

# Pension Trust

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

San Luis Obispo County  
Pension Trust

# SLOCPT

## AGENDA

### PENSION TRUST BOARD OF TRUSTEES

**Monday, June 22, 2020 9:30 AM**

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

#### MEETING MATERIALS

Materials for the meeting may be found at

<http://www.slocounty.ca.gov/Departments/Pension-Trust/Board-of-Trustees>

Any supporting documentation that relates to an agenda item for open session of any regular meeting that is distributed after the agenda is posted and prior to the meeting will also be available at this location.

#### AMERICANS WITH DISABILITIES ACT (Government Code §54953.2)

Disabled individuals who need special assistance to listen to and/or participate in any meeting of the Board of Trustees may request assistance by calling 805/781-5465, or sending an email to [SLOCPT@co.slo.ca.us](mailto:SLOCPT@co.slo.ca.us). Every effort will be made to reasonably accommodate individuals with disabilities by making meeting materials and access available in alternative formats. Requests for assistance should be made at least two days in advance of a meeting whenever possible.

#### **\* TELE-CONFERENCE / VIDEO-CONFERENCE**

**Due to the current pandemic Board of Trustees meetings are closed to the public attending in person until further notice.**

This meeting of the Board of Trustees will be held via teleconference and/or videoconference pursuant to Executive Order N-25-20, issued by Governor Newsom on March 12, 2020, Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, and Executive Order N-35-20, issued by Governor Newsom on March 21, 2020. Items of business will be limited to the matters shown on the agenda.

If you wish to view the videoconference of the meeting please access

<https://zoom.us/j/91486339991?pwd=UTk0Z3VVTXNXdjc2R3pSMDkzRjQzQT09>

If you wish to listen to the teleconference meeting, please dial 669/900-6833 (Meeting ID 914 8633 9991). If you have any questions or require additional service, please contact SLOCPT at 805/781-5465.

**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 18, 2020 (Approve Without Correction).
3. Reports of Deposits and Contributions for the month of May 2020 (Receive and File).
4. Reports of Service Retirements, Disability Retirements and DROP Participants for the month of May 2020 (Receive, Approve and File).
5. Monthly Investment Report for April 2020 (Receive and File).
6. *reserved*

**C) ORGANIZATIONAL**

None

**D) APPLICATIONS FOR DISABILITY RETIREMENT**

None

**E) OLD BUSINESS**

None

**F) NEW BUSINESS**

7. Audited Financial Statements for the period ended December 31, 2019 – 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).
8. January 1, 2020 Actuarial Valuation and Pension Contribution Rates - Presentation by Paul Wood, Plan Actuary (Approve, Receive and File, Approve Pension Contribution Rates).

9. Employer Contributions FY20-21 Prefunding Amount – (Recommend Approval)

## **G) INVESTMENTS**

10. Monthly Investment Report for May 2020 (Receive and File).
11. Asset Allocation - (Review, Discuss, and Direct Staff as necessary).

## **H) OPERATIONS**

12. Staff Reports
13. General Counsel Reports
14. Committee Reports:
  - i. Audit Committee Report
  - ii. Personnel Committee No Report
15. Upcoming Board Topics (subject to change)
  - i. July 27, 2020 (planned as a non-meeting month)
  - ii. August 24, 2020
    - a. Disability case (1)
    - b. Mid-year Financial Statements and Budget Status
    - c. Actuarial Services RFP
    - d. Quarterly Investment Report
    - e. Asset Allocation Policy – Amended Investment Policy Statement
    - f. Liquidity Pool Strategy
    - g. Private Equity Review
  - iii. September 28, 2020
    - a. Fiduciary Refresher briefing
    - b. Annual Strategic Planning session
      - Funding Policy
      - Continuity of Operations Staffing Plan
      - Topics TBD
  - iv. October 26, 2020 (planned as a non-meeting month)
  - v. November 23, 2020
    - a. Interest Crediting Rates and PEPRAs Compensation Limit
    - b. Actuarial Services RFP responses
    - c. Quarterly Investment Report
    - d. Asset Allocation Policy – Growth Asset Classes

16. Trustee Comments

**I) CLOSED SESSION**

None

**J) ADJOURNMENT**

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BOARD OF TRUSTEES**

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**MINUTES**

**May 18, 2020 \***

**PENSION TRUST  
BOARD OF TRUSTEES**

Regular Meeting of the Pension Trust  
Board of Trustees

*\* Note – all attendees participated via videoconference as noticed on the agenda for the meeting. Public access was available via videoconference or an audio-only phone-in line.*

**Board Members Present:** Guy Savage \*\* President  
Gere Sibbach Vice President  
Taylor Dacus  
Jim Hamilton \*\*  
Jeff Hamm  
Matt Janssen  
Michelle Shoresman \*\*

**Board Members Absent:** -

**Pension Trust Staff:** Carl Nelson \*\* Executive Director  
Amy Burke Deputy Director  
Jennifer Alderete Accountant

**General Counsel:** Chris Waddell

**Consultants:** Paul Wood and Thomas Lyle Gabriel Roeder Smith  
Scott Whalen Verus

**Others:** Michael Hobbs SLO County Human Resources  
Natalie Fixler SLO County Human Resources  
Lisa Winter SLOCPT staff  
Larry Batchelder SLOCREA  
Dan Andoetoe Retiree  
Andrea Paley Retiree  
M. Brown, Peter Benson, one other via teleconference

*\*\* Present at the physical location of the meeting, Room 161/162, County Government Center.*

**Call to Order:** 9:35 AM by President Savage, presiding over the meeting.

**A) PUBLIC COMMENT**

None

**B) CONSENT**

2. Minutes of the Regular Meeting of March 23, 2020 (Approve Without Correction).
3. Reports of Deposits and Contributions for the months of March and April 2020 (Receive and File).
4. Reports of Service Retirements, Disability Retirements and DROP Participants for the months of March and April 2020 (Receive, Approve and File).
5. Monthly Investment Report for March 2020 (Receive and File).
6. Social Security Section 218 Agreement - Resolution 2020-03 (Recommend Approval).

Motion: Approve the Consent items.

Public Comment: None

Discussion: Mr. Sibbach inquired about Item 6 – Social Security 218 Agreement. The need for a separate authorization to allow SLOCPT staff to participate in Social Security was discussed.

Motion Made: Mr. Hamm                      Motion Seconded: Mr. Savage

Carried: Unanimous (roll call vote)

**C) ORGANIZATIONAL**

None

**D) APPLICATIONS FOR DISABILITY RETIREMENT**

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

Discussion: Staff report.

Motion: Approval

Public Comment: None

Motion Made: Mr. Hamm                      Motion Seconded: Mr. Janssen  
Carried: Unanimous (roll call vote)

8. Application for Industrial Disability Retirement – Case 2020-01 (Recommend Approval).

Discussion: Staff report.

Motion: Approval

Public Comment: None

Motion Made: Mr. Janssen                      Motion Seconded: Ms. Shoresman

Carried: Unanimous (roll call vote)

## **E) OLD BUSINESS**

None

## **F) NEW BUSINESS**

9. 2020 Actuarial Experience Study Results - Presentation by Paul Wood, Plan Actuary of Gabriel Roeder Smith - (Discuss, Direct Actuary and Staff as necessary - Recommend Approval).

Discussion: Paul Wood, Actuary with GRS presented the 2020 Actuarial Experience Study report. Recommendations by GRS on key actuarial assumptions were covered in the presentation materials. The Trustees discussed the Actuary's recommendations on each change to actuarial assumptions at length.

Motion: Approve 2020 Actuarial Experience Study report

Motion: Approval

Public Comment: None

Motion Made: Mr. Savage                      Motion Seconded: Mr. Hamilton

Carried: Unanimous (roll call vote)

10. Actuarial Valuation – 2020 Actuarial Assumptions Approval - (Discuss, Direct Actuary and Staff as necessary – Recommend Approval).

Discussion: Trustees and staff discussed the different roles of Trustees in their official capacity and the separate roles they may have outside of the Pension Trust and that the sole responsibility in this action was as fiduciaries to the Retirement Plan.

Trustees and staff discussed actuarial assumptions at length and the recommended changes as shown below –

- Inflation: 2.250%
- Discount Rate: Range of 6.750% to 7.000% recommended. Trustees reiterated their support for a strong funding plan for the Trust with biennial experience studies, 20-year layered amortization of the UAAL targeting full funding, and realistic assumptions. All Trustees expressed support for a reduction in the Discount Rate to more realistically reflect declining long-term capital market return expectations.
  - Trustees agreed that a reduction in the Discount Rate to 6.875% (Inflation of 2.25% + Real Return assumption of 4.625%) for the 2020 Valuation was appropriate.
  - Trustees also indicated their intent to further decrease the Discount Rate assumption for the 2021 Actuarial Valuation to 6.750% to reflect their leaning towards conservatism in pension funding.
- Retiree COLA: Tier 1 – a San Luis Obispo specific assumption of 2.50%. Tier 2 and 3 COLA assumption of 2.00% (the maximum COLA allowed under the Plan).
- Salary Increase: 2.750% + merit increases.
- Payroll Growth: 2.750%
- Mortality: For post-retirement, disability, and active service – use the corresponding mortality tables from the Society of Actuaries Pub-2010 base table with the MP2019 projection table.
- Rates of Retirement: Adjust to match Experience Study data of generally slightly earlier retirements than previously assumed.
- Rates of Termination: Adjust to match Experience Study data of generally slightly higher rates of preretirement terminations than previously assumed.
- Interest Crediting Rate on member Accounts: 6.00%.

Motion: Approve actuarial assumptions for the 2020 Actuarial Valuation as follows –

- Discount rate of 6.875%
- All other recommended actuarial assumptions changes as discussed above.

Public Comment: None

Motion Made: Mr. Hamm

Motion Seconded: Mr. Savage

Carried: Unanimous (roll call vote)



11. Administrative Budget for Fiscal Year 2020-2021 - Approval – (Recommend Approval).

Discussion: Staff presented the proposed SLOCPT administrative budget for FY20-21. Trustee Savage inquired if the SLOCPT staff compensation is benchmarked to that of SLO County and would mirror any changes to SLO County. Staff verified that this was SLOCPT policy. Trustee Shoresman inquired about budgeted training cost in an environment of Covid-19 curtailed travel. Staff noted that training costs would be expected to come in well below budget for this reason.

Public Comment: None

Motion Made: Mr. Sibbach                      Motion Seconded: Mr. Janssen

Carried: Unanimous (roll call vote)

12. Reserved agenda item – not used

## **G) INVESTMENTS**

13. Quarterly Investment Report for the 1st Quarter of 2020 – Verus (Receive and File).

Discussion: Scott Whalen of Verus presented an in-depth review of 1Q20 investment markets and SLOCPT performance.

Motion: Receive and File

Public Comment: None

Motion Made: Mr. Savage                      Motion Seconded: Mr. Hamm

Carried: Unanimous (roll call vote)

14. Monthly Investment Report for April 2020

Discussion: This item not yet available and will be presented at the June 2020 meeting.

No Action Necessary

15. Asset Allocation Policy - Verus (Review, Discuss, and Direct Staff as necessary).

Discussion: Scott Whalen of Verus and Staff presented a previously discussed proposal to redesign the SLOCPT Investment Policy to use a Functionally Focused Portfolio (FFP) methodology. Trustee inquiry focused on the advantages of such an approach. Mr. Whalen noted that an FFP portfolio could be designed with similar risk or variability to current policy, but with a slightly higher expected return for greater efficiency. The risk mitigating nature of the Liquidity Pool maintained in an FFP portfolio and its size was also discussed.

Motion: Approve Staff recommendation to develop an FFP based Investment Policy and return it to the Board for future action.

Public Comment: None

Motion Made: Mr. Sibbach                      Motion Seconded: Mr. Savage

Carried: Unanimous (roll call vote)

16. Cash Overlay Strategy Review - Verus (Discuss, Direct Staff as necessary - Recommend Approval).

Discussion: Scott Whalen of Verus and Staff presented a recommendation to reactivate the previously approved Cash Overlay strategy managed by Parametric.

Motion: Approve Staff recommendation

Public Comment: None

Motion Made: Mr. Sibbach                      Motion Seconded: Mr. Savage

Carried: Unanimous (roll call vote)

17. Asset Allocation

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

No Action Necessary

## H) OPERATIONS

18. Staff Reports

- i. Trustee election – Staff reported that Trustee Shoresman was the only candidate who turned in a statement of interest to the Clerk & Recorder’s Office for the elected Trustee term she currently occupies. Accordingly, Shoresman will be certified by the C&R’s office to the Board of Supervisors for approval to the elected Trustee term running to July 2023.
- ii. CARES Act – Staff reported on certain provisions of the Federal CARES Act not readily applicable to the SLO County Retirement Plan and not recommended for adoption.
- iii. Staff reported on a May 11th presentation to the San Luis Obispo County Retired Employees Association done virtually using Zoom.
- iv. Staff reported on the functioning of the SLOCPT office and staff during the Covid crisis. At present, the SLOCPT office is closed to outside visitors and members are being serviced via phone and email without problem.

19. General Counsel Reports

- i. Counsel Waddell summarized the status of the Alameda case before the California Supreme Court.

20. Committee Reports:

- i. Audit Committee                      Scheduled for May 27, 2020
- ii. Personnel Committee              No Report

21. Upcoming Board Topics – published on meeting agenda

22. Trustee Comments

- i. Mr. Janssen reported that he intends to retire in December 2020 and that the November 2020 Board of Trustees meeting would be his last as a Trustee. The other Trustees congratulated Mr. Janssen and complimented him on his long service to the SLOCPT.

**J) CLOSED SESSION**

None

**J) ADJOURNMENT –**

There being no further business, the meeting was adjourned at 1:33 PM. The next Regular Meeting was set for June 22, 2020, at 9:30 AM, in the Board of Supervisors chamber, County Government Center, San Luis Obispo, California 93408.

Respectfully submitted,

Carl Nelson  
Executive Director

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**REPORT OF DEPOSITS AND CONTRIBUTIONS FOR THE MONTH OF  
MAY 2020**

PP 10 5/8/2020	By Employer and Tier:	Pensionable	Employer	Employer	Employee	Employer for	Employee	Combined	Additional	Buy	TOTAL
		Salary	Contributions	Rate	Contributions	Employee Contributions	Rate	Rate	Contributions	Backs	Contributions
	County Tier 1	3,262,215.11	837,114.94	25.66%	392,017.01	277,537.31	20.52%	46.19%	912.50	47,611.33	1,555,193.09
	County Tier 2	996,514.71	267,016.36	26.80%	49,398.45	85,090.67	13.50%	40.29%	-	361.58	401,867.06
	County Tier 3	3,382,145.45	847,940.41	25.07%	418,537.96	-	12.37%	37.45%	-	780.88	1,267,259.25
	Superior Court Tier 1	251,669.74	70,154.06	27.88%	46,961.53	-	18.66%	46.54%	-	-	117,115.59
	Superior Court Tier 3	108,696.47	28,386.80	26.12%	14,171.10	-	13.04%	39.15%	-	-	42,557.90
	APCD Tier 1	57,824.02	14,301.06	24.73%	8,353.43	4,265.55	21.82%	46.56%	-	-	26,920.04
	APCD Tier 3	21,287.25	5,082.20	23.87%	2,958.86	-	13.90%	37.77%	-	-	8,041.06
	SLOCPT Tier 1	7,715.87	1,860.30	24.11%	1,026.98	716.80	22.60%	46.71%	-	-	3,604.08
	SLOCPT Tier 2	9,171.20	2,211.17	24.11%	346.67	852.01	13.07%	37.18%	-	-	3,409.85
	SLOCPT Tier 3	11,733.96	2,771.56	23.62%	1,523.88	-	12.99%	36.61%	250.00	-	4,545.44
	LAFCO Tier 1	10,832.21	3,269.43	30.18%	709.51	1,006.31	15.84%	46.02%	-	-	4,985.25
	LAFCO Tier 3	1,731.20	479.20	27.68%	161.35	-	9.32%	37.00%	-	-	640.55
	RTA Tier 2	25,056.98	6,384.51	25.48%	527.05	3,257.40	15.10%	40.58%	-	-	10,168.96
	RTA Tier 3	11,627.20	3,370.72	28.99%	1,172.13	-	10.08%	39.07%	-	-	4,542.85
		8,158,221.37	2,090,342.72	25.62%	937,865.91	372,726.05	16.06%	41.69%	1,162.50	48,753.79	\$ 3,450,850.97
<b>PP 11 5/22/2020</b>	<b>By Employer and Tier:</b>	<b>Pensionable</b>	<b>Employer</b>	<b>Employer</b>	<b>Employee</b>	<b>Employer for</b>	<b>Employee</b>	<b>Combined</b>	<b>Additional</b>	<b>Buy</b>	<b>TOTAL</b>
		<b>Salary</b>	<b>Contributions</b>	<b>Rate</b>	<b>Contributions</b>	<b>Employee Contributions</b>	<b>Rate</b>	<b>Rate</b>	<b>Contributions</b>	<b>Backs</b>	<b>Contributions</b>
	County Tier 1	3,270,308.13	839,033.68	25.66%	392,912.58	278,362.57	20.53%	46.18%	912.50	144,637.95	1,655,859.28
	County Tier 2	1,002,004.17	267,878.54	26.73%	50,458.00	84,990.35	13.52%	40.25%	-	332.54	403,659.43
	County Tier 3	3,394,999.74	849,960.15	25.04%	419,677.17	-	12.36%	37.40%	-	809.92	1,270,447.24
	Superior Court Tier 1	250,618.95	69,554.45	27.75%	46,564.23	-	18.58%	46.33%	-	-	116,118.68
	Superior Court Tier 3	107,699.53	28,447.54	26.41%	14,192.64	-	13.18%	39.59%	-	-	42,640.18
	APCD Tier 1	58,164.46	14,383.21	24.73%	8,417.94	4,285.13	21.84%	46.57%	-	-	27,086.28
	APCD Tier 3	21,044.82	5,024.86	23.88%	2,924.24	-	13.90%	37.77%	-	-	7,949.10
	SLOCPT Tier 1	7,715.87	1,860.30	24.11%	1,026.98	716.80	22.60%	46.71%	-	-	3,604.08
	SLOCPT Tier 2	9,171.20	2,211.17	24.11%	346.67	852.01	13.07%	37.18%	-	-	3,409.85
	SLOCPT Tier 3	11,733.96	2,771.56	23.62%	1,523.88	-	12.99%	36.61%	250.00	-	4,545.44
	LAFCO Tier 1	10,832.21	3,269.43	30.18%	709.51	1,006.31	15.84%	46.02%	-	-	4,985.25
	LAFCO Tier 3	1,731.20	479.20	27.68%	161.35	-	9.32%	37.00%	-	-	640.55
	RTA Tier 2	25,056.98	6,384.51	25.48%	527.05	3,257.40	15.10%	40.58%	-	-	10,168.96
	RTA Tier 3	11,627.20	3,370.72	28.99%	1,172.13	-	10.08%	39.07%	-	-	4,542.85
		8,182,708.42	2,094,629.32	25.60%	940,614.37	373,470.57	16.06%	41.66%	1,162.50	145,780.41	\$ 3,555,657.17
<b>TOTAL FOR THE MONTH</b>		<b>16,340,929.79</b>	<b>4,184,972.04</b>	<b>25.61%</b>	<b>1,878,480.28</b>	<b>746,196.62</b>	<b>16.06%</b>	<b>41.67%</b>	<b>2,325.00</b>	<b>194,534.20</b>	<b>\$ 7,006,508.14</b>
<b>TOTAL YEAR TO DATE</b>		<b>88,447,922.00</b>	<b>22,625,359.58</b>	<b>25.58%</b>	<b>10,178,639.69</b>	<b>4,112,828.32</b>	<b>16.16%</b>	<b>41.74%</b>	<b>14,248.00</b>	<b>260,535.78</b>	<b>37,191,611.37</b>

**REPORT OF RETIREMENTS****May 2020**

<b>RETIREE NAME</b>	<b>DEPARTMENT</b>	<b>BENEFIT TYPE *</b>	<b>EFFECTIVE DATE</b>	<b>MONTHLY BENEFIT</b>	<b>SS TEMP ANNUITY**</b>
Cook, Edward T	Facilities Management	Service Retirement	05/02/2020	2,093.61	False
Garman, Kathie L	Superior Court	Service Retirement	04/18/2020	1,443.74	False
LeBoeuf, Edith Isabell	Sheriff-Coroner	Service Retirement	04/20/2020	726.01	False
Peron, Gayle L	Superior Court	Service Retirement	04/01/2020	4,132.02	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  
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Date: May 22, 2020

To: Board of Trustees

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

### **Item 14: Monthly Investment Report for April 2020**

	April	Year to Date 2020		2019	2018	2017	2016	2015
Total Trust Investments (\$ millions)	\$1,308			\$1,446 year end	\$1,285 year end	\$1,351 year end	\$1,196 year end	\$1,148 year end
<b>Total Fund Return</b>	4.7% Gross	<b>-8.2%</b> Gross		16.3 % Gross	-3.2 % Gross	15.5 % Gross	6.6 % Gross	-0.8% Gross
Policy Index Return (r)	5.0%	-4.3%		16.4 %	-3.2 %	13.4 %	7.7 %	-0.5 %

(r) Policy index as of April 1, 2020 revision to Strategic Asset Allocation Policy: 21% domestic equity, 21% international equity, 15% core bonds, 6% bank loans, 5% global bonds, 5% emerging market debt, 17% real estate, 0% commodities, 5% private equity, 5% private credit.

### **SLOCPT Investment Returns:**

The attached report from Verus covers the preliminary investment returns of the SLOCPT portfolio and general market conditions through the end of April. The attached market commentary from Verus details market conditions in April, but subsequent activity in May is not yet factored into these numbers.

Staff estimates on a preliminary basis that Total Fund Return in **May month-to-date is approximately 0%.**

## **The Economy and Capital Markets:**

### ➤ **Covid-19 Pandemic Impact -**

- The rapid global spread of the SARS-CoV-2 virus continues, but with some “flattening of the curve in the U.S. While infection rates in New York have declined from very high peaks in April, the remainder of the U.S. continues to see modest increase in the rate of infection. This stretches out hopes for reopening of economic activity as the danger abates.
- Comparisons of the Covid-19 outbreak to previous outbreaks of SARS, MERS, Ebola, and Swine Flu illustrate why this pandemic is more widespread and economically disruptive.
  - SARS-CoV-2 has a high rate of transmissibility – still to be accurately measured but, estimated at an  $R_0$  factor of about 1.5 to 3.5. The  $R_0$  factor is the number of people infected by one infected person – i.e., a  $R_0$  factor of 2 = a squared exponential growth rate. The mortality rate for SARS-CoV-2 is around 1.4% or 14x higher than seasonal influenza.
  - In contrast the mortality rate for SARS (9.6%), MERS (34%), and Ebola (50%) are far higher, but the  $R_0$  transmissibility factor is a fraction of that of SARS-CoV-2. These diseases are transmissible generally only during and after symptoms are apparent and with close contact. Hence, these other diseases are dangerous, but infect exponentially smaller numbers.
  - The 2009 pandemic of Swine Flu – H1N1 – was highly transmissible like SARS-CoV-2 including pre-symptomatic transmission. The  $R_0$  factor for transmissibility of H1N1 is about 1.4 to 1.6. H1N1 may have infected over 1 billion people by the end of 2010. However, H1N1’s symptoms were far milder and had a mortality rate less than 0.1%.
  - SARS-CoV-2 as the virus that causes Covid-19 combines the potent combination of a high  $R_0$  transmissibility factor, pre-symptomatic transmission, highly damaging health impairments and a moderately high mortality rate. Hence, the economic disruption caused by efforts to limit Covid-19 is necessarily severe.

### ➤ **Global Recession -**

- Fed Chair Powell at a May 12<sup>th</sup> address included comments that were sobering to the capital markets –
  - On the topic of fiscal policy responses Powell commented “The recovery may take some time to gather momentum, and the passage of time can turn liquidity problems into solvency problems.”... “Additional fiscal support could be costly, but worth it if it helps avoid long-term economic damage and leaves us with a stronger recovery”
  - Powell commented that the Fed had the ability to act as a “bridge across temporary disruptions to liquidity” but suggested that far more than a temporary bridge may be needed to counter the large and uncertain impact on the economy.



- “While the economic response has been both timely and appropriately large, it may not be the final chapter, given that the path ahead is both highly uncertain and subject to significant downside risk. Since the answers are currently unknowable, policies will need to be ready to address a range of possible outcomes.”
- On unemployment, Mr. Powell said that America’s unemployment rate will probably peak “over the course of the next month or so” and might come down sharply as the economy recovers, but that it will probably take some time to get back to the very-low jobless levels that prevailed before the coronavirus.”

➤ **Policy Responses**

- Monetary Policy – The Fed continued with its 0% Fed Funds rate floor and unprecedented provision of liquidity to the financial markets through nine emergency lending programs.
- Fiscal Policy – The Federal government continues to debate new phases of economic stimulus. The initial rounds of stimulus with an unprecedented addition to the deficit from a rapid \$2+ trillion series of measures. Pending points of contention include stimulus aid to state and local governments that face massive shortfalls in revenue and increases in necessary social expenditures.

➤ **Economic Recovery**

- Forecasts of whether the U.S. economic recovery will be a protracted “U-shaped” recovery are highly speculative and depend on complex variables for unprecedented circumstances. In other words – no one really knows.
- The apparent most common outlooks are for a protracted U-shaped recovery with negative GDP growth in 2Q20 and 3Q20 and flat for 4Q20. Followed by a mild bounce back in 2021. While the underlying economic conditions going into the pandemic crises were strong which encourages a rapid return to normal, lingering effects of a protracted pandemic on consumer spending may slow the return to growth and employment.
- A more positive outlook for a V-shaped recovery was recently published by Beacon Economics, a well-known Central Coast economics firm. The following are excerpts from the conclusions of Beacon’s May report – “*The Post Covid-19 Economy – A Case for the “V”.*”

“There is no doubt that the 10 million plus people who are entering into unemployment will face a challenging period even with expanded unemployment benefits and direct payments from the Federal government. Many small businesses are also being pushed close to the edge as they wait to restart operations. But among much of the consuming public, savings rates are good, debt burdens are low, and consumers are maintaining their earnings. For this group the inability to spend money during the public health mandated shutdowns will lead to a surge in savings and significant pent up demand. While some households will not be able to spend as much post-pandemic, others will likely spend considerably more than usual. The same applies to businesses and investors.”

“All this does not suggest a “U”, but a very large and rapid “V”. The second quarter will definitely post record negatives, but that will be followed by record positives in the last half of the year as we quickly return to normalcy. We see GDP growth as follows: 0% in Q1, -30% in Q2, 25% in Q3, and 5% in Q4, with unemployment falling back to the low 4’s over the year. Not all of the damage will be erased, but much of it will and things should largely return to normal faster than many expect. Indeed, we may find that the second quarter will be the only negative growth quarter of the year, which will cause plenty of debate over whether this was or wasn’t a true recession.” ...

“The Fed has now injected trillions of dollars into short term credit markets, but it looks like much of the panic has already passed. Credit markets are settling down and the economy will, in the short term at least, enjoy record low interest rates along with lower gas prices and all the other benefits that come from falling commodity prices. This will also help with the third quarter bounce.”...

“While we believe that the most likely outcome for the U.S. economy is better than what most forecasts are currently suggesting, we must also be humble in the face of such an unprecedented shock. In this case there are two major wildcards. The first, of course, is the virus itself. They are wily things and can take strange and unanticipated twists and turns. If the spread of the Coronavirus should spiral out of control again, public health mandates will once again take over and more damage will be done. But even in such a case, public response should be faster and more forceful the second time around, allowing us to weather the storm better. The global population has experienced a big learning curve and we are likely to continue behaving vigilantly, which will help limit negative outcomes.”

The second wildcard is whether there will be a dramatic shift in consumer behavior after the pandemic ends. Certainly, people will wash their hands more often and handshakes may well become a thing of the past, but will consumers stop going to ballgames and music festivals? Will they be too afraid to go to restaurants?”...

“While we believe a “V” recovery is ahead, we say so very cautiously, and hope the false narrative that the ‘cure is worse than the disease’ is not allowed to push us off our current path.”

Let’s hope Beacon Economics is right.

### ➤ **Equity Markets**

- Equity markets globally responded to the pandemic and its economic fallout with unprecedented rapidity of their falls in March. The U.S. domestic stock S&P 500 index declined from a high of 3,386 in mid-February to a bottom on March 23<sup>rd</sup> at 2,237 – a 33% drop. Since that date, the S&P 500 has rallied – albeit with heightened volatility – to 2,955 on May 22<sup>nd</sup>. Thus far the S&P 500 has retraced about over half of its fall and is +32% off its March 23<sup>rd</sup> bottom and down -12% from its February peak.

➤ **Debt Markets**

- With the aggressive monetary policy response Treasury Bond yields fell precipitously with the 10-year Treasury bond going from about a 1.50% yield in mid-February to a 0.66% yield on May 22nd. The March expansion of credit spreads (corporate debt yields less the corresponding maturity Treasury yield) that severely lowered total bond returns abated somewhat in April.

➤ **Fed Policy and Interest Rates –**

- At the April 29<sup>th</sup> FOMC meeting the Fed reiterated its commitment to support the economy and investment market functioning through near-unlimited provision of liquidity via asset purchases. The Fed indicated no hurry to increase interest rates and intends to keep the Fed Funds rate near its lower bound of 0% until economic recovery.

➤ **Oil Prices –**

- Oil prices recovered to more normal levels in the \$33/barrel range in mid-May. The global reduction in oil demand and the production cutbacks of OPEC and Russia stabilized the oil market. However, oil prices are roughly half of what they were in 2019.

➤ **Inflation –**

- The outlook for inflation is another source of uncertainty in the pandemic and recovery.
- In the near/medium term the demand shock of a global contraction due to the pandemic and oil market turmoil is likely disinflationary (a falling rate of inflation, but not necessarily widespread deflation). The disinflationary/deflationary impact may fall more heavily on sectors suffering longer term demand contractions such as airlines and hotels.
- In the longer term, inflationary pressures are less clear and may be impacted by –
  - Cost-Push Inflation – As many suppliers to the consumer economy contend with cost impacts (e.g., restaurants operating at ½ capacity) some consumer prices may increase. Also, supply chain reorganization as globalization partially recedes and producers seeking resiliency in their sources shorten their supply chains may contribute to higher costs.
  - Monetary Policy based Inflation - The unprecedented creation of money supply through deficit spending may tap into the classic source of inflation – too many dollars chasing too few goods. However, this interpretation is suspect given that the monetary policy response is primarily building central bank balance sheets as they purchase debt instruments – not wholesale pouring of money out to the populace.

➤ **Employment and Wages –**

- The April DOL report from the BLS on nonfarm employment showed that Unemployment surged to 14.7% - from its February low of 3.5%. A 20% unemployment rate is conceivable on a short-term basis.
- Unemployment - by May 21<sup>st</sup>, applications for unemployment benefits in the U.S. over the last nine weeks surged past 36 million. Effectively about ¼ of the workforce. While many job losses are temporary layoffs that may be reversed within months as the economy reopens in stages, it is likely that unemployment will be above 10% through year end.
- The impact on income from the Covid crisis is substantially softened by the large stimulus contained in the CARES Act. Michael Cembalest of JP Morgan in his May 4<sup>th</sup> Eye on the Market newsletter commented on income effects –  

“Is US fiscal stimulus “enough”? Hard to define exactly, but here are some metrics we have seen that put stimulus in context. Overall worker incomes may only decline by 3% in 2020; the original 11% hit to incomes may be offset by 8% from government transfers. Furthermore, 65%-75% of workers laid off may be receiving more state and local unemployment benefits than lost wages (at least through the program’s initial expiration date at the end of July), all of which may result in a remarkable 0.5% increase in personal disposable income this year vs 2019.”

Respectfully Submitted,

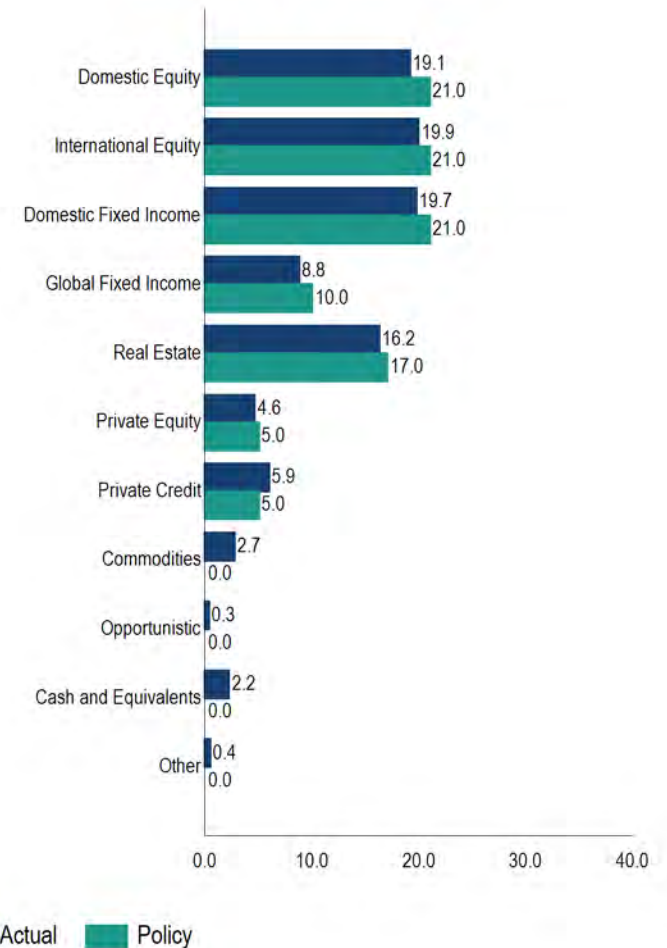
# San Luis Obispo County Pension Trust

## Executive Summary - Preliminary (Gross of Fees)

Period Ending: April 30, 2020

	Market Value	% of Portfolio	1 Mo	YTD
<b>Total Fund</b>	<b>1,307,925,345</b>	<b>100.0</b>	<b>4.7</b>	<b>-8.2</b>
<i>Policy Index</i>			5.0	-4.3
<b>Total Domestic Equity</b>	<b>249,982,907</b>	<b>19.1</b>	<b>12.2</b>	<b>-13.9</b>
<i>Russell 3000</i>			13.2	-10.4
PIMCO RAE Fundamental PLUS Instl	50,049,700	3.8	11.3	-19.7
<i>S&amp;P 500</i>			12.8	-9.3
Loomis Sayles Large Cap Growth	82,403,120	6.3	12.1	-0.4
<i>Russell 1000 Growth</i>			14.8	-1.4
Boston Partners Large Cap Value	64,653,104	4.9	12.1	-20.4
<i>Russell 1000 Value</i>			11.2	-18.5
Atlanta Capital Mgmt	52,876,983	4.0	13.4	-17.4
<i>Russell 2500</i>			14.6	-19.5
<b>Total International Equity</b>	<b>260,685,673</b>	<b>19.9</b>	<b>8.4</b>	<b>-16.5</b>
<i>MSCI ACWI ex USA Gross</i>			7.6	-17.4
Dodge & Cox Intl Stock	111,075,134	8.5	7.6	-25.1
<i>MSCI EAFE Gross</i>			6.5	-17.7
WCM International Growth	149,610,539	11.4	8.9	-8.9
<i>MSCI ACWI ex USA Gross</i>			7.6	-17.4
<b>Total Domestic Fixed Income</b>	<b>258,046,296</b>	<b>19.7</b>	<b>3.2</b>	<b>0.8</b>
<i>BBgBarc US Aggregate TR</i>			1.8	5.0
BlackRock Core Bond	94,985,717	7.3	3.4	4.0
<i>BBgBarc US Aggregate TR</i>			1.8	5.0
Dodge & Cox Income Fund	97,246,382	7.4	3.0	2.4
<i>BBgBarc US Aggregate TR</i>			1.8	5.0
Pacific Asset Corporate Loan	65,814,196	5.0	3.3	-6.4
<i>S&amp;P/LSTA Leveraged Loan Index</i>			4.5	-9.1
<b>Total Global Fixed</b>	<b>114,642,970</b>	<b>8.8</b>	<b>2.6</b>	<b>-14.8</b>
<i>FTSE World Govt Bond Index</i>			1.2	3.2
Brandywine Global Fixed Income	55,723,089	4.3	2.5	-10.0
<i>FTSE WGBI ex US TR</i>			1.5	-0.4
Ashmore EM Blended Debt Fund	58,919,881	4.5	2.6	-19.4
<i>50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELMI+</i>			2.4	-10.5

Actual vs Target Allocation (%)



\*Other balance represents Clifton Group.

Policy Index (4/1/2020): 21% Russell 3000, 21% MSCI ACWI ex. US, 31% BBgBarc Aggregate, 17% NCREIF Property, 5% Russell 3000 + 300 bp lagged, 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. Direct RE liquidated 5/3/2019. Pathway 10 funded 3/25/2020. TPG Adjacent Opportunities Partners funded 4/16/2020. 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.

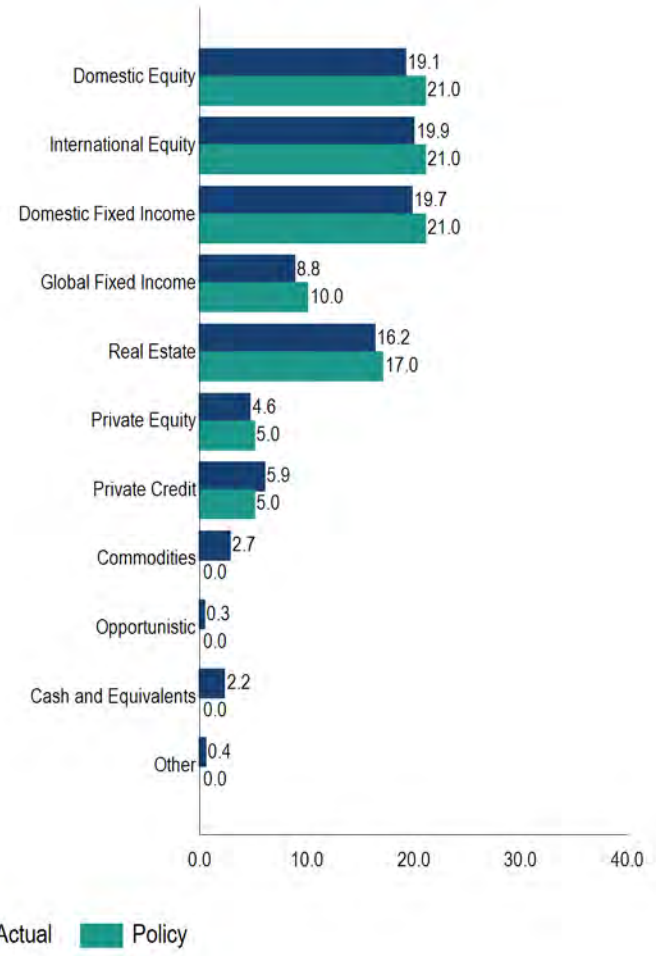
# San Luis Obispo County Pension Trust

## Executive Summary - Preliminary (Gross of Fees)

Period Ending: April 30, 2020

	Market Value	% of Portfolio	1 Mo	YTD
<b>Total Real Estate</b>	<b>212,494,111</b>	<b>16.2</b>	<b>0.4</b>	<b>1.9</b>
<i>NCREIF Property Index</i>			0.0	0.7
JP Morgan Core Real Estate	173,625,226	13.3	0.2	1.6
<i>NCREIF-ODCE</i>			0.0	1.0
<i>NCREIF Property Index</i>			0.0	0.7
ARA American Strategic Value Realty	38,868,885	3.0	1.2	3.5
<i>NCREIF-ODCE</i>			0.0	1.0
<i>NCREIF Property Index</i>			0.0	0.7
<b>Total Commodities</b>	<b>35,343,674</b>	<b>2.7</b>	<b>-0.4</b>	<b>-25.4</b>
<i>Bloomberg Commodity Index TR USD</i>			-1.5	-24.5
Gresham MTAP Commodity Builder	35,343,674	2.7	-0.4	-25.4
<i>Bloomberg Commodity Index TR USD</i>			-1.5	-24.5
<b>Total Private Equity</b>	<b>60,123,930</b>	<b>4.6</b>		
Harbourvest Partners IX Buyout Fund L.P.	15,820,636	1.2		
Pathway Private Equity Fund Investors 9 L.P.	35,304,431	2.7		
Harbourvest 2018 Global Fund L.P.	7,898,185	0.6		
Pathway Private Equity Fund Investors 10 L.P.	1,100,678	0.1		
<b>Total Private Credit</b>	<b>69,922,012</b>	<b>5.3</b>		
TPG Diversified Credit Program	69,922,012	5.3		
<b>Total Cash</b>	<b>28,780,721</b>	<b>2.2</b>	<b>0.5</b>	<b>1.0</b>
<i>91 Day T-Bills</i>			0.0	0.4
Cash Account	28,780,721	2.2	0.5	1.0
<i>91 Day T-Bills</i>			0.0	0.4
<b>Total Opportunistic</b>	<b>12,108,230</b>	<b>0.9</b>		
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	4,225,695	0.3		
PIMCO Distressed Credit Fund	100,628	0.0		
TPG Adjacent Opportunities Partners	7,781,907	0.6		

Actual vs Target Allocation (%)



\*Other balance represents Clifton Group.

Policy Index (4/1/2020): 21% Russell 3000, 21% MSCI ACWI ex. US, 31% BBgBarc Aggregate, 17% NCREIF Property, 5% Russell 3000 + 300 bp lagged, 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. Direct RE liquidated 5/3/2019. Pathway 10 funded 3/25/2020. TPG Adjacent Opportunities Partners funded 4/16/2020. 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**

APRIL 2020  
Capital Markets Update

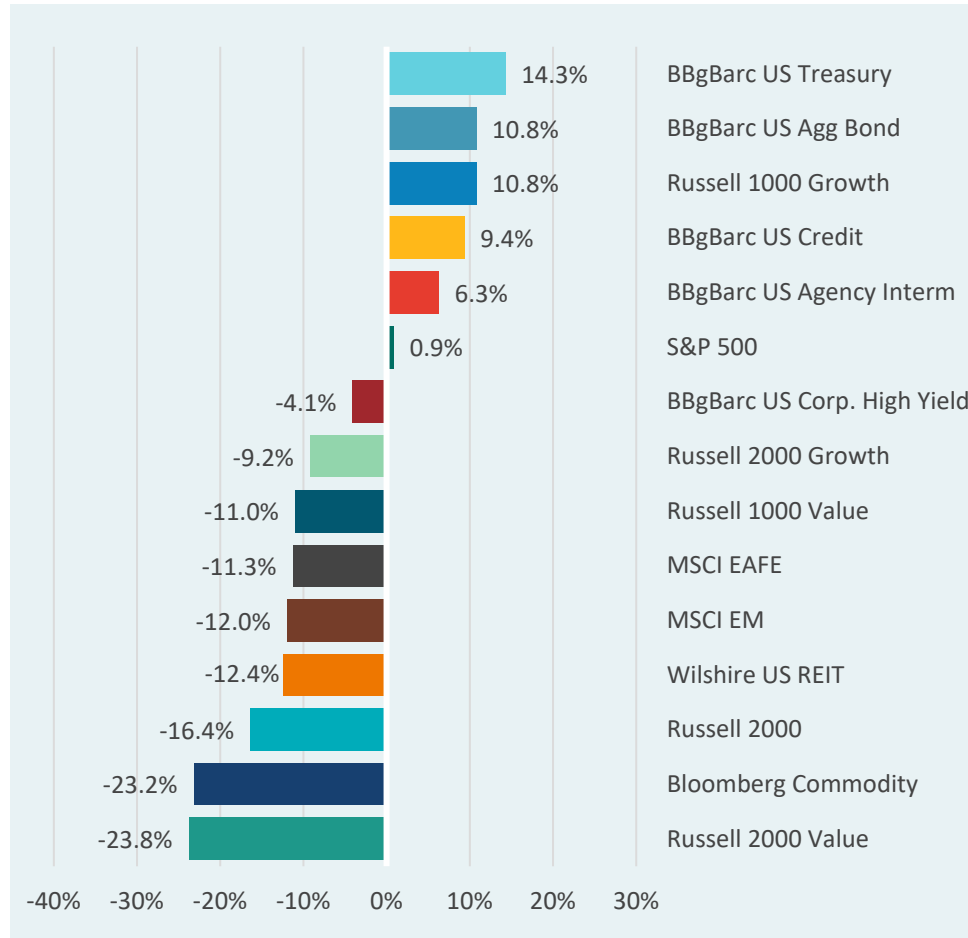


# Market commentary

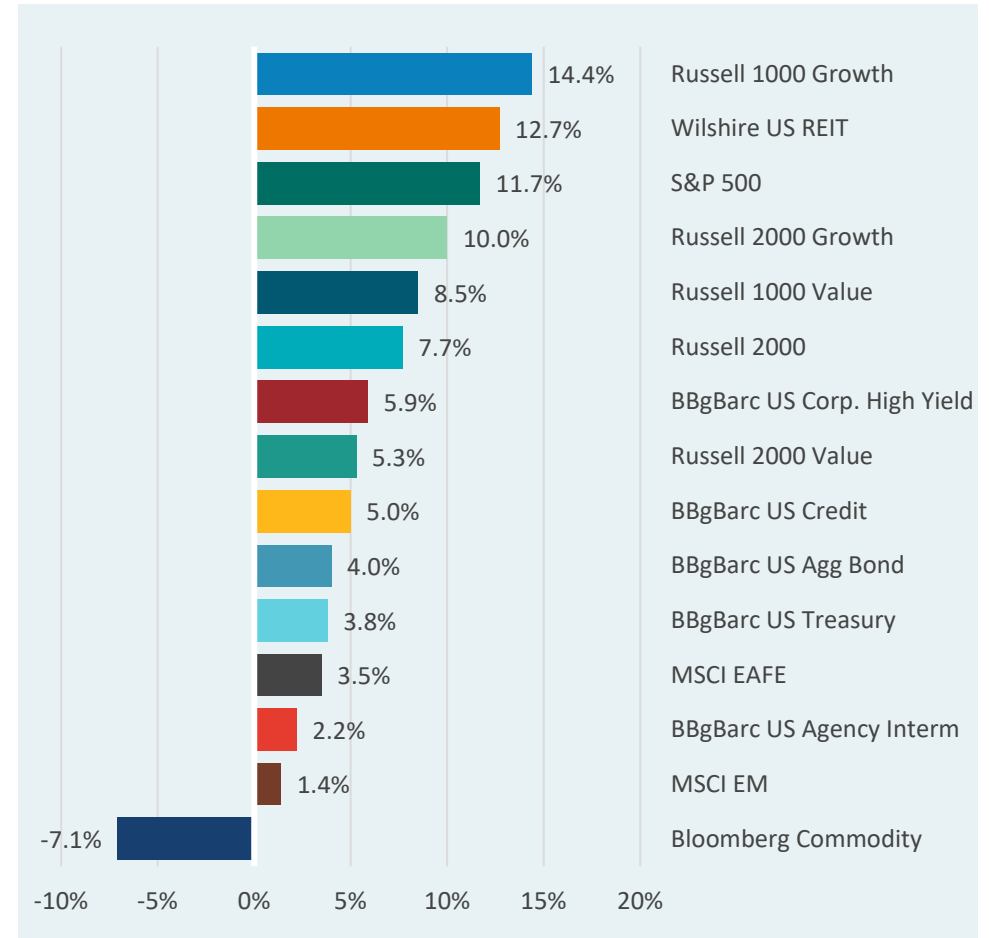


# Major asset class returns

ONE YEAR ENDING APRIL



TEN YEARS ENDING APRIL



# U.S. large cap equities

- In April, the S&P 500 Index bounced back, returning 12.9% following a precipitous slide in equity prices in the first quarter. The advance was likely supported by evidence that the transmission of COVID-19 was slowing in certain hot spots, as well as promises of both fiscal and monetary support.
- Analysts slashed earnings estimates for S&P 500 companies. During the month of April, the median EPS estimate for the index declined -28.4%. The largest decline in quarterly EPS estimates during the Global Financial Crisis was -20.6% back in Q1 2009.
- All eleven GICS sectors contributed positively to returns, and the Energy sector (+29.8%) was the top performer as concerns around oversupply faded following an OPEC+ decision to cut oil production. The Consumer Discretionary sector (+20.5%) fueled the move higher for the overall index.
- The CBOE VIX Index of implied volatility fell 19.8 points in April, starting the month at 57.1 and closing the month at 37.2. The popular “fear gauge” is still well above its 3-year average of 18.7.

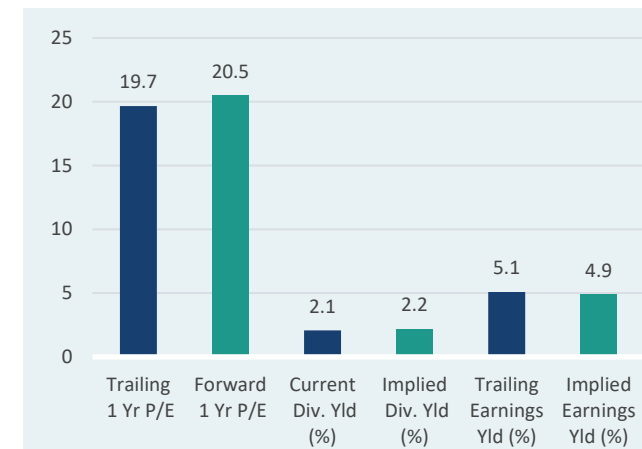
**S&P 500 PRICE INDEX**



**IMPLIED VOLATILITY (VIX INDEX)**



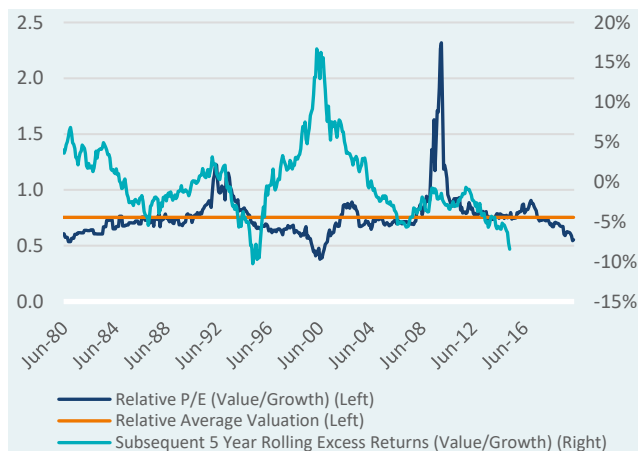
**S&P 500 VALUATION SNAPSHOT**



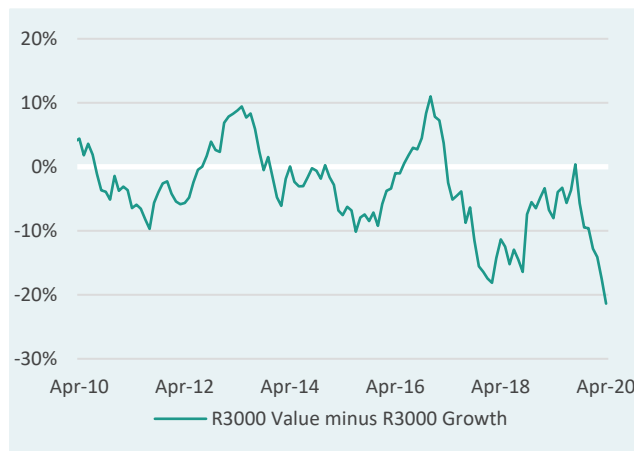
# Domestic equity size and style

- The Russell 3000 Value Index (+11.3%) continued to underperform the Russell 3000 Growth Index (+14.8%). The underperformance of the value factor relative to the growth factor was attributable to the Health Care and Consumer Discretionary sectors being more highly weighted in the growth index.
- The Russell 2000 Index advanced 13.7% while the Russell 1000 Index gained 13.2%. Small-cap equities, which tend to outperform in anticipation of higher economic growth, notched their best monthly performance since April 2011.
- The Russell Mid-Cap Index (+14.4%) outperformed the small- and large-cap indexes measured, respectively, by the Russell 2000 (+13.7%) and the Russell Top 200 (+12.8%). Some analysts have argued mid-caps are well positioned, being large enough to weather the impact of the pandemic and small enough that global supply chain disruptions may not affect them quite as hard.
- The S&P 500 Low Volatility High Dividend Index (+10.7%) underperformed the S&P 500 Index (+12.8%). Mega-cap tech stocks powered the S&P 500 rebound in April while safer, higher-yielding stocks lagged.

