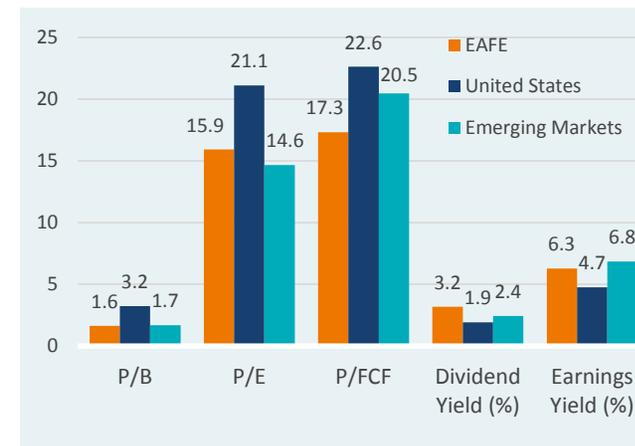
Source: Bloomberg, as of 5/31/18

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 5/31/18

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 5/31/18

Commodities

- The Bloomberg Commodity Index returned 1.4% in May, led by energy and industrial metals.
- WTI oil peaked at a four year of \$72.35 on May 21st, but fell to end the month at \$67.04. Oil prices were impacted by the possibility that OPEC will end production cuts at its next meeting in June.
- Gold prices fell 1.3% during the month, dropping below \$1300 per ounce for the first time since December of last year. A potential increase in U.S. real yields may

place pressure on gold prices due to the relative carry attractiveness of Treasuries.

- Commodities (+3.6%) have outperformed global equities (MSCI ACWI +0.1%) and U.S. fixed income (Bloomberg Barclays Agg -1.5%) so far this year.

Commodities have outperformed financial assets this year

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	1.4	4.0	3.6	11.0	(2.8)	(6.6)	(7.9)
Bloomberg Agriculture	0.6	2.0	5.2	(0.2)	(2.7)	(8.2)	(4.8)
Bloomberg Energy	2.7	7.8	9.7	26.3	(10.0)	(13.9)	(19.4)
Bloomberg Grains	(0.7)	2.3	9.5	0.2	(4.8)	(10.9)	(6.9)
Bloomberg Industrial Metals	2.4	6.0	(0.6)	25.0	6.2	0.4	(3.7)
Bloomberg Livestock	2.2	2.6	(7.6)	(13.4)	(7.1)	(2.7)	(6.1)
Bloomberg Petroleum	1.7	8.8	13.9	45.8	(6.0)	(11.1)	(13.6)
Bloomberg Precious Metals	(1.0)	(1.2)	(1.7)	(0.6)	1.3	(3.2)	2.3
Bloomberg Softs	6.6	6.0	(4.7)	(7.1)	(1.1)	(6.9)	(2.8)

Source: Morningstar, as of 5/31/18

COMMODITY PERFORMANCE



Source: Bloomberg, as of 5/31/18

Appendix

Periodic table of returns

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	YTD	5-Year	10-Year
Small Cap Growth	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	8.8	15.7	10.9
Small Cap Equity	27.0	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	6.9	13.3	10.5
Large Cap Growth	20.3	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	6.2	12.9	9.6
Small Cap Value	19.3	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	4.8	12.2	9.2
Commodities	16.2	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	3.6	11.0	8.7
Large Cap Equity	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	2.2	10.1	7.4
Real Estate	8.7	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	1.7	10.0	6.1
Hedge Funds of Funds	4.9	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	1.2	5.9	4.3
Cash	1.2	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	0.6	5.9	3.7
60/40 Global Portfolio	-2.5	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-0.3	4.5	2.1
US Bonds	-5.1	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	5.1	-1.5	3.3	1.6
International Equity	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-1.5	2.0	1.4
Large Cap Value	-25.3	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-1.9	0.4	0.4
Emerging Markets Equity	-27.0	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-2.6	-6.6	-7.9

