

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 24, 2019 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>*

A) 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.

B) CONSENT

2. Minutes of the Regular Meeting of May 20, 2019 (Approve Without Correction).
3. Report of Deposits and Contributions for the month of May 2019 (Receive and File).
4. Report of Service Retirements, Disability Retirements and DROP Participants for the month of May 2019 (Receive, Approve and File).
5. Applications & Elections to participate in the Deferred Retirement Option Program (DROP) received through June 7, 2019 (Receive, Approve and File).
6. Pension Administration System – RAD Decommissioning Support – Magenic contract Amendment (Recommend Approval)

C) ORGANIZATIONAL

None

D) APPLICATIONS FOR DISABILITY RETIREMENT

- 7. Application for Ordinary Disability Retirement – Case 2019-02 (Recommend Approval).

E) OLD BUSINESS

None

F) NEW BUSINESS

- 8. Audited Financial Statements for the period ended December 31, 2018 – Comprehensive Annual Financial Report – presentation by Rosalva Flores and Alaina Vandermade, CPAs of Brown Armstrong Accountancy (Recommend Receive, File and Direct Staff to Distribute in accordance with the Retirement Plan).
- 9. January 1, 2019 Actuarial Valuation and Pension Contribution Rates (Approve, Receive and File, Approve Pension Contribution Rates).
- 10. Employer Contributions FY19-20 Prefunding Amount – (Recommend Approval)
- 11. Board of Trustees Meeting Schedule (Review, Discuss, and Direct Staff as necessary)

G) INVESTMENTS

- 12. Monthly Investment Report for May 2019 (Receive and File)
- 13. Asset Allocation - (Review, Discuss, and Direct Staff as necessary)

H) OPERATIONS

- 14. Staff Reports
- 15. General Counsel Reports
- 16. Committee Reports:
 - i. Audit Committee Report
 - ii. Personnel Committee No Report
 - iii. PAS Replacement Committee Report

17. Upcoming Board Topics (subject to change)

i. July 22, 2019

- a. Disability case(s) – TBD
- b. Actuarial Services – RFP Plan
- c. Member Survey Results

ii. August 26, 2019

- a. Mid-year Financial Statements and Budget Update
- b. Quarterly Investment Report
- c. ESG Inclusion in Investment Management
- d. Private Equity / Private Credit program review and 2019 commitment

iii. September 23, 2019 (Strategic Planning session)

- a. Actuarial Risk and Sustainability
- b. Business Continuity Plan

18. Trustee Comments

I) CLOSED SESSION

None

J) ADJOURNMENT

This page left blank intentionally.

**PENSION TRUST
BOARD OF TRUSTEES**

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



MINUTES

May 20, 2019
Regular Meeting of the Pension Trust
Board of Trustees

- Board Members Present:** Will Clemens President
Jim Hamilton
Jeff Hamm
Michelle Shoresman
Gere Sibbach
- Board Members Absent:** Guy Savage Vice President
Matt Janssen
- Pension Trust Staff:** Carl Nelson Executive Secretary
Amy Burke Deputy Executive Secretary
- General Counsel:** Chris Waddell, Esq.
- Consultants:** Scott Whalen Verus
- Others:** Larry Batchelder SLOCREA
Teresa McCarthy-White SLO County Human Resources
Jennifer Alderete * Pension Trust staff
(* arrived at 9:55 after Agenda Item 6 addressed)

Call to Order: 9:32 AM by President Clemens, presiding over the meeting.

A) PUBLIC COMMENT

- 1. None

B) CONSENT

2. Minutes of the Regular Meeting of April 25, 2019 (Approve Without Correction).
3. Report of Deposits and Contributions for the month of April 2019 (Receive and File).
4. Report of Service Retirements, Disability Retirements and DROP Participants for the month of April 2019 (Receive, Approve and File).
5. Applications & Elections to participate in the Deferred Retirement Option Program (DROP) received through May 3, 2019 (Receive, Approve and File).

Motion: Approve the Consent items.

Public Comment: None

Motion Made: Mr. Clemens

Motion Seconded: Mr. Hamm

Carried: Unanimous

C) ORGANIZATIONAL

None

D) APPLICATIONS FOR DISABILITY RETIREMENT

None

E) OLD BUSINESS

None

F) NEW BUSINESS

6. Job Description Amendment

Discussion: Staff presented the proposed changes to the SLOCPT Financial Accountant job description. The Personnel Committee reported that they had reviewed the changes and recommended their approval.

Motion: Approve Staff Recommendation to add an Accountant IV level to the existing Accountant I-III range. In addition, change budget and other documents to consistently use

“Accountant” in lieu of “Financial Accountant” to conform usage with the revised job description.

Public Comment: None

Motion Made: Mr. Hamm

Motion Seconded: Ms. Shoresman

Carried: Unanimous

7. Administrative Budget for Fiscal Year 2019-2020 - Approval

Discussion: Staff presented the Proposed FY19-20 Administrative Budget for the SLOCPT. The initial proposed budget had been presented at the April 25, 2019 Board of Trustees meeting. Minor revisions for lower costs in some capital expenditure items were incorporated in the final budget.

Motion: Approve Staff Recommendation with change of “Financial Accountant” to “Accountant” in personnel sections.

Public Comment: None

Motion Made: Mr. Clemens

Motion Seconded: Mr. Hamm

Carried: Unanimous

8. By-Laws and Plan Technical Amendments – Resolution 2019-03

Discussion: Staff presented proposed Pension Trust By-Laws amendments and Retirement Plan technical amendments. The Board discussed the proposed changes at length. Resolution 2019-03 recommends such amendments to the Board of Supervisors for approval. Staff commented on the SLO County Human Resources process of circulating proposed Retirement Plan amendments to the various collective bargaining organizations for a two-week comment period prior to setting such amendments for Board of Supervisors approval.

Motion: Approve Staff Recommendation and Resolution 2019-03 with the addition of the acronym “SLOCPT” in addition to “Pension Trust” in Section 2.01 of the By-Laws

Public Comment: None

Motion Made: Mr. Hamm

Motion Seconded: Mr. Sibbach

Carried: Unanimous

G) INVESTMENTS

9. Quarterly Investment Report for the 1st Quarter of 2019 – Verus

Discussion: Quarterly investment report by Scott Whalen, Verus presented and discussed at length. Mr. Whalen, at the request of President Clemens, commented on the ethical compliance and ethical tone at TPG, the SLOCPT's private credit investment manager, and the private markets sector in general. President Clemens' inquiry was based on recent news reports of the private misdeeds of a Managing Director at TPG's Private Equity arm relative to a nationwide college admissions scandal. Mr. Whalen reported that the matter at TPG was a personnel action by the person in question and was unrelated to TPG as an organization. Mr. Whalen also reported that TPG and the private markets sector in general has a necessarily strong compliance structure. Mr. Whalen shared his opinion that TPG operates as a highly ethical organization.

Relative to investment performance Mr. Whalen reported that Verus may be recommending a change to the policy target allocation to Commodities in the future. Verus also is closely monitoring recent relative underperformance of the Brandywine global credit portfolio.

Motion: Receive and File

Public Comment: None

Motion Made: Mr. Hamm

Motion Seconded: Mr. Clemens

Carried: Unanimous

10. Monthly Investment Report for April 2019

Discussion: Monthly investment performance report by Staff.

Motion: Receive and File

Public Comment: None

Motion Made: Mr. Clemens

Motion Seconded: Mr. Hamilton

Carried: Unanimous (excluding Trustee Sibbach who had left the room momentarily)

11. Investment Benchmark Review

Discussion: Scott Whalen of Verus presented his recommendations for revisions to the investment benchmarks used for investment performance reporting on private equity and private credit weightings as addressed in his written report.

Motion: Approve Staff Recommendation including amendment of Addendum A to the Investment Policy Statement

Public Comment: None

Motion Made: Mr. Hamm Motion Seconded: Mr. Clemens

Carried: Unanimous

12. Strategic Asset Allocation Policy Review

Discussion: Scott Whalen of Verus presented his recommendations on the Strategic Asset Allocation (SAA) policy for the Pension Trust. Verus' 2019 Capital Market Assumptions for expected 10-year returns are increased in some sectors from their 2018 CMAs. However, no changes were significant enough to warrant a recommendation to change the existing Strategic Asset Allocation Policy contained in the adopted Investment Policy Statement – Addendum A. Future changes to be considered may be to the target weights for Commodities and Private Equity & Private Credit.

Motion: No Action Necessary

Public Comment: None

11:57 AM – President Clemens called for a five-minute break

12:01 PM – Back in session

13. Investment Policy Peer Comparison

Discussion: Staff presented exhibits comparing the SLOCPT investment policy to other public retirement systems. The SLOCPT follows an investment policy slightly lower risk than most other public pension funds (e.g., a total of a 40% allocation to public market equities vs. most other funds allocating over 50% to equities).

Motion: Receive and File

Public Comment: None

Motion Made: Mr. Clemens Motion Seconded: Mr. Hamm

Carried: Unanimous

14. **ESG Investing Update - Verus**

Discussion: Scott Whalen of Verus presented an educational update on institutional investor practices regarding “Environmental, Social, Governance” (ESG) investment criteria. A lengthy and involved Trustee discussion of ESG issues took place. The Board requested that at a future meeting –

- A review of the ESG policies of the investment managers used by the SLOCPT be presented.
- A Board discussion of possible expansion of the existing ESG guidelines contained in the adopted Investment Policy Statement be scheduled.

Motion: Receive and File

Public Comment: None

Motion Made: Mr. Clemens

Motion Seconded: Mr. Hamm

Carried: Unanimous

15. **Asset Allocation**

Discussion: Staff reviewed routine administrative asset allocation transfers related to liquidity.

No Action Necessary

H) OPERATIONS

11. Staff Reports

- i) Trustee Election Update – Staff reported that for the 2019 Trustee election, Trustee Clemens as the incumbent was the only candidate who filed a statement of interest with the Clerk & Recorder’s Office. As a result, the election will be canceled and the Clerk & Recorder’s Office will prepare a Board of Supervisors item certifying Trustee Clemens for another three year term for July 2019 to June 2022.
- ii) RAD Decommissioning – Staff reported that following the planned go-live date of a new Pension Administration System (PensionGold Version 3) in July 2019, that the existing RAD system would be decommissioned and removed from County servers by February 2020.

- iii) Member Survey – Staff reported that the survey of Retirees on SLOCPT communication and customer satisfaction had received over 450 response to date for an approximately 15% response rate. A survey of Active Members is slated to be conducted starting in late May. Both surveys will remain open for response through June and a report to the Board of Trustees on the results will be made at the next meeting after that.
- iv) Retirement 101 classes – Staff conducted a “Retirement 101” pension educational class for the Assessors office staff on April 24th.
- v) Industrial Disability Application – Staff reported that Case 2017-08 would not proceed to Hearing as previously approved by the Board. The applicant has withdrawn their disability retirement application.
- vi) Pension Trust Staff CPR/AED training will take place on July 24th with the Pension Trust office closed from 9:00 to 1:00.

12. General Counsel Reports

- i) Mr. Waddell reported that the California Supreme Court in the Alameda vested-rights case has been fully briefed with a decision date yet to be determined.

13. Committee Reports:

- i) Audit Committee – No Report
- ii) Personnel Committee - Trustee Hamm reported on the Personnel Committee meeting of April 22, 2019. The Personnel Committee recommendations were: a) to approve the job description revision addressed in Agenda Item 6; b) change the title of the Executive Secretary to “Executive Director” and the Deputy Executive Secretary to “Deputy Director” as addressed in Agenda Item 8; and c) direct that a confidential survey of SLOCPT staff be conducted and reported to the Personnel Committee.
- iii) PAS Replacement Committee – Trustee Savage reported that the PAS Replacement Committee met on May 20th and that the project was proceeding as planned.

14. Upcoming Board Topics – published on meeting agenda

15. Trustee Comments – None

I) CLOSED SESSION

None

J) ADJOURNMENT –

There being no further business, the meeting was adjourned at 1:03 PM. The next Regular Meeting was set for June 24, 2019, at 9:30 AM, in the Board of Supervisors chambers, County Government Center, San Luis Obispo, California 93408.

Respectfully submitted,

Carl Nelson
Executive Secretary

**REPORT OF DEPOSITS AND CONTRIBUTIONS FOR THE MONTH OF
MAY 2019**

PP 10 5/10/2019	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	3,490,367.30	823,624.12	23.59%	394,245.64	296,583.71	19.79%	43.37%	2,098.00	1,542.66		1,518,094.13
County Tier 2	958,446.02	232,693.32	24.28%	43,329.34	80,748.70	12.95%	37.22%	53.49	709.70		357,534.55
County Tier 3	2,754,935.99	625,757.28	22.71%	322,570.60	(1,065.23)	11.65%	34.37%	-	993.28		948,255.93
Superior Court Tier 1	265,818.85	69,862.64	26.28%	46,003.14	-	17.31%	43.59%	-	-		115,865.78
Superior Court Tier 3	70,903.45	17,700.55	24.96%	8,690.53	-	12.26%	37.22%	-	-		26,391.08
APCD Tier 1	58,620.96	13,610.56	23.22%	7,915.97	4,096.10	20.49%	43.71%	-	-		25,622.63
APCD Tier 3	16,291.20	3,674.15	22.55%	2,085.33	-	12.80%	35.35%	-	-		5,759.48
Pension Trust Staff Tier 1	7,204.40	1,655.57	22.98%	877.50	669.29	21.47%	44.45%	-	-		3,202.36
Pension Trust Staff Tier 2	8,374.40	1,924.43	22.98%	221.92	777.98	11.94%	34.92%	-	-		2,924.33
Pension Trust Staff Tier 3	10,672.37	2,400.22	22.49%	1,329.76	-	12.46%	34.95%	-	-		3,729.98
LAFCO Tier 1	13,227.91	3,882.79	29.35%	716.94	1,228.88	14.71%	44.06%	-	-		5,828.61
	7,654,862.85	1,796,785.63	23.47%	827,986.67	383,039.43	15.82%	39.29%	2,151.49	3,245.64		\$ 3,013,208.86
PP 11 5/24/2019											
By Employer and Tier:											
County Tier 1	3,486,857.87	822,137.27	23.58%	393,548.81	296,477.49	19.79%	43.37%	2,098.00	1,542.66		1,515,804.23
County Tier 2	953,360.27	231,419.10	24.27%	43,009.84	80,293.93	12.93%	37.21%	53.49	709.70		355,486.06
County Tier 3	2,788,605.68	633,074.09	22.70%	325,796.63	-	11.67%	34.37%	-	993.28		959,864.00
Superior Court Tier 1	266,194.07	69,960.09	26.28%	46,078.13	-	17.31%	43.59%	-	-		116,038.22
Superior Court Tier 3	70,971.45	17,716.60	24.96%	8,697.91	-	12.26%	37.22%	-	-		26,414.51
APCD Tier 1	58,620.87	13,610.54	23.22%	7,915.95	4,096.10	20.49%	43.71%	-	-		25,622.59
APCD Tier 3	16,291.20	3,674.15	22.55%	2,085.33	-	12.80%	35.35%	-	-		5,759.48
Pension Trust Staff Tier 1	7,204.40	1,655.57	22.98%	877.50	669.29	21.47%	44.45%	-	-		3,202.36
Pension Trust Staff Tier 2	8,374.40	1,924.43	22.98%	221.92	777.98	11.94%	34.92%	-	-		2,924.33
Pension Trust Staff Tier 3	10,892.37	2,449.70	22.49%	1,357.31	-	12.46%	34.95%	-	-		3,807.01
LAFCO Tier 1	13,227.91	3,882.79	29.35%	716.94	1,228.88	14.71%	44.06%	-	-		5,828.61
	7,680,600.49	1,801,504.33	23.46%	830,306.27	383,543.67	15.80%	39.26%	2,151.49	3,245.64		\$ 3,020,751.40
TOTAL FOR THE MONTH	15,335,463.34	3,598,289.96	23.46%	1,658,292.94	766,583.10	15.81%	39.28%	4,302.98	6,491.28		\$ 6,033,960.26
TOTAL YEAR TO DATE	84,108,786.18	19,608,476.28	23.31%	9,185,127.50	4,292,986.14	16.02%	39.34%	16,338.23	145,170.36		33,248,098.51

REPORT OF RETIREMENTS**May 2019**

RETIREE NAME	DEPARTMENT	BENEFIT TYPE *	EFFECTIVE DATE	MONTHLY BENEFIT	SS TEMP ANNUITY**
Cole, Donna	Behavioral Health	Service Retirement	05/11/19	1,584.01	False
Dayton, Geoffrey	Sheriff-Coronor	DROP	05/01/19	6,479.21	False
Dietz, Dennis	Sheriff-Coronor	Service Retirement	05/04/19	3,786.33	True
Hall, Barbara	District Attorney	Service Retirement	05/04/19	2,983.04	False
Hall, Barbara	District Attorney	Additional Annuity	05/04/19	82.96	False
McMickle, Carolyn	Superior Court	Service Retirement	05/18/19	3,305.07	False
Melin, Katherine	Social Services	Service Retirement	04/01/19	335.20	True
Ramirez, Elizabeth	Public Health	DROP	05/01/19	7,622.89	False
Thompson, Sonja	Auditor-Contrlr-Treas-Tax-Coll	Service Retirement	05/01/19	2,029.03	False

** Additional Annuity Benefits are calculated based on the Additional Contribution and associated Interest balance of the Retiree at the point of retirement (per Sections 5.07, 27.12, 28.12, 29.12, 30.12, and 31.12 of the Plan)*

*** If "True" Retiree has elected an optional Social Security Coordinated Temporary Annuity (per Section 13.06 of the Plan), actual monthly allowance will be increased until age 62 and then actuarially reduced going forward*

Board of Trustees

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

San Luis Obispo County
Pension Trust
SLOOPT

Date: June 24, 2019
To: Board of Trustees
From: Carl Nelson – Executive Secretary

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

Recommendation:

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, 2019	Reginald Holmes, Behavioral Health
July 1, 2019	Shaun McDonough, ITD
July 1, 2019	Arthur Trinidad, Planning Department

This page left blank intentionally.

Board of Trustees

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



Date: June 24, 2019

To: Board of Trustees

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

Agenda Item 6: Pension Administration System – RAD Decommissioning Support – Magenic contract Amendment

Recommendation:

Staff recommends that the Board of Trustees approve the execution of Statement of Work 17.1 between the SLOCPT and Magenic, Inc. amending the existing contract for RAD system support.

Discussion:

The Pension Trust's existing Pension Administration System (PAS), RAD, was custom designed for the SLOCPT and has been in service since 2006. The software firm that built RAD and has maintained it throughout its service with the Pension Trust is Magenic Inc.

RAD is being replaced by a new PAS in the final testing stages – PensionGold Version 3. As of July 1, 2019, PensionGold will become the official System of Record for the Pension Trust and RAD will be decommissioned. However, the recommendation of Staff is to keep RAD in serviceable form through the end of 2019 for the low probability that this older PAS may need to be referenced to resolve any year-end Form 1099 tax reporting questions. This is unlikely given the successful testing of PensionGold and the data transfer already accomplished. But keeping RAD up past year end is inexpensive and prudent. Doing so involves little more than monthly operating system patches and updating at minimal effort.

The ongoing support agreement with Magenic, Inc expires at the end of June. The attached Statement of Work 17.1 to the existing Magenic agreement extends their services on a Time and Materials basis through January 31, 2020 at an hourly rate of \$125/hour and a not to exceed amount of \$12,500. Staff anticipates that the actual billings under this amendment will amount to less than three hours/month for seven months, or less than \$3,000.

Respectfully Submitted



Time and Expense Statement of Work #17.1

(Rev. 2.29.16)

This Statement of Work (sometimes referred to as an 'SOW') is attached to and made a part of the Magenic Technologies, Inc. Master Consulting Agreement which is effective on September 23, 2008. Terms in this Statement of Work shall have the same meaning as in the Master Consulting Agreement.

Client Name: San Luis Obispo County Pension Trust

Project Name: RAD Support and Maintenance

Client's Reference: Carl Nelson, Executive Secretary

Account Rep: Bill Brennan

<p><u>For Magenic Accounting Use Only:</u></p> <p>Client #:</p> <p>Project #:</p>
--

SERVICES

Magenic Technologies, Inc. ("Magenic") shall provide services to Client in a "work for hire" capacity. Although provided in good faith by Magenic, Client acknowledges that all estimates and projections provided herein, or in supplementary documents, by Magenic personnel as to total hours, fees, or cost related to a project or deliverable can vary significantly due to factors outside Magenic's control. Therefore, Magenic cannot warrant any such estimate or projection.

Client hereby acknowledges that Magenic is providing Client with subject matter expertise to assist Client on a time and expense basis in completing certain projects while working under the management of Client personnel.

Client is responsible for project management including, but not limited to, time line adherence, project scope, budget, and individual tasking and therefore the final outcome or deliverable of this engagement.

Once the monetary total of this Statement of Work has been reached, Magenic will not be required to complete any additional Services without the express written prior consent of Customer in the form of a new Statement of Work.

Magenic shall provide the following services: -

1. Systems Supported –

Magenic shall provide Application Maintenance functions as defined in this Statement of Work for the following applications:

- Application Support and Maintenance: Pension Trust Retirement Administration and Distribution System (RAD)
- Database Support and Maintenance: RAD Application
- Operations Support and Maintenance: RAD Application Infrastructure

2. Additional Services –

Magenic will provide the following additional maintenance services as directed by the client within the hours purchased:

- Defect resolution
- Migration troubleshooting
- SQL Server and Operating System high and critical patches
- SQL Server and Operating System problem management

DATES

This Statement of Work provides 100 hours of time that shall be consumed between July 1, 2019 and January 31, 2020. Should Client wish to extend the statement of work beyond this end date, Magenic requires Two (2) weeks' notice, prior to the end date. Failure to extend this statement of work prior to



two weeks before its end may result in the reassignment of the current consultant(s) to other engagements.

MATERIALS

Client agrees to provide the necessary hardware and software needed to perform the above services. The Client will pay for any additional hardware and software expenses incurred by Magenic to perform the above services.

EXPENSES

Client agrees to pay for the following incidental expenses incurred by Magenic while performing the above services:

- Airfare Meals Mileage Supplies
- Lodging Ground Transport Parking/Tolls Other _____

Magenic personnel shall adhere to the Magenic travel and expense policy unless otherwise agreed hereto. A copy of the Magenic travel and expense policy can be provided at Client's request.

Travel and expense policy to be followed: Magenic Client

ROLES AND FEES

Role	Hourly Rate	Hours	Total Fees
1. MDC Lead Developer	\$125	100	\$12,500
2.			
3.			
4.			
<hr/>			
Total – Not to Exceed		100	\$12,500

Note: Utilization of Magenic's Global Delivery Center beyond normal business hours, on weekends, and on designated Philippine holidays shall be charged at the following percentages of the above standard rates:

Regular Overtime & Weekends	150%
Holidays	250%

INVOICING AND PAYMENT

Client agrees to pay for Magenic's time for services rendered during the term of this Statement of Work. Magenic shall bill Client twice monthly for services performed and expenses incurred to date. Payment shall be due according to the payment terms as specified in the Master Consulting Agreement, unless such payment terms are modified, herein, for this particular SOW.

Inquiries regarding invoices should be directed to:

Invoices will be sent to:

Attn: Accounts Receivable
Magenic Technologies, Inc.
1600 Utica Avenue South, Ste. 800
St. Louis Park, MN 55416

Attention: Carl Nelson
San Luis Obispo County Pension Trust
1000 Mill Street
San Luis Obispo, CA 93408

Phone: 763-398-4800
Fax: 763-521-4090

Phone: 805-781-5465
E-mail: CNelson@co.slo.ca.us



THEREFORE, the parties have executed this Statement of Work to the Master Consulting Agreement in duplicate originals.

Magenic Technologies, Inc.

San Luis Obispo County Pension Trust

(Sign)

(Sign)

Name (Print)

Name (Print)

Title

Title

Date

Date

Board of Trustees

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



Date: June 24, 2019

To: Board of Trustees

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

Agenda Item 8: Audited Financial Statements and Report to the Board for the period ended December 31, 2018 – Comprehensive Annual Financial Report –Presentation by Rosalva Flores, CPA and Alaina Vandermade, CPA of Brown Armstrong Accountancy Corporation

Recommendation:

Staff recommends that the Board take the following actions:

1. Approve, Receive and File the audited Financial Statements for the period ended December 31, 2018 that are presented here as the 2018 Comprehensive Annual Financial Report (CAFR).
2. Authorize and Direct the Executive Secretary to transmit the 2018 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 29, 2019, the Audit Committee and Staff met by phone with SLOOPT's audit firm, Brown Armstrong. Rosalva Flores, CPA and Alaina Vandermade, CPA represented the firm and presented a review of the results of the Financial Audit of SLOOPT for the year 2018. 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:

Approve, Receive and File, along with authorization from the Board to distribute the 2018 CAFR to the parties listed in the recommendation, will complete the activities of the 2018 Financial Audit.

Attachments:

1. Brown Armstrong 2018 Audit Results Presentation
2. Draft Comprehensive Annual Financial Report (CAFR) for year ended December 31, 2018

Respectfully Submitted,

The San Luis Obispo County Pension Trust

Results of the December 31, 2018 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

www.bacpas.com

Contacts: Rosalva Flores, CPA
Alaina Vandermade, CPA

BROWN ARMSTRONG
Certified Public Accountants

Agenda

- ▶ Scope of Services Recap 3
- ▶ Audit Timeline/Critical Dates List 4
- ▶ Audit Areas of Focus
 - Significant Risk Areas 5
 - Significant Audit Areas 6–7
 - SAS 99 Procedures 8
- ▶ Results of the Audit
 - Required Communication Letter (SAS 114) 9
 - Audit Opinion Issued 10
 - Other Reports Issued 10–11
- ▶ Financial Statement Review 12
- ▶ Thank Staff/Questions? 13

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 *Government Auditing Standards*
 - Agreed Upon Conditions Report (Management Letter), as applicable

Audit Timeline/Critical Dates List

- ▶ February 19, 2019 – Entrance meeting with Audit Committee and Management
- ▶ Week of April 1st – 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 4, 2019 – Exit meeting to discuss results with Management
- ▶ May 29, 2019 – Exit meeting with Audit Committee and Management
- ▶ May and June 2019 – 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 and affirm that there are controls in place

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
Information Technology	<ul style="list-style-type: none">• IT Risk Assessment Survey• Review detail of administrative overrides/changes/corrections made to pension system• Timeline and estimated completion for new pension administration system

Audit Areas of Focus (cont.)

SAS 99 Procedures (Statement on Auditing Standards No. 99: Consideration of Fraud)	Brown Armstrong's Response
Fraud Interviews	<ul style="list-style-type: none">• Randomly selected Management, Employees and Trustees to interview
Travel and Credit Card Expenses	<ul style="list-style-type: none">• Tested a sample of travel and credit card expenses with policy
Investment Manager Fees	<ul style="list-style-type: none">• Walkthrough of fees• Selected a sample to recalculate with contract
Board Member Departure	<ul style="list-style-type: none">• Reviewed board member departure and inquired as to reason.

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 pronouncement – GASB Statement No. 85, <i>Omnibus 2017</i><ul style="list-style-type: none">• No significant effect on the Fiduciary Net Position• Significant estimates reviewed<ul style="list-style-type: none">✓ Fair value of investments✓ Money-weighted rate of return✓ Contributions and Net Pension Liability 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 (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
Email: rflores@bacpas.com



Alaina Vandermade, CPA
Manager
Email: avandermade@bacpas.com

Brown Armstrong Accountancy Corporation
4200 Truxtun Avenue, Suite 300
Bakersfield, California 93309
Phone (888) 565-1040
Website: www.bacpas.com

This page left blank intentionally.

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, 2018**

This page left blank intentionally

DRAFT

Comprehensive Annual Financial Report

For the Year Ended December 31, 2018

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)

Table of Contents

Introductory Section

Letter of Transmittal	2
GFOA Certificate of Achievement	11
PPCC Standards Award	12
Board of Trustees	13
Organization Chart.....	14
Professional Consultants	15

Financial Section

Independent Auditor's Report.....	18
Management's Discussion and Analysis	20

Basic Financial Statements

Statement of Fiduciary Net Position ...	25
Statement of Changes in Fiduciary Net Position.....	27

Notes to Financial Statements

Note 1 – Summary of Significant Accounting Policies	28
Note 2 – Plan Description	30
Note 3 – Deposits and Investment Risk Disclosures.....	32
Note 4 – Investments	37
Note 5 – Capital Assets.....	41
Note 6 – Contributions.....	42
Note 7 – Net Pension Liability.....	43
Note 8 – Litigation	44
Note 9 – Subsequent Events	45

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios.....	48
Schedule of Employer Contributions..	49
Actuarial Methods and Assumptions.....	49
Schedule of Annual Money-Weighted Rate of Return	50

Other Supplementary Information

Schedule of Administrative Expenses	52
Schedule of Investment Expenses.....	53
Schedule of Payments to Consultants.....	53

Investment Section

Investment Section Overview.....	56
Investment Consultant's Report	57
Summary of Investment Objectives....	60
Asset Allocation Policy	61
Investment Results.....	63
Investment Results Based on Fair Value.....	64
Schedule of Management Fees and Commissions	66
Investments at Fair Value	68
Schedule of Largest Stock and Bond Holdings	69

Actuarial Section

Actuarial Section Overview.....	72
Actuary's Certification Letter.....	73
Actuarial Methods and Assumptions..	76
Valuation Date.....	76
Actuarial Cost Method.....	76
Actuarial Value of Assets	76
Economic Assumptions	77
Demographic Assumptions.....	78
Other Assumptions	83
Schedule of Active Member Valuation Data.....	84
Schedule of Retirees and Beneficiaries Added to and Removed from Retiree Payroll	84
Solvency Test	85
Schedule of Funding Progress	86
Schedule of Development of Actuarial Value of Assets.....	87
Brief Summary of Benefit Provisions.	88

Table of Contents (continued)

Statistical Section

Statistical Section Overview94
Changes in Fiduciary Net Position.....95
Benefits by Class and Type.....96
Retiree Average Age and Average
 Monthly Benefit by Class97
Retired Members by Benefit Type
 and Amount.....98
Member Data100
Covered Employees by Employer.....101

Photographs: Carl Nelson

DRAFT

This page left blank intentionally.

DRAFT

Introductory Section



June 24, 2019

San Luis Obispo County Pension Trust
Board of Trustees



Carl Nelson

Dear Board of 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, 2018.

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 Trustees 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 Determined Contribution (ADC). The relative allocation of the Total ADC 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.

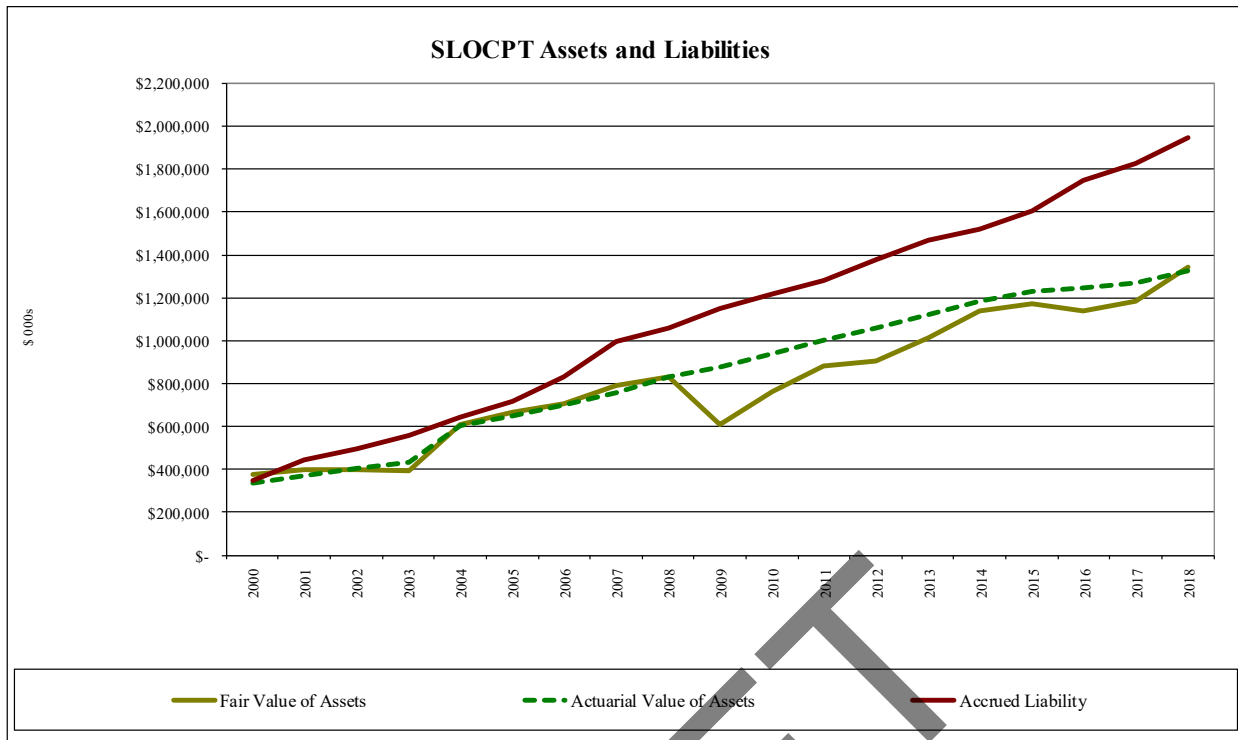
It is the policy of the County to contribute the full Total ADC each year through a combination of employer appropriations and employee contributions. The timing of when employer appropriation rate changes are implemented may vary depending on when the actuarial valuation is completed. Likewise, the 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 ADC in aggregate to be collected from employer appropriations and employee contributions.

The most recent annual actuarial valuation available for financial reporting in this CAFR is the January 1, 2018 valuation. It is based on member data and financial results through December 31, 2017. 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, 2018. At the time of preparation of this CAFR, the January 1, 2019 valuation was 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.

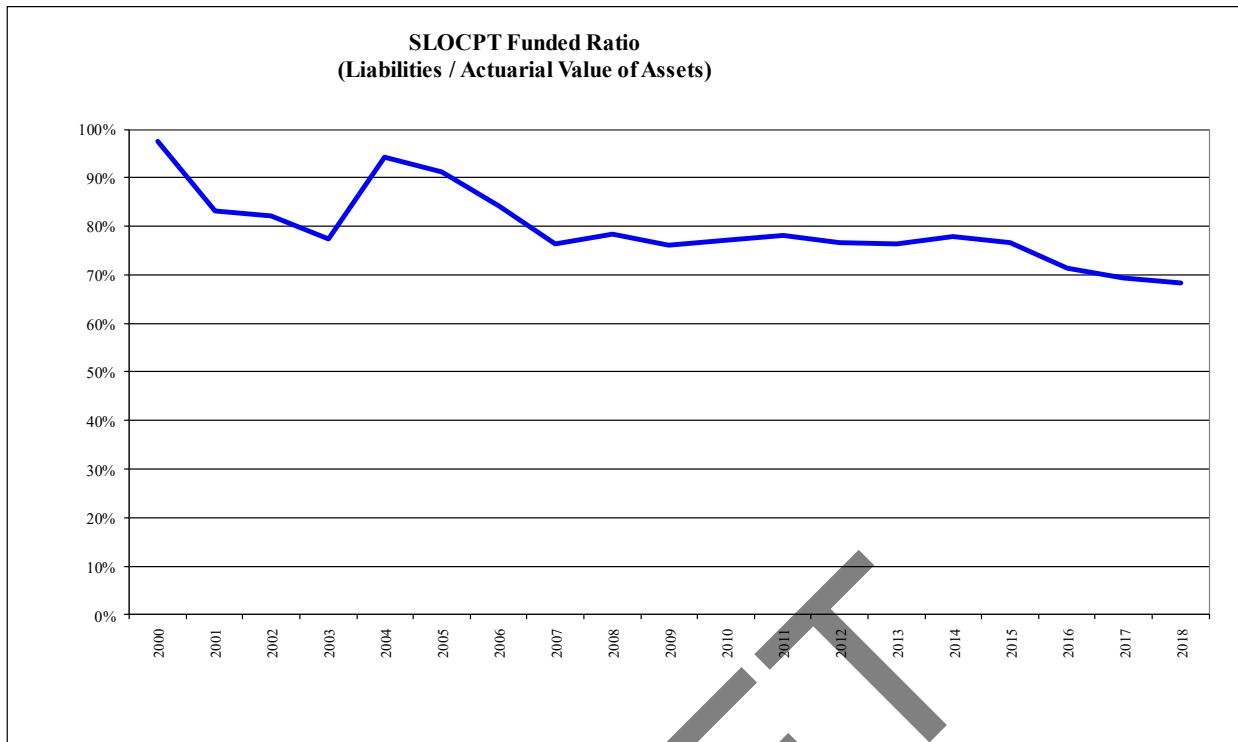
Combined with the year-end Fair Value of Assets (FVA), the history of these measures is shown in the following graph on the next page:



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%. With the 2018 Annual Actuarial Valuation, the Earnings Assumption was reduced further to 7.00%. 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, 2016 and 2017 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 69.4% as of year-end 2016 to 68.3% as of year-end 2017. 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 91.

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>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
SLOCPT Total Returns	5.1%	-0.8%	6.6%	15.5%	-3.2%

Source: Verus reports

For cumulative periods ending December 31, 2018, 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	-3.2%	6.0%	4.4%	8.8%

Source: Verus 4th Quarter 2018 report

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.

Honoring Public Service

The Pension Trust keeps foremost in its operation that the retirement benefits promised by the Plan Sponsor and administered by the Pension Trust are an important element of compensation to the hard-working public servants included in the Plan. The promise of lifetime retirement income as a portion of the compensation for such service is a weighty responsibility and one not taken lightly. The social services, health services, public infrastructure, planning, justice system, emergency services, public safety, and other services provided by the public servants in San Luis Obispo County are important to the well-being of county citizens. As such, fair compensation, including pensions, for the providers of those public services is a right that the Pension Trust is honored to be a part of providing.

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 2018, the Pension Trust paid benefit allowances to 2,868 retirees, disability recipients, beneficiaries, and survivors. During 2018, \$92.8 million was paid by the Pension Trust in recipients' benefits. Of this amount, approximately 80% 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 has spanned the 2016-2019 timeframe and is expected to result in the ability to continue to meet the operating mission of the Pension Trust into the foreseeable future. As of year-end 2018, the PAS replacement project was on schedule and on budget for a July 2019 “go-live” date. Later in 2019 an extension of the new Pension Administration System is planned to make available an online Member Portal website with substantially improved usefulness to active members and retired participants.

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 2018 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 2018.

- Private Equity – Additional commitments within the targeted 5% allocation to Private Equity were initiated in 2018 with a commitment to the Harbourvest 2018 Global Fund, LP.
- Private Credit – Contingent – During 2018, the Pension Trust approved a commitment to a contingent Private Credit LP – the TSSP-TAO Contingent – 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 2018, seven of the local properties were sold with one more property sold in early 2019. The single remaining local real estate property is the operating office of the Pension Trust. During 2018 a “retain vs. sell & lease” analysis was conducted and the decision made to retain this final property as an operating asset of the Pension Trust.

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 2018 and its findings were considered in the setting of assumptions for the January 1, 2018 annual actuarial valuation. As part of the 2018 actuarial valuation further changes in assumptions were planned for 2019. The current key actuarial assumptions used in the 2018 actuarial valuation (the most recent available as of the date of this writing) were as follows:

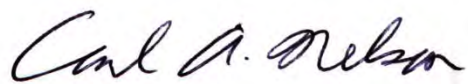
- 7.00% Earning Assumption
- 2.75% Salary Growth Assumption
- 3.00% Payroll Growth Assumption (planned to change to 2.750% in 2019)
- 2.50% Inflation Assumption
- Mortality Assumptions updated to latest available actuarial tables (RP-2014 base with MP-2017 projection tables), adjusted for actual plan experience and phased in over two Experience Study cycles in 2016 and 2018.