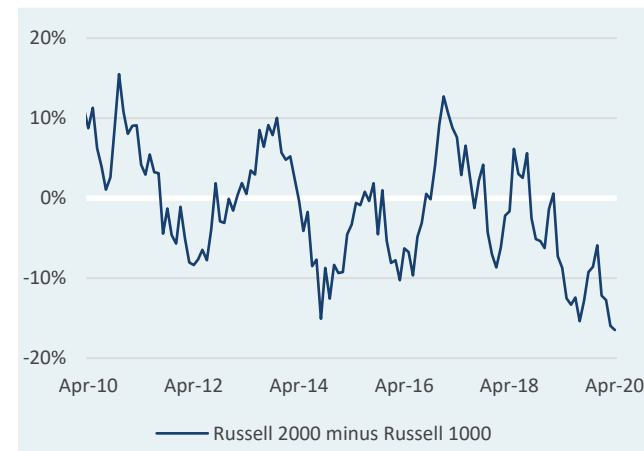
**VALUE VS. GROWTH RELATIVE VALUATIONS**



**VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE**

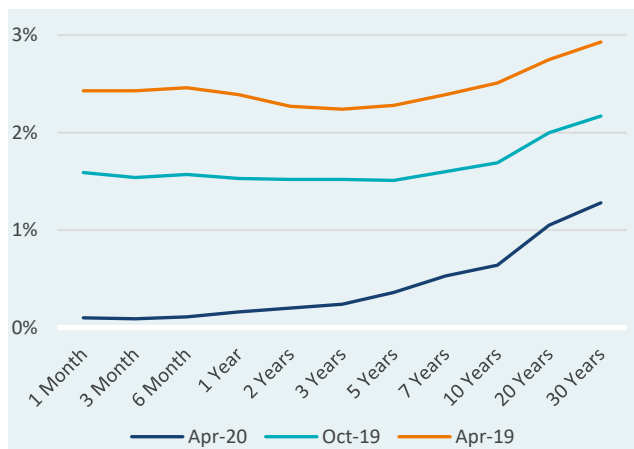


**SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE**

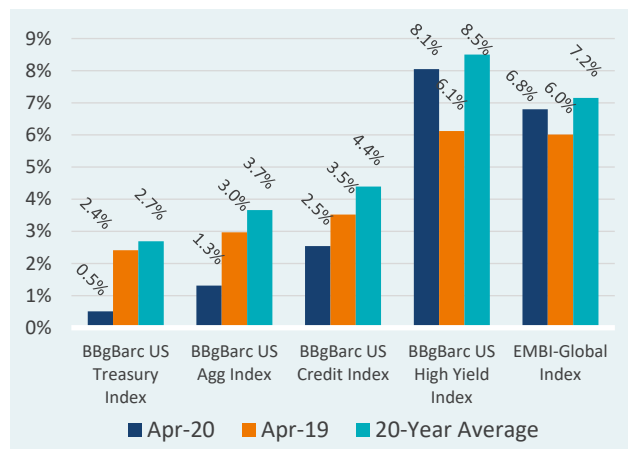


# Fixed income

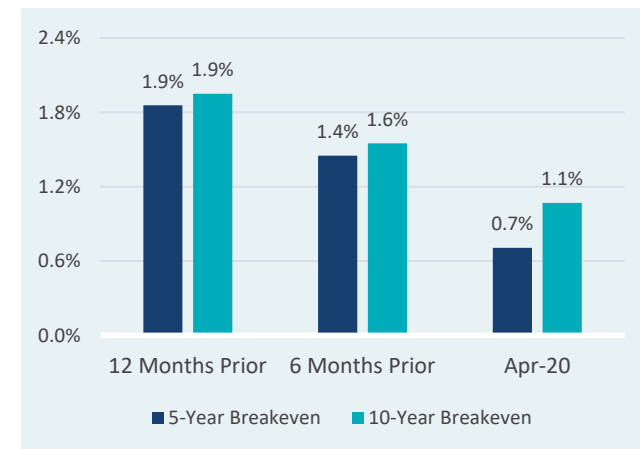
U.S. TREASURY YIELD CURVE



NOMINAL YIELDS



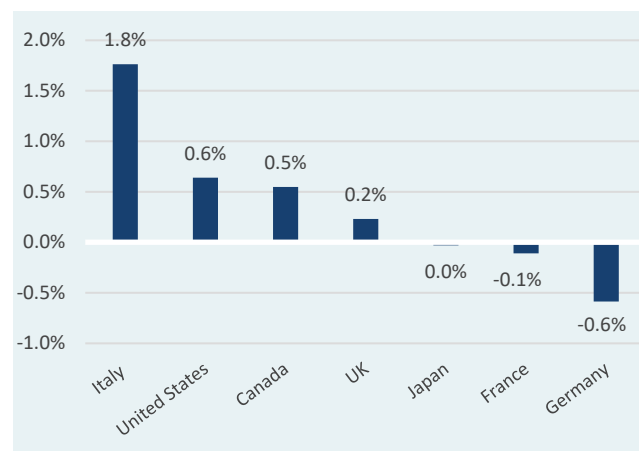
BREAKEVEN INFLATION RATES



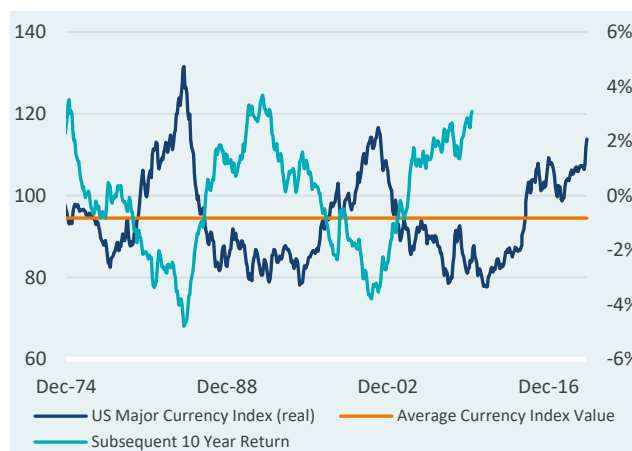
# Global markets

- The pound rallied +1.7% against the U.S. dollar, resulting in currency tailwinds for unhedged U.S. investors in U.K. equities. The MSCI United Kingdom Index, hedged to U.S. dollars, returned +3.5%, while the unhedged index returned +5.1%.
- In Q1 2020, Chinese GDP contracted at a -6.8% quarter over quarter annualized rate, marking the first contraction since 1992. The People’s Bank of China has stepped forward to provide support to its economy, which was battered by COVID-19 related disruptions in Q1. Aggregate financing to the real economy increased 12.0% year-over-year in April, a 22-month high.
- Global equities (MSCI ACWI +10.7%) outperformed both emerging market equities (MSCI EM +9.2%) and international developed equities (MSCI EAFE +6.5%), likely buoyed by a bounce back in U.S. equities. The four countries with the largest economies in the Eurozone were among the top six countries in terms of confirmed COVID-19 cases.
- The J.P. Morgan Global FX Volatility Index declined from 11.0% to 8.6%, after hitting multi-year peaks at 15.0% in mid-March. Currency markets have calmed down markedly following the Fed’s rollout of liquidity programs which have eased dollar funding pressures.

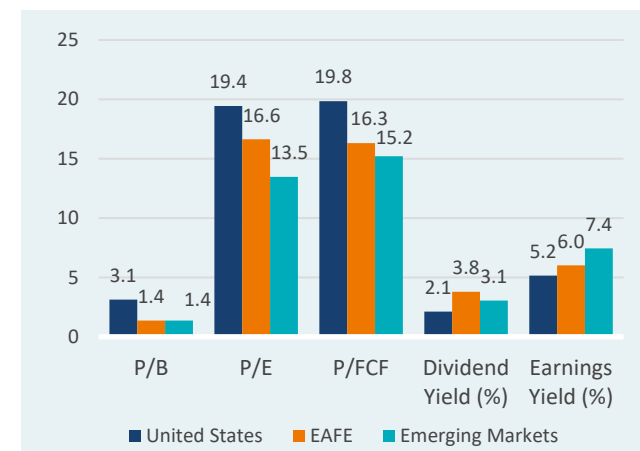
GLOBAL SOVEREIGN 10-YEAR YIELDS



U.S. DOLLAR MAJOR CURRENCY INDEX



MSCI VALUATION METRICS (3-MONTH AVG)



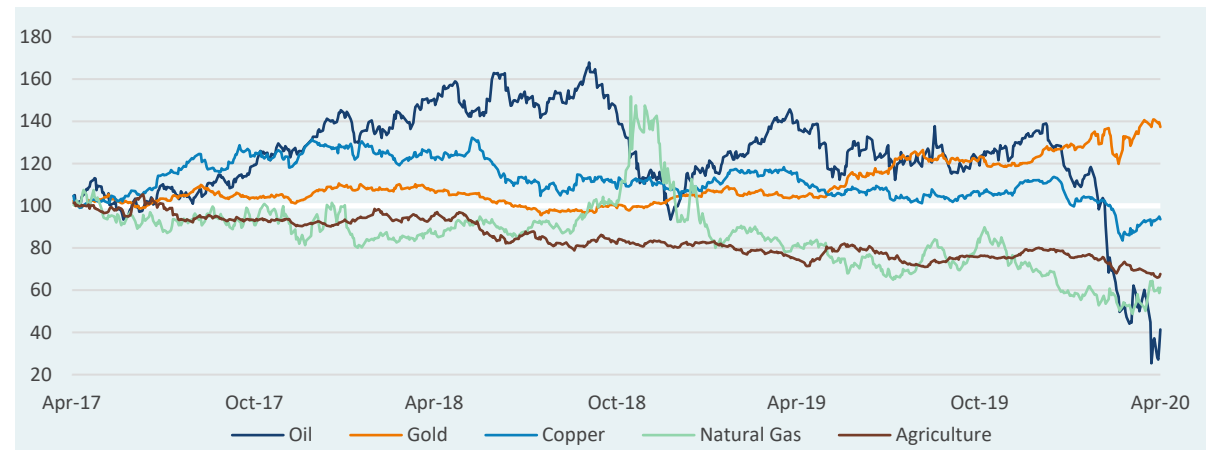
# Commodities

- The Bloomberg Commodity Index fell -1.5% during the month of April. Precious Metals (+5.9%) and Industrial Metals (+2.3%) significantly outperformed the index overall. The Petroleum component (-14.9%) was a major laggard for the second month in row.
- WTI crude oil futures pricing briefly dropped into negative territory prior to the rolling of the front-month contract from May to June. The precipitous decline in oil demand resulted in a supply glut and the eventual depletion of storage capacity. This forced investors unable to take physical receipt of oil to sell their contracts at negative prices, namely, paying other investors to take their oil.

- On April 12<sup>th</sup>, to prop up oil prices amidst withered demand, OPEC+ agreed to cut production by 9.7 million barrels per day effective May 1<sup>st</sup> and extending through June. The U.S. Secretary of Energy said about two to three million barrels per day will be taken offline in the U.S. this year due to low prices.
- The Bloomberg Precious Metals Sub-Index posted a +5.9% return for the month as investors sought a store of value amidst many economies' vast stimulus spending. Gold prices rose +6.1% in April to \$1,690 per ounce. Other precious metals including platinum showed their largest monthly gains in almost four years.

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	(1.5)	(1.5)	(24.5)	(23.2)	(8.6)	(9.1)	(7.1)
Bloomberg Agriculture	(5.7)	(5.7)	(15.0)	(7.6)	(10.5)	(8.2)	(4.4)
Bloomberg Energy	(3.5)	(3.5)	(52.8)	(56.4)	(20.0)	(21.4)	(17.6)
Bloomberg Grains	(6.0)	(6.0)	(12.7)	(4.7)	(9.6)	(9.0)	(4.8)
Bloomberg Industrial Metals	2.3	2.3	(16.6)	(18.1)	(3.7)	(4.4)	(5.5)
Bloomberg Livestock	(5.1)	(5.1)	(31.8)	(37.3)	(14.6)	(11.0)	(6.2)
Bloomberg Petroleum	(14.9)	(14.9)	(66.0)	(66.3)	(22.6)	(23.4)	(16.1)
Bloomberg Precious Metals	5.9	5.9	4.7	23.6	5.9	4.6	1.7
Bloomberg Softs	(3.6)	(3.6)	(19.8)	(14.5)	(15.5)	(9.5)	(6.2)

## COMMODITY PERFORMANCE



# Appendix

# Periodic table of returns

BEST ↑

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	YTD	5-Year	10-Year
US Bonds	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	36.4	5.0	13.3	14.4
Real Estate	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	31.4	0.7	8.7	11.6
Cash	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	28.5	0.4	7.7	10.2
Large Cap Growth	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	26.5	-1.4	5.2	10.0
Hedge Funds of Funds	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	25.5	-6.0	4.0	8.5
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	22.4	-7.0	3.9	7.7
Large Cap Equity	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.0	-9.7	3.8	5.4
Small Cap Growth	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	18.6	-14.7	2.9	5.3
Emerging Markets Equity	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	18.4	-16.6	1.1	4.0
International Equity	-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	8.7	-17.8	0.6	3.5
Large Cap Value	-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	7.8	-18.5	0.3	2.0
Small Cap Equity	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	-21.1	-0.1	1.4
Commodities	-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	6.4	-24.5	-0.2	0.6
Small Cap Value	-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	2.1	-27.7	-9.1	-7.1

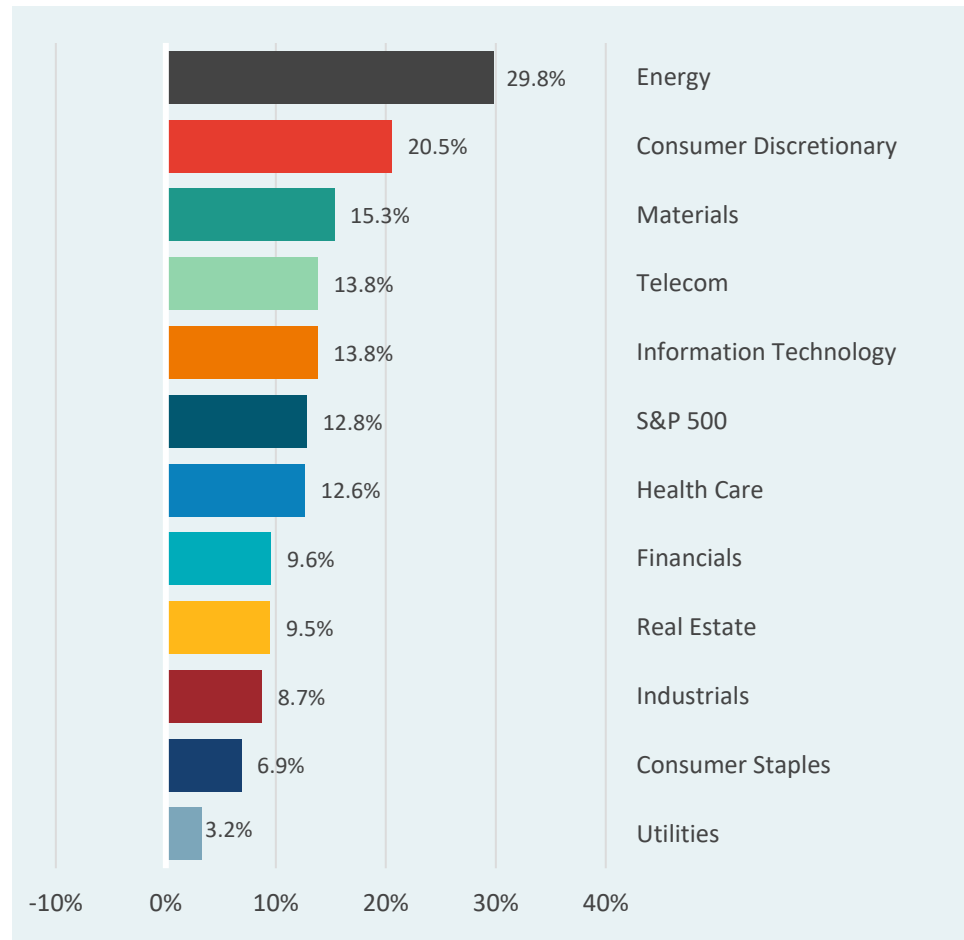
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- Large Cap Equity
- Small Cap Growth
- Commodities
- Large Cap Value
- International Equity
- Real Estate
- Large Cap Growth
- Emerging Markets Equity
- Hedge Funds of Funds
- US Bonds
- 60% MSCI ACWI/40% BBgBarc Global Bond
- Cash

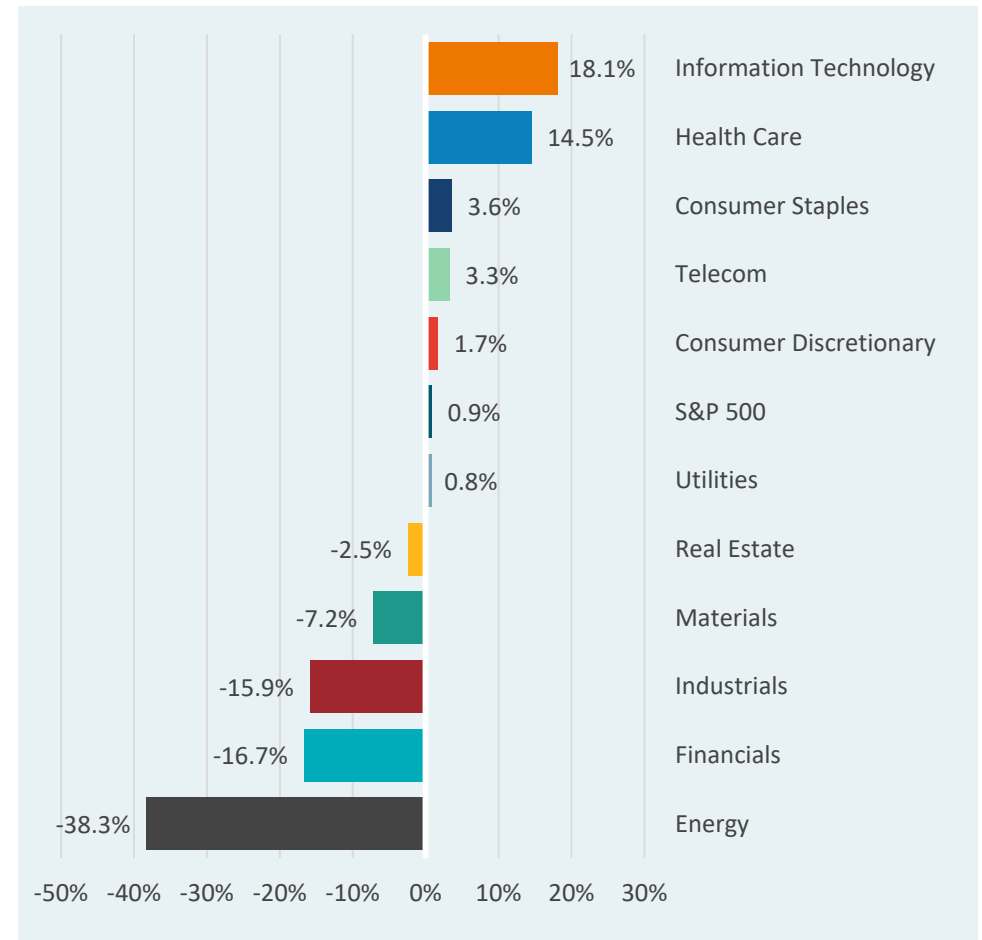


# S&P 500 sector returns

QTD



ONE YEAR ENDING APRIL



# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	12.8	12.8	(9.3)	0.9	9.0	9.1	11.7
S&P 500 Equal Weighted	14.4	14.4	(16.1)	(8.9)	3.9	5.5	10.4
DJ Industrial Average	11.2	11.2	(14.1)	(6.2)	7.7	9.1	11.0
Russell Top 200	12.8	12.8	(7.1)	3.9	10.7	10.3	12.2
Russell 1000	13.2	13.2	(9.7)	0.1	8.7	8.7	11.6
Russell 2000	13.7	13.7	(21.1)	(16.4)	(0.8)	2.9	7.7
Russell 3000	13.2	13.2	(10.4)	(1.0)	8.0	8.3	11.3
Russell Mid Cap	14.4	14.4	(16.6)	(10.0)	3.5	4.8	9.8
<b>Style Index</b>							
Russell 1000 Growth	14.8	14.8	(1.4)	10.8	15.7	13.3	14.4
Russell 1000 Value	11.2	11.2	(18.5)	(11.0)	1.4	3.9	8.5
Russell 2000 Growth	14.9	14.9	(14.7)	(9.2)	4.2	5.2	10.0
Russell 2000 Value	12.3	12.3	(27.7)	(23.8)	(6.1)	0.3	5.3

## INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
MSCI ACWI	10.7	10.7	(12.9)	(5.0)	4.5	4.4	6.9
MSCI ACWI ex US	7.6	7.6	(17.5)	(11.5)	(0.3)	(0.2)	2.9
MSCI EAFE	6.5	6.5	(17.8)	(11.3)	(0.6)	(0.2)	3.5
MSCI EM	9.2	9.2	(16.6)	(12.0)	0.6	(0.1)	1.4
MSCI EAFE Small Cap	10.4	10.4	(20.0)	(12.3)	(1.0)	2.1	5.7
<b>Style Index</b>							
MSCI EAFE Growth	7.4	7.4	(11.4)	(2.1)	4.4	3.2	5.6
MSCI EAFE Value	5.4	5.4	(24.4)	(20.5)	(5.7)	(3.7)	1.3
<b>Regional Index</b>							
MSCI UK	5.1	5.1	(25.1)	(20.8)	(3.9)	(3.7)	2.2
MSCI Japan	5.4	5.4	(12.3)	(3.0)	2.4	2.2	4.4
MSCI Euro	5.7	5.7	(22.9)	(17.8)	(3.8)	(1.7)	2.1
MSCI EM Asia	9.2	9.2	(10.6)	(5.7)	3.6	1.8	4.2
MSCI EM Latin American	6.3	6.3	(42.2)	(37.3)	(11.2)	(6.6)	(6.1)

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
BBgBarc US TIPS	2.8	2.8	4.5	9.5	4.2	3.1	3.5
BBgBarc US Treasury Bills	0.0	0.0	0.6	2.2	1.8	1.2	0.7
BBgBarc US Agg Bond	1.8	1.8	5.0	10.8	5.2	3.8	4.0
<b>Duration</b>							
BBgBarc US Treasury 1-3 Yr	0.1	0.1	2.9	5.3	2.7	1.9	1.4
BBgBarc US Treasury Long	2.0	2.0	23.4	37.8	13.6	8.4	8.9
BBgBarc US Treasury	0.6	0.6	8.9	14.3	5.8	3.9	3.8
<b>Issuer</b>							
BBgBarc US MBS	0.6	0.6	3.5	7.8	4.0	3.1	3.3
BBgBarc US Corp. High Yield	4.5	4.5	(8.8)	(4.1)	1.9	3.4	5.9
BBgBarc US Agency Interm	0.4	0.4	3.3	6.3	3.2	2.4	2.2
BBgBarc US Credit	4.6	4.6	1.3	9.4	5.4	4.3	5.0

## OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Index</b>							
Bloomberg Commodity	(1.5)	(1.5)	(24.5)	(23.2)	(8.6)	(9.1)	(7.1)
Wilshire US REIT	8.4	8.4	(19.4)	(12.4)	0.2	5.7	12.7
CS Leveraged Loans	4.3	4.3	(9.5)	(7.1)	0.5	4.6	5.0
Alerian MLP	47.6	47.6	(38.2)	(43.1)	(19.7)	(15.6)	(1.3)
<b>Regional Index</b>							
JPM EMBI Global Div	2.2	2.2	(11.4)	(5.0)	0.7	2.9	5.1
JPM GBI-EM Global Div	3.9	3.9	(11.9)	(2.7)	0.1	0.4	0.7
<b>Hedge Funds</b>							
HFRI Composite	4.8	4.8	(6.6)	(3.4)	1.2	1.5	3.0
HFRI FOF Composite	2.7	2.7	(6.0)	(3.4)	0.8	0.6	2.0
<b>Currency (Spot)</b>							
Euro	(0.2)	(0.2)	(2.4)	(2.3)	0.2	(0.5)	(1.9)
Pound	1.7	1.7	(4.8)	(3.2)	(0.8)	(3.9)	(1.9)
Yen	1.0	1.0	1.6	4.2	1.4	2.3	(1.3)

# 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](http://www.adviserinfo.sec.gov).

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## Board of Trustees

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



Date: June 22, 2020

To: Board of Trustees

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

**Agenda Item 7: Audited Financial Statements and Report to the Board for the period ended December 31, 2019 – 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, 2019 that are presented here as the 2019 Comprehensive Annual Financial Report (CAFR).
2. Authorize and Direct the Executive Director to transmit the 2019 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 27, 2020, the Audit Committee and Staff met with SLOCPT'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 SLOCPT for the year 2019. 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 2019 CAFR to the parties listed in the recommendation, will complete the activities of the 2019 Financial Audit.

**Attachments:**

1. Brown Armstrong 2019 Audit Results Presentation
2. Draft Comprehensive Annual Financial Report (CAFR) for year ended December 31, 2019

Respectfully Submitted,

# The San Luis Obispo County Pension Trust

## Results of the December 31, 2019 Financial Statement Audit

Brown Armstrong

Accountancy Corporation

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

[www.bacpas.com](http://www.bacpas.com)

Contacts: Rosalva Flores, CPA  
Alaina Vandermade, CPA

**BROWN ARMSTRONG**  
Certified Public Accountants

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# Agenda

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- ▶ Scope of Services Recap 3
- ▶ Summary of Exit Meeting with Audit Committee 4
- ▶ Results of the Audit
  - Required Communication Letter (SAS 114) 5
  - Audit Opinion Issued 6
  - Other Reports Issued 6-7
- ▶ Thank Staff/Questions? 8



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# Scope of Services Recap

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- ❖ 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

---

## Summary of Exit Meeting with Audit Committee

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- ▶ Meeting was held May 27, 2020
  
- ▶ Discussion items:
  - Audit timeline
  - Audit areas of focus:
    - Significant risk areas
    - Significant audit areas
    - SAS 99 procedures
  - Presentation of draft reports
  
- ▶ Addressed AC concerns
  - Expanded travel testing

---

# 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"><li>• New GASB pronouncement – none</li><li>• Significant estimates reviewed<ul style="list-style-type: none"><li>✓ Fair value of investments</li><li>✓ Money-weighted rate of return</li><li>✓ Contributions and Net Pension Liability Estimates</li></ul></li><li>• Significant audit adjustments – none</li><li>• Disagreements with management – none</li></ul>

---

# Results of the Audit

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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"><li>• No noncompliance with laws and regulations noted</li><li>• No material weaknesses or significant deficiencies identified</li></ul>

---

# Results of the Audit (cont.)

---

Report	Summary
Agreed Upon Conditions Report (Management Letter)	<ul style="list-style-type: none"><li>• Two financial statement related items:<ul style="list-style-type: none"><li>✓ Review of Journal Entries</li><li>✓ Incorrect Date of Birth for Beneficiary</li></ul></li><li>• Two information technology related items:<ul style="list-style-type: none"><li>✓ Accounting System User Access</li><li>✓ Examination of Internal Controls SSAE 18 reports</li></ul></li></ul>

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# Thank Staff/Questions?

---



Rosalva Flores, CPA  
Principal  
Email: [rflores@bacpas.com](mailto:rflores@bacpas.com)



Alaina Vandermade, CPA  
Manager  
Email: [avandermade@bacpas.com](mailto:avandermade@bacpas.com)

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



# San Luis Obispo County Pension Trust

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



## **Comprehensive Annual Financial Report**

**For the Year Ended  
December 31, 2019**

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# Comprehensive Annual Financial Report

For the Year Ended December 31, 2019

## 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 Director and Chief Investment Officer

*Amy Burke*  
Deputy Director

*Jennifer Alderete*  
Accountant

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

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*Photographs: Carl Nelson*

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*Introductory Section*



June 22, 2020

San Luis Obispo County Pension Trust  
Board of Trustees



*Carl Nelson*

Dear Board of Trustees:

*Executive Director 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, 2019.

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 Court 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 Director who is appointed and serves at the pleasure of the Board. The Executive Director 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. In developing and maintaining the Pension Trust's accounting system, consideration is given to the adequacy of internal controls, which are designed to provide reasonable, but not absolute, assurance regarding 1) the safekeeping of assets against loss from unauthorized use or disposition, and 2) the reliability of financial records for preparing financial statements and maintaining accountability of assets. 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 Actuarially 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.

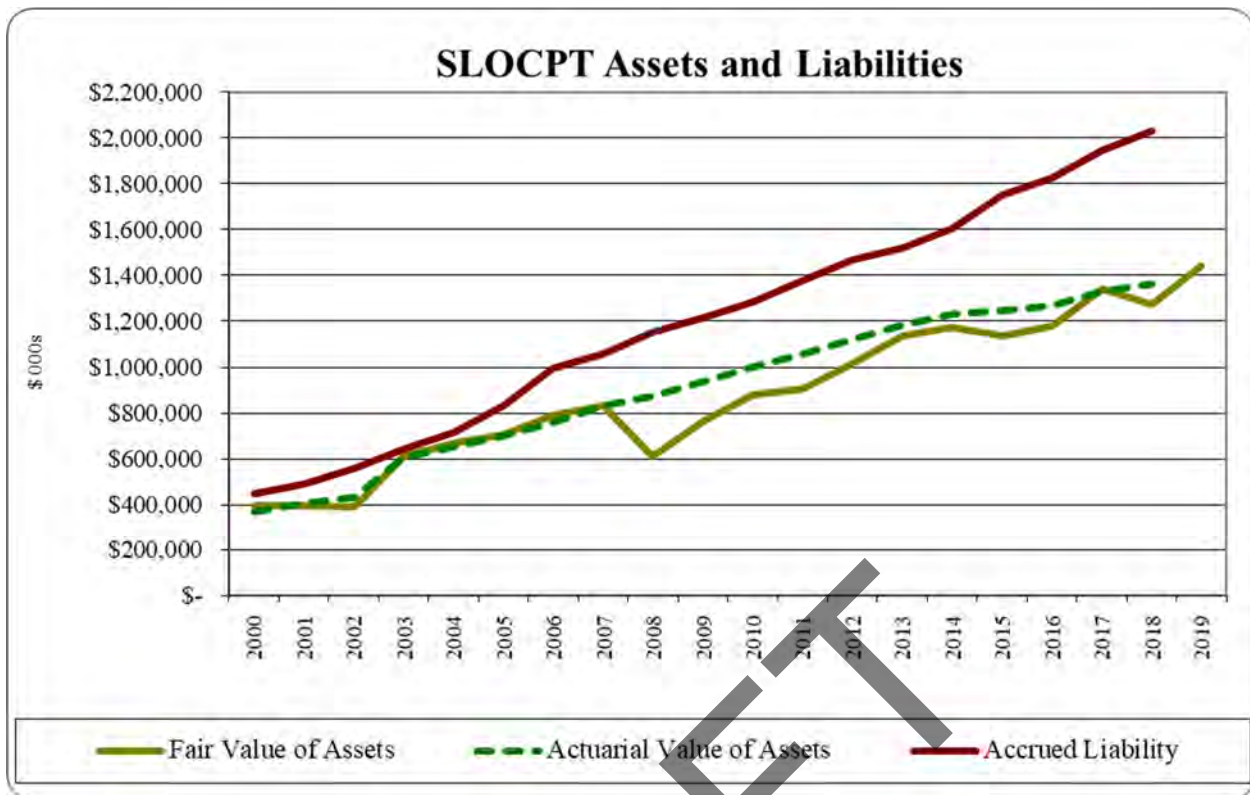
The Pension Trust engages an independent actuarial firm to perform annual valuations on the Pension Trust. Additionally, actuarial experience studies are conducted biennially. The economic and demographic assumptions that are used in each annual actuarial valuation are approved by the Board and are typically 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, 2019 valuation. It is based on member data and financial results through December 31, 2018. 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 as of January 1, 2018. At the time of preparation of this CAFR, the January 1, 2020 biennial experience study and the January 1, 2020 valuation were being prepared, but the results were not yet available.

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

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

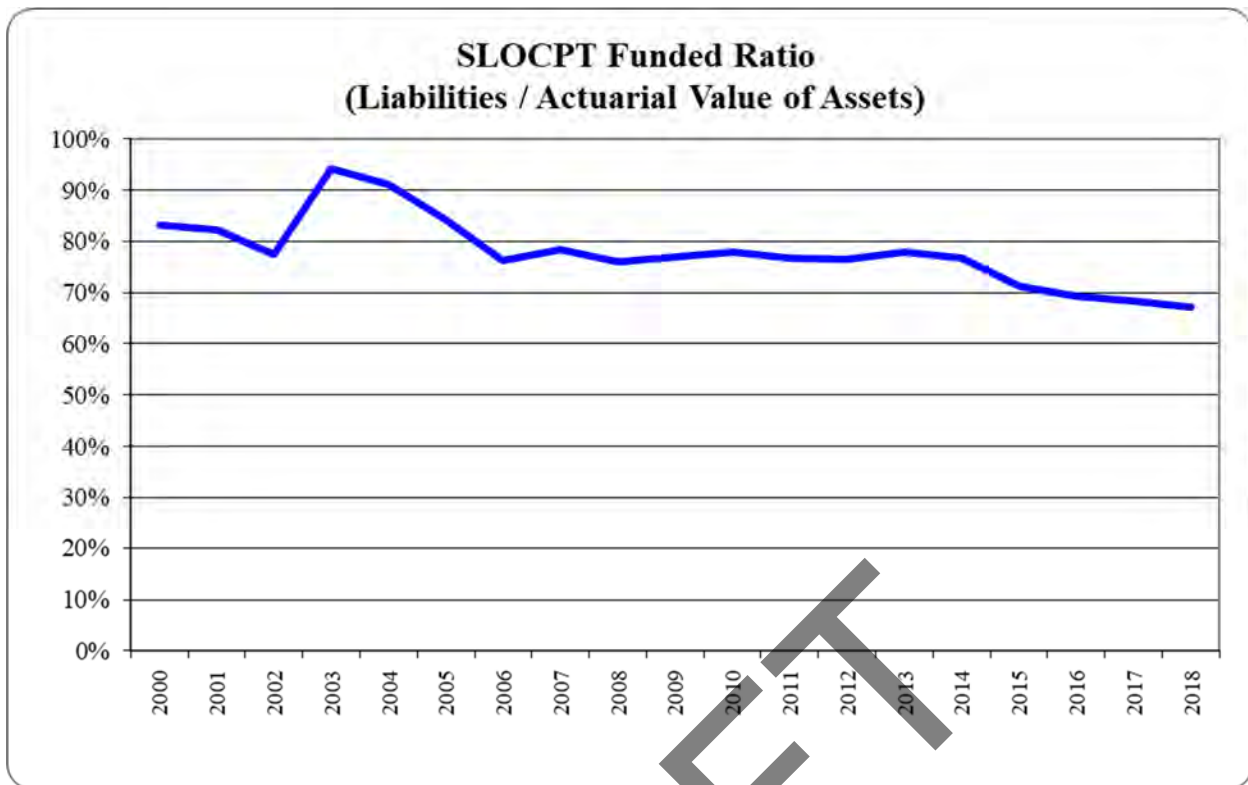




Source: Pension Trust financial records from annual actuarial valuations

Note that the measurement of Actuarial Accrued Liability is sensitive to the discount rate used. This discount rate is the expected investment return, also known as the Earnings Assumption. The Earnings Assumption used by the Pension Trust from 2000 to 2015 has varied from 7.25% (e.g., the rate in 2015) to 7.75%. With the 2016 and 2017 Annual Actuarial Valuations, the Earnings Assumption used was 7.125%. 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, 2017 and 2018 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 68.3% as of year-end 2017 to 67.1% as of year-end 2018. 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 90.

## **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>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
SLOCPT Total Returns	-0.8%	6.6%	15.5%	-3.2%	16.3%

*Source: Verus reports*

For cumulative periods ending December 31, 2019, 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	16.3%	9.2%	6.6%	8.2%

*Source: Verus 4<sup>th</sup> Quarter 2019 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 6,250 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 31, 2019, the Pension Trust paid benefit allowances to 2,966 retirees, disability recipients, beneficiaries, and survivors. During 2019, \$101.2 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 during 2016-2019 was successfully completed and fully operational in July 2019. The new PAS is expected to provide the ability to continue to meet the operating mission of the Pension Trust into the foreseeable future. The PAS replacement project was completed on schedule and on budget. Following the “go-live” date for the new PAS in July 2019, the integral Member Portal was activated with substantially improved usefulness to active members and retired participants.

### ***Pension Trust Staffing***

A large part of a retirement system's purpose is to serve its active members and retired participants. As a small system, the Pension Trust has depended on core staff of long-experienced professionals. During 2018, Debbie Villalon retired after 25 years as the core of pension administration. During 2019, Andrea Paley retired after 40 years as the lead retirement counselor. Practically all the nearly

3,000 retirees and beneficiaries being paid by the Pension Trust passed through Andrea's office at some point. Both Debbie and Andrea retired leaving behind fully competent replacements who had trained with them for multiple years to serve our members.

### ***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 2019 were:

- Asset Allocation and Investment Policy – there were no significant changes to the asset allocation policy or the Investment Policy Statement during 2019.
- Emerging Market Debt – The commitment to Emerging Market Debt targeted at 5% of total fund assets was shifted from a local currency only strategy with Stone Harbor Investment Partners to a blended currency strategy managed by The Ashmore Group.
- Private Equity – Additional commitments within the targeted 5% allocation to Private Equity were initiated in 2019 with a commitment to the Pathway Fund 10, LP.
- 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 led to the decision 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 January 1, 2019 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
- 2.75% Payroll Growth Assumption
- 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, 2020 actuarial experience study and actuarial valuation were 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 Director, and Jennifer Alderete, Accountant, for their prodigious efforts in producing this tenth annual CAFR for the Pension Trust.

Respectfully submitted,



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



Government Finance Officers Association

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

Presented to

**San Luis Obispo County Pension Trust  
California**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**December 31, 2018**

*Christopher P. Morill*

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2019***

Presented to

***San Luis Obispo County Pension Trust***

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

*Presented by the Public Pension Coordinating Council, a confederation of*

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

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

Alan H. Winkle  
Program Administrator



# Board of Trustees

As of December 31, 2019

Vacant  
President



Michelle Shoresman  
Elected Member  
Present term  
expires 2020



Guy Savage  
Vice President  
Appointed Member



James Hamilton  
Treasurer  
Ex-Officio Member



Gere Sibbach  
Appointed Member



Matt Janssen  
Elected Member  
Present term  
Expires 2021

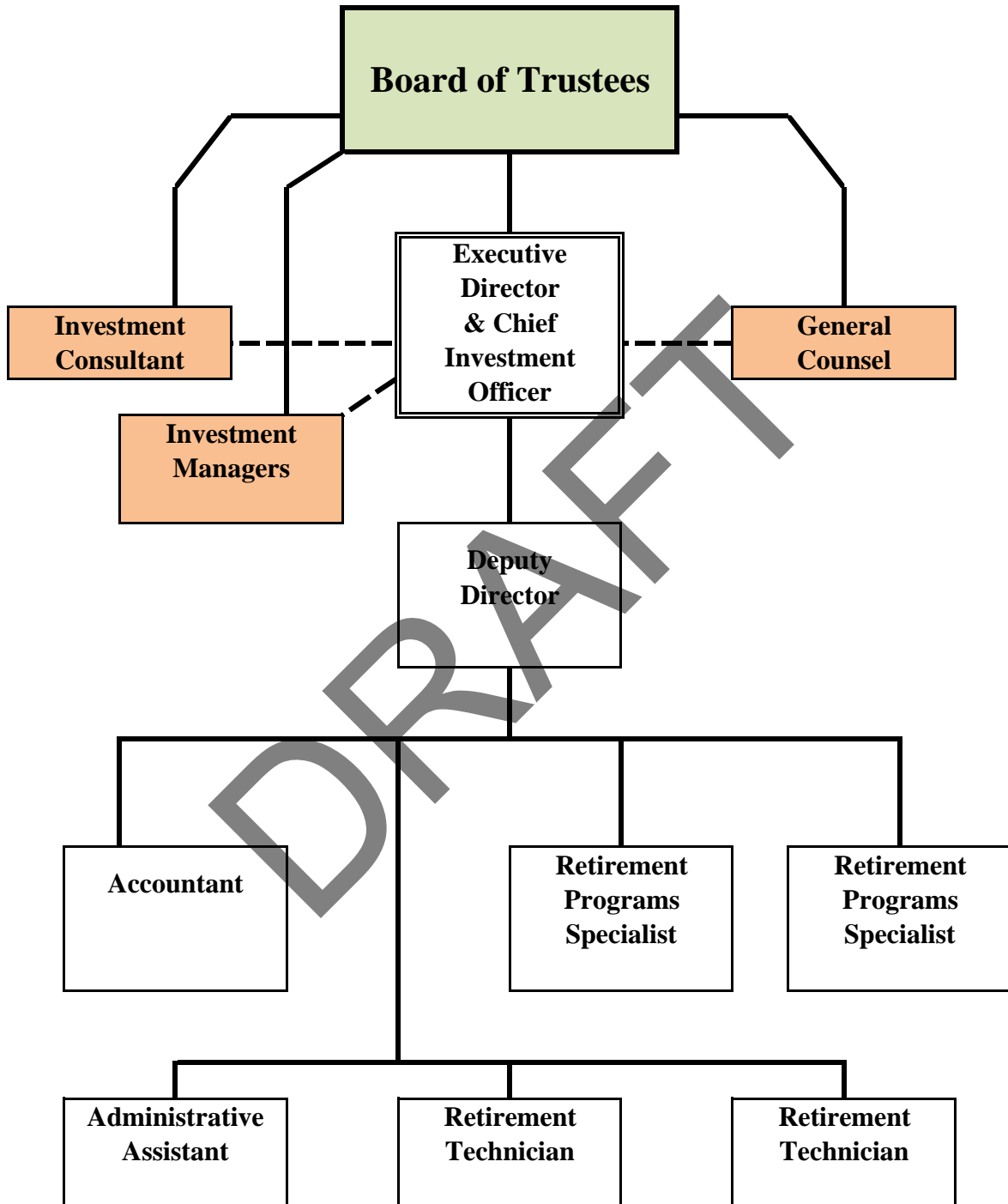


Jeff Hamm  
Appointed Member

*Subsequent to December 31, 2019, new officers were elected,  
and a new Trustee was appointed.*

San Luis Obispo County Pension Trust  
Organization Chart - December 31, 2019

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*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, 2019

### **Actuary**

Paul Wood, ASA, FCA, MAAA  
Gabriel, Roeder, Smith & Company

### **Legal Services**

General Counsel  
Chris Waddell  
Olson Remcho 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**

LRS Retirement Solutions  
PensionGold Pension Administration  
System

#### 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

Ashmore  
BlackRock  
Brandywine Global Investment Management  
Dodge & Cox  
Pacific Asset Management Bank Loan Fund

#### 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

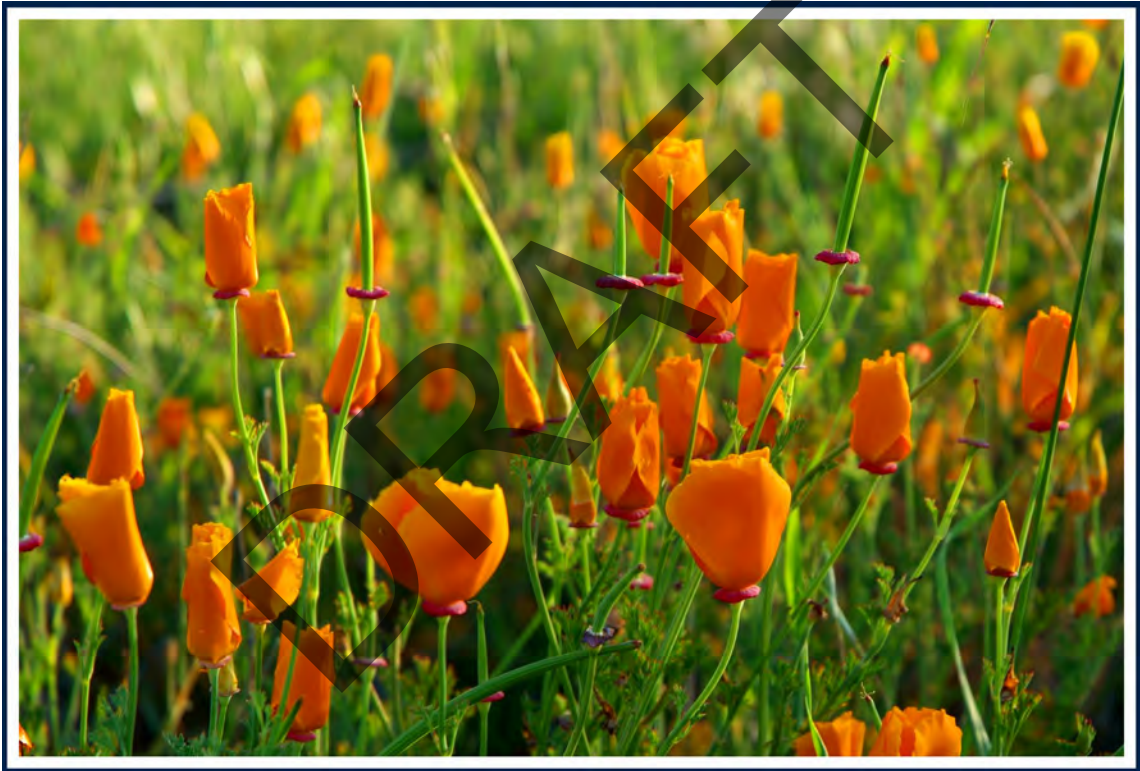
#### Cash Overlay

Parametric

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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, 2019, 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, 2019, 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, 2018 financial statements, and our report dated June 24, 2019, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of December 31, 2018, 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 \_\_\_\_\_, 2020, 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  
\_\_\_\_\_, 2020



**SAN LUIS OBISPO COUNTY  
PENSION TRUST  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
DECEMBER 31, 2019**

June 22, 2020

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, 2019. 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 its members – Miscellaneous, Public Safety, or Probation employees – and within each class of membership. 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, 2019 was \$1.439 billion. This represents an increase of \$167 million or 13.2% from the year ended December 31, 2018. 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 2019 were \$275.7 million, which includes member contributions and employer appropriations of \$81.9 million and net investment income of \$193.8 million. Comparatively, in 2018, additions to the Fiduciary Net Position were \$29.2 million, which included member contributions and employer appropriations of \$79.2 million and net investment losses of \$50.0 million. The \$181.5 million in realized and unrealized gains on investments was the main factor contributing to the net increase in total additions over prior year.

For the year ended December 31, 2019, deductions from the Fiduciary Net Position totaled \$108.3 million, consisting of \$104.6 million in payments to Plan members and their beneficiaries and \$3.7 million in administrative and other expenses. 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. 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, 2019, the date of the last actuarial valuation that was approved in June 2019, the funded ratio for the Plan was 67.1%. In general, this indicates that for every dollar of benefits due, SLOCPT had approximately 67.1 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, 2019. 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, 2019 totaled \$1.439 billion, an increase of \$167 million from prior year-end. This increase was due primarily to a rebound from late-2018 unrealized losses as well as a steady increase in realized and unrealized income across the entire portfolio, which is consistent with the returns experienced in comparable markets in 2019. During 2019, the rate of return on investments, as measured by SLOCPT's investment consultant, was 16.3% gross of fees.

In comparison, the Fiduciary Net Position restricted for pension benefits as of December 31, 2018 totaled \$1.272 billion, a decrease of \$68 million from the prior year. This decrease was due primarily to unrealized losses across the entire portfolio, which is consistent with the returns experienced in these markets in 2018. The rate of return on investments, as measured by SLOCPT's investment consultant, during 2018 was -3.2% gross of fees.

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

	2019	2018	Increase (Decrease)
Cash	\$ 46,396,399	\$ 55,156,155	\$ (8,759,756)
Investments at Fair Value	1,413,261,165	1,246,781,943	166,479,222
Securities Sold	981,205	1,262,251	(281,046)
Other Receivables and Other Assets	11,511,409	7,429,163	4,082,246
Total Assets	1,472,150,178	1,310,629,512	161,520,666
Total Liabilities	33,145,975	39,009,428	(5,863,453)
Net Increase (Decrease) in Fiduciary Net Position	167,384,119	(68,850,938)	236,235,057
Fiduciary Net Position, Beginning of Year	1,271,620,084	1,340,471,022	(68,850,938)
Fiduciary Net Position, End of Year	\$ 1,439,004,203	\$ 1,271,620,084	\$ 167,384,119

## 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, 2019 totaled \$275.7 million. Employer appropriations and Plan member contributions continue to increase.

Pensionable salaries for active members increased \$1.6 million or 0.8% for the year ended December 31, 2019 when compared to those earned in 2018. 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. Based on the January 1, 2018 valuation, a contribution rate increase of 2.51% was implemented on January 1, 2019 for Superior Court of California and the Air Pollution Control District. For the remaining Plan participants, an increase of 2.80% in aggregate was implemented on July 1, 2019 with specific rate increases depending on bargaining unit. The increase in employer appropriations and member contributions experienced in 2019 was due to this contribution rate increase.

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

	Year Ended 2019	Year Ended 2018	Increase
Employer Appropriations	\$ 48,957,564	\$ 46,243,596	\$ 2,713,968
Plan Member Contributions	32,983,211	32,952,747	30,464
Net Investment Income (Loss)	193,721,648	(50,033,056)	243,754,704
Other Income	18,930	-	18,930
Total Additions	<u>\$ 275,681,353</u>	<u>\$ 29,163,287</u>	<u>\$ 246,518,066</u>
Total Deductions	<u>108,297,234</u>	<u>98,014,225</u>	<u>10,283,009</u>
Net Change in Fiduciary Net Position	<u>\$ 167,384,119</u>	<u>\$ (68,850,938)</u>	<u>\$ 236,235,057</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 2019, 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 2019	Year Ended 2018	Increase
Monthly Benefit Payments	\$ 101,220,652	\$ 92,811,810	\$ 8,408,842
Refund of Contributions	3,291,865	1,756,682	1,535,183
Death Benefits	118,337	60,376	57,961
Administration and Actuarial	2,120,046	1,972,465	147,581
Prefunded Discount Amortization	1,546,334	1,412,892	133,442
Total Deductions	<u>\$ 108,297,234</u>	<u>\$ 98,014,225</u>	<u>\$ 10,283,009</u>

### **The Plan as a Whole**

Management believes that SLOCPT is in reasonably sound financial position to meet its obligations to the Plan members and their beneficiaries. The current financial position results from a diversified investment program that prudently balances expected risk and return, and an effective system of cost control and strategic planning.

### **New Pension Accounting and Financial Reporting Standards**

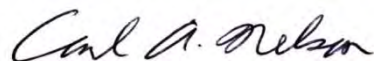
No new GASB Statements were issued in 2019 or subsequent to December 31, 2019 that would affect SLOCPT's Fiduciary Net Position or the presentation of its financial statements.

### **Requests for Information**

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

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

Respectfully submitted,



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

**SAN LUIS OBISPO COUNTY PENSION TRUST  
STATEMENT OF FIDUCIARY NET POSITION  
AS OF DECEMBER 31, 2019 (WITH COMPARATIVE TOTALS)**

	2019	2018
<b>ASSETS</b>		
Cash and Cash Equivalents	\$ 46,396,399	\$ 55,156,155
Receivables		
Accrued Interest and Dividends Receivable	716,114	769,193
Accounts Receivable	24,701	23,672
Contributions Receivable	3,287,950	3,013,566
Securities Sold	981,205	1,262,251
Total Receivables	5,009,970	5,068,682
Investments, at Fair Value		
Bonds and Notes	265,883,323	264,058,167
International Fixed Income	148,271,810	152,893,552
Collateralized Mortgage Obligations	5,983,103	4,365,340
Domestic Equities	298,421,573	250,084,930
International Equities	323,757,992	258,784,769
Alternative Investments	165,992,908	124,392,603
Real Estate	204,950,456	192,202,582
Total Investments	1,413,261,165	1,246,781,943
Other Assets		
Prepaid Expenses	75,376	62,905
Capital Assets - Net of Accumulated Depreciation	7,407,268	3,559,827
Total Other Assets	7,482,644	3,622,732
Total Assets	\$ 1,472,150,178	\$ 1,310,629,512
<b>LIABILITIES</b>		
Securities Purchased	\$ 3,432,132	\$ 10,667,232
Accrued Liabilities	1,740,469	1,284,059
Prefunded Contributions	27,973,374	27,058,137
Total Liabilities	\$ 33,145,975	\$ 39,009,428
<b>FIDUCIARY NET POSITION</b>		
Fiduciary Net Position Restricted for Pension Benefits	<b>\$ 1,439,004,203</b>	<b>\$ 1,271,620,084</b>

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

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**SAN LUIS OBISPO COUNTY PENSION TRUST  
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED DECEMBER 31, 2019 (WITH COMPARATIVE TOTALS)**

	2019	2018
<b>ADDITIONS</b>		
Contributions		
Employer Appropriations	\$ 48,957,564	\$ 46,243,596
Plan Member Contributions	32,983,211	32,952,747
Total Contributions	<u>81,940,775</u>	<u>79,196,343</u>
Investment Income (Loss)		
Realized and Unrealized Gains and Losses, Net	181,520,905	(60,131,990)
Interest	4,450,180	4,120,406
Dividends	11,371,561	9,451,610
Real Estate Operating Income, Net	11,549	376,191
Investment Expenses	(3,632,547)	(3,849,273)
Net Investment Income (Loss)	<u>193,721,648</u>	<u>(50,033,056)</u>
Other Income	<u>18,930</u>	<u>-</u>
Total Additions	<u>275,681,353</u>	<u>29,163,287</u>
<b>DEDUCTIONS</b>		
Benefits		
Monthly Benefit Payments	101,220,652	92,811,810
Refund of Contributions	3,291,865	1,756,682
Death Benefits	118,337	60,376
Total Benefits	<u>104,630,854</u>	<u>94,628,868</u>
Other Deductions		
Administration and Actuarial	2,120,046	1,972,465
Prefunded Discount Amortization	1,546,334	1,412,892
Total Other Deductions	<u>3,666,380</u>	<u>3,385,357</u>
Total Deductions	<u>108,297,234</u>	<u>98,014,225</u>
Net Increase (Decrease) in Fiduciary Net Position	<u>\$ 167,384,119</u>	<u>\$ (68,850,938)</u>
Fiduciary Net Position Restricted for Pension Benefits - Beginning of Year	<u>\$ 1,271,620,084</u>	<u>\$ 1,340,471,022</u>
Fiduciary Net Position Restricted for Pension Benefits - End of Year	<u><b>\$ 1,439,004,203</b></u>	<u><b>\$ 1,271,620,084</b></u>

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

**SAN LUIS OBISPO COUNTY PENSION TRUST**  
**NOTES TO FINANCIAL STATEMENTS**  
**DECEMBER 31, 2019**

**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

The Plan's two real estate investments are in the form of real estate commingled funds.