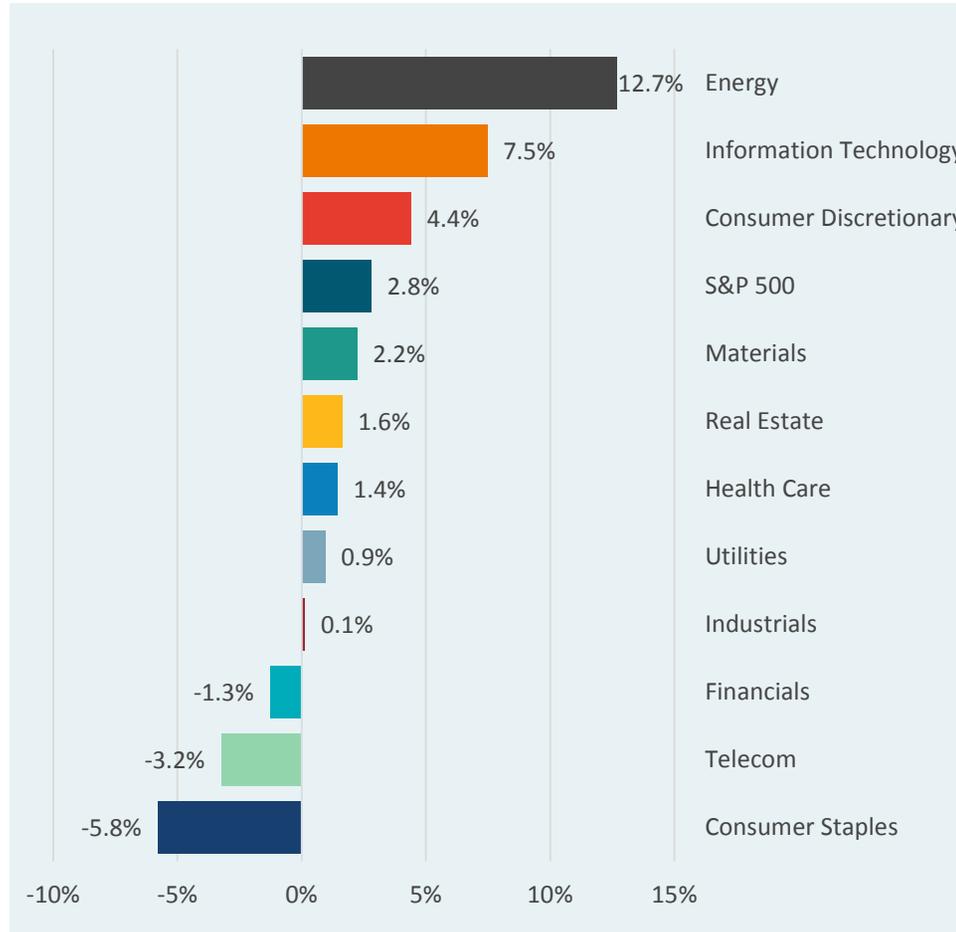
BEST
↑
↓
WORST



Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BBgBarc US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BBgBarc Global Bond. NCREIF Property Index performance data as of 3/31/18.