At the time of preparation of this CAFR, the January 1, 2019 actuarial valuation was being prepared but the results were not yet available.

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 ninth annual CAFR for the Pension Trust.

Respectfully submitted,



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

DRAFT



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, 2017

Christopher P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2018***

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 black ink that reads "Alan H. Winkle".

Alan H. Winkle
Program Administrator

Board of Trustees

As of December 31, 2018



Matt Janssen
President
Elected Member
Present term
expires July 2021



James Hamilton
Treasurer
Ex-Officio Member



Will Clemens
Vice President
Elected Member
Present term
expires July 2019



Guy Savage
Appointed Member



Michelle Shoresman
Elected Member
Present term
expires 2020

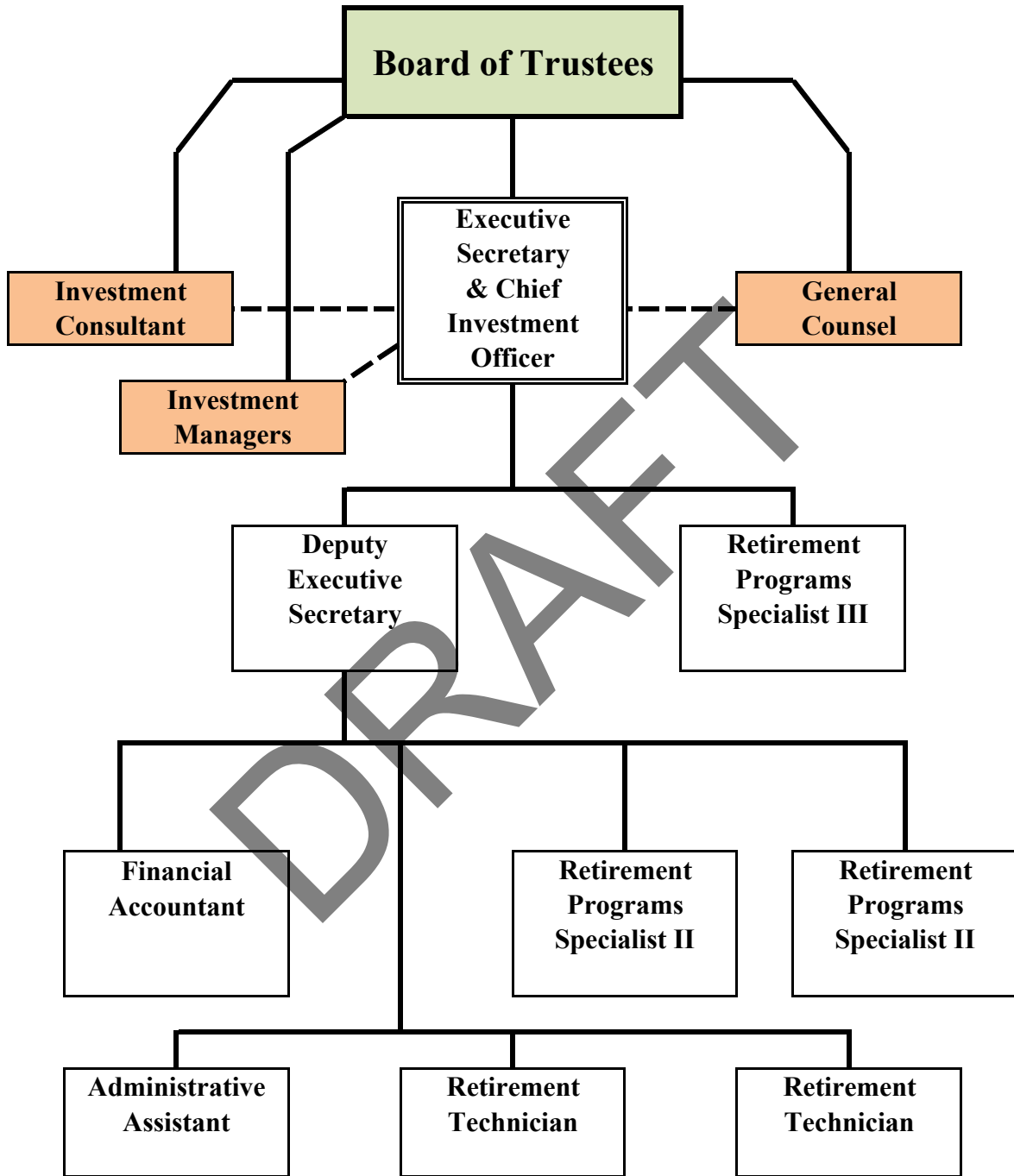


Gere Sibbach
Appointed Member



Jeff Hamm
Appointed Member

San Luis Obispo County Pension Trust
 Organization Chart - December 31, 2018



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, 2018

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 Sixth Street Partners

Real Estate

American Realty Advisors
J.P. Morgan Investment Management

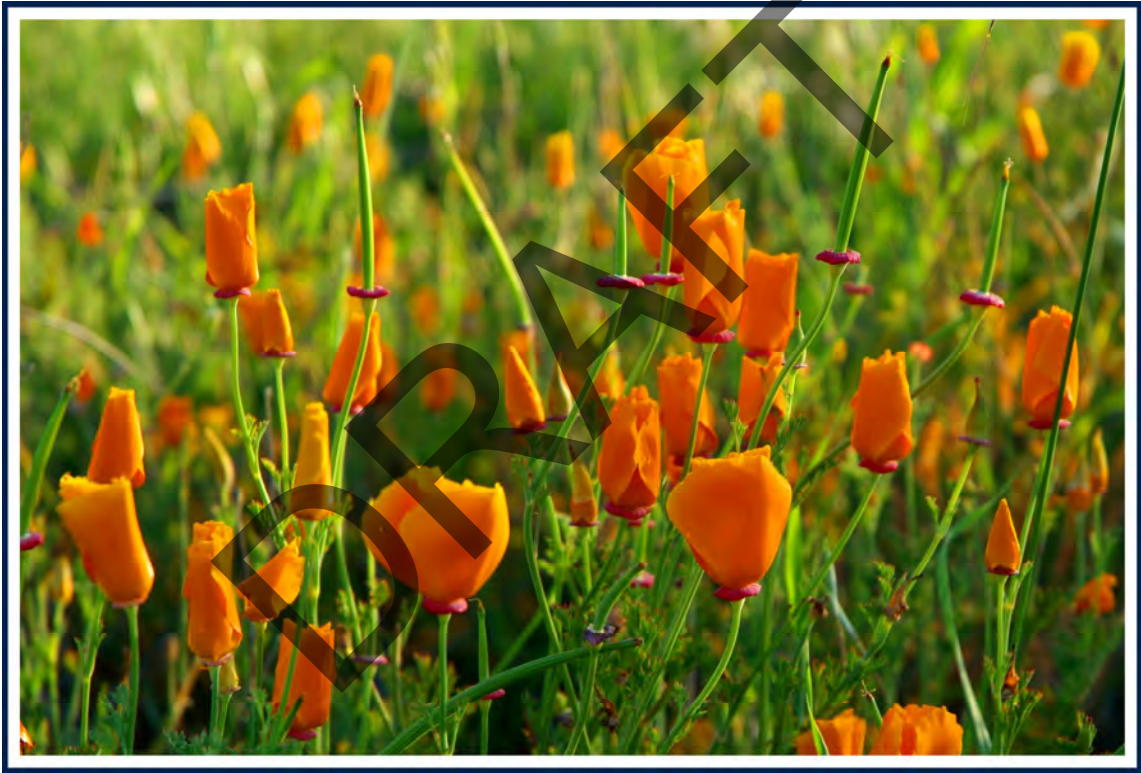
Cash Overlay

Parametric

This page left blank intentionally.

DRAFT

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, 2018, 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, 2018, 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, 2017 financial statements, and our report dated June 25, 2018, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of December 31, 2017, 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 _____, 2019, 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
_____, 2019

**SAN LUIS OBISPO COUNTY
PENSION TRUST
MANAGEMENT'S DISCUSSION AND ANALYSIS
DECEMBER 31, 2018**

June 24, 2019

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, 2018. 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, 2018 was \$1.272 billion. This represents a decrease of \$68 million or 5.1% from the year ended December 31, 2017. 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 2018 were \$29.2 million, which includes member contributions and employer appropriations of \$79.2 million and net investment losses of \$50.0 million. Comparatively, in 2017, additions to the Fiduciary Net Position were \$251.4 million, which included member contributions and employer appropriations of \$72.8 million and net investment incomes of \$178.6 million. The \$60.1 million in realized and unrealized losses on investments was the main factor contributing to the net decrease in total additions over prior year.

For the year ended December 31, 2018, deductions from the Fiduciary Net Position totaled \$98.0 million, consisting of \$94.6 million in payments to Plan members and their beneficiaries and \$3.4 million in administrative and other expenses. 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. 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, 2018, the date of the last actuarial valuation that was approved in June 2018, the funded ratio for the Plan was 68.3%. In general, this indicates that for every dollar of benefits due, SLOCPT had approximately 68.3 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, 2018. 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 appropriations 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, 2018 totaled \$1.272 billion, a decrease of \$68 million from prior year end. This decrease was due primarily to unrealized losses across the entire portfolio which is consistent with the returns experienced in these markets in 2018. During 2018, the rate of return on investments, as measured by SLOCPT's investment consultant, was -3.2% gross of fees.

In comparison, the Fiduciary Net Position restricted for pension benefits as of December 31, 2017 totaled \$1.340 billion, an increase of \$159.2 million from the prior year. 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. The rate of return on investments, as measured by SLOCPT's investment consultant, during 2017 was 15.5% gross of fees.

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

	2018	2017	Increase (Decrease)
Cash	\$ 55,156,155	\$ 34,474,219	\$ 20,681,936
Investments at Fair Value	1,246,781,943	1,319,057,884	(72,275,941)
Securities Sold	1,262,251	13,980,940	(12,718,689)
Other Receivables and Other Assets	7,429,163	6,537,255	891,908
Total Assets	1,310,629,512	1,374,050,298	(63,420,786)
Total Liabilities	39,009,428	33,579,276	5,430,152
Net Increase (Decrease) in Fiduciary Net Position	(68,850,938)	159,228,164	(228,079,102)
Fiduciary Net Position, Beginning of Year	1,340,471,022	1,181,242,858	159,228,164
Fiduciary Net Position	<u>\$ 1,271,620,084</u>	<u>\$ 1,340,471,022</u>	<u>\$ (68,850,938)</u>

Additions to Fiduciary Net Position

There are three primary sources of funding for the payment of benefits: earnings on investments of assets, employer appropriations, and active Plan member contributions. Income sources for the year ended December 31, 2018 totaled \$29.2 million. Employer appropriations and Plan member contributions continue to increase.

Pensionable salaries for active members increased \$6.6 million or 3.4% for the year ended December 31, 2018 when compared to those earned in 2017. This increase is due to prevailing wage adjustments and a contribution rate increase, which is 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 2.38% in aggregate was implemented on December 31, 2017 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. The increase in employer appropriations and member contributions experienced in 2018 was due to this contribution rate increase.

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

	Year Ended 2018	Year Ended 2017	Increase (Decrease)
Employer Appropriations	\$ 46,243,596	\$ 42,340,904	\$ 3,902,692
Plan Member Contributions	32,952,747	30,467,232	2,485,515
Net Investment Income (loss)	(50,033,056)	178,639,524	(228,672,580)
Total Additions	<u>\$ 29,163,287</u>	<u>\$ 251,447,660</u>	<u>\$ (222,284,373)</u>
Total Deductions from Fiduciary Net Position	98,014,225	92,219,496	5,794,729
Net Change in Fiduciary Net Position	<u>\$ (68,850,938)</u>	<u>\$ 159,228,164</u>	<u>\$ (228,079,102)</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 appropriations 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 appropriations 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 appropriations in the subsequent year. In years 2015 through 2018, 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 2018	Year Ended 2017	Increase (Decrease)
Monthly Benefit Payments	\$ 92,811,810	\$ 85,052,016	\$ 7,759,794
Refund of Contributions	1,756,682	2,857,104	(1,100,422)
Death Benefits	60,376	748,157	(687,781)
Administration and Actuarial	1,972,465	2,045,367	(72,902)
Prefunded Discount Amortization	1,412,892	1,516,852	(103,960)
Total Deductions	<u>\$ 98,014,225</u>	<u>\$ 92,219,496</u>	<u>\$ 5,794,729</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

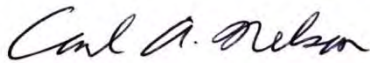
In March 2017, GASB issued Statement No. 85, “*Omnibus 2017*”, which addresses practice issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefit (pension and other postemployment benefits [OPEB]). SLOCPT implemented Statement No. 85 during the fiscal year ended December 31, 2018. This statement did not have a material impact on SLOCPT’s 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

**SAN LUIS OBISPO COUNTY PENSION TRUST
STATEMENT OF FIDUCIARY NET POSITION
AS OF DECEMBER 31, 2018 (WITH COMPARATIVE TOTALS)**

	2018	2017
ASSETS		
Cash and Cash Equivalents	\$ 55,156,155	\$ 34,474,219
Receivables		
Accrued Interest and Dividends Receivable	769,193	765,062
Accounts Receivable	23,672	29,270
Contributions Receivable	3,013,566	2,826,010
Securities Sold	1,262,251	13,980,940
Total Receivables	5,068,682	17,601,282
Investments, at Fair Value		
Bonds and Notes	264,058,167	261,759,770
International Fixed Income	152,893,552	147,038,778
Collateralized Mortgage Obligations	4,365,340	2,656,107
Domestic Equities	250,084,930	302,662,187
International Equities	258,784,769	332,949,417
Alternative Investments	124,392,603	95,192,130
Real Estate	192,202,582	176,799,495
Total Investments	1,246,781,943	1,319,057,884
Other Assets		
Prepaid Expenses	62,905	61,759
Capital Assets - Net of Accumulated Depreciation	3,559,827	2,855,154
Total Other Assets	3,622,732	2,916,913
Total Assets	\$ 1,310,629,512	\$ 1,374,050,298
LIABILITIES		
Securities Purchased	\$ 10,667,232	\$ 8,528,679
Accrued Liabilities	1,284,059	1,013,394
Prefunded Contributions	27,058,137	24,037,203
Total Liabilities	\$ 39,009,428	\$ 33,579,276
FIDUCIARY NET POSITION		
Fiduciary Net Position Restricted for Pension Benefits	\$ 1,271,620,084	\$ 1,340,471,022

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

This page left blank intentionally

DRAFT

SAN LUIS OBISPO COUNTY PENSION TRUST
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED DECEMBER 31, 2018 (WITH COMPARATIVE TOTALS)

	2018	2017
ADDITIONS		
Contributions		
Employer Appropriations	\$ 46,243,596	\$ 42,340,904
Plan Member Contributions	32,952,747	30,467,232
	79,196,343	72,808,136
Investment Income (Loss)		
Realized and Unrealized Gains and Losses, Net	(60,131,990)	169,242,335
Interest	4,120,406	3,492,823
Dividends	9,451,610	8,768,901
Real Estate Management Trust Income (Loss), Net	-	(9,952)
Real Estate Operating Income, Net	376,191	464,978
Investment Expenses	(3,849,273)	(3,319,561)
	(50,033,056)	178,639,524
Net Investment Income (Loss)		
Total Additions	29,163,287	251,447,660
DEDUCTIONS		
Benefits		
Monthly Benefit Payments	92,811,810	85,052,016
Refund of Contributions	1,756,682	2,857,104
Death Benefits	60,376	748,157
	94,628,868	88,657,277
Other Deductions		
Administration and Actuarial	1,972,465	2,045,367
Prefunded Discount Amortization	1,412,892	1,516,852
	3,385,357	3,562,219
Total Other Deductions		
Total Deductions	98,014,225	92,219,496
Net Increase (Decrease) in Fiduciary Net Position	\$ (68,850,938)	\$ 159,228,164
Fiduciary Net Position Restricted for Pension Benefits - Beginning of Year	\$ 1,340,471,022	\$ 1,181,242,858
Fiduciary Net Position Restricted for Pension Benefits - End of Year	\$ 1,271,620,084	\$ 1,340,471,022

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

**SAN LUIS OBISPO COUNTY PENSION TRUST
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2018**

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 San Luis Obispo County Employees Retirement Plan (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 SLOCPT's 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%	2.32%
Domestic Equities	20%	3.76%
International Equities	20%	6.02%
Alternative Investments	15%	4.92%
Real Estate	15%	4.77%
	<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 2018, for the fifth consecutive year, the Board entered into an agreement with the County Board of Supervisors to accept advanced payment of the employer appropriations 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 6.00%, based on the earning assumption in effect as of the date of the approval of the agreement which was 7.125%, less 1.125%.

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 concentrations 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 2017, GASB issued Statement No. 85, "*Omnibus 2017*", which addresses practice issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefit (pension and other postemployment benefits [OPEB]). SLOCPT implemented Statement No. 85 during the fiscal year ended December 31, 2018. This statement did not have a material impact on SLOCPT's 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. The Plan is 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-

NOTE 2 – PLAN DESCRIPTION (continued)

Public Administrator as the Ex-Officio member.

Membership

Active members are required to contribute to the Plan at rates currently ranging from 7.86% 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%, 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, 2018:

Retirees and Beneficiaries Currently Receiving Benefits	2,868
Terminated Employees Entitled to but not yet Receiving Benefits	489
Active Plan Participants	
Vested	1,538
Nonvested	1,187
Total	<u>6,082</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.

Benefits

The applicable retirement formula, minimum retirement age, compensation base, post-retirement cost-of-living adjustment (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.

NOTE 2 – PLAN DESCRIPTION (continued)

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.

Some 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.

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:

NOTE 3 – DEPOSITS AND INVESTMENT RISK DISCLOSURES (continued)*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, 2018:

Investment Type	Investment Maturities (in years)				Fair Value
	Less Than 1 Year	1-5 Years	6-10 Years	More than 10 Years	
Collateralized Mortgages	\$ 220,068	\$ 32,313	\$ 1,535,425	\$ 2,867,321	\$ 4,655,127
Corporate Bonds	6,774,475	45,183,520	81,939,745	20,923,247	154,820,987
Derivatives	(15,215)	-	-	-	(15,215)
Municipal Bonds	224,312	509,536	70,891	3,686,494	4,491,233
US Government & Agencies	100,123	6,184,105	4,010,571	71,602,714	81,897,513
Foreign Corporate Bonds	10,721,296	7,345,581	12,291,876	3,634,316	33,993,069
Foreign Government Bonds	29,421,302	45,482,400	28,759,898	30,188,547	133,852,147
Other Short-Term Investments	7,622,198	-	-	-	7,622,198
Total	<u>\$ 55,068,559</u>	<u>\$ 104,737,455</u>	<u>\$ 128,608,406</u>	<u>\$ 132,902,639</u>	<u>\$421,317,059</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.

At December 31, 2018, the carrying amount of the Plan's cash deposits was \$55.156 million (which includes cash equivalents) and the bank balance was \$53.827 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, \$556 thousand was covered by the Federal Deposit Insurance Corporation, and \$35.911 million was collateralized by the pledging financial institutions as required by Section 53652 of the California Government Code. The Plan's policy is to

NOTE 3 – DEPOSITS AND INVESTMENT RISK DISCLOSURES (continued)

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.

DRAFT

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, 2018, as rated by Standard & Poor’s equivalent ratings:

Quality Rating	%	Fair Value
AAA	7.08%	\$ 29,846,761
AA+	12.56%	52,911,367
AA	1.20%	5,071,063
AA-	0.96%	4,042,403
A+	1.01%	4,264,515
A	7.64%	32,184,291
A-	5.38%	22,651,951
BBB+	3.60%	15,165,390
BBB	11.43%	48,165,806
BBB-	3.21%	13,528,879
Subtotal Investment Grade	54.08%	227,832,426
BB+	3.91%	\$ 16,464,562
BB	2.25%	9,466,845
BB-	4.50%	18,947,103
B+	3.53%	14,863,325
B	6.63%	27,950,817
B-	1.88%	7,925,136
CCC+	1.05%	4,433,052
CCC	0.91%	3,820,341
CCC-	0.15%	615,290
D	0.00%	-
Not Rated	21.11%	88,998,162
Subtotal Non-Investment Grade	45.92%	193,484,633
Total Fixed Income, Bonds, Collateralized Mortgage Obligations, and Short-Term Investments	100.00%	\$421,317,059

Nationally recognized statistical rating organizations provide quality ratings 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, 2018 was as follows:

Currency	2018 Fair Value
Euro Currency	\$ 54,162,537
British Pound	36,491,563
Japanese Yen	25,002,140
Mexican Peso	24,179,030
Swiss Franc	24,006,767
South African Rand	17,769,355
Brazilian Real	15,662,604
Polish Zloty	13,805,240
Swedish Krona	12,110,155
Hong Kong Dollar	10,765,015
South Korean Won	10,383,469
Australian Dollar	9,272,211
Russian Ruble	9,130,517
Norwegian Krone	8,779,425
Indonesian Rupiah	8,266,511
Canadian Dollar	6,145,653
Malaysian Ringgit	6,141,669
Indian Rupee	5,531,359
Colombian Peso	5,161,102
Turkish Lira	4,502,452
Thai Baht	4,498,984
Danish Krone	3,878,426
Peruvian Nuevo Sol	2,523,404
Chilean Peso	2,245,225
Czech Koruna	1,530,835
Argentine Peso	597,755
Uruguayan Peso	524,858
Ukrainian Hryvnia	408,223
Kazakhstani Tenge	109,345
Singapore Dollar	27,629
Total	\$ 323,613,458

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, 2018:

Investment Type	Fair Value Measurements			Total
	Quoted Prices in Active Markets for Identical Assets	Quoted Prices for Similar Assets in Inactive Markets	Significant Unobservable Inputs	
	Level 1	Level 2	Level 3	
Bonds and Notes	\$ 99,926,139	\$ 164,132,028	\$ -	\$ 264,058,167
International Fixed Income	-	79,952,118	-	79,952,118
Collateralized Mortgage Obligations	-	4,365,340	-	4,365,340
Domestic Equities	50,093,382	199,991,548	-	250,084,930
International Equities	128,636,253	130,148,516	-	258,784,769
Real Estate	-	-	163,245,205	163,245,205
Total	\$ 278,655,774	\$ 578,589,550	\$ 163,245,205	\$ 1,020,490,529

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, 2018:

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	\$ 72,941,434	\$ -	Quarterly	30 days
Commingled Fund - Real Estate	22,016,296	-	Quarterly	30 days
Real Estate Held for Investment - Separate Account	6,941,081	-	Not Eligible	Not Eligible
Alternatives	124,392,603	103,102,025	Not Eligible	Not Eligible
Total	<u>\$ 226,291,414</u>	<u>\$ 103,102,025</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, 2018:

Assets	\$ 7,033,165
Less: Liabilities	(92,084)
Net Assets	<u>\$ 6,941,081</u>
Net Income	<u>\$ 1,573,192</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 within the context of the overall portfolio performance and cannot be evaluated in isolation. Investment derivatives involve the following types of risks:

NOTE 4 – INVESTMENTS (continued)

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, 2018:

<u>Derivative Type</u>	<u>Notional Amount</u>	<u>Fair Value</u>
Forward Contracts	\$ (129)	\$ (129)
Swap Agreements	(3,157,722,740)	161,573
TBAs	9,437,758	9,437,758
	<u>\$ (3,148,285,111)</u>	<u>\$ 9,599,202</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, 2018, the Plan had unfunded capital commitments totaling \$103.102 million.

Annual Money-Weighted Rate of Return

For the year ended December 31, 2018, the annual money-weighted rate of return on investments, net of investment expense, was -3.72%. 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, 2018 were as follows:

	Beginning Balance January 1, 2018	Additions	Deletions	Ending Balance December 31, 2018
Office Equipment	\$ 54,514	\$ -	\$ (6,282)	\$ 48,232
Software	2,524,414	-	-	2,524,414
Work in Progress	2,846,094	708,065	-	3,554,159
Accumulated Depreciation and Amortization	(2,569,868)	(3,392)	6,282	(2,566,978)
	<u>\$ 2,855,154</u>	<u>\$ 704,673</u>	<u>\$ -</u>	<u>\$ 3,559,827</u>

Depreciation and amortization expenses for the year ended December 31, 2018 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 (21 years as of December 31, 2018) 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 \$1.329 million.

In June 2018, the Board unanimously passed the recommendation of an increase of 2.51% to the total contribution rate as recommended by the Actuary in the January 1, 2018 Actuarial Valuation. The increased total contribution rate took into consideration: a) continuing with the remaining 22 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 will implement the shared employer and employee increased total contribution rates for the majority of members effective July 1, 2019. The increase was adjusted to an average of 2.80% to account for the deferred implementation. Superior Courts of California and the Air Pollution Control District implemented increased rates of January 1, 2019.

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, 2018 were as follows:

Net Pension Liability (dollars in thousands):

Total Pension Liability	\$ 2,026,092
Plan Fiduciary Net Position	<u>(1,271,620)</u>
Employers' Net Pension Liability	<u>\$ 754,472</u>

Plan Fiduciary Net Position as a percentage of Total Pension Liability was 62.76% as of December 31, 2018.

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, 2018 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	2.50 percent
Salary Increases	2.75 percent, including inflation, additional merit component applicable to first 7 years of service
Investment rate of return	7.00 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-2017. The actuarial assumptions used in the January 1, 2018 valuation were based on the results of an actuarial experience study for the period January 1, 2013 to December 31, 2017.

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, 2018 (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%	4.82%
Domestic Equities	20%	6.26%
International Equities	20%	8.52%
Alternative Investments	15%	7.42%
Real Estate	15%	7.27%
	<u>100%</u>	

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. 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 appropriations 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 7.00%, 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 (6.00%) or one percentage-point higher (8.00%) than the current rate:

Employers' Net Pension Liability as of December 31, 2018 (dollars in thousands)	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
	\$ 1,030,863	\$ 754,472	\$ 528,371

NOTE 8 – LITIGATION

The Plan is subject to legal proceedings and claims in the ordinary course of its business. As of December 31, 2018, 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.

Subsequent to year-end, the final piece of directly-owned real estate that will not be retained for SLOCPT operations was sold. The SLOCPT offices will be retained as an operational asset of SLOCPT.

Management has determined that no additional events require disclosure in accordance with governmental accounting standards generally accepted in the United States of America. Subsequent events have been evaluated through June 24, 2019, which is the date the financial statements were available to be issued.

DRAFT

This page left blank intentionally.

DRAFT

DRAFT

REQUIRED SUPPLEMENTARY INFORMATION

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

Fiscal year ending December 31*	2018	2017	2016	2015	2014
Total Pension Liability					
Service Cost	\$ 40,729,658	\$ 38,161,931	\$ 36,968,006	\$ 35,503,180	\$ 36,210,322
Interest on the Total Pension Liability	134,311,163	128,399,243	123,083,279	114,971,636	108,953,629
Differences Between Expected and Actual Experience	31,926,880	(1,367,931)	5,485,265	9,771,252	-
Assumption Changes	8,507,420	-	62,845,241	-	-
Benefit Payments	(92,811,810)	(85,052,016)	(78,193,401)	(72,441,811)	(66,162,944)
Refunds	(1,817,058)	(3,605,261)	(2,489,904)	(2,612,455)	(1,932,077)
Net Change in Total Pension Liability	120,846,253	76,535,966	147,698,486	85,191,802	77,068,930
Total Pension Liability - Beginning	1,905,246,211	1,828,710,245	1,681,011,759	1,595,819,957	1,518,751,027
Total Pension Liability - Ending (a)	\$ 2,026,092,464	\$ 1,905,246,211	\$ 1,828,710,245	\$ 1,681,011,759	\$ 1,595,819,957
Fiduciary Net Position					
Employer Contributions	\$ 46,243,596	\$ 42,340,904	\$ 35,451,409	\$ 33,618,330	\$ 32,046,545
Employee Contributions	32,952,747	30,467,232	25,359,069	24,586,735	24,415,512
Pension Plan Net Investment Income (Loss)	(50,033,056)	178,639,524	68,949,306	(16,705,852)	51,667,160
Benefit Payments	(92,811,810)	(85,052,016)	(78,193,401)	(72,441,811)	(66,162,944)
Refunds	(1,817,058)	(3,605,261)	(2,489,904)	(2,612,455)	(1,932,077)
Pension Plan Administrative Expense	(1,972,465)	(2,045,367)	(2,248,956)	(2,528,532)	(2,084,841)
Other	(1,412,892)	(1,516,852)	(1,387,369)	(1,449,773)	(331,910)
Net Change in Fiduciary Net Position	(68,850,938)	159,228,164	45,440,154	(37,533,358)	37,617,445
Fiduciary Net Position - Beginning	1,340,471,022	1,181,242,858	1,135,802,704	1,173,336,062	1,135,718,617
Fiduciary Net Position - Ending (b)	\$ 1,271,620,084	\$ 1,340,471,022	\$ 1,181,242,858	\$ 1,135,802,704	\$ 1,173,336,062
Net Pension Liability - Ending (a)-(b)	\$ 754,472,380	\$ 564,775,189	\$ 647,467,387	\$ 545,209,055	\$ 422,483,895
Fiduciary Net Position as a Percentage of Total Pension Liability	62.76%	70.36%	64.59%	67.57%	73.53%
Covered Payroll**	199,288,713	192,735,874	180,728,417	175,628,910	167,343,323
Net Pension Liability as a Percentage of Covered Payroll	378.59%	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 payroll 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 Payroll	Actual Contribution as a % of Covered Payroll
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%
2018	\$ 51,375,341	\$ 46,243,596	\$ 5,131,745	\$ 199,283,713	23.20%

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

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

Valuation Date	January 1, 2018
Notes	Actuarially determined contribution rates are calculated as of January 1, 2018. 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 22-year period from January 1, 2018 ending December 31, 2039
Asset Valuation Method	5-year smoothed market
Investment Rate of Return	7.00%
Inflation Rate Assumption	2.50% per year
Salary Increases	2.75% Composed of 2.50% 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 - 2.50% Tiers 2 & 3 - 2.00% (limit)
Retirement Age	Experience-based table for rates based on age and service. Adopted by the Board in 2018 in conjunction with the five-year experience study for the period ending December 31, 2017.
Mortality	Males: RP-2014 with generational mortality improvements using scale MP-2017, a 105% multiplier and white collar adjustment. Females: RP-2014 with generational mortality improvements using scale MP-2017, 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
2018	-3.72%
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.*

DRAFT

DRAFT

OTHER SUPPLEMENTARY INFORMATION

**SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF ADMINISTRATIVE EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018 (WITH COMPARATIVE TOTALS)**

	2018	2017
Personnel Services		
Salaries and Benefits	\$ 1,096,817	\$ 1,192,260
Total Personnel Services	<u>1,096,817</u>	<u>1,192,260</u>
Office Expenses		
Office Supplies	13,179	18,976
Postage	24,351	23,190
Telephone	3,648	3,842
Utilities	7,709	7,095
Total Office Expenses	<u>48,887</u>	<u>53,103</u>
Professional Services		
Accounting and Auditing	65,428	59,475
Actuarial	167,799	149,382
Data Processing	159,230	166,518
Legal	208,198	195,585
Medical	25,249	20,601
Human Resources Consulting	5,129	5,000
Other	7,545	9,217
Bank Charges	12,396	13,137
Total Professional Services	<u>650,974</u>	<u>618,915</u>
Other Administrative Expenses		
Maintenance and Custodial	17,731	20,525
Insurance	116,594	117,425
Memberships, Subscriptions, and Publications	3,872	4,919
Printing and Reprographics	13,856	10,488
Transportation, Travel, and Education	19,492	23,989
Miscellaneous Administrative Expenses	850	351
Total Other Administrative Expenses	<u>172,395</u>	<u>177,697</u>
Depreciation and Amortization	3,392	3,392
TOTAL ADMINISTRATIVE EXPENSES	<u><u>\$ 1,972,465</u></u>	<u><u>\$ 2,045,367</u></u>

**SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF INVESTMENT EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018 (WITH COMPARATIVE TOTALS)**

	2018	2017
Investment Manager Fees	\$ 3,334,254	\$ 2,821,161
Custody Fees	199,754	173,398
Investment Consultant	315,176	324,903
Other Investment Expenses	89	99
	3,849,273	3,319,561
Additional Investment Expenses Netted Against		
Investment Income and Gains/Losses		
Broker Commissions	17,260	17,974
Broker Fees	300	119
	\$ 3,866,833	\$ 3,337,654
TOTAL INVESTMENT EXPENSES		

**SAN LUIS OBISPO COUNTY PENSION TRUST
SCHEDULE OF PAYMENTS TO CONSULTANTS
FOR THE YEAR ENDED DECEMBER 31, 2018 (WITH COMPARATIVE TOTALS)**

	2018	2017
Custody Fees	\$ 199,754	\$ 173,398
Investment Consulting Services	315,176	324,903
Accounting and Auditing Services	65,428	59,475
Actuarial Services	167,799	149,382
Data Processing Services	159,230	166,518
Legal Services	208,198	195,585
Disability Medical Services	25,249	20,601
Human Resources Services	5,129	5,000
Payroll Processing Services	6,029	7,143
	\$ 1,151,992	\$ 1,102,005
TOTAL PAYMENTS TO CONSULTANTS		

This page left blank intentionally

DRAFT

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

DRAFT

March 26, 2019

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, 2018.

Capital Markets Review

Economic conditions around the world have weakened somewhat, but global growth continues, and indicators here in the U.S. remain positive for the time being. Real GDP reached 3.0% year-over-year in the most recent quarter, which was the fastest pace of growth in more than three years. Inflation fell from 2.3% to 1.9% during the quarter but remains relatively stable near the Fed's target of 2.0%. The labor market is historically strong with headline unemployment at 3.9%, and employment participation within the core age range between 25 and 54 rose from 81.8% to 82.3%. The tight labor market is beginning to translate to meaningful wage gains, as wage growth hit a cyclical high of 3.3% from the previous year. Also benefitting from a tight labor market and decent wage growth is consumer spending, which rose 2.8% year-over-year and remains a core driver of recent economic expansion.

While current economic conditions appear stable and positive, investment markets discount future conditions, and in the fourth quarter of 2018, the US equity market suffered a significant pullback. The S&P 500 fell nearly 20% before recovering somewhat during the last week of the year, ultimately closing out the fourth quarter down 13.5%, the worst quarter for the S&P since 2008. Several factors led to the poor performance. First, many companies communicated profit warnings and downward revisions to earnings, which created an overall bearish outlook. In addition, ongoing uncertainty surrounding U.S. and China trade talks have weighed on markets. Although negotiations continued, there was scant progress through the end of the year. Further, economists have been predicting the positive effects of tax cuts have peaked and will begin to tail off throughout the coming year. Finally, markets expressed concern the Fed may become too restrictive too quickly.

Fortunately, the start of 2019 has seen a strong recovery in global equity markets, as many of the concerns in the fourth quarter of last year have abated somewhat. The resulting rebound since the beginning of the year nearly erased the losses from the previous quarter. The S&P 500 was up 11.5% year to date through the end of February. International stocks of developed nations measured by

the MSCI EAFE were up 9.3% and Emerging Markets stocks (MSCI EM) were up 9.0% through the first two months of the year.

Performance Summary

Verus independently calculates the Plan’s performance using the total fair-value based time-weighted rates of return on San Luis Obispo County Pension Trust’s investment assets as well as transaction data provided by the Plan’s custodian bank, J.P. Morgan.

Largely the result of a challenging 4th quarter, the Trust returned -3.2% for the full year 2018 before expenses and investment management fees. Despite this disappointing performance, the Plan’s diversification strategy was effective in protecting on the downside. As a result, performance relative to peers was strong, earning a rank in the top 27th percentile of the InvestorForce Public DB Plan universe. Private market investments lifted performance over the fiscal year, as the Plan’s private equity portfolio appreciated 17.1% and private credit advanced 11.3%. Real estate also contributed meaningfully, as that component of the Plan returned 7.5% over the same period. While the Plan’s international equity investments were down 12.2% for the year, the asset class managed to beat its benchmark by 160 basis points. Global fixed income and domestic equities were also down over the same period falling 5.2% and 6.6%, respectively. Domestic fixed income returned 0.4% for the year, edging out the benchmark, which was flat.

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

The Board continues to improve on the foundation set by the long-term strategic asset allocation adopted in 2016 by updating the manager structure. In 2018, an additional private credit strategy was added to the line-up. This strategy is unique in that it will not be implemented unless a credit event occurs creating a significant buying opportunity for credit investments. Additionally, an emerging markets debt manager was hired to replace the existing one. The new manager will have the latitude to invest in both local and hard currency debt issuances, whereas the old manager invested only in local currency securities.