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.



**NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES** (continued)

The following table displays the Board-approved asset allocation policy as of May 20, 2019 and the long-term expected real rates of return:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Weighted Average Long-Term Expected Real Rate of Return</u>
Fixed Income	30%	1.30%
Domestic Equities	20%	3.64%
International Equities	20%	5.31%
Alternative Investments	15%	4.53%
Real Estate	15%	5.37%
	<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 2019, for the sixth consecutive year, the Board entered into an agreement with the San Luis Obispo County (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%, based on the earning assumption in effect as of the date of the approval of the agreement which was 7%, less 1%.

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 and APCD'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 contributions.

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. 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.

## **NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES** (continued)

### 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.

## **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 Court (the Court), 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-Public Administrator as the Ex-Officio member.

### Membership

Active members are required to contribute to the Plan at rates currently ranging from 7.92% to 31.62% 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 21.61% to 40.84% 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 and contributions utilized are those adopted by the County Board of

**NOTE 2 – PLAN DESCRIPTION** (continued)

Supervisors based upon recommendation of SLOCPT’s Board. The Board bases its recommendation 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, 2019:

Retirees and Beneficiaries Currently Receiving Benefits	2,966
Terminated Employees Entitled to but not yet Receiving Benefits	532
Active Plan Participants	
Vested	1,663
Nonvested	1,089
	<hr/>
Total	<u>6,250</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.

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.

**NOTE 2 – PLAN DESCRIPTION** (continued)

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:

*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.

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

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, 2019:

Investment Type	Investment Maturities (in years)				Fair Value
	Less Than 1 Year	1-5 Years	6-10 Years	More than 10 Years	
Collateralized Mortgage Obligations	\$ -	\$ 15,264	\$ 1,670,625	\$ 5,123,577	\$ 6,809,466
Corporate Bonds	1,226,800	54,571,655	82,175,213	31,026,326	168,999,994
Derivatives	(15,358,343)	-	-	-	(15,358,343)
Municipal Bonds	2	2,424	49,900	3,614,930	3,667,256
US Government & Agencies	2,759,886	11,314,507	4,622,503	68,105,095	86,801,991
Foreign Corporate Bonds	9,848,194	6,695,594	6,863,799	4,763,073	28,170,660
Foreign Government Bonds	39,709,644	46,585,707	23,404,022	37,881,630	147,581,003
Other Short-Term Investments	(6,533,791)	-	-	-	(6,533,791)
Total	<u>\$ 31,652,392</u>	<u>\$ 119,185,151</u>	<u>\$ 118,786,062</u>	<u>\$ 150,514,631</u>	<u>\$420,138,236</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, 2019, the carrying amount of the Plan's cash deposits was \$46.396 million (which includes cash equivalents) and the bank balance was \$45.391 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, \$557 thousand was covered by the Federal Deposit Insurance Corporation, and \$35.286 million was collateralized by the pledging financial institutions as required by Section 53652 of the California Government Code. The Plan's policy is to confirm the existence and allocation of the bank's collateral with the State of California Local Agency Commission not less than annually, and to confirm the existence of insurance in the Plan's name.

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

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

custody bank are in the Plan's name.

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

*Credit Risk*

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

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

The following is a schedule of the credit risk ratings comparison of the Plan's fixed income, bonds, collateralized mortgage obligations, and short-term investments as of December 31, 2019, as rated by Standard & Poor's equivalent ratings:

	2019	
Quality Rating	%	Fair Value
AAA	13.05%	\$ 54,807,191
AA+	15.10%	63,443,187
AA	1.45%	6,080,176
AA-	0.94%	3,933,978
A+	1.49%	6,241,067
A	5.66%	23,759,164
A-	3.75%	15,741,924
BBB+	4.56%	19,167,331
BBB	9.92%	41,678,521
BBB-	3.60%	15,137,002
Subtotal Investment Grade	59.52%	249,989,541
BB+	4.45%	18,703,335
BB	2.57%	10,808,801
BB-	4.05%	17,039,797
B+	4.01%	16,839,412
B	8.64%	36,279,236
B-	3.61%	15,161,186
CCC+	0.60%	2,537,214
CCC	0.94%	3,935,418
CCC-	0.03%	133,717
CC	0.49%	2,065,756
C	0.01%	49,264
D	0.04%	175,809
Not Rated**	11.04%	46,419,750
Subtotal Non-Investment Grade	40.48%	170,148,695
Total Fixed Income and Short-Term Investments	100.00%	\$ 420,138,236

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

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.

*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.

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

The Plan's exposure to foreign currency risk in U.S. Dollars as of December 31, 2019 was as follows:

<u>Currency</u>	<u>Fair Value</u>
Euro Currency	\$ 74,032,771
British Pound	48,915,947
Swiss Franc	37,592,999
Japanese Yen	35,431,175
Mexican Peso	17,328,317
Australian Dollar	16,024,816
South Korean Won	14,376,716
Hong Kong Dollar	12,305,446
Brazilian Real	11,262,066
Norwegian Krone	8,605,222
South African Rand	8,114,900
Indian Rupee	7,651,963
Polish Zloty	5,793,179
Chilean Peso	5,317,620
Swedish Krona	4,923,790
Malaysian Ringgit	4,887,961
Russian Ruble	4,848,982
Danish Krone	3,756,879
New Zealand Dollar	2,720,162
Indonesian Rupiah	2,703,063
Czech Koruna	2,479,614
Thai Baht	2,395,189
Canadian Dollar	2,236,391
Chinese Yuan	1,860,645
Turkish Lira	1,340,474
Singapore Dollar	1,164,447
Colombian Peso	1,128,108
Hungarian Forint	996,251
Taiwan Dollar	908,346
Peruvian Nuevo Sol	688,585
Romanian Leu	681,260
Egyptian Pound	417,546
Ukrainian Hryvnia	344,293
Philippine Peso	307,666
Argentine Peso	263,713
Israeli Sheqel	219,761
Uruguayan Peso	168,484
Dominican Peso	102,555
Total	<u>\$ 344,297,302</u>

## **NOTE 4 – INVESTMENTS**

### Fair Value Measurements

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

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

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

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

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

**NOTE 4 – INVESTMENTS** (continued)

The following table shows the fair value leveling of SLOCPT’s investments as of December 31, 2019:

Investment Type	Fair Value Measurements			Total
	Quoted Prices in Active Markets for Identical Assets Level 1	Quoted Prices for Similar Assets in Inactive Markets Level 2	Significant Unobservable Inputs Level 3	
Bonds and Notes	\$ 107,319,716	\$ 158,563,607	\$ -	\$ 265,883,323
International Fixed Income	-	79,406,947	-	79,406,947
Collateralized Mortgage Obligations	-	5,983,103	-	5,983,103
Domestic Equities	61,066,328	237,355,245	-	298,421,573
International Equities	153,763,487	169,994,505	-	323,757,992
Real Estate	-	-	170,439,564	170,439,564
Total	\$ 322,149,531	\$ 651,303,407	\$ 170,439,564	\$ 1,143,892,502

**Investments in Entities that Calculate Net Asset Value Per Share**

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, 2019:

Investment Type	Investments Measured at Net Asset Value (NAV)			
	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Commingled Fund	\$ 68,864,863	\$ -	Quarterly	30 days
Private Real Estate Fund	34,510,892	-	Quarterly	30 days
Private Equity Funds	53,242,564	51,370,171	Not Eligible	Not Eligible
Private Credit Funds	65,380,389	56,292,448	Not Eligible	Not Eligible
Commodities	47,369,955	-	Daily	1 day
Total	<u>\$ 269,368,663</u>	<u>\$ 107,662,619</u>		

*Commingled Fund*

This investment type consists of investments primarily in equity, debt, or real estate investments. As of December 31, 2019, there was one commingled fund; this fund invests in debt investments and contains foreign bonds.

*Private Real Estate Fund*

This investment type consists of real estate properties, unconsolidated joint ventures, non-guaranteed mortgage-backed certificates, and loans receivable. As of December 31, 2019, SLOCPT's investment in private real estate consisted of one partnership investment.

*Private Equity Funds*

This investment type consists of corporate finance/buyouts, venture capital, coinvestments, and secondary funds and is globally diversified. The fair value of these investments has been determined by the investment custodian bank by using the last capital account statement from the respective general partner and adjusting for capital calls, management fees inside the commitment, return of capital, gain or loss, and income.

*Private Credit Funds*

This investment type consists of private market direct corporate lending, leveraged loans, and asset-backed debt investments and is globally diversified. The fair value of these investments has been determined by the investment custodian bank by using the last capital account statement from the respective general partner and adjusting for capital calls, management fees inside the commitment, return of capital, gain or loss, and income.

*Commodities*

This investment type consists of commodities futures strategies across asset classes and is globally diversified. As of December 31, 2019, SLOCPT's investment in commodities consisted of one partnership investment.

## NOTE 4 – INVESTMENTS (continued)

### 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:

#### *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.

**NOTE 4 – INVESTMENTS** (continued)

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.

The Investment Derivatives schedule below reports the fair value balances and notional amounts of derivatives outstanding as of December 31, 2019:

<u>Derivative Type</u>	<u>Notional Amount</u>	<u>Fair Value</u>
Forward Contracts	\$ (2,885)	\$ (2,885)
Swap Agreements	3,578,362,982	(24,024)
TBAs	2,412,142	2,412,142
	<u>\$ 3,580,772,239</u>	<u>\$ 2,385,233</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, 2019, the Plan had unfunded capital commitments totaling \$107.663 million.

Annual Money-Weighted Rate of Return

For the year ended December 31, 2019, the annual money-weighted rate of return on investments, net of investment expense, was 15.21%. 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, 2019 were as follows:

	Beginning Balance January 1, 2019	Additions	Deletions	Ending Balance December 31, 2019
Office Equipment	\$ 48,232	\$ -	\$ -	\$ 48,232
Software	2,524,414	6,116,621	(2,524,414)	6,116,621
Work in Progress	3,554,159	-	(3,554,159)	-
Land	-	668,150	-	668,150
Building	-	925,136	-	925,136
Accumulated Depreciation and Amortization	(2,566,978)	(308,307)	2,524,414	(350,871)
	<u>\$ 3,559,827</u>	<u>\$ 7,401,600</u>	<u>\$ (3,554,159)</u>	<u>\$ 7,407,268</u>

Depreciation and amortization expenses for the year ended December 31, 2019 were \$308,307.

**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. Unfunded liability amounts incurred through December 31, 2017 are amortized over a closed 30-year period (20 years as of December 31, 2019). Based on the recommendation of SLOCPT's Actuary from the January 1, 2019 Actuarial Valuation, the Board elected to amortize each future year's Unfunded Actuarial Accrued Liability over a closed 20-year layered amortization schedule. 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 \$1.363 million.

In June 2019, the Board unanimously passed the recommendation of an increase of 2.30% to the total contribution rate as recommended by the Actuary in the January 1, 2019 Actuarial Valuation. The increased total contribution rate took into consideration continuing with the remaining 21 years of the 30-year amortization for unfunded liabilities that was reset in 2010 to 30 years as well as beginning the new practice of amortizing future liability amounts using a layered 20-year amortization. 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, 2020. The increase was adjusted to an average of 2.68% to account for the deferred implementation. Superior Court of California and the Air Pollution Control District implemented increased rates of January 1, 2020.

It is the policy of the employers to contribute the full Actuarially Determined Contribution (ADC) 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, 2019 were as follows:

Net Pension Liability:	
Total Pension Liability	\$ 2,105,592,650
Plan Fiduciary Net Position	<u>(1,439,004,203)</u>
Employers' Net Pension Liability	<u>\$ 666,588,447</u>

Plan Fiduciary Net Position as a percentage of Total Pension Liability was 68.34% as of December 31, 2019.

### 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, 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, 2019 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, 2019 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, 2019 (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%	3.80%
Domestic Equities	20%	6.14%
International Equities	20%	7.81%
Alternative Investments	15%	7.03%
Real Estate	15%	7.87%
	<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 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, 2019	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
	\$ 951,044,899	\$ 666,588,447	\$ 434,696,884

**NOTE 8 – LITIGATION**

The Plan is subject to legal proceedings and claims in the ordinary course of its business. As of December 31, 2019, 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 through the date the financial statements were issued to determine if these events are required to be disclosed in these financial statements. On March 11, 2020, the World Health Organization declared the outbreak of the coronavirus (COVID-19) a pandemic. As a result of the spread of COVID-19, economic uncertainties have arisen which are likely to negatively impact the Net Increase in Fiduciary Net Position. Other financial impacts could occur, though such potential impact is unknown at this time.

Subsequent to year-end, the San Luis Obispo Regional Transit Authority (RTA) became a contract agency with SLOCPT, and the management, administrative, and confidential employees of RTA became members 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 22, 2020, which is the date the financial statements were available to be issued.

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**REQUIRED SUPPLEMENTARY INFORMATION**

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

Fiscal year ending December 31*	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>						
Service Cost	\$ 40,445,623	\$ 40,729,658	\$ 38,161,931	\$ 36,968,006	\$ 35,503,180	\$ 36,210,322
Interest on the Total Pension Liability	139,848,569	134,311,163	128,399,243	123,083,279	114,971,636	108,953,629
Differences Between Expected and Actual Experience	3,836,848	31,926,880	(1,367,931)	5,485,265	9,771,252	-
Assumption Changes	-	8,507,420	-	62,845,241	-	-
Benefit Payments	(101,220,652)	(92,811,810)	(85,052,016)	(78,193,401)	(72,441,811)	(66,162,944)
Refunds	(3,410,202)	(1,817,058)	(3,605,261)	(2,489,904)	(2,612,455)	(1,932,077)
<b>Net Change in Total Pension Liability</b>	<b>79,500,186</b>	<b>120,846,253</b>	<b>76,535,966</b>	<b>147,698,486</b>	<b>85,191,802</b>	<b>77,068,930</b>
<b>Total Pension Liability - Beginning</b>	<b>2,026,092,464</b>	<b>1,905,246,211</b>	<b>1,828,710,245</b>	<b>1,681,011,759</b>	<b>1,595,819,957</b>	<b>1,518,751,027</b>
<b>Total Pension Liability - Ending (a)</b>	<b>\$ 2,105,592,650</b>	<b>\$ 2,026,092,464</b>	<b>\$ 1,905,246,211</b>	<b>\$ 1,828,710,245</b>	<b>\$ 1,681,011,759</b>	<b>\$ 1,595,819,957</b>
<b>Fiduciary Net Position</b>						
Employer Appropriations	\$ 48,957,564	\$ 46,243,596	\$ 42,340,904	\$ 35,451,409	\$ 33,618,330	\$ 32,046,545
Employee Contributions	32,983,211	32,952,747	30,467,232	25,359,069	24,586,735	24,415,512
Pension Plan Net Investment Income (Loss)	193,721,648	(50,033,056)	178,639,524	68,949,306	(16,705,852)	51,667,160
Benefit Payments	(101,220,652)	(92,811,810)	(85,052,016)	(78,193,401)	(72,441,811)	(66,162,944)
Refunds	(3,410,202)	(1,817,058)	(3,605,261)	(2,489,904)	(2,612,455)	(1,932,077)
Pension Plan Administrative Expense	(2,120,046)	(1,972,465)	(2,045,367)	(2,248,956)	(2,528,532)	(2,084,841)
Other	(1,527,404)	(1,412,892)	(1,516,852)	(1,387,369)	(1,449,773)	(331,910)
<b>Net Change in Fiduciary Net Position</b>	<b>167,384,119</b>	<b>(68,850,938)</b>	<b>159,228,164</b>	<b>45,440,154</b>	<b>(37,533,358)</b>	<b>37,617,445</b>
<b>Fiduciary Net Position - Beginning</b>	<b>1,271,620,084</b>	<b>1,340,471,022</b>	<b>1,181,242,858</b>	<b>1,135,802,704</b>	<b>1,173,336,062</b>	<b>1,135,718,617</b>
<b>Fiduciary Net Position - Ending (b)</b>	<b>\$ 1,439,004,203</b>	<b>\$ 1,271,620,084</b>	<b>\$ 1,340,471,022</b>	<b>\$ 1,181,242,858</b>	<b>\$ 1,135,802,704</b>	<b>\$ 1,173,336,062</b>
<b>Net Pension Liability (a)-(b)</b>	<b>\$ 666,588,447</b>	<b>\$ 754,472,380</b>	<b>\$ 564,775,189</b>	<b>\$ 647,467,387</b>	<b>\$ 545,209,055</b>	<b>\$ 422,483,895</b>
<b>Fiduciary Net Position as a Percentage of Total Pension Liability</b>	68.34%	62.76%	70.36%	64.59%	67.57%	73.53%
<b>Covered Payroll**</b>	200,924,549	199,288,713	192,735,874	180,728,417	175,628,910	167,343,323
<b>Net Pension Liability as a Percentage of Covered Payroll</b>	331.76%	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 payrate for the subsequent year at the valuation date.

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

Fiscal Year Ended December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)*	Covered Payroll**	Actual Contribution as a % of Covered Payroll
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%
2019	\$ 57,223,312	\$ 48,957,564	\$ 8,265,748	\$ 200,924,549	24.37%

\* A portion of the deficiency for the years ending December 31, 2014, 2015, 2016, 2018, 2018, and 2019 was due to the prefunding arrangement and/or the delayed implementation of rate increases.

\*\* Covered payroll for years prior to 2014 is the amount in force as of the valuation date and likely differs from the actual payroll paid during the year.

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

Valuation Date	January 1, 2019
Notes	Actuarially determined contribution rates are calculated as of January 1, 2019. Members and employers contribute based on fixed rates. The County may choose to prefund a portion of the actuarially determined contribution. 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 21-year period from January 1, 2019 ending December 31, 2039. Future gains and losses will be amortized over 20-year closed period layers.
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
2019	15.21%
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 a comparable format. Additional years will be displayed as they become available.*

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**OTHER SUPPLEMENTARY INFORMATION**

**SAN LUIS OBISPO COUNTY PENSION TRUST  
SCHEDULE OF ADMINISTRATIVE EXPENSES  
FOR THE YEAR ENDED DECEMBER 31, 2019 (WITH COMPARATIVE TOTALS)**

	2019	2018
<b>Personnel Services</b>		
Salaries and Benefits	\$ 1,076,101	\$ 1,096,817
Total Personnel Services	<u>1,076,101</u>	<u>1,096,817</u>
<b>Office Expenses</b>		
Office Supplies	18,157	13,179
Postage	28,826	24,351
Telephone	1,538	3,648
Utilities	7,859	7,709
Total Office Expenses	<u>56,380</u>	<u>48,887</u>
<b>Professional Services</b>		
Accounting and Auditing	58,489	65,428
Actuarial	81,789	167,799
Data Processing	115,342	159,230
Legal	192,937	208,198
Medical	23,878	25,249
Human Resources Consulting	5,000	5,129
Other	7,749	7,545
Bank Charges	11,975	12,396
Total Professional Services	<u>497,159</u>	<u>650,974</u>
<b>Other Administrative Expenses</b>		
Maintenance and Custodial	19,805	17,731
Insurance	116,692	116,594
Memberships, Subscriptions, and Publications	6,372	3,872
Printing and Reprographics	20,944	13,856
Transportation, Travel, and Education	18,197	19,492
Miscellaneous Administrative Expenses	89	850
Total Other Administrative Expenses	<u>182,099</u>	<u>172,395</u>
<b>Depreciation and Amortization</b>	308,307	3,392
<b>TOTAL ADMINISTRATIVE EXPENSES</b>	<u>\$ 2,120,046</u>	<u>\$ 1,972,465</u>



**SAN LUIS OBISPO COUNTY PENSION TRUST  
SCHEDULE OF INVESTMENT EXPENSES  
FOR THE YEAR ENDED DECEMBER 31, 2019 (WITH COMPARATIVE TOTALS)**

	2019	2018
Investment Manager Fees	\$ 3,081,339	\$ 3,334,254
Custody Fees	190,586	199,754
Investment Consultant	296,346	315,176
Other Investment Expenses	64,276	89
<b>TOTAL INVESTMENT EXPENSES</b>	<b>\$ 3,632,547</b>	<b>\$ 3,849,273</b>

**SAN LUIS OBISPO COUNTY PENSION TRUST  
SCHEDULE OF PAYMENTS TO CONSULTANTS  
FOR THE YEAR ENDED DECEMBER 31, 2019 (WITH COMPARATIVE TOTALS)**

	2019	2018
Accounting and Auditing Services	\$ 58,489	\$ 65,428
Actuarial Services	81,789	167,799
Data Processing Services	115,342	159,230
Legal Services	192,937	208,198
Disability Medical Services	23,878	25,249
Human Resources Services	5,000	5,129
Payroll Processing Services	6,235	6,029
<b>TOTAL PAYMENTS TO CONSULTANTS</b>	<b>\$ 483,670</b>	<b>\$ 637,062</b>

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*Investment Section*



## **Investment Section Overview**

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

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

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April 15, 2020

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, 2019.

#### **Capital Markets Review**

A strong 4th quarter capped a strong year for global equities with the U.S. leading the charge. The S&P 500 Index delivered a total return of 31.0%, compared to 22.1% for stocks outside the U.S. The impressive showing came despite concerns about slowing economic growth and flat-to-declining corporate profits around the world. It is also worth noting that much of last year's performance was simply digging out from a very poor fourth quarter of 2018, when the S&P 500 fell 19.8% from its prior peak. Whereas the disappointing 4Q18 performance was largely driven by the Fed raising interest rates too soon over concerns about nascent inflation, much of last year's recovery was driven by a policy reversal that saw the Fed lower rates three times for a total of a 0.75% reduction throughout the year. Falling rates provided a tailwind to a global economy otherwise hindered by uncertainty over the U.S./China trade dispute. Then in the fourth quarter, sustained progress was made on the trade front in the lead up to the Phase 1 trade agreement, which was signed on January 15th. Risk markets shot ahead, and Emerging Markets investments were the clear winner in the fourth quarter of last year and heading into this year, as they benefitted most from the cessation of trade hostilities.

#### **Performance Summary**

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

In conjunction with strong investment returns across most asset classes, the Trust earned 16.3% in 2019 before expenses and investment management fees. While this performance was very strong historically, the Trust's relatively conservative positioning versus its peers led to modest

underperformance when compared to a return of 18.5% for the median fund in the InvestorForce Public DB Plan universe.

Digging deeper into the Trust’s annual return, the strongest performance for the year came from Domestic and International Equity, which returned 29.4% and 30.2%, respectively. Fixed income put up historically strong numbers as well with Domestic and Global Fixed Income returning 9.9% and 7.8%, respectively, as interest rates fell and credit spreads tightened around the world. Even Commodities, which have disappointed for much of the last decade, returned 8.7% over the past 12 months. Real Estate lagged with a positive but relatively modest 4.3% return. At 16.3%, the Trust was just behind its benchmark of 16.8% for the year. The underperformance was primarily driven by a slight value bias in the equity portion of the portfolio, as well as trailing performance by one of the Trust’s two real estate managers.

**Asset Allocation**

In May of 2019, 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

**Recent Developments**

As we write this annual review in mid-April 2020, the 2019 Novel Coronavirus (COVID-19) pandemic has caused economic activity to come to a virtual standstill, which is in turn wreaking havoc on global investment markets. It is impossible to say what the future holds in such uncertain times. In the past two weeks, we have seen a strong if incomplete reversal off of recent lows, based on evidence the rate of global infection is waning, but should infection rates rebound, or if the downward trend in economic activity persists, we could easily test the lows again.

In this environment, it is important to note the Trust’s portfolio is well-diversified and constructed with a risk profile to weather large market drawdowns. In addition, the Board has put in place investment strategies to take advantage of investment opportunities during periods of elevated market volatility and improve long-term performance. In this environment and given these circumstances, the investment portfolio is well-positioned to withstand a significant downturn and benefit from the recovery that will inevitably follow.

All of us here at Verus appreciate the opportunity to assist the SLOCPT Board in meeting the Trust'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

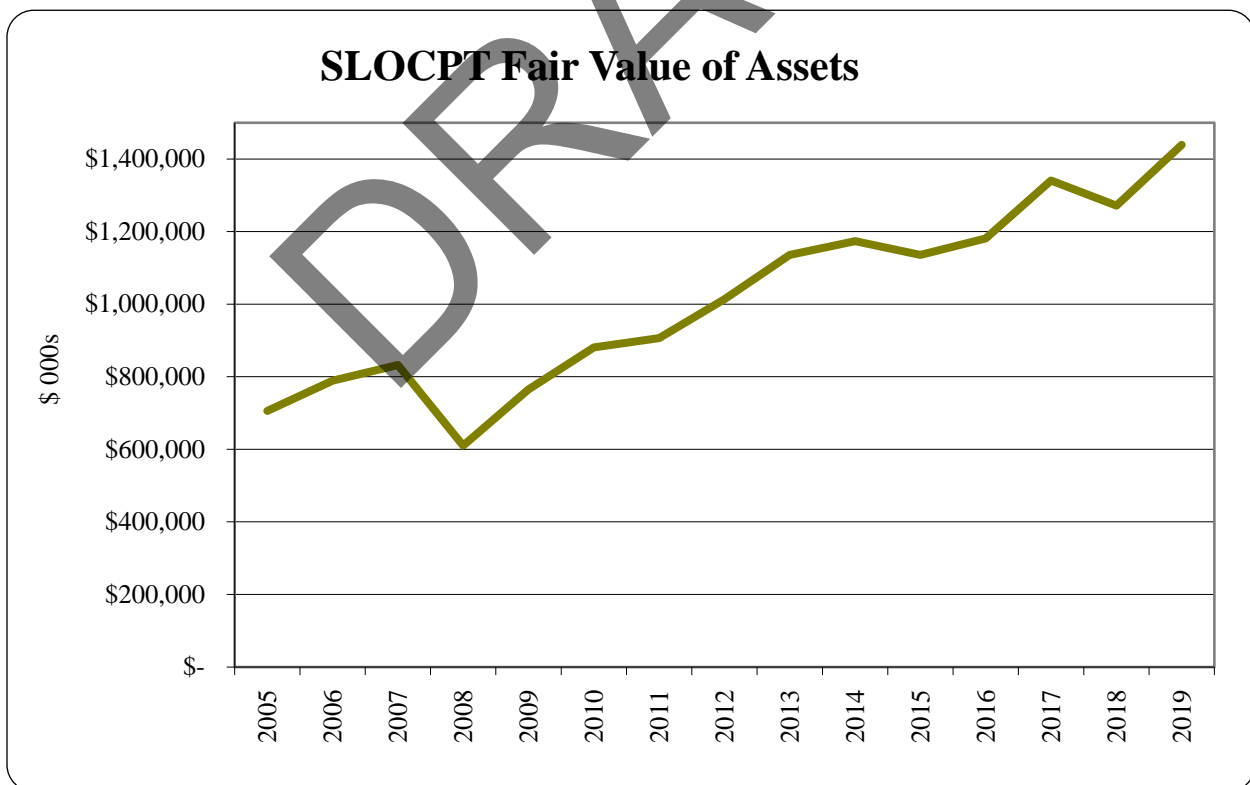
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## Summary of Investment Objectives

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

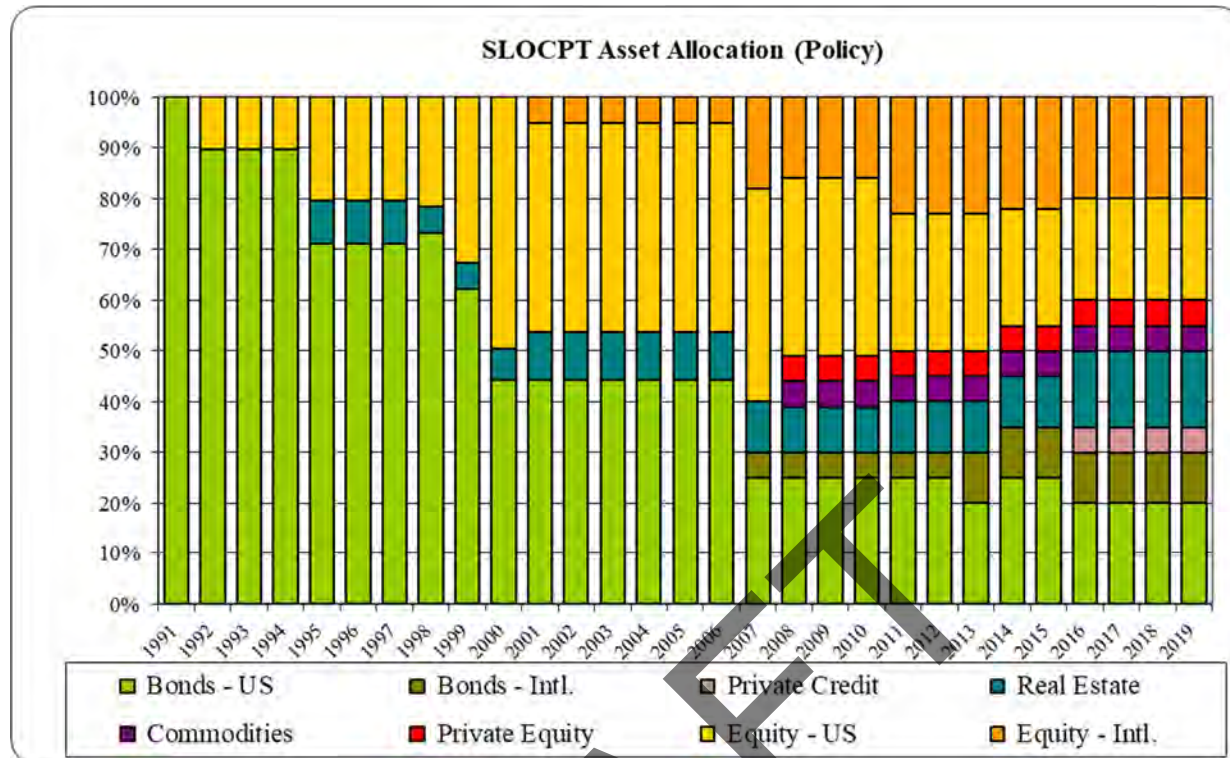
The Strategic Asset Allocation (SAA) asset mix incorporated into the Investment Policy is shown below (amended May 2019):

Asset Allocation Policy <b>Adopted May 20, 2019</b>	2019 Policy	2019 Min. Max.		Performance Benchmark
<b>Equities - US</b>				
Large Cap US Equity	16%	11%	21%	varies with Mgr.
Small / Mid Cap US Equity	4%	2%	9%	varies with Mgr.
<b>Equities - US - Total</b>	<b>20%</b>	15%	30%	<b>Russell 3000</b>
<b>Equities - International</b>				
International	13%	8%	18%	MSCI EAFE
International - Emerging Mkt.s	7%	0%	12%	
<b>Equities - Intl. - Total</b>	<b>20%</b>	15%	30%	<b>MSCI ACWI ex. US</b>
<b>EQUITIES - Total</b>	<b>40%</b>	30%	50%	
<b>Fixed Income</b>				
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
<b>BONDS - Total</b>	<b>30%</b>	25%	45%	<b>BC Aggregate Bond</b>
<b>Real Estate</b>				
Real Estate - Core	10%	5%	15%	NCREIF
Real Estate - Value Add	5%	0%	10%	NCREIF
Real Estate - Directly owned	0%	0%	4%	NCREIF
<b>REAL ESTATE - Total</b>	<b>15%</b>	5%	20%	<b>NCREIF</b>
<b>Commodities</b>				
Commodities - Active	5%	0%	10%	DJ UBS Commodities
<b>COMMODITIES - Total</b>	<b>5%</b>	0%	10%	<b>DJ UBS Commodities</b>
<b>Alternative Assets</b>				
Private Equity	5%	*	0% 10%	Actual time-wtd return
Private Credit	5%	*	0% 10%	Actual time-wtd return
<b>ALT. ASSETS - Total</b>	<b>10%</b>		0% 20%	<b>Russell 3000 + 3%</b>
<b>Opportunistic</b>				
Opportunistic	varies		0% 10%	Russell 3000 + 3%
<b>Liquidity</b>				
Cash Equivalents	0%	**	0% 5%	* T-Bills
Cash Overlay	0%	**	NA NA	* Policy Mix
<b>LIQUIDITY - Total</b>	<b>0%</b>		0% 5%	T-Bills
<b>TOTAL</b>	<b>100%</b>			

\* The Policy Benchmark uses actual private market asset class weights each rounded to the nearest 1%. The difference in actual weight versus target is allocated to the private market's public market "equivalent" (private equity to equity; private credit to core fixed income).

\* 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:

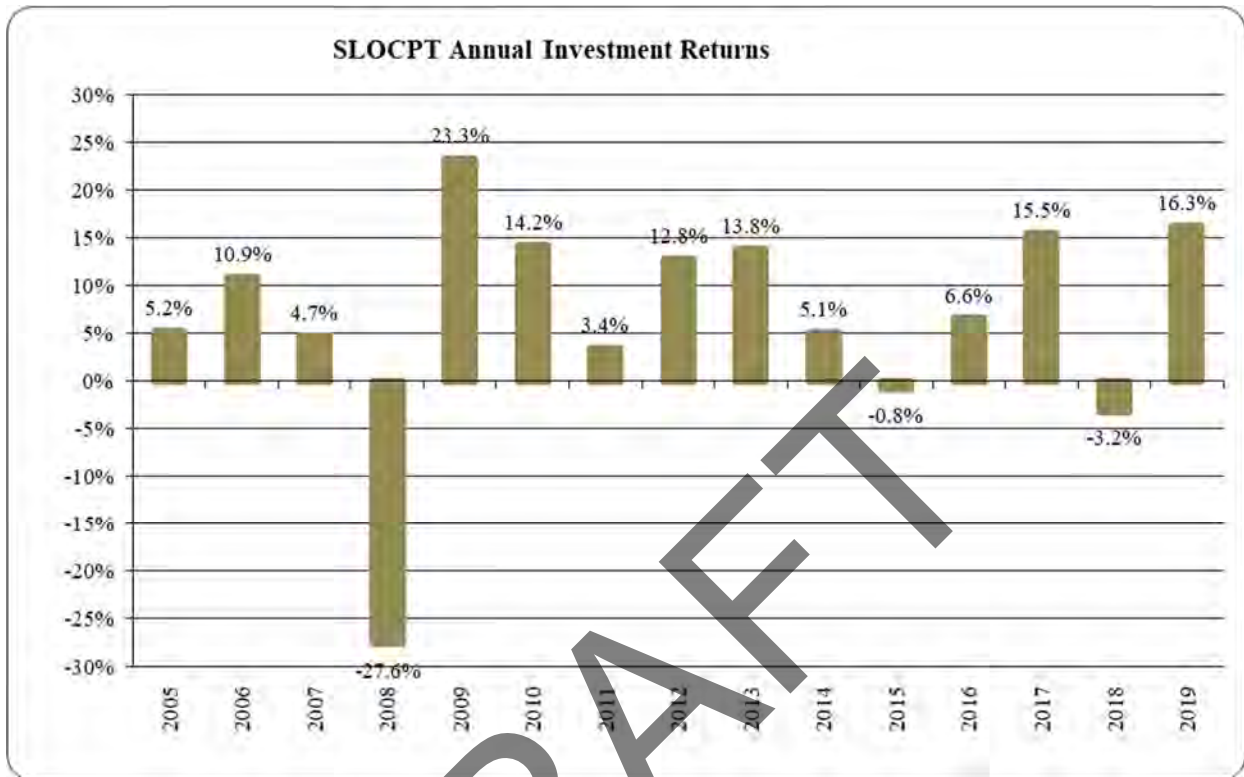


SLOCPT employs multiple investment managers in different asset classes and with different styles of investing. Combined with strict limitations in the Investment Policy on the maximum exposure to individual investments and with regular rebalancing of the asset mix the diversification level of the investments 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 2019, SLOCPT achieved a rate of return of 16.3% 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>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
SLOCPT Total Returns	-0.8%	6.6%	15.5%	-3.2%	16.3%

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	16.3%	9.2%	6.6%	8.2%	6.0%

Source: Verus 4<sup>th</sup> Quarter 2019 report and Pension Trust records for pre-2006 returns

San Luis Obispo County Pension Trust  
**Investment Results Based on Fair Value**  
For the Year Ended December 31, 2019

Annualized time-weighted rates of return based on fair value

<b>Investment Account</b>		<b>Current Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>Inception</b>
<b>Domestic Equities</b>					
PIMCO RAE Fundamental	g	25.5%	11.1%	9.1%	11/2007
<i>Index: S&amp;P 500</i>		31.5%	15.3%	11.7%	
Loomis Sayles Large Cap Growth	g	32.7%	20.5%	< 5 yrs	12/2016
<i>Index: Russell 1000 Growth</i>		36.4%	20.5%		
Boston Partners Large Cap Value	g	24.3%	< 3 yrs		02/2017
<i>Index: Russell 1000 Value</i>		26.5%			
Atlanta Capital	g	35.1%	17.8%	15.2%	08/2010
<i>Index: Russell 2500</i>		27.8%	10.3%	8.9%	
<b>International Equities</b>					
Dodge & Cox	g	23.6%	8.4%	4.3%	12/2007
<i>Index: MSCI EAFE</i>		22.7%	10.1%	6.2%	
WCM International Growth	g	36.7%	< 3 yrs		02/2017
<i>Index: MSCI ACWI ex US</i>		22.1%			
<b>Domestic Fixed Income</b>					
BlackRock Core Bond	g	10.2%	< 3 yrs		01/2017
Dodge & Cox Income Fund	g	10.2%	< 3 yrs		01/2017
<i>Index: BBgBarc US Aggregate TR</i>		8.7%			
PAM Bank Loan Fund	g	9.1%	4.9%	5.3%	9/2014
<i>Index: S&amp;P/LSTA Leveraged Loan Index</i>		8.6%	4.3%	4.4%	
<b>International Fixed Income</b>					
Brandywine	g	6.2%	4.6%	1.2%	11/2007
<i>Index: FTSE WGBI ex US TR</i>		5.3%	4.5%	1.9%	
Ashmore Emerging Markets	g	< 1 yr			03/2019
<i>Index: JPM GBI EM Global Div</i>					
<b>Real Estate</b>					
ARA American Strategic Value Realty Fund	g	7.3%	7.9%		06/2016
JP Morgan Strategic Properties Fund	g	3.4%	5.5%	8.0%	03/2008
<i>Index: NCREIF Property</i>		6.4%	6.7%	8.2%	
<b>Commodities</b>					
Gresham MTAP	g	8.7%	0.4%	-3.2%	08/2013
<i>Index: Bloomberg Commodity</i>		7.7%	-0.9%	-3.9%	

San Luis Obispo County Pension Trust  
**Investment Results Based on Fair Value (continued)**  
For the Year Ended December 31, 2019  
Annualized time-weighted rates of return based on fair value

<b>Investment Account</b>		<b>Current Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>Inception</b>
<b>Private Equity</b>					
HarbourVest Fund IX (buyout)					06/2011
Harbourvest 2018 Global Fund					12/2018
Pathway Private Equity Fund					04/2017
Combined Private Equity	g	7.2%	15.0%	16.0%	
<i>Index: Russell 3000 + 300BP</i>		34.9%	18.0%	14.6%	
<b>Private Credit</b>					
TSSP Diversified Credit Programs					11/2016
Combined Private Credit	g	6.7%	6.4%		
<i>Index: BBgBarc High Yield + 200BP</i>		8.5%	8.2%		
<b>Opportunistic</b>					
PIMCO Distressed Credit Fund					07/2010
KKR Mezzanine Debt Fund I					04/2011
Combined Opportunistic	g	-2.9%	9.0%	7.1%	
<i>Index: Russell 3000 + 300BP</i>		34.9%	18.0%	14.6%	
<b>Cash Account</b>					
Treasury Pool		2.2%	1.6%	1.1%	
<i>Index: 91 day T-Bills</i>		2.1%	1.6%	1.1%	
<b>TOTAL FUND (including Parametric Cash Overlay)</b>					
Total Fund		<b>16.3%</b>	<b>9.2%</b>	<b>6.6%</b>	
<i>Index: Policy Index at 12/31/19:</i>		16.6%	8.6%	6.6%	
<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, 2019; 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 Year Ended December 31, 2019 (Dollars in Thousands)

Management Fees	2019 Fees	Year-End Assets Under Mgmt.	Fees as % of Year- End Assets (a)
<b>Domestic Equity</b>			
PIMCO RAE Fundamental	N/A (d)	\$ 62,374	
Loomis Sayles	\$ 363	88,587	0.41%
Boston Partners	N/A (d)	86,395	
Atlanta Capital	495	61,066	0.81%
Total Domestic Equity	858	298,422	
<b>International Equity</b>			
Dodge & Cox (mutual fund)	N/A (d)	153,763	
WCM International (mutual fund)	N/A (d)	169,995	
Total International Equity	-	323,758	
<b>Domestic Fixed Income</b>			
BlackRock Core Bond	286	100,322	0.29%
Dodge & Cox Income Fund	N/A (d)	107,320	
PAM Bank Loan Fund	N/A (d)	70,378	
Total Domestic Fixed Income	286	278,020	
<b>International and Global Fixed Income</b>			
Brandywine	300	68,865	0.44%
Ashmore Emerging Markets	N/A (d)	73,253	
Total International and Global Fixed Income	300	142,118	
<b>Real Estate</b>			
Direct Real Estate Owned	60	-	
ARA American Strategic Value Realty Fund	N/A (d)	34,511	
JP Morgan Strategic Properties Fund	1,478	170,439	0.87%
Total Real Estate	1,538	204,950	
<b>Commodities</b>			
Gresham	N/A (d)	47,370	
<b>Private Equity/Credit</b>			
HarbourVest Fund IX (buyout)	N/A (d)	15,395	
HarbourVest 2018 Global Fund	N/A (d)	4,950	
Pathway Private Equity	N/A (d)	32,898	
TSSP Diversified Credit Programs	N/A (d)	60,583	
PIMCO Distressed Credit Fund	-	102	0.00%
KKR Mezzanine Debt Fund I	82	4,695	1.74%
Total Private Equity/Credit	82	118,623	
<b>Cash Overlay</b>			
Parametric	17	- (b)	N/A
<b>Total Management Fees</b>	\$ 3,081		

San Luis Obispo County Pension Trust  
**Schedule of Management Fees and Commissions (continued)**  
For the Year Ended December 31, 2019 (Dollars in Thousands)

	2019 Fees	Year-End Assets Under Mgmt.	Fees as % of Year- End Assets
Other Investment Expenses			
Custodian Fees	191		0.01%
Investment Consultant	297		0.02%
Other Investment Expenses	64		0.00%
<b>Total Other Investment Expenses</b>	<b>552</b>		<b>0.04%</b>
<b>TOTAL INVESTMENT EXPENSES AND ASSETS UNDER MANAGEMENT</b>	<b>\$ 3,633</b>	<b>\$ 1,413,261</b>	<b>0.26%</b>

	Commissions Fees
Broker Commissions	
Broker Commissions	\$ 17 (c)
Broker Fees	-
<b>Total Broker Commissions</b>	<b>\$ 17</b>

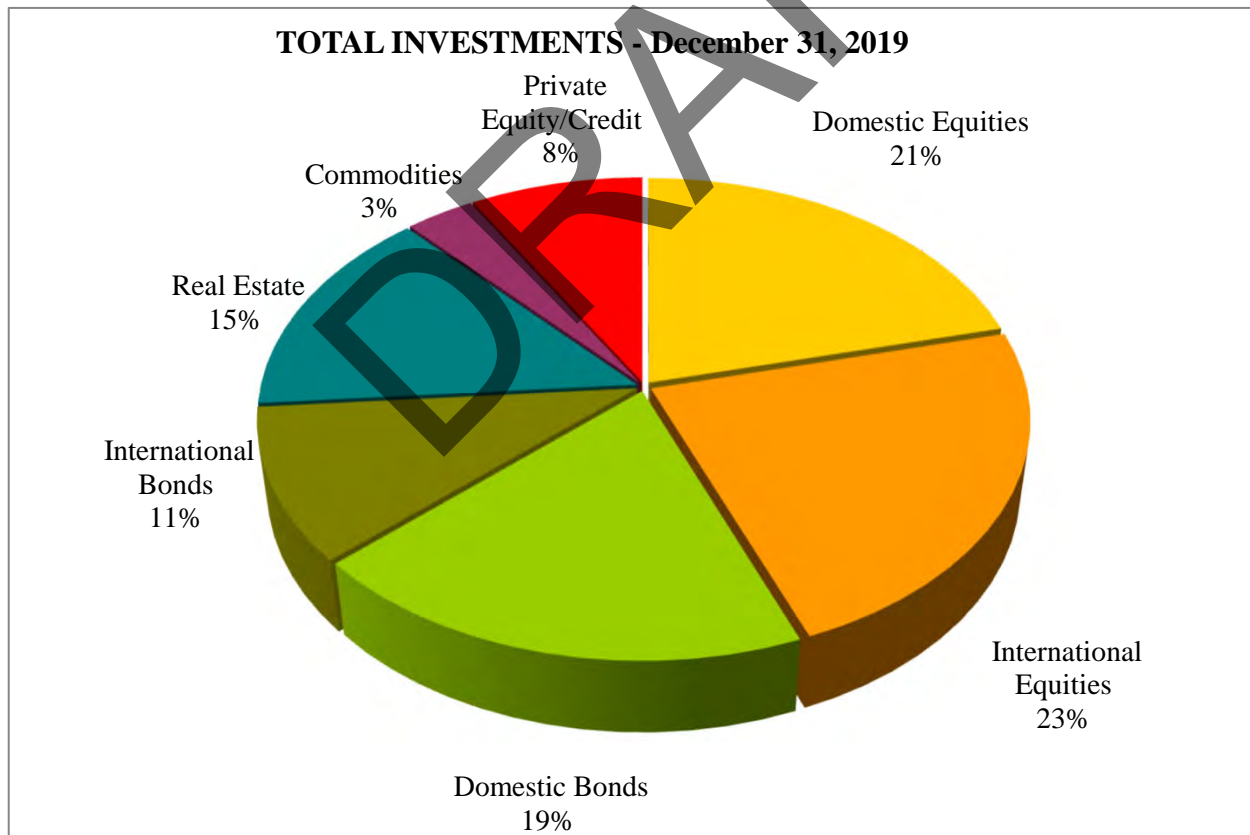
- (a) Investment management fees are typically charged quarterly based on fair value and on a graduated scale; therefore, management fees compared to year-end asset values is a simplified presentation that approximates the average fee rate.
- (b) Parametric Cash Overlay strategy has all of its underlying 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 SLOCPT's investments are held in commingled funds. Brokerage commissions for commingled funds are netted against investment returns and therefore are 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, 2019.

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, 2019 (Dollars in Thousands)

	<u>Fair Value</u>	<u>%</u>
<b>Equities</b>		
Domestic Equities	\$ 298,422	21.12%
International Equities	323,758	22.91%
<b>Fixed Income</b>		
Domestic Bonds, Mortgages, Notes	271,866	19.24%
International Bonds	148,272	10.49%
<b>Real Estate</b>	204,950	14.50%
<b>Alternatives</b>		
Commodities	47,370	3.35%
Private Equity/Credit	118,623	8.39%
<b>TOTAL INVESTMENTS</b>	<u>\$ 1,413,261</u>	<u>100.00%</u>





San Luis Obispo County Pension Trust  
**Schedule of Largest Stock and Bond Holdings**  
As of December 31, 2019 By Fair Value

Largest Stock Holdings	Shares	Fair Value
1 ARAMARK COMMON STOCK USD 0.01	69,177	\$ 3,002,282
2 WR BERKLEY CORP COMMON STOCK USD 0.2	42,979	2,969,849
3 TRANSUNION COMMON STOCK USD 0.01	32,825	2,810,148
4 TELEFLEX INC COMMON STOCK USD 1	7,111	2,676,865
5 WEX INC COMMON STOCK USD 0.01	9,484	1,986,519
6 SERVICEMASTER GLOBAL HOLDINGS INC COMMON STOCK USD 0.01	51,352	1,985,268
7 JB HUNT TRANSPORT SERVICES INC COMMON STOCK USD 0.01	16,244	1,896,974
8 CARLISLE COS INC COMMON STOCK USD 1	10,781	1,744,797
9 APTARGROUP INC COMMON STOCK USD 0.01	14,913	1,724,241
10 LENNOX INTERNATIONAL INC COMMON STOCK USD 0.01	6,825	1,665,095
Total of 10 Largest Stock Holdings		<u>\$ 22,462,038</u>

Largest Bond Holdings	Par Value	Fair Value
1 UMBS MORTPASS 4% 01/NOV/2041	\$ 1,420,400	\$ 1,446,638
2 UMBS MORTPASS 4.5% 01/FEB/2045	1,370,715	1,381,402
3 GNMA II MORTPASS 4% 20/JUN/2047	1,363,623	1,356,018
4 UMBS MORTPASS 4% 01/NOV/2046	1,136,338	1,174,667
5 UMBS MORTPASS 3.5% 01/JAN/2047	1,124,612	1,143,094
6 FHLMCGLD MORTPASS 4.5% 01/SEP/2046	1,000,455	1,006,736
7 TBA UMBS SINGLE FAMILY 30YR 4 1/20 4.00%	892,519	894,469
8 FHLMCGLD MORTPASS 3.5% 01/DEC/2046	863,503	889,967
9 GNMA II MORTPASS 4.5% 20/JUL/2048	774,595	784,636
10 UMBS MORTPASS 5% 01/SEP/2035	762,835	766,840
Total of 10 Largest Bond Holdings		<u>\$ 10,844,467</u>

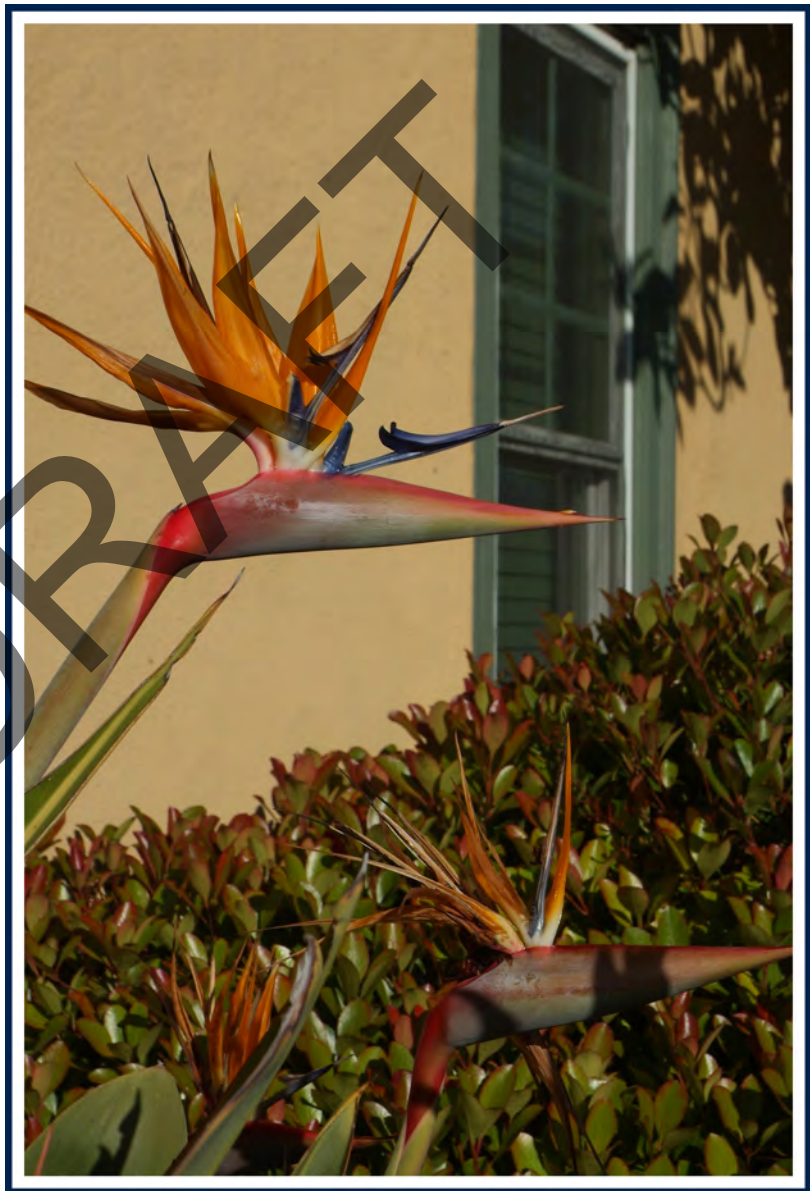
Significant portions of the San Luis Obispo County Pension Trust's (SLOCPT) investments are held in commingled funds. The securities listed above are from those held in separate accounts for SLOCPT and do not include securities held in commingled funds.