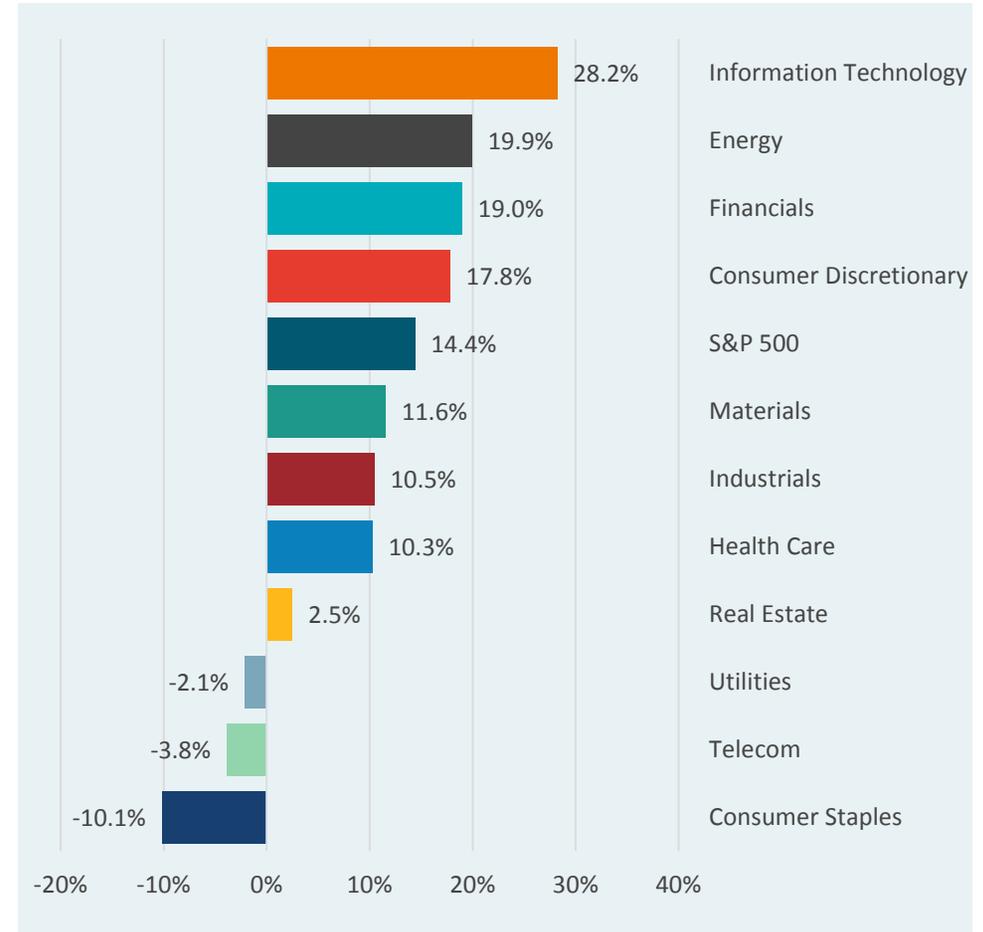
S&P 500 sector returns

QTD



Source: Morningstar, as of 5/31/18

ONE YEAR ENDING MAY



Source: Morningstar, as of 5/31/18

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	2.4	2.8	2.0	14.4	11.0	13.0	9.1
S&P 500 Equal Weighted	1.4	1.8	0.8	12.3	9.3	12.3	10.4
DJ Industrial Average	1.4	1.8	(0.2)	18.9	13.5	12.8	9.7
Russell Top 200	2.7	3.2	2.4	15.4	11.6	13.4	9.2
Russell 1000	2.6	2.9	2.2	14.6	10.7	12.9	9.2
Russell 2000	6.1	7.0	6.9	20.8	11.0	12.2	9.6
Russell 3000	2.8	3.2	2.5	15.1	10.7	12.9	9.2
Russell Mid Cap	2.3	2.1	1.6	12.7	8.6	11.8	9.2
Style Index							
Russell 1000 Growth	4.4	4.7	6.2	21.0	13.9	15.7	10.9
Russell 1000 Value	0.6	0.9	(1.9)	8.2	7.4	10.1	7.4
Russell 2000 Growth	6.3	6.4	8.8	25.1	10.8	13.3	10.5
Russell 2000 Value	5.8	7.7	4.8	16.4	11.0	11.0	8.7

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	0.1	1.1	0.1	11.8	7.5	8.9	5.0
MSCI ACWI ex US	(2.3)	(0.7)	(1.9)	9.7	4.7	5.5	1.9
MSCI EAFE	(2.2)	(0.0)	(1.5)	8.0	4.3	5.9	2.1
MSCI EM	(3.5)	(4.0)	(2.6)	14.0	6.2	4.5	1.6
MSCI EAFE Small Cap	(1.0)	0.4	0.6	14.7	10.3	10.9	6.1
Style Index							
MSCI EAFE Growth	(0.2)	1.3	0.2	10.0	5.9	7.0	2.8
MSCI EAFE Value	(4.3)	(1.4)	(3.4)	5.9	2.7	4.8	1.3
Regional Index							
MSCI UK	(0.8)	3.9	(0.1)	8.9	2.2	4.0	2.1
MSCI Japan	(1.0)	(0.3)	0.5	14.6	6.5	8.3	3.1
MSCI Euro	(5.3)	(2.1)	(2.5)	4.4	4.7	6.0	0.0
MSCI EM Asia	(1.3)	(1.3)	(0.4)	17.5	7.6	8.0	4.7
MSCI EM Latin American	(14.1)	(15.2)	(8.3)	3.7	3.4	(3.6)	(4.2)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US TIPS	0.4	0.4	(0.4)	0.7	1.5	0.9	3.1
BBgBarc US Treasury Bills	0.2	0.3	0.6	1.2	0.6	0.4	0.4
BBgBarc US Agg Bond	0.7	(0.0)	(1.5)	(0.4)	1.4	2.0	3.7
Duration							
BBgBarc US Treasury 1-3 Yr	0.4	0.2	0.0	(0.1)	0.4	0.6	1.3
BBgBarc US Treasury Long	2.1	0.1	(3.2)	0.1	2.0	3.8	6.2
BBgBarc US Treasury	0.9	0.1	(1.1)	(0.8)	0.7	1.3	3.1
Issuer							
BBgBarc US MBS	0.7	0.2	(1.0)	(0.3)	1.2	2.0	3.5
BBgBarc US Corp. High Yield	(0.0)	0.6	(0.2)	2.3	4.9	4.9	7.8
BBgBarc US Agency Interm	0.5	0.2	(0.2)	(0.2)	0.7	1.0	2.3
BBgBarc US Credit	0.5	(0.4)	(2.5)	0.1	2.4	2.9	5.1

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	1.4	4.0	3.6	11.0	(2.8)	(6.6)	(7.9)
Wilshire US REIT	3.6	5.0	(2.8)	1.9	4.7	7.1	6.1
CS Leveraged Loans	0.2	0.7	2.3	4.5	4.2	4.1	5.0
Alerian MLP	5.1	13.6	0.9	(3.7)	(8.1)	(3.2)	6.1
Regional Index							
JPM EMBI Global Div	(0.9)	(2.4)	(4.1)	(0.6)	4.5	4.3	6.7
JPM GBI-EM Global Div	(5.0)	(7.8)	(3.7)	1.0	2.5	(1.7)	2.7
Hedge Funds							
HFRI Composite	0.8	1.1	1.6	5.4	2.2	3.9	3.5
HFRI FOF Composite	0.7	0.9	1.2	5.6	1.8	3.3	1.4
Currency (Spot)							
Euro	(3.4)	(5.1)	(2.8)	3.8	2.1	(2.1)	(2.8)
Pound	(3.4)	(5.1)	(1.6)	3.1	(4.5)	(2.6)	(3.9)
Yen	0.7	(2.1)	3.7	1.8	4.5	(1.5)	(0.3)

Source: Morningstar, HFR, as of 5/31/18

Notices & disclosures

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Board of Trustees

1000 Mill Street
San Luis Obispo, CA 93408
Phone: (805) 781-5465
Fax: (805) 781-5697
www.SLOPensionTrust.org



Date: June 25, 2018

To: Board of Trustees

From: Carl Nelson – Executive Secretary
Amy Burke – Deputy Executive Secretary

Agenda Item 11: Investment Consultant – Verus – Revised Consulting Agreement

Recommendation:

Staff recommends approval of the attached revised consulting agreement with Verus as the Pension Trust's general investment consultant.