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, CAIA
Executive Managing Director and Senior Consultant

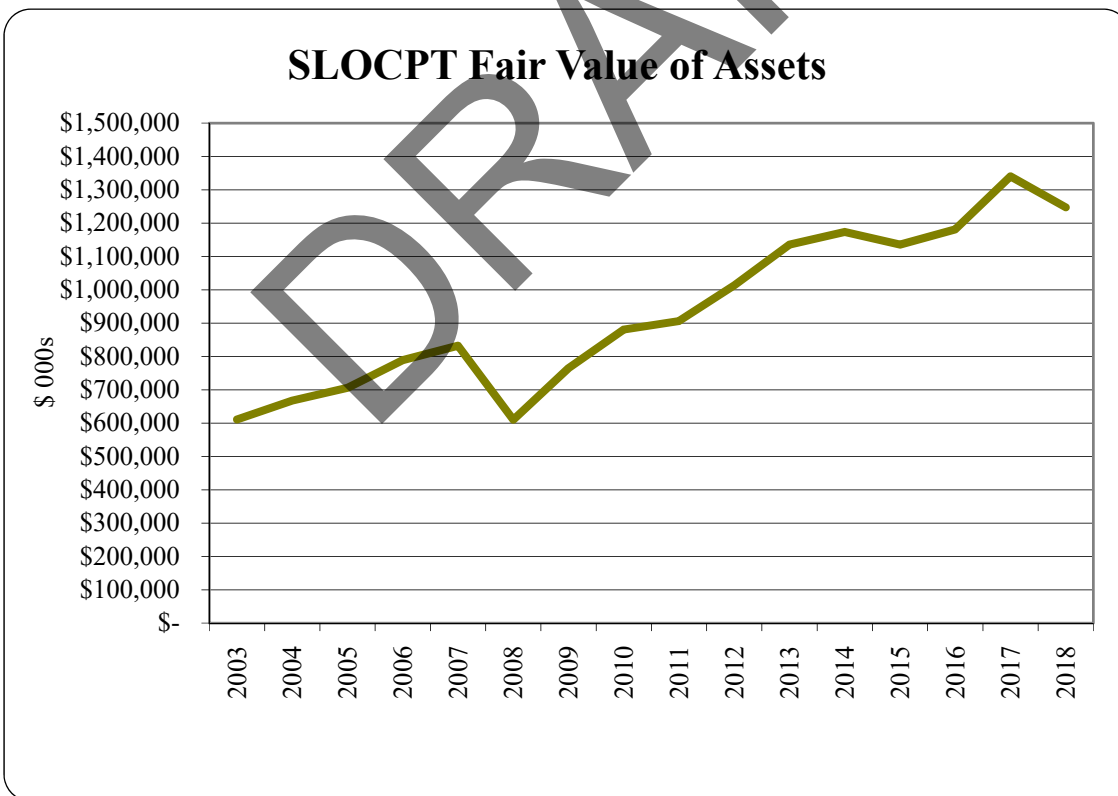
DRAFT

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 Fiduciary Net Position Restricted for Pension Benefits for SLOCPT over the last fifteen years as of December 31:



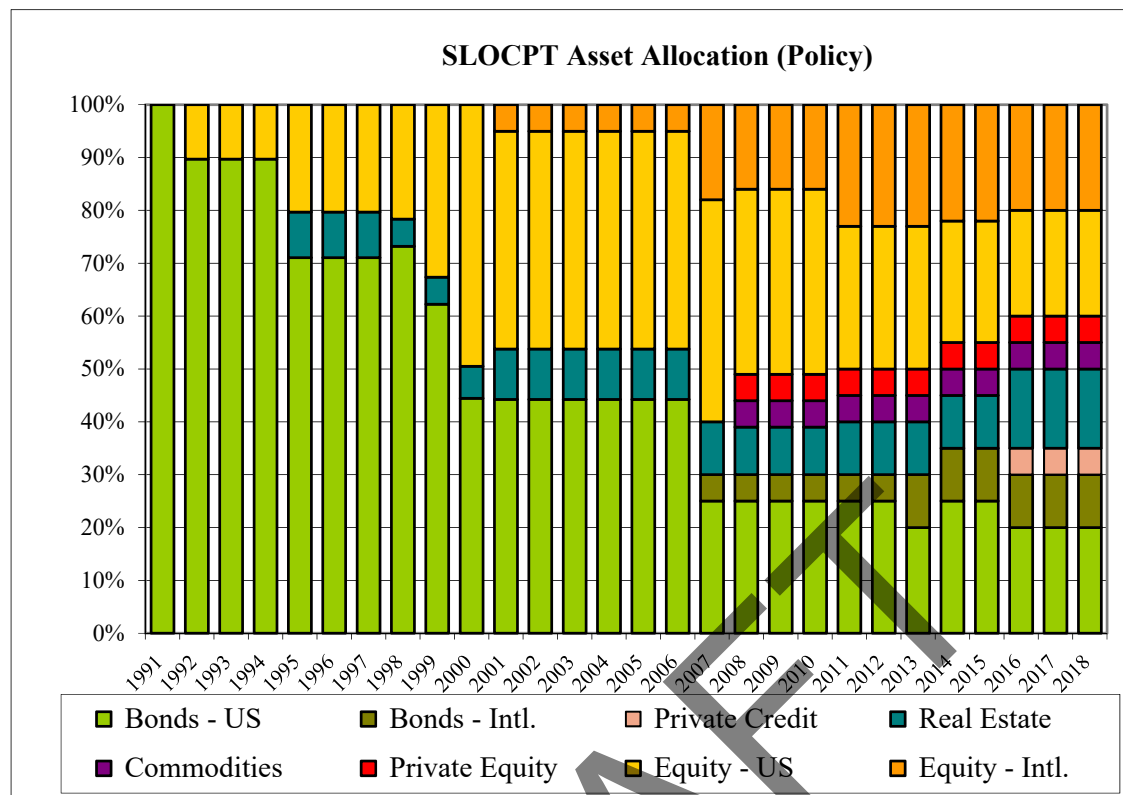
Asset Allocation Policy

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	2018 Policy	2018 Min. Max.		Performance Benchmark
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:

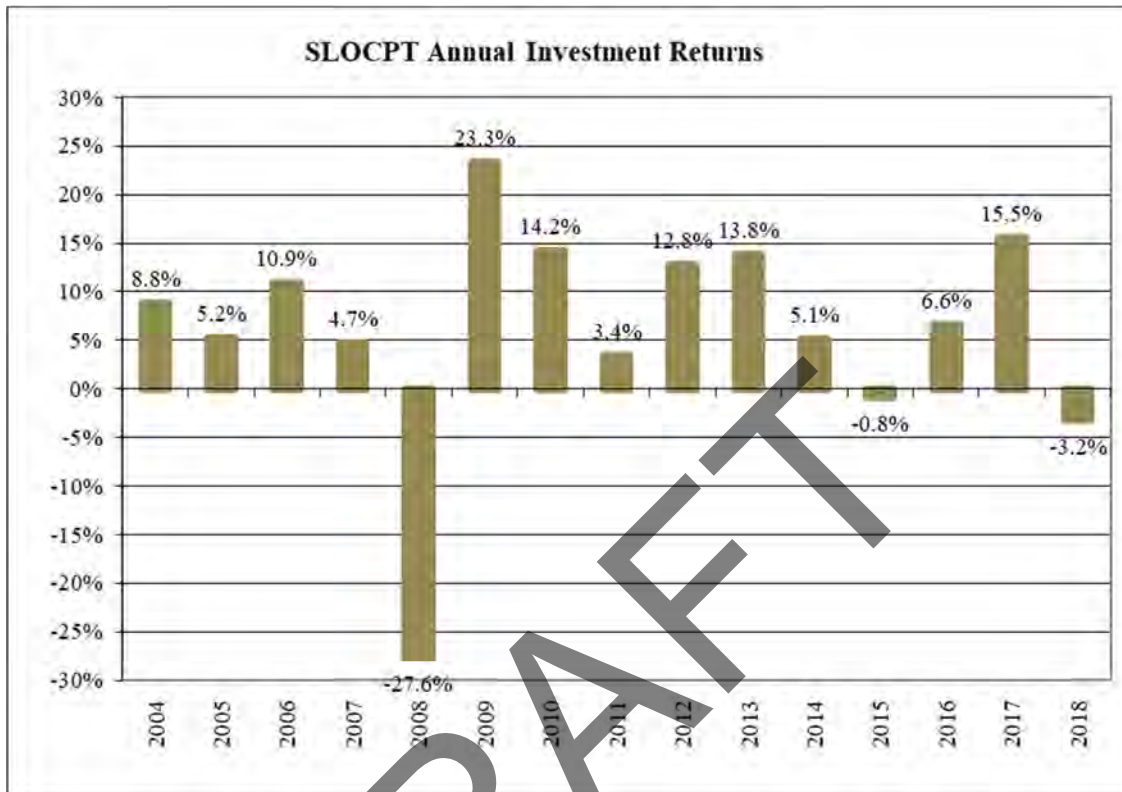


SLOCPT employs multiple investment managers in different asset classes and with different styles of investing. Combined with strict limitations in the Investment Policy on the maximum exposure to individual investments and with regular rebalancing of the asset mix the diversification level of the investments 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 2018, SLOCPT achieved a rate of return of -3.2% 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>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
SLOCPT Total Returns	5.1%	-0.8%	6.6%	15.5%	-3.2%

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	-3.2%	6.0%	4.4%	8.8%	5.5%

Source: Verus 4th Quarter 2018 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, 2018

Annualized time-weighted rates of return based on fair value

Investment Account		Current Year	3 Years	5 Years	Inception
Domestic Equities					
Research Affiliates	g	-6.6%	8.2%	6.8%	11/2007
<i>Index: S&P 500</i>		-4.4%	9.3%	8.5%	
Loomis Sayles Large Cap Growth	g	-1.7%	< 3 yrs		12/2016
<i>Index: Russell 1000 Growth</i>		-1.5%			
Boston Partners Large Cap Value	g	-8.5%	< 3 yrs		2/2017
<i>Index: Russell 1000 Value</i>		-8.3%			
Atlanta Capital	g	-4.5%	10.8%	9.7%	8/2010
<i>Index: Russell 2500</i>		-10.0%	7.3%	5.1%	
International Equities					
Dodge & Cox	g	-17.5%	3.9%	0.2%	12/2007
<i>Index: MSCI EAFE</i>		-13.4%	3.4%	1.0%	
WCM International Growth	g	-6.7%	< 3 yrs		2/2017
<i>Index: MSCI ACWI ex US</i>		-13.8%			
Domestic Fixed Income					
BlackRock Core Bond	g	0.3%	< 3 yrs		01/2017
Dodge & Cox Income Fund	g	0.1%	< 3 yrs		01/2017
<i>Index: BBgBarc US Aggregate TR</i>		0.0%			
PAM Bank Loan Fund	g	1.0%	5.0%	< 5 yrs	9/2014
<i>Index: S&P/LSTA Leveraged Loan Index</i>		0.4%	4.8%		
International Fixed Income					
Brandywine	g	-4.1%	3.3%	0.6%	11/2007
<i>Index: FTSE WGBI ex US TR</i>		-1.8%	3.3%	0.3%	
Stone Harbor (emerging market debt)	g	-9.0%	5.2%	-1.7%	7/2013
<i>Index: JPM GBI EM Global Div</i>		-6.2%	5.9%	-1.0%	
Real Estate					
Direct Real Estate Owned	g	11.6%	12.4%	13.1%	
ARA American Strategic Value Realty Fund	g	9.1%	< 3 yrs		6/2016
JP Morgan Strategic Properties Fund	g	7.0%	7.2%	9.5%	3/2008
<i>Index: NCREIF Property</i>		6.7%	7.2%	9.3%	
Commodities					
Gresham MTAP	g	-12.4%	1.5%	-8.0%	8/2013
<i>Index: Bloomberg Commodity</i>		-11.2%	0.3%	-8.8%	

San Luis Obispo County Pension Trust
Investment Results Based on Fair Value (continued)
For the Fiscal Year Ended December 31, 2018
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
Harbourvest 2018 Global Fund					12/2018
Pathway Private Equity Fund					4/2017
Combined Private Equity	g	17.1%	17.4%	17.9%	
<i>Index: Russell 3000 + 300BP</i>		-2.4%	12.2%	11.1%	
Private Credit					
TSSP Diversified Credit Programs					11/2016
Combined Private Credit	g	11.3%	< 3 yrs		
<i>Index: BBgBarc High Yield + 200BP</i>		5.1%			
Opportunistic					
PIMCO Distressed Credit Fund					7/2010
KKR Mezzanine Debt Fund I					4/2011
Combined Opportunistic	g	25.2%	14.4%	10.5%	
<i>Index: Russell 3000 + 300BP</i>		-2.4%	12.2%	11.1%	
Cash Account					
Treasury Pool		1.5%	1.0%	0.7%	
<i>Index: 91 day T-Bills</i>		1.9%	1.1%	0.6%	
TOTAL FUND (including Parametric Cash Overlay)					
Total Fund		-3.2%	6.0%	4.4%	
<i>Index: Policy Index at 12/31/18:</i>		-3.2%	5.8%	7.8%	
<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, 2018; 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, 2018 (Dollars in Thousands)

Management Fees	2018 Fees	Year-End Assets Under Mgmt.	Fees as % of Year- End Assets (a)
Domestic Equity			
Research Affiliates	N/A (d)	\$ 52,494	
Loomis Sayles	\$ 493	74,383	0.66%
Boston Partners	N/A (d)	73,114	
Atlanta Capital	463	50,094	0.92%
Total Domestic Equity	956	250,085	
International Equity			
Dodge & Cox (mutual fund)	N/A (d)	128,636	
WCM International (mutual fund)	N/A (d)	130,149	
Total International Equity	-	258,785	
Domestic Fixed Income			
BlackRock Core Bond	351	101,421	0.35%
Dodge & Cox Income Fund	N/A (d)	99,926	
PAM Bank Loan Fund	N/A (d)	74,131	
Total Domestic Fixed Income	351	275,478	
International and Global Fixed Income			
Brandywine	337	72,941	0.46%
Stone Harbor	N/A (d)	72,897	
Total Intl. and Global Fixed Income	337	145,838	
Real Estate			
Direct Real Estate Owned	100	6,941	1.44%
ARA American Strategic Value Realty Fund	N/A (d)	22,017	
JP Morgan Strategic Properties Fund	1,420	163,245	0.87%
Total Real Estate	1,520	192,203	
Commodities			
Gresham	N/A (d)	43,566	
Private Equity/Credit			
HarbourVest Fund IX (buyout)	N/A (d)	12,654	
HarbourVest 2018 Global Fund	103 (d)	1,359	
Pathway Private Equity	N/A (d)	16,381	
TSSP Diversified Credit Programs	N/A (d)	45,630	
PIMCO Distressed Credit Fund	-	111	0.00%
KKR Mezzanine Debt Fund I	50	4,692	1.07%
Total Private Equity	153	80,827	
Cash Overlay			
Parametric	17	- (b)	N/A
Total Management Fees	\$ 3,334		

San Luis Obispo County Pension Trust
Schedule of Management Fees and Commissions (continued)
For the Fiscal Year Ended December 31, 2018 (Dollars in Thousands)

Other Investment Expenses	2018 Fees	Year-End Assets Under Mgmt.	Fees as % of Year- End Assets
Custodian Fees	200		0.02%
Investment Consultant	315		0.03%
Total Other Investment Expenses	515		0.04%
TOTAL INVESTMENT EXPENSES AND ASSETS UNDER MANAGEMENT	\$ 3,849	\$ 1,246,782	0.31%

Broker Commissions	Commissions Fees
Broker Commissions	\$ 17 (c)
Broker Fees	-
Total Broker Commissions	\$ 17

- (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, 2018.

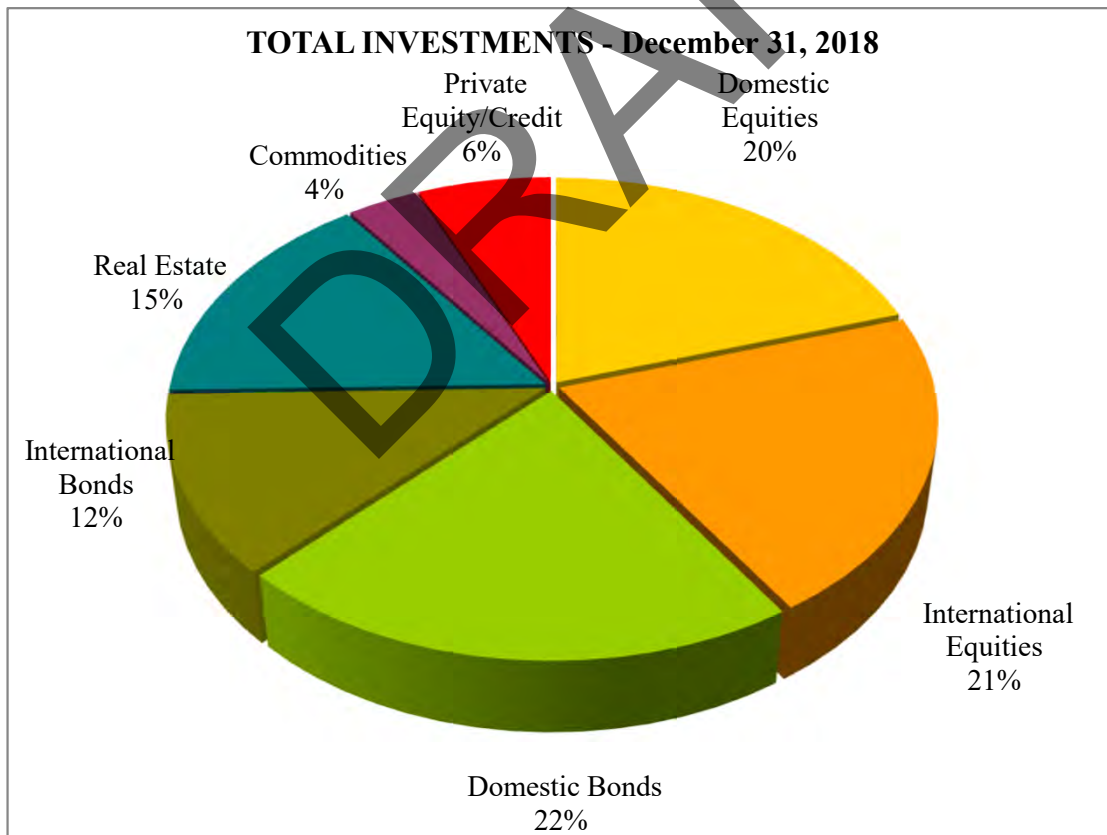
Investment managers are instructed to seek best execution and to seek to minimize commission and market impact costs when trading securities.

San Luis Obispo County Pension Trust

Investments at Fair Value

As of December 31, 2018 (Dollars in Thousands)

	Fair Value	%
Equities		
Domestic Equities	\$ 250,085	20.06%
International Equities	258,785	20.76%
Fixed Income		
Domestic Bonds, Mortgages, Notes	268,423	21.53%
International Bonds	152,893	12.26%
Real Estate		
	192,203	15.42%
Alternatives		
Commodities	43,566	3.49%
Private Equity/Credit	80,827	6.48%
TOTAL INVESTMENTS	\$ 1,246,782	100.00%



San Luis Obispo County Pension Trust
Schedule of Largest Stock and Bond Holdings
As of December 31, 2018 By Fair Value

Largest Stock Holdings	Shares	Fair Value
1 TELEFLEX INC COMMON STOCK USD 1	9,808	\$ 2,535,172
2 WR BERKLEY CORP COMMON STOCK USD 0.2	33,419	2,469,998
3 TRANSUNION COMMON STOCK USD 0.01	36,579	2,077,687
4 HENRY SCHEIN INC COMMON STOCK USD 0.01	23,620	1,854,642
5 CDW CORP/DE COMMON STOCK USD 0.01	22,332	1,810,009
6 SERVICEMASTER GLOBAL HOLDINGS INC COMMON STOCK USD 0.01	48,492	1,781,596
7 ARAMARK COMMON STOCK USD 0.01	57,522	1,666,412
8 LENNOX INTERNATIONAL INC COMMON STOCK USD 0.01	6,885	1,506,851
9 APTARGROUP INC COMMON STOCK USD 0.01	14,913	1,402,866
10 CARLISLE COS INC COMMON STOCK USD 1	13,562	1,363,252
Total of 10 Largest Stock Holdings		<u>\$ 18,468,485</u>

Largest Bond Holdings	Par Value	Fair Value
1 FEDERAL NATIONAL MORTGAGE ASSOCIATION TBA FIXED 4%	\$ 6,816,000	\$ 6,948,094
2 GNMA II MORTPASS 4.5% 20/JUL/2048	1,771,489	1,834,368
3 UNITED STATES OF AMERICA NOTES FIXED 2.25%	1,850,000	1,826,579
4 FNMA MORTPASS 4.5% 01/FEB/2045	1,497,017	1,569,308
5 FNMA MORTPASS 4% 01/NOV/2041	1,497,866	1,544,689
6 FNMA MORTPASS 4% 01/NOV/2046	1,208,072	1,248,252
7 FNMA MORTPASS 3.5% 01/JAN/2047	1,203,122	1,205,191
8 FHLMCGLD MORTPASS 4.5% 01/SEP/2046	1,113,055	1,165,024
9 GOVERNMENT NATIONAL MORTGAGE ASSOCIATION TBA FIXED	953,000	975,786
10 FHLMCGLD MORTPASS 4.5% 01/SEP/2046	910,262	912,046
Total of 10 Largest Bond Holdings		<u>\$ 19,229,337</u>

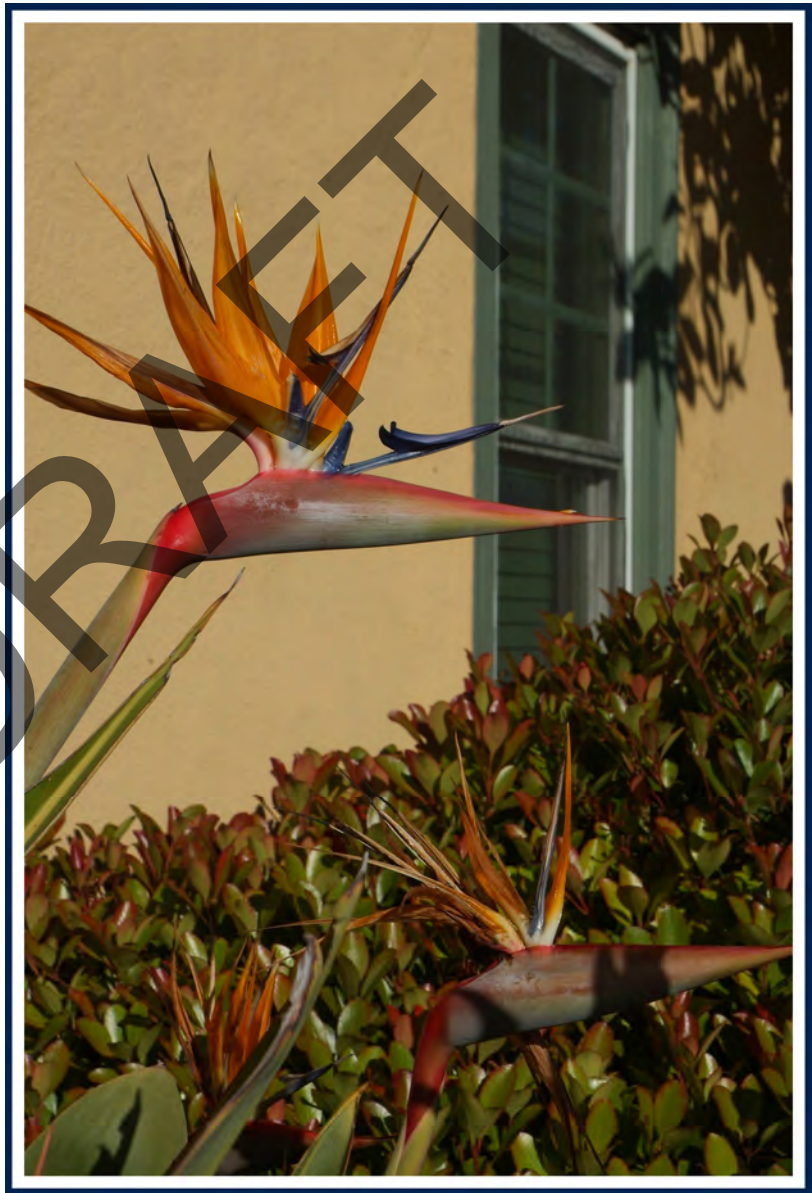
Significant portions of the Pension Trust's investments are held in commingled funds. The securities listed above are from those held in separate accounts for the Pension Trust and do not include securities held in commingled funds.

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

This page left blank intentionally.

DRAFT

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, 2018.

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, 2018 valuation. It is based on member data and financial results through December 31, 2017. The Pension Trust's actuary, Gabriel Roeder Smith & Company (GRS), completed this annual valuation during 2018. The most recent Biennial Actuarial Experience Study was completed by GRS as of December 31, 2017. Results of this Biennial Actuarial Experience Study were used in developing the assumptions used in the January 1, 2018 Annual Actuarial Valuation.

The Annual Actuarial Valuation as of January 1, 2018 including actuarial assumptions was approved by the Board on June 25, 2018.

The Annual Actuarial Valuation as of January 1, 2019, based on data through December 31, 2018, is in the process of being developed at the time of the publication of this CAFR.

March 7, 2019

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, 2018 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, 2018.

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 actuaries signing the report are members of the American Academy of Actuaries and meet 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, 2018 valuation, the Trust's funded status decreased from 69.4% to 68.3%. The total actuarially determined contribution is 42.19% as of January 1, 2018, compared to total charged rates of 39.68%.

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, with 22 years remaining as of January 1, 2018.

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, 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.

The valuation and GASB 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 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. 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. This year, the 2008 asset loss will be fully recognized.

The enclosed exhibits provide further related information necessary to complete your filing. All other necessary information is available in the January 1, 2018 actuarial valuation report. The enclosed exhibits include:

- 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
- Summary of Benefit 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.

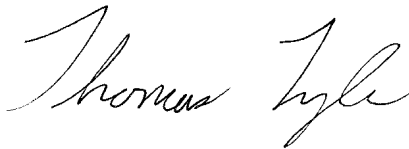
Respectfully submitted,
Gabriel, Roeder, Smith & Company



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



Paul T. Wood, ASA, FCA, MAAA
Consultant



Thomas Lyle, ASA, EA, MAAA
Senior Analyst

DRAFT

ACTUARIAL METHODS AND ASSUMPTIONS USED FOR THE JANUARY 1, 2018 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 2.50% 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. 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 0.25%) 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 – Scale MP-2017
2. Mortality after termination or retirement -
 - a. Healthy males – RP-2014 with generational mortality improvements using scale MP-2017 and a 105% multiplier
 - b. Healthy females – RP-2014 with generational mortality improvements using scale MP-2017 and 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.

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

Sample rates for 2018 shown 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%

DRAFT

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 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.

DRAFT

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Average Annual Earnings	Percent Increase In Average Earnings
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	1.9
1/01/2018	2,722	196,848,084	72,317	4.6

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	Number	Pension Benefit Amount	Average Annual Benefit	Percent Increase in Average Benefit
1/01/2008					1,659	\$34,884,890	\$21,028	12.2%
1/01/2009	108	\$3,340,063	26	\$277,689	1,741	38,693,412	22,225	5.7%
1/01/2010	205	6,258,612	56	732,196	1,890	44,940,354	23,778	7.0%
1/01/2011	113	3,290,962	57	530,316	1,946	48,431,618	24,888	4.7%
1/01/2012	134	4,109,419	40	568,150	2,040	51,967,375	25,474	2.4%
1/01/2013	150	5,235,834	43	813,919	2,147	57,242,887	26,662	4.7%
1/01/2014	152	4,469,386	49	890,436	2,250	62,026,694	27,567	3.4%
1/01/2015	200	6,983,929	49	877,814	2,401	69,067,723	28,766	4.3%
1/01/2016	168	5,858,191	52	1,099,047	2,517	74,864,386	29,743	3.4%
1/01/2017	161	5,982,085	60	1,350,465	2,618	80,486,911	30,744	3.4%
1/01/2018	181	7,428,520	54	1,164,837	2,745	88,353,092	32,187	4.7%

* 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				
1/01/2008	\$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%
1/01/2018	1,252,332,952	66,235,224	627,112,335	1,328,750,029	100%	100%	2%

DRAFT

Schedule of Funding Progress

Valuation Date	Valuation Assets ¹	Actuarial Liability ¹	Funded Ratio	Unfunded		Ratio to Payroll
				Actuarial Liability	Member Payroll	
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 ^{2,3}	1,057,922	1,378,549	76.7%	320,627	161,055	199.1%
12/31/2012 ³	1,122,151	1,468,001	76.4%	345,850	164,299	210.5%
12/31/2013 ⁴	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%
12/31/2017	1,328,750	1,937,173	68.6%	608,423	196,848	309.1%
12/31/2017 ²	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 provisions under Tier 2 for certain new members.

⁴ 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, 2018

	<u>Plan Year Ended December 31, 2013</u>	<u>Plan Year Ended December 31, 2014</u>	<u>Plan Year Ended December 31, 2015</u>	<u>Plan Year Ended December 31, 2016</u>	<u>Plan Year Ended December 31, 2017</u>
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.

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 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, 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 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 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 \$121,388 for 2018 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, 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 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.

This page left blank intentionally.

DRAFT

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 San Luis Obispo County Employees Retirement Plan (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, 2018 Annual Actuarial Valuation which reflects data as of year-end 2017.

San Luis Obispo County Pension Trust

Changes in Fiduciary Net Position

Last 10 fiscal years (Dollars in Thousands)

	2018	2017	2016	2015	2014
Additions					
Employer Appropriations	\$ 46,243	\$ 42,341	\$ 35,452	\$ 33,618	\$ 32,047
Plan Member Contributions	32,953	30,467	25,359	24,587	24,415
Net Investment Income (Loss)	(50,033)	178,640	68,949	(16,706)	51,667
Total Additions	\$ 29,163	\$ 251,448	\$ 129,760	\$ 41,499	\$ 108,129
Deductions					
Service Retirement Benefits	\$ 79,120	\$ 72,074	\$ 66,623	\$ 61,796	\$ 56,186
Disability Retirement Benefits	3,506	3,305	3,214	3,150	2,972
Beneficiary Retirement Benefits	4,845	4,435	4,156	3,824	3,541
Deferred Retirement Option Program	5,341	5,238	4,201	3,672	3,464
Total Retirement Benefits	\$ 92,812	\$ 85,052	\$ 78,194	\$ 72,442	\$ 66,163
Refunds	1,757	2,857	2,247	1,613	1,629
Death Benefit	60	748	243	999	303
Administrative Expense	1,972	2,046	2,249	2,528	2,085
Discount Amortization	1,413	1,517	1,387	1,450	332
Total Deductions	\$ 98,014	\$ 92,220	\$ 84,320	\$ 79,032	\$ 70,512
Net Increase (Decrease) in Fiduciary Net Position	\$ (68,851)	\$ 159,228	\$ 45,440	\$ (37,533)	\$ 37,617
	2013	2012	2011	2010	2009
Additions					
Employer Appropriations	\$ 30,796	\$ 30,942	\$ 30,436	\$ 32,148	\$ 31,427
Plan Member Contributions	24,460	25,207	25,262	24,549	24,171
Net Investment Income (Loss)	131,842	108,818	24,113	110,054	144,482
Total Additions	\$ 187,098	\$ 164,967	\$ 79,811	\$ 166,751	\$ 200,080
Deductions					
Service Retirement Benefits	\$ 50,919	\$ 46,535	\$ 42,739	\$ 39,807	\$ 35,688
Disability Retirement Benefits	2,879	2,746	2,692	2,662	2,555
Beneficiary Retirement Benefits	3,352	2,905	2,769	2,486	2,131
Deferred Retirement Option Program	3,087	2,362	2,215	1,846	1,654
Total Retirement Benefits	\$ 60,237	\$ 54,548	\$ 50,415	\$ 46,801	\$ 42,028
Refunds	2,374	1,138	1,659	1,642	1,575
Death Benefit	150	125	430	362	45
Administrative Expense	2,054	2,070	1,910	1,981	1,730
Total Deductions	\$ 64,815	\$ 57,881	\$ 54,414	\$ 50,786	\$ 45,378
Net Increase (Decrease) in Fiduciary Net Position	\$ 122,283	\$ 107,086	\$ 25,397	\$ 115,965	\$ 154,702

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
2018	Miscellaneous	\$ 64,336	\$ 1,462	\$ 3,571	\$ 3,178	\$ 1,613	\$ 50	\$ 74,210
	Probation	2,898	159	190	129	82	-	3,458
	Safety	11,886	1,885	1,084	2,034	62	10	16,961
	TOTAL	\$ 79,120	\$ 3,506	\$ 4,845	\$ 5,341	\$ 1,757	\$ 60	\$ 94,629
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

Source: SLOCPT detailed retiree payroll journals 2009-2018 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, 2018,
based on data as of December 31, 2017.

As of December 31		Avg. Age on Dec. 31st	Avg. Age at retirement (1)	Number of Recipients	Average Monthly Benefit
2017	Miscellaneous	69.5	59.2	2,355	\$ 2,451
	Probation	64.3	55.8	75	3,367
	Safety	63.5	52.9	315	4,251
	TOTAL	68.7	58.4	2,745	\$ 2,682
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

(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, 2018

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>	419	22	63	-	504	17.6%
<i>Probation</i>	9	-	-	1	10	0.3%
<i>Safety</i>	16	-	3	1	20	0.7%
subtotal	444	22	66	2	534	18.6%
\$10,000-\$19,999						
<i>Miscellaneous</i>	532	39	52	2	625	21.8%
<i>Probation</i>	10	-	-	-	10	0.3%
<i>Safety</i>	24	-	9	-	33	1.2%
subtotal	566	39	61	2	668	23.3%
\$20,000-\$29,999						
<i>Miscellaneous</i>	385	21	25	4	435	15.2%
<i>Probation</i>	9	1	3	-	13	0.5%
<i>Safety</i>	26	10	8	-	44	1.5%
subtotal	420	32	36	4	492	17.2%
\$30,000-\$39,999						
<i>Miscellaneous</i>	242	4	19	7	272	9.5%
<i>Probation</i>	8	4	1	-	13	0.5%
<i>Safety</i>	16	16	9	1	42	1.5%
subtotal	266	24	29	8	327	11.4%
\$40,000-\$49,999						
<i>Miscellaneous</i>	149	1	9	8	167	5.8%
<i>Probation</i>	6	-	2	-	8	0.3%
<i>Safety</i>	19	15	7	-	41	1.4%
subtotal	174	16	18	8	216	7.5%
\$50,000-\$59,999						
<i>Miscellaneous</i>	123	1	3	6	133	4.6%
<i>Probation</i>	12	-	-	-	12	0.4%
<i>Safety</i>	19	6	-	9	34	1.2%
subtotal	154	7	3	15	179	6.2%

San Luis Obispo County Pension Trust

Retired Members by Benefit Type and Amount (continued)

as of December 31, 2018

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>	89	-	3	14	106	3.7%
<i>Probation</i>	5	-	-	-	5	0.2%
<i>Safety</i>	21	-	-	5	26	0.9%
subtotal	115	-	3	19	137	4.8%
\$70,000-\$79,999						
<i>Miscellaneous</i>	66	-	1	5	72	2.5%
<i>Probation</i>	5	-	-	-	5	0.2%
<i>Safety</i>	25	-	-	5	30	1.0%
subtotal	96	-	1	10	107	3.7%
\$80,000-\$89,999						
<i>Miscellaneous</i>	30	-	1	1	32	1.1%
<i>Probation</i>	2	-	-	-	2	0.1%
<i>Safety</i>	19	-	-	3	22	0.8%
subtotal	51	-	1	4	56	2.0%
\$90,000-\$99,999						
<i>Miscellaneous</i>	27	-	1	1	29	1.0%
<i>Probation</i>	1	-	-	-	1	0.0%
<i>Safety</i>	13	-	-	1	14	0.5%
subtotal	41	-	1	2	44	1.5%
\$100,000+						
<i>Miscellaneous</i>	74	-	2	5	81	2.8%
<i>Probation</i>	3	-	-	1	4	0.1%
<i>Safety</i>	17	1	2	3	23	0.8%
subtotal	94	1	4	9	108	3.8%
CUMULATIVE TOTAL						
<i>Miscellaneous</i>	2,136	88	179	53	2,456	85.7%
<i>Probation</i>	70	5	6	2	83	2.8%
<i>Safety</i>	215	48	38	28	329	11.5%
	2,421	141	223	83	2,868	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, 2018,
based on data as of December 31, 2017.

Active Members (all classes)	Average Age	Average Service	Average Annual Pay			
2017	45.1	9.3	\$ 72,317			
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			

Number of Members	Active Members	Deferred Vested Members	Retiree and Beneficiary	Disability Recipients	TOTAL
2017	2,722	464	2,608	137	5,931
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

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	SLOCPT	TOTAL
2018							
Tier 1	1,140	90	16	3	-	1	1,250
Tier 2	309	-	-	-	-	2	311
Tier 3	1,122	33	4	-	-	5	1,164
Total	2,571	123	20	3	-	8	2,725
% of total	94.2%	4.5%	0.7%	0.1%	0.0%	0.3%	
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)							
Total	2,320	149	-	3	-	7	2,479
% of total	93.6%	6.0%	0.0%	0.1%	0.0%	0.3%	
2009							
Total	2,341	154	-	3	1	7	2,506
% of total	93.5%	6.1%	0.0%	0.1%	0.0%	0.3%	

- (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
SLOOPT

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 24, 2019

To: Board of Trustees

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

Agenda Item 9: January 1, 2019 Actuarial Valuation and Pension Contribution Rates

Accompanying this memo are –

- **Draft January 1, 2019 Annual Actuarial Valuation** prepared by Gabriel Roeder Smith (GRS) – the Plan Actuary - with additional supplementary tables of data.
- **Actuarial Valuation presentation** by Leslie Thompson, Actuary, of Gabriel Roeder Smith on the results of the 2019 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).
- **Pension Contribution Rate Increase History – 2014-2019**
- **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 2.75% (changed for 2019)
 - 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, 2019 Actuarial Valuation.
2. Approve the transfer of \$2,483,595 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 44.52% effective January 1, 2019 is received - an increase of 2.30% over the current Charged Rate of contributions as of 1/1/19** as recommended by GRS in the Contribution Rate Comment of the Valuation (page A-6).
 - a. 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.
 - b. **See the attached Deferred Implementation Date exhibit to this memo for the applicable pension contribution rate increases.**

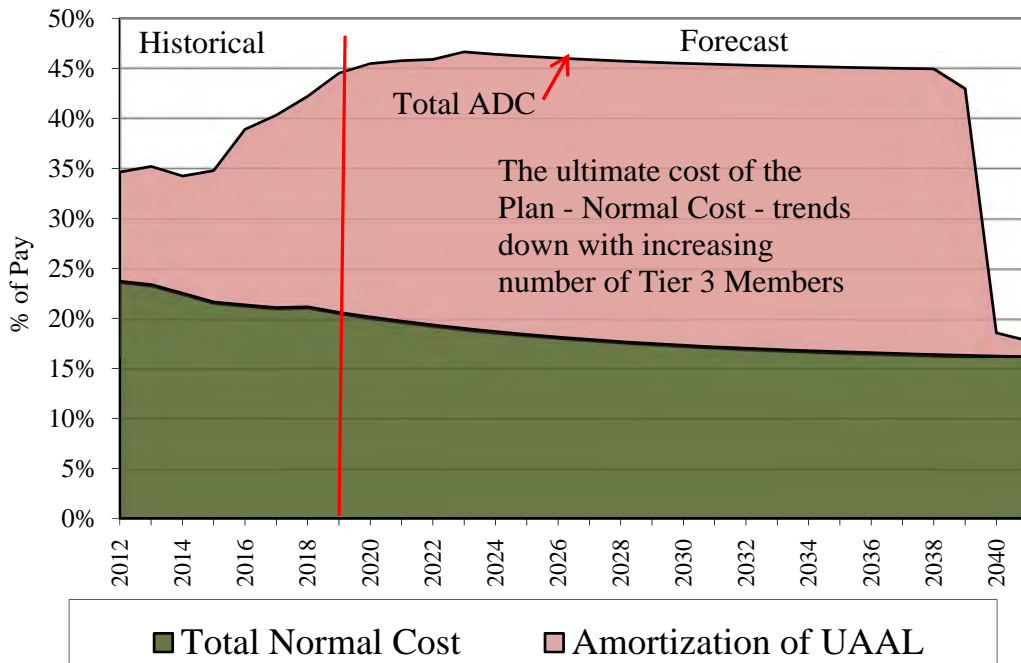
Discussion – Contribution Rate:

The valuation indicates an increase in the Total Required Contribution Rate (or Actuarially Determined Contributions (ADC) vs. the current Charged Rate of contributions) to 44.52% effective January 1, 2019. This **increase of 2.30%** is attributable to –

1. Investment Earnings less than expected over the five-year period used to in the Valuation – Contribution impact = +1.61% of pay
2. Decrease in the Payroll Growth Assumption from 3.00%/year in 2018 to 2.75%/year in 2019. This decrease was planned as a two-year phase-in of changes to assumptions recommended in the 2018 Actuarial Experience Study. Contribution impact = +0.45% of pay.
3. Net demographic experience losses - Contribution impact = +0.24% of pay.