A complete listing of SLOCPT's investments is available upon request.

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*Actuarial Section*



## **Actuarial Section Overview**

The Actuarial Section of the Comprehensive Annual Financial Report (CAFR) provides expanded reporting on the actuarial measures and valuations relative to the San Luis Obispo County Pension Trust (SLOCPT) and the San Luis Obispo County Employees Retirement Plan (the Plan). This section is based on the latest available actuarial valuation which, in this case, is the Annual Actuarial Valuation as of January 1, 2019.

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, 2019 valuation. It is based on member data and financial results through December 31, 2018. The Pension Trust's actuary, Gabriel Roeder Smith & Company (GRS), completed this annual valuation during 2019. 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, 2019 Annual Actuarial Valuation.

The Annual Actuarial Valuation as of January 1, 2019 including actuarial assumptions was approved by the Board on June 24, 2019.

The Annual Actuarial Valuation as of January 1, 2020, based on data through December 31, 2019, is in the process of being developed at the time of the publication of this CAFR.



June 1, 2020

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, 2019 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, 2019.

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

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 21 years remaining as of January 1, 2019.

**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 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 21 years (30 year closed amortization period beginning with the January 1, 2010 valuation) for funding computations.

The enclosed exhibits provide further related information necessary to complete your filing. All other necessary information is available in the January 1, 2019 actuarial valuation report. The enclosed exhibits include:

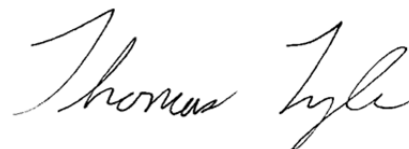
- Assumptions and Funding Methods
- Schedule of Active Members
- Schedule of Retirees and Beneficiaries
- Solvency Test
- Schedule of Funding Progress
- Development of Actuarial Value of Assets
- Summary of Benefit Provisions

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**



Paul T. Wood, ASA, FCA, MAAA  
Consultant



Thomas Lyle, ASA, FCA, EA, MAAA  
Consultant



# ACTUARIAL METHODS AND ASSUMPTIONS USED FOR THE January 1, 2019 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 (21 years as of January 1, 2019) for funding computations. Starting January 1, 2019, future gains and losses 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. 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 – 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 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.

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

Sample rates for 2019 shown 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%

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5. Retirement –

a. As shown below for Tier 1 members for selected ages (rates are only applied to members eligible for retirement):

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

Current Reciprocal and Reserve members are assumed to retire at the later of age 60 (age 55 for Tier 1 Reserve Members) or attained age.

b. As shown below for Tier 2 and future Tier 3 members for selected ages (rates are only applied to members eligible for retirement):

Age	Percent of Eligible Active Members Retiring Within Next Year		
	Miscellaneous	Probation	Safety
50	3.0%	7.5%	9.0%
51	3.0%	7.5%	9.0%
52	3.0%	7.5%	10.0%
53	3.0%	7.5%	10.0%
54	3.0%	7.5%	10.0%
55	6.0%	7.5%	10.0%
56	6.0%	7.5%	10.0%
57	6.0%	7.5%	10.0%
58	6.0%	9.0%	11.0%
59	6.0%	9.0%	15.0%
60	8.0%	10.0%	20.0%
61	8.0%	10.0%	25.0%
62	20.0%	20.0%	30.0%
63	20.0%	20.0%	40.0%
64	20.0%	20.0%	60.0%
65	40.0%	40.0%	100.0%
66	30.0%	20.0%	
67	25.0%	20.0%	
68	25.0%	40.0%	
69	25.0%	50.0%	
70	100.0%	100.0%	

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

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

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

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

40% of Vested Terminations are assumed to be Reciprocal.

Based on Member Contribution Totals provided by SLOCPT, we are assuming that 1.00% of members' contribution account balances are for supplemental/additional benefits.



C. Other Assumptions

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

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

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

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

Marital Status. 80% of men and 60% of women were assumed married at retirement.

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

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

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

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## Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Average Annual Earnings	Percent Increase In Average Earnings
1/01/2009	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
1/01/2019	2,725	200,537,472	73,592	1.8

## 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
1/01/2009	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%
1/01/2019	188	6,817,615	65	1,583,470	2,868	95,882,264	33,432	3.9%

## 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				
1/01/2009	\$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%
1/01/2019	1,343,131,383	72,620,989	614,176,940	1,362,561,581	100%	27%	0%

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## Schedule of Funding Progress

Valuation Date	Valuation Assets <sup>1</sup>	Actuarial Liability <sup>1</sup>	Funded Ratio	Unfunded		Ratio to Payroll
				Actuarial Liability	Member Payroll	
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 <sup>2,3</sup>	1,057,922	1,378,549	76.7%	320,627	161,055	199.1%
12/31/2012 <sup>3</sup>	1,122,151	1,468,001	76.4%	345,850	164,299	210.5%
12/31/2013 <sup>4</sup>	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 <sup>2</sup>	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 <sup>2</sup>	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%

<sup>1</sup> 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

<sup>2</sup> Reflects assumption changes.

<sup>3</sup> Reflects benefit provisions under Tier 2 for certain new members.

<sup>4</sup> Reflects benefit provisions under Tier 3 for new members, and assumption changes.

## Development of Funding Value of Assets January 1, 2019

### San Luis Obispo County Pension Trust

#### Development of Funding Value of Assets - January 1, 2019

	Plan Year Ended <u>December 31, 2014</u>	Plan Year Ended <u>December 31, 2015</u>	Plan Year Ended <u>December 31, 2016</u>	Plan Year Ended <u>December 31, 2017</u>	Plan Year Ended <u>December 31, 2018</u>
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)	68,949,306	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*	0	0	0	0	0
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.



# 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 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, 2019 valuation have increased since the January 1, 2018 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, 2019

## C. Retirement Age Factors

Safety					
Age	Tier 1 <sup>1</sup>	Tier 1 <sup>2</sup>	Tier 2 <sup>3</sup>	Tier 2 <sup>4</sup>	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

<sup>1</sup> Safety Bargaining Units 6 & 7 and Non-Sworn Bargaining Units 3, 14, 15

<sup>2</sup> Safety Bargaining Units 10 & 16 and Sworn Bargaining Units 15, 27, 28

<sup>3</sup> Non-Sworn Safety members

<sup>4</sup> 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 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 \$124,180 for 2019 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 (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 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.

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*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, 2019 Annual Actuarial Valuation which reflects data as of December 31, 2018.

San Luis Obispo County Pension Trust

**Changes in Fiduciary Net Position**

Last 10 fiscal years (Dollars in Thousands)

	2019	2018	2017	2016	2015
<b>Additions</b>					
Employer Appropriations	\$ 48,958	\$ 46,243	\$ 42,341	\$ 35,452	\$ 33,618
Plan Member Contributions	32,983	32,953	30,467	25,359	24,587
Net Investment Income (Loss)	193,721	(50,033)	178,640	68,949	(16,706)
Other Income	19	-	-	-	-
<b>Total Additions</b>	<b>\$ 275,681</b>	<b>\$ 29,163</b>	<b>\$ 251,448</b>	<b>\$ 129,760</b>	<b>\$ 41,499</b>
<b>Deductions</b>					
Service Retirement Benefits	\$ 86,853	\$ 79,120	\$ 72,074	\$ 66,623	\$ 61,796
Disability Retirement Benefits	3,777	3,506	3,305	3,214	3,150
Beneficiary Retirement Benefits	5,326	4,845	4,435	4,156	3,824
Deferred Retirement Option Program	5,265	5,341	5,238	4,201	3,672
Total Retirement Benefits	\$ 101,221	\$ 92,812	\$ 85,052	\$ 78,194	\$ 72,442
Refunds	3,292	1,757	2,857	2,247	1,613
Death Benefit	118	60	748	243	999
Administrative Expense	2,120	1,972	2,046	2,249	2,528
Discount Amortization	1,546	1,413	1,517	1,387	1,450
<b>Total Deductions</b>	<b>\$ 108,297</b>	<b>\$ 98,014</b>	<b>\$ 92,220</b>	<b>\$ 84,320</b>	<b>\$ 79,032</b>
<b>Net Increase (Decrease) in Fiduciary Net Position</b>	<b>\$ 167,384</b>	<b>\$ (68,851)</b>	<b>\$ 159,228</b>	<b>\$ 45,440</b>	<b>\$ (37,533)</b>
	2014	2013	2012	2011	2010
<b>Additions</b>					
Employer Appropriations	\$ 32,047	\$ 30,796	\$ 30,942	\$ 30,436	\$ 32,148
Plan Member Contributions	24,415	24,460	25,207	25,262	24,549
Net Investment Income (Loss)	51,667	131,842	108,818	24,113	110,054
<b>Total Additions</b>	<b>\$ 108,129</b>	<b>\$ 187,098</b>	<b>\$ 164,967</b>	<b>\$ 79,811</b>	<b>\$ 166,751</b>
<b>Deductions</b>					
Service Retirement Benefits	\$ 56,186	\$ 50,919	\$ 46,535	\$ 42,739	\$ 39,807
Disability Retirement Benefits	2,972	2,879	2,746	2,692	2,662
Beneficiary Retirement Benefits	3,541	3,352	2,905	2,769	2,486
Deferred Retirement Option Program	3,464	3,087	2,362	2,215	1,846
Total Retirement Benefits	\$ 66,163	\$ 60,237	\$ 54,548	\$ 50,415	\$ 46,801
Refunds	1,629	2,374	1,138	1,659	1,642
Death Benefit	303	150	125	430	362
Administrative Expense	2,085	2,054	2,070	1,910	1,981
Discount Amortization	332	-	-	-	-
<b>Total Deductions</b>	<b>\$ 70,512</b>	<b>\$ 64,815</b>	<b>\$ 57,881</b>	<b>\$ 54,414</b>	<b>\$ 50,786</b>
<b>Net Increase (Decrease) in Fiduciary Net Position</b>	<b>\$ 37,617</b>	<b>\$ 122,283</b>	<b>\$ 107,086</b>	<b>\$ 25,397</b>	<b>\$ 115,965</b>

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
2019	Miscellaneous	\$ 70,981	\$ 1,522	\$ 3,986	\$ 2,967	\$ 2,821	\$ 98	\$ 82,375
	Probation	3,175	163	196	132	29	-	3,695
	Safety	12,697	2,092	1,144	2,166	442	20	18,561
	<b>TOTAL</b>	<b>\$ 86,853</b>	<b>\$ 3,777</b>	<b>\$ 5,326</b>	<b>\$ 5,265</b>	<b>\$ 3,292</b>	<b>\$ 118</b>	<b>\$ 104,631</b>
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
	<b>TOTAL</b>	<b>\$ 79,120</b>	<b>\$ 3,506</b>	<b>\$ 4,845</b>	<b>\$ 5,341</b>	<b>\$ 1,757</b>	<b>\$ 60</b>	<b>\$ 94,629</b>
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
	<b>TOTAL</b>	<b>\$ 72,074</b>	<b>\$ 3,305</b>	<b>\$ 4,435</b>	<b>\$ 5,238</b>	<b>\$ 2,857</b>	<b>\$ 748</b>	<b>\$ 88,657</b>
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
	<b>TOTAL</b>	<b>\$ 66,623</b>	<b>\$ 3,214</b>	<b>\$ 4,156</b>	<b>\$ 4,201</b>	<b>\$ 2,247</b>	<b>\$ 243</b>	<b>\$ 80,684</b>
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
	<b>TOTAL</b>	<b>\$ 61,796</b>	<b>\$ 3,150</b>	<b>\$ 3,824</b>	<b>\$ 3,672</b>	<b>\$ 1,613</b>	<b>\$ 999</b>	<b>\$ 75,054</b>
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
	<b>TOTAL</b>	<b>\$ 56,186</b>	<b>\$ 2,972</b>	<b>\$ 3,541</b>	<b>\$ 3,464</b>	<b>\$ 1,629</b>	<b>\$ 303</b>	<b>\$ 68,095</b>
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
	<b>TOTAL</b>	<b>\$ 50,919</b>	<b>\$ 2,879</b>	<b>\$ 3,352</b>	<b>\$ 3,087</b>	<b>\$ 2,374</b>	<b>\$ 150</b>	<b>\$ 62,761</b>
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
	<b>TOTAL</b>	<b>\$ 46,535</b>	<b>\$ 2,746</b>	<b>\$ 2,905</b>	<b>\$ 2,362</b>	<b>\$ 1,138</b>	<b>\$ 125</b>	<b>\$ 55,811</b>
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
	<b>TOTAL</b>	<b>\$ 42,739</b>	<b>\$ 2,692</b>	<b>\$ 2,769</b>	<b>\$ 2,215</b>	<b>\$ 1,659</b>	<b>\$ 430</b>	<b>\$ 52,504</b>
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
	<b>TOTAL</b>	<b>\$ 39,807</b>	<b>\$ 2,662</b>	<b>\$ 2,486</b>	<b>\$ 1,846</b>	<b>\$ 1,642</b>	<b>\$ 362</b>	<b>\$ 48,805</b>

Source: SLOCPT detailed retiree payroll journals 2010-2019 data

San Luis Obispo County Pension Trust  
**Average Benefit Payments by Years of Credited Service**  
 Last 10 fiscal years

Retirement Effective Dates		Years Credited Service						
		0-5	6-10	11-15	16-20	21-25	26-30	30+
1/1/2019 - 12/31/2019	Average Monthly Benefit	\$ 493.07	\$ 1,244.32	\$ 2,068.43	\$ 2,949.22	\$ 4,799.69	\$ 5,299.73	\$ 5,739.78
	Average Final Average Salary	\$ 6,374.46	\$ 6,231.25	\$ 5,866.78	\$ 6,593.79	\$ 8,117.29	\$ 7,660.11	\$ 6,982.06
	Number of Active Retirees	2	20	14	39	18	19	8
1/1/2018 - 12/31/2018	Average Monthly Benefit	\$ 409.83	\$ 1,540.43	\$ 2,077.05	\$ 3,141.36	\$ 4,412.63	\$ 5,570.06	\$ 8,239.11
	Average Final Average Salary	\$ 8,031.99	\$ 6,611.33	\$ 6,210.09	\$ 6,307.72	\$ 7,264.65	\$ 7,587.95	\$ 9,356.42
	Number of Active Retirees	12	23	36	35	21	22	12
1/1/2017 - 12/31/2017	Average Monthly Benefit	\$ 378.74	\$ 1,262.66	\$ 2,199.64	\$ 3,407.49	\$ 4,313.69	\$ 6,273.46	\$ 4,940.17
	Average Final Average Salary	\$ 8,948.53	\$ 6,414.16	\$ 6,556.10	\$ 6,797.64	\$ 7,368.66	\$ 8,314.33	\$ 6,185.87
	Number of Active Retirees	7	22	27	23	27	34	19
1/1/2016 - 12/31/2016	Average Monthly Benefit	\$ 424.73	\$ 1,313.71	\$ 1,790.75	\$ 2,889.70	\$ 4,209.62	\$ 5,416.97	\$ 5,752.62
	Average Final Average Salary	\$ 6,777.47	\$ 6,564.35	\$ 5,582.02	\$ 5,965.96	\$ 6,700.09	\$ 7,073.04	\$ 7,459.94
	Number of Active Retirees	10	24	26	28	11	33	10
1/1/2015 - 12/31/2015	Average Monthly Benefit	\$ 577.87	\$ 1,060.62	\$ 1,955.17	\$ 2,921.47	\$ 4,092.69	\$ 4,771.88	\$ 6,588.28
	Average Final Average Salary	\$ 8,609.65	\$ 5,627.75	\$ 5,583.10	\$ 5,984.86	\$ 6,935.85	\$ 6,370.70	\$ 7,792.99
	Number of Active Retirees	11	26	33	27	14	29	14
1/1/2014 - 12/31/2014	Average Monthly Benefit	\$ 128.30	\$ 1,205.16	\$ 1,915.27	\$ 2,736.06	\$ 4,481.47	\$ 5,238.35	\$ 5,347.19
	Average Final Average Salary	\$ 5,183.10	\$ 5,887.71	\$ 5,802.38	\$ 5,501.43	\$ 6,759.59	\$ 7,042.32	\$ 6,209.47
	Number of Active Retirees	5	39	31	35	25	28	12
1/1/2013 - 12/31/2013	Average Monthly Benefit	\$ 384.94	\$ 1,145.55	\$ 1,875.07	\$ 2,726.88	\$ 3,812.09	\$ 6,676.43	\$ 7,587.61
	Average Final Average Salary	\$ 6,145.60	\$ 5,575.87	\$ 5,727.70	\$ 6,355.97	\$ 6,138.44	\$ 8,697.89	\$ 8,723.62
	Number of Active Retirees	11	27	48	16	23	9	6
1/1/2012 - 12/31/2012	Average Monthly Benefit	\$ 423.34	\$ 1,151.18	\$ 1,625.01	\$ 2,480.77	\$ 3,877.46	\$ 5,842.70	\$ 6,630.33
	Average Final Average Salary	\$ 5,828.85	\$ 6,217.75	\$ 4,782.79	\$ 5,438.30	\$ 6,344.62	\$ 8,298.58	\$ 8,156.87
	Number of Active Retirees	8	25	38	14	15	24	11
1/1/2011 - 12/31/2011	Average Monthly Benefit	\$ 381.32	\$ 1,043.17	\$ 2,132.43	\$ 2,462.09	\$ 3,263.78	\$ 4,712.96	\$ 6,176.94
	Average Final Average Salary	\$ 7,407.99	\$ 5,281.23	\$ 7,214.81	\$ 5,890.86	\$ 5,551.63	\$ 6,441.64	\$ 7,341.59
	Number of Active Retirees	13	21	20	17	25	14	12
1/1/2010 - 12/31/2010	Average Monthly Benefit	\$ 660.34	\$ 823.61	\$ 1,628.93	\$ 2,332.76	\$ 3,901.89	\$ 5,492.59	\$ 5,419.40
	Average Final Average Salary	\$ 9,176.79	\$ 4,624.44	\$ 5,236.73	\$ 4,838.12	\$ 6,844.40	\$ 7,458.57	\$ 6,759.40
	Number of Active Retirees	7	23	21	9	22	7	10

Note: data reported for Service, DROP, and Disability Retirees

Source: SLOCPT Pension Administration System of record and monthly Reports of Retirement reported to the Board of Trustees

San Luis Obispo County Pension Trust  
**Retired Members by Benefit Type and Amount**  
*as of December 31, 2019*

Annual Benefit Range and Class	Service Retirement Recipients	Disability Retirement Recipients	Beneficiary Retirement Recipients	DROP Retirement Recipients	TOTAL	% of Total
<b>\$0-\$9,999</b>						
<i>Miscellaneous</i>	405	22	64	-	491	16.6%
<i>Probation</i>	8	-	-	1	9	0.3%
<i>Safety</i>	18	-	3	1	22	0.7%
<b>subtotal</b>	<b>431</b>	<b>22</b>	<b>67</b>	<b>2</b>	<b>522</b>	<b>17.6%</b>
<b>\$10,000-\$19,999</b>						
<i>Miscellaneous</i>	542	35	47	1	625	21.1%
<i>Probation</i>	11	-	-	-	11	0.4%
<i>Safety</i>	25	-	9	-	34	1.1%
<b>subtotal</b>	<b>578</b>	<b>35</b>	<b>56</b>	<b>1</b>	<b>670</b>	<b>22.6%</b>
<b>\$20,000-\$29,999</b>						
<i>Miscellaneous</i>	394	23	27	4	448	15.1%
<i>Probation</i>	9	1	3	-	13	0.4%
<i>Safety</i>	28	10	9	-	47	1.6%
<b>subtotal</b>	<b>431</b>	<b>34</b>	<b>39</b>	<b>4</b>	<b>508</b>	<b>17.1%</b>
<b>\$30,000-\$39,999</b>						
<i>Miscellaneous</i>	265	3	17	1	286	9.6%
<i>Probation</i>	8	4	1	-	13	0.4%
<i>Safety</i>	13	16	9	3	41	1.4%
<b>subtotal</b>	<b>286</b>	<b>23</b>	<b>27</b>	<b>4</b>	<b>340</b>	<b>11.4%</b>
<b>\$40,000-\$49,999</b>						
<i>Miscellaneous</i>	164	3	12	7	186	6.3%
<i>Probation</i>	2	-	2	-	4	0.1%
<i>Safety</i>	22	12	6	1	41	1.4%
<b>subtotal</b>	<b>188</b>	<b>15</b>	<b>20</b>	<b>8</b>	<b>231</b>	<b>7.8%</b>
<b>\$50,000-\$59,999</b>						
<i>Miscellaneous</i>	125	-	6	5	136	4.6%
<i>Probation</i>	16	-	-	-	16	0.5%
<i>Safety</i>	22	7	2	7	38	1.3%
<b>subtotal</b>	<b>163</b>	<b>7</b>	<b>8</b>	<b>12</b>	<b>190</b>	<b>6.4%</b>

San Luis Obispo County Pension Trust  
**Retired Members by Benefit Type and Amount (continued)**  
*as of December 31, 2019*

Annual Benefit Range and Class	Service Retirement Recipients	Disability Retirement Recipients	Beneficiary Retirement Recipients	DROP Retirement Recipients	TOTAL	% of Total
<b>\$60,000-\$69,999</b>						
<i>Miscellaneous</i>	99	1	4	12	116	3.9%
<i>Probation</i>	7	-	-	-	7	0.2%
<i>Safety</i>	21	1	-	5	27	0.9%
<b>subtotal</b>	<b>127</b>	<b>2</b>	<b>4</b>	<b>17</b>	<b>150</b>	<b>5.0%</b>
<b>\$70,000-\$79,999</b>						
<i>Miscellaneous</i>	60	-	1	6	67	2.3%
<i>Probation</i>	3	-	-	-	3	0.1%
<i>Safety</i>	27	2	-	6	35	1.2%
<b>subtotal</b>	<b>90</b>	<b>2</b>	<b>1</b>	<b>12</b>	<b>105</b>	<b>3.6%</b>
<b>\$80,000-\$89,999</b>						
<i>Miscellaneous</i>	50	-	1	2	53	1.8%
<i>Probation</i>	3	-	-	-	3	0.1%
<i>Safety</i>	21	1	-	4	26	0.9%
<b>subtotal</b>	<b>74</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>82</b>	<b>2.8%</b>
<b>\$90,000-\$99,999</b>						
<i>Miscellaneous</i>	28	-	1	3	32	1.1%
<i>Probation</i>	1	-	-	-	1	0.0%
<i>Safety</i>	12	3	-	-	15	0.5%
<b>subtotal</b>	<b>41</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>48</b>	<b>1.6%</b>
<b>\$100,000+</b>						
<i>Miscellaneous</i>	82	-	2	3	87	2.9%
<i>Probation</i>	4	-	-	1	5	0.2%
<i>Safety</i>	22	1	2	3	28	0.9%
<b>subtotal</b>	<b>108</b>	<b>1</b>	<b>4</b>	<b>7</b>	<b>120</b>	<b>4.0%</b>
<b>CUMULATIVE TOTAL</b>						
<i>Miscellaneous</i>	<b>2,214</b>	<b>87</b>	<b>182</b>	<b>44</b>	<b>2,527</b>	<b>85.3%</b>
<i>Probation</i>	<b>72</b>	<b>5</b>	<b>6</b>	<b>2</b>	<b>85</b>	<b>2.8%</b>
<i>Safety</i>	<b>231</b>	<b>53</b>	<b>40</b>	<b>30</b>	<b>354</b>	<b>11.9%</b>
	<b>2,517</b>	<b>145</b>	<b>228</b>	<b>76</b>	<b>2,966</b>	<b>100.0%</b>

Source: SLOCPT Pension Administration Software (PensionGold)

San Luis Obispo County Pension Trust

**Member Data**

Last 10 fiscal years

As of most recent completed actuarial valuation dated January 1, 2019,  
based on data as of December 31, 2018.

<b>Active Members (all classes)</b>	<b>Average Age</b>	<b>Average Service</b>	<b>Average Annual Pay</b>			
2018	44.7	9.1	\$ 73,592			
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			

<b>Number of Members</b>	<b>Active Members</b>	<b>Deferred Vested Members</b>	<b>Retiree and Beneficiary</b>	<b>Disability Recipients</b>	<b>TOTAL</b>
2018	2,725	489	2,727	141	6,082
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

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 Court of CA	Air Pollution Control District	Local Agency Formation Comm.	SLOCPT	TOTAL
<b>2019</b>						
Tier 1	1,031	85	14	2	1	1,133
Tier 2	296	-	-	-	2	298
Tier 3	1,268	41	6	1	5	1,321
<b>Total</b>	<b>2,595</b>	<b>126</b>	<b>20</b>	<b>3</b>	<b>8</b>	<b>2,752</b>
% of total	94.2%	4.6%	0.7%	0.1%	0.3%	
<b>2018</b>						
Tier 1	1,140	90	16	3	1	1,250
Tier 2	309	-	-	-	2	311
Tier 3	1,122	33	4	-	5	1,164
<b>Total</b>	<b>2,571</b>	<b>123</b>	<b>20</b>	<b>3</b>	<b>8</b>	<b>2,725</b>
% of total	94.2%	4.5%	0.7%	0.1%	0.3%	
<b>2017</b>						
Tier 1	1,284	97	20	3	1	1,405
Tier 2	312	-	-	-	2	314
Tier 3	974	22	4	-	4	1,004
<b>Total</b>	<b>2,570</b>	<b>119</b>	<b>24</b>	<b>3</b>	<b>7</b>	<b>2,723</b>
% of total	94.4%	4.4%	0.9%	0.1%	0.3%	
<b>2016</b>						
Tier 1	1,426	110	21	3	2	1,562
Tier 2	313	-	-	-	2	315
Tier 3	769	22	3	-	4	798
<b>Total</b>	<b>2,508</b>	<b>132</b>	<b>24</b>	<b>3</b>	<b>8</b>	<b>2,675</b>
% of total	93.8%	4.9%	0.9%	0.1%	0.3%	
<b>2015</b>						
Tier 1	1,568	114	21	3	2	1,708
Tier 2	306	-	-	-	3	309
Tier 3	571	17	1	-	3	592
<b>Total</b>	<b>2,445</b>	<b>131</b>	<b>22</b>	<b>3</b>	<b>8</b>	<b>2,609</b>
% of total	93.7%	5.0%	0.8%	0.1%	0.3%	
<b>2014</b>						
Tier 1	1,712	119	24	3	3	1,861
Tier 2	301	-	-	-	1	302
Tier 3	380	5	-	-	2	387
<b>Total</b>	<b>2,393</b>	<b>124</b>	<b>24</b>	<b>3</b>	<b>6</b>	<b>2,550</b>
% of total	93.8%	5.0%	0.9%	0.1%	0.2%	
<b>2013</b> (a)						
Tier 1	1,884	129	24	3	5	2,045
Tier 2	281	-	-	-	1	282
Tier 3	189	4	-	-	1	194
<b>Total</b>	<b>2,354</b>	<b>133</b>	<b>24</b>	<b>3</b>	<b>7</b>	<b>2,521</b>
% of total	93.4%	5.3%	1.0%	0.1%	0.3%	
<b>2012</b>						
Tier 1	2,054	134	24	3	5	2,220
Tier 2	274	-	-	-	1	275
<b>Total</b>	<b>2,328</b>	<b>134</b>	<b>24</b>	<b>3</b>	<b>6</b>	<b>2,495</b>
% of total	93.3%	5.3%	1.0%	0.1%	0.2%	
<b>2011</b> (b)						
Tier 1	2,184	147	24	3	7	2,365
Tier 2	81	-	-	-	-	81
<b>Total</b>	<b>2,265</b>	<b>147</b>	<b>24</b>	<b>3</b>	<b>7</b>	<b>2,446</b>
% of total	92.6%	6.0%	1.0%	0.1%	0.3%	
<b>2010</b> (c)						
<b>Total</b>	<b>2,320</b>	<b>149</b>	<b>-</b>	<b>3</b>	<b>7</b>	<b>2,479</b>
% of total	93.6%	6.0%	0.0%	0.1%	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](http://www.slocounty.ca.gov/Departments/Pension-Trust.aspx)



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## Board of Trustees

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



Date: June 22, 2020

To: Board of Trustees

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

### **Agenda Item 8: January 1, 2020 Actuarial Valuation and Pension Contribution Rates**

Accompanying this memo are –

- **Actuarial Valuation presentation** by Paul Wood, Actuary, of Gabriel Roeder Smith on the results of the 2020 Annual Actuarial Valuation of the Plan.
- **Draft January 1, 2020 Annual Actuarial Valuation** prepared by Gabriel Roeder Smith (GRS) – the Plan Actuary - with additional supplementary tables of data.
- **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 – 2014-2020**
- **Funding Projections –**
  - **Baseline** 30-year projection of funded status and contribution rates for the Plan
    - Earnings Assumption (discount rate) of 6.875% in 2020
    - Forecast investment returns of 6.875% long term
    - Inflation Assumption of 2.250%
    - Retiree COLAs of 2.500% (Tier1) and 2.000% (Tier 2 & 3)
    - Salary Growth Assumption of 2.750% (+ merit increase scale)
    - Payroll Growth Assumption of 2.750%
    - Mortality Tables updated to Pub 2010 w/ MP2019 projection scale

- Baseline – Variations - Illustrative 30-year projection similar to the Baseline projection, but with Earnings Assumptions (discount rates) and forecast returns as shown below
  - 6.875% Earnings Assumption and forecast returns of 6.750%.
  - 6.750% Earnings Assumption and forecast returns of 6.750%.
  - 6.500% Earnings Assumption and forecast returns of 6.500%.

**Recommendation:**

It is recommended that the Board take the following actions:

1. Approve the January 1, 2020 Actuarial Valuation.
2. Approve the transfer of \$33,440,791 from the Current Reserve to the Retiree Reserve as recommended by GRS in the Reserves Comment of the Valuation (page A-2).
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 47.92% effective January 1, 2020 is received - an increase of 3.60% over the current Charged Rate of contributions as of 1/1/20** as recommended by GRS in the Contribution Rate Comment of the Valuation (page A-2).
  - 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.**

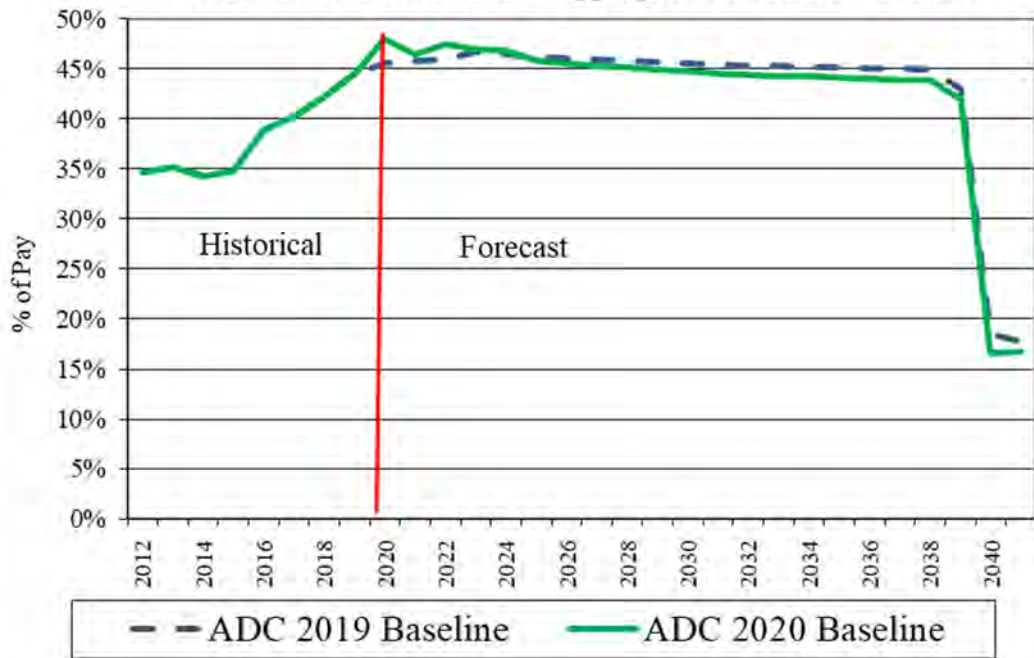
## Discussion – Contribution Rate:

The valuation indicates an increase in the Total Required Contribution Rate (or Actuarially Determined Contributions (ADC) vs. the current Charged Rate of contributions) to 47.92% effective January 1, 2020. This **increase of 3.60%** is attributable to –

1. Normal Cost – Minor change as plan demographics evolved over the valuation year – Contribution impact = -0.25% of pay
2. Investment Earnings less than expected over the five-year period used to in the Valuation – Contribution impact = +0.64% of pay
3. Salary increases slightly lower than assumed rate – Contribution impact = -0.04% of pay
4. Retirement rates – slightly earlier than assumed rate – Contribution impact = +0.10% of pay
5. Mortality Experience increases slightly longer-lived retirees than assumed rate – Contribution impact = +0.44% of pay
6. Retiree COLA – higher than assumed rate (based on CPI data) – Contribution impact = +0.24% of pay
7. Net demographic experience losses - Contribution impact = -0.07% of pay
8. Actual Charged Rate of Pension Contributions at start of 2020 relative to the 2019 ADC rate (natural variation as turnover among Plan members takes place) - Contribution impact = +0.20% of pay
9. Changes in Actuarial Assumptions –
  - a. Discount Rate / Earnings Assumption – decrease from 7.000% to 6.875% - Contribution impact = +1.42% of pay
  - b. Retirement Rates – adjust assumptions to match experience - Contribution impact = +0.61% of pay
  - c. Termination/ Withdrawal Rates – adjust assumptions to match experience - Contribution impact = -0.13% of pay
  - d. Mortality – Update to Updated mortality tables - Contribution impact = +0.44% of pay

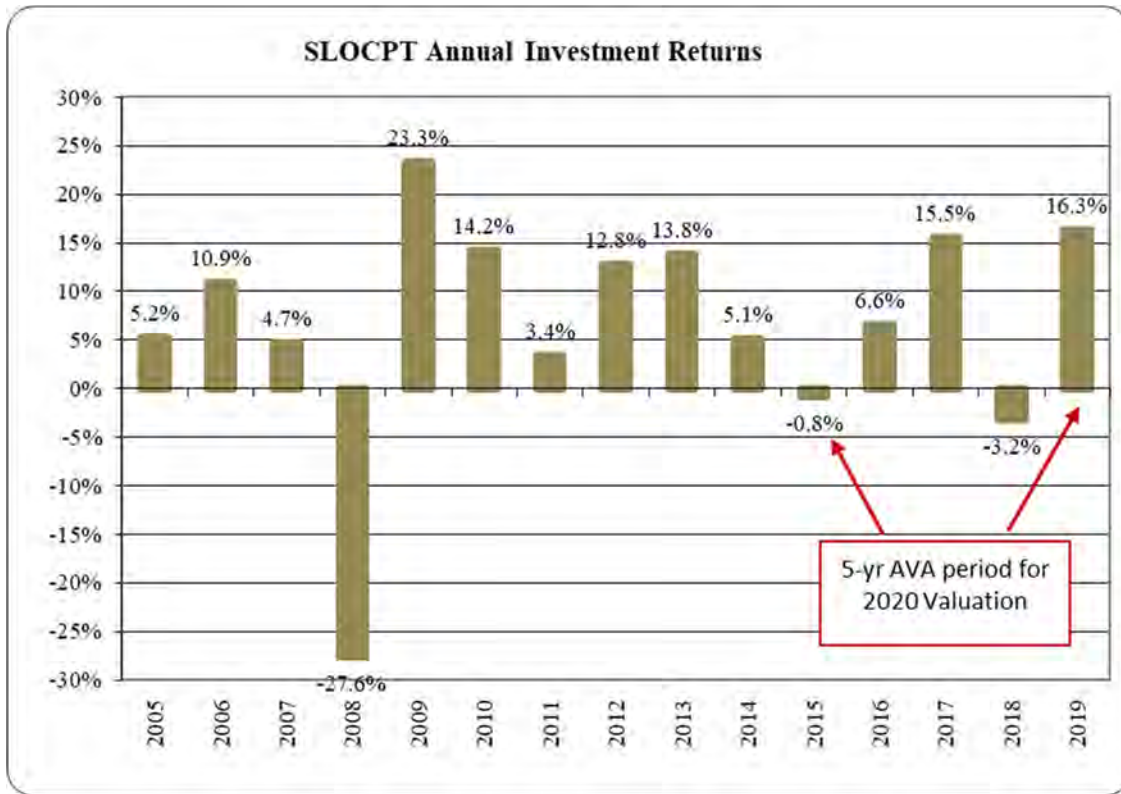
By way of illustration, the following graph shows the ADC forecast from the Baseline forecasts for the 2019 Actuarial Valuation and the 2020 Actuarial Valuation.

**SLO Retirement Plan - Contribution Rates -  
2020 vs. 2019 Baseline - Aggregate - all member classes**



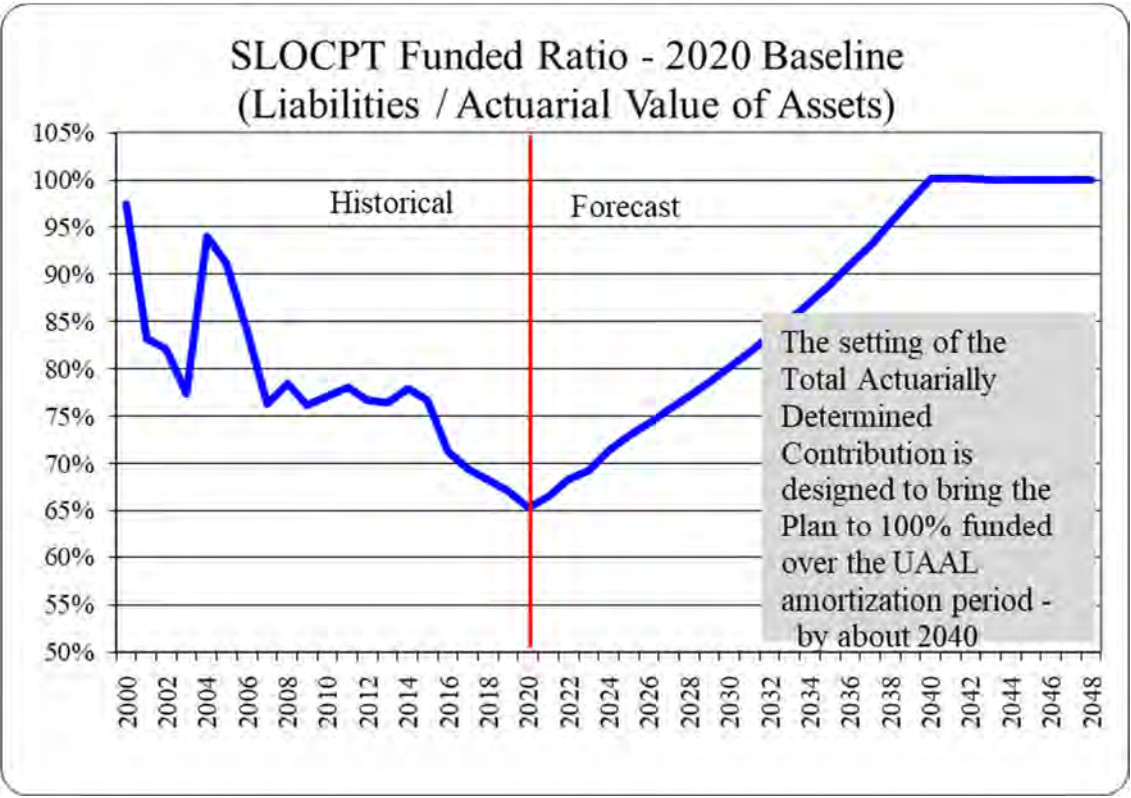
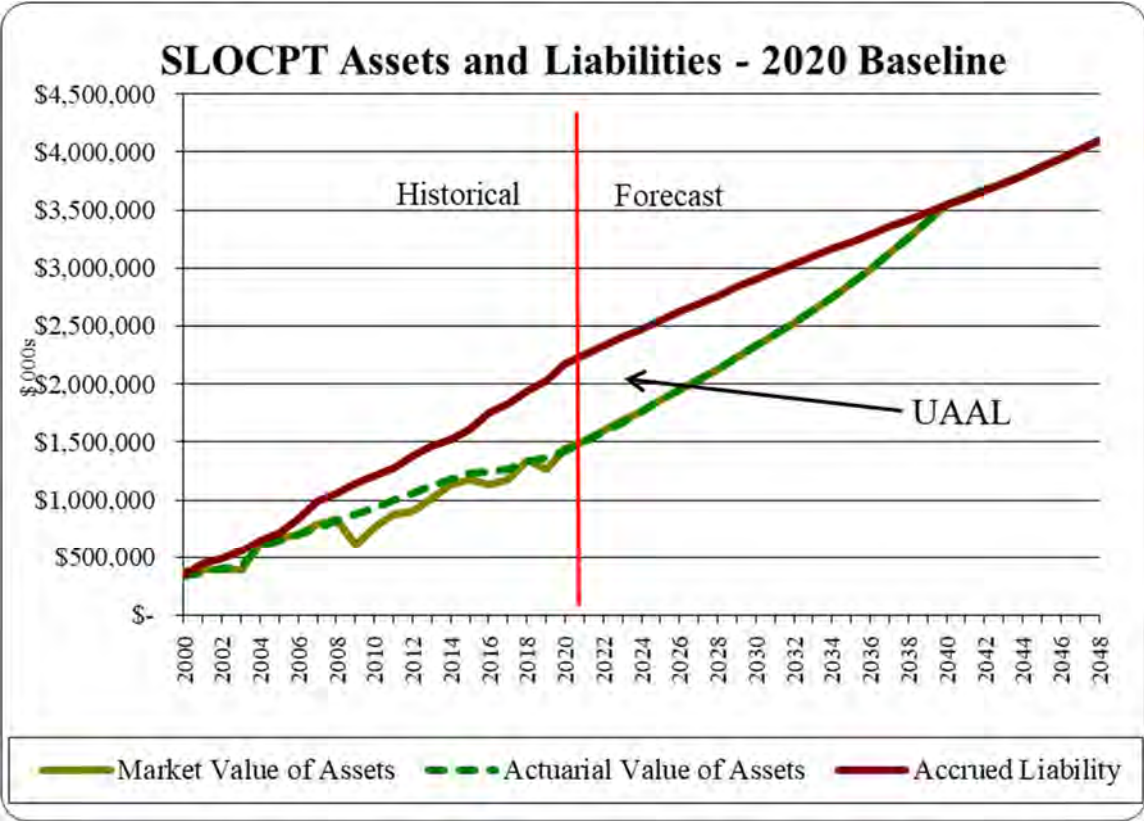
**Discussion – Investment Returns:**

The effect of the below-expectations investment return in the five-year asset smoothing period of 2015-2019 is the result of the investment return history shown below



**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 67.1% in 2019 to **65.3%** in 2020. 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,

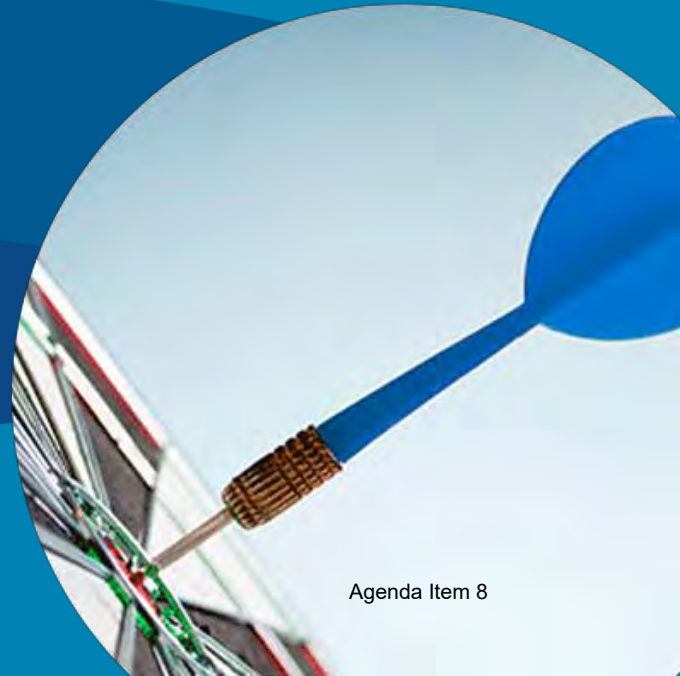




# San Luis Obispo County Pension Trust

**Actuarial Valuation  
As of January 1, 2020**

**Paul Wood, ASA, FCA, MAAA  
Thomas Lyle, ASA, FCA, EA, MAAA**



# Actuarial Valuation

## *Rate Increase*

---

- Rate increase of 3.60% recommended
  - The Actuarially Determined Contribution (ADC) is 47.92%, while the rate being charged is 44.32%
  - Charged rate includes 2.68% increase recommended as of July 1, 2020 from the prior valuation
- The rate increase comes from three primary sources
  - First, from assumptions changes based on the most recent experience study (2.34%)
  - Second, from investment earnings less than assumed
  - Third, from demographic experience including payroll growing different than expected



# Actuarial Valuation

## *Development of the ADC and Recommended Rate Increase*

	Jan 1, 2020	Jan 1, 2019	Change
1. Total Normal Cost	21.04%	20.60%	0.44%
2. Amortization Payment	26.88%	23.92%	2.96%
3. Actuarially Determined Contribution (1.+2.)	47.92%	44.52%	3.40%
4. Total Charged Rate (actual)	44.32%	42.22%	2.10%
5. Recommended Rate Increase	3.60%	2.30%	

# Actuarial Valuation

## *Development of the Charged Rate*

---

Category	Rates as a Percent of Payroll
Employee Contributions	16.48%
Employer Appropriations	25.16%
Total	41.64%
Increase at 7/1/2020	2.68%
Grand Total Contributions	44.32%

\*Amounts shown on are based on actual contributions from July 1, 2019 through December 31, 2019



# Actuarial Valuation

## *Charged Rate Summary*

---

- The current charged rate is not adequate to meet the Actuarially Determined Contribution
- Assumption changes had the largest impact on ADC
- Future normal cost and future charged rates will trend downward as more Tier 3 members join the plan
- There are deferred asset gains, therefore there is some downward pressure on the ADC
- Total payroll growth less than the assumed rate, which put upward pressure on the ADC



# Actuarial Valuation

## *Assumption Changes*

---

- Rate of return decreased from 7.00% to 6.875% as of January 1, 2020
- Rate of inflation decreased from 2.50% to 2.25%
- The mortality tables were updated to the Pub-2010 tables projected with scale MP-2019
- Retirement rates were updated for all groups
- Termination rates were updated for Miscellaneous members

# Membership

## *Summary of Active Members*

2020	Tier 1	Tier 2	Tier 3	Total
Miscellaneous	941	250	1,143	2,334
Probation	75	0	45	120
Safety	117	48	133	298
Total	1,133	298	1,321	2,752

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



# Membership

## *Reconciliation*

---

- The year started with 2,725 actives
  - 329 new hires
  - 13 returned to work
  - 315 actives ceased active status
- Implication
  - Tier 3 members pay a lower contribution amounts
  - Fixed cost of UAAL remains the same



# Assets

## Returns

---

- Market value return was 15.21%
  - Fair market value increased from \$1,272 million to \$1,439 million
  - The amount of investment income “expected” was \$95 million
  - The actual amount of investment income received was \$190 million
  - The \$95 million gain is to be phased in over 5 years
- The actuarial value return was 5.68%
  - 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:
  - 2019      \$ 19.1
  - 2018      \$ (29.2)
  - 2017      \$ 17.1
  - 2016      \$ (3.8)
  - 2015      \$ (21.0)
  - Total recognized for this year    \$(17.9) million
- Total yet to be recognized
  - the difference between the actuarial and market value
  - \$ 22.2 million in deferred gains
- Actuarial value of assets is 98% of market value

# Results

## *Tiers and Class - Normal Costs - 2020*

Class/Tier	Tier 1	Tier 2	Tier 3	Total
Misc.	23.76%	18.76%	15.92%	19.80%
Probation	27.09%	N/A	20.05%	24.91%
Safety	<u>29.69%</u>	<u>27.22%</u>	<u>23.68%</u>	<u>26.87%</u>
Blended	24.79%	20.42%	17.11%	21.04%

# Results

## *Liabilities - Total Plan Basis*

	Jan 1, 2020	Jan 1, 2019	Change
Accrued Liability	\$2.17B	\$2.03B	\$140M
Unfunded Accrued Liability	\$753M	\$667M	\$86M
Actuarial Value of Assets (AVA)	\$1.42B	\$1.36B	\$60M
Funded Ratio (AVA Basis)	65.3%	67.1%	(1.8)%
Market Value of Assets (MVA)	\$1.44B	\$1.27B	\$170M
Funded Ratio (MVA Basis)	66.3%	62.6%	3.7%



# Results

## *Attribution of Change in Funded Ratio and Actuarially Determined Contribution*

	Funded Ratio	Increase/ (Decrease)	Rate	Increase/ (Decrease)
<b>Actual as of 1/1/2019</b>	<b>67.1%</b>		<b>44.52%</b>	
Expected at 1/1/2020	68.3%	1.2%	44.47%	(0.05)%
Expected at 1/1/2020 (with actual payroll)	68.3%	0.0%	44.52%	0.05%
Experience items during 2019:				
Decrease in normal cost	68.3%	0.0%	44.27%	(0.25)%
Due to investment experience	67.5%	(0.8)%	44.91%	0.64%
Due to pay increases	67.5%	0.0%	44.87%	(0.04)%
Due to retirement experience	67.4%	(0.1)%	44.97%	0.10%
Due to mortality experience	67.0%	(0.4)%	45.41%	0.44%
Due to COLA experience	66.8%	(0.2)%	45.65%	0.24%
Due to other factors	66.9%	0.1%	45.58%	(0.07)%
Assumption Changes	65.3%	(1.6)%	47.92%	2.34%
<b>Actual as of 1/1/2020</b>	<b>65.3%</b>		<b>47.92%</b>	