Discussion:

Verus, the Pension Trust's general investment consultant has proposed a revised consulting agreement. The current agreement with Verus dates from the inception of the assignment in 2007 and has fees based on total asset size. Verus proposes a more contemporary norm for consulting fees to be charged on a flat fee amount. Staff is agreeable to this and a reduction in the amount of consulting fees paid is expected. General Counsel has reviewed the agreement and finds it to be acceptable form.

When The Pension Trust first utilized Verus (then known as Wurts & Associates) starting in 2007 it was typical for Verus to charge consulting fees as a percent of the total assets of the client's fund. Since that time, Verus has charged a fee of 2.5 basis points on the total assets of the Plan. It is now more typical for Verus to charge consulting fees to their clients on a flat fee basis with periodic updates for cost increases to be negotiated.

Verus proposes to convert to a \$295,000/year fee for the same slate of services currently offered. These services are detailed in schedules to the proposed consulting agreement and include –

- Verus acts as a Fiduciary relative to the Plan
- Quarterly and monthly investment reporting

- Asset allocation and investment policy advice
- Investment manager recommendations
- Asset allocation studies on a 3-5 year basis
- Ongoing investment advice

On the current asset-based fee structure for Verus – 2.50 basis points – the FY18-19 consulting fees for Verus had been projected to be \$340,000. The adopted FY18-19 administrative budget for the Pension Trust includes consulting fees at \$300,000 in anticipation of this proposed flat fee based fee reduction from Verus.

Verus' services are as the general investment consultant to the Pension Trust. More specialized consulting – e.g., real estate, private equity, etc. may be performed by other consultants if needed. At present, staff is of the opinion that keeping Verus as the general investment consultant without other consultants is an appropriate structure.

Respectfully submitted,



April 2, 2018

Mr. Carl Nelson
Executive Secretary
San Luis Obispo County Pension Trust
100 Mill Street
San Luis Obispo, CA 93408

Re: Investment Consulting Fee

Dear Carl:

It has been my great pleasure to serve the San Luis Obispo Pension Trust since my firm and I were first hired in early 2007.

As I'm sure you're aware, the fee structure we have been operating under since the beginning of our relationship is asset-based and was originally set at 2.25 basis points of total plan assets. This was increased to 2.5 basis points in May of 2008 in consideration of additional services requested by the Board at that time (e.g., monthly flash reports and monthly market commentary).

In 2008, total plan assets were approximately \$800 million, which equated to about \$200,000 in annual consulting fees. Since then, total plan assets have grown by nearly 70%, and our fees have increased commensurately.

Recently, we undertook a holistic effort to evaluate our fee structure and to ensure we are charging and receiving fees aligned with the market for high quality investment consulting services. This in turn led to a new asset-based fee schedule, which provides break points so plans with higher assets can benefit from economies of scale. Applying our new schedule to your current assets leads to a lower fee for SLOCPT. Therefore, I am proposing two options for your and your Board's consideration, each of which will have the effect of lowering your fee going forward.

Option 1 – Updated asset-based fee

Under this option, we would convert your current asset-based fee of 2.5 basis points to our new graduated fee schedule, which provides break points at higher asset levels (see schedule below). Assuming total fund assets of \$1.35 billion, your fee would decrease from \$337,500 to \$298,750 (or 2.21 basis points), on an annualized basis.

Selecting this option would maintain the asset-based feature of the current fee structure, whereby Verus benefits from rising plan assets and shares the risk of market drawdowns. A key difference

between the proposed schedule and the current schedule is that as assets grow, any additional dollar of plan assets will be charged 0.75 basis points, rather than the current 2.5 basis points. Effectively, this means our fee growth rate is discounted by 70% on a go-forward basis. (It is worth noting that if plan assets grow at the actuarial assumed rate of return over time, our fee will grow by about 2.5% per year on average.)

Base Consulting Fee Schedule			
	Assets		Bps
7	\$1,000,000,000	and up	0.75
6	\$500,000,000	\$1,000,000,000	1.50
5	\$250,000,000	\$500,000,000	2.50
4	\$100,000,000	\$250,000,000	3.50
3	\$50,000,000	\$100,000,000	5.00
2	\$25,000,000	\$50,000,000	8.00
1	\$0	\$25,000,000	15.00
	\$ 1,350,000,000		
	\$ 298,750	0.0221%	2.21

Option 2 – Static retainer fee

Under this option, we would simply charge a static fee of \$295,000 per year, guaranteed for three years. This arrangement would trigger a fee increase request every few years.