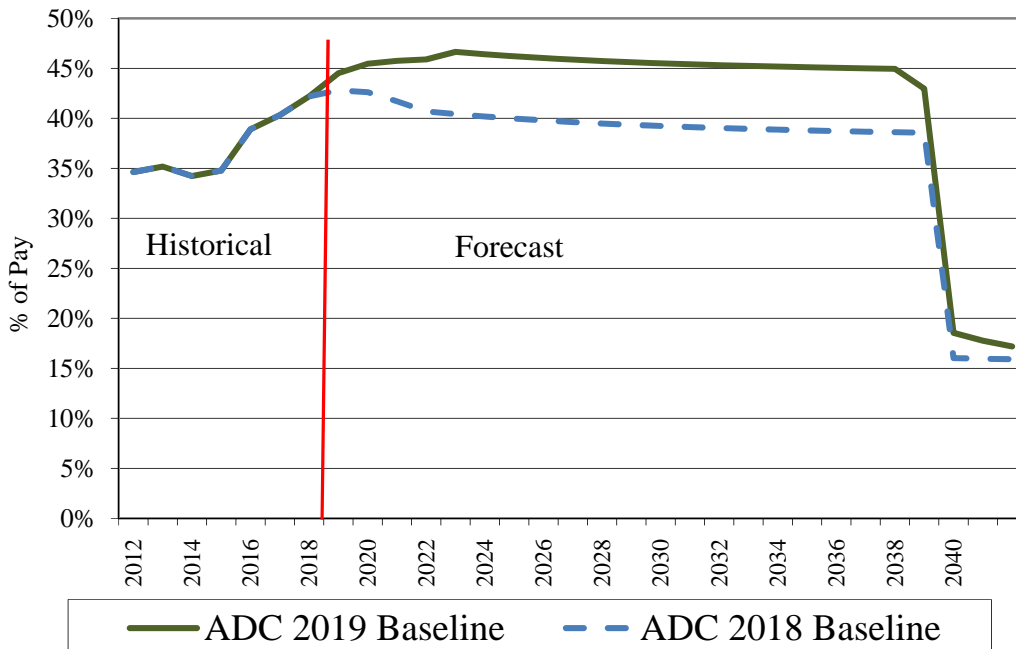
See the attached Actuarial Valuation presentation for further detail on the sources of the increase. The Baseline projections of Total Required Contribution Rates or Actuarially Determined Contributions (ADC) are shown in the following graph.

**SLO Retirement Plan - Contribution Rates -
2019 Baseline - Aggregate - all member classes**



By way of illustration, the following graph shows the ADC forecast from the Baseline forecasts for the 2018 Actuarial Valuation and the 2019 Actuarial Valuation.

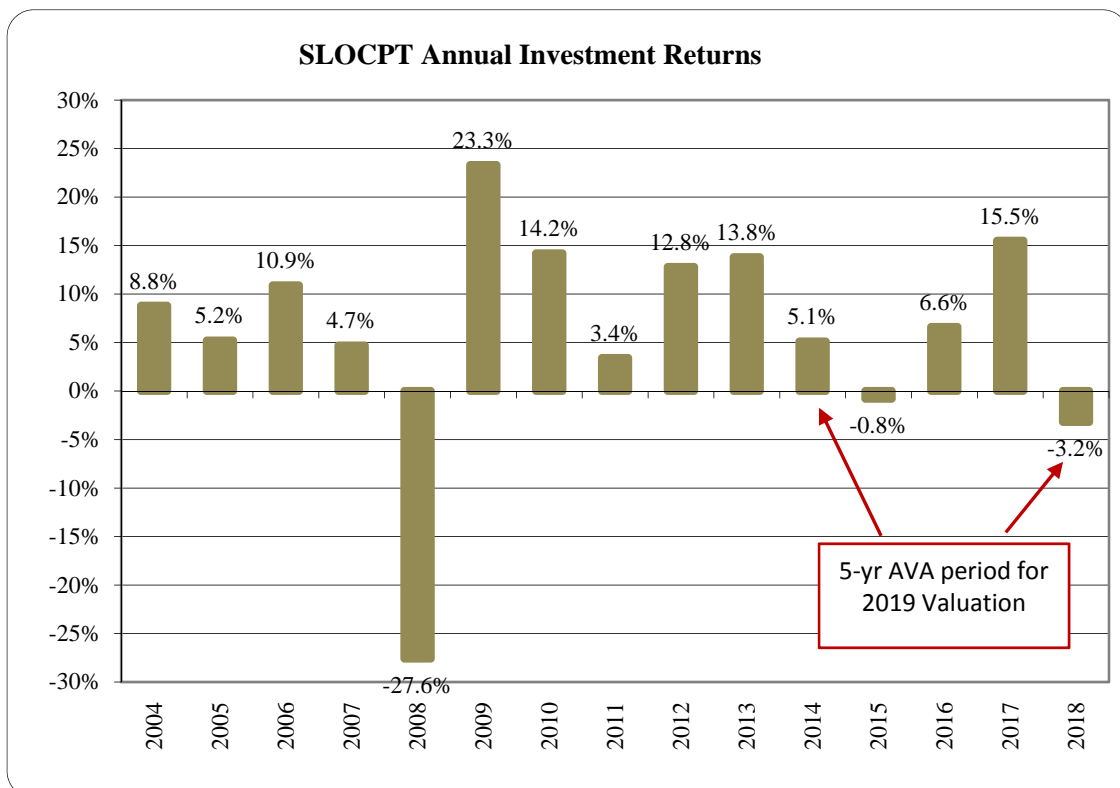
**SLO Retirement Plan - Contribution Rates -
2019 vs. 2018 Baseline - Aggregate - all member classes**



Discussion – Investment Returns:

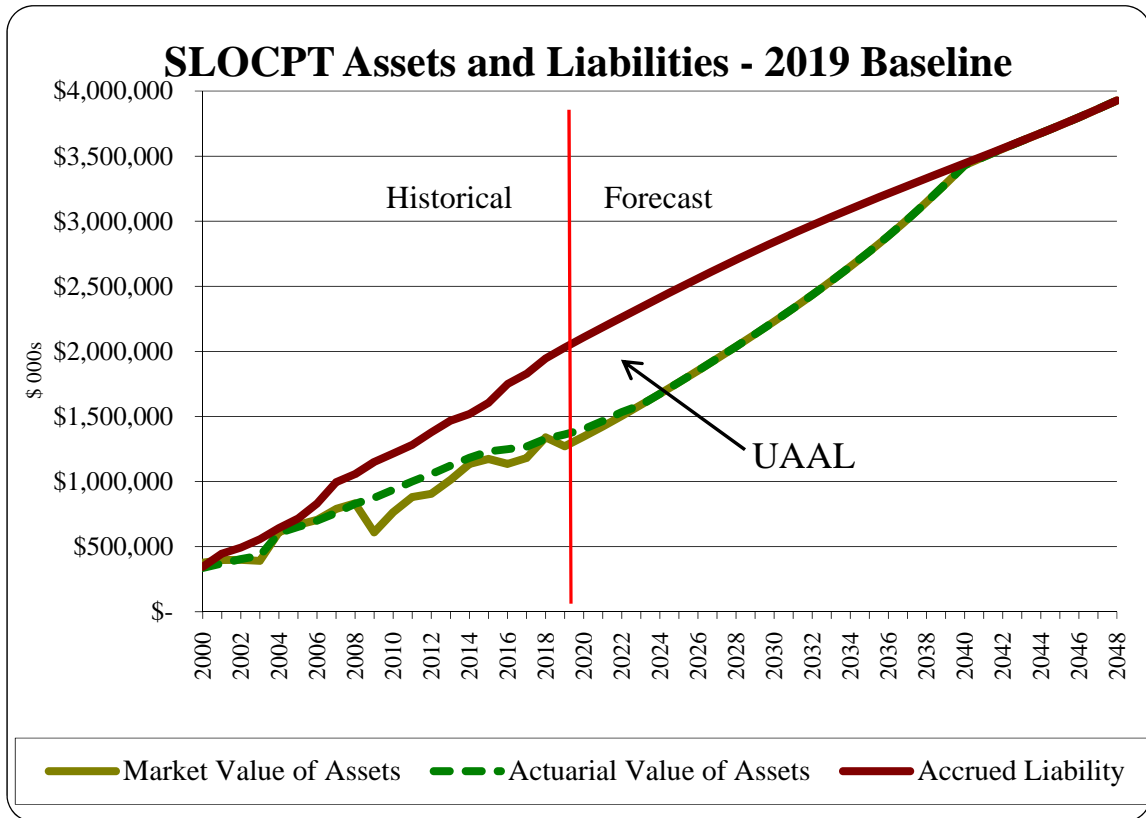
The effect of the below-expectations investment return in 2018 can be summarized as –

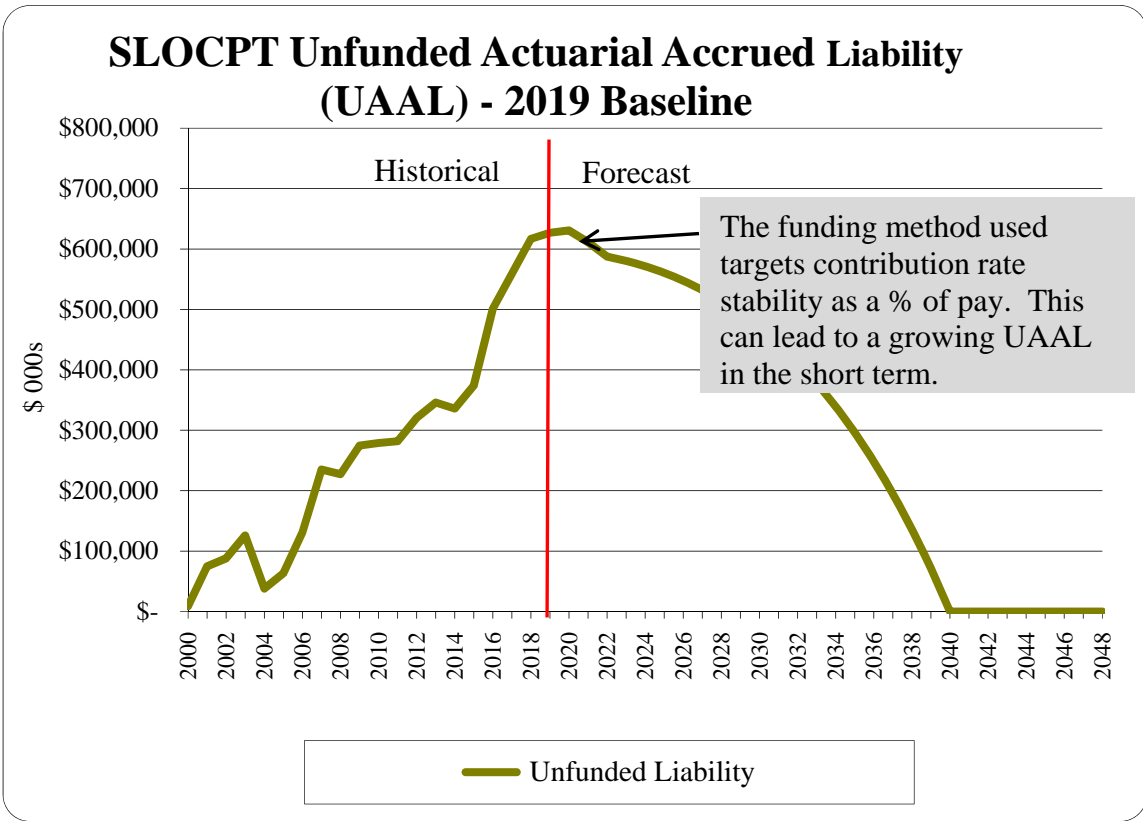
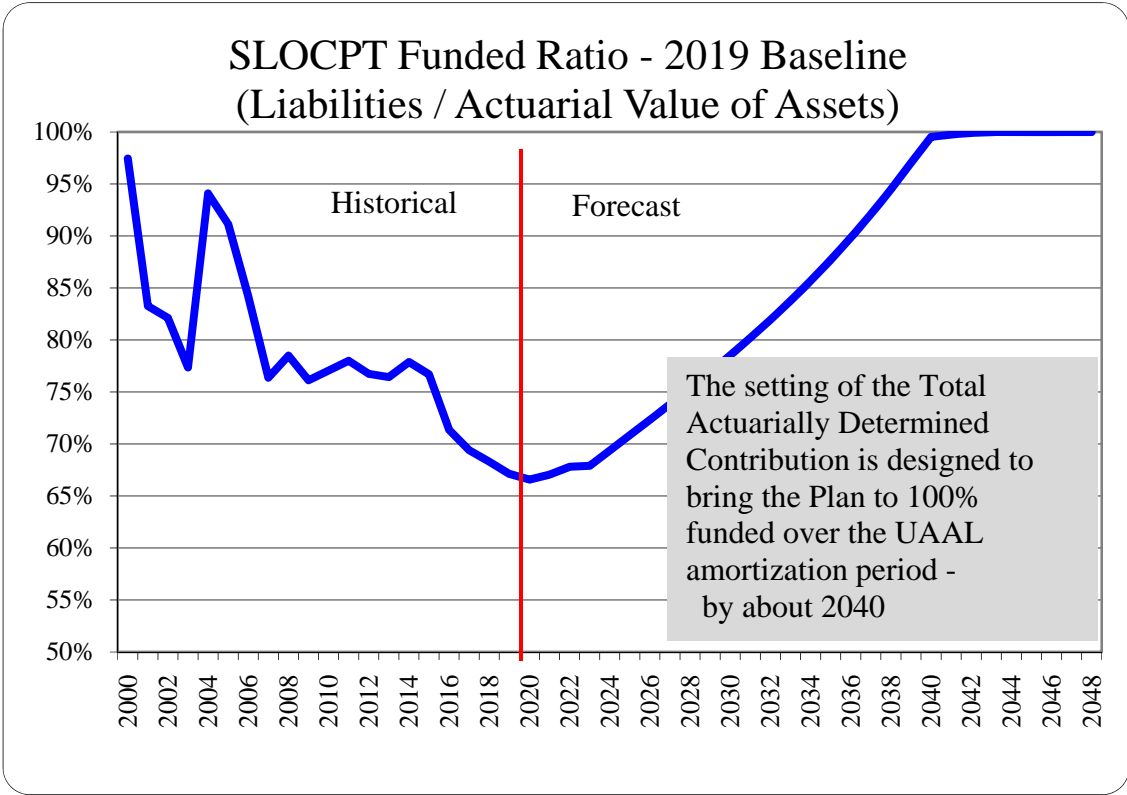
- The actuarial process uses a 5-year smoothing of asset values to arrive at the asset side of the Asset/Liability ratio which is important in the setting of contribution rates. For the five-year period factored into the 2019 Valuation, the 13.8% return in 2013 drops out of the 5-year smoothing period while the -3.2% return of 2018 is added to the 5-year smoothing period. The 10-year smoothing of the 2008 market losses concluded in 2018.
- It should be noted that much of the negative investment experience of 2018 took place in November and December with a bounce-back in 2019. The year-to-date MVA based return on the fund through April 2019 was +8.8%. The remainder of 2019 is an unknown as far as returns are concerned.
- The impacts of investment returns on the outputs from the Actuarial Valuation (contribution rates, funded status) is highly path-dependent. In other words, a bear market at the start of a forecast period has a larger impact than a similar bear market near the end of a forecast period.
- While the actuarial process has its own 5-year smoothing method for investment results, it is illustrative to look at the following graph of year-by-year investment returns of the Pension Trust. Keep in mind that the Pension Trust invests in a broadly diversified portfolio of multiple asset classes. To limit volatility, the Pension Trust follows an investment policy slightly lower-risk than many other pension funds.



Discussion – Funded Ratio:

The valuation results also indicate that the funded ratio of the Plan – Actuarial Accrued Liabilities (AAL) vs. Actuarial Value of Assets (AVA) has declined from 68.3% in 2018 to **67.1%** in 2019. See the attached Actuarial Valuation presentation for further detail on the sources of the decrease. The Baseline projections of assets and liabilities and funded ratio are shown in the following graphs.





Respectfully submitted,

**2019 Annual Actuarial Valuation
and Supplementary Exhibits**

This page left blank intentionally.

San Luis Obispo County Pension Trust

Actuarial Valuation Report
As of January 1, 2019

Draft



June 11, 2019

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, 2019 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, 2019.

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 21 years (30 year closed amortization period beginning with the January 1, 2010 valuation) for funding computations. Effective with this valuation, new gains and losses generated each year are amortized over their own 20 year closed period.

In the January 1, 2019 valuation, the Trust's funded status decreased from 68.3% to 67.1%. The total actuarially determined contribution rate is 44.52% of pay as of January 1, 2019, compared to the total charged rates of 42.22%. 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.

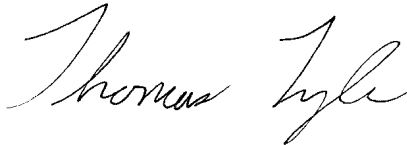
Respectfully submitted,
Gabriel, Roeder, Smith & Company



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



Paul Wood, ASA, FCA, MAAA
Consultant



Thomas A. Lyle, ASA, EA, 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

Draft

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, 2019, there are 1,163 active members covered under Tier 3 compared to 1,003 active members covered as of the prior valuation. See Section D for additional details regarding the active membership in each tier.

Assumptions: Other than the payroll growth rate assumption discussed below, there have been no changes to the assumptions since the prior valuation.

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 was decreased 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 decreased from 21.15% to 20.60% of pay. 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 decreased from 16.41% to 16.04%. The net result is the County share of the normal cost decreased from 4.74% to 4.56%. Investment losses and the change in the payroll growth assumption increased the amortization payment and overall the January 1, 2019 computed County Employer actuarial appropriation rate for the SLOCPT increased from 25.78% to 28.48%. 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 68.3% to 67.1%.

Contribution Rate: The total charged rate in 2019 was 39.42%. Adding to that the 2.80% increase that was effective July 1, 2019 creates a charged rate for 2019 of 42.22%. The total actuarially determined contribution rate is 44.52% as of January 1, 2019. Since the margin between the charged rate and the actuarially determined contribution rate has grown to 2.30%, an increase in the charged rate is recommended. Please note that the 2.30% increase assumes the charged rate is changed January 1, 2019. Delaying that change will result in a higher increase.

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 \$43.7 million from investments (described as the return on the actuarial value of assets less than the assumed 7.00%). The actuarial asset return of 3.69% did not exceed the 7.00% benchmark for the prior year. The return on the market value of assets as calculated by the SLOCPT investment consultants was -3.72%.

- A \$1.4 million gain due to compensation increases for continuing active members being less than the expected increase. A continuing active member is a member who was active as of the last valuation date, and is active as of this valuation date. The average increase for continuing active members was 4.16%, while assumed increases range from 2.88% to 8.13%.
- A \$3.5 million loss due to retirement. This loss reflects more retirements than anticipated.
- A \$6.2 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 initial base of the unfunded accrued liability established January 1, 2018 are based on a 21 year amortization as of the January 1, 2019 valuation. Future gains and losses will be amortized over 20 year closed period layers.

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, 2018, the reserve for retirees and beneficiaries is \$1,042,178,545. The non-COLA liabilities calculated were \$1,044,662,140. Accordingly, we recommend that the Trust transfer this \$2,483,595 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 2019 is approximately \$8.5 million -- 4.23% of active member payroll. When this percent is added to the valuation computed appropriation rate of 28.48%, the total rate of 32.71% more accurately reflects total County pension costs.

Assets: There is approximately \$90.9 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, 2019	January 1, 2018
	(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 	2,725 2,868 489 <hr style="width: 100px; margin: 0 auto;"/> 6,082 \$ 200,537 \$ 73,592	2,722 2,745 464 <hr style="width: 100px; margin: 0 auto;"/> 5,931 \$ 196,848 \$ 72,317
Assets		
<ul style="list-style-type: none"> • Market Value (000s) • Actuarial Value (000s) • Return on Market Value • Return on Actuarial Value 	\$ 1,271,620 \$ 1,362,562 -3.72% 3.69%	\$ 1,340,471 \$ 1,328,750 14.92% 5.99%
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 	\$ 614,177 1,343,131 72,621 <hr style="width: 100px; margin: 0 auto;"/> \$ 2,029,929 \$ 667,368 67.1% \$ 758,309 62.6%	\$ 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%
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 	20.60% 16.04% 4.56% 23.92% 28.48% 44.52%	21.15% 16.41% 4.74% 21.04% 25.78% 42.19%

* Total may not add due to rounding.

**Percentage of active payroll

Calculation of the UAAL Amortization Payment

UAAL as of January 1, 2019				\$667,367,732
Total Prior Remaining Amortization Bases as of January 1, 2019				616,632,313
2019 Amortization Base as of January 1, 2019				\$50,735,419
2019 Payment (20 years, level percent of pay amortization)				\$3,753,148
		As of January 1, 2019		
Base Year	Initial Base	Remaining Base	Years Remaining	Amortization Payment
2019	\$ 50,735,419	\$ 50,735,419	20	\$ 3,753,148
2018	616,930,482	616,632,313	21	44,209,689
Total		\$ 667,367,732		\$ 47,962,837

Draft

Reconciliation of Charged Rates and the Actuarially Determined Contribution

Valuation Date	January 1, 2019	January 1, 2018
Actuarially Determined Contribution (ADC)	44.52%	42.19%
County Charged Rate	23.15%	21.82%
Member Charged Rate	<u>16.27%</u>	<u>15.48%</u>
Total Charged Rate	39.42%	37.30%
Increase to Charged Rate*	2.80%	2.38%
Total Charged Rate as of January 1	42.22%	39.68%
Difference between the ARC and the Charged Rate	2.30%	2.51%
Recommended Rate Increase as of January 1	2.30%	2.51%

Draft

*The recommended rate increase as of January 1, 2018 was 2.51%. However, the rate increase was implemented on July 1, 2019 and therefore was increased to 2.80%.

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, 2019 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 initial base of the unfunded accrued liability that was effective as of January 1, 2010. This base has 21 years remaining as of January 1, 2019. Future gains and losses, including the loss from this year, will be amortized over 20 year closed period layers.

Elements of Normal Cost January 1, 2019

MISCELLANEOUS VALUATION GROUPS

	Other	Management				SLOCEA				TOTAL MISC.
	BU #14, 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	14.19%	17.63%	19.11%	19.72%	17.77%	15.00%	15.59%	15.00%	
Vesting	1.69%	1.74%	1.21%	1.88%	1.74%	1.63%	2.15%	1.87%	1.64%	1.67%
Death-In-Service	0.15%	0.26%	0.09%	0.25%	0.25%	0.19%	0.07%	0.09%	0.18%	0.20%
Disability	0.27%	0.29%	0.28%	0.35%	0.30%	0.26%	0.27%	0.27%	0.26%	0.27%
Refunds	<u>1.55%</u>	<u>1.58%</u>	<u>1.49%</u>	<u>1.36%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.78%</u>	<u>1.78%</u>	<u>1.57%</u>	<u>1.56%</u>
Total Normal Cost	17.85%	21.50%	22.18%	23.56%	21.62%	18.64%	19.86%	19.01%	18.66%	19.54%
Less										
Employee Contribution Rate	13.56%	16.27%	16.79%	16.80%	16.31%	14.65%	15.68%	15.16%	14.67%	15.16%
Equals										
County Normal Cost	4.29%	5.23%	5.39%	6.76%	5.31%	3.99%	4.18%	3.85%	3.99%	4.38%

Elements of Normal Cost January 1, 2019

	Probation			Safety				GRAND TOTAL	
	Mgmt	Non	Total	Management		Non-Mgmt			Total
		Mgmt	Probation	Sworn	Non-Sworn	Sworn	Non-Sworn		Safety
Service Retirement	17.79%	15.45%	15.63%	25.16%	18.36%	19.85%	18.91%	19.64%	16.35%
Vesting	4.72%	3.83%	3.90%	2.21%	2.50%	2.23%	2.02%	2.14%	1.83%
Death-In-Service	0.28%	0.23%	0.23%	0.51%	0.29%	0.42%	0.33%	0.38%	0.23%
Disability	0.35%	0.29%	0.29%	2.73%	2.67%	2.99%	3.11%	3.02%	0.65%
Refunds	<u>2.83%</u>	<u>2.44%</u>	<u>2.47%</u>	<u>1.24%</u>	<u>1.40%</u>	<u>1.17%</u>	<u>0.96%</u>	<u>1.08%</u>	<u>1.54%</u>
Total Normal Cost	25.97%	22.24%	22.52%	31.85%	25.22%	26.66%	25.33%	26.26%	20.60%
				Less					
Employee Contribution Rate	23.15%	18.55%	18.91%	27.27%	24.10%	21.37%	18.70%	20.48%	16.04%
				Equals					
County Normal Cost	2.82%	3.69%	3.61%	4.58%	1.12%	5.29%	6.63%	5.78%	4.56%

Draft

Pension Costs Summary - 2019
Normal Cost by Tier
(Expressed as Percentage of Active Payroll)

NORMAL COST (NC)	Tier 1	Tier 2	Tier 3	2019 Combined
MISCELLANEOUS				
Member Contributions *	18.99%	12.26%	11.12%	15.16%
Employer Paid Normal Cost	<u>3.77%</u>	<u>6.17%</u>	<u>4.67%</u>	<u>4.38%</u>
Total Normal Cost	22.76%	18.43%	15.79%	19.54%
Note: COLA portion of NC	4.93%	3.25%	2.65%	4.03%
PROBATION				
Member Contributions *	21.65%	NA	12.53%	18.91%
Employer Paid Normal Cost	<u>2.65%</u>	NA	<u>5.88%</u>	<u>3.61%</u>
Total Normal Cost	24.30%	NA	18.41%	22.52%
Note: COLA portion of NC	5.38%	NA	3.35%	4.87%
SAFETY				
Member Contributions *	23.56%	17.85%	16.52%	20.48%
Employer Paid Normal Cost	<u>3.84%</u>	<u>8.79%</u>	<u>7.43%</u>	<u>5.78%</u>
Total Normal Cost	27.40%	26.64%	23.95%	26.26%
Note: COLA portion of NC	6.62%	5.27%	4.44%	5.97%
TOTAL				
Member Contributions *	19.79%	13.37%	11.74%	16.04%
Employer Paid Normal Cost	<u>3.72%</u>	<u>6.72%</u>	<u>5.02%</u>	<u>4.56%</u>
Total Normal Cost	23.51%	20.09%	16.76%	20.60%
Note: COLA portion of NC	5.20%	3.67%	2.87%	4.33%

* 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, 2019

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	\$1,054,964	\$57,052	\$250,546	\$1,362,562
B. Present value of expected future County appropriations				
1. Unfunded past service	516,710	27,944	122,715	667,368
2. Expected future service	<u>46,814</u>	<u>2,653</u>	<u>13,587</u>	<u>63,055</u>
3. Total future County	\$563,524	\$30,597	\$136,302	\$730,423
C. Present value of expected future member contributions	<u>184,911</u>	<u>14,161</u>	<u>48,500</u>	<u>247,572</u>
D. Total Present and Expected Future Resources	<u>\$1,803,399</u>	<u>\$101,810</u>	<u>\$435,348</u>	<u>\$2,340,557</u>

Draft

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	\$1,024,532	\$52,665	\$265,934	\$1,343,131
B. To Deferred and Reciprocal	63,415	2,183	7,023	72,621
C. Active members				
1. Service rendered prior to valuation date	483,727	30,147	100,303	614,177
2. Expected future service	<u>231,725</u>	<u>16,815</u>	<u>62,088</u>	<u>310,628</u>
D. Total Present Value of Expected Future Benefits	<u>\$1,803,399</u>	<u>\$101,810</u>	<u>\$435,348</u>	<u>\$2,340,557</u>

* Grand Total may not add due to rounding.

Summary of Reported Asset Information Submitted for the January 1, 2019 Valuation

Market Value of Reported Assets as of January 1, 2019

Cash/Short-term	\$ 55,156,155
Receivables	5,068,682
Equities	508,869,699
Bonds	416,951,719
Mortgages	4,365,340
Alternative Investments	124,392,603
Real Estate	192,202,582
Other	3,622,732
	\$ 1,310,629,512
Liabilities	(39,009,428)
Total Market Value	\$ 1,271,620,084

Reserves as of January 1, 2019

Member Deposit Reserve	\$ 356,146,743
Appropriation Reserves	44,743,010
Retired Members Reserve	1,042,178,545
Cost-of Living	405,954,286
Contingency Reserves	(770,684,547)
Market Value Adjustments	193,282,047
Total Reserves	\$ 1,271,620,084

Draft

Summary of Reported Asset Information Submitted for the January 1, 2019 Valuation

Total Reserves	
Beginning of Year	\$ 1,340,471,022
Revenues	
Employer Contributions	\$ 46,243,596
Employee Contributions	32,952,747
Interest	4,120,406
Dividends	9,451,610
Real Estate Income	376,191
Realized and Unrealized Gains and Losses	(60,131,990)
Investment Expenses	(3,849,273)
	(3,849,273)
Total Revenues	\$ 29,163,287
Disbursements	
Benefit Payments	\$ 92,811,810
Refunds of Member Contributions	1,756,682
Death Benefits	60,376
Administration	3,385,357
	3,385,357
Total Disbursements	\$ 98,014,225
Net Increase	\$ (68,850,938)
Total Reserves - End of year	\$ 1,271,620,084

Draft

Development of Funding Value of Assets January 1, 2019

	Plan Year Ended December 31, 2014	Plan Year Ended December 31, 2015	Plan Year Ended December 31, 2016	Plan Year Ended December 31, 2017	Plan Year Ended December 31, 2018
A. Funding Value Beginning of Year	\$1,182,923,978	\$1,231,473,577	\$1,248,327,560	\$1,268,404,900	\$1,328,750,029
B. Gross Market Value End of Year	1,173,336,063	1,135,802,704	1,181,242,858	1,340,471,022	1,271,620,084
C. Gross Market Value Beginning of Year	1,135,718,617	1,173,336,063	1,135,802,704	1,181,242,858	1,340,471,022
D. Non-Investment Cash Flow	(14,055,197)	(20,827,506)	(23,509,152)	(15,849,141)	(15,432,525)
E. Investment Income					
E1. Market Total =B-C-D	51,672,643	(16,705,853)	23,509,152	175,077,305	(53,418,413)
E2 Immediate Recognition	<u>85,252,488</u>	<u>88,526,837</u>	<u>88,105,825</u>	<u>89,809,223</u>	<u>92,481,499</u>
E3. Phased-in Recognition	(\$33,579,845)	(\$105,232,690)	(\$19,156,519)	\$85,268,082	(\$145,899,912)
F. Phased-in Recognition					
F1. Current Year=E3x20%*	(6,715,969)	(21,046,538)	(3,831,304)	17,053,616	(29,179,982)
F2. First Prior Year	10,167,841	(6,715,969)	(21,046,538)	(3,831,304)	17,053,616
F3. Second Prior Year	6,442,404	10,167,841	(6,715,969)	(21,046,538)	(3,831,304)
F4. Third Prior Year	(10,690,006)	6,442,404	10,167,841	(6,715,969)	(21,046,538)
F5. Fourth Prior Year	7,437,258	(10,690,006)	6,442,404	10,167,841	(6,715,969)
F6. Continued Recognition of 2008 Asset Loss	(29,936,396)	(29,936,396)	(29,936,396)	(9,936,396)	0
F7. Additional Recognition of 2008 Asset Loss	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
F8. Total Recognized Gain/(Loss)	(\$23,294,868)	(\$51,778,664)	(\$44,919,962)	(\$14,308,750)	(\$43,720,177)
G. Preliminary Funding Value					
=A+D+E2+F8	\$1,230,826,401	\$1,247,394,244	\$1,268,004,271	\$1,328,056,232	\$1,362,078,826
H. Excludable Assets					
H1. End of Year	5,295,316	4,362,000	3,961,371	3,267,574	2,784,819
H2. Beginning of Year	5,942,492	5,295,316	4,362,000	3,961,371	3,267,574
H3. Change=H1-H2	(647,176)	(933,316)	(400,629)	(693,797)	(482,755)
I. Final Funding Value=G-H3	\$1,231,473,577	\$1,248,327,560	\$1,268,404,900	\$1,328,750,029	\$1,362,561,581
J. Investment Return=(E2+F8)/(A+D/2)	5.27%	3.01%	3.49%	5.99%	3.69%

*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. This base is now fully recognized.

Allocation of Valuation Assets January 1, 2019

	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand Total</u>
1) Valuation Assets as of December 31, 2017	\$1,032,437,340	\$53,742,969	\$242,569,720	\$1,328,750,029
2) Preliminary member contributions including pickups by group	\$25,543,974	\$1,685,513	\$5,651,147	\$32,880,634
3) Member contributions from financials, subgroups split in proportion to (2)	\$25,599,997	\$1,689,209	\$5,663,541	\$32,952,747
4) Preliminary employer contributions by group	\$36,128,630	\$1,725,245	\$8,274,277	\$46,128,152
5) Employer contributions from financials, subgroups split in proportion to (4)	\$36,219,048	\$1,729,563	\$8,294,985	\$46,243,596
6) Benefit Payments based on data - avg LY & TY	\$72,376,342	\$3,263,276	\$16,478,066	\$92,117,684
7) Benefit payments from financials, subgroups split in proportion to (6)	\$74,349,365	\$3,352,235	\$16,927,268	\$94,628,868
8) Subtotal = (1) + (3) + (5) - (7)	\$1,019,907,020	\$53,809,506	\$239,600,978	\$1,313,317,504
9) Valuation Assets as of December 31, 2018				\$1,362,561,581
10) Residual to allocate among groups (9) - (8)				\$49,244,077
11) Allocation of residual to equalize funded ratios	\$35,056,672	\$3,242,741	\$10,944,663	\$49,244,077
12) Valuation Assets Allocated by group: (8) + (11)	\$1,054,963,692	\$57,052,247	\$250,545,641	\$1,362,561,580

Draft

Development of Unfunded Actuarial Accrued Liability January 1, 2019

	Miscellaneous (1)	Probation (2)	Safety (3)	Total (4)
1. Actuarial Accrued Liability for active members				
a. PVB	\$ 715,451,556	\$ 46,962,328	\$ 162,391,062	\$ 924,804,946
b. Less: PVFNC	(231,724,668)	(16,815,308)	(62,088,030)	(310,628,006)
c. Actuarial accrued liability (AAL)	\$ 483,726,888	\$ 30,147,020	\$ 100,303,032	\$ 614,176,940
2. Total AAL for:				
a. Retirees and beneficiaries	\$ 1,024,532,032	\$ 52,665,413	\$ 265,933,938	\$ 1,343,131,383
b. Inactive members	63,414,428	2,183,380	7,023,181	72,620,989
c. Active members (Item 1c)	483,726,888	30,147,020	100,303,032	614,176,940
d. Total AAL	\$ 1,571,673,348	\$ 84,995,813	\$ 373,260,151	\$ 2,029,929,312
3. Actuarial value of assets	\$ 1,054,963,692	\$ 57,052,247	\$ 250,545,641	\$ 1,362,561,580
4. Funded ratio	67.1%	67.1%	67.1%	67.1%
5. UAAL (Item 2d - Item 3)	\$ 516,709,656	\$ 27,943,566	\$ 122,714,510	\$ 667,367,732

Draft

Pension Costs Summary - 2019 (Expressed as Percentage of Active Payroll)

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) AMORTIZATION* & TOTAL ADC **	2019 Combined	2018 Combined
MISCELLANEOUS		
Total Normal Cost	19.54%	20.15%
UAAL Amortization	22.56%	19.65%
Total ADC - Miscellaneous	42.10%	39.80%
UAAL attributable to Miscellaneous (000's)	\$ 516,710	\$ 479,354
PROBATION		
Total Normal Cost	22.52%	23.24%
UAAL Amortization	22.70%	19.52%
Total ADC - Probation	45.22%	42.76%
UAAL attributable to Probation (000's)	\$ 27,944	\$ 24,953
SAFETY		
Total Normal Cost	26.26%	26.95%
UAAL Amortization	32.60%	30.89%
Total ADC - Safety	58.86%	57.84%
UAAL attributable to Safety (000's)	\$ 122,715	\$ 112,624
TOTAL		
Total Normal Cost	20.60%	21.15%
UAAL Amortization	23.92%	21.04%
Total ADC - Combined	44.52%	42.19%
UAAL Total (000's)	\$ 667,368	\$ 616,930

* UAAL Amortization calculated on 30 year closed period with 21 years remaining as of January 1, 2019, with new bases, amortized over a closed 20 year period.

** 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, 2018

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	\$616,930,482
(2) County normal cost	9,376,070
(3) Actuarially determined contribution for prior year	51,412,965
(4) Interest accrual	41,738,726
(5) Increase/(Decrease) in UAAL due to assumption changes	0
(6) Increase in UAAL due to provision changes	0
(7) Expected UAAL at end of year	\$616,632,313
[(1) + (2) - (3) + (4) + (5) + (6)]	
(8) Actual UAAL at end of year	\$667,367,732
(9) Experience Gain/(Loss): (7) - (8)	(\$50,735,419)
(10) Gain (loss) as percentage of actuarial accrued liabilities at beginning of year	
\$1,945,680,511	-2.61%

Components of Experience Gain/(Loss) December 31, 2018

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

Components of Experience Gain/(Loss)

Gain/(Loss) due to:	
Compensation increases	\$1,368,962
Investment experience	(43,720,177)
Contribution timing experience	(5,284,813)
Accelerated recognition of 2008 loss	0
Retirement incidence	(3,533,996)
Termination experience	436,787
Active mortality experience	(28,862)
Disability experience	(263,739)
Retiree & beneficiary mortality	
experience and miscellaneous retiree data changes	(6,246,957)
COLAs	(3,568,492)
Other data changes and miscellaneous factors	<u>10,105,868</u>
Total Experience Gain/(Loss)	(\$50,735,419)

Funding Progress Indicators Historic Comparison

(\$ in Thousands)

Valuation Date	Valuation Assets ¹	Actuarial Liability ¹	Funded Ratio	Unfunded Actuarial Liability	Member Payroll	Ratio to Payroll
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 ^{2,3}	1,057,922	1,378,549	76.7%	320,627	161,055	199.1%
12/31/2012 ³	1,122,151	1,468,001	76.4%	345,850	164,299	210.5%
12/31/2013 ⁴	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%
12/31/2017	1,328,750	1,937,173	68.6%	608,423	196,848	309.1%
12/31/2017 ²	1,328,750	1,945,681	68.3%	616,930	196,848	313.4%
12/31/2018	1,362,562	2,029,929	67.1%	667,368	200,537	332.8%

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

12/31/2018	\$2,784,819	12/31/2013	\$5,942,492
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

² Reflects assumption changes.

³ Reflects benefit provisions under Tier 2 for certain new members.

⁴ Reflects benefit provisions under Tier 3 for new members, and assumption changes.

Risk Metrics January 1, 2019

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	\$ 200,537
b. Market value of assets	\$ 1,271,620
c. Accrued Liability	\$ 2,029,929
d. Funded ratio, market value basis	62.64%
e. Asset volatility ratio (MVA / Payroll)	6.34
f. Liability volatility ratio (AAL / Payroll)	10.12

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 matures, 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 \$127 million) is 63.4% of payroll. This 63.4% 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 20-year amortization, with and without the five-year asset smoothing.