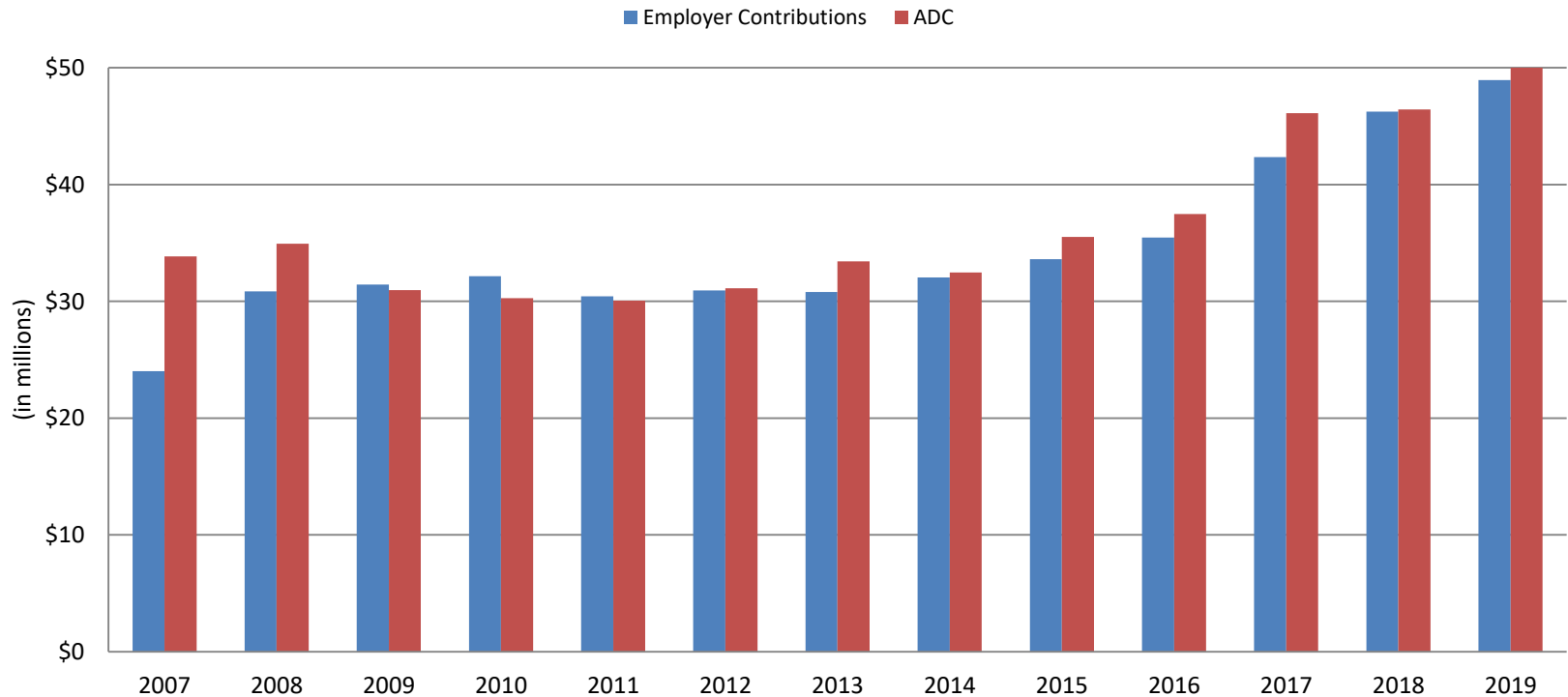
# HISTORICAL PERSPECTIVE



# Historical Perspective

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

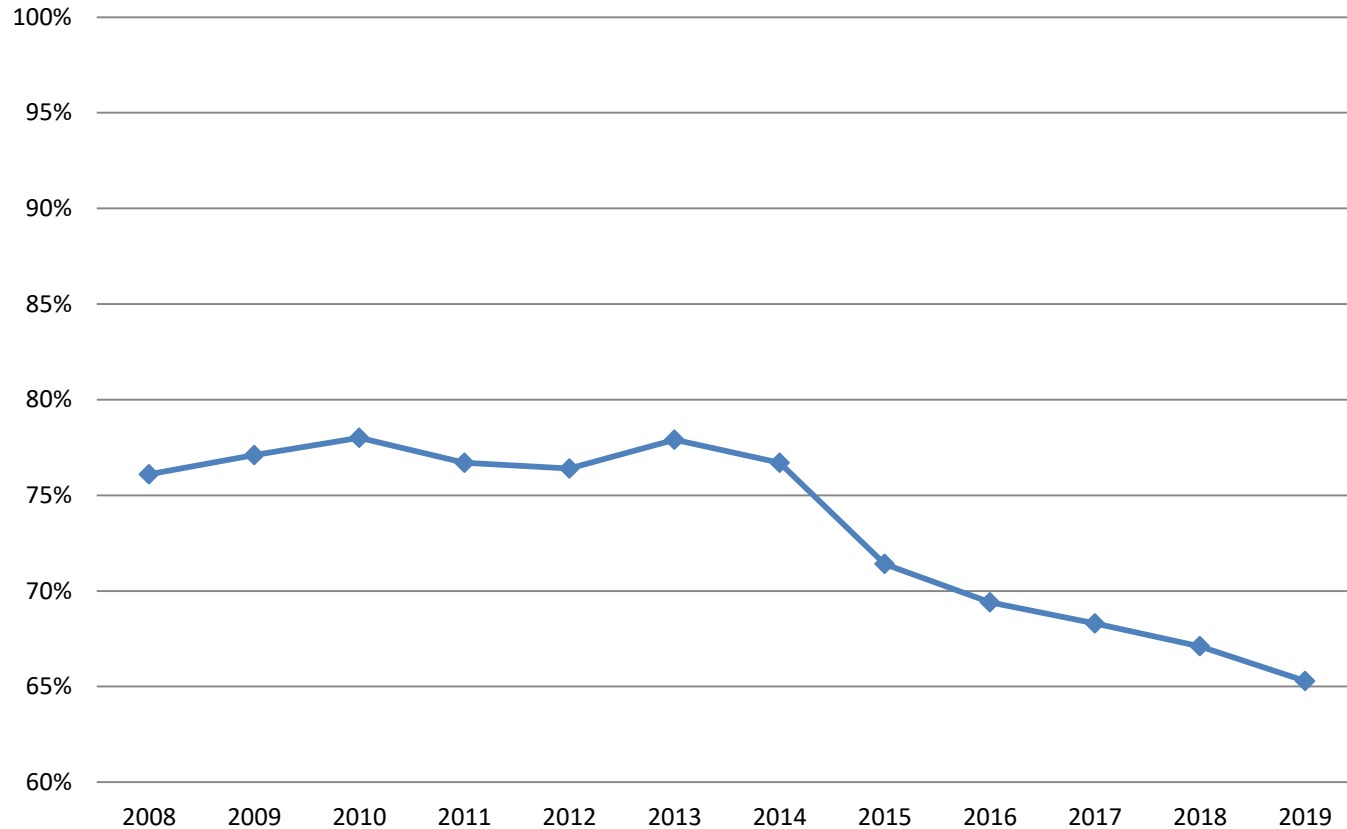
## **Actuarially Determined Contribution vs Actual Contribution Made**



# Historical Perspective

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

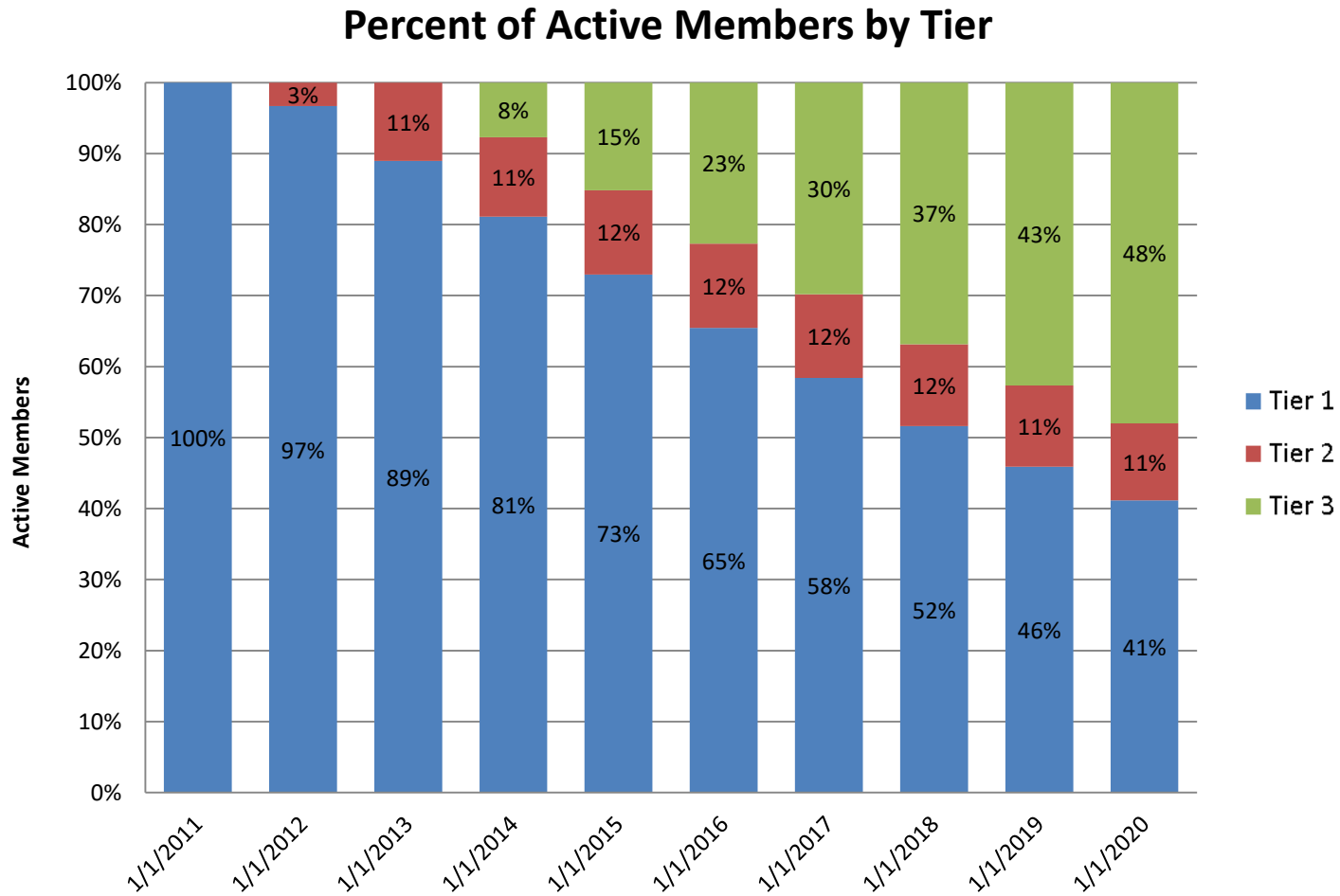
**A year by year summary of the funded ratio**





# Historical Perspective

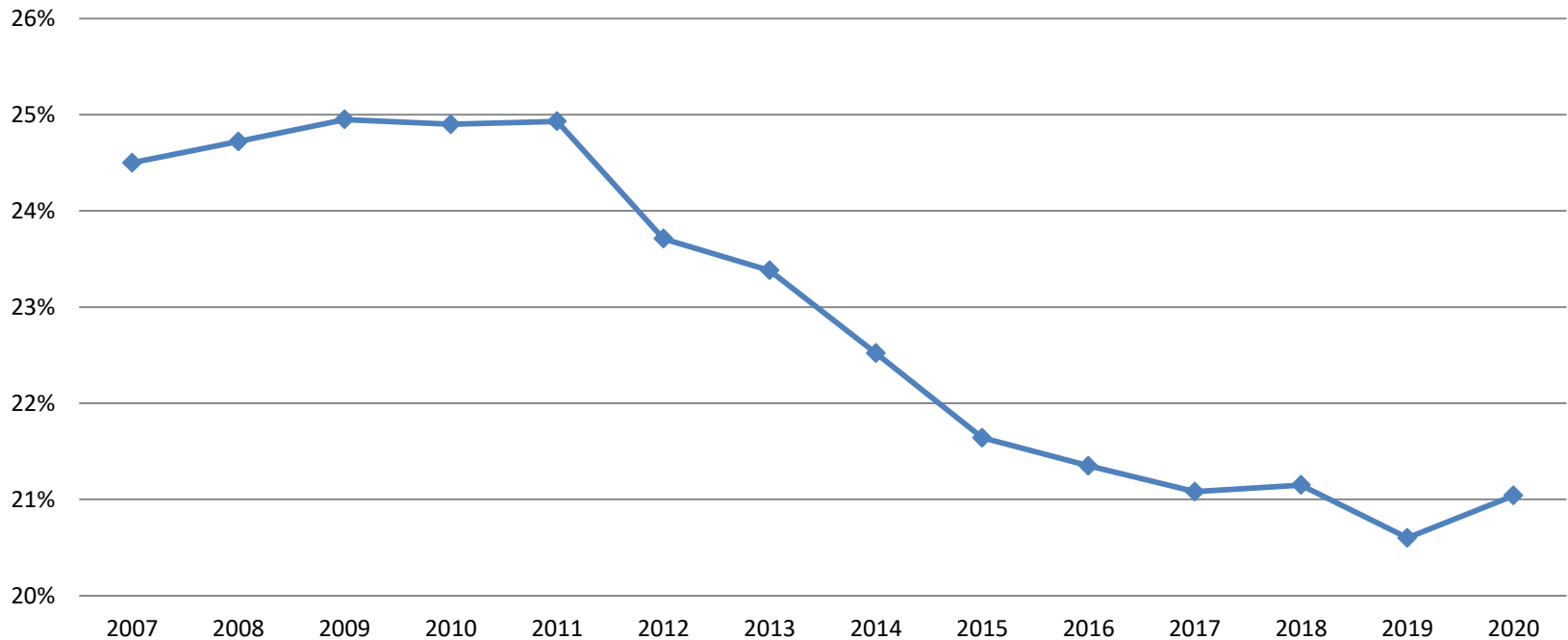
## Active Members By Tier



# Historical Perspective

## *Has The Plan's Normal Cost Been Stabilized?*

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



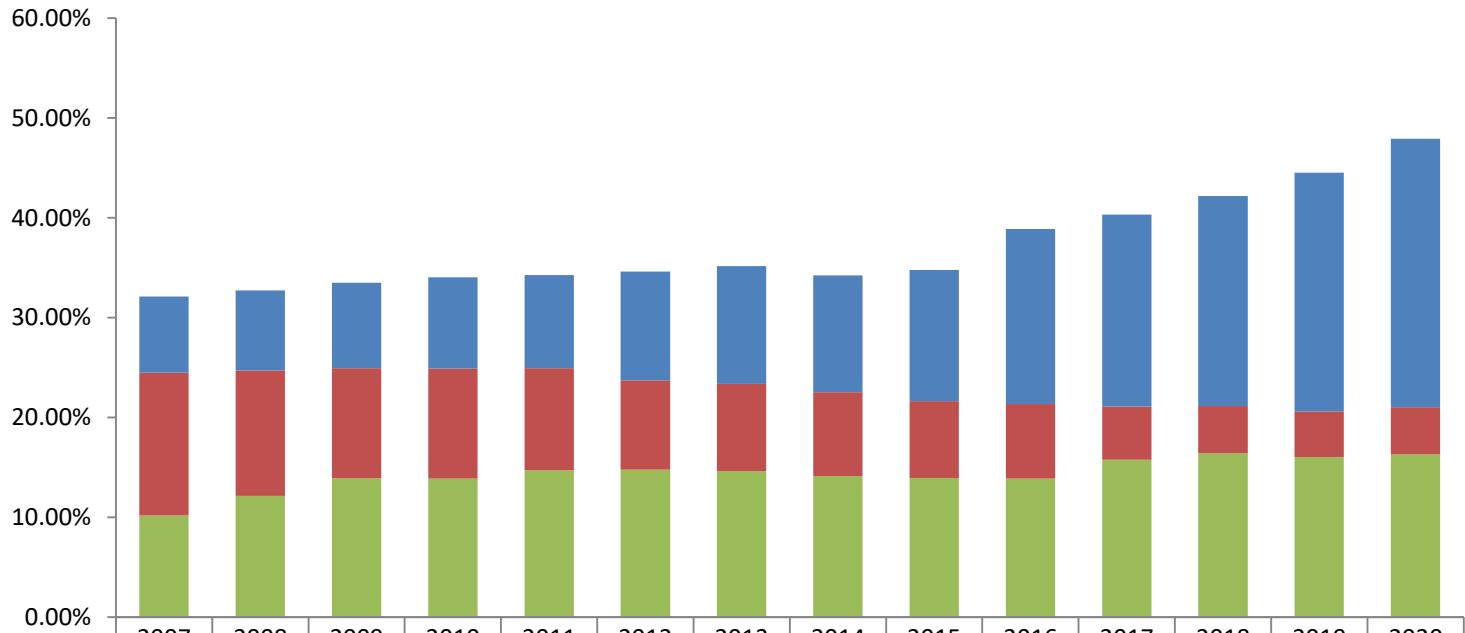
\*Total blended normal cost of 21.04% as of January 1, 2020 including Tier 2 and Tier 3 members.

# Historical Perspective

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

## Normal Cost and UAAL Amortization

■ Employee Normal Cost   ■ Employer Normal Cost   ■ UAAL Amortization



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
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%	26.88%
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%	4.73%
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%	16.31%



# 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)	2010	2015	2020
Market Value of Assets	\$764,989	\$1,135,803	\$1,439,004
Covered Payroll	\$161,783	\$177,004	\$205,694
Asset Volatility = Assets / Payroll	4.73	6.42	7.00
Increase in Actuarially Determined Contribution Resulting From a 10% Asset Loss	0.86%	1.04%	1.03%

# LONG TERM PROJECTIONS



# Long Term Projections

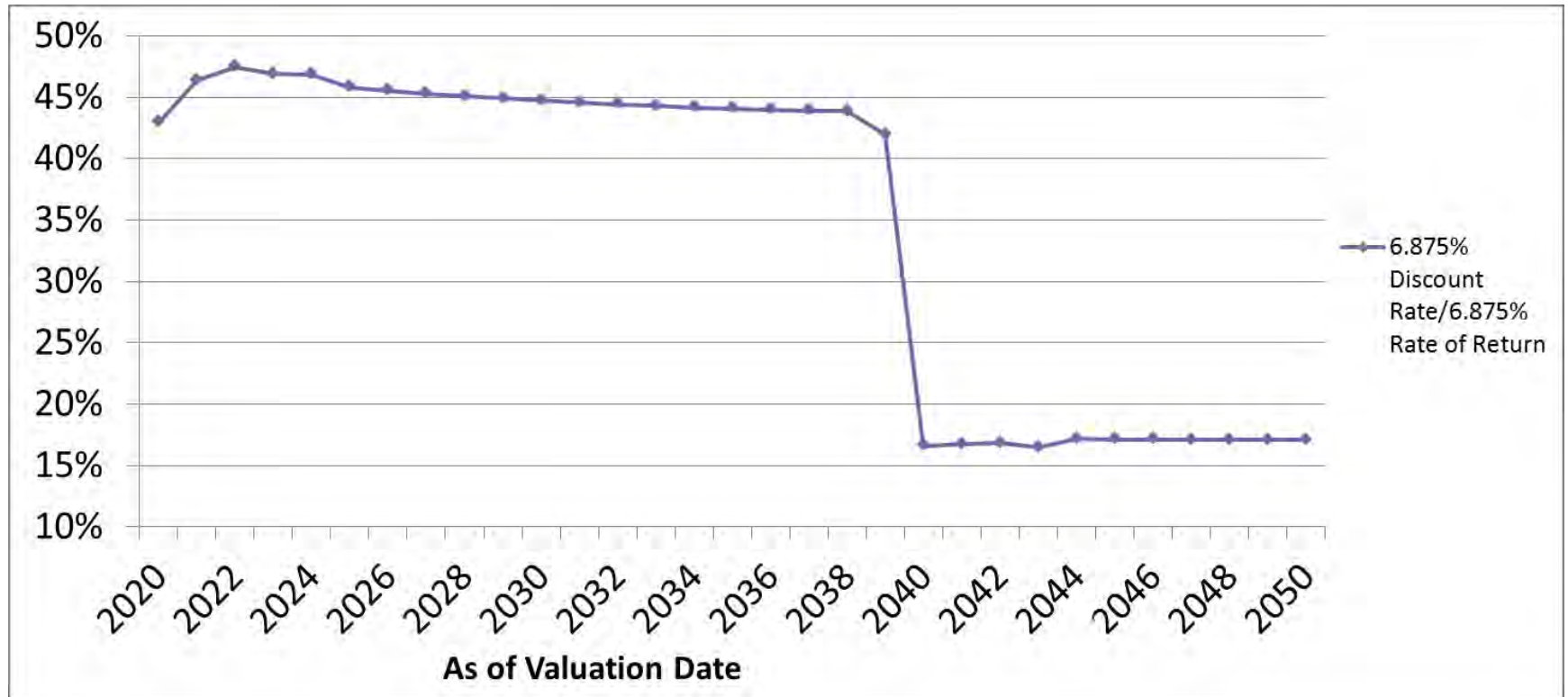
## *Deterministic Projections as of 1/1/2020*

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- Results based on a closed 20 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
- Three sets of projections are provided:
  - 6.875% Discount Rate with 6.875% Rate of Return Each Year
  - 6.875% Discount Rate with 6.750% Rate of Return Each Year Beginning in 2021
  - 6.875% Discount Rate in 2020 and 6.750% Discount Rate Beginning in 2021 with 6.750% Rate of Return Each Year Beginning in 2021

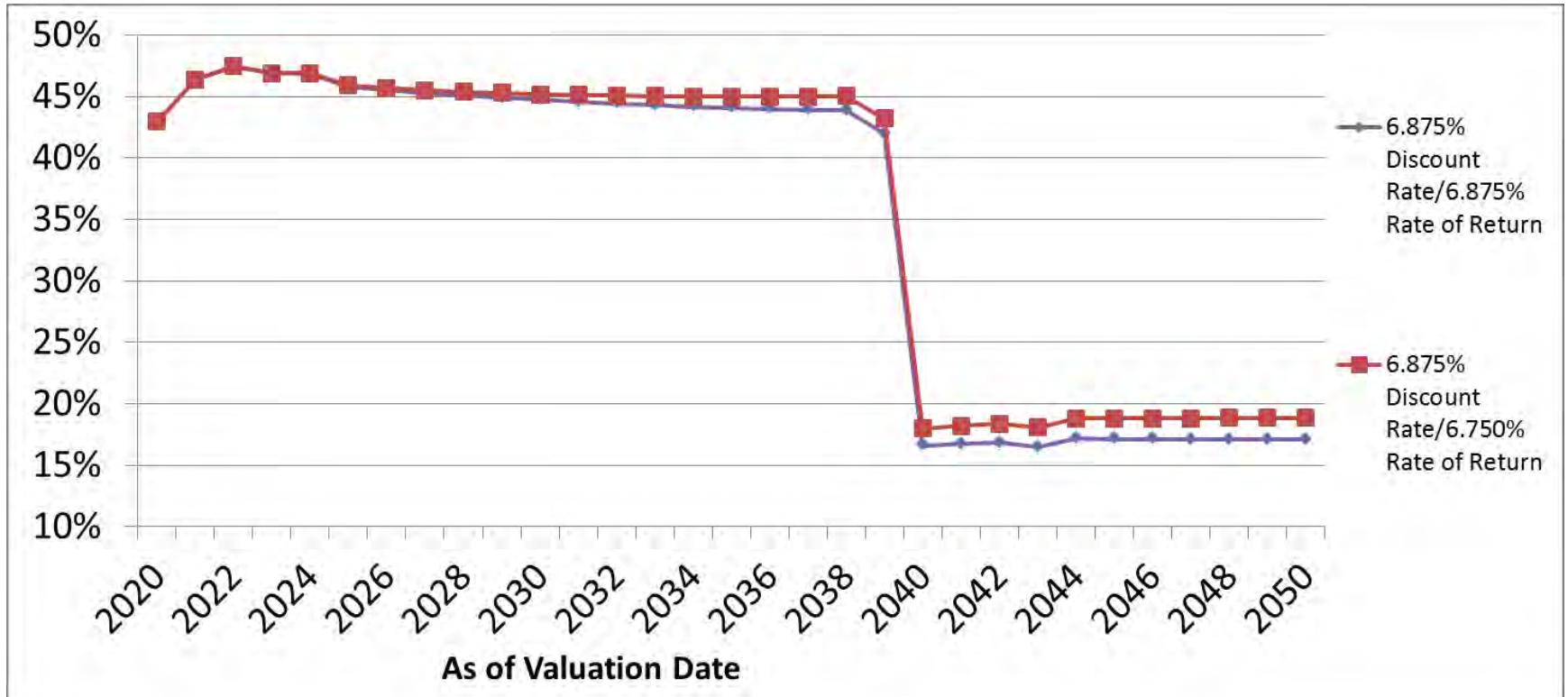
# Long Term Projections – Contribution Rate

*Deterministic Projections as of 1/1/2020*



# Long Term Projections – Contribution Rate

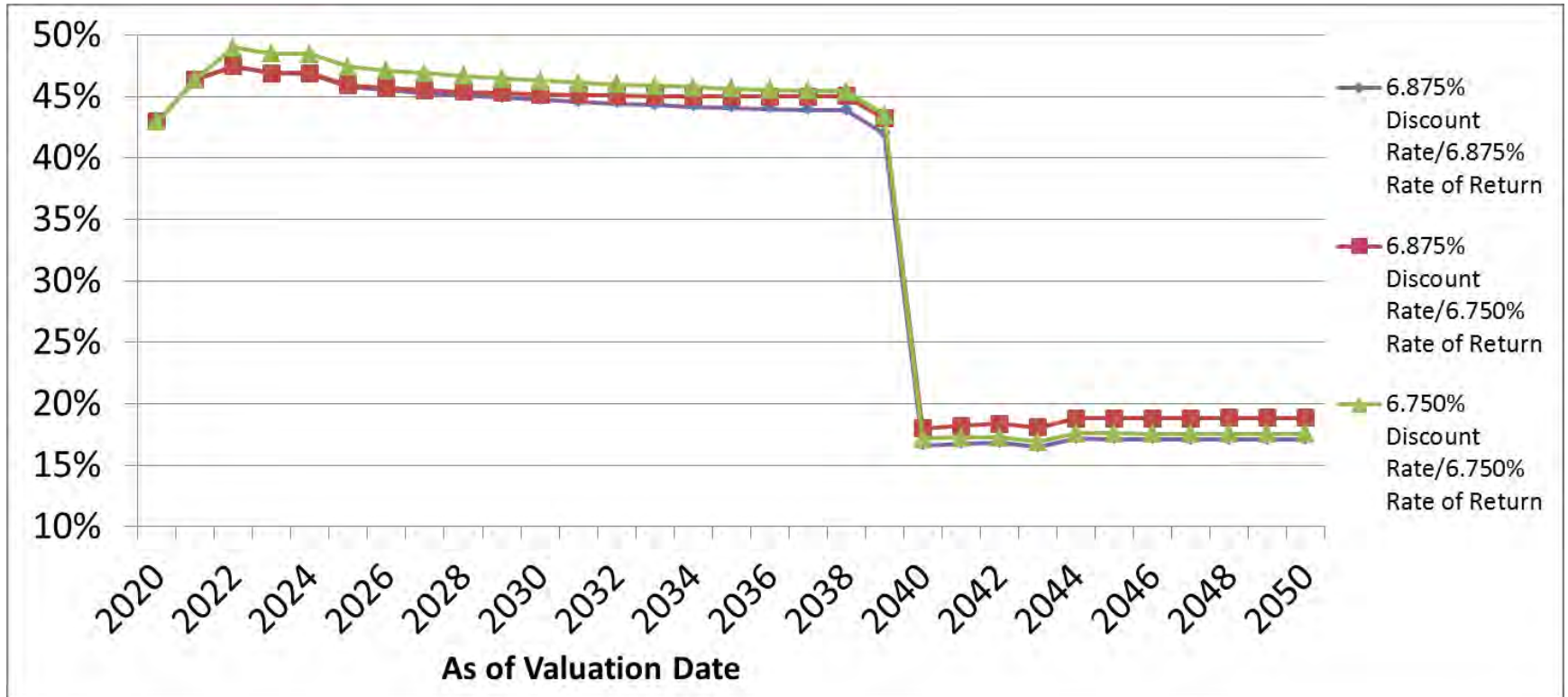
*Deterministic Projections as of 1/1/2020*





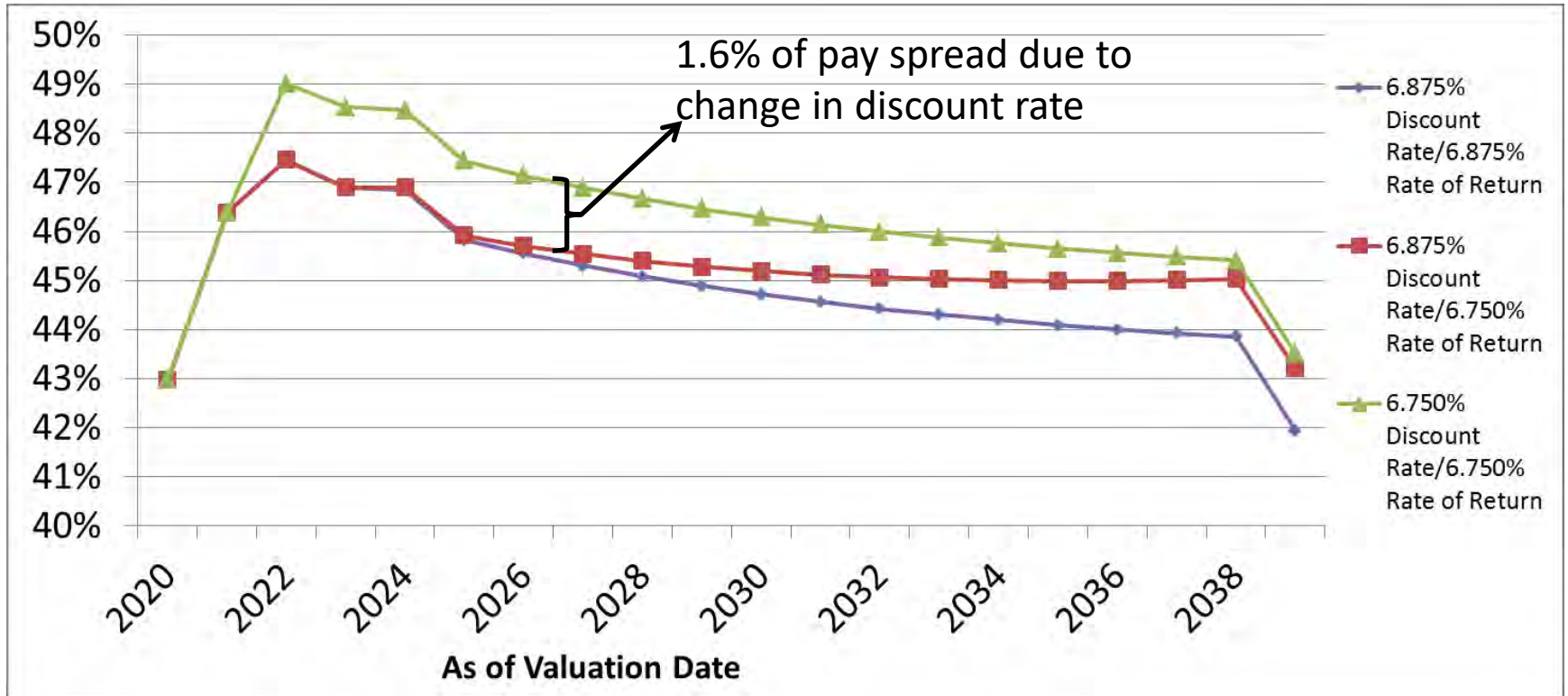
# Long Term Projections – Contribution Rate

*Deterministic Projections as of 1/1/2020*



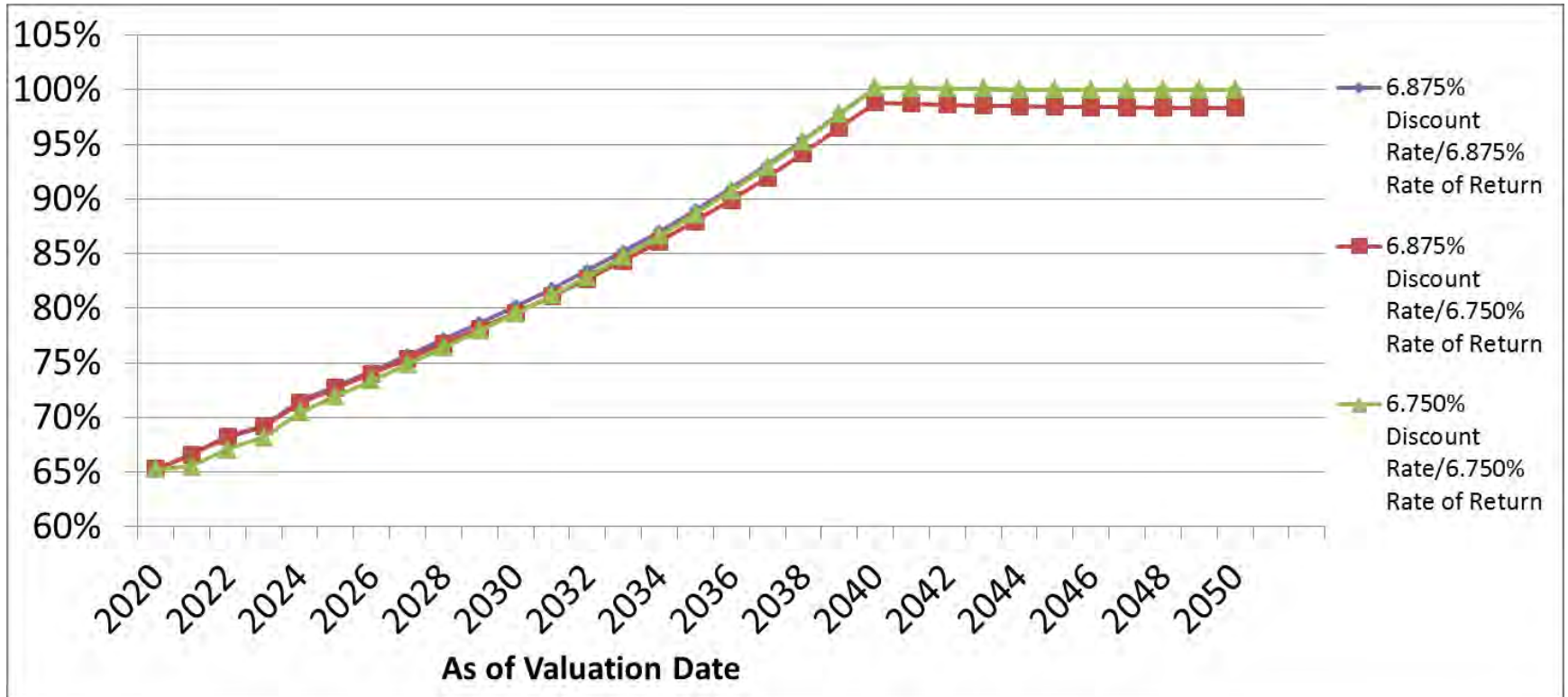
# Long Term Projections – Contribution Rate

*Deterministic Projections as of 1/1/2020 – Before the Cliff*



# Long Term Projections – Funded Ratio

*Deterministic Projections as of 1/1/2020*



# Long Term Projections

## *Stress Testing*

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- In the midst of the global pandemic, there has been significant volatility in the capital markets
- While 2019 was a great year for investments, there is tremendous uncertainty surrounding returns in 2020 and beyond
- If and when the recovery happens, we don't know exactly what it will look like
- Stress test scenarios are based on the 6.75% discount rate beginning in 2021, shape of the resulting curves and outcomes would be similar under the 6.875% discount rate

# Long Term Projections

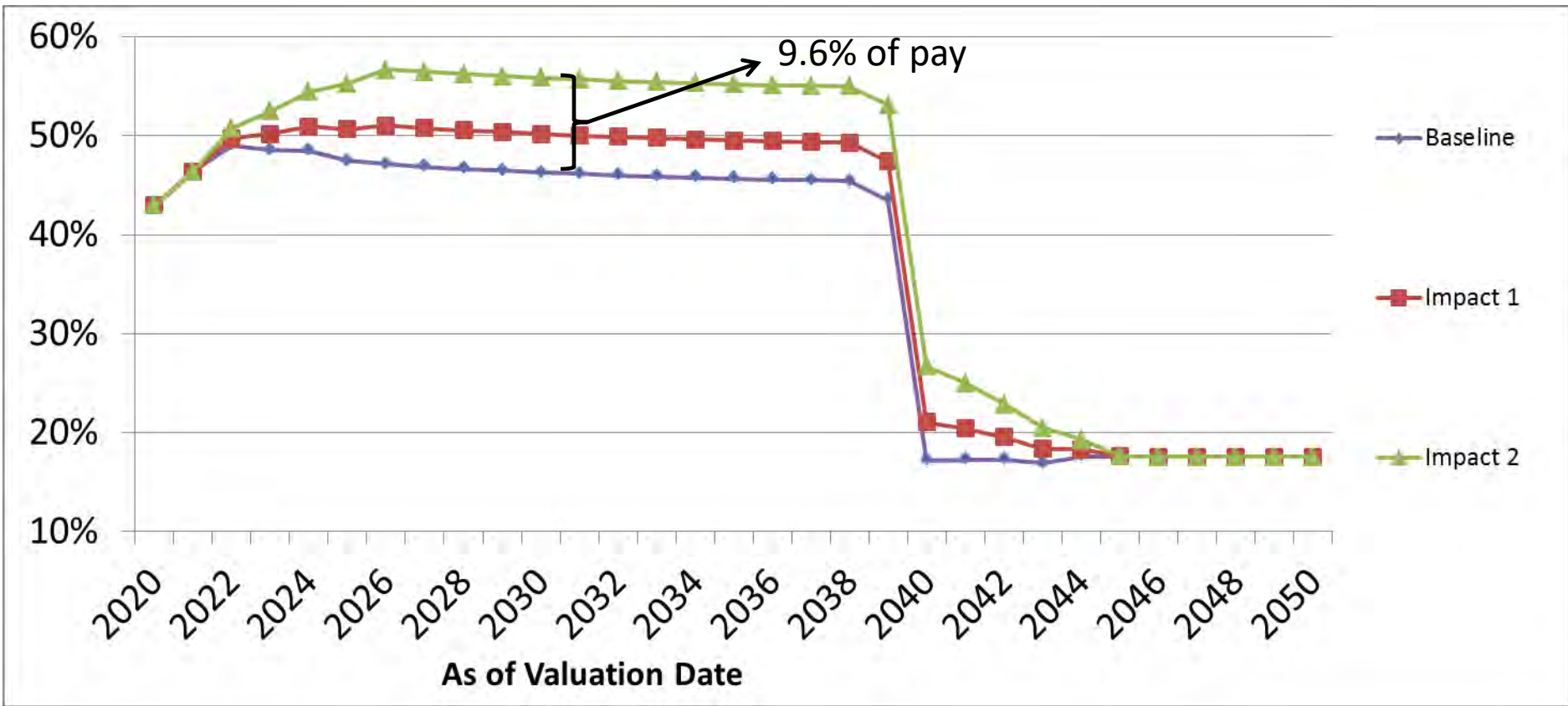
## *Stress Testing – No Recovery*

---

- Let's look at a couple of scenarios that demonstrate the sensitivity to returns in the short term
  - Baseline: 6.875% return in 2020 and 6.75% return thereafter
  - Impact 1: 0.00% return in 2020 and 6.75% return thereafter
  - Impact 2: -10.00% return in 2020 and 6.75% return thereafter

# Long Term Projections

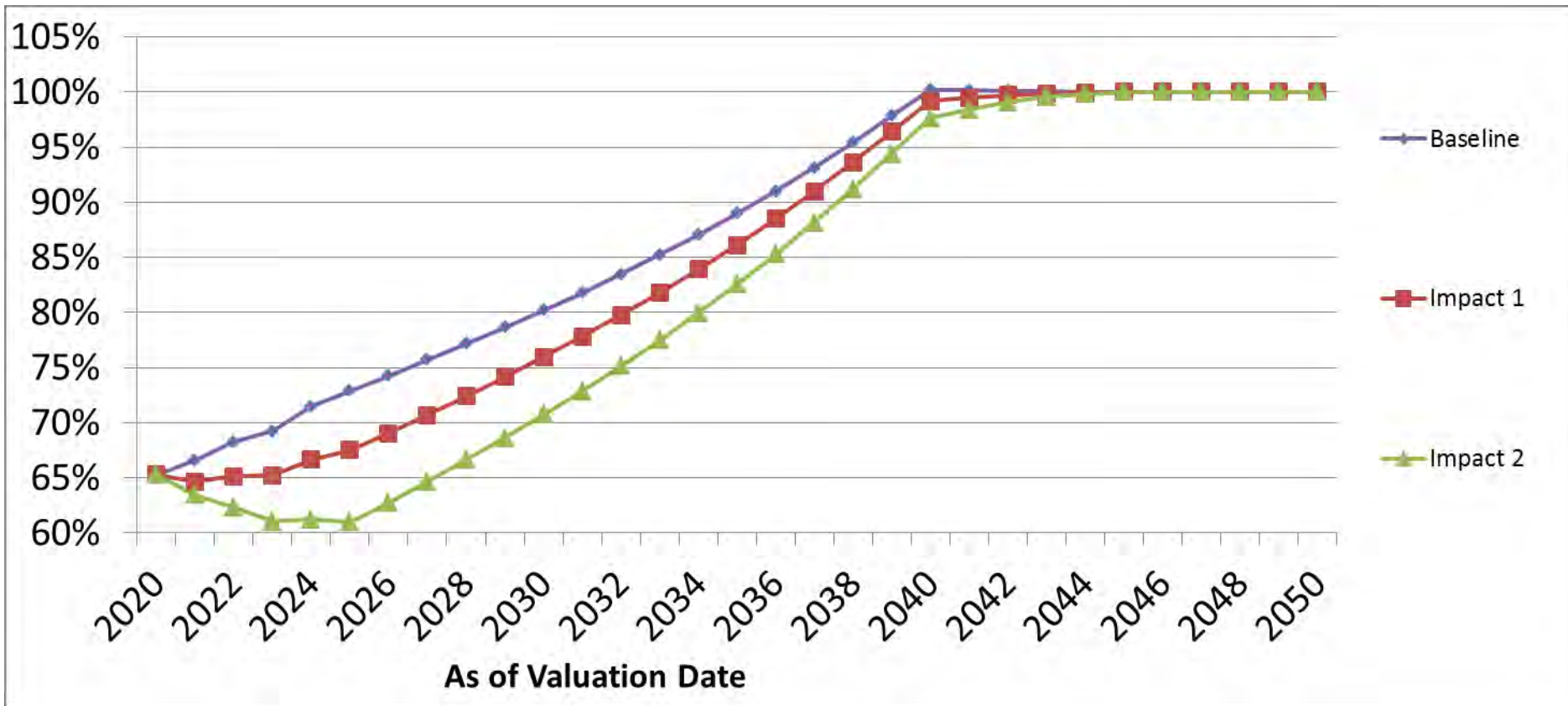
## Stress Testing – No Recovery – Contribution Rates





# Long Term Projections

## *Stress Testing – No Recovery – Funded Ratio*



# Long Term Projections

## *Stress Testing – Partial Recovery*

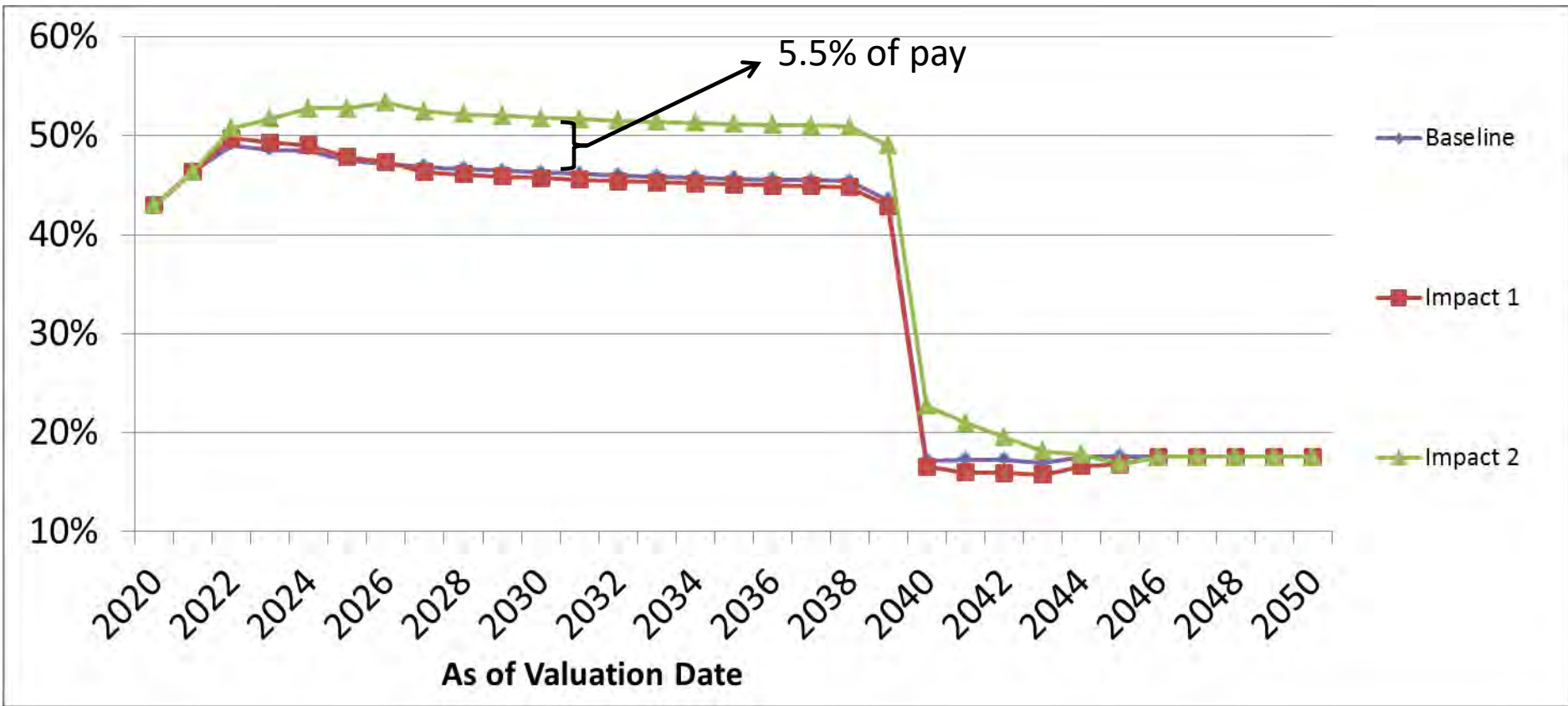
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- Let's look at those same two scenarios but with a partial recovery in 2021
  - Baseline: 6.875% return in 2020 and 6.75% return thereafter
  - Impact 1: 0.00% return in 2020, 15.00% return in 2021 and 6.75% return thereafter
  - Impact 2: -10.00% return in 2020, 15.00% return in 2021 and 6.75% return thereafter



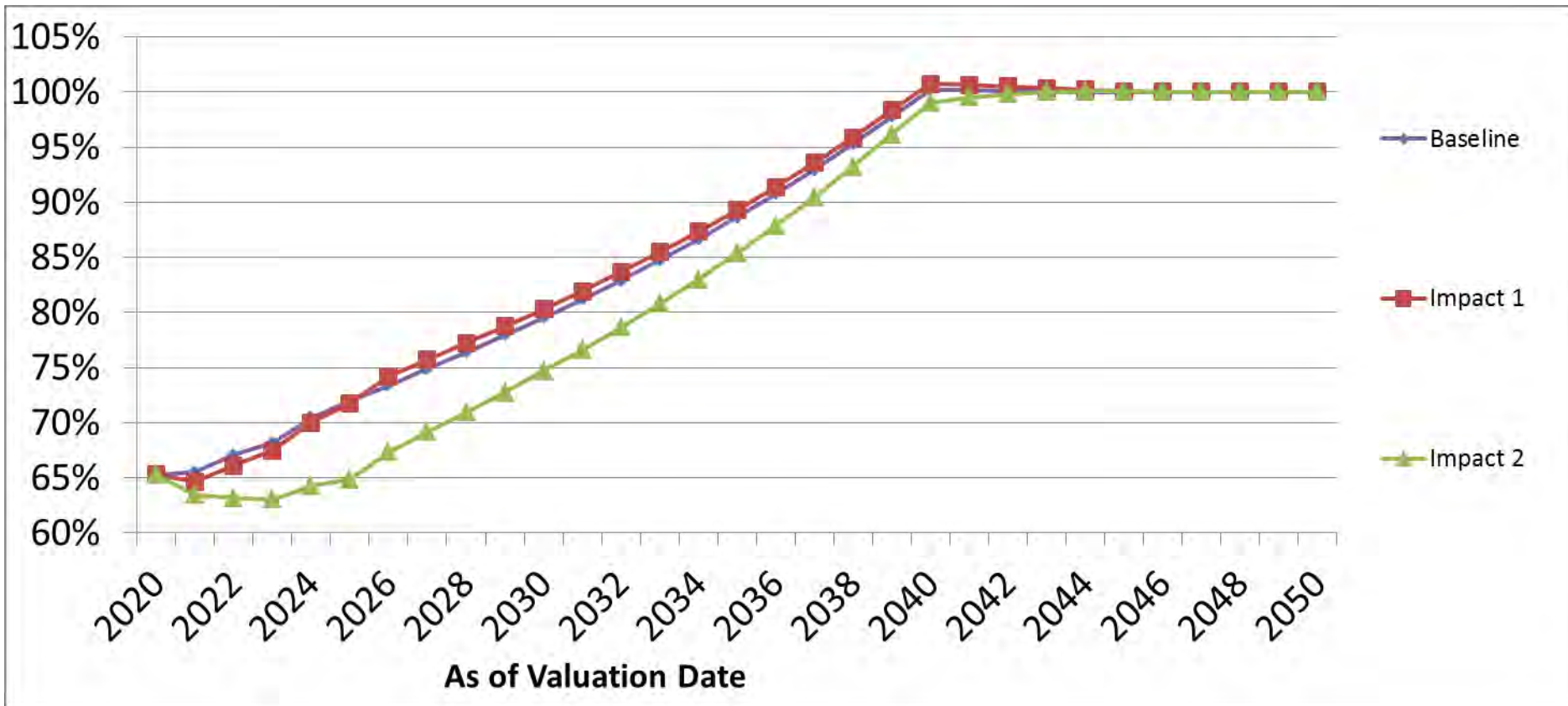
# Long Term Projections

## Stress Testing – Partial Recovery – Contribution Rates



# Long Term Projections

## *Stress Testing – Partial Recovery – Funded Ratio*



# Long Term Projections

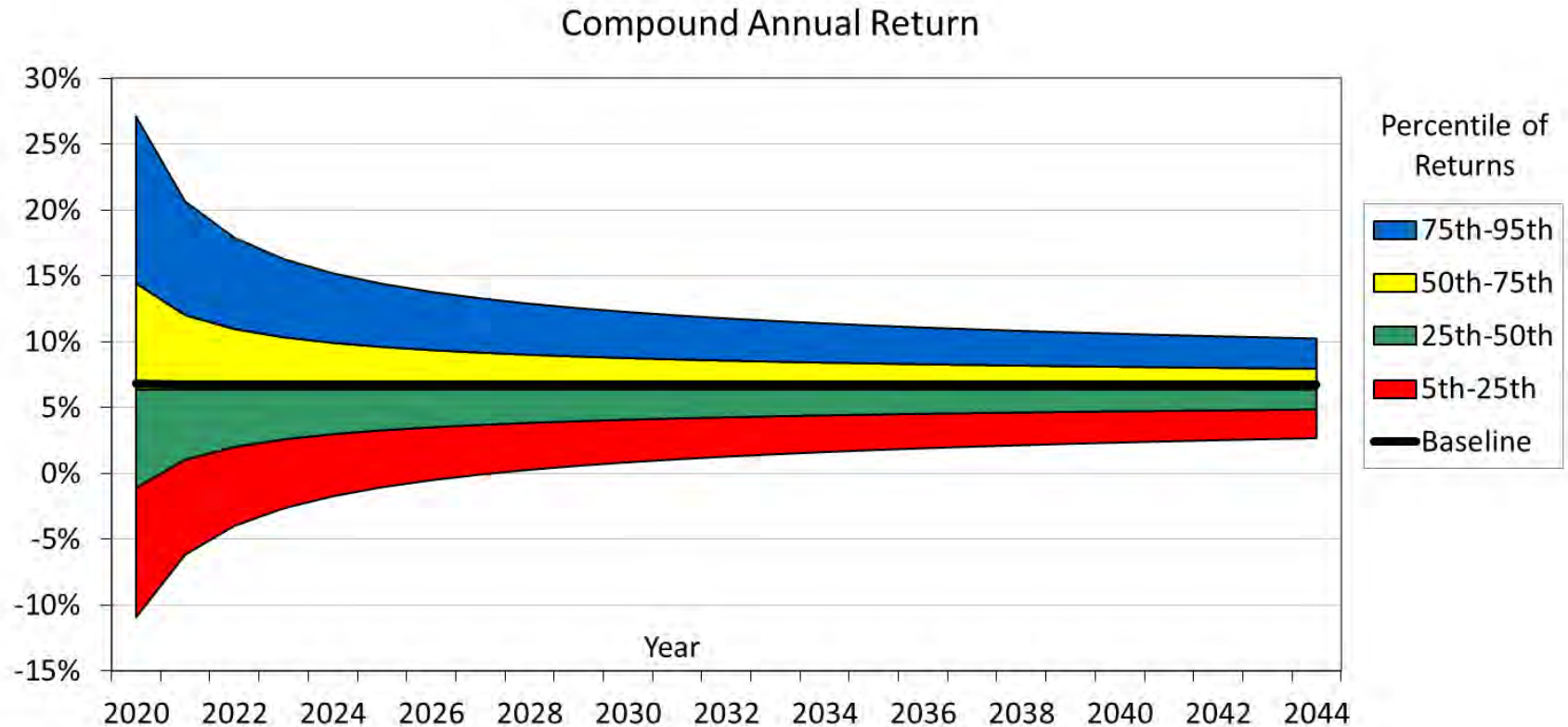
## *Cone of Uncertainty*

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- Now let's talk about the likelihood of certain outcomes
- As we have learned with the global pandemic, models are useful but also are constantly changing over time
- There is no one single outcome, rather, there is a range of outcomes with various likelihoods
- We can call this the “Cone Of Uncertainty”