Carl, I am pleased to be able to offer these two options to reduce SLOCPT’s overall plan expense. If the Board is agreeable to one or the other, I will send over an updated agreement, which may also give us a chance to do some additional modernizing as well.

I’ll be pleased to hear your thoughts once you’ve had a chance to review.

Best regards,

Scott J. Whalen, CFA

Executive Managing Director

Restated and Amended Investment Consulting Agreement

This Agreement (restating and amending the Agreement between the parties dated February 26th, 2007 and its June 19, 2008 supplement) is made and entered into effective as of July 1, 2018 (the “Agreement”) by and between Verus Advisory, Inc., a Washington corporation, having its principal offices at 999 Third Avenue, Suite 4200, Seattle, WA 98104 (“Consultant”), and San Luis Obispo County Pension Trust (the “Client”). Client hereby retains Consultant to provide the consulting services described below with respect to Client’s assets (the “Assets”) on the terms and conditions set forth below.

1. Services of Consultant

Consultant agrees to provide Client with the investment consulting services stipulated in Schedule A. Additional services, which are not committed for by Client at this time but may be requested in the future, are detailed in Schedule B.

2. Client Information

Client agrees to provide, or cause its custodian bank, administrator, attorney, trustee, present or former investment consultant, actuary, consultants, other third parties, or investment managers (hereinafter referred to as “Representatives”) to provide Consultant with any and all the necessary and appropriate information for Consultant to begin to perform its obligations under this Agreement. This information includes liquidity needs, historical performance information, investment guidelines, and other pertinent information as requested by Consultant from time to time, including, without limitation, a written summary of any investment limitations or restrictions. If Client represents a Plan (as defined in Section 3 below), Client agrees to provide, or cause its Representatives to provide, Consultant (in addition to the information described in the preceding sentence) with a copy of any applicable Plan documents, a list of any investment restrictions set forth therein and a list of parties-in-interest with respect to the Plan. The Client, directly or through its Representatives, also agrees to inform the Consultant within a commercially reasonable period of time of any change in circumstances affecting the needs or goals of the Client, as the case may be. Client understands that in providing its services hereunder, Consultant will rely on the information from time to time provided to it by Client and Client’s Representatives. Consultant shall not be required to verify any information obtained from Client or Client’s Representatives. Consultant shall not be liable for the accuracy and completeness of information furnished or representation made by such Representatives.

3. Limits of Responsibility

Consultant’s advice to Client pursuant to this Agreement is limited to recommendations and Client shall retain absolute discretion over and responsibility for the implementation of Consultant’s

recommendations. Nothing herein shall require Client to engage any investment managers recommended by Consultant or to follow any recommendation provided by Consultant. Consultant makes its recommendations based upon information obtained and analyzed by a wide variety of public and private sources, including, in the case of investment managers, periodic questionnaires and interviews. Although the information collected by Consultant is believed to be reliable and is compiled in accordance with accepted industry standards, Consultant cannot guarantee the accuracy or validity of such information. Consultant shall not be liable for any losses or expenses incurred by Client as a result of fraudulent actions made by Client's Representatives. Client understands that the prior performance of an investment manager is not necessarily indicative of such investment manager's future results.

If Client has requested Consultant to assist it in the selection of an investment manager(s), Consultant will recommend investment managers (or mutual funds), which appear to be suitable for Client and that have been approved by either the Consultant's Investment Committee or Alternatives Investment Committee, based upon Client's stated investment objectives, risk/return expectations and financial needs. Consultant will monitor quantitative and qualitative elements of investment managers recommended and selected by Client; provided, however, nothing in this Agreement shall be construed to assert that Consultant will conduct an audit of the individual security level positions of investment managers. Consultant does not assume any responsibility, nor shall it be liable for the conduct or the investment performance, either historical or prospective, of any investment manager recommended by Consultant and selected by Client. Consultant shall have no authority to enter into any agreement with any investment manager on behalf of, or otherwise bind Client.

Consultant will not manage Client's Assets or exercise any investment discretion or perform any discretionary trading with respect to the Assets. Consultant shall have no responsibility for voting any proxies solicited by or with respect to issuers of securities in which the assets of Client may be invested from time to time. Consultant cannot be and is not responsible for diversifying any of the Client investments or the Plans that Consultant does not see or is otherwise unaware of, even if those assets have an impact on or would be affected by the investment program Consultant is advocating. In addition, Consultant and its employees will not render, or be responsible for rendering, any legal, accounting or actuarial advice to Client or prepare for Client any legal, accounting or actuarial document.

If Client is or will be acting in connection with the management or investment of assets of any employee benefit plan (a "Plan") subject to the Employee Retirement Income Security Act of 1974 "ERISA", Consultant hereby acknowledges that it is a "fiduciary" (as defined under Section 3(21) of ERISA). Client acknowledges (i) Consultant has no discretionary authority or control with respect to the Plan, and (ii) Consultant's recommendations hereunder will be implemented with respect to the Assets only if accepted and acted upon by Client pursuant to an exercise of Client's independent fiduciary duty to the Plan. Consultant shall not be liable as a fiduciary for any activities not deemed to be fiduciary activities under ERISA or other applicable law.