Asset Volatility Ratio (in Thousands)					
Fiscal Year ending 12/31/-	2018	2017	2016	2015	2014
Market Value of Assets	\$1,271,620	\$1,340,471	\$1,181,243	\$1,135,803	\$1,173,336
Covered Payroll	\$200,537	\$196,848	\$185,020	\$177,004	\$167,695
Asset Volatility Ratio=Assets/Payroll	6.34	6.81	6.38	6.42	7.00
Increase in contribution rate resulting from a 10% asset loss (using 20-year level percent of pay amortization and five-year asset smoothing)	0.94%	1.01%	0.95%	0.96%	1.04%
Increase in contribution rate resulting from a 10% asset loss (using 20-year level percent of pay amortization without asset smoothing)	4.72%	5.07%	4.75%	4.78%	5.21%

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/-	2018	2017	2016	2015	2014
Accrued Liability	\$2,029,929	\$1,945,681	\$1,827,342	\$1,749,342	\$1,686,497
Covered Payroll	\$200,537	\$196,848	\$185,020	\$177,004	\$167,695
Liability Volatility Ratio=Liability/Payroll	10.12	9.88	9.88	9.88	10.06
Increase in contribution rate resulting from a 1% liability loss (using 20-year level percent of pay amortization)	0.75%	0.74%	0.74%	0.74%	0.75%

SECTION D

SUMMARY OF MEMBER DATA

Draft

Reconciliation of Members From January 1, 2018 to January 1, 2019

	Actives	Terminated			DROP	Beneficiary	Total
		Disability	Vested	Retiree			
Counts as of January 1, 2018	2,722	137	464	2,323	77	208	5,931
Actives	5		(5)				0
Disability	(4)	5		(1)			0
Terminated Vested	(58)		58				0
Terminated Nonvested	(99)		(1)				(100)
Retiree	(96)		(31)	150	(23)		0
DROP	(28)				28		0
Beneficiary							0
Deceased		(1)		(51)		(6)	(58)
Refund	(5)		(5)				(10)
New Beneficiaries						21	21
New Actives	275						275
Return to Work	13						13
Missing							0
Not included last year			9		1		10
Counts as of January 1, 2019	2,725	141	489	2,421	83	223	6,082

Draft

**Summary of Active Members Included
January 1, 2019 Valuation
By Attained Ages and Years of Service
Total Membership**

Age Group	Years of Accrued Service							No.	Compensation Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
<20	1							1	35,797
20-24	43	0						43	2,393,352
25-29	237	14	0					251	14,406,725
30-34	248	95	26	0				369	24,593,211
35-39	190	100	99	19	1			409	29,260,836
40-44	117	78	80	58	9	0		342	26,751,314
45-49	80	52	87	61	45	6	1	332	26,660,226
50-54	80	45	63	77	63	23	8	359	28,743,759
55-59	64	51	52	61	50	36	23	337	26,167,302
60-64	39	35	46	40	29	20	6	215	16,518,287
65-69	11	12	11	12	4	1	2	53	4,106,314
70-74	3	1	3	3	0	0	1	11	629,574
75+	0	1	1	1	0	0	0	3	270,774
Totals	1,113	484	468	332	201	86	41	2,725	\$200,537,472

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

Averages

Age: 44.7
 Service: 9.1
 Compensation: \$73,592

Summary of Active Members Included in the January 1, 2019 Valuation

	<u>No.</u>	<u>Total Payroll</u>	<u>Averages</u>		
			<u>Annual Compensation</u>	<u>Age</u>	<u>Service</u>
Miscellaneous Members					
1/1/2019	2,324	\$164,634,676	\$70,841	45.5	8.9
1/1/2018	2,340	\$163,791,934	\$69,997	45.9	9.1
Percent Increase	-0.7%	0.5%	1.2%		
Probation Members					
1/1/2019	116	\$8,848,590	\$76,281	38.8	9.1
1/1/2018	115	\$8,580,686	\$74,615	39.5	9.6
Percent Increase	0.9%	3.1%	2.2%		
Safety Members					
1/1/2019	285	\$27,054,206	\$94,927	40.0	10.1
1/1/2018	267	\$24,475,464	\$91,668	40.8	10.6
Percent Increase	6.7%	10.5%	3.6%		
All Active Members					
1/1/2019	2,725	\$200,537,472	\$73,592	44.7	9.1
1/1/2018	2,722	\$196,848,084	\$72,317	45.1	9.3
Percent Increase	0.1%	1.9%	1.8%		

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 \$124,180 for 2019 for Tier 3 members.

Summary of Active Members by Valuation Group January 1, 2019 Valuation

	Counts				Total Payroll (000s*)			
	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total
Miscellaneous Members								
1/1/2019	1,039	259	1,026	2,324	\$ 82,021	\$20,514	\$62,100	\$164,635
1/1/2018	1,174	262	904	2,340	\$ 90,953	\$20,061	\$52,778	\$163,792
Percent Increase				-0.7%				0.5%
Probation Members								
1/1/2019	72	0	44	116	\$ 6,219	\$ -	\$ 2,630	\$ 8,849
1/1/2018	80	0	35	115	\$ 6,634	\$ -	\$ 1,947	\$ 8,581
Percent Increase				0.9%				3.1%
Safety Members								
1/1/2019	140	52	93	285	\$ 14,343	\$ 5,086	\$ 7,625	\$ 27,054
1/1/2018	151	52	64	267	\$ 14,675	\$ 4,805	\$ 4,996	\$ 24,475
Percent Increase				6.7%				10.5%
All Active Members								
1/1/2019	1,251	311	1,163	2,725	\$102,583	\$25,600	\$72,355	\$200,537
1/1/2018	1,405	314	1,003	2,722	\$112,262	\$24,866	\$59,720	\$196,848
Percent Increase				0.1%				1.9%

* Total may not add due to rounding.

Summary of Deferred and Reciprocal members Included in the January 1, 2019 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	215	\$15,145,627	\$70,445	49.2	39.7	5.0
Deferred	<u>215</u>	<u>21,593,833</u>	100,436	50.4	40.7	9.0
Total	430	\$36,739,460	\$85,441	49.8	40.2	7.0
Probation						
Reciprocals	8	\$337,798	\$42,225	45.2	34.6	3.7
Deferred	<u>9</u>	<u>1,028,710</u>	114,301	42.4	36.0	9.5
Total	17	\$1,366,508	\$80,383	43.7	35.3	6.8
Safety						
Reciprocals	17	\$1,323,895	\$77,876	44.0	34.4	4.4
Deferred	<u>25</u>	<u>3,526,316</u>	141,053	44.5	36.4	9.3
Total	42	\$4,850,211	\$115,481	44.3	35.6	7.3
Total						
Reciprocals						
1/1/2019	240	\$16,807,320	\$70,031	48.7	39.2	4.9
1/1/2018	221	\$13,313,197	\$60,241	48.6	38.7	4.5
Percent Change	8.6%	26.2%	16.3%			
Deferred						
1/1/2019	249	\$26,148,859	\$105,015	49.5	40.1	9.1
1/1/2018	243	\$24,372,696	\$100,299	50.4	40.1	9.1
Percent Change	2.5%	7.3%	4.7%			
Grand Total 1/1/2019	489	\$42,956,179	\$87,845	49.1	39.7	7.0
Grand Total 1/1/2018	464	\$37,685,893	\$81,220	49.5	39.4	6.9
Percent Change	5.4%	14.0%	8.2%			

Draft

Summary of Retirees Included in the January 1, 2019 Valuation

	Averages					New Retirees Only		
	<u>No.</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								
1/1/2019	2,279	\$71,578,729	\$31,408	69.8	59.3	144	\$36,657	61.7
1/1/2018	2,179	\$65,658,991	\$30,133	69.5	59.2	132	\$41,992	61.0
Percent Change	4.6%	9.0%	4.2%				-12.7%	
Probation								
1/1/2019	78	\$3,324,873	\$42,627	64.3	55.8	8	\$47,767	55.3
1/1/2018	70	\$2,864,113	\$40,916	64.3	55.8	4	\$34,976	54.0
Percent Change	11.4%	16.1%	4.2%				36.6%	
Safety								
1/1/2019	288	\$15,880,657	\$55,141	63.3	52.7	16	\$39,796	51.6
1/1/2018	288	\$15,294,071	\$53,104	63.5	52.9	29	\$50,996	54.5
Percent Change	0.0%	3.8%	3.8%				-22.0%	
All Retirees								
1/1/2019	2,645	\$90,784,259	\$34,323	68.9	58.5	168	\$37,326	60.4
1/1/2018	2,537	\$83,817,175	\$33,038	68.7	58.4	165	\$42,821	60.1
Percent Change	4.3%	8.3%	3.9%				-12.8%	

Draft

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

Summary of Beneficiaries Included in the January 1, 2019 Valuation

		<u>Averages</u>		
	<u>No.</u>	<u>Annual Allowance</u>	<u>Annual Allowance</u>	<u>Attained Age</u>
Miscellaneous				
1/1/2019	184	\$3,774,609	\$20,514	76.0
1/1/2018	176	\$3,594,654	\$20,424	75.5
Percent Change	4.5%	5.0%	0.4%	
Probation				
1/1/2019	5	\$171,113	\$34,223	75.2
1/1/2018	5	\$166,452	\$33,290	74.2
Percent Change	0.0%	2.8%	2.8%	
Safety				
1/1/2019	34	\$1,152,283	\$33,891	73.3
1/1/2018	27	\$774,811	\$28,697	72.8
Percent Change	25.9%	48.7%	18.1%	
All Beneficiaries				
1/1/2019	223	\$5,098,005	\$22,861	75.6
1/1/2018	208	\$4,535,918	\$21,807	75.1
Percent Change	7.2%	12.4%	4.8%	

Retirees and Beneficiaries January 1, 2019 Total Tabulated by Type of Allowances Being Paid

<u>Type of Allowance</u>	<u>No.</u>	<u>Annual Allowances</u>
SERVICE RETIREMENT		
Unmodified	1,081	\$34,076,166
Cash Refund	176	5,341,778
100% Continuance	740	29,969,574
50% Continuance	272	11,472,991
Benefits Coordinated with Social Security		
Unmodified	125	\$2,663,689
Cash Refund	24	398,508
100% Continuance	49	1,704,101
50% Continuance	<u>37</u>	<u>1,322,856</u>
Total Service Retirement	2,504	\$86,949,662
DISABILITY RETIREMENT		
Unmodified	79	\$2,133,524
Cash Refund	13	285,928
100% Continuance	40	1,220,735
50% Continuance	<u>9</u>	<u>194,409</u>
Total Disability Retirement	141	\$3,834,597
BENEFICIARIES	<u>223</u>	<u>\$5,098,005</u>
Total Allowances	<u>2,868</u>	<u>\$95,882,264</u>

Draft

SECTION E

VALUATION METHODS AND ASSUMPTIONS

Draft

Actuarial Methods and Assumptions Used in the January 1, 2019 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 (21 years as of January 1, 2019) for funding computations. Starting January 1, 2019, all new gains and losses, including the loss from this year, will be amortized over a closed 20-year layer each year.

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:

2.75% per year (inflation 2.50%; productivity of 0.25%) 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 2019 below:

Ages	% Dying Within Next Year Retirees	
	Men	Women
45	0.19%	0.18%
50	0.27%	0.23%
55	0.40%	0.31%
60	0.55%	0.46%
65	0.80%	0.74%
70	1.27%	1.16%
75	2.13%	1.93%
80	3.74%	3.37%
85	6.89%	6.11%

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 2019 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 2019 below:

Ages	% of Disabled Members Dying Within Next Year	
	Men	Women
30	0.44%	0.15%
35	0.84%	0.30%
40	1.23%	0.47%
45	1.55%	0.64%
50	1.86%	0.82%
55	2.20%	1.05%
60	2.60%	1.26%
65	3.06%	1.47%
70	3.72%	1.88%

Draft

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		
	2018	2017	2016	2015	2014	3 Year	5 Year	10 Year
Inflation ¹	3.9%	3.3%	2.8%	2.6%	1.7%	3.3%	2.9%	2.4%
Current Assumption	2.500%							
Average Pay Increase	1.8%	4.6%	1.9%	3.2%	0.7%	2.7%	2.4%	1.5%
Current Assumption	2.750%							
Merit & Longevity Pay Increase	-2.1%	1.3%	-0.9%	0.6%	-1.0%	-0.6%	-0.5%	-0.9%
Current Assumption	0.250%							
Total Payroll	1.9%	6.4%	4.5%	5.6%	1.8%	4.2%	4.0%	1.7%
Current Assumption	2.750%							
Investment Return Rate ²	3.7%	6.0%	3.5%	3.0%	5.3%	4.4%	4.3%	5.1%
Current Assumption	7.000%							
Real Rate of Investment Return	-0.2%	2.7%	0.7%	0.4%	3.6%	1.1%	1.4%	2.7%
Current Assumption	4.500%							

¹ Based on the average of the Consumer Price Index for Los Angeles – Long Beach – Anaheim and the San Francisco – Oakland – Hayward, 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, 2019

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, 2019 valuation have increased since the January 1, 2018 valuation for some 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, 2019

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, 2019

- 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, 2019

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, 2019 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 Management	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%	17.83%	17.83%	15.31%	16.60%	15.61%	17.88%	17.32%	14.75%	18.96%	19.27%
19	17.76%	14.66%	18.26%	17.37%	17.90%	17.90%	15.38%	16.67%	15.68%	17.95%	17.39%	14.82%	19.03%	19.34%
20	17.83%	14.73%	18.33%	17.44%	17.97%	17.97%	15.45%	16.74%	15.75%	18.02%	17.46%	14.89%	19.10%	19.41%
21	17.89%	14.79%	18.39%	17.50%	18.03%	18.03%	15.51%	16.80%	15.81%	18.08%	17.52%	14.95%	19.16%	19.47%
22	17.91%	14.81%	18.41%	17.52%	18.05%	18.05%	15.53%	16.82%	15.83%	18.10%	17.54%	14.97%	19.18%	19.49%
23	17.93%	14.83%	18.43%	17.54%	18.07%	18.07%	15.55%	16.84%	15.85%	18.12%	17.56%	14.99%	19.20%	19.51%
24	17.96%	14.86%	18.46%	17.57%	18.10%	18.10%	15.58%	16.87%	15.88%	18.15%	17.59%	15.02%	19.23%	19.54%
25	18.00%	14.90%	18.50%	17.61%	18.14%	18.14%	15.62%	16.91%	15.92%	18.19%	17.63%	15.06%	19.27%	19.58%
26	18.05%	14.95%	18.55%	17.66%	18.19%	18.19%	15.67%	16.96%	15.97%	18.24%	17.68%	15.11%	19.32%	19.63%
27	18.10%	15.00%	18.60%	17.71%	18.24%	18.24%	15.72%	17.01%	16.02%	18.29%	17.73%	15.16%	19.37%	19.68%
28	18.16%	15.06%	18.66%	17.77%	18.30%	18.30%	15.78%	17.07%	16.08%	18.35%	17.79%	15.22%	19.43%	19.74%
29	18.23%	15.13%	18.73%	17.84%	18.37%	18.37%	15.85%	17.14%	16.15%	18.42%	17.86%	15.29%	19.50%	19.81%
30	18.30%	15.20%	18.80%	17.91%	18.44%	18.44%	15.92%	17.21%	16.22%	18.49%	17.93%	15.36%	19.57%	19.88%
31	18.38%	15.28%	18.88%	17.99%	18.52%	18.52%	16.00%	17.29%	16.30%	18.57%	18.01%	15.44%	19.65%	19.96%
32	18.47%	15.37%	18.97%	18.08%	18.61%	18.61%	16.09%	17.38%	16.39%	18.66%	18.10%	15.53%	19.74%	20.05%
33	18.56%	15.46%	19.06%	18.17%	18.70%	18.70%	16.18%	17.47%	16.48%	18.75%	18.19%	15.62%	19.83%	20.14%
34	18.66%	15.56%	19.16%	18.27%	18.80%	18.80%	16.28%	17.57%	16.58%	18.85%	18.29%	15.72%	19.93%	20.24%
35	18.76%	15.66%	19.26%	18.37%	18.90%	18.90%	16.38%	17.67%	16.68%	18.95%	18.39%	15.82%	20.03%	20.34%
36	18.86%	15.76%	19.36%	18.47%	19.00%	19.00%	16.48%	17.77%	16.78%	19.05%	18.49%	15.92%	20.13%	20.44%
37	18.97%	15.87%	19.47%	18.58%	19.11%	19.11%	16.59%	17.88%	16.89%	19.16%	18.60%	16.03%	20.24%	20.55%
38	19.08%	15.98%	19.58%	18.69%	19.22%	19.22%	16.70%	17.99%	17.00%	19.27%	18.71%	16.14%	20.35%	20.66%
39	19.20%	16.10%	19.70%	18.81%	19.34%	19.34%	16.82%	18.11%	17.12%	19.39%	18.83%	16.26%	20.47%	20.78%
40	19.32%	16.22%	19.82%	18.93%	19.46%	19.46%	16.94%	18.23%	17.24%	19.51%	18.95%	16.38%	20.59%	20.90%
41	19.45%	16.35%	19.95%	19.06%	19.59%	19.59%	17.07%	18.36%	17.37%	19.64%	19.08%	16.51%	20.72%	21.03%
42	19.58%	16.48%	20.08%	19.19%	19.72%	19.72%	17.20%	18.49%	17.50%	19.77%	19.21%	16.64%	20.85%	21.16%
43	19.72%	16.62%	20.22%	19.33%	19.86%	19.86%	17.34%	18.63%	17.64%	19.91%	19.35%	16.78%	20.99%	21.30%
44	19.86%	16.76%	20.36%	19.47%	20.00%	20.00%	17.48%	18.77%	17.78%	20.05%	19.49%	16.92%	21.13%	21.44%
45	20.00%	16.90%	20.50%	19.61%	20.14%	20.14%	17.62%	18.91%	17.92%	20.19%	19.63%	17.06%	21.27%	21.58%
46	20.15%	17.05%	20.65%	19.76%	20.29%	20.29%	17.77%	19.06%	18.07%	20.34%	19.78%	17.21%	21.42%	21.73%
47	20.31%	17.21%	20.81%	19.92%	20.45%	20.45%	17.93%	19.22%	18.23%	20.50%	19.94%	17.37%	21.58%	21.89%
48	20.47%	17.37%	20.97%	20.08%	20.61%	20.61%	18.09%	19.38%	18.39%	20.66%	20.10%	17.53%	21.74%	22.05%
49	20.63%	17.53%	21.13%	20.24%	20.77%	20.77%	18.25%	19.54%	18.55%	20.82%	20.26%	17.69%	21.90%	22.21%
50	20.80%	17.70%	21.30%	20.41%	20.94%	20.94%	18.42%	19.71%	18.72%	20.99%	20.43%	17.86%	22.07%	22.38%
51	20.97%	17.87%	21.47%	20.58%	21.11%	21.11%	18.59%	19.88%	18.89%	21.16%	20.60%	18.03%	22.24%	22.55%
52	21.14%	18.04%	21.64%	20.75%	21.28%	21.28%	18.76%	20.05%	19.06%	21.33%	20.77%	18.20%	22.41%	22.72%
53	21.32%	18.22%	21.82%	20.93%	21.46%	21.46%	18.94%	20.23%	19.24%	21.51%	20.95%	18.38%	22.59%	22.90%
54	21.50%	18.40%	22.00%	21.11%	21.64%	21.64%	19.12%	20.41%	19.42%	21.69%	21.13%	18.56%	22.77%	23.08%
55	21.69%	18.59%	22.19%	21.30%	21.83%	21.83%	19.31%	20.60%	19.61%	21.88%	21.32%	18.75%	22.96%	23.27%
56	21.88%	18.78%	22.38%	21.49%	22.02%	22.02%	19.50%	20.79%	19.80%	22.07%	21.51%	18.94%	23.15%	23.46%
57	22.07%	18.97%	22.57%	21.68%	22.21%	22.21%	19.69%	20.98%	19.99%	22.26%	21.70%	19.13%	23.34%	23.65%
58	22.27%	19.17%	22.77%	21.88%	22.41%	22.41%	19.89%	21.18%	20.19%	22.46%	21.90%	19.33%	23.54%	23.85%
59+	22.47%	19.37%	22.97%	22.08%	22.61%	22.61%	20.09%	21.38%	20.39%	22.66%	22.10%	19.53%	23.74%	24.05%

* 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, 2019 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, 2019 Actuarial Valuation Member Contribution Rates*

BU Entry Age	SAFETY - TIER 1							
	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, 2019 Actuarial Valuation

Member Contribution Rates

Tier 2							
BU	12	7 LAFCO	all others	3, 14	6	7, 15 (non-sworn)	all other
Entry Age	Miscellaneous	Miscellaneous	Miscellaneous	Safety	Safety	Safety	Safety
18	8.41%	9.31%	9.30%	14.01%	13.01%	14.19%	14.88%
19	8.53%	9.43%	9.42%	14.36%	13.36%	14.54%	15.28%
20	8.65%	9.55%	9.54%	14.71%	13.71%	14.89%	15.68%
21	8.80%	9.70%	9.69%	15.06%	14.06%	15.24%	16.08%
22	8.91%	9.81%	9.80%	15.41%	14.41%	15.59%	16.48%
23	9.07%	9.97%	9.96%	15.76%	14.76%	15.94%	16.88%
24	9.19%	10.09%	10.08%	16.11%	15.11%	16.29%	17.29%
25	9.33%	10.23%	10.22%	16.46%	15.46%	16.64%	17.69%
26	9.53%	10.43%	10.42%	16.81%	15.81%	16.99%	18.09%
27	9.63%	10.53%	10.52%	17.16%	16.16%	17.34%	18.49%
28	9.82%	10.72%	10.71%	17.51%	16.51%	17.69%	18.89%
29	9.97%	10.87%	10.86%	17.86%	16.86%	18.04%	19.29%
30	10.27%	11.17%	11.16%	18.21%	17.21%	18.39%	19.69%
31	10.43%	11.33%	11.32%	18.56%	17.56%	18.74%	20.09%
32	10.72%	11.62%	11.61%	18.91%	17.91%	19.09%	20.50%
33	10.87%	11.77%	11.76%	19.26%	18.26%	19.44%	20.90%
34	11.05%	11.95%	11.94%	19.61%	18.61%	19.79%	21.30%
35	11.37%	12.27%	12.26%	19.96%	18.96%	20.14%	21.70%
36	11.52%	12.42%	12.41%	19.96%	18.96%	20.14%	21.70%
37	11.73%	12.63%	12.62%	19.96%	18.96%	20.14%	21.70%
38	11.96%	12.86%	12.85%	19.96%	18.96%	20.14%	21.70%
39	12.17%	13.07%	13.06%	19.96%	18.96%	20.14%	21.70%
40	12.37%	13.27%	13.26%	19.96%	18.96%	20.14%	21.70%
41	12.52%	13.42%	13.41%	19.96%	18.96%	20.14%	21.70%
42	12.55%	13.45%	13.44%	19.96%	18.96%	20.14%	21.70%
43	12.78%	13.68%	13.67%	19.96%	18.96%	20.14%	21.70%
44	13.01%	13.91%	13.90%	19.96%	18.96%	20.14%	21.70%
45	13.10%	14.00%	13.99%	19.96%	18.96%	20.14%	21.70%
46	13.38%	14.28%	14.27%	19.96%	18.96%	20.14%	21.70%
47	13.62%	14.52%	14.51%	19.96%	18.96%	20.14%	21.70%
48	13.72%	14.62%	14.61%	19.96%	18.96%	20.14%	21.70%
49	14.00%	14.90%	14.89%	19.96%	18.96%	20.14%	21.70%
50	14.04%	14.94%	14.93%	19.96%	18.96%	20.14%	21.70%
51	14.25%	15.15%	15.14%	19.96%	18.96%	20.14%	21.70%
52	14.31%	15.21%	15.20%	19.96%	18.96%	20.14%	21.70%
53	14.51%	15.41%	15.40%	19.96%	18.96%	20.14%	21.70%
54	14.70%	15.60%	15.59%	19.96%	18.96%	20.14%	21.70%
55	15.00%	15.90%	15.89%	19.96%	18.96%	20.14%	21.70%
56	15.06%	15.96%	15.95%	19.96%	18.96%	20.14%	21.70%
57	15.08%	15.98%	15.97%	19.96%	18.96%	20.14%	21.70%
58	15.10%	16.00%	15.99%	19.96%	18.96%	20.14%	21.70%
59	15.12%	16.02%	16.01%	19.96%	18.96%	20.14%	21.70%
60	15.14%	16.04%	16.03%	19.96%	18.96%	20.14%	21.70%
61	15.16%	16.06%	16.05%	19.96%	18.96%	20.14%	21.70%
62+	15.18%	16.08%	16.07%	19.96%	18.96%	20.14%	21.70%

January 1, 2019 Actuarial Valuation

Member Contribution Rates

BU Entry Age	Tier 3										
	all other Miscellaneous	17C,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%	8.85%	6.79%	7.86%	8.76%	7.69%	12.81%	11.81%	12.99%	9.64%	9.59%
19	7.93%	9.10%	7.04%	8.11%	9.01%	7.94%	13.31%	12.31%	13.49%	9.89%	9.84%
20	7.93%	9.10%	7.04%	8.11%	9.01%	7.94%	13.56%	12.56%	13.74%	10.14%	10.09%
21	8.18%	9.35%	7.29%	8.36%	9.26%	8.19%	13.81%	12.81%	13.99%	10.14%	10.09%
22	8.18%	9.35%	7.29%	8.36%	9.26%	8.19%	14.06%	13.06%	14.24%	10.39%	10.34%
23	8.43%	9.60%	7.54%	8.61%	9.51%	8.44%	14.56%	13.56%	14.74%	10.64%	10.59%
24	8.43%	9.60%	7.54%	8.61%	9.51%	8.44%	14.81%	13.81%	14.99%	10.89%	10.84%
25	8.68%	9.85%	7.79%	8.86%	9.76%	8.69%	15.06%	14.06%	15.24%	11.14%	11.09%
26	8.93%	10.10%	8.04%	9.11%	10.01%	8.94%	15.56%	14.56%	15.74%	11.39%	11.34%
27	8.93%	10.10%	8.04%	9.11%	10.01%	8.94%	15.81%	14.81%	15.99%	11.64%	11.59%
28	9.18%	10.35%	8.29%	9.36%	10.26%	9.19%	16.06%	15.06%	16.24%	12.14%	12.09%
29	9.43%	10.60%	8.54%	9.61%	10.51%	9.44%	16.56%	15.56%	16.74%	12.39%	12.34%
30	9.43%	10.60%	8.54%	9.61%	10.51%	9.44%	16.81%	15.81%	16.99%	12.64%	12.59%
31	9.68%	10.85%	8.79%	9.86%	10.76%	9.69%	17.06%	16.06%	17.24%	13.14%	13.09%
32	9.93%	11.10%	9.04%	10.11%	11.01%	9.94%	17.56%	16.56%	17.74%	13.39%	13.34%
33	10.18%	11.35%	9.29%	10.36%	11.26%	10.19%	17.81%	16.81%	17.99%	13.64%	13.59%
34	10.43%	11.60%	9.54%	10.61%	11.51%	10.44%	18.06%	17.06%	18.24%	14.14%	14.09%
35	10.43%	11.60%	9.54%	10.61%	11.51%	10.44%	18.56%	17.56%	18.74%	14.39%	14.34%
36	10.68%	11.85%	9.79%	10.86%	11.76%	10.69%	18.56%	17.56%	18.74%	14.89%	14.84%
37	10.93%	12.10%	10.04%	11.11%	12.01%	10.94%	18.56%	17.56%	18.74%	15.14%	15.09%
38	11.18%	12.35%	10.29%	11.36%	12.26%	11.19%	18.56%	17.56%	18.74%	15.39%	15.34%
39	11.43%	12.60%	10.54%	11.61%	12.51%	11.44%	18.56%	17.56%	18.74%	15.64%	15.59%
40	11.68%	12.85%	10.79%	11.86%	12.76%	11.69%	18.56%	17.56%	18.74%	15.89%	15.84%
41	11.93%	13.10%	11.04%	12.11%	13.01%	11.94%	18.56%	17.56%	18.74%	16.14%	16.09%
42	11.93%	13.10%	11.04%	12.11%	13.01%	11.94%	18.56%	17.56%	18.74%	16.39%	16.34%
43	12.18%	13.35%	11.29%	12.36%	13.26%	12.19%	18.56%	17.56%	18.74%	16.64%	16.59%
44	12.43%	13.60%	11.54%	12.61%	13.51%	12.44%	18.56%	17.56%	18.74%	16.89%	16.84%
45	12.68%	13.85%	11.79%	12.86%	13.76%	12.69%	18.56%	17.56%	18.74%	17.14%	17.09%
46	12.93%	14.10%	12.04%	13.11%	14.01%	12.94%	18.56%	17.56%	18.74%	17.39%	17.34%
47	13.18%	14.35%	12.29%	13.36%	14.26%	13.19%	18.56%	17.56%	18.74%	17.64%	17.59%
48	13.43%	14.60%	12.54%	13.61%	14.51%	13.44%	18.56%	17.56%	18.74%	17.89%	17.84%
49	13.68%	14.85%	12.79%	13.86%	14.76%	13.69%	18.56%	17.56%	18.74%	17.89%	17.84%
50	13.93%	15.10%	13.04%	14.11%	15.01%	13.94%	18.56%	17.56%	18.74%	18.14%	18.09%
51	14.18%	15.35%	13.29%	14.36%	15.26%	14.19%	18.56%	17.56%	18.74%	18.39%	18.34%
52	14.43%	15.60%	13.54%	14.61%	15.51%	14.44%	18.56%	17.56%	18.74%	18.39%	18.34%
53	14.68%	15.85%	13.79%	14.86%	15.76%	14.69%	18.56%	17.56%	18.74%	18.64%	18.59%
54	14.93%	16.10%	14.04%	15.11%	16.01%	14.94%	18.56%	17.56%	18.74%	18.64%	18.59%
55	15.18%	16.35%	14.29%	15.36%	16.26%	15.19%	18.56%	17.56%	18.74%	18.89%	18.84%
56	15.43%	16.60%	14.54%	15.61%	16.51%	15.44%	18.56%	17.56%	18.74%	19.14%	19.09%
57	15.43%	16.60%	14.54%	15.61%	16.51%	15.44%	18.56%	17.56%	18.74%	19.14%	19.09%
58	15.43%	16.60%	14.54%	15.61%	16.51%	15.44%	18.56%	17.56%	18.74%	19.39%	19.34%
59	15.43%	16.60%	14.54%	15.61%	16.51%	15.44%	18.56%	17.56%	18.74%	19.64%	19.59%
60	15.43%	16.60%	14.54%	15.61%	16.51%	15.44%	18.56%	17.56%	18.74%	19.64%	19.59%
61	15.43%	16.60%	14.54%	15.61%	16.51%	15.44%	18.56%	17.56%	18.74%	19.64%	19.59%
62+	15.43%	16.60%	14.54%	15.61%	16.51%	15.44%	18.56%	17.56%	18.74%	19.64%	19.59%

Summary of Benefits by Collective Bargaining Unit As of January 1, 2019

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, 2019

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 \$124,180 for 2019 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.

This page left blank intentionally.

Date: June 13, 2019

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

Re: **Supplemental Exhibits for the January 1, 2019 Actuarial Valuation**

Attached please find supplemental data exhibits, which relate to the January 1, 2019 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, 2019 Actuarial Valuation

Miscellaneous Members
Probation and Safety Members

Average Pay by Years of Service

Miscellaneous Members
Probation Members
Safety Members

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

Draft

Respectfully submitted,



Paul Wood, ASA, FCA, MAAA

CC: Leslie L. Thompson, FSA, FCA, EA, MAAA

Summary of Active Members by Valuation Group In the January 1, 2019 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					
1/1/2019	32	\$2,487,659	\$77,739	40.5	5.7
1/1/2018	31	\$2,374,445	\$76,595	39.0	5.7
2 Management Non-Court - Units # 4, 7, 8, 9, 10, 11, 12, 17, 99					
1/1/2019	471	\$46,907,207	\$99,591	48.4	11.1
1/1/2018	462	\$46,064,522	\$99,707	48.4	11.6
3 Management Court - Unit # 18					
1/1/2019	10	\$929,198	\$92,920	46.0	5.6
1/1/2018	10	\$893,069	\$89,307	49.1	8.1
4 Management Court - Units # 24, 25, 26, 27					
1/1/2019	25	\$2,829,735	\$113,189	50.6	14.0
1/1/2018	24	\$2,652,249	\$110,510	52.6	14.4
5 SLOCEA Non-Court - Units # 1, 2, 5, 13, 31, 98					
1/1/2019	1,703	\$106,570,225	\$62,578	44.7	8.2
1/1/2018	1,733	\$107,196,331	\$61,856	45.2	8.3
6 SLOCEA Court - Unit # 19					
1/1/2019	10	\$765,232	\$76,523	52.4	19.3
1/1/2018	9	\$652,662	\$72,518	51.2	19.7
7 SLOCEA Court - Unit # 20					
1/1/2019	73	\$4,145,419	\$56,787	46.0	10.9
1/1/2018	71	\$3,958,656	\$55,756	46.8	11.0

Summary of Active Members by Valuation Group In the January 1, 2019 Actuarial Valuation

			Averages		
	<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					
1/1/2019	5	\$690,310	\$138,062	51.8	22.1
1/1/2018	6	\$800,238	\$133,373	51.8	22.5
9 Probation Non-Management - Units # 31, 32					
1/1/2019	111	\$8,158,280	\$73,498	38.2	8.6
1/1/2018	109	\$7,780,448	\$71,380	38.8	8.9
Safety Members					
10 Safety Management - Units # 7, 10, 15, 16					
1/1/2019	12	\$1,792,377	\$149,365	50.8	18.3
1/1/2018	10	\$1,501,906	\$150,191	52.2	17.7
11 Safety Non-Management - Units # 3, 6, 14, 27, 28					
1/1/2019	273	\$25,261,829	\$92,534	39.5	9.7
1/1/2018	257	\$22,973,558	\$89,391	40.3	10.3

Average Pay by Years of Service

Miscellaneous Members

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	46	92	138	\$7,437,102	\$53,892
1	83	165	248	14,860,370	59,921
2	62	153	215	13,569,271	63,113
3	65	131	196	12,792,080	65,266
4	57	119	176	11,987,934	68,113
5	37	102	139	9,458,341	68,046
6	15	69	84	6,173,439	73,493
7	33	42	75	5,322,803	70,971
8	17	57	74	5,615,355	75,883
9	12	25	37	2,960,897	80,024
10	22	46	68	5,419,159	79,694
11	28	64	92	7,139,896	77,608
12	23	66	89	6,440,767	72,368
13	36	59	95	7,093,050	74,664
14	16	32	48	3,433,914	71,540
15 & Up	198	352	550	44,930,299	81,691
Totals	750	1,574	2,324	\$164,634,676	\$70,841

Average Pay by Years of Service

Probation Members

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	4	1	5	\$281,923	\$56,385
1	5	9	14	780,021	55,716
2	9	5	14	835,827	59,702
3	2	4	6	404,477	67,413
4	3	2	5	323,939	64,788
5	2	4	6	449,779	74,963
6	2	4	6	470,059	78,343
7	2	2	4	335,920	83,980
8	2	0	2	160,451	80,226
9	1	2	3	229,112	76,371
10	2	3	5	379,309	75,862
11	3	3	6	497,328	82,888
12	2	0	2	155,771	77,886
13	3	0	3	244,026	81,342
14	3	1	4	332,821	83,205
15 & Up	16	15	31	2,967,827	95,736
Totals	61	55	116	\$8,848,590	\$76,281

Average Pay by Years of Service

Safety Members

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	7	1	8	\$667,514	\$83,439
1	32	4	36	2,865,117	79,587
2	12	1	13	1,150,323	88,486
3	13	6	19	1,493,482	78,604
4	18	2	20	1,878,718	93,936
5	17	3	20	1,878,968	93,948
6	10	3	13	1,295,362	99,643
7	11	5	16	1,532,440	95,778
8	2	0	2	308,942	154,471
9	2	1	3	280,925	93,642
10	6	0	6	567,965	94,661
11	20	1	21	2,086,053	99,336
12	11	2	13	1,209,146	93,011
13	5	3	8	814,882	101,860
14	8	0	8	758,389	94,799
15 & Up	70	9	79	8,265,980	104,633
Totals	244	41	285	\$27,054,206	\$94,927

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	23.87%	24.15%	24.91%	24.98%	24.22%	21.94%	19.86%	20.94%	21.85%	22.76%
				Less						
Employee Contribution Rate	19.07%	19.39%	18.96%	17.65%	19.25%	19.02%	15.68%	16.61%	18.83%	18.99%
				Equals						
County Normal Cost	4.80%	4.76%	5.95%	7.33%	4.97%	2.92%	4.18%	4.33%	3.02%	3.77%

Elements of Normal Cost

Probation & Safety Tier 1 Members

	Probation			Safety					GRAND TOTAL
	Mgmt	Non	Total	Management		Non-Mgmt		Total	
		Mgmt	Probation	Sworn	Non-Sworn	Sworn	Non-Sworn	Safety	
Total Normal Cost	25.97%	24.10%	24.30%	32.37%	25.22%	27.74%	26.33%	27.40%	23.51%
	Less								
Employee Contribution Rate	23.15%	21.47%	21.65%	29.41%	24.10%	25.23%	20.74%	23.56%	19.79%
	Equals								
County Normal Cost	2.82%	2.63%	2.65%	2.96%	1.12%	2.51%	5.59%	3.84%	3.72%

Elements of Normal Cost

Probation & Safety Tier 2 Members

	Probation			Safety				GRAND TOTAL	
	Mgmt	Non	Total	Management		Non-Mgmt			Total
		Mgmt	Probation	Sworn	Non-Sworn	Sworn	Non-Sworn		Safety
Total Normal Cost	0.00%	0.00%	0.00%	25.43%	0.00%	26.79%	26.44%	26.64%	20.09%
				Less					
Employee Contribution Rate	0.00%	0.00%	0.00%	16.64%	0.00%	18.24%	17.27%	17.85%	13.37%
				Equals					
County Normal Cost	0.00%	0.00%	0.00%	8.79%	0.00%	8.55%	9.17%	8.79%	6.72%

Elements of Normal Cost

Probation & Safety Tier 3 Members

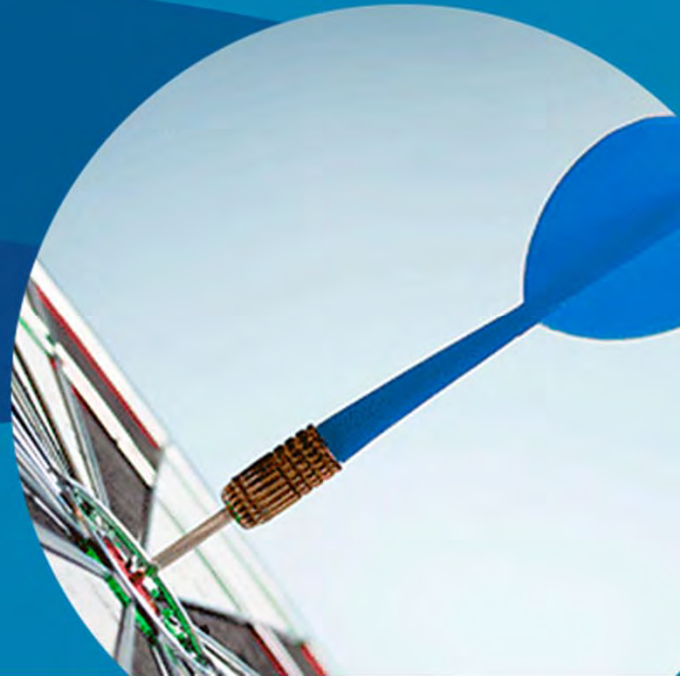
	Probation			Safety					GRAND TOTAL
	Mgmt	Non	Total	Management		Non-Mgmt		Total	
		Mgmt	Probation	Sworn	Non-Sworn	Sworn	Non-Sworn	Safety	
Total Normal Cost	0.00%	18.41%	18.41%	36.23%	0.00%	24.35%	23.49%	23.95%	16.76%
				Less					
Employee Contribution Rate	0.00%	12.53%	12.53%	18.74%	0.00%	16.61%	16.40%	16.52%	11.74%
				Equals					
County Normal Cost	0.00%	5.88%	5.88%	17.49%	0.00%	7.74%	7.09%	7.43%	5.02%

**2019 Annual Actuarial Valuation
Presentation by Plan Actuary**

This page left blank intentionally.