# Cone of Uncertainty

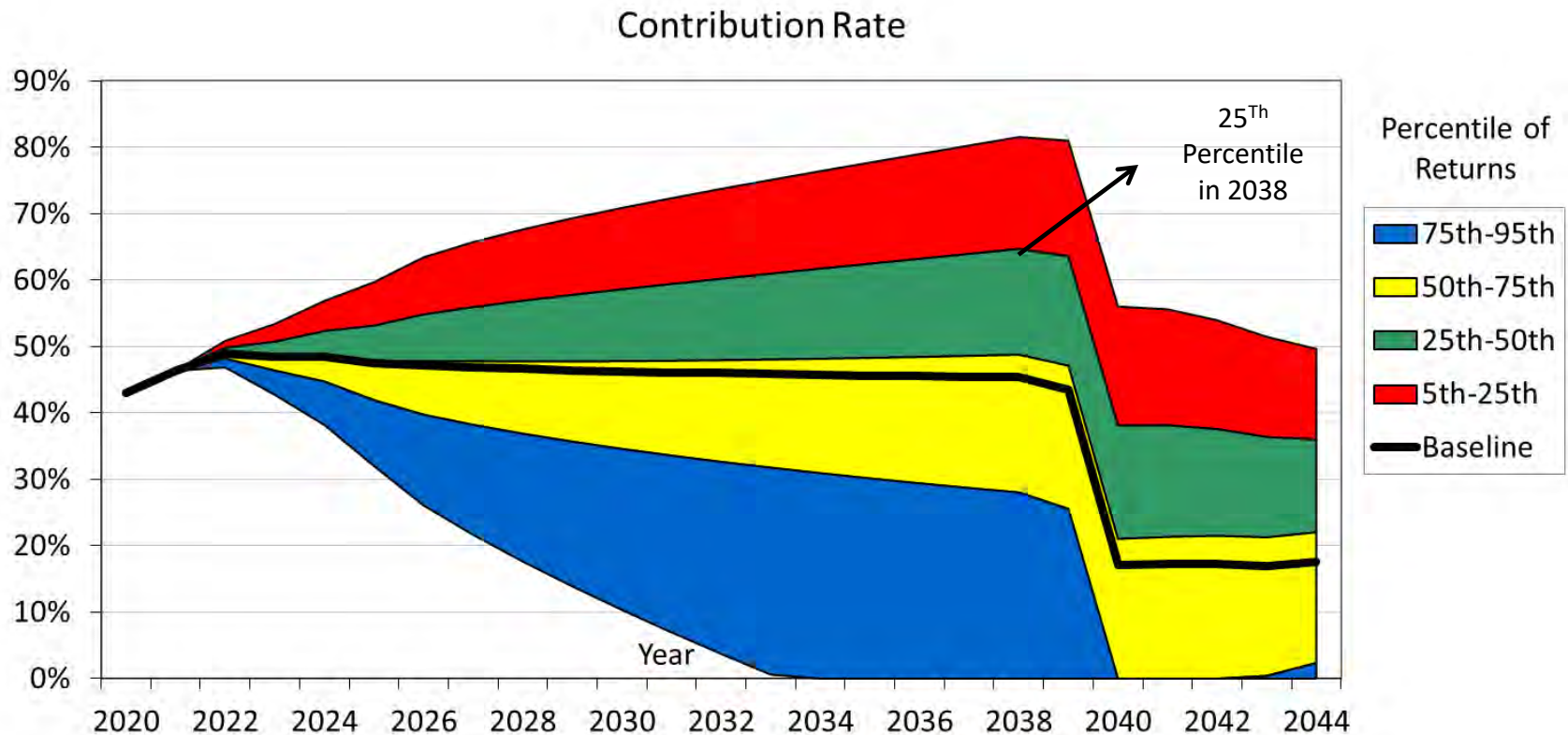
## *Annual Compound Rates of Return*



- In the past, we have described the 25<sup>th</sup> percentile as the “downside risk,” i.e., there is a 25% chance that we will see this outcome

# Cone of Uncertainty

## *Projected Contribution Rates*

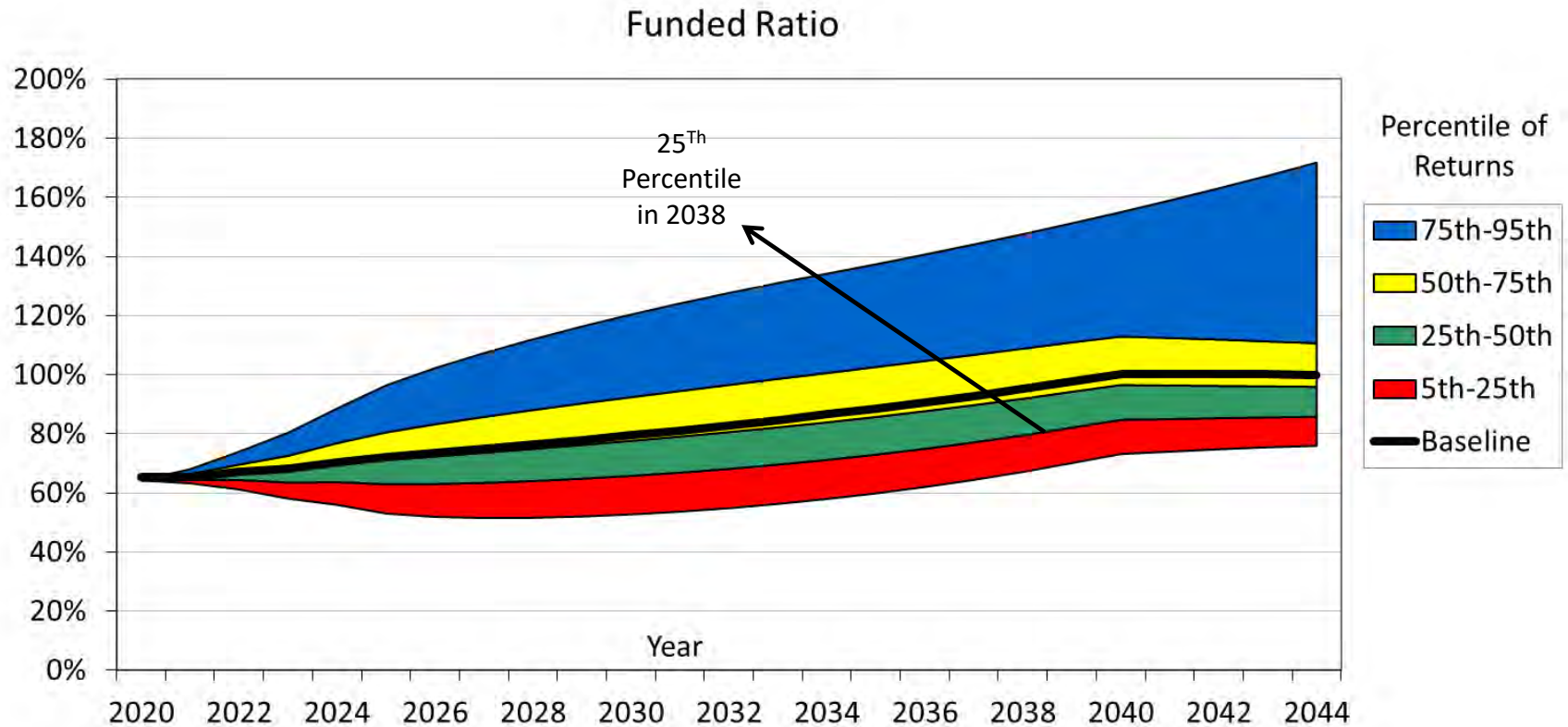


- The downside projected contribution rate risk (25<sup>th</sup> percentile) under this model is close to 65% in 2038
- That means, if our returns are in the bottom quartile, the long term projected contribution rate is expected to be at or above 65% by 2038



# Cone of Uncertainty

## *Projected Funded Ratios*

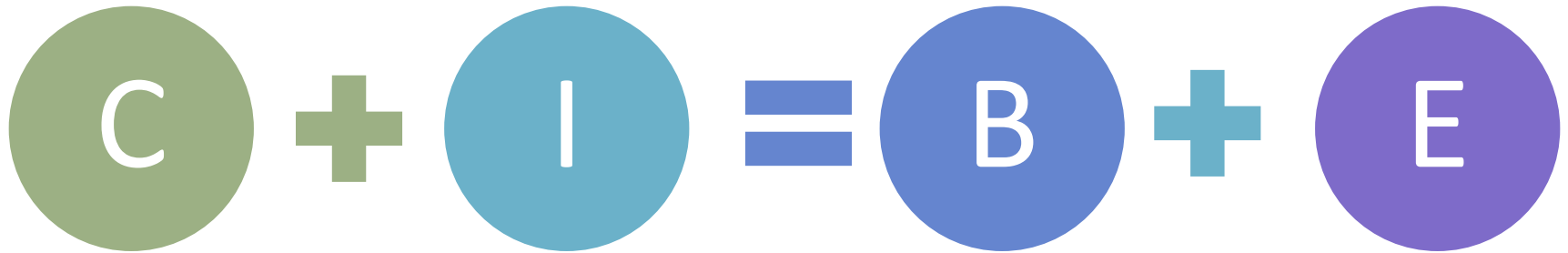


- The downside funded ratio risk (25<sup>th</sup> percentile) under this model is 80% in 2038
- That means, if our returns are in the bottom quartile, the long term projected funded ratio is expected to be at or below 80% by 2038

# Why Do We Take on Investment Risk?

## *Basic Retirement Funding Equation*

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Contribution  
Income

Investment  
Return

Benefits Paid

Expenses

**Money In = Money Out**

# Why Do We Take on Investment Risk?

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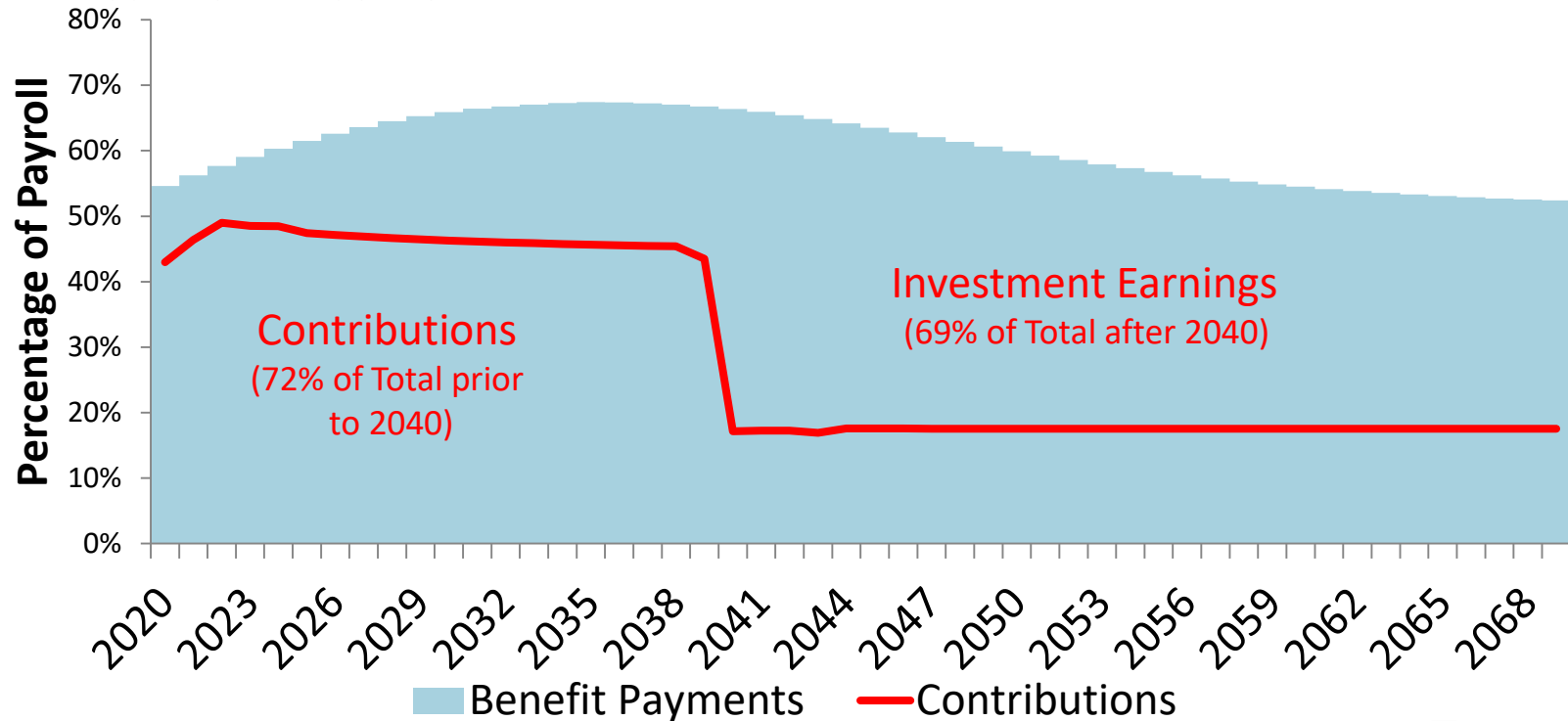
- Prefunding and taking on investment risk is a way to fulfill a promise to the taxpayer; that their money will be used to efficiently provide retirement benefits to the public sector worker
- There is a “most efficient” way to use taxpayer dollars to fulfill the retirement promise, and there is a “least efficient” way to do so
- The least efficient way will require more taxpayer dollars to fulfill the same promise



# Why Do We Take on Investment Risk?

## *SLOCPT - Prefunded Plan*

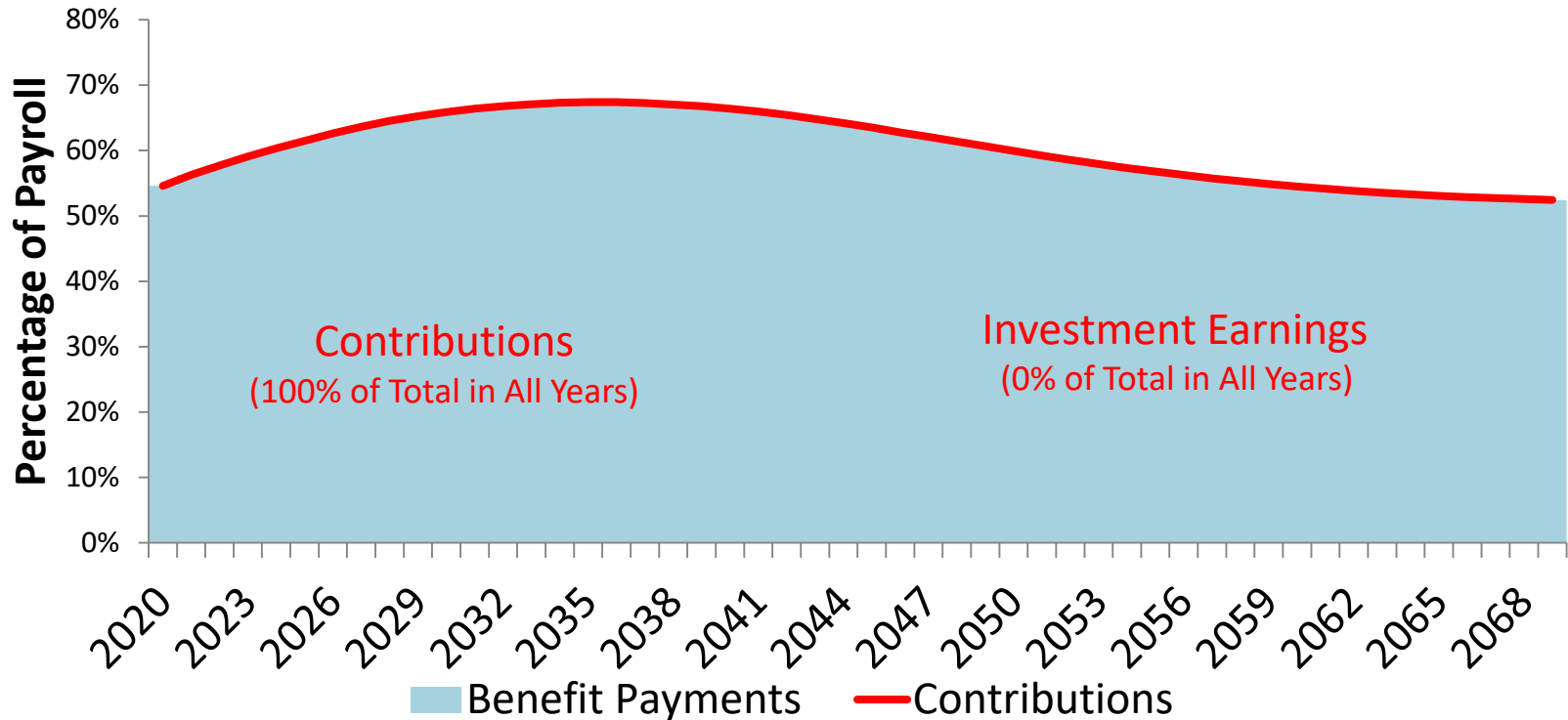
- Prefunding and taking on investment risk means a vast majority of the retiree's benefit check could be paid through investment income
- Over the next 50 years, close to 60% of benefit payments will be made via investment income



# Why Do We Take on Investment Risk?

## *Pay-as-you-go Plan*

- If the benefits were not prefunded, then 100% of the benefit checks would be paid from contributions
- This would be a much less efficient use of taxpayer money



# Thank You!

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**Paul Wood, ASA, FCA, MAAA**

Paul.wood@grsconsulting.com

Office: (720) 274-7275

Cell: (248) 470-4877

**Thomas Lyle, ASA, EA, MAAA**

Thomas.lyle@grsconsulting.com

Office: (720) 274-7278

Cell: (813) 610-4184



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# San Luis Obispo County Pension Trust

Actuarial Valuation Report  
As of January 1, 2020

Draft





June 10, 2020

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, 2020 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, 2020.

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 20 years (30 year closed amortization period beginning with the January 1, 2010 valuation) for funding computations. Effective with the January 1, 2019 valuation, new gains and losses generated each year are amortized over their own 20 year closed period.

In the January 1, 2020 valuation, the Trust's funded status decreased from 67.1% to 65.3%. The total actuarially determined contribution rate is 47.92% of pay as of January 1, 2020, compared to the total charged rates of 44.32% (this includes a scheduled changes increase of 2.68% as of July 1, 2020). 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.

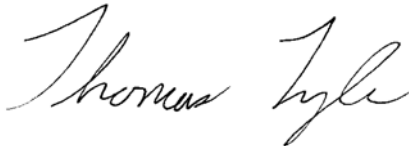
All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of state law and, where applicable, the Internal Revenue Code and ERISA. The undersigned are independent actuaries and consultants. 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**



Paul Wood, ASA, FCA, MAAA  
Consultant



Thomas A. Lyle, ASA, FCA, EA, MAAA  
Consultant

Draft

	<b>Cover Letter</b>
<b>Section A</b>	<b>Valuation Comments &amp; Recommendations</b>
<b>Section B</b>	<b>Executive Summary &amp; Rate Reconciliation</b>
<b>Section C</b>	<b>Valuation Results</b>
<b>Section D</b>	<b>Summary of Member Data</b>
<b>Section E</b>	<b>Valuation Methods &amp; Assumptions</b>
<b>Section F</b>	<b>Summary of Benefit Provisions</b>
<b>Section G</b>	<b>Definitions of Technical Terms</b>

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## **SECTION A**

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### **VALUATION COMMENTS & RECOMMENDATIONS**

## Valuation Comments & Recommendations

**Benefits:** As of January 1, 2013, Tier 2 was effectively closed and most new hires enter under the provisions of Tier 3 (known as AB 340; some new members enter Tier 2 by virtue of reciprocity). As of January 1, 2020, there are 1,321 active members covered under Tier 3 compared to 1,163 active members covered as of the prior valuation. See Section D for additional details regarding the active membership in each tier.

**Assumptions:** This valuation includes assumption changes adopted by the Board based on the Experience Study performed for the five-year period ending December 31, 2019. These changes include changing the discount rate, inflation rate, mortality rates, retirement rates, and termination rates. The net impact of these changes is a \$53 million increase in the accrued liability and a 0.69% of pay increase in the normal cost.

**Discount Rate:** The Board adopted a lower discount rate based on the Experience Study performed for the five-year period ending December 31, 2019. The discount rate effective January 1, 2020 is equal to 6.875%.

**Normal Cost and Amortization Payment:** The total normal cost increased from 20.60% to 21.04% of pay mainly as a result of the changes in assumptions. Employee contribution rates were increased since the prior valuation for most members in all Tiers. This increase is larger than the expected decrease as Tier 3 members entered the plan, therefore the weighted average employee rate increased from 16.04% to 16.31%. The net result is the County share of the normal cost increased from 4.56% to 4.73%. Investment losses, liability losses and assumption changes, increased the amortization payment, and overall, the January 1, 2020 computed County Employer actuarial appropriation rate increased from 28.48% to 31.61%. The cost for the Tier 3 members is expected to bring down the total normal cost of the plan in future years.

**Contribution Rate:** The total charged rate as of December 31, 2019 was 41.64% (based on the last six months of the year, which included the schedule rate increase as of July 1, 2019). Adding to that the 2.68% increase that was effective July 1, 2020 creates a charged rate for 2020 of 44.32%. The total actuarially determined contribution rate is 47.92% as of January 1, 2020. Since the margin between the charged rate and the actuarially determined contribution rate has grown to 3.60%, an increase in the charged rate is recommended. Please note that the 3.60% increase assumes the charged rate is changed January 1, 2020. Delaying that change will result in a higher increase.

**Changes to Assets & Liabilities:** Assumption changes increased the accrued liability by \$53 million. Furthermore, the plan experienced a loss from investments and a net loss from demographic sources. The key sources of the gains and losses were an actuarial loss of \$17.9 million from investments (described as the return on the actuarial value of assets less than the assumed 7.00%). The actuarial asset return of 5.68% did not exceed the 7.00% expected rate of return for the prior year. The return on the market value of assets as calculated by the SLOCPT investment consultants was 15.21%.



- A \$1.2 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 4.15% while assumed increases range from 2.75% to 8.00%.
- A \$2.9 million loss due to retirement. This loss reflects more retirements than anticipated.
- A \$6.4 million loss due to cost of living adjustments (COLA). This loss reflects an actual COLA that was higher than anticipated.
- A \$11.1 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 bases of the unfunded accrued liability established on or after January 1, 2019 are based on their own 20 year amortization periods. Future gains and losses will be amortized over 20 year closed period layers. This process is commonly referred to as “layering.”

**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, 2019, the reserve for retirees and beneficiaries is \$1,096,148,832. The non-COLA liabilities calculated were \$1,129,589,623. Accordingly, we recommend that the Trust transfer this \$33,440,791 difference out of the Current Reserve and back into the Retiree Reserve. A large source of this trust transfer is the change in assumptions.

**Member Rates:** Member rates change regularly because 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 2020 is approximately \$9.0 million, which is approximately 4.39% of active member payroll. When this percent is added to the valuation computed appropriation rate of 31.61%, the total rate of 36.00% more accurately reflects total County pension costs.

**Assets:** There is approximately \$22.2 million in deferred asset gains yet to be recognized. This puts some downward pressure on the actuarially determined contribution rate in future valuations.

## **SECTION B**

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### **EXECUTIVE SUMMARY AND RATE RECONCILIATION**

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## Executive Summary

Valuation Date:	January 1, 2020	January 1, 2019
	(1)	(2)
<b>Membership</b>		
<ul style="list-style-type: none"> <li>• Number of</li> <li>- Active Members</li> <li>- Retirees and Beneficiaries</li> <li>- Inactive, Vested</li> <li>- Total</li> <li>• Total Payroll (000s)</li> <li>• Average Pay</li> </ul>	2,752 2,968 531 <hr style="width: 100px; margin: 0 auto;"/> 6,251 \$ 205,694 \$ 74,743	2,725 2,868 489 <hr style="width: 100px; margin: 0 auto;"/> 6,082 \$ 200,537 \$ 73,592
<b>Assets</b>		
<ul style="list-style-type: none"> <li>• Market Value (000s)</li> <li>• Actuarial Value (000s)</li> <li>• Return on Market Value</li> <li>• Return on Actuarial Value</li> </ul>	\$ 1,439,004 \$ 1,416,763 15.21% 5.68%	\$ 1,271,620 \$ 1,362,562 -3.72% 3.69%
<b>Actuarial Liabilities and Funded Ratio</b>		
<ul style="list-style-type: none"> <li>• Actuarial Accrued Liability (000s)</li> <li>- Active Members</li> <li>- Retirees and Beneficiaries</li> <li>- Inactive, Vested</li> <li>- Total*</li> <li>• Unfunded Actuarial Accrued Liability (UAAL) (000s)</li> <li>• Funded Ratio</li> <li>• UAAL based on Market Value</li> <li>• Funded Ratio Based on Market Value</li> </ul>	\$ 637,693 1,460,305 72,074 <hr style="width: 100px; margin: 0 auto;"/> \$ 2,170,071 \$ 753,309 65.3% \$ 731,067 66.3%	\$ 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%
<b>Actuarially Determined Contribution**</b>		
<ul style="list-style-type: none"> <li>• Total Normal Cost</li> <li>• Member Contributions</li> <li>• County Normal Cost</li> <li>• Amortization Payment</li> <li>• Total County Cost (ADC)</li> <li>• Total Combined ADC</li> </ul>	21.04% 16.31% 4.73% 26.88% 31.61% 47.92%	20.60% 16.04% 4.56% 23.92% 28.48% 44.52%

\* Total may not add due to rounding.

\*\*Percentage of active payroll



## Calculation of the UAAL Amortization Payment

UAAL as of January 1, 2020		\$753,308,880		
Total Prior Remaining Amortization Bases as of January 1, 2020		664,470,329		
<b>2020 Amortization Base as of January 1, 2020</b>		<b>\$88,838,551</b>		
<b>2020 Payment (20 years, level percent of pay amortization)</b>		<b>\$6,505,439</b>		
<b>As of January 1, 2020</b>				
Base Year	Initial Base	Remaining Base	Years Remaining	Amortization Payment
2020	\$ 88,838,551	\$ 88,838,551	20	6,505,439
2019	50,735,419	50,404,612	19	3,819,068
2018	616,930,482	614,065,717	20	44,966,591
<b>Total</b>		<b>\$ 753,308,880</b>		<b>\$ 55,291,098</b>

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## Reconciliation of Charged Rates and the Actuarially Determined Contribution

Valuation Date	January 1, 2020	January 1, 2019
Actuarially Determined Contribution (ADC)	47.92%	44.52%
County Charged Rate	25.16%	23.15%
Member Charged Rate	<u>16.48%</u>	<u>16.27%</u>
Total Charged Rate	41.64%	39.42%
Increase to Charged Rate*	2.68%	2.80%
Total Charged Rate as of January 1	44.32%	42.22%
Difference between the ADC and the Charged Rate	3.60%	2.30%
Recommended Rate Increase as of January 1	3.60%	2.30%

\*The recommended rate increase as of January 1, 2019 was 2.30%. However, the rate increase was implemented on July 1, 2020 and therefore was increased to 2.68%.

## **SECTION C**

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### **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, 2020 valuation are shown in the following exhibits.

Draft

### FUNDING POLICY

The policy adopted by the Board is to recommend the full funding of the Total Actuarially Determined Contribution. This includes a 30 year closed amortization of the unfunded accrued liability that was effective as of January 1, 2010. This base has 20 years remaining as of January 1, 2020. 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, 2020

### 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	9.78%	13.46%	13.74%	14.44%	13.53%	11.95%	12.37%	11.07%	11.92%	12.42%
Vesting	4.63%	5.24%	4.64%	5.68%	5.26%	4.61%	5.81%	4.98%	4.63%	4.84%
Death-In-Service	0.14%	0.20%	0.13%	0.19%	0.20%	0.17%	0.11%	0.11%	0.16%	0.18%
Disability	0.23%	0.25%	0.24%	0.28%	0.25%	0.22%	0.24%	0.22%	0.22%	0.23%
Refunds	<u>1.98%</u>	<u>2.24%</u>	<u>1.77%</u>	<u>1.91%</u>	<u>2.21%</u>	<u>2.08%</u>	<u>2.65%</u>	<u>2.35%</u>	<u>2.09%</u>	<u>2.13%</u>
<b>Total Normal Cost</b>	16.76%	21.39%	20.52%	22.50%	21.45%	19.03%	21.18%	18.73%	19.02%	19.80%
<b>Less</b>										
Employee Contribution Rate	13.74%	16.78%	15.55%	16.14%	16.72%	15.39%	15.81%	14.73%	15.36%	15.79%
<b>Equals</b>										
<b>County Normal Cost</b>	3.02%	4.61%	4.97%	6.36%	4.73%	3.64%	5.37%	4.00%	3.66%	4.01%



## Elements of Normal Cost January 1, 2020

	Probation			Safety				GRAND TOTAL	
	Mgmt	Non	Total	Management		Non-Mgmt			Total
		Mgmt	Probation	Sworn	Non-Sworn	Sworn	Non-Sworn		Safety
Service Retirement	23.03%	19.75%	19.99%	26.87%	20.07%	20.79%	19.57%	20.54%	<b>13.93%</b>
Vesting	2.54%	1.91%	1.96%	2.51%	2.83%	2.11%	1.97%	2.07%	<b>4.31%</b>
Death-In-Service	0.28%	0.22%	0.22%	0.40%	0.28%	0.36%	0.32%	0.34%	<b>0.20%</b>
Disability	0.37%	0.31%	0.31%	2.84%	2.62%	2.88%	2.80%	2.83%	<b>0.60%</b>
Refunds	<u>3.08%</u>	<u>2.38%</u>	<u>2.43%</u>	<u>1.55%</u>	<u>1.71%</u>	<u>1.05%</u>	<u>1.05%</u>	<u>1.09%</u>	<b><u>2.00%</u></b>
<b>Total Normal Cost</b>	29.30%	24.57%	24.91%	34.17%	27.51%	27.19%	25.71%	26.87%	<b>21.04%</b>
				<b>Less</b>					
Employee Contribution Rate	25.13%	18.56%	19.06%	25.80%	23.52%	17.61%	18.23%	18.47%	<b>16.31%</b>
				<b>Equals</b>					
<b>County Normal Cost</b>	4.17%	6.01%	5.85%	8.37%	3.99%	9.58%	7.48%	8.40%	<b>4.73%</b>



**Pension Costs Summary - 2020**  
**Normal Cost by Tier**  
(Expressed as Percentage of Active Payroll)

NORMAL COST (NC)	Tier 1	Tier 2	Tier 3	2020 Combined
<b>MISCELLANEOUS</b>				
Member Contributions *	19.91%	13.25%	12.15%	15.79%
Employer Paid Normal Cost	<u>3.85%</u>	<u>5.51%</u>	<u>3.77%</u>	<u>4.01%</u>
Total Normal Cost	23.76%	18.76%	15.92%	19.80%
Note: COLA portion of NC	5.25%	3.33%	2.57%	4.11%
<b>PROBATION</b>				
Member Contributions *	21.88%	NA	12.65%	19.06%
Employer Paid Normal Cost	<u>5.21%</u>	NA	<u>7.40%</u>	<u>5.85%</u>
Total Normal Cost	27.09%	NA	20.05%	24.91%
Note: COLA portion of NC	6.43%	NA	3.73%	5.73%
<b>SAFETY</b>				
Member Contributions *	22.39%	15.76%	15.29%	18.47%
Employer Paid Normal Cost	<u>7.30%</u>	<u>11.46%</u>	<u>8.39%</u>	<u>8.40%</u>
Total Normal Cost	29.69%	27.22%	23.68%	26.87%
Note: COLA portion of NC	7.52%	5.48%	4.64%	6.29%
<b>TOTAL</b>				
Member Contributions *	20.37%	13.73%	12.58%	16.31%
Employer Paid Normal Cost	<u>4.42%</u>	<u>6.69%</u>	<u>4.53%</u>	<u>4.73%</u>
Total Normal Cost	24.79%	20.42%	17.11%	21.04%
Note: COLA portion of NC	5.63%	3.75%	2.91%	4.49%

\* Average of all active members in group

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



## Actuarial Balance Sheet January 1, 2020

### 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	\$1,092,274	\$60,501	\$263,988	\$1,416,763
B. Present value of expected future County appropriations				
1. Unfunded past service	580,774	32,169	140,366	753,309
2. Expected future service	<u>37,317</u>	<u>4,691</u>	<u>20,794</u>	<u>62,801</u>
3. Total future County	\$618,091	\$36,860	\$161,160	\$816,110
C. Present value of expected future member contributions	<u>175,755</u>	<u>15,440</u>	<u>45,994</u>	<u>237,190</u>
D. Total Present and Expected Future Resources	<u>\$1,886,120</u>	<u>\$112,801</u>	<u>\$471,142</u>	<u>\$2,470,063</u>

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### Present Value of Expected Future Benefit Payments and Reserve

	(thousands)			
	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand Total*</u>
A. To Retirees and Beneficiaries	\$1,109,542	\$54,301	\$296,462	\$1,460,305
B. To Deferred and Reciprocal	62,539	2,029	7,506	72,074
C. Active members				
1. Service rendered prior to valuation date	500,967	36,340	100,386	637,693
2. Expected future service	<u>213,072</u>	<u>20,131</u>	<u>66,788</u>	<u>299,991</u>
D. Total Present Value of Expected Future Benefits	<u>\$1,886,120</u>	<u>\$112,801</u>	<u>\$471,142</u>	<u>\$2,470,063</u>

\* Grand Total may not add due to rounding.



## Summary of Reported Asset Information Submitted for the January 1, 2020 Valuation

### Market Value of Reported Assets as of January 1, 2020

Cash/Short-term	\$ 46,396,399
Receivables	5,009,970
Equities	622,179,565
Bonds	414,155,133
Mortgages	5,983,103
Alternative Investments	165,992,908
Real Estate	204,950,456
Other	7,482,644
	\$ 1,472,150,178
Liabilities	(33,145,975)
Total Market Value	\$ 1,439,004,203

### Reserves as of January 1, 2020

Member Deposit Reserve	\$ 375,633,777
Appropriation Reserves	55,922,115
Retired Members Reserve	1,096,148,832
Cost-of Living	423,021,791
Contingency Reserves	(873,921,605)
Market Value Adjustments	362,199,293
Total Reserves	\$ 1,439,004,203

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## Summary of Reported Asset Information Submitted for the January 1, 2020 Valuation

Total Reserves	
<b>Beginning of Year</b>	<b>\$ 1,271,620,084</b>
<b>Revenues</b>	
Employer Contributions	\$ 48,957,564
Employee Contributions	32,983,211
Interest	4,450,180
Dividends	11,371,561
Real Estate Income	11,549
Realized and Unrealized Gains and Losses	181,520,905
Investment Expenses	(3,632,547)
Other Income	18,930
	18,930
<b>Total Revenues</b>	<b>\$ 275,681,353</b>
<b>Disbursements</b>	
Benefit Payments	\$ 101,220,652
Refunds of Member Contributions	3,291,865
Death Benefits	118,337
Administration	3,666,380
	3,666,380
<b>Total Disbursements</b>	<b>\$ 108,297,234</b>
Net Increase	\$ 167,384,119
<b>Total Reserves - End of year</b>	<b>\$ 1,439,004,203</b>

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## Development of Funding Value of Assets January 1, 2020

	Plan Year Ended December 31, 2015	Plan Year Ended December 31, 2016	Plan Year Ended December 31, 2017	Plan Year Ended December 31, 2018	Plan Year Ended December 31, 2019
A. Funding Value Beginning of Year	\$1,231,473,577	\$1,248,327,560	\$1,268,404,900	\$1,328,750,029	\$1,362,561,581
B. Gross Market Value End of Year	1,135,802,704	1,181,242,858	1,340,471,022	1,271,620,084	1,439,004,203
C. Gross Market Value Beginning of Year	1,173,336,063	1,135,802,704	1,181,242,858	1,340,471,022	1,271,620,084
D. Non-Investment Cash Flow	(20,827,506)	(23,509,152)	(15,849,141)	(15,432,525)	(22,671,149)
E. Investment Income					
E1. Market Total =B-C-D	(16,705,853)	68,949,306	175,077,305	(53,418,413)	190,055,268
E2 Immediate Recognition	<u>88,526,837</u>	<u>88,105,825</u>	<u>89,809,223</u>	<u>92,481,499</u>	<u>94,599,241</u>
E3. Phased-in Recognition	(\$105,232,690)	(\$19,156,519)	\$85,268,082	(\$145,899,912)	\$95,456,027
F. Phased-in Recognition					
F1. Current Year=E3x20%*	(21,046,538)	(3,831,304)	17,053,616	(29,179,982)	19,091,205
F2. First Prior Year	(6,715,969)	(21,046,538)	(3,831,304)	17,053,616	(29,179,982)
F3. Second Prior Year	10,167,841	(6,715,969)	(21,046,538)	(3,831,304)	17,053,616
F4. Third Prior Year	6,442,404	10,167,841	(6,715,969)	(21,046,538)	(3,831,304)
F5. Fourth Prior Year	(10,690,006)	6,442,404	10,167,841	(6,715,969)	(21,046,538)
F6. Continued Recognition of 2008 Asset Loss	(29,936,396)	(29,936,396)	(9,936,396)	0	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)	(\$51,778,664)	(\$44,919,962)	(\$14,308,750)	(\$43,720,177)	(\$17,913,003)
G. Preliminary Funding Value					
=A+D+E2+F8	\$1,247,394,244	\$1,268,004,271	\$1,328,056,232	\$1,362,078,826	\$1,416,576,670
H. Excludable Assets					
H1. End of Year	4,362,000	3,961,371	3,267,574	2,784,819	2,598,886
H2. Beginning of Year	5,295,316	4,362,000	3,961,371	3,267,574	2,784,819
H3. Change=H1-H2	(933,316)	(400,629)	(693,797)	(482,755)	(185,933)
I. Final Funding Value=G-H3	\$1,248,327,560	\$1,268,404,900	\$1,328,750,029	\$1,362,561,581	\$1,416,762,603
J. Investment Return=(E2+F8)/(A+D/2)	3.01%	3.49%	5.99%	3.69%	5.68%

\*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, 2020

	<u>Miscellaneous</u>	<u>Probation</u>	<u>Safety</u>	<u>Grand Total</u>
1) Valuation Assets as of December 31, 2018	\$1,054,963,693	\$57,052,247	\$250,545,641	\$1,362,561,581
2) Preliminary member contributions including pickups by group	\$25,818,675	\$1,713,899	\$5,393,307	\$32,925,880
3) Member contributions from financials, subgroups split in proportion to (2)	\$25,863,631	\$1,716,883	\$5,402,697	\$32,983,211
4) Preliminary employer contributions by group	\$37,200,210	\$1,930,575	\$9,609,726	\$48,740,511
5) Employer contributions from financials, subgroups split in proportion to (4)	\$37,365,871	\$1,939,173	\$9,652,520	\$48,957,564
6) Benefit Payments based on data - avg LY & TY	\$78,132,567	\$3,607,893	\$17,904,274	\$99,644,734
7) Benefit payments from financials, subgroups split in proportion to (6)	\$82,042,240	\$3,788,428	\$18,800,186	\$104,630,854
8) Subtotal = (1) + (3) + (5) - (7)	\$1,036,150,955	\$56,919,875	\$246,800,672	\$1,339,871,502
9) Valuation Assets as of December 31, 2019				\$1,416,762,603
10) Residual to allocate among groups (9) - (8)				\$76,891,101
11) Allocation of residual to equalize funded ratios	\$56,122,775	\$3,580,818	\$17,187,508	\$76,891,101
12) Valuation Assets Allocated by group: (8) + (11)	\$1,092,273,730	\$60,500,693	\$263,988,180	\$1,416,762,603

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## Development of Unfunded Actuarial Accrued Liability January 1, 2020

	Miscellaneous (1)	Probation (2)	Safety (3)	Total (4)
1. Actuarial Accrued Liability for active members				
a. PVB	\$ 714,039,723	\$ 56,470,395	\$ 167,174,314	\$ 937,684,432
b. Less: PVFNC	(213,072,442)	(20,130,639)	(66,788,162)	(299,991,243)
c. Actuarial accrued liability (AAL)	\$ 500,967,281	\$ 36,339,756	\$ 100,386,152	\$ 637,693,189
2. Total AAL for:				
a. Retirees and beneficiaries	\$ 1,109,542,174	\$ 54,300,656	\$ 296,461,894	\$ 1,460,304,724
b. Inactive members	62,538,710	2,029,192	7,505,668	72,073,570
c. Active members (Item 1c)	500,967,281	36,339,756	100,386,152	637,693,189
d. Total AAL	\$ 1,673,048,165	\$ 92,669,604	\$ 404,353,714	\$ 2,170,071,483
3. Actuarial value of assets	\$ 1,092,273,730	\$ 60,500,693	\$ 263,988,180	\$ 1,416,762,603
4. Funded ratio	65.3%	65.3%	65.3%	65.3%
5. UAAL (Item 2d - Item 3)	\$ 580,774,435	\$ 32,168,911	\$ 140,365,534	\$ 753,308,880

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**Pension Costs Summary - 2020**  
**(Expressed as Percentage of Active Payroll)**

<b>UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)</b>	<b>2020</b>	<b>2019</b>
<b>AMORTIZATION* &amp; TOTAL ADC**</b>	<b>Combined</b>	<b>Combined</b>
<b>MISCELLANEOUS</b>		
Total Normal Cost	19.80%	19.54%
UAAL Amortization	25.45%	22.56%
Total ADC - Miscellaneous	45.25%	42.10%
UAAL attributable to Miscellaneous (000's)	\$ 580,774	\$ 516,710
<b>PROBATION</b>		
Total Normal Cost	24.91%	22.52%
UAAL Amortization	24.94%	22.70%
Total ADC - Probation	49.85%	45.22%
UAAL attributable to Probation (000's)	\$ 32,169	\$ 27,944
<b>SAFETY</b>		
Total Normal Cost	26.87%	26.26%
UAAL Amortization	36.09%	32.60%
Total ADC - Safety	62.96%	58.86%
UAAL attributable to Safety (000's)	\$ 140,366	\$ 122,715
<b>TOTAL</b>		
Total Normal Cost	21.04%	20.60%
UAAL Amortization	26.88%	23.92%
<b>Total ADC - Combined</b>	<b>47.92%</b>	<b>44.52%</b>
UAAL Total (000's)	\$ 753,309	\$ 667,368

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\* UAAL Amortization calculated on 30 year closed period with 20 years remaining as of January 1, 2020, with new bases beginning in 2019 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, 2019

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	\$667,367,732
(2) County normal cost	9,277,192
(3) Actuarially determined contribution for prior year	56,736,789
(4) Interest accrual	45,082,749
(5) Increase/(Decrease) in UAAL due to assumption changes	53,371,279
(6) Increase in UAAL due to provision changes	0
(7) Expected UAAL at end of year	\$718,362,163
[(1) + (2) - (3) + (4) + (5) + (6)]	
(8) Actual UAAL at end of year	\$753,308,880
(9) Experience Gain/(Loss): (7) - (8)	(\$34,946,717)
(10) Gain (loss) as percentage of actuarial accrued liabilities at beginning of year	
\$2,029,929,312	-1.72%

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## Components of Experience Gain/(Loss) December 31, 2019

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

### Components of Experience Gain/(Loss)

Gain/(Loss) due to:

Compensation increases	\$1,189,459
Investment experience	(17,913,003)
Contribution timing experience	(7,996,277)
Retirement incidence	(2,941,181)
Termination experience	1,812,654
Active mortality experience	737,801
Disability experience	(677,808)
Retiree & beneficiary mortality experience and miscellaneous retiree data changes	(11,060,199)
COLAs	(6,374,103)
Other data changes and miscellaneous factors	<u>8,275,940</u>
Total Experience Gain/(Loss)	(\$34,946,717)

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## Funding Progress Indicators Historic Comparison

Valuation Date	Valuation Assets <sup>1</sup>	Actuarial Liability <sup>1</sup>	Funded Ratio	Unfunded		Ratio to Payroll
				Actuarial Liability	Member Payroll	
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 <sup>2,3</sup>	1,057,922	1,378,549	76.7%	320,627	161,055	199.1%
12/31/2012 <sup>3</sup>	1,122,151	1,468,001	76.4%	345,850	164,299	210.5%
12/31/2013 <sup>4</sup>	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 <sup>2</sup>	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 <sup>2</sup>	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%
12/31/2019	1,416,763	2,116,700	66.9%	699,938	205,694	340.3%
12/31/2019 <sup>2</sup>	1,416,763	2,170,071	65.3%	753,309	205,694	366.2%

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

12/31/2019	\$2,598,886	12/31/2014	\$5,295,316
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

<sup>2</sup> Reflects assumption changes.

<sup>3</sup> Reflects benefit provisions under Tier 2 for certain new members.

<sup>4</sup> Reflects benefit provisions under Tier 3 for new members and assumption changes.



## Risk Metrics January 1, 2020

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	\$ 205,694
b. Market value of assets	\$ 1,439,004
c. Accrued Liability	\$ 2,170,071
d. Funded ratio, market value basis	66.31%
e. Asset volatility ratio (MVA / Payroll)	7.00
f. Liability volatility ratio (AAL / Payroll)	10.55

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

For SLOCPT, using this volatility measure, an asset loss of 10% (a loss of \$144 million) is 70.0% of payroll. This 70.0% 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/-	2019	2018	2017	2016	2015
<b>Market Value of Assets</b>	\$1,439,004	\$1,271,620	\$1,340,471	\$1,181,243	\$1,135,803
<b>Covered Payroll</b>	\$205,694	\$200,537	\$196,848	\$185,020	\$177,004
<b>Asset Volatility Ratio=Assets/Payroll</b>	7.00	6.34	6.81	6.38	6.42
<b>Increase in contribution rate resulting from a 10% asset loss (using 20-year level percent of pay amortization and five-year asset smoothing)</b>	1.03%	0.94%	1.01%	0.95%	1.04%
<b>Increase in contribution rate resulting from a 10% asset loss (using 20-year level percent of pay amortization without asset smoothing)</b>	5.15%	4.72%	5.07%	4.75%	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 an experience loss of 1% for a given year.

Liability Volatility Ratio (in Thousands)					
Fiscal Year ending 12/31/-	2019	2018	2017	2016	2015
Accrued Liability	\$2,170,071	\$2,029,929	\$1,945,681	\$1,827,342	\$1,749,342
Covered Payroll	\$205,694	\$200,537	\$196,848	\$185,020	\$177,004
Liability Volatility Ratio=Liability/Payroll	10.55	10.12	9.88	9.88	9.88
Increase in contribution rate resulting from a 1% liability loss (using 20-year level percent of pay amortization )	0.78%	0.75%	0.74%	0.74%	0.74%



## **SECTION D**

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### **SUMMARY OF MEMBER DATA**

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## Reconciliation of Members From January 1, 2019 to January 1, 2020

	Actives	Disability	Terminated		DROP	Beneficiary	Total
			Vested	Retiree			
Counts as of January 1, 2019	2,725	141	489	2,421	83	223	<b>6,082</b>
Actives	5		(4)	(1)			0
Disability	(4)	7		(1)	(2)		0
Terminated Vested	(69)		69				0
Terminated Nonvested	(69)		(2)				(71)
Retiree	(70)		(24)	126	(32)		0
DROP	(27)				27		0
Beneficiary							0
Deceased	(3)	(3)		(34)		(13)	(53)
Refund	(73)		(9)				(82)
New Beneficiaries						18	18
New Actives	324						324
Return to Work	13						13
Missing							0
Not included last year			12	10			22
Data Corrections				(2)			(2)
Counts as of January 1, 2020	<b>2,752</b>	<b>145</b>	<b>531</b>	<b>2,519</b>	<b>76</b>	<b>228</b>	<b>6,251</b>

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**Summary of Active Members Included  
January 1, 2020 Valuation  
By Attained Ages and Years of Service  
Total Membership**

Age Group	Years of Accrued Service							No.	Compensation Totals
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>		
<20	0							0	0
20-24	52	0						52	2,927,267
25-29	244	21	0					265	15,847,478
30-34	235	100	21	0				356	24,288,410
35-39	185	125	101	24	1			436	31,801,744
40-44	103	86	95	69	11	0		364	29,028,126
45-49	83	53	71	54	52	7	0	320	25,891,599
50-54	67	47	56	61	71	25	9	336	27,155,105
55-59	59	46	53	58	47	42	23	328	26,058,692
60-64	49	37	43	38	29	23	10	229	17,617,148
65-69	8	12	10	10	8	2	2	52	4,124,494
70-74	4	2	2	2	0	1	0	11	678,746
75+	0	0	2	1	0	0	0	3	275,226
Totals	1,089	529	454	317	219	100	44	2,752	\$205,694,036

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

Averages

Age: 44.4  
 Service: 8.9  
 Compensation: \$74,743



## Summary of Active Members Included in the January 1, 2020 Valuation

	<u>No.</u>	<u>Total Payroll</u>	<u>Averages</u>		
			<u>Annual Compensation</u>	<u>Age</u>	<u>Service</u>
<b>Miscellaneous Members</b>					
1/1/2020	2,334	\$167,651,501	\$71,830	45.4	8.8
1/1/2019	2,324	\$164,634,676	\$70,841	45.5	8.9
Percent Increase	0.4%	1.8%	1.4%		
<b>Probation Members</b>					
1/1/2020	120	\$9,476,688	\$78,972	39.6	9.3
1/1/2019	116	\$8,848,590	\$76,281	38.8	9.1
Percent Increase	3.4%	7.1%	3.5%		
<b>Safety Members</b>					
1/1/2020	298	\$28,565,846	\$95,859	38.9	8.8
1/1/2019	285	\$27,054,206	\$94,927	40.0	10.1
Percent Increase	4.6%	5.6%	1.0%		
<b>All Active Members</b>					
1/1/2020	2,752	\$205,694,036	\$74,743	44.4	8.9
1/1/2019	2,725	\$200,537,472	\$73,592	44.7	9.1
Percent Increase	1.0%	2.6%	1.6%		

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

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

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

Pensionable compensation is capped at \$126,291 for 2020 for Tier 3 members.



## Summary of Active Members by Valuation Group January 1, 2020 Valuation

	Counts				Total Payroll (000s*)			
	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total
<b>Miscellaneous Members</b>								
1/1/2020	941	250	1,143	2,334	\$ 76,213	\$20,607	\$70,832	\$167,652
1/1/2019	1,039	259	1,026	2,324	\$ 82,021	\$20,514	\$62,100	\$164,635
Percent Increase				0.4%				1.8%
<b>Probation Members</b>								
1/1/2020	75	0	45	120	\$ 6,604	\$ 0	\$ 2,872	\$ 9,477
1/1/2019	72	0	44	116	\$ 6,219	\$ 0	\$ 2,630	\$ 8,849
Percent Increase				3.4%				7.1%
<b>Safety Members</b>								
1/1/2020	117	48	133	298	\$ 12,542	\$ 4,855	\$11,169	\$ 28,566
1/1/2019	140	52	93	285	\$ 14,343	\$ 5,086	\$ 7,625	\$ 27,054
Percent Increase				4.6%				5.6%
<b>All Active Members</b>								
1/1/2020	1,133	298	1,321	2,752	\$ 95,359	\$25,461	\$84,873	\$205,694
1/1/2019	1,251	311	1,163	2,725	\$102,583	\$25,600	\$72,355	\$200,537
Percent Increase				1.0%				2.6%

\* Total may not add due to rounding.