To the extent permitted by applicable law, Consultant, its officers, directors, employees and shareholders will not be liable for any losses or expenses incurred by Client, its Trustees, or the Plan's underlying participants or beneficiaries as a result of any action or omission by the Representatives, unrelated third parties, or Consultant, except to the extent caused by Consultant's negligence, willful misconduct, bad faith, or violation of this Agreement or of its fiduciary responsibilities under ERISA or other applicable law. For all purposes of this Agreement, Consultant shall be deemed to be an independent contractor and shall have no authority to act for or represent Client in any way and shall not be deemed to be an agent of Client. Nothing in this Agreement may be interpreted or construed to create any employment, partnership, joint venture, or other relationship among Consultant and Client.

4. Fees

In consideration of the services to be rendered by Consultant set forth in Schedule A, Client shall pay Consultant in accordance with Fees stipulated in Schedule A. If this Agreement is terminated by either Client or Consultant effective as of a date which is not the end of a calendar quarter, Client shall pay Consultant a pro rata portion of the fee payable hereunder through the written receipt of such notice plus 30 days (computed on the basis of a 90-day quarter and the actual number of days elapsed). Normal travel costs for meetings attended will also be billed to Client without mark up.

Fees for additional services, not committed for by Client at this time, are detailed in Schedule B.

Consultant shall not accept any fees or other compensation from any other party or source (whether directly or indirectly) in connection with or relating to its services to Client.

5. Manner of Payment

Fees will be billed quarterly in arrears on a calendar quarter basis with the first quarter commencing on the effective date of this Agreement. All invoices for fees shall be payable within thirty (30) days of receipt.

6. Confidentiality

From time to time, Consultant may acquire information that may be regarded as confidential. Client acknowledges and agrees Consultant will not be free to divulge or to act upon such information with respect to the performance of its services hereunder. All information and advice furnished by either party to the other, including their agents and employees, shall be treated as confidential and not disclosed to third parties except as agreed upon in writing or required by law.

Notwithstanding the above Client agrees to allow Consultant to use Client's name and/or logo on client reference lists so long as a disclaimer is used stating the Consultant does not know if the Client would recommend using its services and that no confidential information with regard to client's assets or policies is revealed.

7. Nonexclusive Relationship

Client recognizes and acknowledges Consultant performs investment-consulting services for various clients. Client agrees Consultant is permitted to give advice and take action with respect to its other clients that may differ from advice given or action taken with respect to Client even though the investment objectives may be the same or similar. Nothing in this Agreement shall be deemed to in any way restrict the right of Consultant to perform investment-consulting services or other services for any other person or entity, and the performance of such services for others shall not be deemed to violate or give rise to any duty or obligation to the Client or Plan. Consultant shall not be obligated to give Client's assets, Plan, or investments treatment that is preferential or more favorable than which is provided to other clients.

Nothing in this Agreement shall limit or restrict Consultant or any of its shareholders, officers, directors, affiliates or employees from buying, selling, or trading in any securities for their own account or accounts. Client acknowledges Consultant and its shareholders, officers, directors, affiliates and employees, and its other clients, may at any time have, acquire, increase, decrease, or dispose of positions in investments which are at the same time being acquired or disposed of for the account of Client.

8. Authority to Execute Agreement

Consultant and Client represent the person executing and delivering this Agreement on its behalf has full power and authority to do so and this Agreement is binding. Consultant and Client will advise the other of any event, which might affect this authority or the propriety of this Agreement.

9. Assignment or Termination of Agreement

No assignment (as the term is defined in the Investment Advisers Act of 1940, as amended (the "Advisers Act")) of this Agreement may be made by Consultant without the prior consent of Client. This Agreement may be terminated at will upon written notice by either party to the other and termination will become effective 30 days after receipt of such written notice. Upon termination of this Agreement, any fees paid in advance will be prorated and Client will be entitled to a refund from the effective date of termination through the end of the billing period. To the extent there are amounts owed by Client to Consultant upon the date of termination of this Agreement, Client agrees to immediately pay such amounts to Consultant without further notice or demand therefore. Anything herein to the contrary notwithstanding, Client shall have the right to terminate this Agreement, without penalty, within five business days of the date of the initial execution of this Agreement by Client and to receive a full refund of all amounts paid to Consultant.