San Luis Obispo County Pension Trust

**Actuarial Valuation
As of January 1, 2019**



Actuarial Valuation

Rate Increase

- Rate increase of 2.30% recommended
 - The Actuarially Determined Contribution (ADC) is 44.52%, while the rate being charged is 42.22%
 - Charged rate includes 2.80% increase recommended as of July 1, 2019 from the prior valuation
- The rate increase comes from three primary sources
 - First, from investment earnings less than assumed (1.61% of pay)
 - Second, from the second part of the phase in of the decrease in the payroll growth assumption (0.45% of pay)
 - Third, from demographic experience including payroll not growing as much as expected

Actuarial Valuation

Development of the ADC and Recommended Rate Increase

	Jan 1, 2019	Jan 1, 2018	Change
1. Total Normal Cost	20.60%	21.15%	(0.55)%
2. Less Employee Rate	16.04%	16.41%	(0.37)%
3. County Normal Cost (1.-2.)	4.56%	4.74%	(0.18)%
4. Amortization Payment	23.92%	21.04%	2.88%
5. ADC (3.+4.)	28.48%	25.78%	2.70%
6. Total Required Contribution (2.+5.)	44.52%	42.19%	2.33%
7. Total Charged Rate (actual)	42.22%	39.68%	2.54%
8. Difference in Rate (6.-7.)	2.30%	2.51%	
9. Recommended Rate Increase	2.30%	2.51%	

Actuarial Valuation

Development of the Charged Rate

Category	Dollar Amounts	Rates as a Percent of Payroll
Employee Contributions	\$32,952,747	16.27%
Employer Appropriations	\$46,243,596	23.15%
Total	\$79,196,343	39.42%
Increase at 7/1/2019	\$5,615,049	2.80%
Grand Total Contributions	\$84,811,392	42.22%
Total Reported Payroll	\$200,537,472	

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
- Total payroll growth less than the assumed rate will also put upward pressure on the rate

Actuarial Valuation

Assumption Changes

- Payroll growth assumption decreased 0.25%
 - This was the second part of a two step approach to decreasing the assumed rate of growth in total payroll
 - This impacts the dollar amount of the amortization payment
 - The lower the future growth in payroll, the slower the growth in the amortization payment; hence more dollar contribution needed up front to pay off the debt

Membership

Summary

2019	Tier 1	Tier 2	Tier 3	Total
Miscellaneous	1,039	259	1,026	2,324
Probation	72	0	44	116
Safety	140	52	93	285
Total	1,251	311	1,163	2,725

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

Membership

Average Age and Service

Average Age	1/1/2019	1/1/2018
Miscellaneous Members	45.5	45.9
Probation Members	38.8	39.5
Safety Members	40.0	40.8
All Active Members	44.7	45.1

Average Service	1/1/2019	1/1/2018
Miscellaneous Members	8.9	9.1
Probation Members	9.1	9.6
Safety Members	10.1	10.6
All Active Members	9.1	9.3

- Average pay for all **continuing** active members increased 4.16%

Membership

Reconciliation

- The year started with 2,722 actives
 - 280 new hires
 - 13 returned to work
 - 290 actives ceased active status
- Implication
 - Tier 3 members pay a lesser amount
 - Fixed cost of UAL remains the same

Assets

Returns

- Market value return was -3.72%
 - Fair market value decreased from \$1,340 million to \$1,272 million
 - The amount of investment income “expected” was \$92 million
 - The actual amount of investment income received was -\$53 million
 - The -\$146 million loss is to be phased in over 5 years
- The actuarial value return was 3.69%
 - 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:
 - 2018 \$ (29.2)
 - 2017 \$ 17.1
 - 2016 \$ (3.8)
 - 2015 \$ (21.0)
 - 2014 \$ (6.7)
 - Total recognized for this year \$(43.7) million
- Total yet to be recognized
 - *the difference between the actuarial and market value*
 - \$ 90.9 million in deferred losses
- Actuarial value of assets is 107% of market value

Results

Tiers and Class-Normal Costs-2019

Class/Tier	Tier 1	Tier 2	Tier 3	Total
Misc.	22.76%	18.43%	15.79%	19.54%
Probation	24.30%	N/A	18.41%	22.52%
Safety	27.40%	26.64%	23.95%	26.26%
Blended	23.51%	20.09%	16.76%	20.60%

Results

Liabilities-Total Plan Basis

	Jan 1, 2019	Jan 1, 2018	Change
Accrued Liability	\$2.03B	\$1.95B	\$80M
Unfunded Accrued Liability	\$667M	\$617M	\$50M
Actuarial Value of Assets (AVA)	\$1.36B	\$1.33B	\$30M
Funded Ratio (AVA Basis)	67.1%	68.3%	(1.2)%
Market Value of Assets (MVA)	\$1.27B	\$1.34B	(\$70)M
Funded Ratio (MVA Basis)	62.6%	68.9%	(6.3)%

Results

Attribution of Change in Determined Contribution

	Increase/ (Decrease)	Rate
Actuarially Determined Contribution at 1/1/2018		42.19%
Expected at 1/1/2019		42.50%
Expected at 1/1/2019 (with actual payroll)		42.74%
Experience items during 2018:		
Wage inflation assumption change	0.45%	43.20%
Decrease in normal cost	(0.55)%	42.65%
Due to investment experience	1.61%	44.26%
Due to pay increases	(0.05)%	44.21%
Due to retirement experience	0.13%	44.34%
Due to mortality experience	0.24%	44.58%
Due to COLA experience	0.13%	44.71%
Due to other factors	(0.19)%	44.52%
Actuarially Determined Contribution Rate at 1/1/2019		44.52%

Results

Components of Experience Gains/(Loss)

Gain/(Loss) due to:	In millions*
Compensation increases	\$1.37
Investment experience	(43.72)
Contribution timing experience	(5.28)
Retirement incidence	(3.53)
Termination experience	0.44
Active mortality experience	(0.03)
Disability experience	(0.26)
Retiree & beneficiary mortality experience and misc. retiree data changes	(6.25)
COLAs	(3.57)
Other data changes and misc. factors	<u>10.11</u>
Total Experience Gain/(Loss)	(<u>\$50.73</u>)

Results

Change in Funded Ratio

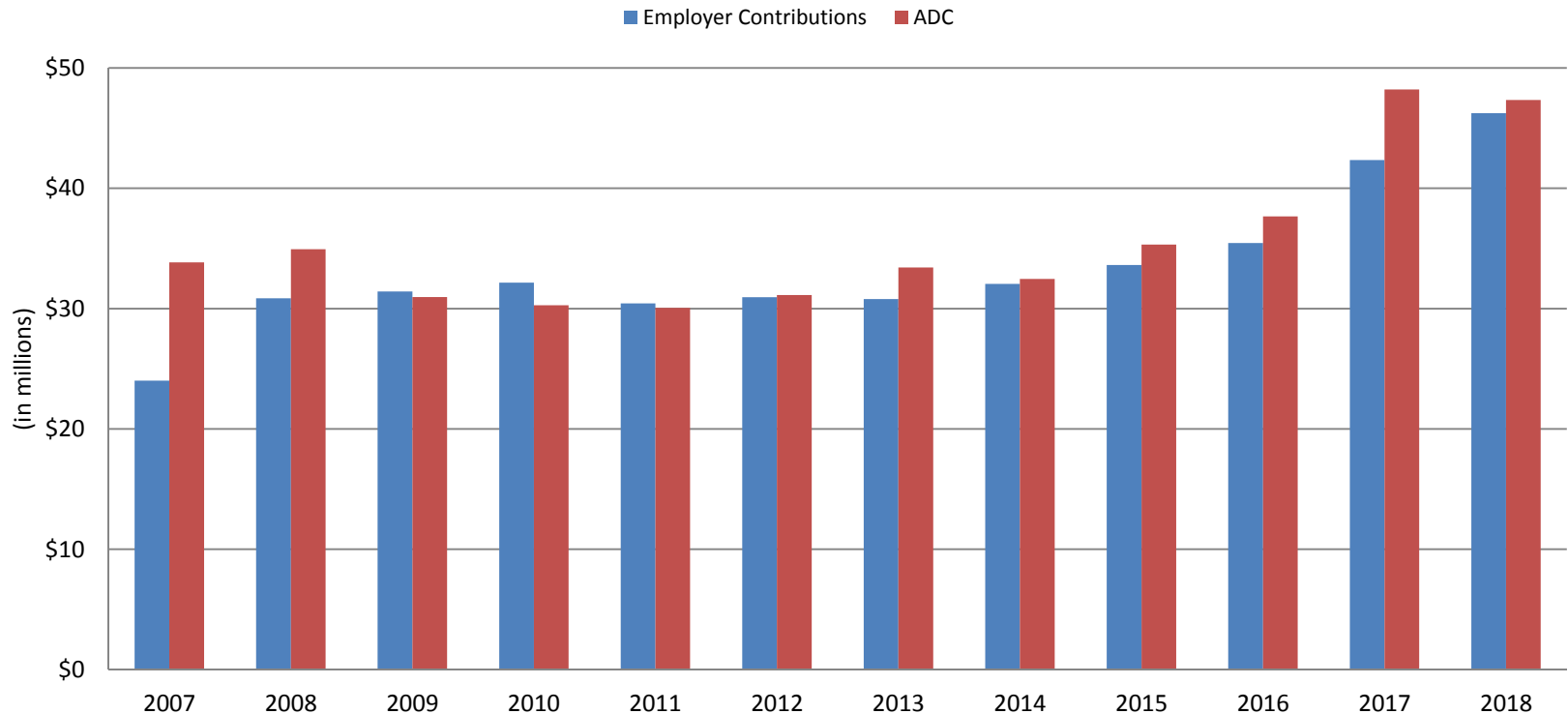
	Increase/ (Decrease)	Ratio
Funded Ratio at 1/1/2018		68.29%
Funded Ratio expected at 1/1/2019	1.22%	69.51%
Change in Funded Ratio due to:		
Investment experience	(2.15)%	67.36%
Pay experience	0.05%	67.41%
Retirement experience	(0.12)%	67.29%
Mortality experience	(0.22)%	67.07%
Higher actual COLA	(0.12)%	66.95%
Other factors	0.17%	67.12%
Actual Funded Ratio at 1/1/2019		67.12%

Historical Perspective

Historical Perspective

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

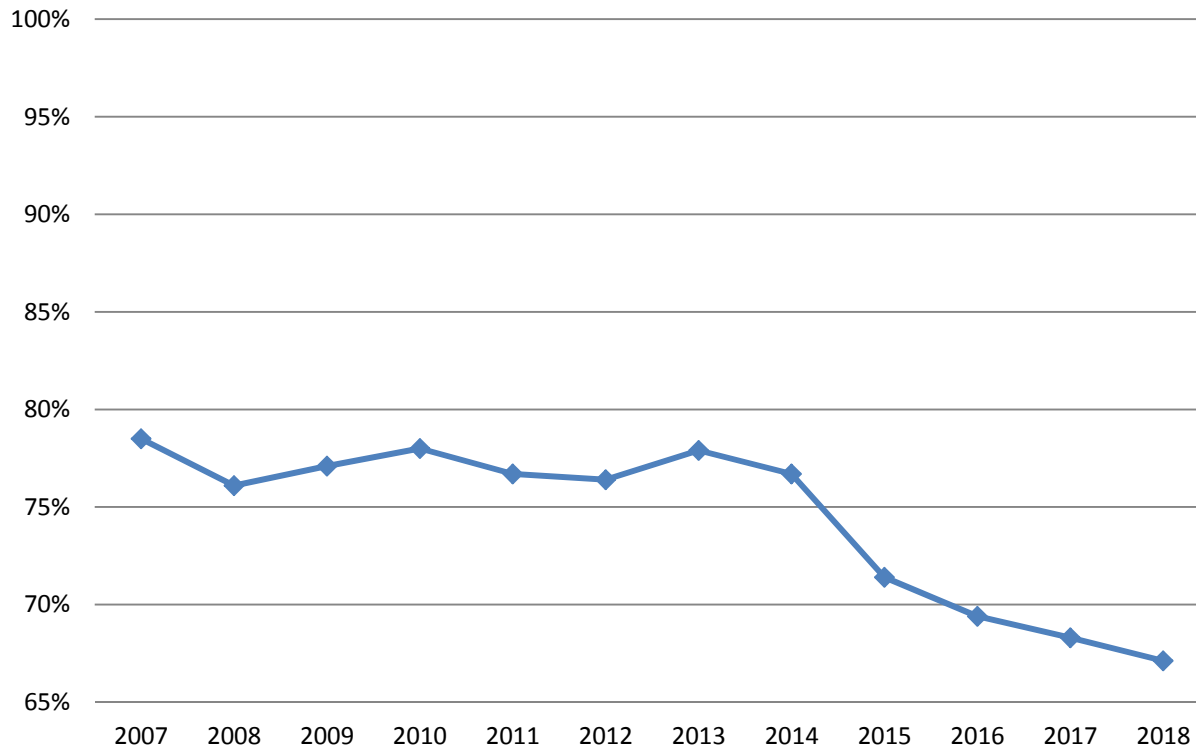
Annual Required Contribution vs Actual Contribution Made



Historical Perspective

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

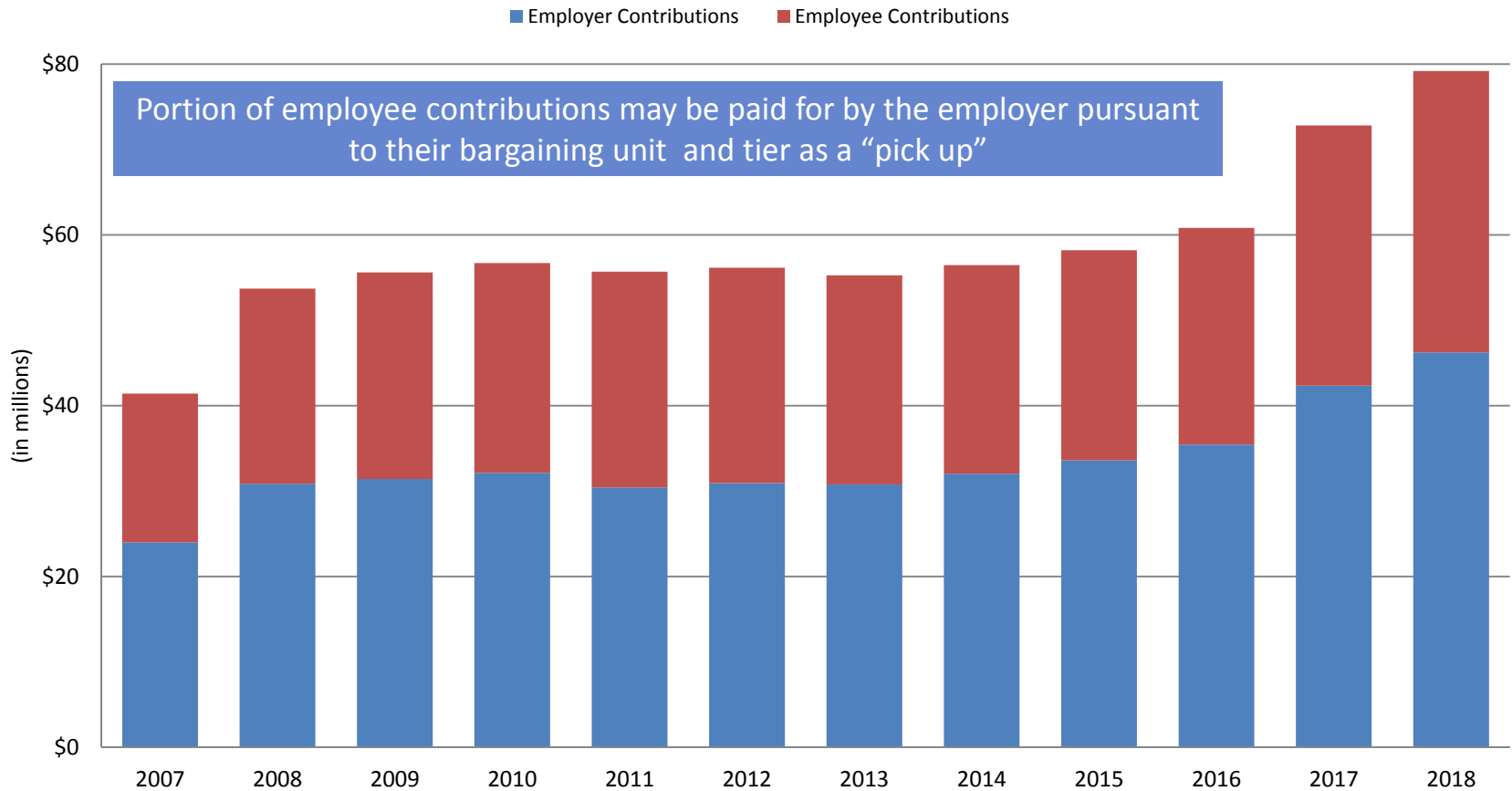
A year by year summary of the funded ratio



Historical Perspective

How Has The Cost Of The Plan Been Shared?

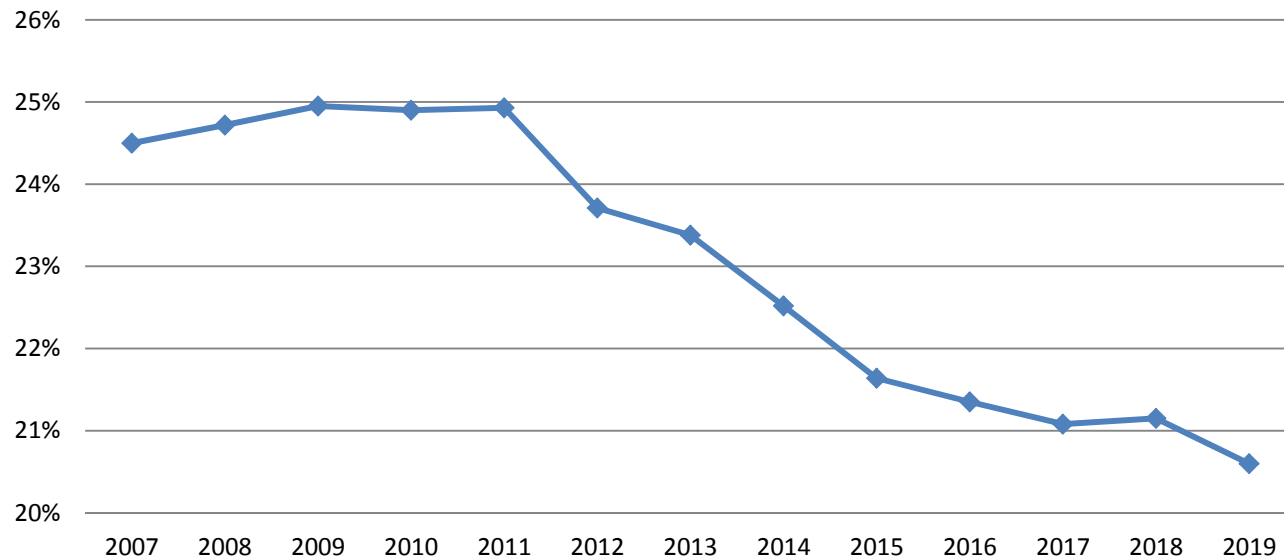
Member Contributions and Employer Contributions



Historical Perspective

Has The Plan's Normal Cost Been Stabilized?

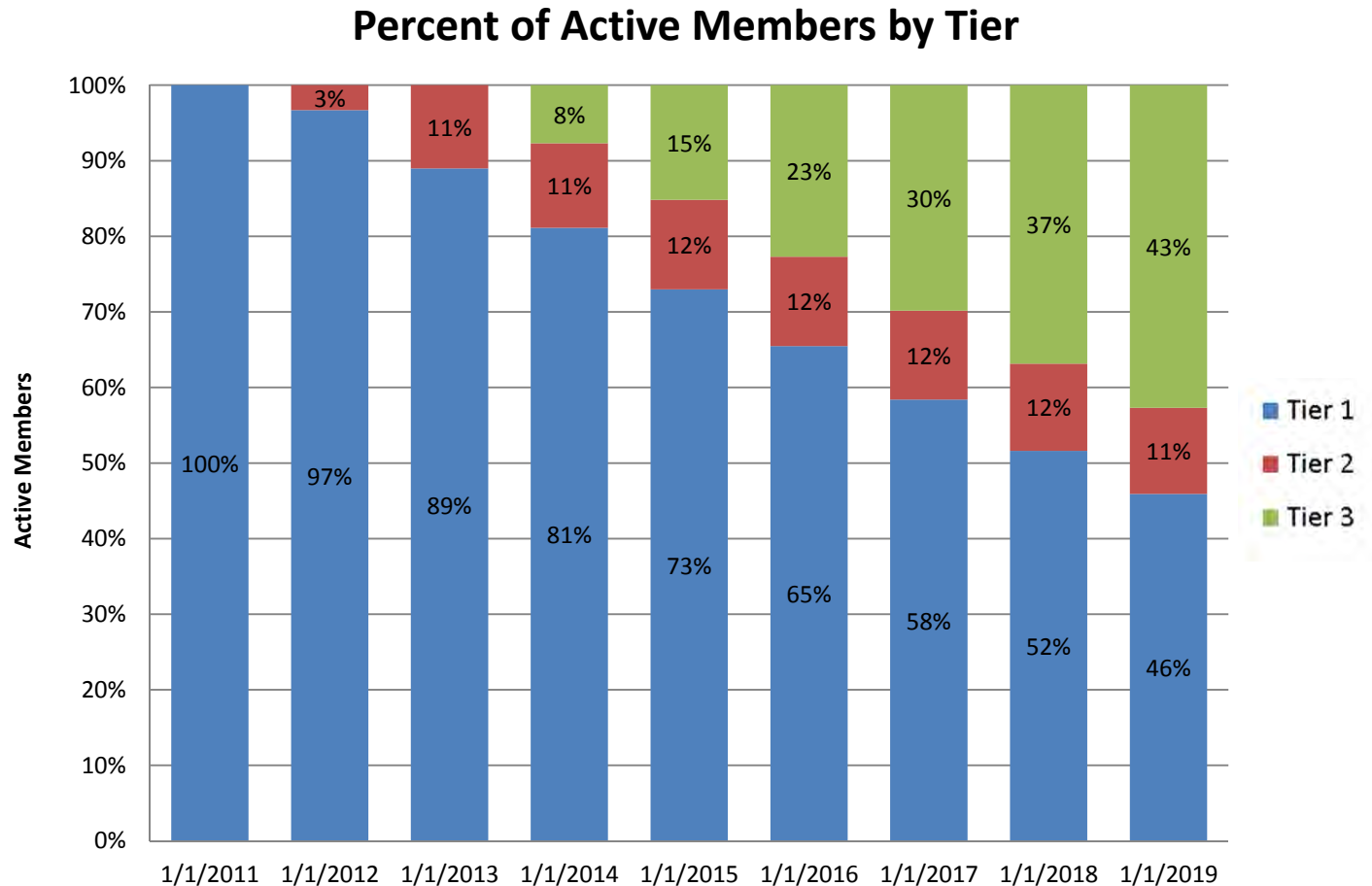
Year by year total normal cost as a percent of payroll*



*Total blended normal cost of 20.60% as of January 1, 2019 including Tier 2 and Tier 3 members.

Historical Perspective

Active Members By Tier

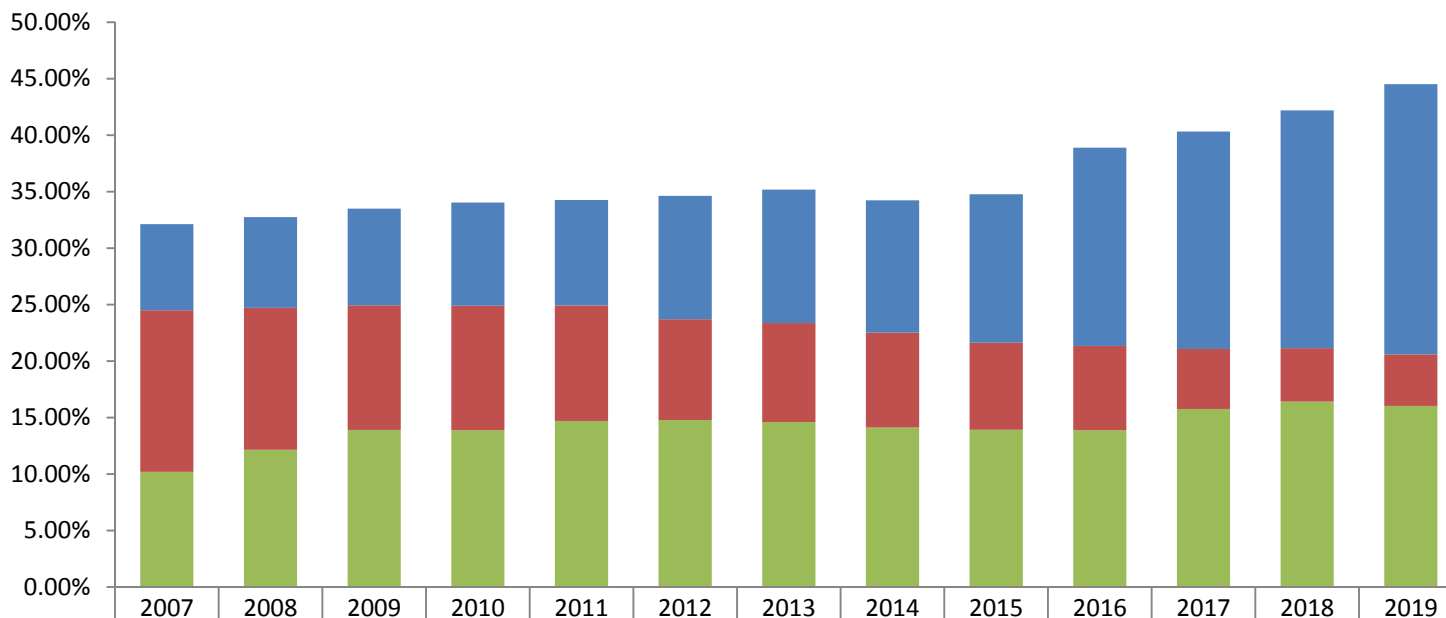


Historical Perspective

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



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%	23.92%
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%	4.56%
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%	16.04%

Historical Perspective

Asset Volatility Ratio

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

All numbers in (000)	2009	2014	2019
Market Value of Assets	\$610,287	\$1,173,336	\$1,271,620
Covered Payroll	\$160,444	\$167,695	\$200,537
Asset Volatility = Assets / Payroll	3.80	7.00	6.34
Increase in Actuarially Determined Contribution Resulting From a 10% Asset Loss	0.69%	1.04%	0.94%

Projections

Projections

- Results based on a closed 21 year amortization period for original base, with new layers amortized of a closed 20 year 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.

2019 Projection—With All Future Members In Tier 3

San Luis Obispo County Pension Trust
Projection Based on January 1, 2019 Actuarial Valuation with Tier 3 (AB 340)

7.00% Discount Rate Assumption and Payroll Growth Assumption of 2.75% - 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)
2019	3.72%	44.52%	\$ 201	\$ 89	\$ 2,030	\$ 1,363	\$ 667	67.1%	20.60%	\$ 1,272	62.6%	42.7%
2020	7.00%	45.47%	206	94	2,108	1,403	704	66.6%	20.12%	1,346	63.9%	47.6%
2021	7.00%	45.76%	212	97	2,185	1,465	720	67.1%	19.72%	1,424	65.2%	51.6%
2022	7.00%	45.89%	217	100	2,262	1,534	728	67.8%	19.33%	1,504	66.5%	55.4%
2023	7.00%	46.65%	223	104	2,338	1,588	750	67.9%	18.98%	1,588	67.9%	59.5%
2024	7.00%	46.40%	228	106	2,414	1,674	739	69.4%	18.67%	1,674	69.4%	62.9%
2025	7.00%	46.21%	234	108	2,488	1,763	725	70.8%	18.39%	1,763	70.8%	66.1%
2026	7.00%	46.03%	240	110	2,561	1,852	709	72.3%	18.14%	1,852	72.3%	69.0%
2027	7.00%	45.87%	246	113	2,633	1,944	689	73.8%	17.90%	1,944	73.8%	71.8%
2028	7.00%	45.73%	252	115	2,704	2,037	666	75.4%	17.69%	2,037	75.4%	74.4%
2029	7.00%	45.61%	258	118	2,773	2,133	640	76.9%	17.49%	2,133	76.9%	76.7%
2034	7.00%	45.17%	293	132	3,094	2,651	443	85.7%	16.75%	2,651	85.7%	86.4%
2039	7.00%	42.96%	333	143	3,388	3,287	101	97.0%	16.29%	3,287	97.0%	92.9%
2044	7.00%	16.03%	379	61	3,677	3,677	-	100.0%	16.03%	3,677	100.0%	97.2%
2049	7.00%	15.92%	434	69	3,996	3,996	0	100.0%	15.92%	3,996	100.0%	99.5%

This page left blank intentionally.

**2019 Deferred Implementation Dates or
Contribution Rate Increases**

and

**Contribution Rate Increases by
Class of Member
(Miscellaneous, Probation, Safety)**

This page left blank intentionally.

Date: June 11, 2019

To: Board of Trustees

Re: **Delayed Implementation for Rate Increase
Two dates for rate increase implementation-January 1, 2020 and July 1, 2020**

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

The January 1, 2019 actuarial valuation recommended a rate increase of 2.30%. This rate increase would be effective January 1, 2019. The Board has requested a recalculation of the recommended rate increase for a January 1, 2020 and a July 1, 2020 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, 2020 the rate increase would be 2.58% of pay. For an implementation date of July 1, 2020 the rate increase would be 2.68% 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							
	2018 Total Charged Rates	2019 Val.		January 1, 2020		July 1, 2020	
		Total ADC	Rate Change	Total ADC	Rate Change	Total ADC	Rate Change
ALL CATEGORIES	42.22%	44.52%	2.30%	44.80%	2.58%	44.90%	2.68%
All Miscellaneous	39.65%	42.12%	2.47%	42.38%	2.73%	42.48%	2.83%
All Probation	42.98%	45.24%	2.26%	45.52%	2.54%	45.62%	2.64%
All Safety	57.63%	58.88%	1.25%	59.25%	1.62%	59.38%	1.75%

Full year 2018 Average (plus 2.80% increase effective July 2019)

The Total ADC is composed of a blended ER appropriation plus a distinct EE rate based on the individual normal cost of each member

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,



Paul Wood, ASA, FCA, MAAA

CC: Leslie L. Thompson, FSA, FCA, EA, MAAA

This page left blank intentionally.

Pension Contribution Rate History

This page left blank intentionally.

San Luis Obispo County Pension Trust
Pension Contribution Rate Increases

	<u>2014</u> <u>Valuation</u>	<u>2015</u> <u>Valuation</u>	<u>2016</u> <u>Valuation</u>	<u>2017</u> <u>Valuation</u>	<u>2018</u> <u>Valuation</u>	<u>2019</u> <u>Valuation</u>
Total Rate Increases						
Miscellaneous	0.00%	0.91%	4.51%	1.65%	1.99%	2.47%
Probation	0.00%	9.90%	4.72%	2.25%	3.70%	2.26%
Safety	0.00%	1.17%	6.71%	3.54%	5.63%	1.25%
COMBINED	0.00%	0.95%	4.85%	1.93%	2.51%	2.30%
Total ADC	34.23%	34.77%	38.90%	40.32%	42.19%	44.52%
Significant Changes:						
Discount Rate	7.250%	7.250%	7.125%	7.125%	7.000%	7.000%
Inflation	2.750%	2.750%	2.650%	2.650%	2.500%	2.500%
Payroll Growth Rate	3.750%	3.750%	3.375%	3.375%	3.000%	2.750%
Mortality			Updated (1st part of 2 step phased)		Updated (2nd part of 2 step phased)	

As of Valuation date of Jan. 1 of the Valuation year
Actual increase modified for delayed implementaton (e.g. Jan. 1 of following year)

Total pension contribution rate increase result of:
Increases in the Actuarially Determined Contribution Rate (ADC)
Increases to adjust for difference between planned ADC to be collected and the actual charged rate during the prior year.

Increases allocated between Employer and Employee pursuant to various MOU provisions in the various bargaining units.

Note - prior to 2018 the ADC was referred to as the Annually Required Contribution or ARC.

This page left blank intentionally.

**2019 Funding Projections
(30 years)**

This page left blank intentionally.

San Luis Obispo County Pension Trust
Projection Based on January 1, 2019 Actuarial Valuation with Tier 3 (AB 340)
7.00% Discount Rate Assumption and Payroll Growth Assumption of 2.75% - 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)
2019	-4.008%	44.52%	\$ 201	\$ 89	\$ 2,030	\$ 1,363	\$ 667	67.1%	20.60%	\$ 1,272	62.6%	42.7%
2020	7.000%	45.47%	206	94	2,108	1,403	704	66.6%	20.12%	1,346	63.9%	47.6%
2021	7.000%	45.76%	212	97	2,185	1,465	720	67.1%	19.72%	1,424	65.2%	51.6%
2022	7.000%	45.89%	217	100	2,262	1,534	728	67.8%	19.33%	1,504	66.5%	55.4%
2023	7.000%	46.65%	223	104	2,338	1,588	750	67.9%	18.98%	1,588	67.9%	59.5%
2024	7.000%	46.40%	228	106	2,414	1,674	739	69.4%	18.67%	1,674	69.4%	62.9%
2025	7.000%	46.21%	234	108	2,488	1,763	725	70.8%	18.39%	1,763	70.8%	66.1%
2026	7.000%	46.03%	240	110	2,561	1,852	709	72.3%	18.14%	1,852	72.3%	69.0%
2027	7.000%	45.87%	246	113	2,633	1,944	689	73.8%	17.90%	1,944	73.8%	71.8%
2028	7.000%	45.73%	252	115	2,704	2,037	666	75.4%	17.69%	2,037	75.4%	74.4%
2029	7.000%	45.61%	258	118	2,773	2,133	640	76.9%	17.49%	2,133	76.9%	76.7%
2030	7.000%	45.50%	265	120	2,840	2,230	610	78.5%	17.31%	2,230	78.5%	79.0%
2031	7.000%	45.41%	271	123	2,906	2,330	575	80.2%	17.16%	2,330	80.2%	81.1%
2032	7.000%	45.32%	278	126	2,970	2,434	536	81.9%	17.01%	2,434	81.9%	83.0%
2033	7.000%	45.24%	285	129	3,033	2,540	492	83.8%	16.88%	2,540	83.8%	84.8%
2034	7.000%	45.17%	293	132	3,094	2,651	443	85.7%	16.75%	2,651	85.7%	86.4%
2035	7.000%	45.11%	300	135	3,154	2,766	388	87.7%	16.64%	2,766	87.7%	87.9%
2036	7.000%	45.05%	308	139	3,214	2,887	327	89.8%	16.54%	2,887	89.8%	89.3%
2037	7.000%	44.99%	316	142	3,272	3,013	259	92.1%	16.45%	3,013	92.1%	90.6%
2038	7.000%	44.95%	324	146	3,330	3,146	184	94.5%	16.37%	3,146	94.5%	91.8%
2039	7.000%	42.96%	333	143	3,388	3,287	101	97.0%	16.29%	3,287	97.0%	92.9%
2040	7.000%	18.55%	341	63	3,445	3,429	16	99.5%	16.22%	3,429	99.5%	93.9%
2041	7.000%	17.77%	350	62	3,503	3,494	9	99.7%	16.16%	3,494	99.7%	94.8%
2042	7.000%	17.19%	360	62	3,560	3,556	4	99.9%	16.11%	3,556	99.9%	95.7%
2043	7.000%	16.07%	369	59	3,618	3,618	-	100.0%	16.07%	3,618	100.0%	96.5%
2044	7.000%	16.03%	379	61	3,677	3,677	-	100.0%	16.03%	3,677	100.0%	97.2%
2045	7.000%	16.00%	390	62	3,737	3,737	0	100.0%	16.00%	3,737	100.0%	97.8%
2046	7.000%	15.97%	400	64	3,799	3,799	0	100.0%	15.97%	3,799	100.0%	98.3%
2047	7.000%	15.95%	411	66	3,862	3,862	-	100.0%	15.95%	3,862	100.0%	98.8%
2048	7.000%	15.93%	422	67	3,928	3,928	0	100.0%	15.93%	3,928	100.0%	99.2%
2049	7.000%	15.92%	434	69	3,996	3,996	0	100.0%	15.92%	3,996	100.0%	99.5%

This page left blank intentionally.