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## Summary of Deferred and Reciprocal members Included in the January 1, 2020 Valuation

	<u>No.</u>	<u>Member Contributions</u>	<u>Averages</u>			
			<u>Contribution Balance</u>	<u>Attained Age</u>	<u>Age at Termination</u>	<u>Service</u>
<b>Miscellaneous</b>						
Reciprocals	134	\$3,083,849	\$23,014	46.5	36.6	3.1
Deferred	<u>336</u>	<u>\$36,975,401</u>	110,046	50.2	41.7	9.8
Total	470	\$40,059,250	\$85,232	49.2	40.3	7.9
<b>Probation</b>						
Reciprocals	4	\$105,859	\$26,465	43.7	33.6	2.7
Deferred	<u>11</u>	<u>\$1,201,477</u>	\$109,225	45.0	36.2	9.6
Total	15	\$1,307,336	\$87,156	44.6	35.5	7.8
<b>Safety</b>						
Reciprocals	6	\$142,863	\$23,811	42.0	33.1	3.1
Deferred	<u>40</u>	<u>\$5,564,124</u>	\$139,103	44.9	37.2	9.3
Total	46	\$5,706,988	\$124,065	44.6	36.7	8.5
<b>Total</b>						
Reciprocals						
1/1/2020	144	\$3,332,572	\$23,143	46.2	36.4	3.1
1/1/2019	240	\$16,807,320	\$70,031	48.7	39.2	4.9
Percent Change	-40.0%	-80.2%	-67.0%			
Deferred						
1/1/2020	387	\$43,741,002	\$113,026	49.5	41.1	9.7
1/1/2019	249	\$26,148,859	\$105,015	49.5	40.1	9.1
Percent Change	55.4%	67.3%	7.6%			
<b>Grand Total 1/1/2020</b>	531	\$47,073,574	\$88,651	48.6	39.8	7.9
<b>Grand Total 1/1/2019</b>	489	\$42,956,179	\$87,845	49.1	39.7	7.0
Percent Change	8.6%	9.6%	0.9%			

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## Summary of Retirees Included in the January 1, 2020 Valuation

	<u>No.</u>	<u>Averages</u>				<u>New Retirees Only</u>		
		<u>Annual Allowance</u>	<u>Annual Allowance</u>	<u>Attained Age</u>	<u>Age at Retirement*</u>	<u>No.</u>	<u>Average Annual Allowance</u>	<u>Average Age at Retirement</u>
<b>Miscellaneous</b>								
1/1/2020	2,347	\$77,035,350	\$32,823	70.2	59.5	110	\$37,826	61.0
1/1/2019	2,279	\$71,578,729	\$31,408	69.8	59.3	144	\$36,657	61.7
Percent Change	3.0%	7.6%	4.5%				3.2%	
<b>Probation</b>								
1/1/2020	79	\$3,524,156	\$44,610	65.2	55.8	2	\$61,557	55.6
1/1/2019	78	\$3,324,873	\$42,627	64.3	55.8	8	\$47,767	55.3
Percent Change	1.3%	6.0%	4.7%				28.9%	
<b>Safety</b>								
1/1/2020	314	\$17,422,694	\$55,486	63.3	53.2	27	\$48,192	52.7
1/1/2019	288	\$15,880,657	\$55,141	63.3	52.7	16	\$39,796	51.6
Percent Change	9.0%	9.7%	0.6%				21.1%	
<b>All Retirees</b>								
1/1/2020	2,740	\$97,982,200	\$35,760	69.3	58.7	139	\$39,698	59.9
1/1/2019	2,645	\$90,784,259	\$34,323	68.9	58.5	168	\$37,326	60.4
Percent Change	3.6%	7.9%	4.2%				6.4%	

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

## Summary of Beneficiaries Included in the January 1, 2020 Valuation

	<u>No.</u>	<u>Averages</u>		
		<u>Annual Allowance</u>	<u>Annual Allowance</u>	<u>Attained Age</u>
<b>Miscellaneous</b>				
1/1/2020	182	\$3,876,446	\$21,299	75.5
1/1/2019	184	\$3,774,609	\$20,514	76.0
Percent Change	-1.1%	2.7%	3.8%	
<b>Probation</b>				
1/1/2020	6	\$195,644	\$32,607	77.3
1/1/2019	5	\$171,113	\$34,223	75.2
Percent Change	20.0%	14.3%	-4.7%	
<b>Safety</b>				
1/1/2020	40	\$1,352,913	\$33,823	74.1
1/1/2019	34	\$1,152,283	\$33,891	73.3
Percent Change	17.6%	17.4%	-0.2%	
<b>All Beneficiaries</b>				
1/1/2020	228	\$5,425,003	\$23,794	75.3
1/1/2019	223	\$5,098,005	\$22,861	75.6
Percent Change	2.2%	6.4%	4.1%	



**Retirees and Beneficiaries January 1, 2020  
Total Tabulated by Type of Allowances Being Paid**

<u>Type of Allowance</u>	<u>No.</u>	<u>Annual Allowances</u>
<b>SERVICE RETIREMENT</b>		
Unmodified	1,068	\$34,033,078
Cash Refund	172	\$5,387,909
100% Continuance	744	\$30,743,570
50% Continuance	261	\$11,328,433
Benefits Coordinated with Social Security		
Unmodified	167	\$5,227,983
Cash Refund	43	\$1,159,596
100% Continuance	80	\$3,400,164
50% Continuance	<u>60</u>	<u>\$2,529,758</u>
<b>Total Service Retirement</b>	2,595	\$93,810,491
<b>DISABILITY RETIREMENT</b>		
Unmodified	82	\$2,355,487
Cash Refund	13	287,149
100% Continuance	41	1,328,831
50% Continuance	<u>9</u>	<u>200,242</u>
<b>Total Disability Retirement</b>	145	\$4,171,709
<b>BENEFICIARIES</b>	<u>228</u>	<u>\$5,425,003</u>
<b>Total Allowances</b>	<u><u>2,968</u></u>	<u><u>\$103,407,203</u></u>

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## **SECTION E**

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### **VALUATION METHODS AND ASSUMPTIONS**

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## **Actuarial Methods and Assumptions Used in the January 1, 2020 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 2.75% wage 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 (20 years as of January 1, 2020) 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, 2020, based on the December 31, 2019 experience study)

A. Economic Assumptions

1. Investment return: 6.875%, compounded annually, net of administrative expenses. This is made up of a 2.25% inflation rate and 4.625% real rate of return.
2. Salary increase rate: Inflation rate of 2.25% plus productivity increase rate of 0.50% 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 2.50% each year (2% for Tier 2 and Tier 3)

4. Payroll growth:

2.75% per year (inflation 2.25%; productivity of 0.50%) for the January 1, 2020 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-2019
2. Mortality after termination or retirement -
  - a. Healthy males – Pub-2010, Amount-Weighted, Above Median Income, with generational mortality improvements using scale MP-2019, a 99% multiplier
  - b. Healthy females – Pub-2010, Amount-Weighted, Above Median Income, with generational mortality improvements using scale MP-2019, a 101% multiplier

See sample rates for 2020 below:

Ages	% Dying Within Next Year Retirees	
	Men	Women
45	0.10%	0.06%
50	0.25%	0.21%
55	0.37%	0.29%
60	0.57%	0.40%
65	0.82%	0.58%
70	1.28%	0.94%
75	2.20%	1.69%
80	4.00%	3.10%
85	7.36%	5.83%

3. Mortality rates of active members – Pub-2010, Amount-Weighted, Above Median Income, General Employee mortality tables, with generational improvements using scale MP-2019, with a 100% multiplier for males and 100% multiplier for females, applied to Pub-2010, as shown below for selected ages:

See sample rates for 2020 below:

Ages	% of Active Members Dying Within Next Year	
	Men	Women
30	0.04%	0.02%
35	0.06%	0.03%
40	0.07%	0.04%
45	0.09%	0.05%
50	0.12%	0.07%
55	0.19%	0.12%
60	0.29%	0.18%
65	0.41%	0.26%
70	0.57%	0.40%

4. Disability mortality after termination or retirement- Pub-2010, Amount-Weighted, Above Median Income, General Disabled Retiree mortality tables, with generational improvements using scale MP-2019, with 100% multiplier for males and 100% multiplier for females, applied to Pub-2010, as shown below for selected ages:

See sample rates for 2020 below:

Ages	% of Disabled Members Dying Within Next Year	
	Men	Women
30	0.49%	0.35%
35	0.65%	0.54%
40	0.80%	0.73%
45	1.02%	0.97%
50	1.50%	1.43%
55	2.07%	1.83%
60	2.61%	2.08%
65	3.08%	2.18%
70	3.65%	2.59%

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5. Retirement –

a. As shown below for Tier 1 members for selected ages (rates are only applied to members eligible for retirement):

Age	Percent of Eligible Active Members Retiring Within Next Year		
	Miscellaneous	Probation	Safety
50	2.0%	7.5%	25.0%
51	2.0%	7.5%	20.0%
52	2.0%	7.5%	10.0%
53	2.0%	7.5%	10.0%
54	4.0%	7.5%	12.0%
55	6.0%	25.0%	40.0%
56	6.0%	25.0%	30.0%
57	8.0%	25.0%	30.0%
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	25.0%	20.0%	40.0%
63	20.0%	20.0%	50.0%
64	20.0%	20.0%	75.0%
65	40.0%	100.0%	100.0%
66	40.0%		
67	30.0%		
68	30.0%		
69	30.0%		
70	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	25.0%	20.0%	30.0%
63	20.0%	20.0%	40.0%
64	20.0%	20.0%	60.0%
65	40.0%	100.0%	100.0%
66	40.0%		
67	30.0%		
68	30.0%		
69	30.0%		
70	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%	10.00%
30	0.01%	9.50%	3.75%	7.50%
35	0.04%	8.00%	2.00%	5.00%
40	0.06%	7.00%	1.25%	4.00%
45	0.09%	6.00%	0.50%	4.00%
50	0.11%	6.00%	0.00%	3.00%
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%

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%

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.

30% 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 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		
	2019	2018	2017	2016	2015	3 Year	5 Year	10 Year
Inflation <sup>1</sup>	2.7%	3.9%	3.3%	2.8%	2.6%	3.3%	3.1%	2.5%
Current Assumption	2.250%							
Average Pay Increase	1.6%	1.8%	4.6%	1.9%	3.2%	2.6%	2.6%	1.6%
Current Assumption	2.750%							
Merit & Longevity Pay Increase	-1.1%	-2.1%	1.3%	-0.9%	0.6%	-0.7%	-0.5%	-0.9%
Current Assumption	0.500%							
Total Payroll	2.6%	1.9%	6.4%	4.5%	5.6%	3.6%	4.2%	1.8%
Current Assumption	2.750%							
Investment Return Rate <sup>2</sup>	5.7%	3.7%	6.0%	3.5%	3.0%	5.1%	4.4%	5.1%
Current Assumption	6.875%							
Real Rate of Investment Return	3.0%	-0.2%	2.7%	0.7%	0.4%	1.8%	1.3%	2.6%
Current Assumption	4.625%							

<sup>1</sup> 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.

<sup>2</sup> Based on actuarial value of assets, NOT market value or book value

## **SECTION F**

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### **SUMMARY OF BENEFIT PROVISIONS AND CURRENT MEMBER CONTRIBUTION RATES**

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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, 2020

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, 2020 valuation have increased since the January 1, 2019 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, 2020

### C. Retirement Age Factors

Safety					
Age	Tier 1 <sup>1</sup>	Tier 1 <sup>2</sup>	Tier 2 <sup>3</sup>	Tier 2 <sup>4</sup>	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

<sup>1</sup> Safety Bargaining Units 6 & 7 and Non-Sworn Bargaining Units 3, 14, 15

<sup>2</sup> Safety Bargaining Units 10 & 16 and Sworn Bargaining Units 15, 27, 28

<sup>3</sup> Non-Sworn Safety members

<sup>4</sup> 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, 2020

- 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 \$126,291 for 2020 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, 2020

### 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, 2020 Actuarial Valuation

## Member Contribution Rates\*

MISCELLANEOUS - TIER 1

BU Entry	14,21,22		7a (LAFCO)		7c (LAFCO)		4,7,8,9,10, 11,17		12		17C (Interpreter)		18		20		24,26,27		25		1,5,13		2		19		98		99	
	Age	Other	Non-Court	Management	Non-Court	Management	Non-Court	Management	Non-Court	Management	Court	Other	Court	Other	Court	Other	Management	Management	SLOCEA	Non-Court	SLOCEA	Non-Court	SLOCEA	Non-Court	SLOCEA	Non-Court	Management	Non-Court	Management	
18	15.65%		14.56%		12.39%		19.32%		18.43%		19.19%		19.19%		16.67%		17.96%		16.97%		19.01%		18.45%		16.11%		20.32%		20.63%	
19	15.72%		14.63%		12.46%		19.39%		18.50%		19.26%		19.26%		16.74%		18.03%		17.04%		19.08%		18.52%		16.18%		20.39%		20.70%	
20	15.79%		14.70%		12.53%		19.46%		18.57%		19.33%		19.33%		16.81%		18.10%		17.11%		19.15%		18.59%		16.25%		20.46%		20.77%	
21	15.85%		14.76%		12.59%		19.52%		18.63%		19.39%		19.39%		16.87%		18.16%		17.17%		19.21%		18.65%		16.31%		20.52%		20.83%	
22	15.87%		14.78%		12.61%		19.54%		18.65%		19.41%		19.41%		16.89%		18.18%		17.19%		19.23%		18.67%		16.33%		20.54%		20.85%	
23	15.89%		14.80%		12.63%		19.56%		18.67%		19.43%		19.43%		16.91%		18.20%		17.21%		19.25%		18.69%		16.35%		20.56%		20.87%	
24	15.92%		14.83%		12.66%		19.59%		18.70%		19.46%		19.46%		16.94%		18.23%		17.24%		19.28%		18.72%		16.38%		20.59%		20.90%	
25	15.96%		14.87%		12.70%		19.63%		18.74%		19.50%		19.50%		16.98%		18.27%		17.28%		19.32%		18.76%		16.42%		20.63%		20.94%	
26	16.01%		14.92%		12.75%		19.68%		18.79%		19.55%		19.55%		17.03%		18.32%		17.33%		19.37%		18.81%		16.47%		20.68%		20.99%	
27	16.06%		14.97%		12.80%		19.73%		18.84%		19.60%		19.60%		17.08%		18.37%		17.38%		19.42%		18.86%		16.52%		20.73%		21.04%	
28	16.12%		15.03%		12.86%		19.79%		18.90%		19.66%		19.66%		17.14%		18.43%		17.44%		19.48%		18.92%		16.58%		20.79%		21.10%	
29	16.19%		15.10%		12.93%		19.86%		18.97%		19.73%		19.73%		17.21%		18.50%		17.51%		19.55%		18.99%		16.65%		20.86%		21.17%	
30	16.26%		15.17%		13.00%		19.93%		19.04%		19.80%		19.80%		17.28%		18.57%		17.58%		19.62%		19.06%		16.72%		20.93%		21.24%	
31	16.34%		15.25%		13.08%		20.01%		19.12%		19.88%		19.88%		17.36%		18.65%		17.66%		19.70%		19.14%		16.80%		21.01%		21.32%	
32	16.43%		15.34%		13.17%		20.10%		19.21%		19.97%		19.97%		17.45%		18.74%		17.75%		19.79%		19.23%		16.89%		21.10%		21.41%	
33	16.52%		15.43%		13.26%		20.19%		19.30%		20.06%		20.06%		17.54%		18.83%		17.84%		19.88%		19.32%		16.98%		21.19%		21.50%	
34	16.62%		15.53%		13.36%		20.29%		19.40%		20.16%		20.16%		17.64%		18.93%		17.94%		19.98%		19.42%		17.08%		21.29%		21.60%	
35	16.72%		15.63%		13.46%		20.39%		19.50%		20.26%		20.26%		17.74%		19.03%		18.04%		20.08%		19.52%		17.18%		21.39%		21.70%	
36	16.82%		15.73%		13.56%		20.49%		19.60%		20.36%		20.36%		17.84%		19.13%		18.14%		20.18%		19.62%		17.28%		21.49%		21.80%	
37	16.93%		15.84%		13.67%		20.60%		19.71%		20.47%		20.47%		17.95%		19.24%		18.25%		20.29%		19.73%		17.39%		21.60%		21.91%	
38	17.04%		15.95%		13.78%		20.71%		19.82%		20.58%		20.58%		18.06%		19.35%		18.36%		20.40%		19.84%		17.50%		21.71%		22.02%	
39	17.16%		16.07%		13.90%		20.83%		19.94%		20.70%		20.70%		18.18%		19.47%		18.48%		20.52%		19.96%		17.62%		21.83%		22.14%	
40	17.28%		16.19%		14.02%		20.95%		20.06%		20.82%		20.82%		18.30%		19.59%		18.60%		20.64%		20.08%		17.74%		21.95%		22.26%	
41	17.41%		16.32%		14.15%		21.08%		20.19%		20.95%		20.95%		18.43%		19.72%		18.73%		20.77%		20.21%		17.87%		22.08%		22.39%	
42	17.54%		16.45%		14.28%		21.21%		20.32%		21.08%		21.08%		18.56%		19.85%		18.86%		20.90%		20.34%		18.00%		22.21%		22.52%	
43	17.68%		16.59%		14.42%		21.35%		20.46%		21.22%		21.22%		18.70%		19.99%		19.00%		21.04%		20.48%		18.14%		22.35%		22.66%	
44	17.82%		16.73%		14.56%		21.49%		20.60%		21.36%		21.36%		18.84%		20.13%		19.14%		21.18%		20.62%		18.28%		22.49%		22.80%	
45	17.96%		16.87%		14.70%		21.63%		20.74%		21.50%		21.50%		18.98%		20.27%		19.28%		21.32%		20.76%		18.42%		22.63%		22.94%	
46	18.11%		17.02%		14.85%		21.78%		20.89%		21.65%		21.65%		19.13%		20.42%		19.43%		21.47%		20.91%		18.57%		22.78%		23.09%	
47	18.27%		17.18%		15.01%		21.94%		21.05%		21.81%		21.81%		19.29%		20.58%		19.59%		21.63%		21.07%		18.73%		22.94%		23.25%	
48	18.43%		17.34%		15.17%		22.10%		21.21%		21.97%		21.97%		19.45%		20.74%		19.75%		21.79%		21.23%		18.89%		23.10%		23.41%	
49	18.59%		17.50%		15.33%		22.26%		21.37%		22.13%		22.13%		19.61%		20.90%		19.91%		21.95%		21.39%		19.05%		23.26%		23.57%	
50	18.76%		17.67%		15.50%		22.43%		21.54%		22.30%		22.30%		19.78%		21.07%		20.08%		22.12%		21.56%		19.22%		23.43%		23.74%	
51	18.93%		17.84%		15.67%		22.60%		21.71%		22.47%		22.47%		19.95%		21.24%		20.25%		22.29%		21.73%		19.39%		23.60%		23.91%	
52	19.10%		18.01%		15.84%		22.77%		21.88%		22.64%		22.64%		20.12%		21.41%		20.42%		22.46%		21.90%		19.56%		23.77%		24.08%	
53	19.28%		18.19%		16.02%		22.95%		22.06%		22.82%		22.82%		20.30%		21.59%		20.60%		22.64%		22.08%		19.74%		23.95%		24.26%	
54	19.46%		18.37%		16.20%		23.13%		22.24%		23.00%		23.00%		20.48%		21.77%		20.78%		22.82%		22.26%		19.92%		24.13%		24.44%	
55	19.65%		18.56%		16.39%		23.32%		22.43%		23.19%		23.19%		20.67%		21.96%		20.97%		23.01%		22.45%		20.11%		24.32%		24.63%	
56	19.84%		18.75%		16.58%		23.51%		22.62%		23.38%		23.38%		20.86%		22.15%		21.16%		23.20%		22.64%		20.30%		24.51%		24.82%	
57	20.03%		18.94%		16.77%		23.70%		22.81%		23.57%		23.57%		21.05%		22.34%		21.35%		23.39%		22.83%		20.49%		24.70%		25.01%	
58	20.23%		19.14%		16.97%		23.90%		23.01%		23.77%		23.77%		21.25%		22.54%		21.55%		23.59%		23.03%		20.69%		24.90%		25.21%	
59+	20.43%		19.34%		17.17%		24.10%		23.21%		23.97%		23.97%		21.45%		22.74%		21.75%		23.79%		23.23%		20.89%		25.10%		25.41%	

\* Rates do not include Auto Allowance for certain individuals. These are the rates in effect at the time of the valuation.



## January 1, 2020 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	24.06%	24.06%	20.83%
19	24.14%	24.14%	20.91%
20	24.22%	24.22%	20.99%
21	24.29%	24.29%	21.06%
22	24.31%	24.31%	21.08%
23	24.33%	24.33%	21.10%
24	24.36%	24.36%	21.13%
25	24.41%	24.41%	21.18%
26	24.46%	24.46%	21.23%
27	24.52%	24.52%	21.29%
28	24.58%	24.58%	21.35%
29	24.66%	24.66%	21.43%
30	24.74%	24.74%	21.51%
31	24.83%	24.83%	21.60%
32	24.93%	24.93%	21.70%
33	25.03%	25.03%	21.80%
34	25.14%	25.14%	21.91%
35	25.25%	25.25%	22.02%
36	25.36%	25.36%	22.13%
37	25.48%	25.48%	22.25%
38	25.60%	25.60%	22.37%
39	25.73%	25.73%	22.50%
40	25.87%	25.87%	22.64%
41	26.01%	26.01%	22.78%
42	26.15%	26.15%	22.92%
43	26.31%	26.31%	23.08%
44	26.46%	26.46%	23.23%
45	26.62%	26.62%	23.39%
46	26.79%	26.79%	23.56%
47	26.96%	26.96%	23.73%
48	27.14%	27.14%	23.91%
49	27.32%	27.32%	24.09%
50	27.50%	27.50%	24.27%
51	27.69%	27.69%	24.46%
52	27.88%	27.88%	24.65%
53	28.08%	28.08%	24.85%
54	28.28%	28.28%	25.05%
55	28.49%	28.49%	25.26%
56	28.70%	28.70%	25.47%
57	28.91%	28.91%	25.68%
58	29.13%	29.13%	25.90%
59+	29.35%	29.35%	26.12%

\* Rates do not include Auto Allowance for certain individuals. These are the rates in effect at the time of the valuation.



## January 1, 2020 Actuarial Valuation Member Contribution Rates\*

SAFETY - TIER 1								
BU	6	3,14	27,28	7	10	15	15	16
Entry	Non-	Non-	Non-		(Sheriff-Coroner)	(non-sworn)	(sworn)	(sworn)
Age	Management	Management	Management	Management	Management	Management#	Management@	Management
18	20.56%	16.72%	21.35%	24.97%	29.62%	21.48%	26.23%	31.80%
19	20.67%	16.83%	21.46%	25.08%	29.73%	21.59%	26.34%	31.91%
20	20.78%	16.94%	21.57%	25.19%	29.84%	21.70%	26.45%	32.02%
21	20.89%	17.05%	21.68%	25.30%	29.95%	21.81%	26.56%	32.13%
22	21.00%	17.16%	21.79%	25.41%	30.06%	21.92%	26.67%	32.24%
23	21.12%	17.28%	21.91%	25.53%	30.18%	22.04%	26.79%	32.36%
24	21.24%	17.40%	22.03%	25.65%	30.30%	22.16%	26.91%	32.48%
25	21.36%	17.52%	22.15%	25.77%	30.42%	22.28%	27.03%	32.60%
26	21.48%	17.64%	22.27%	25.89%	30.54%	22.40%	27.15%	32.72%
27	21.60%	17.76%	22.39%	26.01%	30.66%	22.52%	27.27%	32.84%
28	21.72%	17.88%	22.51%	26.13%	30.78%	22.64%	27.39%	32.96%
29	21.84%	18.00%	22.63%	26.25%	30.90%	22.76%	27.51%	33.08%
30	21.96%	18.12%	22.75%	26.37%	31.02%	22.88%	27.63%	33.20%
31	22.08%	18.24%	22.87%	26.49%	31.14%	23.00%	27.75%	33.32%
32	22.20%	18.36%	22.99%	26.61%	31.26%	23.12%	27.87%	33.44%
33	22.32%	18.48%	23.11%	26.73%	31.38%	23.24%	27.99%	33.56%
34	22.44%	18.60%	23.23%	26.85%	31.50%	23.36%	28.11%	33.68%
35	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
36	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
37	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
38	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
39	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
40	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
41	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
42	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
43	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
44	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
45	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
46	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
47	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
48	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
49	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
50	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
51	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
52	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
53	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
54	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
55	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
56	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
57	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
58	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%
59+	22.56%	18.72%	23.35%	26.97%	31.62%	23.48%	28.23%	33.80%

\* Rates do not include Auto Allowance for certain individuals. These are the rates in effect at the time of the valuation.

# Includes Non-Sworn members of Bargaining Unit 15.

@ Includes Sworn members of Bargaining Unit 15.



# January 1, 2020 Actuarial Valuation

## Member Contribution Rates

Tier 2

BU Entry Age	12	7 LAFCO	14, 21, 22	all others	3, 14	6	7	15 (non- sworn)	15 (sworn)	10, 16	27, 28
	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Safety	Safety	Safety	Safety	Safety	Safety	Safety
18	9.54%	10.44%	7.26%	10.43%	10.95%	14.45%	17.20%	11.63%	12.32%	17.89%	11.88%
19	9.66%	10.56%	7.38%	10.55%	11.30%	14.80%	17.55%	11.98%	12.72%	18.29%	12.28%
20	9.78%	10.68%	7.50%	10.67%	11.65%	15.15%	17.90%	12.33%	13.12%	18.69%	12.68%
21	9.93%	10.83%	7.65%	10.82%	12.00%	15.50%	18.25%	12.68%	13.52%	19.09%	13.08%
22	10.04%	10.94%	7.76%	10.93%	12.35%	15.85%	18.60%	13.03%	13.92%	19.49%	13.48%
23	10.20%	11.10%	7.92%	11.09%	12.70%	16.20%	18.95%	13.38%	14.32%	19.89%	13.88%
24	10.32%	11.22%	8.04%	11.21%	13.05%	16.55%	19.30%	13.73%	14.73%	20.30%	14.29%
25	10.46%	11.36%	8.18%	11.35%	13.40%	16.90%	19.65%	14.08%	15.13%	20.70%	14.69%
26	10.66%	11.56%	8.38%	11.55%	13.75%	17.25%	20.00%	14.43%	15.53%	21.10%	15.09%
27	10.76%	11.66%	8.48%	11.65%	14.10%	17.60%	20.35%	14.78%	15.93%	21.50%	15.49%
28	10.95%	11.85%	8.67%	11.84%	14.45%	17.95%	20.70%	15.13%	16.33%	21.90%	15.89%
29	11.10%	12.00%	8.82%	11.99%	14.80%	18.30%	21.05%	15.48%	16.73%	22.30%	16.29%
30	11.40%	12.30%	9.12%	12.29%	15.15%	18.65%	21.40%	15.83%	17.13%	22.70%	16.69%
31	11.56%	12.46%	9.28%	12.45%	15.50%	19.00%	21.75%	16.18%	17.53%	23.10%	17.09%
32	11.85%	12.75%	9.57%	12.74%	15.85%	19.35%	22.10%	16.53%	17.94%	23.51%	17.50%
33	12.00%	12.90%	9.72%	12.89%	16.20%	19.70%	22.45%	16.88%	18.34%	23.91%	17.90%
34	12.18%	13.08%	9.90%	13.07%	16.55%	20.05%	22.80%	17.23%	18.74%	24.31%	18.30%
35	12.50%	13.40%	10.22%	13.39%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
36	12.65%	13.55%	10.37%	13.54%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
37	12.86%	13.76%	10.58%	13.75%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
38	13.09%	13.99%	10.81%	13.98%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
39	13.30%	14.20%	11.02%	14.19%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
40	13.50%	14.40%	11.22%	14.39%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
41	13.65%	14.55%	11.37%	14.54%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
42	13.68%	14.58%	11.40%	14.57%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
43	13.91%	14.81%	11.63%	14.80%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
44	14.14%	15.04%	11.86%	15.03%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
45	14.23%	15.13%	11.95%	15.12%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
46	14.51%	15.41%	12.23%	15.40%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
47	14.75%	15.65%	12.47%	15.64%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
48	14.85%	15.75%	12.57%	15.74%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
49	15.13%	16.03%	12.85%	16.02%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
50	15.17%	16.07%	12.89%	16.06%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
51	15.38%	16.28%	13.10%	16.27%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
52	15.44%	16.34%	13.16%	16.33%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
53	15.64%	16.54%	13.36%	16.53%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
54	15.83%	16.73%	13.55%	16.72%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
55	16.13%	17.03%	13.85%	17.02%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
56	16.19%	17.09%	13.91%	17.08%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
57	16.21%	17.11%	13.93%	17.10%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
58	16.23%	17.13%	13.95%	17.12%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
59	16.25%	17.15%	13.97%	17.14%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
60	16.27%	17.17%	13.99%	17.16%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
61	16.29%	17.19%	14.01%	17.18%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%
62+	16.31%	17.21%	14.03%	17.20%	16.90%	20.40%	23.15%	17.58%	19.14%	24.71%	18.70%



# January 1, 2020 Actuarial Valuation

## Member Contribution Rates

Tier 3

BU Entry Age	15 (non-sworn)													
	all other Miscellaneous	17C,18,19,20,24,26,27 Miscellaneous	12 Miscellaneous	14, 21, 22 Miscellaneous	25 Miscellaneous	98, 99 Miscellaneous	7 LAFCO Miscellaneous	3, 14 Safety	6 Safety	7, 10, 16 Safety	and sworn) Safety	27, 28 Safety	8, 9 Probation	31, 32 Probation
18	8.81%	10.21%	7.92%	5.64%	9.22%	10.12%	8.82%	9.75%	13.25%	16.00%	10.43%	9.99%	11.63%	9.59%
19	9.06%	10.46%	8.17%	5.89%	9.47%	10.37%	9.07%	10.25%	13.75%	16.50%	10.93%	10.49%	11.88%	9.84%
20	9.06%	10.46%	8.17%	5.89%	9.47%	10.37%	9.07%	10.50%	14.00%	16.75%	11.18%	10.74%	12.13%	10.09%
21	9.31%	10.71%	8.42%	6.14%	9.72%	10.62%	9.32%	10.75%	14.25%	17.00%	11.43%	10.99%	12.13%	10.09%
22	9.31%	10.71%	8.42%	6.14%	9.72%	10.62%	9.32%	11.00%	14.50%	17.25%	11.68%	11.24%	12.38%	10.34%
23	9.56%	10.96%	8.67%	6.39%	9.97%	10.87%	9.57%	11.50%	15.00%	17.75%	12.18%	11.74%	12.63%	10.59%
24	9.56%	10.96%	8.67%	6.39%	9.97%	10.87%	9.57%	11.75%	15.25%	18.00%	12.43%	11.99%	12.88%	10.84%
25	9.81%	11.21%	8.92%	6.64%	10.22%	11.12%	9.82%	12.00%	15.50%	18.25%	12.68%	12.24%	13.13%	11.09%
26	10.06%	11.46%	9.17%	6.89%	10.47%	11.37%	10.07%	12.50%	16.00%	18.75%	13.18%	12.74%	13.38%	11.34%
27	10.06%	11.46%	9.17%	6.89%	10.47%	11.37%	10.07%	12.75%	16.25%	19.00%	13.43%	12.99%	13.63%	11.59%
28	10.31%	11.71%	9.42%	7.14%	10.72%	11.62%	10.32%	13.00%	16.50%	19.25%	13.68%	13.24%	14.13%	12.09%
29	10.56%	11.96%	9.67%	7.39%	10.97%	11.87%	10.57%	13.50%	17.00%	19.75%	14.18%	13.74%	14.38%	12.34%
30	10.56%	11.96%	9.67%	7.39%	10.97%	11.87%	10.57%	13.75%	17.25%	20.00%	14.43%	13.99%	14.63%	12.59%
31	10.81%	12.21%	9.92%	7.64%	11.22%	12.12%	10.82%	14.00%	17.50%	20.25%	14.68%	14.24%	15.13%	13.09%
32	11.06%	12.46%	10.17%	7.89%	11.47%	12.37%	11.07%	14.50%	18.00%	20.75%	15.18%	14.74%	15.38%	13.34%
33	11.31%	12.71%	10.42%	8.14%	11.72%	12.62%	11.32%	14.75%	18.25%	21.00%	15.43%	14.99%	15.63%	13.59%
34	11.56%	12.96%	10.67%	8.39%	11.97%	12.87%	11.57%	15.00%	18.50%	21.25%	15.68%	15.24%	16.13%	14.09%
35	11.56%	12.96%	10.67%	8.39%	11.97%	12.87%	11.57%	15.50%	19.00%	21.75%	16.18%	15.74%	16.38%	14.34%
36	11.81%	13.21%	10.92%	8.64%	12.22%	13.12%	11.82%	15.50%	19.00%	21.75%	16.18%	15.74%	16.88%	14.84%
37	12.06%	13.46%	11.17%	8.89%	12.47%	13.37%	12.07%	15.50%	19.00%	21.75%	16.18%	15.74%	17.13%	15.09%
38	12.31%	13.71%	11.42%	9.14%	12.72%	13.62%	12.32%	15.50%	19.00%	21.75%	16.18%	15.74%	17.38%	15.34%
39	12.56%	13.96%	11.67%	9.39%	12.97%	13.87%	12.57%	15.50%	19.00%	21.75%	16.18%	15.74%	17.63%	15.59%
40	12.81%	14.21%	11.92%	9.64%	13.22%	14.12%	12.82%	15.50%	19.00%	21.75%	16.18%	15.74%	17.88%	15.84%
41	13.06%	14.46%	12.17%	9.89%	13.47%	14.37%	13.07%	15.50%	19.00%	21.75%	16.18%	15.74%	18.13%	16.09%
42	13.06%	14.46%	12.17%	9.89%	13.47%	14.37%	13.07%	15.50%	19.00%	21.75%	16.18%	15.74%	18.38%	16.34%
43	13.31%	14.71%	12.42%	10.14%	13.72%	14.62%	13.32%	15.50%	19.00%	21.75%	16.18%	15.74%	18.63%	16.59%
44	13.56%	14.96%	12.67%	10.39%	13.97%	14.87%	13.57%	15.50%	19.00%	21.75%	16.18%	15.74%	18.88%	16.84%
45	13.81%	15.21%	12.92%	10.64%	14.22%	15.12%	13.82%	15.50%	19.00%	21.75%	16.18%	15.74%	19.13%	17.09%
46	14.06%	15.46%	13.17%	10.89%	14.47%	15.37%	14.07%	15.50%	19.00%	21.75%	16.18%	15.74%	19.38%	17.34%
47	14.31%	15.71%	13.42%	11.14%	14.72%	15.62%	14.32%	15.50%	19.00%	21.75%	16.18%	15.74%	19.63%	17.59%
48	14.56%	15.96%	13.67%	11.39%	14.97%	15.87%	14.57%	15.50%	19.00%	21.75%	16.18%	15.74%	19.88%	17.84%
49	14.81%	16.21%	13.92%	11.64%	15.22%	16.12%	14.82%	15.50%	19.00%	21.75%	16.18%	15.74%	19.88%	17.84%
50	15.06%	16.46%	14.17%	11.89%	15.47%	16.37%	15.07%	15.50%	19.00%	21.75%	16.18%	15.74%	20.13%	18.09%
51	15.31%	16.71%	14.42%	12.14%	15.72%	16.62%	15.32%	15.50%	19.00%	21.75%	16.18%	15.74%	20.38%	18.34%
52	15.56%	16.96%	14.67%	12.39%	15.97%	16.87%	15.57%	15.50%	19.00%	21.75%	16.18%	15.74%	20.38%	18.34%
53	15.81%	17.21%	14.92%	12.64%	16.22%	17.12%	15.82%	15.50%	19.00%	21.75%	16.18%	15.74%	20.63%	18.59%
54	16.06%	17.46%	15.17%	12.89%	16.47%	17.37%	16.07%	15.50%	19.00%	21.75%	16.18%	15.74%	20.63%	18.59%
55	16.31%	17.71%	15.42%	13.14%	16.72%	17.62%	16.32%	15.50%	19.00%	21.75%	16.18%	15.74%	20.88%	18.84%
56	16.56%	17.96%	15.67%	13.39%	16.97%	17.87%	16.57%	15.50%	19.00%	21.75%	16.18%	15.74%	21.13%	19.09%
57	16.56%	17.96%	15.67%	13.39%	16.97%	17.87%	16.57%	15.50%	19.00%	21.75%	16.18%	15.74%	21.13%	19.09%
58	16.56%	17.96%	15.67%	13.39%	16.97%	17.87%	16.57%	15.50%	19.00%	21.75%	16.18%	15.74%	21.38%	19.34%
59	16.56%	17.96%	15.67%	13.39%	16.97%	17.87%	16.57%	15.50%	19.00%	21.75%	16.18%	15.74%	21.63%	19.59%
60	16.56%	17.96%	15.67%	13.39%	16.97%	17.87%	16.57%	15.50%	19.00%	21.75%	16.18%	15.74%	21.63%	19.59%
61	16.56%	17.96%	15.67%	13.39%	16.97%	17.87%	16.57%	15.50%	19.00%	21.75%	16.18%	15.74%	21.63%	19.59%
62+	16.56%	17.96%	15.67%	13.39%	16.97%	17.87%	16.57%	15.50%	19.00%	21.75%	16.18%	15.74%	21.63%	19.59%



# Summary of Benefits by Collective Bargaining Unit As of January 1, 2020

## 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, 2020

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 \$126,291 for 2020 and annually adjusted based on inflation.

Draft

## **SECTION G**

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### **DEFINITIONS OF TECHNICAL TERMS**

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## Definitions of Technical Terms

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

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

**Accrued Service** – Service credited under the system that was rendered before the date of the actuarial valuation.

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

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

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

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

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

**Normal Cost** – The actuarial present value of the SLOCPT benefits allocated to the current year by the actuarial cost method.

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

Most retirement systems have an unfunded actuarial accrued liability. A UAL arises each time new benefits are added and each time an actuarial loss occurs.



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Date: June 5, 2020

To: Board of Trustees

Re: **Delayed Implementation for Rate Increase**  
**Two dates for rate increase implementation-January 1, 2021 and July 1, 2021**

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

The January 1, 2020 actuarial valuation recommended a rate increase of 3.60%. This rate increase would be effective January 1, 2020. The Board has requested a recalculation of the recommended rate increase for a January 1, 2021 and a July 1, 2021 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, 2021 the rate increase would be 3.98% of pay. For an implementation date of July 1, 2020 the rate increase would be 4.13% of pay. The following chart illustrates the increase as well as the increase on the Miscellaneous, Probation and Safety divisions.

Draft

San Luis Obispo Pension Trust-Rate Increases for Alternate Implementation Dates							
	Total Charged Rates at 12/31/2019	2020 Val.		January 1, 2021		July 1, 2021	
		Total ADC	Rate Change	Total ADC	Rate Change	Total ADC	Rate Change
<b>ALL CATEGORIES</b>	44.32%	47.92%	3.60%	48.30%	3.98%	48.45%	4.13%
<b>All Miscellaneous</b>	41.84%	45.25%	3.41%	45.61%	3.77%	45.75%	3.91%
<b>All Probation</b>	45.19%	49.85%	4.66%	50.25%	5.06%	50.40%	5.21%
<b>All Safety</b>	58.56%	62.96%	4.40%	63.46%	4.90%	63.66%	5.10%

Total Charged Rates at 12/31/2019 (plus 2.68% increase effective 7/1/2020)

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

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**San Luis Obispo County Pension Trust  
Pension Contribution Rate Increases**

	<b>2014 Valuation</b>	<b>2015 Valuation</b>	<b>2016 Valuation</b>	<b>2017 Valuation</b>	<b>2018 Valuation</b>	<b>2019 Valuation</b>	<b>2020 Valuation</b>
<b>Total Rate Increases</b>							
<b>Miscellaneous</b>	0.00%	0.91%	4.51%	1.65%	1.99%	2.47%	3.41%
<b>Probation</b>	0.00%	9.90%	4.72%	2.25%	3.70%	2.26%	4.56%
<b>Safety</b>	0.00%	1.17%	6.71%	3.54%	5.63%	1.25%	4.40%
<b>COMBINED</b>	<b>0.00%</b>	<b>0.95%</b>	<b>4.85%</b>	<b>1.93%</b>	<b>2.51%</b>	<b>2.30%</b>	<b>3.60%</b>
<b>Total ADC</b>	34.23%	34.77%	38.90%	40.32%	42.19%	44.52%	47.92%
Significant Changes:							
Discount Rate	7.250%	7.250%	7.125%	7.125%	7.000%	7.000%	6.875%
Inflation	2.750%	2.750%	2.650%	2.650%	2.500%	2.500%	2.250%
Payroll Growth Rate	3.750%	3.750%	3.375%	3.375%	3.000%	2.750%	2.750%
Mortality			Updated (1st part of 2 step phased)		Updated (2nd part of 2 step phased)		Updated

**As of Valuation date of Jan. 1 of the Valuation year**

**Actual increase modified for delayed implementaton (e.g. Jan. 1st or July 1st 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.

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**San Luis Obispo County Pension Trust San Luis Obispo County Pension Trust - 6.875% Discount Rate - 6.875% Projected Rate of Return**  
**Projection Results Based on the January 1, 2020 Actuarial Valuation**  
**Dollar Values Shown in Millions**

Valuation as of January 1,	Fiscal Year Ending December 31,	Market Return for Fiscal Year	Actual Total Contribution Rate for Fiscal Year	Compensation for Fiscal Year	Total Contributions for Fiscal Year	Total Benefit Payments for Fiscal Year	Market Value of Assets as of Valuation Date	Actuarial Accrued Liability (AAL) as of Valuation Date	Actuarial Value of Assets(AVA) as of Valuation Date	Unfunded Actuarial Accrued Liability (UAAL) as of Valuation Date	Funded Ratio	Funded Ratio Using MVA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2020	2020	6.875%	42.98%	\$ 206	\$ 88	\$ 112	\$ 1,439	\$ 2,170	\$ 1,417	\$ 753	65.3%	66.3%
2021	2021	6.875%	46.39%	211	98	119	1,513	2,248	1,497	751	66.6%	67.3%
2022	2022	6.875%	47.46%	217	103	125	1,596	2,325	1,587	738	68.3%	68.6%
2023	2023	6.875%	46.88%	223	105	132	1,682	2,402	1,663	739	69.2%	70.0%
2024	2024	6.875%	46.85%	229	107	138	1,770	2,477	1,770	707	71.5%	71.5%
2025	2025	6.875%	45.83%	236	108	145	1,860	2,551	1,860	691	72.9%	72.9%
2026	2026	6.875%	45.55%	242	110	152	1,949	2,624	1,949	675	74.3%	74.3%
2027	2027	6.875%	45.31%	249	113	158	2,041	2,695	2,041	654	75.7%	75.7%
2028	2028	6.875%	45.09%	256	115	165	2,134	2,765	2,134	631	77.2%	77.2%
2029	2029	6.875%	44.89%	263	118	171	2,229	2,834	2,229	605	78.7%	78.7%
2030	2030	6.875%	44.72%	270	121	178	2,327	2,902	2,327	575	80.2%	80.2%
2031	2031	6.875%	44.56%	277	124	184	2,428	2,969	2,428	541	81.8%	81.8%
2032	2032	6.875%	44.43%	285	127	190	2,533	3,034	2,533	501	83.5%	83.5%
2033	2033	6.875%	44.31%	293	130	196	2,641	3,099	2,641	458	85.2%	85.2%
2034	2034	6.875%	44.19%	301	133	202	2,754	3,164	2,754	410	87.0%	87.0%
2035	2035	6.875%	44.09%	309	136	208	2,871	3,227	2,871	356	89.0%	89.0%
2036	2036	6.875%	44.00%	317	140	214	2,994	3,290	2,994	296	91.0%	91.0%
2037	2037	6.875%	43.92%	326	143	219	3,123	3,353	3,123	230	93.1%	93.1%
2038	2038	6.875%	43.86%	335	147	225	3,259	3,415	3,259	156	95.4%	95.4%
2039	2039	6.875%	41.94%	344	144	230	3,403	3,478	3,403	75	97.8%	97.8%
2040	2040	6.875%	16.62%	354	59	235	3,548	3,541	3,548	(7)	100.2%	100.2%
2041	2041	6.875%	16.73%	364	61	240	3,610	3,605	3,610	(5)	100.1%	100.1%
2042	2042	6.875%	16.84%	374	63	244	3,673	3,670	3,673	(3)	100.1%	100.1%
2043	2043	6.875%	16.47%	384	63	249	3,738	3,736	3,738	(2)	100.1%	100.1%
2044	2044	6.875%	17.15%	394	68	253	3,803	3,803	3,803	-	100.0%	100.0%
2045	2045	6.875%	17.13%	405	69	257	3,873	3,873	3,873	-	100.0%	100.0%
2046	2046	6.875%	17.11%	416	71	261	3,945	3,945	3,945	-	100.0%	100.0%
2047	2047	6.875%	17.10%	428	73	266	4,019	4,019	4,019	-	100.0%	100.0%
2048	2048	6.875%	17.09%	440	75	270	4,097	4,097	4,097	-	100.0%	100.0%
2049	2049	6.875%	17.08%	452	77	274	4,177	4,177	4,177	-	100.0%	100.0%
2050	2050	6.875%	17.08%	464	79	278	4,261	4,261	4,261	-	100.0%	100.0%

**San Luis Obispo County Pension Trust San Luis Obispo County Pension Trust - 6.875% Discount Rate - 6.750% Projected Rate of Return**  
**Projection Results Based on the January 1, 2020 Actuarial Valuation**  
**Dollar Values Shown in Millions**

Valuation as of January 1,	Fiscal Year Ending December 31,	Market Return for Fiscal Year	Actual Total Contribution Rate for Fiscal Year	Compensation for Fiscal Year	Total Contributions for Fiscal Year	Total Benefit Payments for Fiscal Year	Market Value of Assets as of Valuation Date	Actuarial Accrued Liability (AAL) as of Valuation Date	Actuarial Value of Assets(AVA) as of Valuation Date	Unfunded Actuarial Accrued Liability (UAAL) as of Valuation Date	Funded Ratio	Funded Ratio Using MVA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2020	2020	6.875%	42.98%	\$ 206	\$ 88	\$ 112	\$ 1,439	\$ 2,170	\$ 1,417	\$ 753	65.3%	66.3%
2021	2021	6.750%	46.39%	211	98	119	1,513	2,248	1,497	751	66.6%	67.3%
2022	2022	6.750%	47.46%	217	103	125	1,594	2,325	1,586	739	68.2%	68.6%
2023	2023	6.750%	46.90%	223	105	132	1,678	2,402	1,662	740	69.2%	69.9%
2024	2024	6.750%	46.89%	229	108	138	1,764	2,477	1,767	710	71.3%	71.2%
2025	2025	6.750%	45.92%	236	108	145	1,851	2,551	1,855	696	72.7%	72.6%
2026	2026	6.750%	45.70%	242	111	152	1,938	2,624	1,942	682	74.0%	73.9%
2027	2027	6.750%	45.54%	249	113	158	2,026	2,695	2,031	664	75.4%	75.2%
2028	2028	6.750%	45.40%	256	116	165	2,117	2,765	2,122	643	76.7%	76.6%
2029	2029	6.750%	45.28%	263	119	171	2,209	2,834	2,214	620	78.1%	78.0%
2030	2030	6.750%	45.19%	270	122	178	2,304	2,902	2,309	593	79.6%	79.4%
2031	2031	6.750%	45.12%	277	125	184	2,402	2,969	2,407	562	81.1%	80.9%
2032	2032	6.750%	45.07%	285	128	190	2,503	3,034	2,509	525	82.7%	82.5%
2033	2033	6.750%	45.03%	293	132	196	2,608	3,099	2,614	485	84.3%	84.2%
2034	2034	6.750%	45.01%	301	135	202	2,718	3,164	2,724	440	86.1%	85.9%
2035	2035	6.750%	44.99%	309	139	208	2,832	3,227	2,838	389	87.9%	87.8%
2036	2036	6.750%	44.99%	317	143	214	2,951	3,290	2,958	332	89.9%	89.7%
2037	2037	6.750%	45.01%	326	147	219	3,077	3,353	3,084	269	92.0%	91.8%
2038	2038	6.750%	45.03%	335	151	225	3,210	3,415	3,217	198	94.2%	94.0%
2039	2039	6.750%	43.21%	344	149	230	3,350	3,478	3,358	120	96.5%	96.3%
2040	2040	6.750%	17.99%	354	64	235	3,492	3,541	3,500	41	98.8%	98.6%
2041	2041	6.750%	18.19%	364	66	240	3,551	3,605	3,559	46	98.7%	98.5%
2042	2042	6.750%	18.39%	374	69	244	3,611	3,670	3,620	50	98.6%	98.4%
2043	2043	6.750%	18.09%	384	69	249	3,674	3,736	3,682	54	98.6%	98.3%
2044	2044	6.750%	18.81%	394	74	253	3,736	3,803	3,745	58	98.5%	98.2%
2045	2045	6.750%	18.83%	405	76	257	3,803	3,873	3,812	61	98.4%	98.2%
2046	2046	6.750%	18.83%	416	78	261	3,873	3,945	3,882	63	98.4%	98.2%
2047	2047	6.750%	18.84%	428	81	266	3,945	4,019	3,955	64	98.4%	98.2%
2048	2048	6.750%	18.84%	440	83	270	4,020	4,097	4,030	67	98.4%	98.1%
2049	2049	6.750%	18.85%	452	85	274	4,099	4,177	4,108	69	98.3%	98.1%
2050	2050	6.750%	18.86%	464	88	278	4,180	4,261	4,190	71	98.3%	98.1%



**San Luis Obispo County Pension Trust San Luis Obispo County Pension Trust - 6.750% Discount Rate - 6.750% Projected Rate of Return**  
**Projection Results Based on the January 1, 2020 Actuarial Valuation**  
**Dollar Values Shown in Millions**

Valuation as of January 1,	Fiscal Year Ending December 31,	Market Return for Fiscal Year	Actual Total Contribution Rate for Fiscal Year	Compensation for Fiscal Year	Total Contributions for Fiscal Year	Total Benefit Payments for Fiscal Year	Market Value of Assets as of Valuation Date	Actuarial Accrued Liability (AAL) as of Valuation Date	Actuarial Value of Assets(AVA) as of Valuation Date	Unfunded Actuarial Accrued Liability (UAAL) as of Valuation Date	Funded Ratio	Funded Ratio Using MVA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2020	2020	6.875%	42.98%	\$ 206	\$ 88	\$ 112	\$ 1,439	\$ 2,170	\$ 1,417	\$ 753	65.3%	66.3%
2021	2021	6.750%	46.39%	211	98	119	1,513	2,283	1,496	787	65.5%	66.3%
2022	2022	6.750%	49.00%	217	106	125	1,594	2,361	1,584	777	67.1%	67.5%
2023	2023	6.750%	48.53%	223	108	132	1,682	2,438	1,662	776	68.2%	69.0%
2024	2024	6.750%	48.47%	229	111	138	1,771	2,514	1,771	743	70.4%	70.4%
2025	2025	6.750%	47.43%	236	112	145	1,863	2,588	1,863	725	72.0%	72.0%
2026	2026	6.750%	47.14%	242	114	152	1,954	2,662	1,954	708	73.4%	73.4%
2027	2027	6.750%	46.89%	249	117	158	2,047	2,734	2,047	687	74.9%	74.9%
2028	2028	6.750%	46.67%	256	119	165	2,143	2,805	2,143	662	76.4%	76.4%
2029	2029	6.750%	46.47%	263	122	171	2,240	2,874	2,240	634	77.9%	77.9%
2030	2030	6.750%	46.29%	270	125	178	2,340	2,942	2,340	602	79.5%	79.5%
2031	2031	6.750%	46.13%	277	128	184	2,444	3,010	2,444	566	81.2%	81.2%
2032	2032	6.750%	46.00%	285	131	190	2,550	3,076	2,550	526	82.9%	82.9%
2033	2033	6.750%	45.87%	293	134	196	2,661	3,141	2,661	480	84.7%	84.7%
2034	2034	6.750%	45.76%	301	138	202	2,777	3,206	2,777	429	86.6%	86.6%
2035	2035	6.750%	45.65%	309	141	208	2,898	3,270	2,898	372	88.6%	88.6%
2036	2036	6.750%	45.56%	317	145	214	3,024	3,333	3,024	309	90.7%	90.7%
2037	2037	6.750%	45.48%	326	148	219	3,156	3,396	3,156	240	92.9%	92.9%
2038	2038	6.750%	45.41%	335	152	225	3,296	3,459	3,296	163	95.3%	95.3%
2039	2039	6.750%	43.52%	344	150	230	3,443	3,522	3,443	79	97.8%	97.8%
2040	2040	6.750%	17.17%	354	61	235	3,593	3,586	3,593	(7)	100.2%	100.2%
2041	2041	6.750%	17.26%	364	63	240	3,656	3,650	3,656	(6)	100.2%	100.2%
2042	2042	6.750%	17.27%	374	65	244	3,719	3,715	3,719	(4)	100.1%	100.1%
2043	2043	6.750%	16.92%	384	65	249	3,785	3,782	3,785	(3)	100.1%	100.1%
2044	2044	6.750%	17.60%	394	69	253	3,850	3,850	3,850	-	100.0%	100.0%
2045	2045	6.750%	17.59%	405	71	257	3,920	3,920	3,920	-	100.0%	100.0%
2046	2046	6.750%	17.57%	416	73	261	3,992	3,992	3,992	-	100.0%	100.0%
2047	2047	6.750%	17.56%	428	75	266	4,067	4,067	4,067	-	100.0%	100.0%
2048	2048	6.750%	17.55%	440	77	270	4,145	4,145	4,145	-	100.0%	100.0%
2049	2049	6.750%	17.55%	452	79	274	4,226	4,226	4,226	-	100.0%	100.0%
2050	2050	6.750%	17.54%	464	81	278	4,310	4,310	4,310	-	100.0%	100.0%

**San Luis Obispo County Pension Trust San Luis Obispo County Pension Trust - 6.500% Discount Rate - 6.500% Projected Rate of Return**  
**Projection Results Based on the January 1, 2020 Actuarial Valuation**  
**Dollar Values Shown in Millions**

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2020	2020	6.875%	42.98%	\$ 206	\$ 88	\$ 112	\$ 1,439	\$ 2,170	\$ 1,417	\$ 753	65.3%	66.3%
2021	2021	6.500%	46.39%	211	98	119	1,513	2,351	1,493	858	63.5%	64.4%
2022	2022	6.500%	52.13%	217	113	125	1,590	2,430	1,578	852	64.9%	65.4%
2023	2023	6.500%	51.84%	223	116	132	1,681	2,509	1,660	849	66.2%	67.0%
2024	2024	6.500%	51.73%	229	119	138	1,774	2,586	1,772	814	68.5%	68.6%
2025	2025	6.500%	50.66%	236	119	145	1,869	2,662	1,869	793	70.2%	70.2%
2026	2026	6.500%	50.32%	242	122	152	1,964	2,737	1,964	773	71.8%	71.7%
2027	2027	6.500%	50.06%	249	125	158	2,061	2,810	2,061	749	73.3%	73.3%
2028	2028	6.500%	49.83%	256	127	165	2,160	2,882	2,160	722	74.9%	74.9%
2029	2029	6.500%	49.61%	263	130	171	2,261	2,952	2,261	691	76.6%	76.6%
2030	2030	6.500%	49.43%	270	133	178	2,366	3,021	2,366	655	78.3%	78.3%
2031	2031	6.500%	49.26%	277	137	184	2,474	3,089	2,474	615	80.1%	80.1%
2032	2032	6.500%	49.12%	285	140	190	2,586	3,157	2,586	571	81.9%	81.9%
2033	2033	6.500%	48.99%	293	143	196	2,702	3,223	2,702	521	83.8%	83.8%
2034	2034	6.500%	48.86%	301	147	202	2,823	3,288	2,823	465	85.9%	85.9%
2035	2035	6.500%	48.75%	309	151	208	2,949	3,353	2,949	404	88.0%	88.0%
2036	2036	6.500%	48.66%	317	154	214	3,081	3,417	3,081	336	90.2%	90.2%
2037	2037	6.500%	48.57%	326	158	219	3,220	3,481	3,220	261	92.5%	92.5%
2038	2038	6.500%	48.50%	335	163	225	3,367	3,544	3,367	177	95.0%	95.0%
2039	2039	6.500%	46.64%	344	161	230	3,521	3,608	3,521	87	97.6%	97.6%
2040	2040	6.500%	18.37%	354	65	235	3,679	3,672	3,679	(7)	100.2%	100.2%
2041	2041	6.500%	18.42%	364	67	240	3,742	3,737	3,742	(5)	100.1%	100.1%
2042	2042	6.500%	18.21%	374	68	244	3,807	3,803	3,807	(4)	100.1%	100.1%
2043	2043	6.500%	17.90%	384	69	249	3,873	3,870	3,873	(3)	100.1%	100.1%
2044	2044	6.500%	18.58%	394	73	253	3,938	3,938	3,938	-	100.0%	100.0%
2045	2045	6.500%	18.60%	405	75	257	4,009	4,009	4,009	-	100.0%	100.0%
2046	2046	6.500%	18.58%	416	77	261	4,082	4,082	4,082	-	100.0%	100.0%
2047	2047	6.500%	18.57%	428	79	266	4,157	4,157	4,157	-	100.0%	100.0%
2048	2048	6.500%	18.56%	440	82	270	4,235	4,235	4,235	-	100.0%	100.0%
2049	2049	6.500%	18.55%	452	84	274	4,316	4,316	4,316	-	100.0%	100.0%
2050	2050	6.500%	18.55%	464	86	278	4,400	4,400	4,400	-	100.0%	100.0%

## 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  
**SLOCPT**

Date: June 22, 2020

To: Board of Trustees

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

### **Agenda Item 9: Employer Contributions FY20-21 Prefunding Amount**

#### **Recommendation:**

Staff recommends that the Board of Trustees approve the amount calculated for FY20-21 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, 2020 Actuarial Evaluation. For this reason, GRS has prepared two scenarios for the Employer Contributions based on rate increase implementation dates of January 1, 2021 and July 1, 2021. 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 23, 2020 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 Real Rate of Return Assumption. For FY20-21 a discount rate of 4.50% 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 2020 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 FY20-21 Employer Contributions and the pick-up contributions assuming rate increase implementation dates of July 1, 2021:

	Estimated FY20-21 Contributions <u>Undiscounted</u>	Estimated FY20-21 Contributions <u>Discounted</u>
County ER Contributions	\$52,562,806	\$51,461,195
County ER paid EE Contrib.	9,377,697	9,184,153
APCD ER Contributions	520,397	509,489
APCD ER Paid EE Contrib.	103,324	101,190
	-----	-----
TOTAL	\$62,564,224	\$61,256,027

Aggregate Employer Savings = \$1,308,197

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

Respectfully Submitted,



Date: June 10, 2020

To: Board of Trustees

Re: **Prefunding of Contributions for Fiscal Year Ending June 30, 2021**

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, 2021, the actuarially determined rate is based on the results of the January 1, 2020 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 23, 2020 regular meeting, SLOCPT's Board of Trustees approved the discount rate to be used to calculate the prefunding amount to be set at 4.50% for FY20-21.