10. Liability Insurance

Consultant shall not perform any work under this Agreement until it has obtained insurance complying with the provisions of this paragraph, delivered a copy of each insurance policy to the Client, and obtained Client approval of all such policies. Said policies shall be issued by companies authorized to do business in California. Consultant shall maintain said insurance in force at all times. The following coverages with the following features shall be provided:

(A) Comprehensive Liability Insurance. Consultant shall maintain comprehensive general and automobile liability insurance, which shall cover claims arising from bodily and personal injury, including death resulting from any act or occurrence arising out of Consultant's operations in the performance of this Agreement, including, without limitation, acts involving automobiles. The policy shall provide not less than \$2,000,000.00 single limit coverage applying to bodily and personal injury, including death resulting therefrom, and property damage. The following endorsements must be attached to the policy:

- (1) If the automobile policy covers on an "accident" basis, it must be changed to an "occurrence" basis.
- (2) The policy must cover personal injury as well as bodily injury.
- (3) The policy must have blanket coverage of contractual liability.
- (4) The policy must have a "Cross Liability" ("Severability of Interests") endorsement such that each insured is covered as if separate policies had been issued to each insured.
- (5) The San Luis Obispo County Pension Trust, its officers, employees and agents shall be named as additional insureds under the policy, and the policy shall provide that the insurance will operate as primary insurance and that no other insurance effected by the Client will be called upon to contribute to a loss hereunder.

(B) Workers Compensation Coverage. In accordance with the provisions of sections 3700 et seq. of the California Labor Code, Consultant is required to be insured against liability for workers compensation or to undertake self-insurance. Consultant agrees to comply with such provisions before commencing performance under this Agreement.

(C) Certification of Coverage. Prior to commencing work under this Agreement, Consultant shall provide Client with the following for each insurance policy required to be maintained by Consultant under this Agreement:

- (1) A copy of the entire policy (except that no copy of Consultant's workers' compensation policy need be provided).
- (2) A certificate of coverage including certification that the policy will not be canceled or reduced in coverage or changed in any other material aspect without thirty (30) days prior written notice to the Client.

(E) Effect of Failure or Refusal. If Consultant fails or refuses to procure or maintain the insurance required by this Agreement, or fails or refused to furnish the Client with the certifications required above, Client shall have to right, at its option, to forthwith terminate this Agreement for cause.

11. “Copyright”

Any reports, documents or other materials produced in whole or in part under this Agreement shall be the property of the Client and none shall be subject to copyright by or on behalf of Consultant.

12. “Conflict of Interest”

It is hereby understood and agreed that the parties to this Agreement have read and are aware of the provisions of Section 1090, et seq., and Section 87100, et seq., of the California Government Code relating to the conflict of interest of any public officer or employee of the Client relating to this Agreement, its is further understood and agreed to abide by Section 87200, et seq., of the California Government Code during the term of this Agreement.

13. “Investment Adviser”

Consultant is registered with the Securities and Exchange Commission (“SEC”) as an investment adviser. Consultant acknowledges that Consultant is a fiduciary to the Client under the Investment Advisers Act of 1940 and agrees that Consultant will provide Client with all disclosures required by applicable laws related to investment advisers. Further, in this regard, Consultant agrees that Consultant will disclose to Client, on a continuing basis during the term of this Agreement, the following:

(A) Any and all relationships that Consultant has with any and all money managers that Consultant may recommend to the Client.

(B) Any payments Consultant receives or has received from any and all money managers which Consultant may recommend to the Client.

(C) Any arrangement(s) with broker-dealers under which Consultant, or a related company, will benefit if a money manager recommended by Consultant to the Client places trades with the said broker-dealer on behalf of Client.

14. Governing Law

This Agreement is made and shall be construed under the laws of the State of California and covers service to be performed in California. The parties agree that the validity, enforceability, and interpretation of this Agreement or any of its provisions shall be determined and governed by the laws of the State of California. The County of San Luis Obispo shall be the venue for any action or proceeding that may be brought, or arise out of, this Agreement.

15. Amendments

This Agreement may not be modified or amended except by a writing signed by the parties hereto.

16. Severability

If any provision of this Agreement shall be held or made non-enforceable, by a statute, rule, regulation, decision of a tribunal or otherwise, such provision shall be automatically reformed and construed so as to be valid, operative and enforceable to the maximum extent permitted by law or equity while most nearly preserving its original intent. The invalidity of any part of this Agreement shall not render invalid the remainder of this Agreement and, to that extent, the provisions of this Agreement shall be deemed to be severable.

17. Miscellaneous

Consultant represents it is registered under the Advisers Act and shall carry out its fiduciary responsibilities as an investment advisor in accordance with the Advisers Act and such others federal and state laws, regulations and rules as are applicable to the terms of service provided under this Agreement. Consultant will notify the Client immediately in writing if it ever ceases to be registered as an investment adviser under the Advisers Act.

One or more bonds will be maintained during the term of this Agreement by Verus (and any Sub-Manager), to provide the Client with protection against fraud or dishonesty (either directly or through connivance with others) on the part of Verus, its officers, directors, employees, and agents if any, and such bond or bonds shall not be a rider to or a part of any bond or policy procured by the Client.

Consultant shall maintain in full force and effect an insurance policy protecting Verus (and its officers, directors, shareholders, partners and/or employees) against liability or loss for a breach of fiduciary responsibility on an aggregate basis to provide the full limit of not less than \$10,000,000 on any one claim or multiple claims.

As used herein, reference to persons in the masculine gender shall include persons of the feminine gender. Reference in the singular shall, as and if appropriate, include the plural. All paragraph headings in this Agreement are for convenience of reference only, do not form part of this Agreement and shall not affect in any way the meaning or interpretation of this Agreement.