San Luis Obispo County Pension Trust
Projection Based on January 1, 2019 Actuarial Valuation with Tier 3 (AB 340)
7.00% Discount Rate Assumption and Payroll Growth Assumption of 2.75% - 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)
2019	-4.008%	44.52%	\$ 201	\$ 89	\$ 2,030	\$ 1,363	\$ 667	67.1%	20.60%	\$ 1,272	62.6%	42.7%
2020	6.500%	45.51%	206	94	2,108	1,402	706	66.5%	20.12%	1,340	63.6%	47.6%
2021	6.500%	45.90%	212	97	2,185	1,461	724	66.9%	19.72%	1,410	64.6%	51.6%
2022	6.500%	46.20%	217	100	2,262	1,525	737	67.4%	19.33%	1,484	65.6%	55.4%
2023	6.500%	47.16%	223	105	2,338	1,573	766	67.3%	18.98%	1,559	66.7%	59.5%
2024	6.500%	47.18%	228	108	2,414	1,651	762	68.4%	18.67%	1,637	67.8%	62.9%
2025	6.500%	47.25%	234	111	2,488	1,732	756	69.6%	18.39%	1,716	69.0%	66.1%
2026	6.500%	47.35%	240	114	2,561	1,813	748	70.8%	18.14%	1,797	70.1%	69.0%
2027	6.500%	47.47%	246	117	2,633	1,896	738	72.0%	17.90%	1,879	71.3%	71.8%
2028	6.500%	47.62%	252	120	2,704	1,980	724	73.2%	17.69%	1,962	72.6%	74.4%
2029	6.500%	47.80%	258	123	2,773	2,066	706	74.5%	17.49%	2,047	73.8%	76.7%
2030	6.500%	47.99%	265	127	2,840	2,154	686	75.9%	17.31%	2,135	75.2%	79.0%
2031	6.500%	48.21%	271	131	2,906	2,245	661	77.3%	17.16%	2,225	76.6%	81.1%
2032	6.500%	48.43%	278	135	2,970	2,338	631	78.7%	17.01%	2,317	78.0%	83.0%
2033	6.500%	48.67%	285	139	3,033	2,435	597	80.3%	16.88%	2,413	79.6%	84.8%
2034	6.500%	48.92%	293	143	3,094	2,536	558	82.0%	16.75%	2,513	81.2%	86.4%
2035	6.500%	49.19%	300	148	3,154	2,642	513	83.7%	16.64%	2,618	83.0%	87.9%
2036	6.500%	49.46%	308	152	3,214	2,753	461	85.7%	16.54%	2,728	84.9%	89.3%
2037	6.500%	49.75%	316	157	3,272	2,869	403	87.7%	16.45%	2,844	86.9%	90.6%
2038	6.500%	50.04%	324	162	3,330	2,993	337	89.9%	16.37%	2,966	89.1%	91.8%
2039	6.500%	48.41%	333	161	3,388	3,125	263	92.2%	16.29%	3,097	91.4%	92.9%
2040	6.500%	24.30%	341	83	3,445	3,258	187	94.6%	16.22%	3,229	93.7%	93.9%
2041	6.500%	23.77%	350	83	3,503	3,314	188	94.6%	16.16%	3,284	93.8%	94.8%
2042	6.500%	23.39%	360	84	3,560	3,369	191	94.6%	16.11%	3,338	93.8%	95.7%
2043	6.500%	22.41%	369	83	3,618	3,423	195	94.6%	16.07%	3,391	93.7%	96.5%
2044	6.500%	22.47%	379	85	3,677	3,474	203	94.5%	16.03%	3,442	93.6%	97.2%
2045	6.500%	22.52%	390	88	3,737	3,527	210	94.4%	16.00%	3,494	93.5%	97.8%
2046	6.500%	22.56%	400	90	3,799	3,581	218	94.3%	15.97%	3,548	93.4%	98.3%
2047	6.500%	22.60%	411	93	3,862	3,638	225	94.2%	15.95%	3,603	93.3%	98.8%
2048	6.500%	22.63%	422	96	3,928	3,696	232	94.1%	15.93%	3,661	93.2%	99.2%
2049	6.500%	22.66%	434	98	3,996	3,757	239	94.0%	15.92%	3,722	93.1%	99.5%

San Luis Obispo County Pension Trust
Projection Based on January 1, 2019 Actuarial Valuation with Tier 3 (AB 340)
6.50% Discount Rate Assumption and Payroll Growth Assumption of 2.75% - 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)
2019	-4.008%	50.59%	\$ 201	\$ 101	\$ 2,162	\$ 1,363	\$ 799	63.0%	23.01%	\$ 1,272	58.8%	42.7%
2020	6.500%	51.43%	206	106	2,243	1,409	833	62.8%	22.50%	1,352	60.3%	47.6%
2021	6.500%	51.64%	212	109	2,323	1,478	846	63.6%	22.06%	1,436	61.8%	51.6%
2022	6.500%	51.72%	217	112	2,404	1,553	851	64.6%	21.62%	1,524	63.4%	55.4%
2023	6.500%	52.40%	223	117	2,484	1,614	870	65.0%	21.24%	1,614	65.0%	59.5%
2024	6.500%	52.13%	228	119	2,562	1,708	854	66.7%	20.90%	1,708	66.7%	62.9%
2025	6.500%	51.92%	234	122	2,640	1,803	836	68.3%	20.59%	1,803	68.3%	66.1%
2026	6.500%	51.72%	240	124	2,716	1,901	815	70.0%	20.31%	1,901	70.0%	69.0%
2027	6.500%	51.54%	246	127	2,791	2,001	790	71.7%	20.05%	2,001	71.7%	71.8%
2028	6.500%	51.40%	252	129	2,865	2,103	762	73.4%	19.81%	2,103	73.4%	74.4%
2029	6.500%	51.26%	258	132	2,936	2,207	729	75.2%	19.60%	2,207	75.2%	76.7%
2030	6.500%	51.15%	265	135	3,006	2,314	692	77.0%	19.40%	2,314	77.0%	79.0%
2031	6.500%	51.05%	271	138	3,075	2,424	651	78.8%	19.23%	2,424	78.8%	81.1%
2032	6.500%	50.95%	278	142	3,142	2,538	604	80.8%	19.07%	2,538	80.8%	83.0%
2033	6.500%	50.86%	285	145	3,207	2,656	551	82.8%	18.92%	2,656	82.8%	84.8%
2034	6.500%	50.78%	293	149	3,271	2,778	493	84.9%	18.78%	2,778	84.9%	86.4%
2035	6.500%	50.72%	300	152	3,335	2,906	429	87.1%	18.66%	2,906	87.1%	87.9%
2036	6.500%	50.65%	308	156	3,397	3,039	357	89.5%	18.55%	3,039	89.5%	89.3%
2037	6.500%	50.60%	316	160	3,458	3,179	279	91.9%	18.45%	3,179	91.9%	90.6%
2038	6.500%	50.54%	324	164	3,519	3,327	192	94.5%	18.36%	3,327	94.5%	91.8%
2039	6.500%	43.81%	333	146	3,579	3,482	97	97.3%	18.28%	3,482	97.3%	92.9%
2040	6.500%	20.42%	341	70	3,639	3,624	15	99.6%	18.20%	3,624	99.6%	93.9%
2041	6.500%	19.67%	350	69	3,700	3,691	9	99.8%	18.14%	3,691	99.8%	94.8%
2042	6.500%	19.11%	360	69	3,760	3,757	4	99.9%	18.08%	3,757	99.9%	95.7%
2043	6.500%	18.04%	369	67	3,822	3,822	(0)	100.0%	18.04%	3,822	100.0%	96.5%
2044	6.500%	18.00%	379	68	3,884	3,884	-	100.0%	18.00%	3,884	100.0%	97.2%
2045	6.500%	17.96%	390	70	3,948	3,948	(0)	100.0%	17.96%	3,948	100.0%	97.8%
2046	6.500%	17.94%	400	72	4,013	4,013	(0)	100.0%	17.94%	4,013	100.0%	98.3%
2047	6.500%	17.91%	411	74	4,081	4,081	(0)	100.0%	17.91%	4,081	100.0%	98.8%
2048	6.500%	17.90%	422	76	4,150	4,150	-	100.0%	17.90%	4,150	100.0%	99.2%
2049	6.500%	17.89%	434	78	4,222	4,222	-	100.0%	17.89%	4,222	100.0%	99.5%

Board of Trustees

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



Date: June 24, 2019

To: Board of Trustees

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

Agenda Item 10: Employer Contributions FY19-20 Prefunding Amount

Recommendation:

Staff recommends that the Board of Trustees approve the amount calculated for FY19-20 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, 2019 Actuarial Evaluation. For this reason, GRS has prepared two scenarios for the Employer Contributions based on rate increase implementation dates of January 1, 2020 and July 1, 2020. 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 25th, 2019 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 current Earnings Assumption less 1.50%. For FY19-20 a discount rate of 5.50% (7.00% less 1.50%) 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 2019 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 FY19-20 Employer Contributions and the pick-up contributions assuming rate increase implementation dates of January 1, 2020 and July 1, 2020:

<u>If recommended rate increase is implemented 01/01/2020:</u>	Estimated FY19-20 Contributions <u>Undiscounted</u>	Estimated FY19-20 Contributions <u>Discounted</u>
County ER Contributions	\$48,799,958	\$47,543,469
County ER paid EE Contrib.	10,067,710	9,814,983
APCD ER Contributions	489,101	476,507
APCD ER Paid EE Contrib.	106,744	104,064
	-----	-----
TOTAL	\$59,463,513	\$57,939,023

Aggregate Employer Savings = \$1,524,490

<u>If recommended rate increase is implemented 07/01/2020:</u>	Estimated FY19-20 Contributions <u>Undiscounted</u>	Estimated FY19-20 Contributions <u>Discounted</u>
County ER Contributions	\$47,542,409	\$46,334,172
County ER paid EE Contrib.	10,067,710	9,814,983
APCD ER Contributions	476,499	464,386
APCD ER Paid EE Contrib.	106,744	104,064
	-----	-----
TOTAL	\$58,193,362	\$56,717,605

Aggregate Employer Savings = \$1,475,757

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

Respectfully Submitted,

Date: June 11, 2019

To: Board of Trustees

**Re: Prefunding of Contributions for Fiscal Year Ending June 30, 2020
Two dates for rate increase implementation-January 1, 2020 and July 1, 2020**

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, 2020 the actuarially determined rate is based on the results of the January 1, 2019 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 25, 2019 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 1.50%. Thus, for FY19-20, a discount rate of 5.50% (7.00% less 1.50%) 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 2019-20 pay period ending on June 30, 2020, the County can achieve long-term contribution savings.

Two sets of exhibits (payroll dates starting July 1, 2019 and ending June 30, 2020) have been prepared, based on (1) if the County implements the recommended rate increase from the January 1, 2019 valuation as of January 1, 2020, or (2) if the County delays the recommended rate increase until July 1, 2020. For the first set (rate increase not in effect until January 1, 2020), the County appropriation rate for the first half of the fiscal year is based on the 23.15% County charged rate as of January 1, 2019 plus 1.40% of the total 2.80% rate increase effective July 1, 2019. This results in a total rate of 24.55% for the first half of the year. The County appropriation rate for the second half of the fiscal year is based on the 24.55% plus 1.29% of the 2.58%

increase effective January 1, 2020. (This assumes the rate increases will be split 50/50). For the second set (rate increase not in effect until July 1, 2020), the County appropriation rate for the year is based on the 24.55%.

2019 Rate Increase Effective Date	Rate Increase (from the June 7, 2019 delay rate increase letter)	Total County Rate	Addition to rate during FYE 20 as of the Rate Increase Effective Date
January 1, 2019	2.30%	24.55%	NA
January 1, 2020	2.58%	25.84%	1/2 of 2.58% for 6 months
July 1, 2020	2.68%	25.94%	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, 2020	Rate Increase July 1, 2020
Pay period non-discounted contribution for FYE 2020	\$59,463,513	\$58,193,362
Pre-funding single sum contribution made on July 15, 2019	\$57,939,023	\$56,717,605
Contribution savings due to prefunding	\$1,524,490	\$1,475,757

This pre-funding calculation has been done using the Board prescribed interest rate of 5.50%. If the County prefunds the contribution at the beginning of the fiscal year 2020, the County can contribute \$1,524,490 less (based on a rate increase effective January 1, 2020) or \$1,475,757 less (based on a rate increase effective July 1, 2020). If the Trust earns 5.50% 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,

A handwritten signature in black ink that reads "Paul Wood". The signature is fluid and cursive, with the first name "Paul" and last name "Wood" clearly distinguishable.

Paul Wood, ASA, FCA, MAAA

CC: Leslie L. Thompson, FSA, FCA, EA, MAAA

This page left blank intentionally.

San Luis Obispo County Pension Trust

Prepayment of County Contributions

Discount Rate = 5.500%

Rate Increase Delayed to January 1, 2020

Fiscal Year 2019-2020 beginning July 15, 2019 Biweekly Pay Period	County Biweekly Payroll Estimate*	County Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2019 Factor	Biweekly Contribution Discounted
1	\$ 7,351,546	24.55%	\$ 1,804,805	1.00000000	\$ 1,804,805
2	7,359,221	24.55%	1,806,689	0.99794286	1,802,972
3	7,366,903	24.55%	1,808,575	0.99588995	1,801,141
4	7,374,594	24.55%	1,810,463	0.99384126	1,799,313
5	7,382,293	24.55%	1,812,353	0.99179679	1,797,486
6	7,390,000	24.55%	1,814,245	0.98975652	1,795,661
7	7,397,715	24.55%	1,816,139	0.98772045	1,793,838
8	7,405,437	24.55%	1,818,035	0.98568857	1,792,016
9	7,413,168	24.55%	1,819,933	0.98366087	1,790,197
10	7,420,907	24.55%	1,821,833	0.98163734	1,788,379
11	7,428,654	24.55%	1,823,735	0.97961798	1,786,563
12	7,436,410	24.55%	1,825,639	0.97760276	1,784,749
13	7,444,173	24.55%	1,827,544	0.97559170	1,782,937
14	7,451,944	25.84%	1,925,582	0.97358477	1,874,718
15	7,459,724	25.84%	1,927,593	0.97158197	1,872,814
16	7,467,511	25.84%	1,929,605	0.96958328	1,870,913
17	7,475,307	25.84%	1,931,619	0.96758871	1,869,013
18	7,483,111	25.84%	1,933,636	0.96559825	1,867,115
19	7,490,923	25.84%	1,935,655	0.96361187	1,865,220
20	7,498,743	25.84%	1,937,675	0.96162959	1,863,326
21	7,506,572	25.84%	1,939,698	0.95965138	1,861,434
22	7,514,408	25.84%	1,941,723	0.95767724	1,859,544
23	7,522,253	25.84%	1,943,750	0.95570716	1,857,656
24	7,530,106	25.84%	1,945,779	0.95374114	1,855,770
25	7,537,967	25.84%	1,947,811	0.95177916	1,853,886
26	7,545,836	25.84%	1,949,844	0.94982122	1,852,003
Totals:	\$ 193,655,427		\$ 48,799,958		\$ 47,543,469

Contribution Amount for FY 2019-20	\$ 48,799,958	\$ 47,543,469
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2019-20		\$ 1,256,489

* 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 2.75% 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 23.15% County charged rate as of January 1, 2019 plus 1.40% of the total 2.80% rate increase effective July 1, 2019. County appropriation rate for the second half of the year is based 25.84% plus 1.29% of the 2.58% increase effective January 1, 2020.



San Luis Obispo County Pension Trust

Prepayment of County Contributions

Discount Rate = 5.500%

Rate Increase Delayed to July 1, 2020

Fiscal Year 2019-2020 beginning July 15, 2019 Biweekly Pay Period	County Biweekly Payroll Estimate*	County Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2019 Factor	Biweekly Contribution Discounted
1	\$ 7,351,546	24.55%	\$ 1,804,805	1.00000000	\$ 1,804,805
2	7,359,221	24.55%	1,806,689	0.99794286	1,802,972
3	7,366,903	24.55%	1,808,575	0.99588995	1,801,141
4	7,374,594	24.55%	1,810,463	0.99384126	1,799,313
5	7,382,293	24.55%	1,812,353	0.99179679	1,797,486
6	7,390,000	24.55%	1,814,245	0.98975652	1,795,661
7	7,397,715	24.55%	1,816,139	0.98772045	1,793,838
8	7,405,437	24.55%	1,818,035	0.98568857	1,792,016
9	7,413,168	24.55%	1,819,933	0.98366087	1,790,197
10	7,420,907	24.55%	1,821,833	0.98163734	1,788,379
11	7,428,654	24.55%	1,823,735	0.97961798	1,786,563
12	7,436,410	24.55%	1,825,639	0.97760276	1,784,749
13	7,444,173	24.55%	1,827,544	0.97559170	1,782,937
14	7,451,944	24.55%	1,829,452	0.97358477	1,781,127
15	7,459,724	24.55%	1,831,362	0.97158197	1,779,318
16	7,467,511	24.55%	1,833,274	0.96958328	1,777,512
17	7,475,307	24.55%	1,835,188	0.96758871	1,775,707
18	7,483,111	24.55%	1,837,104	0.96559825	1,773,904
19	7,490,923	24.55%	1,839,022	0.96361187	1,772,103
20	7,498,743	24.55%	1,840,941	0.96162959	1,770,304
21	7,506,572	24.55%	1,842,863	0.95965138	1,768,506
22	7,514,408	24.55%	1,844,787	0.95767724	1,766,711
23	7,522,253	24.55%	1,846,713	0.95570716	1,764,917
24	7,530,106	24.55%	1,848,641	0.95374114	1,763,125
25	7,537,967	24.55%	1,850,571	0.95177916	1,761,335
26	7,545,836	24.55%	1,852,503	0.94982122	1,759,546
Totals:	\$ 193,655,427		\$ 47,542,409		\$ 46,334,172

Contribution Amount for FY 2019-20	\$ 47,542,409 (Undiscounted)	\$ 46,334,172 (Discounted)
Savings due to Prepayment for FY 2019-20		\$ 1,208,237

* 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 2.75% 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 23.15% County charged rate as of January 1, 2019 plus 1.40% of the total 2.80% rate increase effective January 1, 2019.



San Luis Obispo County Pension Trust

Prepayment of Employer Paid Portion of Employee Normal Cost ("Pick-up") Contributions

Discount Rate = 5.500%

Fiscal Year 2019-2020 beginning July 15, 2019 Biweekly Pay Period	County Biweekly Payroll Estimate*	County Paid EE NC Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2019 Factor	Biweekly Contribution Discounted
1	\$ 4,729,739	**	\$ 395,577	1.00000000	\$ 395,577
2	4,721,636	**	394,899	0.99794286	394,087
3	4,713,546	**	394,222	0.99588995	392,602
4	4,705,470	**	393,547	0.99384126	391,123
5	4,697,408	**	392,873	0.99179679	389,650
6	4,689,360	**	392,200	0.98975652	388,183
7	4,681,325	**	391,528	0.98772045	386,720
8	4,673,304	**	390,857	0.98568857	385,263
9	4,665,297	**	390,187	0.98366087	383,812
10	4,657,304	**	389,518	0.98163734	382,365
11	4,649,325	**	388,851	0.97961798	380,925
12	4,641,359	**	388,185	0.97760276	379,491
13	4,633,407	**	387,520	0.97559170	378,061
14	4,625,468	**	386,856	0.97358477	376,637
15	4,617,543	**	386,193	0.97158197	375,218
16	4,609,632	**	385,531	0.96958328	373,804
17	4,601,734	**	384,870	0.96758871	372,396
18	4,593,849	**	384,211	0.96559825	370,993
19	4,585,978	**	383,553	0.96361187	369,596
20	4,578,121	**	382,896	0.96162959	368,204
21	4,570,277	**	382,240	0.95965138	366,817
22	4,562,447	**	381,585	0.95767724	365,435
23	4,554,630	**	380,931	0.95570716	364,058
24	4,546,826	**	380,278	0.95374114	362,687
25	4,539,036	**	379,626	0.95177916	361,320
26	4,531,259	**	378,976	0.94982122	359,959
Totals:	\$ 120,375,279		\$ 10,067,710		\$ 9,814,983

Contribution Amount for FY 2019-20	\$ 10,067,710	\$ 9,814,983
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2019-20		\$ 252,727

* 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 2.75% 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 = 5.500%
 Rate Increase Delayed to January 1, 2020

Fiscal Year 2019-2020 beginning July 15, 2019	APCD Biweekly Payroll Estimate*	APCD Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2019 Factor	Biweekly Contribution Discounted
1	\$ 73,681	24.55%	\$ 18,089	1.00000000	\$ 18,089
2	73,758	24.55%	18,108	0.99794286	18,070
3	73,835	24.55%	18,127	0.99588995	18,052
4	73,912	24.55%	18,146	0.99384126	18,034
5	73,990	24.55%	18,164	0.99179679	18,015
6	74,067	24.55%	18,183	0.98975652	17,997
7	74,144	24.55%	18,202	0.98772045	17,979
8	74,222	24.55%	18,221	0.98568857	17,961
9	74,299	24.55%	18,240	0.98366087	17,942
10	74,377	24.55%	18,259	0.98163734	17,924
11	74,454	24.55%	18,279	0.97961798	17,906
12	74,532	24.55%	18,298	0.97760276	17,888
13	74,610	24.55%	18,317	0.97559170	17,870
14	74,688	25.84%	19,299	0.97358477	18,790
15	74,766	25.84%	19,319	0.97158197	18,770
16	74,844	25.84%	19,340	0.96958328	18,751
17	74,922	25.84%	19,360	0.96758871	18,732
18	75,000	25.84%	19,380	0.96559825	18,713
19	75,078	25.84%	19,400	0.96361187	18,694
20	75,157	25.84%	19,421	0.96162959	18,675
21	75,235	25.84%	19,441	0.95965138	18,656
22	75,314	25.84%	19,461	0.95767724	18,637
23	75,392	25.84%	19,481	0.95570716	18,619
24	75,471	25.84%	19,502	0.95374114	18,600
25	75,550	25.84%	19,522	0.95177916	18,581
26	75,629	25.84%	19,542	0.94982122	18,562
Totals:	\$ 1,940,928		\$ 489,101		\$ 476,507

Contribution Amount for FY 2019-20	\$ 489,101	\$ 476,507
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2019-20		\$ 12,594

* 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 2.75% 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 23.15% County charged rate as of January 1, 2019 plus 1.40% of the total 2.80% rate increase effective July 1, 2019. County appropriation rate for the second half of the year is based 25.84% plus 1.29% of the 2.58% increase effective January 1, 2020.



San Luis Obispo County Pension Trust
Air Pollution Control District
 Prepayment of Employer Contributions
 Discount Rate = 5.500%
 Rate Increase Delayed to July 1, 2020

Fiscal Year 2019-2020 beginning July 15, 2019	APCD Biweekly Payroll Estimate*	APCD Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2019 Factor	Biweekly Contribution Discounted
1	\$ 73,681	24.55%	\$ 18,089	1.00000000	\$ 18,089
2	73,758	24.55%	18,108	0.99794286	18,070
3	73,835	24.55%	18,127	0.99588995	18,052
4	73,912	24.55%	18,146	0.99384126	18,034
5	73,990	24.55%	18,164	0.99179679	18,015
6	74,067	24.55%	18,183	0.98975652	17,997
7	74,144	24.55%	18,202	0.98772045	17,979
8	74,222	24.55%	18,221	0.98568857	17,961
9	74,299	24.55%	18,240	0.98366087	17,942
10	74,377	24.55%	18,259	0.98163734	17,924
11	74,454	24.55%	18,279	0.97961798	17,906
12	74,532	24.55%	18,298	0.97760276	17,888
13	74,610	24.55%	18,317	0.97559170	17,870
14	74,688	24.55%	18,336	0.97358477	17,851
15	74,766	24.55%	18,355	0.97158197	17,833
16	74,844	24.55%	18,374	0.96958328	17,815
17	74,922	24.55%	18,393	0.96758871	17,797
18	75,000	24.55%	18,413	0.96559825	17,779
19	75,078	24.55%	18,432	0.96361187	17,761
20	75,157	24.55%	18,451	0.96162959	17,743
21	75,235	24.55%	18,470	0.95965138	17,725
22	75,314	24.55%	18,490	0.95767724	17,707
23	75,392	24.55%	18,509	0.95570716	17,689
24	75,471	24.55%	18,528	0.95374114	17,671
25	75,550	24.55%	18,548	0.95177916	17,653
26	75,629	24.55%	18,567	0.94982122	17,635
Totals:	\$ 1,940,928		\$ 476,499		\$ 464,386

Contribution Amount for FY 2019-20	\$ 476,499	\$ 464,386
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2019-20		\$ 12,113

* 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 2.75% 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 23.15% County charged rate as of January 1, 2019 plus 1.40% of the total 2.80% rate increase effective January 1, 2019.



San Luis Obispo County Pension Trust
Air Pollution Control District
 Prepayment of Employer Paid Portion of
 Employee Normal Cost ("Pick-up") Contributions
 Discount Rate = 5.500%

Fiscal Year 2019-2020 beginning July 15, 2019	APCD Biweekly Payroll Estimate*	APCD Paid EE NC Rate**	Biweekly Contribution Undiscounted	Discount to 7/15/2019 Factor	Biweekly Contribution Discounted
1	\$ 73,681	**	\$ 4,194	1.00000000	\$ 4,194
2	73,555	**	4,186	0.99794286	4,177
3	73,429	**	4,179	0.99588995	4,162
4	73,303	**	4,172	0.99384126	4,146
5	73,178	**	4,165	0.99179679	4,131
6	73,052	**	4,158	0.98975652	4,115
7	72,927	**	4,151	0.98772045	4,100
8	72,802	**	4,144	0.98568857	4,085
9	72,678	**	4,137	0.98366087	4,069
10	72,553	**	4,130	0.98163734	4,054
11	72,429	**	4,123	0.97961798	4,039
12	72,305	**	4,116	0.97760276	4,024
13	72,181	**	4,109	0.97559170	4,009
14	72,057	**	4,102	0.97358477	3,994
15	71,934	**	4,095	0.97158197	3,979
16	71,810	**	4,088	0.96958328	3,964
17	71,687	**	4,081	0.96758871	3,949
18	71,565	**	4,074	0.96559825	3,934
19	71,442	**	4,067	0.96361187	3,919
20	71,320	**	4,060	0.96162959	3,904
21	71,197	**	4,053	0.95965138	3,889
22	71,075	**	4,046	0.95767724	3,875
23	70,954	**	4,039	0.95570716	3,860
24	70,832	**	4,032	0.95374114	3,845
25	70,711	**	4,025	0.95177916	3,831
26	70,589	**	4,018	0.94982122	3,816
Totals:	\$ 1,875,247		\$ 106,744		\$ 104,064

Contribution Amount for FY 2019-20	\$ 106,744	\$ 104,064
	(Undiscounted)	(Discounted)
Savings due to Prepayment for FY 2019-20		\$ 2,680

* 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 2.75% 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 5.75% to 9.29% for APCD. Employer pickup contributions only apply to Tier 1 and Tier 2 members.



Board of Trustees

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



Date: June 24, 2019

To: Board of Trustees

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

Agenda Item 11: Board of Trustees Meeting Schedule

Recommendation:

Staff recommends that the Board of Trustees discuss and direct staff on a preferred plan for the Board meeting schedule.

Discussion:

This discussion is based on the assumption that the proposed Pension Trust By-Laws amendments and accompanying Retirement Plan Technical Amendments are approved by the Board of Supervisors. The Board of Trustees recommended these amendments at the May 20, 2019 meeting by passing Resolution 2019-03. At present, the proposed By-Laws and Retirement Plan Technical Amendments are planned on the following schedule –

- | | |
|-------------------------------|---|
| Week of June 24 th | Amendments circulated by SLO County Human Resources to Collective Bargaining Organizations (CBOs) for comment with a two-week due date for any comments. |
| July | Assuming no comments or meet & confer requests from CBOs on the By-Laws and Retirement Plan Technical Amendments, the necessary Board of Supervisors approval item will be scheduled. Date TBD. |

Alternative Schedules:

Board of Trustees meetings will continue to be scheduled on Trustee's calendars and for the BoS Chambers (as available) for the 4th Monday of each month at 9:30 AM. This reserves the time in case a meeting not on the published schedule (see below) needs to be noticed and held – e.g., to consider a Disability action in a timely manner. The following are alternative meetings for scheduled Board of Trustees meetings. This includes the major items for Board approval

associated with particular months. Many other items for Board consideration are always present, but on a more flexible schedule (e.g., Fiduciary refresher training).

	Current 12 mtg. Schedule	Alternative A: 8 mtg. Schedule	Alternative B: 7 mtg. Schedule	Alternative C: 6 mtg. Schedule
January	Officer elections	Officer elections	Officer elections	
February	4Q Invest. report Invest. Policy COLA Approval	4Q Invest. report Invest. Policy COLA Approval	4Q Invest. report Invest. Policy COLA Approval	Officer elections 4Q Invest. report Invest. Policy COLA Approval
March	Actuarial Val. Planning & prefunding	Actuarial Val. Planning & prefunding	Actuarial Val. Planning & prefunding	Actuarial Val. Planning & prefunding
April	Budget			
May	1Q\ Invest. Report Biennial Experience Study	Budget 1Q\ Invest. Report Biennial Exp. Study	Budget 1Q\ Invest. Report Biennial Exp. Study	Budget 1Q\ Invest. Report Biennial Exp. Study
June	Audit, CAFR Actuarial Val. Contrib. Rates	Audit, CAFR Actuarial Val. Contrib. Rates	Audit, CAFR Actuarial Val. Contrib. Rates	Audit, CAFR Actuarial Val. Contrib. Rates
July	Light agenda			
August	2Q Invest. Report Invest. Topics	2Q Invest. Report Invest. Topics		
September	Annual Planning	Annual Planning	2Q Invest. Report Invest. Topics Annual Planning	2Q Invest. Report Invest. Topics Annual Planning
October	Light agenda			
November	3Q Invest report Invest. Topics Crediting Rates	3Q Invest report Invest. Topics Crediting Rates	3Q Invest report Invest. Topics Crediting Rates	3Q Invest report Invest. Topics Crediting Rates
December	Light agenda			

Board of Trustees

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

San Luis Obispo County Pension Trust *SLOOPT*

Date: June 24, 2019

To: Board of Trustees

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

Agenda Item 12: Investment Report for May 2019

	May	Year to Date 2019	2018	2017	2016	2015	2014
Total Trust Investments (\$ millions)	\$1,331		\$1,285 year end	\$1,351 year end	\$1,196 year end	\$1,148 year end	\$1,190 year end
Total Fund Return	-2.3% Gross	6.3% Gross	-3.2 % Gross	15.5 % Gross	6.6 % Gross	-0.8% Gross	5.1 % Gross
Policy Index Return (r)	-2.2%	6.4%	-3.2 %	13.4 %	7.7 %	-0.5 %	5.2 %

(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:

- **Fed Policy and Interest Rates –**

- The Fed held rates steady in June consistent with its recent dovish tone on monetary policy. However, at the announcement of the June FOMC meeting results, Fed comments tilted towards an expectation of possible rate cuts in response to a clouded economic outlook stemming, in part, from turmoil in trade policy.
- Fixed income markets implied future rates reflect a broad market expectation that the Fed may need to lower interest rates twice in 2019 and perhaps one more time in early 2020.

- The yield curve, responding to a “flight-to-quality” turned inverted with the 10 year treasury rate below that of the 3 month rate.

- **Trade Policy –**
 - Considerations of economic growth have been dominated by turmoil in trade policy. The May 5th announcement of President Trump’s surprise threats to proceed with steep tariff increases on the eve of what was expected to be a productive conclusion of negotiations briefly roiled markets. A consensus on U.S. / China trade seems to be emerging that higher tariffs will remain for the foreseeable future in the face of intractable differences. Underpinning this resignation of the markets is an implicit expectation that the cost of tariffs will roll into consumer prices or lead to alternate supply chains to different countries – and that markets will adjust somehow.
 - The Trump Administration briefly threatened increasing tariffs on Mexican imports. The threat was withdrawn with the purported cooperation of the Mexican government with U.S. Administration demands for aid on immigration control.

- **Employment and Wages –**
 - The May DOL report on nonfarm employment -
 - New jobs came in below expectations at +75k in May indicating a cooling in the pace of hiring from 2018 levels

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. The attached market commentary from Verus details more volatile market conditions in May, but subsequent activity in June are not yet factored into these numbers.

The strong equity market returns in January through April (a +18.2% return on the S&P 500 year to date) followed by a distinctly Bearish May (-6.5% return on the S&P 500) has brought the total gross return on the SLOCPT assets YTD to +6.3%. Compared to the -3.2% return for all of 2018.

Respectfully submitted

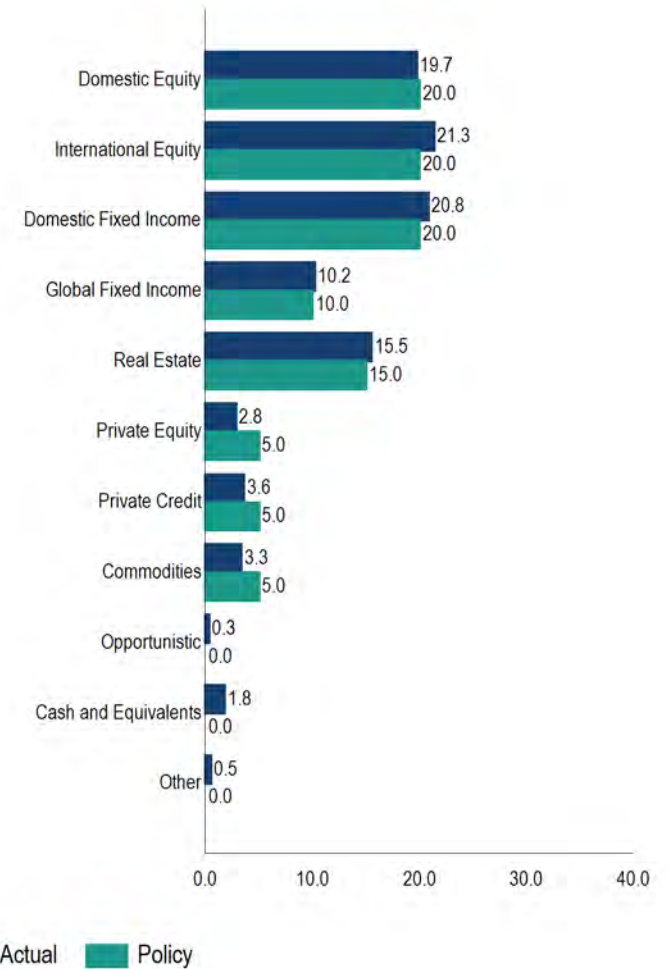
San Luis Obispo County Pension Trust

Executive Summary - Preliminary (Gross of Fees)

Period Ending: May 31, 2019

	Market Value	% of Portfolio	1 Mo	YTD
Total Fund	1,330,638,387	100.0	-2.3	6.3
Total Fund ex Overlay	1,323,901,350	99.5	-2.3	6.3
Policy Index			-2.2	6.4
Total Domestic Equity	262,583,193	19.7	-6.3	10.8
Russell 3000			-6.5	10.9
PIMCO RAE Fundamental PLUS Instl	51,009,157	3.8	-7.7	6.1
S&P 500			-6.4	10.7
Loomis Sayles Large Cap Growth	76,590,606	5.8	-7.3	13.6
Russell 1000 Growth			-6.3	13.7
Boston Partners Large Cap Value	73,573,026	5.5	-6.8	6.0
Russell 1000 Value			-6.4	8.5
Atlanta Capital Mgmt	61,410,404	4.6	-3.1	18.2
Russell 2500			-7.1	11.3
Total International Equity	283,804,637	21.3	-4.4	11.5
MSCI ACWI ex USA Gross			-5.3	7.5
Dodge & Cox Intl Stock	131,920,421	9.9	-7.6	5.9
MSCI EAFE Gross			-4.7	8.0
WCM International Growth	151,884,216	11.4	-1.3	17.0
MSCI ACWI ex USA Gross			-5.3	7.5
Total Domestic Fixed Income	277,153,249	20.8	0.9	5.5
BBgBarc US Aggregate TR			1.8	4.8
BlackRock Core Bond	100,327,958	7.5	1.8	5.9
BBgBarc US Aggregate TR			1.8	4.8
Dodge & Cox Income Fund	101,826,268	7.7	0.8	5.2
BBgBarc US Aggregate TR			1.8	4.8
Pacific Asset Corporate Loan	74,999,022	5.6	-0.1	5.4
S&P/LSTA Leveraged Loan Index			-0.2	5.5
Total Global Fixed	135,580,992	10.2	-0.4	2.6
FTSE World Govt Bond Index			1.7	3.0
Brandywine Global Fixed Income	65,482,318	4.9	-1.0	0.7
FTSE WGBI ex US TR			1.3	2.2
Ashmore EM Blended Debt Fund	70,098,674	5.3	0.1	--
JPM GBI-EM Global Diversified TR USD			0.3	--

Actual vs Target Allocation (%)



*Other balance represents Clifton Group.

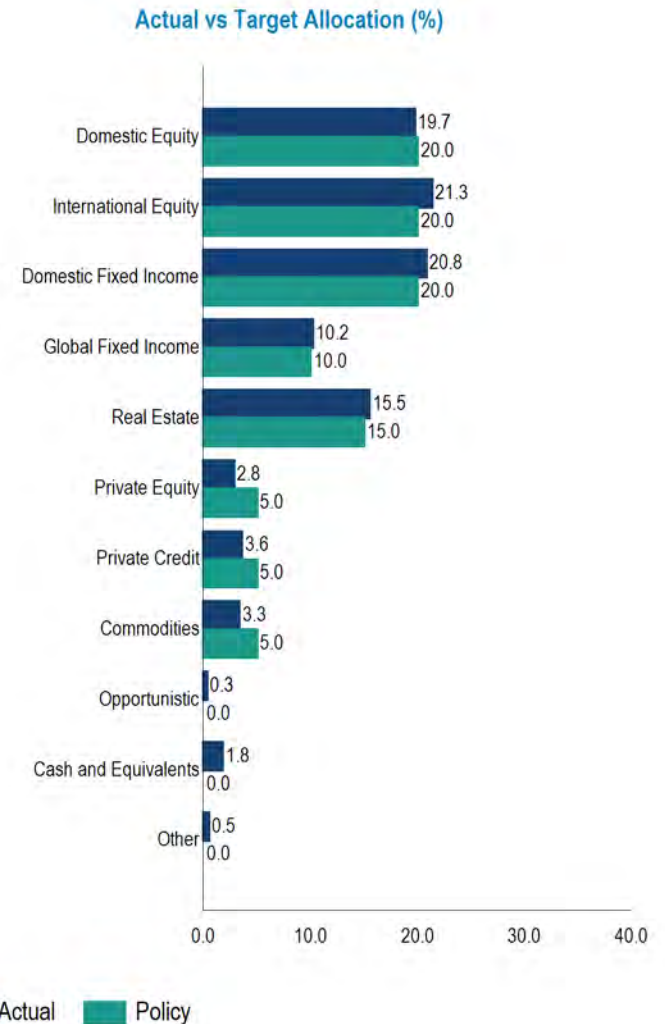
Policy Index (10/1/2016): 20% Russell 3000, 20% MSCI ACWI ex. US, 30% BBgBarc Aggregate, 15% NCREIF Property, 5% Bloomberg Commodity, 5% Russell 3000 + 300 bp, 5% BBgBarc High Yield + 200 bp lagged. Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment 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. Harbourvest 2018 Global Fund L.P. funded 12/14/2018. Stone Harbor liquidated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Most recently reported market values for private equity/credit, opportunistic, and illiquid real estate funds adjusted for calls and distributions through the report end date. All data is preliminary.

San Luis Obispo County Pension Trust

Executive Summary - Preliminary (Gross of Fees)

Period Ending: May 31, 2019

	Market Value	% of Portfolio	1 Mo	YTD
Total Real Estate	206,349,624	15.5	0.3	1.7
NCREIF Property Index			0.0	1.8
JP Morgan Core Real Estate	165,434,698	12.4	0.4	0.9
NCREIF-ODCE			0.0	1.4
NCREIF Property Index			0.0	1.8
ARA American Strategic Value Realty	33,374,724	2.5	0.0	3.8
NCREIF-ODCE			0.0	1.4
NCREIF Property Index			0.0	1.8
Direct Real Estate	7,540,202	0.6	0.0	13.0
NCREIF-ODCE			0.0	1.4
NCREIF Property Index			0.0	1.8
Total Commodities	44,555,502	3.3	-5.3	2.3
Bloomberg Commodity Index TR USD			-3.4	2.3
Gresham MTAP Commodity Builder	44,555,502	3.3	-5.3	2.3
Bloomberg Commodity Index TR USD			-3.4	2.3
Total Private Equity	37,736,455	2.8		
Harbourvest Partners IX Buyout Fund L.P.	13,726,550	1.0		
Pathway Private Equity Fund Investors 9 L.P.	22,698,714	1.7		
Harbourvest 2018 Global Fund L.P.	1,311,191	0.1		
Total Private Credit	47,779,636	3.6		
TPG Diversified Credit Program	47,779,636	3.6		
Total Cash	23,906,914	1.8	0.0	0.9
91 Day T-Bills			0.2	1.0
Cash Account	23,906,914	1.8	0.0	0.9
91 Day T-Bills			0.2	1.0
Total Opportunistic	4,451,149	0.3		
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	4,348,928	0.3		
PIMCO Distressed Credit Fund	102,221	0.0		
CPI + 5%			0.6	4.0



*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. Harbourvest 2018 Global Fund L.P. funded 12/14/2018. Stone Harbor liquidated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Most recently reported market values for private equity/credit, opportunistic, and illiquid real estate funds adjusted for calls and distributions through the report end date. All data is preliminary.



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

MAY 2019
Capital Markets Update

Market commentary

U.S. ECONOMICS

- Nonfarm payrolls increased by 75,000 in May (exp. 180,000), and additions from March and April were revised lower by 75,000 in total. Monthly payroll gains have averaged 158,200 thus far in 2019, a slightly cooler rate than the 2018 average of 215,250.
- The Institute for Supply Management's Manufacturing Purchasing Managers Index registered a May reading of 52.1, below both its April reading of 52.8 and analysts' expectations for a 53.0 figure. Slumps in the supplier deliveries and inventories components contributed to the decline of the index to 3-year lows.
- Consumer confidence indicators topped estimates materially in May. The University of Michigan's Sentiment Index rose from 97.2 to 100.0 (exp. 97.2), while the Conference Board Consumer Confidence Index rose from 129.2 to 134.1 (exp. 130.0).

U.S. EQUITIES

- The S&P 500 Index suffered its first monthly decline of the year and fell 6.4%. At the end of May, the S&P 500 Index had generated a year-to-date total return of 10.7%.
- The CBOE VIX Index ticked up from 13.1 to 18.7, indicating an increase in expectations for 30-day forward S&P 500 Index volatility. Trailing 30-day realized volatility ticked up from 9.4% to 13.1%, while the 90-day figure faded from 16.0% to 11.3%.
- According to FactSet, out of 110 S&P 500 Index companies posting 2Q 2019 EPS guidance, 76% have posted negative guidance, which is above the 5-year average of 70%. Analysts are expecting 2Q 2019 revenue growth of 4.1% and earnings contraction of 2.1%.

U.S. FIXED INCOME

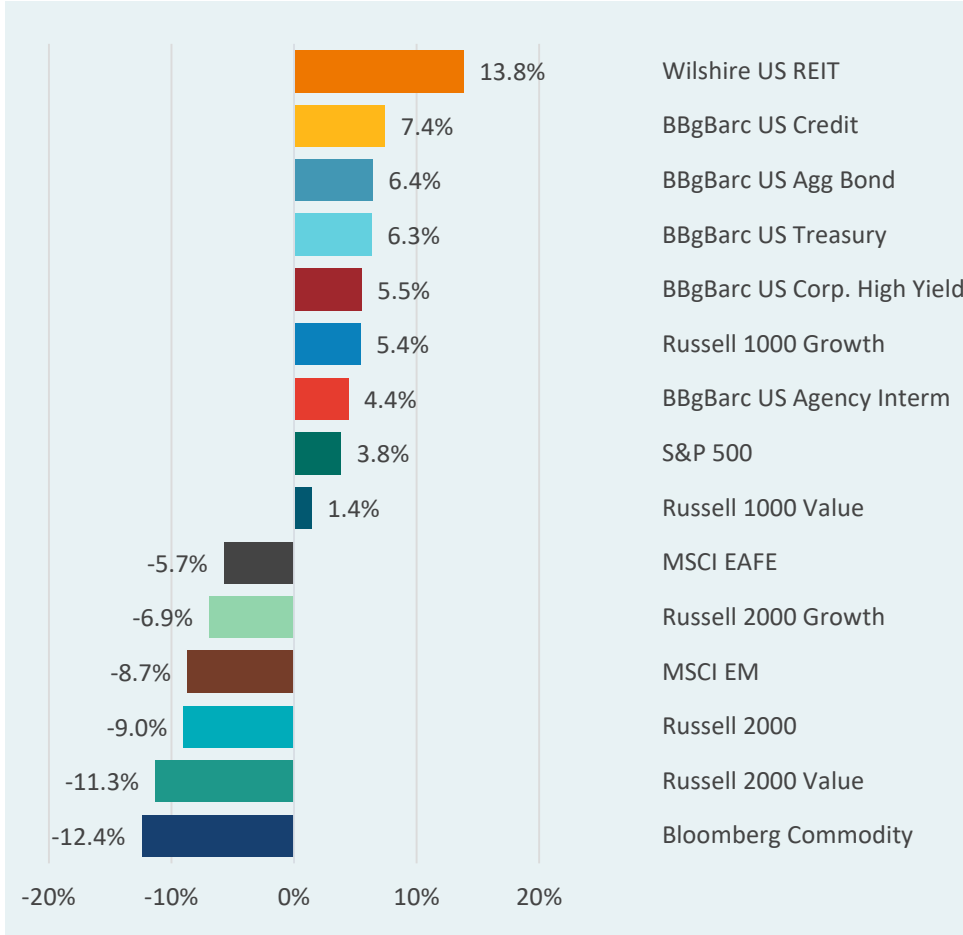
- Treasury yields plummeted in May, as renewed U.S.-China tensions likely fueled risk-off flows. Ten-year Treasury yields plunged from 2.50% to 2.13%, and 2-year Treasury yields dropped from 2.27% to 1.92%.
- At month-end, the market was pricing in a December 2019 fed funds rate of 1.86% and a June 2020 fed funds rate of 1.57%. These fed funds rate pricings reflect the market's expectation for the Federal Reserve to cut rates twice by the end of the year, and a third time within the first six months of 2020.
- In a June 4th press conference, Fed Chairman Jerome Powell expressed an openness to cutting rates, should "trade negotiations and other matters" pose material headwinds to the U.S. economic outlook.

INTERNATIONAL MARKETS

- Following the expiration of U.S. sanction waivers for specific importers of Iranian crude oil, Iran reneged on several components of the Iran Nuclear Deal. President Trump responded with an executive order sanctioning Iranian industrial metals.
- The U.K. Prime Minister Theresa May announced her resignation effective June 7th, citing "deep regret" in failing to deliver Brexit. May will remain acting PM until a new leader is selected in July.
- Safe-haven currencies appreciated sharply as international investors sought insulation from a more uncertain geopolitical outlook. Relative to the U.S. dollar, the Japanese yen appreciated 2.6% and the Swiss franc appreciated 1.3%.

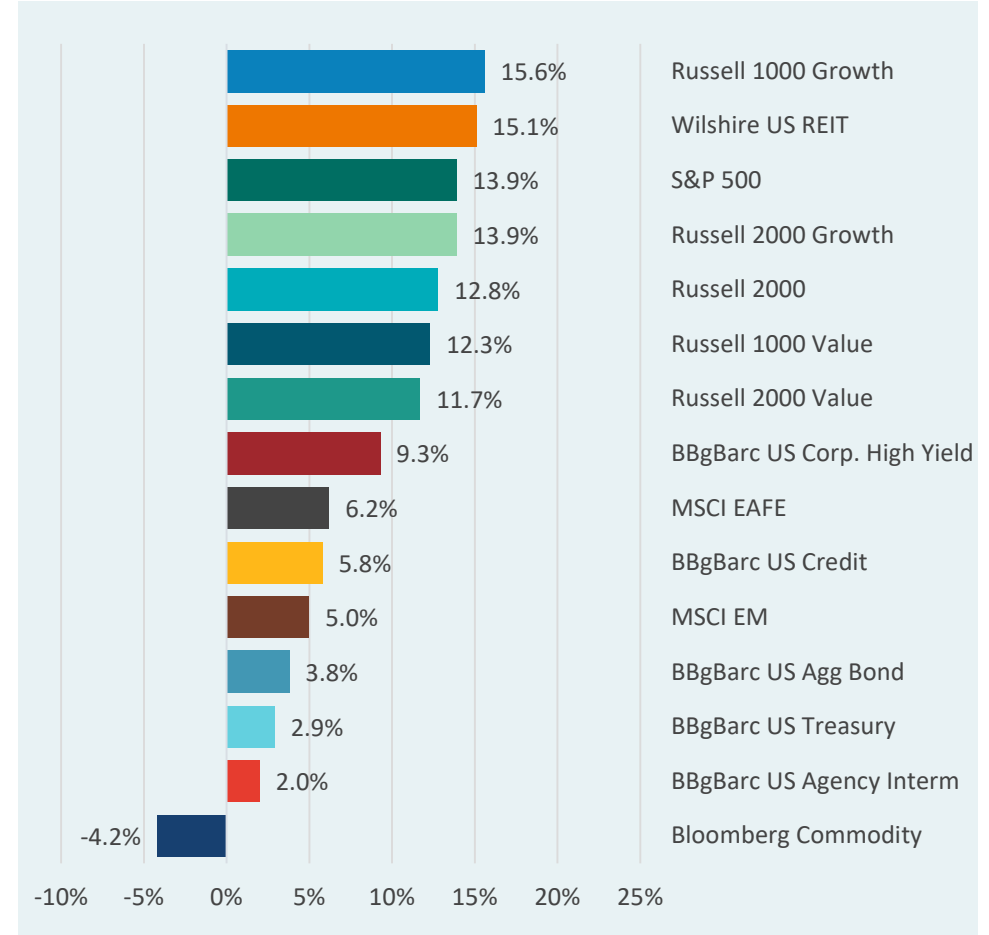
Major asset class returns

ONE YEAR ENDING MAY



Source: Morningstar, as of 5/31/19

TEN YEARS ENDING MAY



Source: Morningstar, as of 5/31/19

U.S. large cap equities

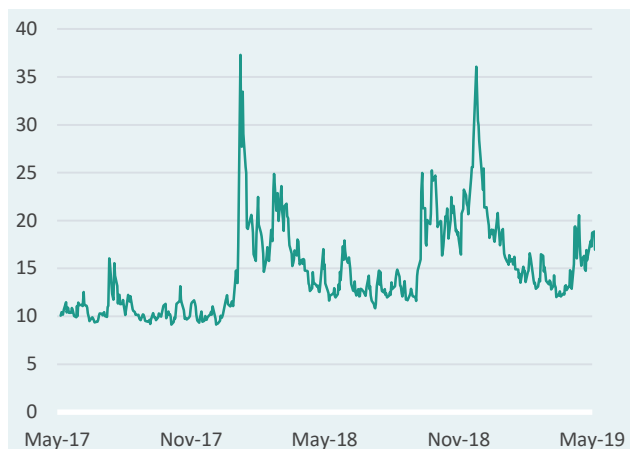
- The S&P 500 Index returned -6.4% in May, breaking its streak of 4 consecutive monthly advances. Within the overall index, energy (-11.1%) and information technology (-8.7%) stocks underperformed, while utilities (-0.8%) outperformed.
- At a weight of roughly 22%, the Information Technology sector was the largest within the S&P 500 Index, and its decline of 8.7% led the decline in the overall index. The Supreme Court’s 5-4 decision to allow a massive anti-trust lawsuit against Apple likely weighed on big tech.
- Energy stocks lost 11.1%, led by ExxonMobil (-10.8%) which represented 26.5% of the sector on April 30th. On top of a high sensitivity to falling oil prices, Exxon faced operational challenges related to rising tensions in the Middle East, anti-corruption investigations in Guyana, and political tensions in Papua New Guinea.
- Over the month, the forward 12-month P/E ratio of the S&P 500 Index declined to 15.7 from 17.0. According to FactSet, the current level of 15.7 is below the 5-year average (16.5) but above the 10-year average (14.8).

S&P 500 PRICE INDEX



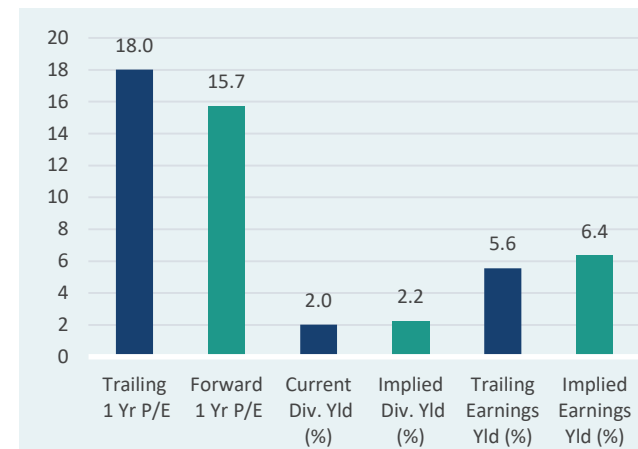
Source: Bloomberg, as of 5/31/19

IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 5/31/19

S&P 500 VALUATION SNAPSHOT

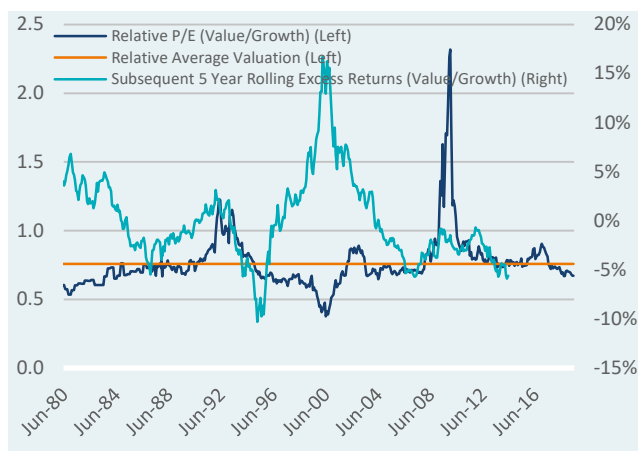


Source: Bloomberg, as of 5/31/19

Domestic equity size and style

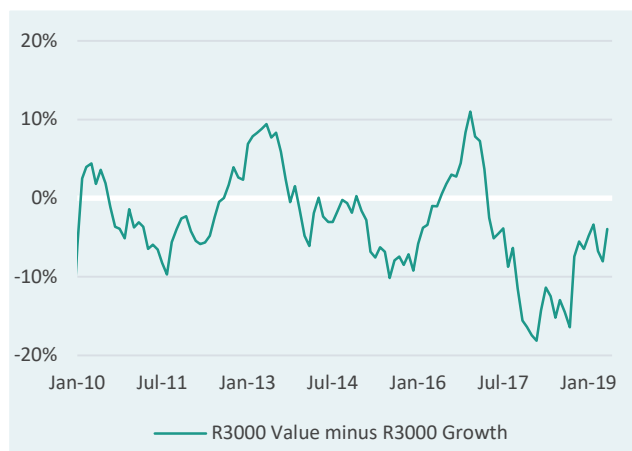
- Large cap stocks outperformed small cap stocks for the third straight month. The Russell 1000 Index lost 6.4%, while the Russell 2000 Index lost 7.8%. Several analysts have attributed the recent outperformance of large-cap stocks to their greater resilience to trade uncertainty.
- The iShares Edge MSCI USA Quality Factor ETF, which seeks to track the performance of high quality large- and mid-cap stocks based on ROE, earnings variability, and leverage, fell 6.6%, roughly in line with the S&P 500 Index.
- Value stocks underperformed growth stocks for the sixth consecutive month. The Russell 3000 Value Index posted May performance of -6.5%, compared with the Russell 3000 Growth Index, which returned -6.4%.
- While the difference in monthly return between growth- and value-oriented equities within the large cap universe was small (0.1%), growth-oriented equities outperformed value-oriented equities by 0.8% within the small-cap universe.

VALUE VS. GROWTH RELATIVE VALUATIONS



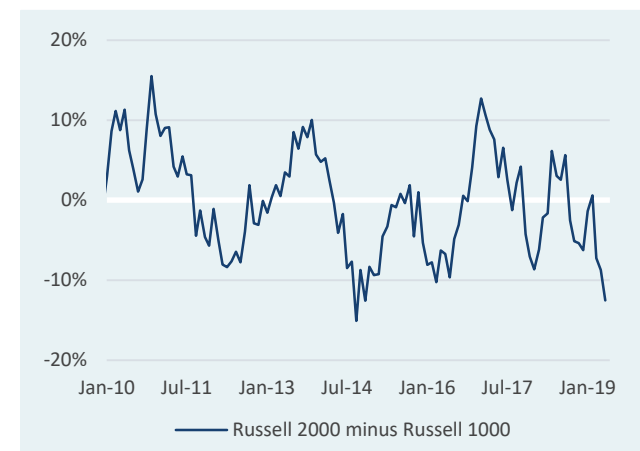
Source: Russell, Bloomberg, as of 5/31/19

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, as of 5/31/19

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

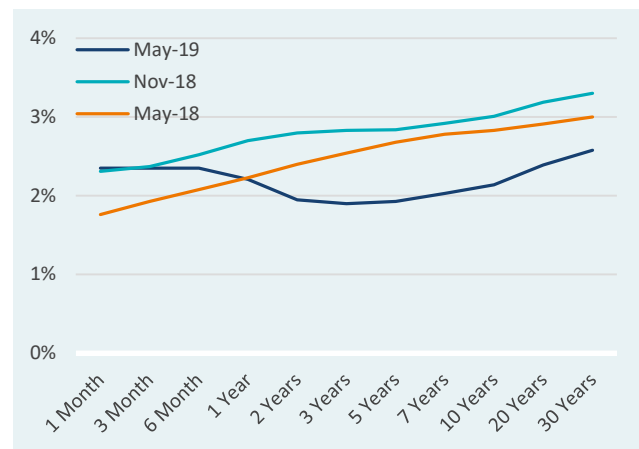


Source: FTSE, as of 5/31/19

Fixed income

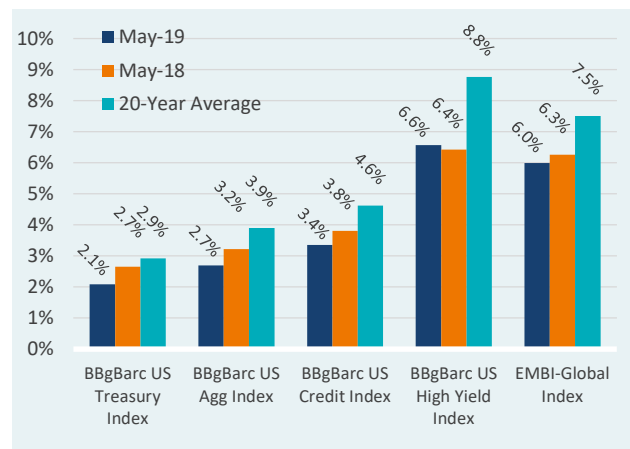
- Global sovereign yields moved in line with U.S. Treasury yields over the period and fell significantly. 10-year German bond yields dropped from 0.01% to fresh all-time lows of -0.21%, and 10-year Japanese bond yields fell from -0.06% to -0.11%.
- Long duration U.S. Treasuries extended their impressive year-to-date performance record. The Bloomberg Barclays U.S. Treasury Long TR USD Index delivered a return of 6.5% in May, bringing its year-to-date return to 9.5% and its trailing one-year return to 11.0%.
- Credit spreads expanded materially over the period. Investment-grade credit spreads widened from 1.10% to 1.32%, while high-yield spreads widened from 3.98% to 4.83%.
- Five-year breakeven inflation rates dropped from 1.9% to 1.6% while ten-year rates dropped from 1.9% to 1.7%. Rising pessimism concerning central banks' abilities to achieve their inflation targets, as well as a sell-off in the energy markets influenced the meaningful decline in expectations for future inflation.

U.S. TREASURY YIELD CURVE



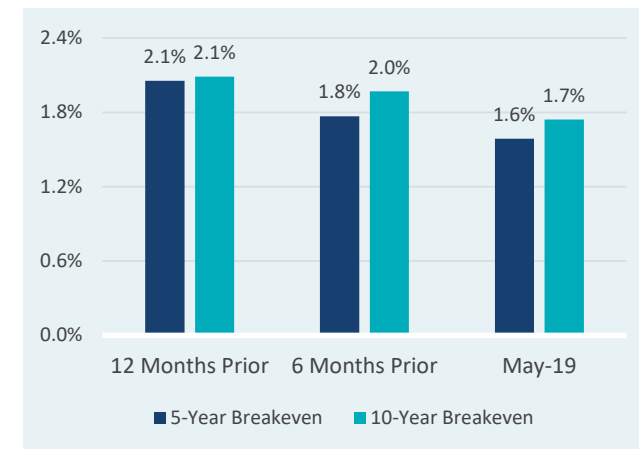
Source: Bloomberg, as of 5/31/19

NOMINAL YIELDS



Source: Morningstar, as of 5/31/19

BREAKEVEN INFLATION RATES

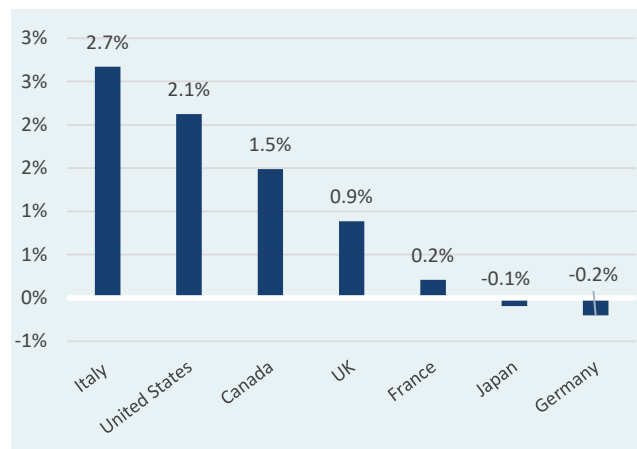


Source: Bloomberg, as of 5/31/19

Global markets

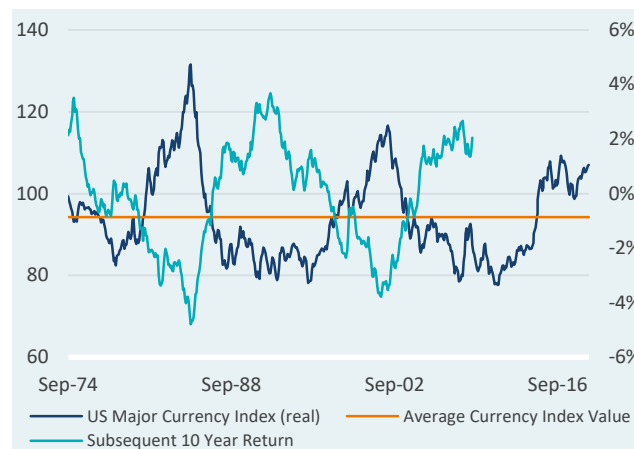
- U.S.-China trade reemerged at the fore of the geopolitical backdrop. Effective May 10th, U.S. tariff rates on \$200 billion in Chinese imports were hiked from 10% to 25%, and the Trump administration noted that 25% tariffs on an additional \$325 billion in imports were being considered. China responded in kind with commensurate tariff rate hikes on their U.S. imports.
- Yields on 10-year Italian bonds rose from 2.55% to 2.67%, fueled by a shift in the Italian political landscape favoring the Northern League, a Euro-skeptic party.
- The Trump administration blacklisted the Chinese firm Huawei, cutting it off from U.S. suppliers, and indicated that additional Chinese tech/surveillance firms were being considered for the blacklist. In China, President Xi visited a major rare earths production facility, stoking rumors that an export ban could be implemented.
- President Trump threatened to impose tariffs on all Mexican goods unless serious efforts were made to address illegal immigration. Tariffs would start at 5% on June 10th and rise monthly toward a maximum of 25%.

GLOBAL SOVEREIGN 10-YEAR YIELDS



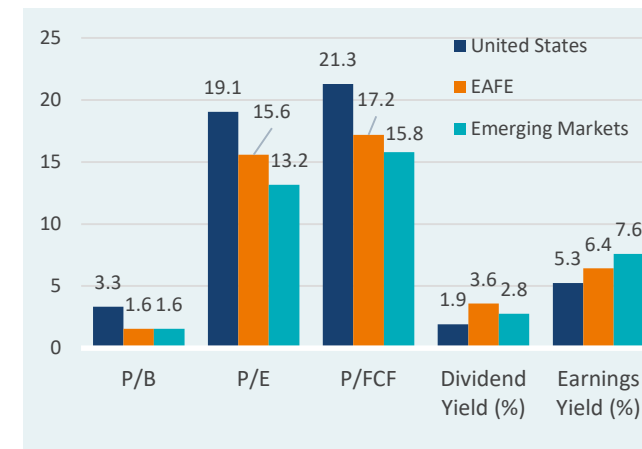
Source: Bloomberg, as of 5/31/19

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 5/31/19

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 5/31/19

Commodities

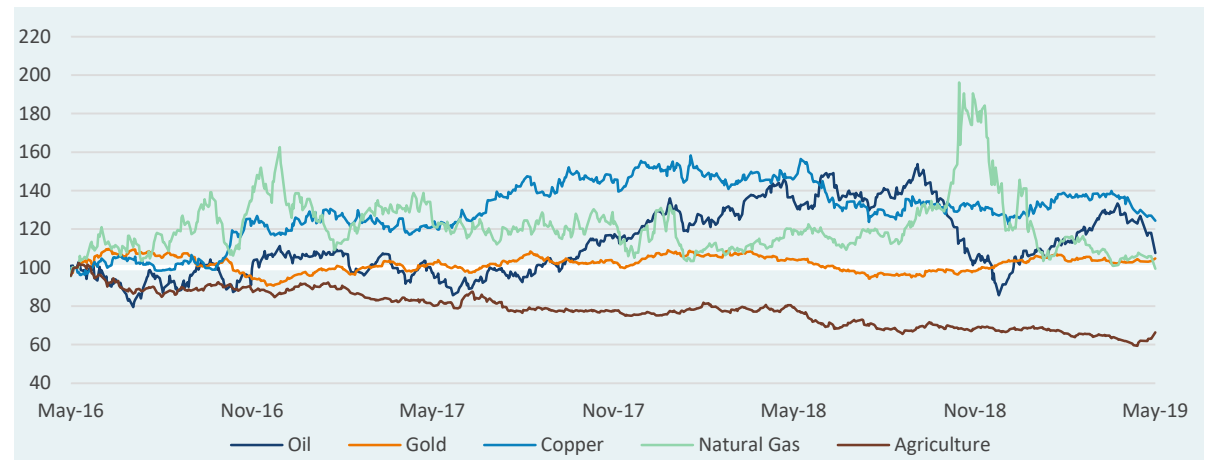
- The Bloomberg Commodity Index fell 3.4% amidst widely dispersed commodity sector returns. Energy (-12.0%), Petroleum (-13.6%), and Industrial Metals (-5.9%) led the overall index lower, while Grains (+12.4%) provided some support.
- The Energy sector dropped 12.0% in May, and crude oil led the decline. A barrel of West Texas Intermediate crude oil fell 16.5% to \$53.50 as demand concerns based on geopolitical developments coincided with a glut in domestic supply.
- Industrial Metals (-5.9%) struggled in May, as corporations around the globe worked to unpack the implications of the evolving trade narrative between the United States and China. Within the sector, copper (-9.2%) and zinc (-10.7%) underperformed.
- The Grains (+12.4%) sector, led by corn (+18.8%), was the top performer in the overall commodity index, as adverse global weather conditions softened supply outlooks. U.S. farmers faced planting delays due to flooded croplands while Australian farmers suffered a third year of drought.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	(3.4)	(3.8)	2.3	(12.4)	(1.7)	(9.5)	(4.2)
Bloomberg Agriculture	7.6	4.0	0.7	(14.7)	(9.9)	(11.0)	(3.9)
Bloomberg Energy	(12.0)	(8.2)	6.4	(15.3)	(0.8)	(18.5)	(12.0)
Bloomberg Grains	12.4	8.1	1.8	(12.1)	(10.1)	(11.9)	(5.3)
Bloomberg Industrial Metals	(5.9)	(9.1)	2.6	(16.9)	8.0	(2.9)	(0.1)
Bloomberg Livestock	(5.6)	(7.8)	(3.5)	2.7	(1.6)	(5.1)	(1.8)
Bloomberg Petroleum	(13.6)	(7.5)	16.5	(17.4)	2.3	(16.5)	(6.5)
Bloomberg Precious Metals	0.7	(0.2)	(0.1)	(3.0)	0.2	(1.2)	1.5
Bloomberg Softs	0.9	(1.8)	(1.4)	(19.5)	(11.0)	(12.4)	(4.3)

Source: Morningstar, as of 5/31/19

COMMODITY PERFORMANCE



Source: Bloomberg, as of 5/31/19

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	2018	YTD	5-Year	10-Year
Large 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	6.7	13.7	12.3	15.6
Small Cap Growth	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	1.9	11.8	9.5	14.0
Large Cap Equity	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	0.0	11.0	9.1	13.9
Small Cap Equity	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	-1.5	9.3	8.3	12.8
Large Cap Value	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	-3.5	8.5	6.7	12.3
International 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	-4.8	7.6	6.5	11.7
60/40 Global Portfolio	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	-6.0	6.9	5.0	8.5
Small Cap Value	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	-8.3	6.7	3.6	6.9
Hedge Funds of Funds	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	-9.3	4.9	2.7	6.2
US Bonds	-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	-11.0	4.8	2.2	5.0
Emerging Markets Equity	-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	7.0	-11.2	4.1	1.8	3.8
Commodities	-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	-12.9	2.3	1.3	3.1
Real Estate	-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	-13.8	1.8	0.8	0.5
Cash	-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	-14.6	1.0	-9.5	-4.2

BEST

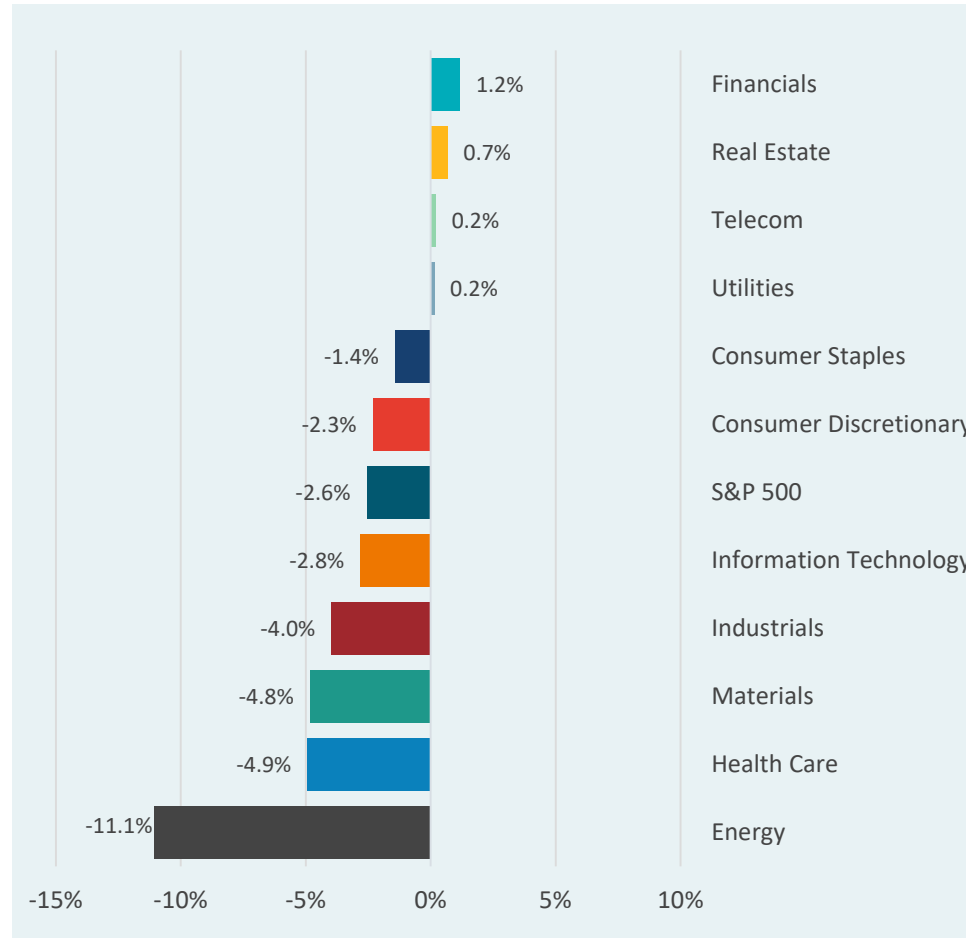
WORST

 Large Cap Equity	 Small Cap Growth	 Commodities
 Large Cap Value	 International Equity	 Real Estate
 Large Cap Growth	 Emerging Markets Equity	 Hedge Funds of Funds
 Small Cap Equity	 US Bonds	 60% MSCI ACWI/40% BBgBarc Global Bond
 Small Cap Value	 Cash	

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 3/31/19.

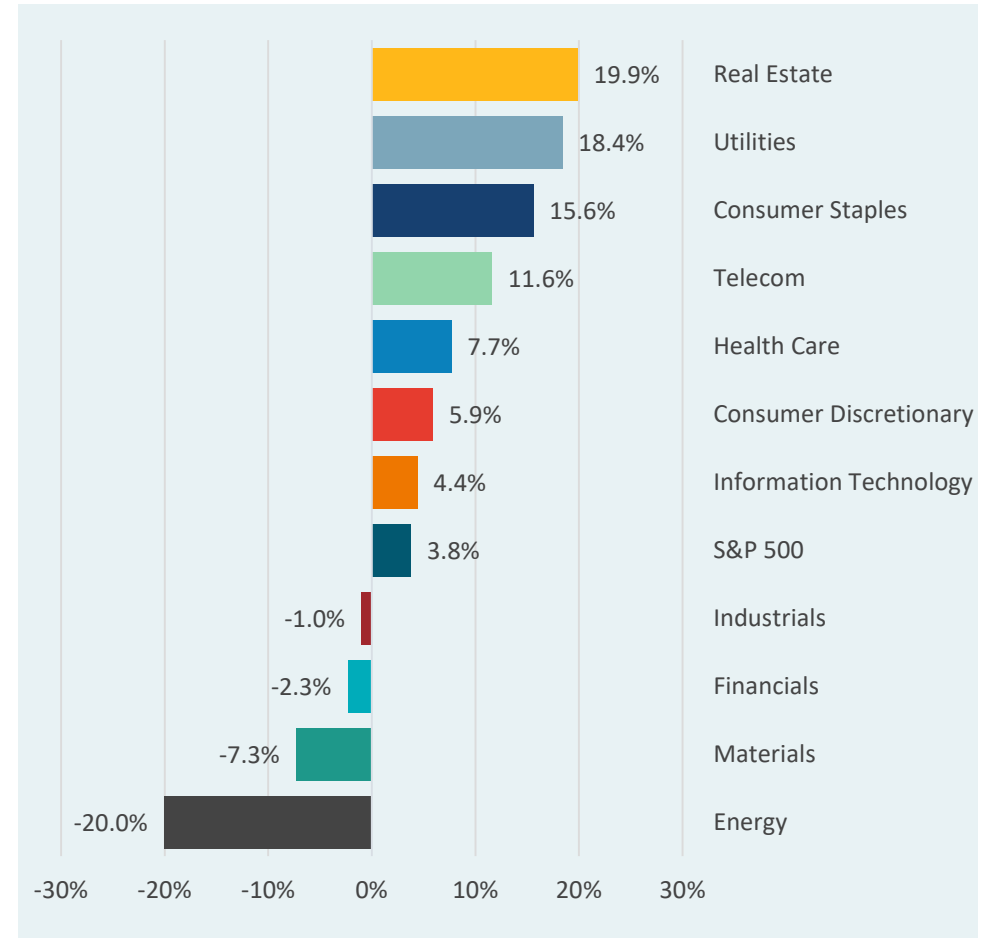
S&P 500 sector returns

QTD



Source: Morningstar, as of 5/31/19

ONE YEAR ENDING MAY



Source: Morningstar, as of 5/31/19

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	(6.4)	(2.6)	10.7	3.8	11.7	9.7	13.9
S&P 500 Equal Weighted	(6.9)	(3.5)	10.8	1.5	9.7	8.2	14.6
DJ Industrial Average	(6.3)	(3.8)	7.5	4.0	14.4	10.9	14.2
Russell Top 200	(6.5)	(2.6)	10.1	4.2	12.4	10.1	13.9
Russell 1000	(6.4)	(2.6)	11.0	3.5	11.7	9.5	14.0
Russell 2000	(7.8)	(4.6)	9.3	(9.0)	9.8	6.7	12.8
Russell 3000	(6.5)	(2.7)	10.9	2.5	11.5	9.2	13.9
Russell Mid Cap	(6.1)	(2.6)	13.5	1.6	9.9	7.9	14.4
Style Index							
Russell 1000 Growth	(6.3)	(2.1)	13.7	5.4	15.3	12.3	15.6
Russell 1000 Value	(6.4)	(3.1)	8.5	1.4	8.0	6.5	12.3
Russell 2000 Growth	(7.4)	(4.6)	11.8	(6.9)	11.7	8.3	13.9
Russell 2000 Value	(8.2)	(4.7)	6.7	(11.3)	7.7	5.0	11.7

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	(5.9)	(2.8)	9.1	(1.3)	9.1	5.2	9.4
MSCI ACWI ex US	(5.4)	(2.9)	7.1	(6.3)	6.7	1.3	5.8
MSCI EAFE	(4.8)	(2.1)	7.6	(5.7)	5.8	1.3	6.2
MSCI EM	(7.3)	(5.3)	4.1	(8.7)	9.9	1.8	5.0
MSCI EAFE Small Cap	(5.3)	(2.4)	8.0	(11.9)	5.6	3.8	9.4
Style Index							
MSCI EAFE Growth	(3.9)	(0.7)	11.2	(3.3)	6.8	3.2	7.5
MSCI EAFE Value	(5.8)	(3.6)	4.0	(8.2)	4.8	(0.7)	4.8
Regional Index							
MSCI UK	(6.0)	(3.9)	7.5	(7.6)	3.9	(1.1)	6.2
MSCI Japan	(4.0)	(2.6)	3.9	(10.0)	5.9	4.8	5.6
MSCI Euro	(6.4)	(1.6)	8.0	(7.3)	5.5	(0.4)	4.6
MSCI EM Asia	(8.8)	(7.1)	3.2	(12.4)	10.0	3.8	6.8
MSCI EM Latin American	(2.0)	(1.6)	6.1	8.2	12.6	(1.1)	1.5

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US TIPS	1.7	2.0	5.2	4.4	2.5	1.6	3.6
BBgBarc US Treasury Bills	0.2	0.4	1.0	2.3	1.3	0.8	0.5
BBgBarc US Agg Bond	1.8	1.8	4.8	6.4	2.5	2.7	3.8
Duration							
BBgBarc US Treasury 1-3 Yr	0.7	0.9	1.9	3.5	1.3	1.1	1.1
BBgBarc US Treasury Long	6.5	4.6	9.5	11.0	2.9	5.4	6.5
BBgBarc US Treasury	2.4	2.1	4.2	6.3	1.8	2.3	2.9
Issuer							
BBgBarc US MBS	1.3	1.2	3.4	5.5	2.1	2.5	3.2
BBgBarc US Corp. High Yield	(1.2)	0.2	7.5	5.5	7.0	4.4	9.3
BBgBarc US Agency Interm	1.0	1.1	2.5	4.4	1.6	1.6	2.0
BBgBarc US Credit	1.5	2.0	6.9	7.4	3.7	3.5	5.8

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	(3.4)	(3.8)	2.3	(12.4)	(1.7)	(9.5)	(4.2)
Wilshire US REIT	0.4	0.2	16.3	13.8	5.8	7.7	15.1
CS Leveraged Loans	(0.2)	1.4	5.2	4.0	5.4	3.9	6.7
Alerian MLP	(1.0)	(2.2)	14.8	1.5	0.5	(5.9)	8.7
Regional Index							
JPM EMBI Global Div	0.4	0.7	7.7	7.5	5.5	4.7	7.6
JPM GBI-EM Global Div	0.3	0.1	3.0	0.3	4.4	(1.3)	3.0
Hedge Funds							
HFRI Composite	(1.5)	(0.2)	5.3	(0.9)	4.4	2.8	4.5
HFRI FOF Composite	(0.6)	0.3	4.9	(0.5)	3.7	2.2	3.1
Currency (Spot)							
Euro	(0.6)	(0.8)	(2.5)	(4.5)	0.3	(4.0)	(2.4)
Pound	(3.3)	(3.3)	(1.0)	(5.3)	(4.7)	(5.6)	(2.4)
Yen	2.6	1.9	1.1	0.1	0.7	(1.3)	(1.3)

Source: Morningstar, HFR, as of 5/31/19

Notices & disclosures

Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other “forward-looking statements.” No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. (“Verus”) file a single form ADV under the United States Investment Advisors Act of 1940, as amended. Additional information about Verus Advisory, Inc. available on the SEC’s website at www.adviserinfo.sec.gov.

Verus – also known as Verus Advisory™.

This page left blank intentionally.

Board of Trustees

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



Date: June 24, 2019

To: Board of Trustees

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

Agenda Item 13: Asset Allocation June 2019

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.

Staff will report on routine liquidity management and asset mix rebalancing transactions undertaken as administrative matters.

Assuming that the Board of Trustees approval for Employer prefunding of FY19-20 pension contributions is granted and the County decides to proceed with such prefunding, the Pension Trust should receive approximately \$56.7 million of contributions in mid-July.

The adopted Investment Policy Statement requires the maintenance of a liquid reserve of three months' worth of retirement benefit payments – or about \$24 million. With the anticipated prefunding in July, Staff plans on keeping an additional \$24 million in liquid reserves and transfer those funds for benefit payments through 3Q19. This minimizes transaction costs for funds that will be drawn down in the near term for benefits.

The remainder of the prefunded contributions will be allocated following normal rebalancing guidelines to the various investment managers to keep their allocations close to the Strategic Asset Allocation targets.

No Board action is planned at this point.

Respectfully submitted

This page left blank intentionally.