All written communication to Consultant pursuant to this Agreement shall be sent to the Consultant, at the above-referenced address. All written communication to the Client shall be sent to Client at their current address. All notices and other written communication given under this Agreement shall be effective upon their receipt by the party to whom addressed.

Client acknowledges receipt of Consultant's Form ADV, Part 2 and has five (5) business days to cancel this Agreement from date of receipt of Form ADV.

AGREED to this _____ day of _____, 2018.

San Luis Obispo County Pension Trust

By _____
Signature of Client

Title if Applicable

Signature of Client

Title if Applicable

**AGREED AND ACCEPTED:
Verus Advisory, Inc.**

By _____
Principal

Schedule A: Scope of services and retainer fees

1. Consulting Services

Consultant agrees to provide the following services to Client:

- (a) Provide monthly “flash” investment reports.
- (b) Perform quarterly quantitative analysis of the investments and deliver quarterly review presentations to Client.
- (c) Provide ongoing investment advice designed to assist Client in meeting investment objectives.
- (d) Review, revise, and maintain an investment policy statement to govern the investments of the Plan.
- (e) Conduct periodic asset allocation reviews.
- (f) Conduct Investment Manager searches as approved by Client.
- (g) Review investment manager fees and assist with negotiating investment manager agreements.
- (h) Select transition manager and assist Client in transitioning assets.
- (i) Conduct education on methods and strategies associated with improving the overall investment strategy of the Plan.
- (j) Conduct an Asset-Liability study not more frequently than every 3 years.
- (k) Perform a custodial audit when authorized by Client.
- (l) Additional services not requested at this time, and the fees for each, are itemized in Schedule B.

2. Fee for Service

For the above-referenced series of services, Client agrees to pay an annual fee of \$295,000, payable on a quarterly basis in arrears.

Consultant Initials: _____

Client Initials: _____

Schedule B: Schedule of additional available services and related fees

The following is a list of services and related fees not stipulated in the retainer fee and which would be billed separately:

- (a) Provide BarraOne risk analytics using index holdings for \$25,000 plus applicable software license fees.
- (b) Provide BarraOne risk management services, using portfolio holdings for \$200,000 plus applicable software license fees.
- (c) Assist in a non-discretionary capacity in the research and construction of a broadly diversified portfolio of hedge funds for an annual fee of \$150,000.
- (d) Provide research, construction and management on a discretionary basis of a broadly diversified portfolio of hedge funds for an annual fee of \$250,000.
- (e) Assist in a non-discretionary capacity in the research and construction of a broadly diversified portfolio of private equity funds for an annual fee of \$200,000.
- (f) Provide research, construction and management on a discretionary basis of a broadly diversified portfolio of private equity funds for an annual fee of \$300,000.
- (g) Assume responsibility for executing investment decisions as a discretionary consultant or OCIO, within the parameters set forth by Client, including manager selection and portfolio construction (price based on scope and level of assets; standard fee structure begins at 30bps on the first \$100 million). This would require amending this existing service agreement.
- (h) Conduct a custodial bank/directed trustee search including up to six vendors (\$20,000; \$2,500 per additional vendor included).
- (i) Provide litigation support and other specific administrative services when authorized by Client for the following hourly rates:

Principal / Senior Consultant	\$400/hour
Consultant	\$250/hour
Associate Consultant	\$150/hour
Analyst	\$125/hour

Consultant shall furnish Client with appropriate hourly detail to justify bills submitted.

Consultant Initials: _____

Client Initials: _____

Board of Trustees

1000 Mill Street
San Luis Obispo, CA 93408
Phone: (805) 781-5465
Fax: (805) 781-5697
www.SLOPensionTrust.org



Date: June 25, 2018

To: Board of Trustees

From: Carl Nelson – Executive Secretary
Amy Burke – Deputy Executive Secretary

Agenda Item 12: Asset Allocation June 2018

This item on the agenda provides a properly noticed opportunity for the Board of Trustees to discuss and take action if necessary regarding asset allocation and related investment matters.

No investment account drawdowns were necessary in June for either liquidity or rebalancing purposes.

Should SLO County proceed with the anticipated prefunding of employer paid contributions for the County and the APCD in July, those funds will be allocated depending on asset mix at that time.

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Board of Trustees

1000 Mill Street
San Luis Obispo, CA 93408
Phone: (805) 781-5465
Fax: (805) 781-5697
www.SLOPensionTrust.org



Date: June 25, 2018

To: Board of Trustees

From: Carl Nelson – Executive Secretary
Amy Burke – Deputy Executive Secretary

Agenda Item 17: Trustee Comments – September Strategic Planning Session Topics

The Pension Trust traditionally holds a strategic planning session for the Board of Trustees each year at the September meeting. For 2018 a key topic will be pension funding policy.

Staff requests the Board to think about other topics it deems of interest for more in-depth discussion in September and share them at the June 25th meeting.

Thanks you

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