The 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.

The exhibits (payroll dates starting July 1, 2020 and ending June 30, 2021) have been prepared based on the County implementing the recommended rate increase from the January 1, 2019 valuation on July 1, 2020. The County appropriation rate for the fiscal year is based on the 25.16% County charged rate as of January 1, 2020 plus 1.34% of the total 2.68% rate increase effective July 1, 2020. This results in a total rate of 26.50% for the year. Furthermore, this assumes that any rate increases from the January 1, 2020 valuation will not go into effect prior to June 30, 2021.

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

Contribution Basis	Rate Increase July 1, 2020
Pay period non-discounted contribution for FYE 2021	\$62,564,224
Pre-funding single sum contribution made on July 17, 2020	\$61,256,027
Contribution savings due to prefunding	\$1,308,197

This pre-funding calculation has been done using the Board prescribed interest rate of 4.50%. If the County prefunds the contribution at the beginning of the fiscal year ending 2021, the County can contribute \$1,308,197 less. If the Trust earns 4.50% 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,



Paul Wood, ASA, FCA, MAAA  
Consultant



### San Luis Obispo County Pension Trust

#### Prepayment of County Contributions Discount Rate = 4.500%

Fiscal Year 2020-2021 beginning July 17, 2020 Biweekly Pay Period	County Biweekly Payroll Estimate*	County Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/17/2020 Factor	Biweekly Contribution Discounted
1	\$ 7,529,769	26.50%	\$ 1,995,389	1.00000000	\$ 1,995,389
2	7,537,630	26.50%	1,997,472	0.99830848	1,994,093
3	7,545,499	26.50%	1,999,557	0.99661981	1,992,798
4	7,553,376	26.50%	2,001,645	0.99493400	1,991,504
5	7,561,262	26.50%	2,003,734	0.99325105	1,990,211
6	7,569,155	26.50%	2,005,826	0.99157094	1,988,919
7	7,577,057	26.50%	2,007,920	0.98989367	1,987,627
8	7,584,967	26.50%	2,010,016	0.98821924	1,986,337
9	7,592,886	26.50%	2,012,115	0.98654765	1,985,047
10	7,600,812	26.50%	2,014,215	0.98487888	1,983,758
11	7,608,747	26.50%	2,016,318	0.98321293	1,982,470
12	7,616,690	26.50%	2,018,423	0.98154980	1,981,183
13	7,624,642	26.50%	2,020,530	0.97988948	1,979,896
14	7,632,602	26.50%	2,022,639	0.97823198	1,978,611
15	7,640,570	26.50%	2,024,751	0.97657727	1,977,326
16	7,648,546	26.50%	2,026,865	0.97492537	1,976,042
17	7,656,531	26.50%	2,028,981	0.97327626	1,974,759
18	7,664,524	26.50%	2,031,099	0.97162994	1,973,476
19	7,672,525	26.50%	2,033,219	0.96998640	1,972,195
20	7,680,535	26.50%	2,035,342	0.96834564	1,970,914
21	7,688,553	26.50%	2,037,467	0.96670766	1,969,635
22	7,696,580	26.50%	2,039,594	0.96507245	1,968,356
23	7,704,615	26.50%	2,041,723	0.96344001	1,967,077
24	7,712,658	26.50%	2,043,854	0.96181033	1,965,800
25	7,720,709	26.50%	2,045,988	0.96018340	1,964,524
26	7,728,770	26.50%	2,048,124	0.95855923	1,963,248
<b>Totals:</b>	<b>\$ 198,350,209</b>		<b>\$ 52,562,806</b>		<b>\$ 51,461,195</b>

Contribution Amount for FY 2020-21	\$ 52,562,806	\$ 51,461,195
	(Undiscounted)	(Discounted)
<b>Savings due to Prepayment for FY 2020-21</b>		<b>\$ 1,101,611</b>

\* 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 25.16% County charged rate as of January 1, 2020 plus 1.34% of the total 2.68% rate increase effective July 1, 2020.



### San Luis Obispo County Pension Trust

Prepayment of Employer Paid Portion of  
Employee Normal Cost ("Pick-up") Contributions  
Discount Rate = 4.500%

Fiscal Year 2020-2021 beginning July 17, 2020 Biweekly Pay Period	County Biweekly Payroll Estimate*	County Paid EE NC Rate**	Biweekly Contribution Undiscounted	Discount to 7/17/2020 Factor	Biweekly Contribution Discounted
1	\$ 4,446,074	**	\$ 371,517	1.00000000	\$ 371,517
2	4,435,501	**	370,633	0.99830848	370,006
3	4,424,953	**	369,752	0.99661981	368,502
4	4,414,430	**	368,873	0.99493400	367,004
5	4,403,932	**	367,996	0.99325105	365,512
6	4,393,459	**	367,121	0.99157094	364,027
7	4,383,011	**	366,248	0.98989367	362,547
8	4,372,588	**	365,377	0.98821924	361,073
9	4,362,190	**	364,508	0.98654765	359,605
10	4,351,816	**	363,641	0.98487888	358,142
11	4,341,468	**	362,776	0.98321293	356,686
12	4,331,143	**	361,913	0.98154980	355,236
13	4,320,844	**	361,052	0.97988948	353,791
14	4,310,568	**	360,193	0.97823198	352,352
15	4,300,317	**	359,336	0.97657727	350,919
16	4,290,091	**	358,481	0.97492537	349,492
17	4,279,889	**	357,629	0.97327626	348,072
18	4,269,711	**	356,779	0.97162994	346,657
19	4,259,557	**	355,931	0.96998640	345,248
20	4,249,428	**	355,085	0.96834564	343,845
21	4,239,322	**	354,241	0.96670766	342,447
22	4,229,241	**	353,399	0.96507245	341,056
23	4,219,184	**	352,559	0.96344001	339,669
24	4,209,150	**	351,721	0.96181033	338,289
25	4,199,140	**	350,885	0.96018340	336,914
26	4,189,155	**	350,051	0.958555923	335,545
<b>Totals:</b>	<b>\$ 112,226,164</b>		<b>\$ 9,377,697</b>		<b>\$ 9,184,153</b>

Contribution Amount for FY 2020-21	\$ 9,377,697	\$ 9,184,153
	(Undiscounted)	(Discounted)
<b>Savings due to Prepayment for FY 2020-21</b>		<b>\$ 193,544</b>

\* 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 = 4.500%

Fiscal Year 2020-2021 beginning July 17, 2020	APCD Biweekly Payroll Estimate*	APCD Appropriation Rate**	Biweekly Contribution Undiscounted	Discount to 7/17/2020 Factor	Biweekly Contribution Discounted
1	\$ 74,548	26.50%	\$ 19,755	1.00000000	\$ 19,755
2	74,626	26.50%	19,776	0.99830848	19,742
3	74,704	26.50%	19,797	0.99661981	19,730
4	74,782	26.50%	19,817	0.99493400	19,717
5	74,860	26.50%	19,838	0.99325105	19,704
6	74,938	26.50%	19,859	0.99157094	19,691
7	75,017	26.50%	19,879	0.98989367	19,678
8	75,095	26.50%	19,900	0.98821924	19,666
9	75,173	26.50%	19,921	0.98654765	19,653
10	75,252	26.50%	19,942	0.98487888	19,640
11	75,330	26.50%	19,963	0.98321293	19,627
12	75,409	26.50%	19,983	0.98154980	19,615
13	75,488	26.50%	20,004	0.97988948	19,602
14	75,566	26.50%	20,025	0.97823198	19,589
15	75,645	26.50%	20,046	0.97657727	19,576
16	75,724	26.50%	20,067	0.97492537	19,564
17	75,803	26.50%	20,088	0.97327626	19,551
18	75,883	26.50%	20,109	0.97162994	19,538
19	75,962	26.50%	20,130	0.96998640	19,526
20	76,041	26.50%	20,151	0.96834564	19,513
21	76,120	26.50%	20,172	0.96670766	19,500
22	76,200	26.50%	20,193	0.96507245	19,488
23	76,279	26.50%	20,214	0.96344001	19,475
24	76,359	26.50%	20,235	0.96181033	19,462
25	76,439	26.50%	20,256	0.96018340	19,450
26	76,519	26.50%	20,277	0.95855923	19,437
<b>Totals:</b>	<b>\$ 1,963,763</b>		<b>\$ 520,397</b>		<b>\$ 509,489</b>

Contribution Amount for FY 2020-21	\$ 520,397	\$ 509,489
	(Undiscounted)	(Discounted)
<b>Savings due to Prepayment for FY 2020-21</b>		<b>\$ 10,908</b>

\* 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 25.16% County charged rate as of January 1, 2020 plus 1.34% of the total 2.68% rate increase effective July 1, 2020.



**San Luis Obispo County Pension Trust  
Air Pollution Control District**

Prepayment of Employer Paid Portion of  
Employee Normal Cost ("Pick-up") Contributions  
Discount Rate = 4.500%

Fiscal Year 2020-2021 beginning July 17, 2020	APCD Biweekly Payroll Estimate*	APCD Paid EE NC Rate**	Biweekly Contribution Undiscounted	Discount to 7/17/2020 Factor	Biweekly Contribution Discounted
1	\$ 74,548	**	\$ 4,094	1.00000000	\$ 4,094
2	74,371	**	4,085	0.99830848	4,078
3	74,194	**	4,075	0.99661981	4,061
4	74,018	**	4,065	0.99493400	4,044
5	73,842	**	4,055	0.99325105	4,028
6	73,666	**	4,045	0.99157094	4,011
7	73,491	**	4,035	0.98989367	3,994
8	73,316	**	4,025	0.98821924	3,978
9	73,142	**	4,015	0.98654765	3,961
10	72,968	**	4,005	0.98487888	3,944
11	72,794	**	3,995	0.98321293	3,928
12	72,621	**	3,985	0.98154980	3,911
13	72,449	**	3,976	0.97988948	3,896
14	72,276	**	3,967	0.97823198	3,881
15	72,104	**	3,958	0.97657727	3,865
16	71,933	**	3,949	0.97492537	3,850
17	71,762	**	3,940	0.97327626	3,835
18	71,591	**	3,931	0.97162994	3,819
19	71,421	**	3,922	0.96998640	3,804
20	71,251	**	3,913	0.96834564	3,789
21	71,082	**	3,904	0.96670766	3,774
22	70,913	**	3,895	0.96507245	3,759
23	70,744	**	3,886	0.96344001	3,744
24	70,576	**	3,877	0.96181033	3,729
25	70,408	**	3,868	0.96018340	3,714
26	70,241	**	3,859	0.95855923	3,699
Totals:	\$ 1,881,723		\$ 103,324		\$ 101,190

Contribution Amount for FY 2020-21	\$ 103,324	\$ 101,190
	(Undiscounted)	(Discounted)
<b>Savings due to Prepayment for FY 2020-21</b>		<b>\$ 2,134</b>

\* 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 22, 2020

To: Board of Trustees

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

### **Item 10: Monthly Investment Report for May 2020**

	May	Year to Date 2020	2019	2018	2017	2016	2015
Total Trust Investments (\$ millions)	\$1,336		\$1,446 year end	\$1,285 year end	\$1,351 year end	\$1,196 year end	\$1,148 year end
<b>Total Fund Return</b>	3.3% Gross	<b>-5.7%</b> Gross	16.3 % Gross	-3.2 % Gross	15.5 % Gross	6.6 % Gross	-0.8% Gross
Policy Index Return (r)	1.5%	-2.8%	16.4 %	-3.2 %	13.4 %	7.7 %	-0.5 %

(r) Policy index as of April 1, 2020 revision to Strategic Asset Allocation Policy: 21% domestic equity, 21% international equity, 15% core bonds, 6% bank loans, 5% global bonds, 5% emerging market debt, 17% real estate, 0% commodities, 5% private equity, 5% private credit.

### **SLOCPT Investment Returns:**

The attached report from Verus covers the preliminary investment returns of the SLOCPT portfolio and general market conditions through the end of May. The attached market commentary from Verus details market conditions in May, but subsequent activity in June is not yet factored into these numbers.

Staff estimates on a preliminary basis that Total Fund Return in **June through June 17th is approximately +1%.**

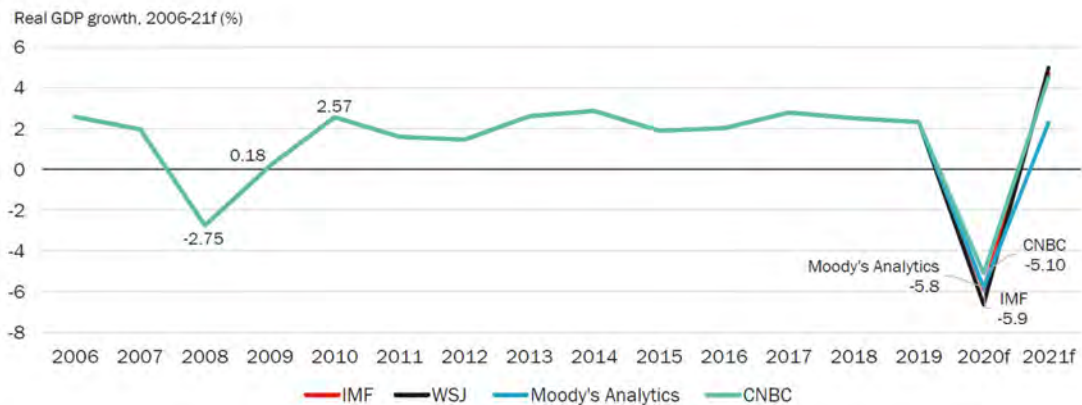
## The Economy and Capital Markets:

### ➤ Covid-19 Pandemic Impact -

- The global pandemic and the economic consequences of public health measures to limit its' spread continue to dominate economies and investment markets.
- As the pandemic progresses and infection rates show mixed levels of improvement depending on regions and country, economies are beginning various levels of reopening.
- Epidemiologists expect a resurgence of infection rates in the Fall of this year. However, news reports suggest an unwillingness of governments to return to significant or generalized levels of activity shut-downs out of concern over unsustainable economic impacts and expected non-compliance by citizens.

### ➤ Global Recession -

- U.S. GDP results in 1Q20 were revised to a -5.1% annualized rate of contraction.
- JP Morgan Asset Management's baseline expectation for U.S. GDP growth as of early June in terms of annual rates are for: 2Q20 about -40%; 3Q20 guess at +10% as economy partially reopens; 4Q20 guess at +3%; followed by stronger 2021 GDP growth as vaccines or antiviral treatments allow increased economic activity.
- American Realty Advisors in their H12020 House View report on the economy and the markets includes the following –



- Some economists' forecasts for 2020/2021 GDP growth still reflect a "V-shaped" recovery; it is our view that the recovery will not be that symmetrical.
- ARA believes full-year GDP figures will reflect a steep contraction (in the realm of 5-7%), but the subsequent recovery back to pre-COVID levels will be much more gradual ("U") given uneven re-openings and the potential for further waves of reinfection.

### ➤ Policy Responses

- Monetary Policy – The Fed continued its unbridled provision of liquidity to the capital markets including its first purchases of corporate debt in May.
- Fiscal Policy – The Federal government has not added significant stimulus after the passage of the CARES Act in March. A proposed HEROES Act that includes material

assistance to State and Local government finances was passed by the House, but is expected to be rejected by the Senate.

➤ **Fed Policy and Interest Rates –**

- The Fed continues unabated its 0% lower bound for interest rates and massive provision of liquidity to capital markets. Fed Chair Powell's public comments reflect deep concern over the need for supporting a difficult economic recovery and pledge whatever-is-needed Fed measures.
- Economic commentary suggests that the Fed is not interested in the negative interest rate policy response used in recent years by European and Japanese Central Banks. The apparent view is that 0% bounded interest rates and liquidity provision provide necessary monetary support without the market disruptions of negative interest rates.

➤ **Oil Prices –**

- After posting negative prices in May, the benchmark WTI crude oil benchmark returned to the \$35/barrel to \$39/barrel range in June. Well below recent historical prices, this value reflects the slowly recovering level of oil demand and production curtailments by OPEC and Russia. With a global reduction of approximately -35% in oil demand in March-April, oil consumption is expected to slowly build back towards normal levels throughout 2021.

➤ **Employment and Wages –**

- The May DOL report from the BLS on nonfarm employment showed a surprising 2.5 million gain in jobs. Unemployment fell from 14.7% in April to 13.3% in May - from its February low of 3.5%.
- Unemployment - by mid-June new applications for unemployment benefits in the U.S. over the year have reached a staggering 45.7 million. Continuing claims (the number of people who have filed for ongoing benefits) has declined slightly to 20.5 million as economic activity begins to resume.
- While many job losses are temporary layoffs that may be reversed within months as the economy reopens in stages, the Fed forecasts a 9% unemployment rate at the end of 2020 and about a 6.5% rate at the end of 2021.
- The 45 million job losses in the U.S. so far in 2020 are expected to reverse quickly as the economy is reopened – for some. Rough estimates are that 20 million of those jobs could return by year end. However, a large portion of the lost jobs will remain in a structural unemployment void. For example, jobs in sectors that do not return to normal quickly – big box retail, low-density restaurants with less staff, cruise lines, leisure travel – may not rebound for several years. Some jobs may never return as the economy goes through an accelerated evolution driven by pandemic responses – e.g., e-commerce, work-from-home, reduced business travel.

- With a shattered and shuttered economy in pandemic based shutdown, gradual reopening and recovery in unemployment is expected to be halting and regional. Many stores and restaurants must operate at ¼ of pre shutdown capacity and will require less staffing. The likelihood of many service sector jobs being eliminated for multiple years is high.
- Employers have additional impediments to bringing employees back to work including –
  - Availability of childcare with schools and summer camps closed.
  - Enhanced unemployment benefits under the CARES Act. A recent study by the University of Wisconsin-Madison estimated that 40% of all workers could earn more while unemployed than while working – until the July expiration of the extra \$600/week in unemployment benefits in the CARES Act.

➤ **Equity Markets**

- The strong rally in equity markets in April and May points out the oft-noted observation that “the stock market is not the real economy”. Following the March freefall in equity values the stock market appears to be optimistic about the pace of economic activity to be allowed by easing of pandemic restraints. The attached Market Commentary from Verus does a good job of describing the apparent speculative excess implied in current equity market levels. Verus notes that the forward P/E ratio of the S&P 500 is at 24.3x – its highest level since November 2000.

➤ **Debt Markets**

- In the environment of extremely low interest rates the March-April expansion of credit spreads (corporate debt yields difference from similar maturity Treasury bond yields) that negatively impacted bond returns have abated. While credit spreads are elevated above pre-pandemic levels, they have recovered most of the earlier run-up. This stabilization has added to the May returns on bonds.

Respectfully Submitted,

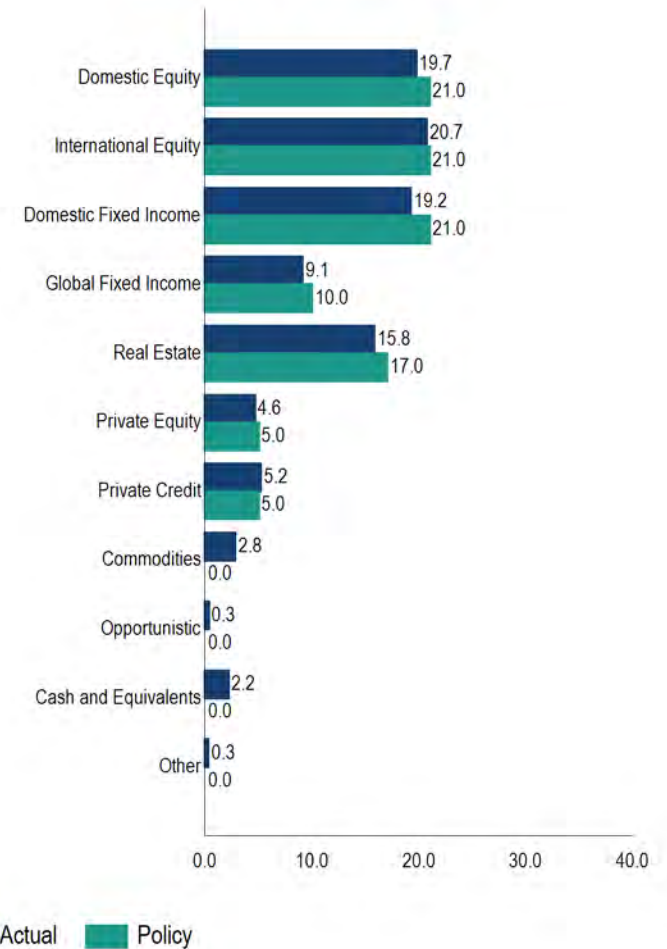
# San Luis Obispo County Pension Trust

## Executive Summary - Preliminary (Gross of Fees)

Period Ending: May 31, 2020

	Market Value	% of Portfolio	1 Mo	YTD
<b>Total Fund</b>	<b>1,336,494,138</b>	<b>100.0</b>	<b>3.3</b>	<b>-5.7</b>
<i>Policy Index</i>			1.5	-2.8
<b>Total Domestic Equity</b>	<b>263,486,104</b>	<b>19.7</b>	<b>5.4</b>	<b>-9.2</b>
<i>Russell 3000</i>			5.3	-5.6
PIMCO RAE Fundamental PLUS Instl	51,771,840	3.9	3.5	-16.9
<i>S&amp;P 500</i>			4.8	-5.0
Loomis Sayles Large Cap Growth	87,981,368	6.6	6.8	6.3
<i>Russell 1000 Growth</i>			6.7	5.2
Boston Partners Large Cap Value	67,015,098	5.0	3.7	-17.4
<i>Russell 1000 Value</i>			3.4	-15.7
Atlanta Capital Mgmt	56,717,798	4.2	7.3	-11.4
<i>Russell 2500</i>			7.4	-13.5
<b>Total International Equity</b>	<b>276,838,257</b>	<b>20.7</b>	<b>6.3</b>	<b>-11.3</b>
<i>MSCI ACWI ex USA Gross</i>			3.3	-14.7
Dodge & Cox Intl Stock	115,369,540	8.6	3.9	-22.2
<i>MSCI EAFE Gross</i>			4.4	-14.0
WCM International Growth	161,468,717	12.1	8.0	-1.7
<i>MSCI ACWI ex USA Gross</i>			3.3	-14.7
<b>Total Domestic Fixed Income</b>	<b>256,951,533</b>	<b>19.2</b>	<b>2.0</b>	<b>2.8</b>
<i>BBgBarc US Aggregate TR</i>			0.5	5.5
BlackRock Core Bond	96,261,689	7.2	1.4	5.4
<i>BBgBarc US Aggregate TR</i>			0.5	5.5
Dodge & Cox Income Fund	98,820,391	7.4	1.7	4.1
<i>BBgBarc US Aggregate TR</i>			0.5	5.5
Pacific Asset Corporate Loan	61,869,453	4.6	3.5	-3.1
<i>S&amp;P/LSTA Leveraged Loan Index</i>			3.8	-5.7
<b>Total Global Fixed</b>	<b>121,632,687</b>	<b>9.1</b>	<b>6.2</b>	<b>-9.6</b>
<i>FTSE World Govt Bond Index</i>			0.2	3.4
Brandywine Global Fixed Income	57,983,835	4.3	4.2	-6.2
<i>FTSE WGBI ex US TR</i>			0.5	0.1
Ashmore EM Blended Debt Fund	63,648,852	4.8	8.1	-12.9
<i>50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELM+</i>			4.7	-6.3

Actual vs Target Allocation (%)



\*Other balance represents Clifton Group.

Policy Index (4/1/2020): 21% Russell 3000, 21% MSCI ACWI ex. US, 31% BBgBarc Aggregate, 17% NCREIF Property, 5% Russell 3000 + 300 bp lagged, 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. Direct RE liquidated 5/3/2019. Pathway 10 funded 3/25/2020. TPG Adjacent Opportunities Partners funded 4/16/2020. 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.

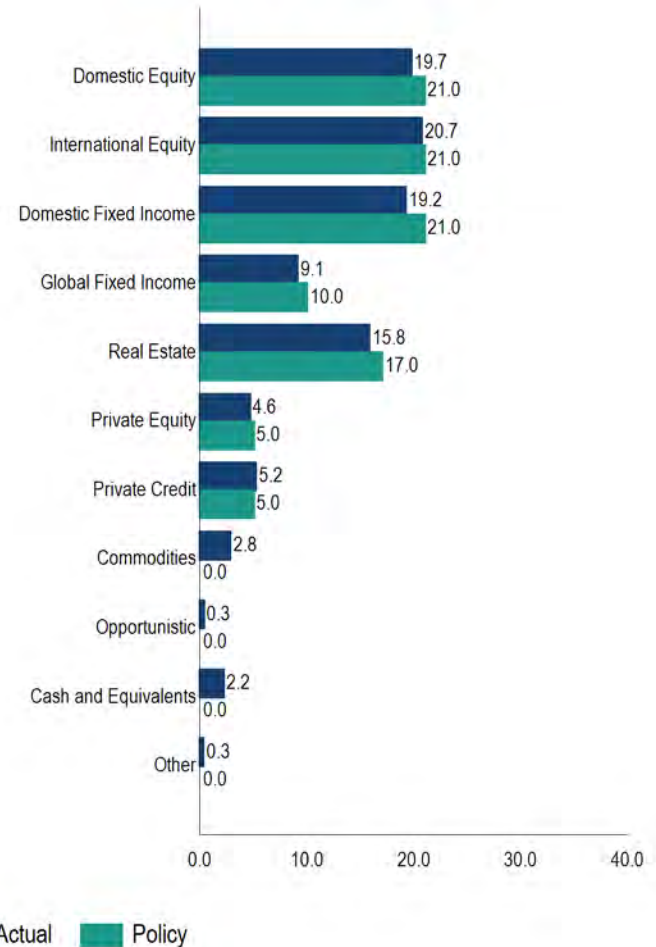
# San Luis Obispo County Pension Trust

## Executive Summary - Preliminary (Gross of Fees)

Period Ending: May 31, 2020

	Market Value	% of Portfolio	1 Mo	YTD
<b>Total Real Estate</b>	<b>211,294,490</b>	<b>15.8</b>	<b>-0.6</b>	<b>1.3</b>
NCREIF Property Index			0.0	0.7
JP Morgan Core Real Estate	172,425,604	12.9	-0.8	0.8
NCREIF-ODCE			0.0	1.0
NCREIF Property Index			0.0	0.7
ARA American Strategic Value Realty	38,868,885	2.9	0.0	3.5
NCREIF-ODCE			0.0	1.0
NCREIF Property Index			0.0	0.7
<b>Total Commodities</b>	<b>37,458,375</b>	<b>2.8</b>	<b>6.0</b>	<b>-20.9</b>
Bloomberg Commodity Index TR USD			4.3	-21.2
Gresham MTAP Commodity Builder	37,458,375	2.8	6.0	-20.9
Bloomberg Commodity Index TR USD			4.3	-21.2
<b>Total Private Equity</b>	<b>61,994,139</b>	<b>4.6</b>		
Harbourvest Partners IX Buyout Fund L.P.	15,820,636	1.2		
Pathway Private Equity Fund Investors 9 L.P.	37,174,640	2.8		
Harbourvest 2018 Global Fund L.P.	7,898,185	0.6		
Pathway Private Equity Fund Investors 10 L.P.	1,100,678	0.1		
<b>Total Private Credit</b>	<b>61,846,541</b>	<b>4.6</b>		
TPG Diversified Credit Program	61,846,541	4.6		
<b>Total Cash</b>	<b>29,088,761</b>	<b>2.2</b>	<b>0.0</b>	<b>1.0</b>
91 Day T-Bills			0.0	0.4
Cash Account	29,088,761	2.2	0.0	1.0
91 Day T-Bills			0.0	0.4
<b>Total Opportunistic</b>	<b>12,108,230</b>	<b>0.9</b>		
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	4,225,695	0.3		
PIMCO Distressed Credit Fund	100,628	0.0		
TPG Adjacent Opportunities Partners	7,781,907	0.6		

Actual vs Target Allocation (%)



\*Other balance represents Clifton Group.

Policy Index (4/1/2020): 21% Russell 3000, 21% MSCI ACWI ex. US, 31% BBgBarc Aggregate, 17% NCREIF Property, 5% Russell 3000 + 300 bp lagged, 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. Direct RE liquidated 5/3/2019. Pathway 10 funded 3/25/2020. TPG Adjacent Opportunities Partners funded 4/16/2020. 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 2020  
Capital Markets Update



# Market commentary

## U.S. ECONOMICS

- U.S. housing starts fell -30.2% from the month before (-29.7% year-over-year). Disruptions to building material supply chains likely weighed on the print. Existing home sales fell -17.8% from the month before (17.2% year-over-year) as transaction volume decreased.
- The ISM Manufacturing PMI improved from 41.5 in April to 43.1 in May, slightly below expectations of 43.7. New orders showed demand contracted again this month but at a slower rate. Only 6 of 18 manufacturing sectors reported expansion in activity.
- The broad unemployment rate fell to 13.3% from 14.7% in April defying economists' expectations of 19.5%. Though the decline in the unemployment rate in May was the largest in history, a footnote in the report from the Bureau of Labor Statistics implied that the actual rate of unemployment may be closer to 16.3%.

## U.S. EQUITIES

- The S&P 500 rebounded 4.8% in May, bringing the quarter-to-date return to 18.2%. At month-end, the index was still down -5.0% since the beginning of the year. Strong performance from mega-cap tech companies and optimism surrounding nationwide reopening progress has powered the S&P 500 Index back to just -11.2% below the all-time high levels reached in mid-February of this year.
- In May, the price of the S&P 500 rose to 24.3x expectations for earnings over the next year. The last time the forward P/E ratio of the S&P 500 Index reached 24.3x was back in November of 2000.
- Speculative trading surged and the put/call ratio on the S&P 500 Index hit levels not seen since the index was at its peak toward the beginning of the year. This could suggest a high degree of uncertainty.

## U.S. FIXED INCOME

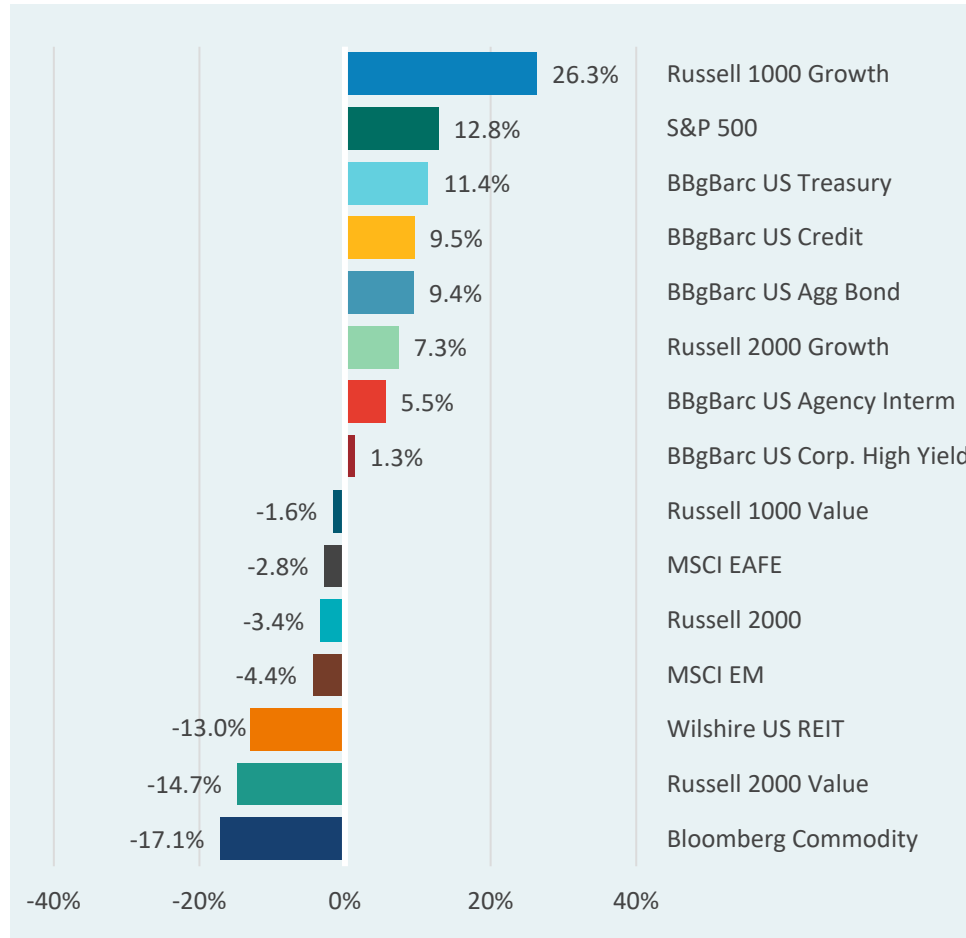
- Year-over-year growth in core consumer price inflation, measured by the Core Consumer Price Index, slowed from 2.1% to 1.0%, below expectations for 1.7% growth. The savings rate picked up to +33.0% as consumers' marginal propensities to consume fell and demand for goods eroded creating downward pressure on prices.
- In May, the Federal Reserve began buying corporate bonds for the first time in history with the intention of ensuring the liquidity of credit markets. Companies which drew down bank credit lines to fortify balance sheets in March are now issuing cheaper long-term debt to pay this revolving credit.
- The 30-year Treasury yield rose to 1.4% in May from 1.3% in April. Long-duration Treasuries returned -1.8% for the month.

## INTERNATIONAL MARKETS

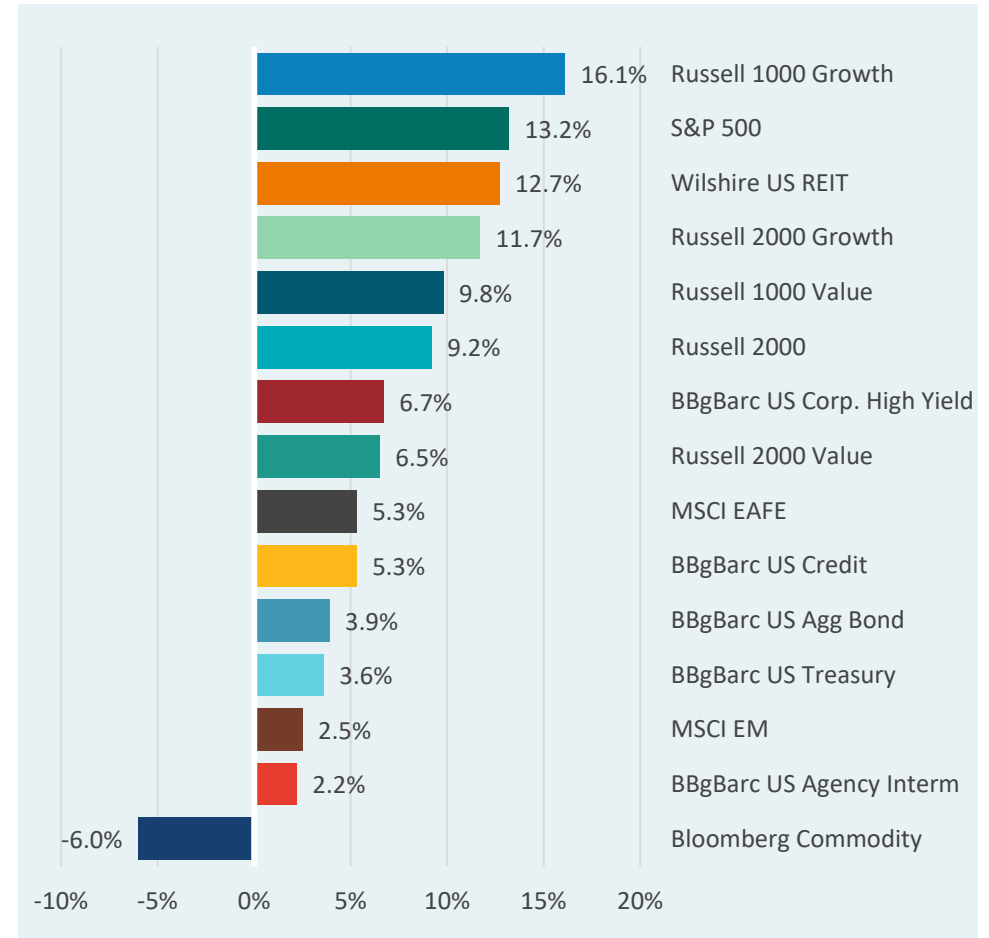
- President Trump and the Labor Department directed a board in charge of federal retirement dollars to not invest in Chinese equities. The Thrift Savings Plan, a retirement plan for federal employees, was set to invest in equities based on MSCI ACWI ex USA IMI weightings. Steps were taken to avoid investment of U.S. pension dollars in Chinese companies which were viewed as potentially threatening to U.S. national security interests.
- Japanese officials approved a ¥108 trillion (\$990 billion) package which will provide financing help for struggling companies, rent subsidies for businesses, and healthcare assistance.
- Emerging market currencies performed well relative to the dollar in May, benefiting from global risk-on sentiment, as well as the recovery in oil prices. The J.P. Morgan EMCI returned +3.4%.

# Major asset class returns

ONE YEAR ENDING MAY



TEN YEARS ENDING MAY



\*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 5/31/20

Source: Morningstar, as of 5/31/20

# U.S. large cap equities

- The S&P 500 Index continued to gain through May, returning 4.7%, and has rebounded quickly from the March 23<sup>rd</sup> price index low of 2237. The S&P 500 Price Index ended the month at 3030, only -10.6% below the February 19<sup>th</sup> high water mark of 3386.
- Per FactSet, with nearly all S&P 500 companies reporting Q1 2020 results, 64% have reported positive EPS surprise. Only 46 companies in the S&P 500 have issued Q2 EPS guidance, well below the five-year average of 107 companies, as significant uncertainty surrounding the economic outlook persisted.
- All 11 major sectors contributed positively to returns for the S&P 500 Index. Information Technology (+7.1%) led the index higher for the second straight month. The Materials sector (+7.0%) also contributed to the strong returns for the overall index.
- The CBOE VIX Index of implied volatility, sometimes described as the “Fear Index”, declined for the second month in a row and fell to 27.5 by month-end. The VIX is now 55.2 points off mid-March highs of 82.7, indicating an expectation for calmer markets as states begin to reopen across the country.

**S&P 500 PRICE INDEX**



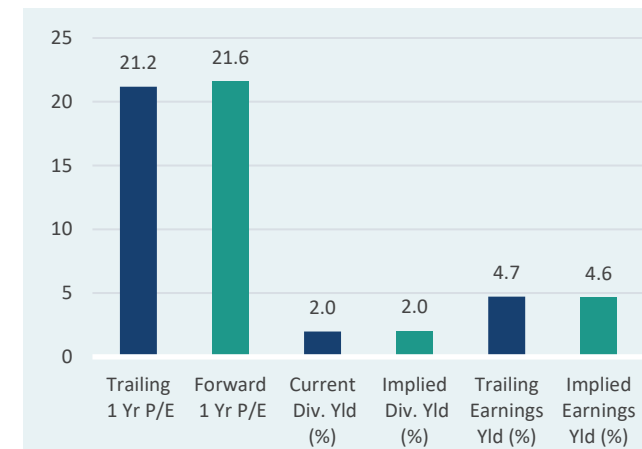
Source: Bloomberg, as of 5/31/20

**IMPLIED VOLATILITY (VIX INDEX)**



Source: CBOE, as of 5/31/20

**S&P 500 VALUATION SNAPSHOT**

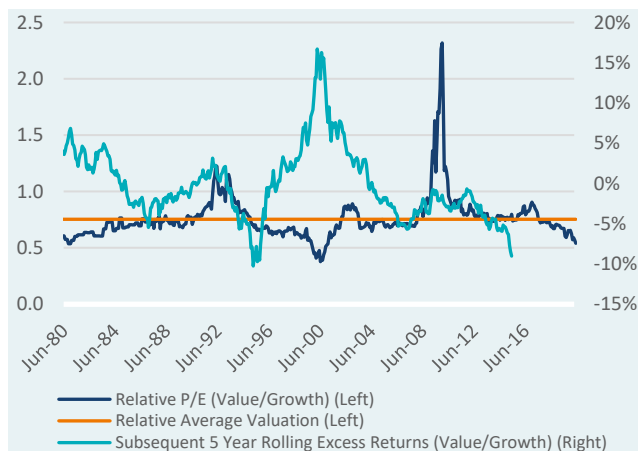


Source: Bloomberg, as of 5/31/20

# Domestic equity size and style

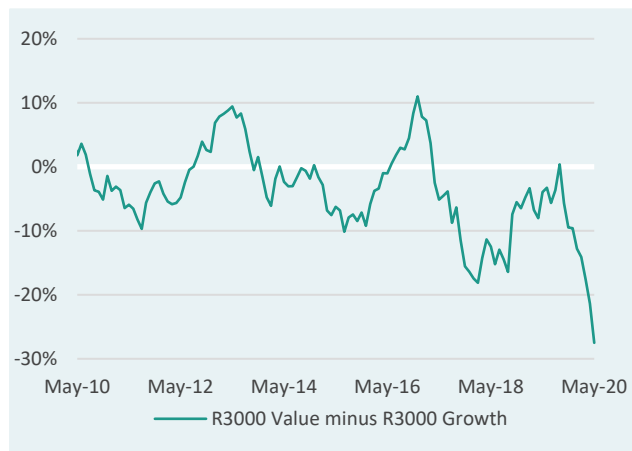
- The growth factor continued to outperform the value factor in May. The Russell 3000 Growth Index (+6.7%) outperformed the Russell 3000 Value Index (+3.1%). Over the year-to-date, the Russell 3000 Growth Index has outperformed its value counterpart by +3.7%.
- Small-cap equities as measured by the Russell 2000 Index (+6.5%) outperformed large-caps measured by the Russell 1000 Index (+5.3%). The NFIB Small Business Optimism Index, a measure of small businesses that aren't necessarily traded publicly, increased 3.5 points in May to 94.4.
- Cyclical factors tend to lead the market out of recessions as cyclicals respond to trends in economic data while defensives tend to be less affected. The MSCI USA Cyclical - Defensives Total Return Spread Index has returned 5.5% over the past two months.
- Momentum factor investing, a strategy of buying stocks that have performed well and selling underperformers has outperformed the broader market in recent months. The S&P 500 Momentum Index outperformed the S&P 500 Index by +2.1% in May.

**VALUE VS. GROWTH RELATIVE VALUATIONS**



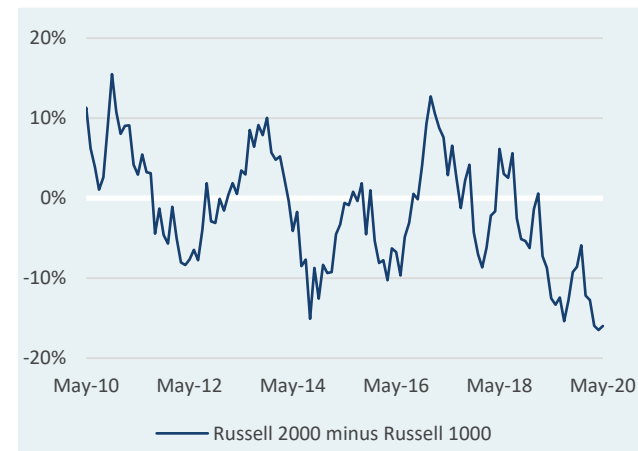
Source: Russell, Bloomberg, as of 5/31/20

**VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE**



Source: FTSE, Bloomberg, as of 5/31/20

**SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE**

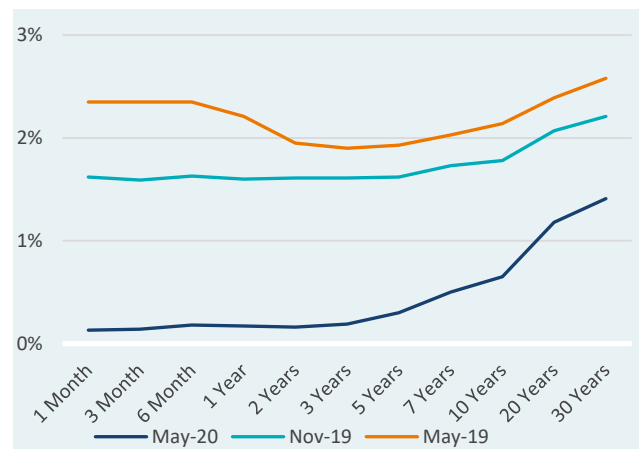


Source: FTSE, Bloomberg, as of 5/31/20

# Fixed income

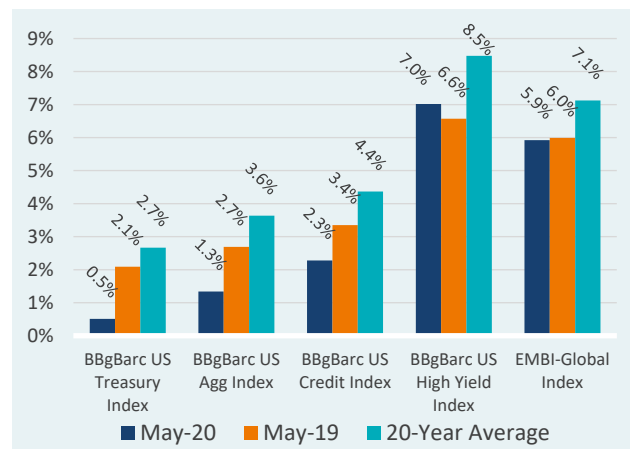
- High-yield U.S. credit returned 4.4% in May, bringing its quarter-to-date return to +9.1%. The Federal Reserve purchased \$3 billion in mostly investment-grade ETFs, but also bought some corporate debt that had been downgraded to below investment-grade quality. At month-end, high yield credit was still down -4.7% over the year-to-date.
- The European Central Bank announced its plans to expand the Eurozone’s pandemic bond buying program by €600 billion (\$842 billion). ECB President Lagarde said that the ECB’s prediction of an 8-12% decline in 2020 Eurozone GDP was likely to materialize.
- Global risky credit performed well in May, benefiting from risk-on sentiment. Hard-currency denominated emerging market debt (JPM EMBI Global Diversified Index) returned 6.1% in May and outperformed local-currency denominated emerging market debt (J.P. Morgan GBI-EM +5.2%).
- Breakeven inflation rates continued to rise from the low levels experienced in March. Part of the recovery in priced-in inflation rates has been attributed to the recovery in oil prices from record lows.

**U.S. TREASURY YIELD CURVE**



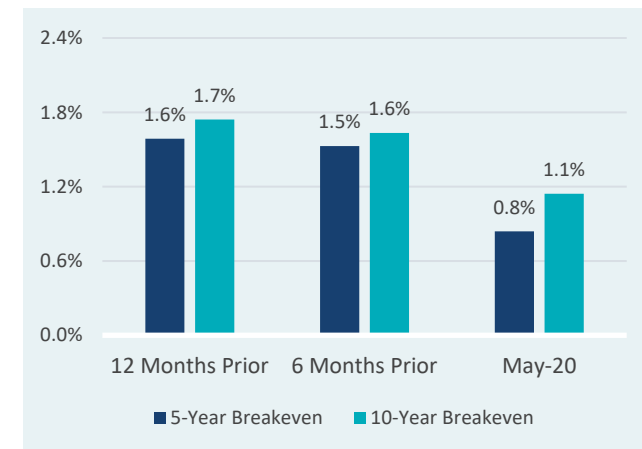
Source: Bloomberg, as of 5/31/20

**NOMINAL YIELDS**



Source: Morningstar, as of 5/31/20

**BREAKEVEN INFLATION RATES**

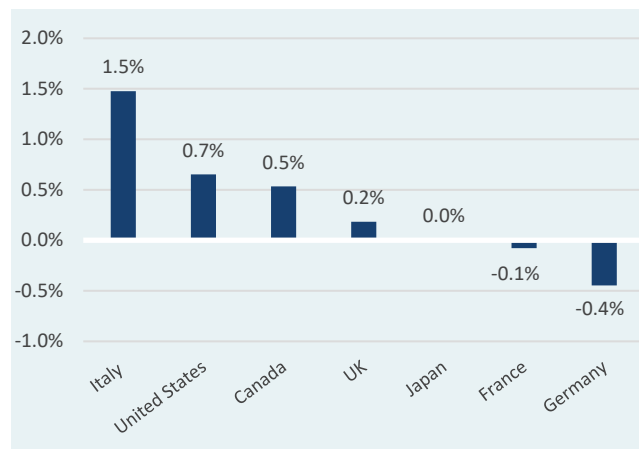


Source: Bloomberg, as of 5/31/20

# Global markets

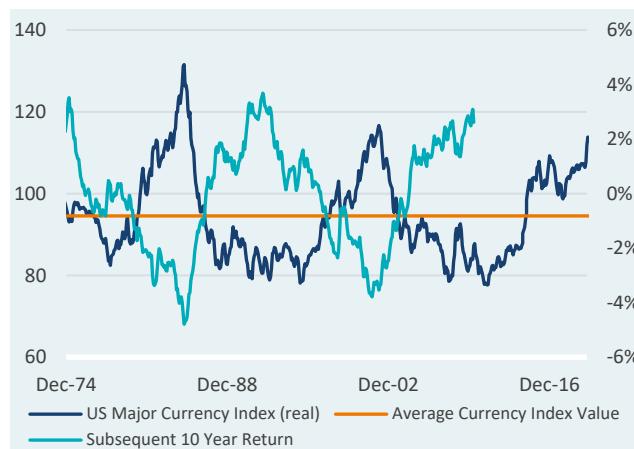
- The pound tumbled -2.0% against the U.S. dollar in May, resulting in currency tailwinds for hedged U.S. investors in U.K. equities. The MSCI United Kingdom Index, hedged to U.S. dollars, returned +3.2%, while the unhedged index returned +1.0%. Year-to-date, the currency hedge has paid investors +5.7%.
- Tensions between China and the U.S. escalated as the U.S. withdrew from the W.H.O. after the President criticized the agency for not quickly sounding the alarm on COVID-19. Additionally, the U.S. revoked Hong Kong’s advantaged trade status based on the view that it was not sufficiently autonomous from China.
- International developed equities (MSCI EAFE +4.4%) outperformed both emerging market equities (MSCI EM +0.8%) and global equities (MSCI ACWI +4.3%). Within the MSCI EAFE Index, European companies (MSCI Euro +6.5%) outperformed Japanese companies (MSCI Japan +5.9%) in U.S. dollar terms.
- The OECD painted a bleak outlook for global growth. In its best-case scenario assuming no resurgence of the virus, 2020 global GDP was projected to fall -6.0%. Given there is a second wave of, GDP was forecasted at -7.6%. In both scenarios global GDP would require at least two years to recover to Q4 2019 levels.

**GLOBAL SOVEREIGN 10-YEAR YIELDS**



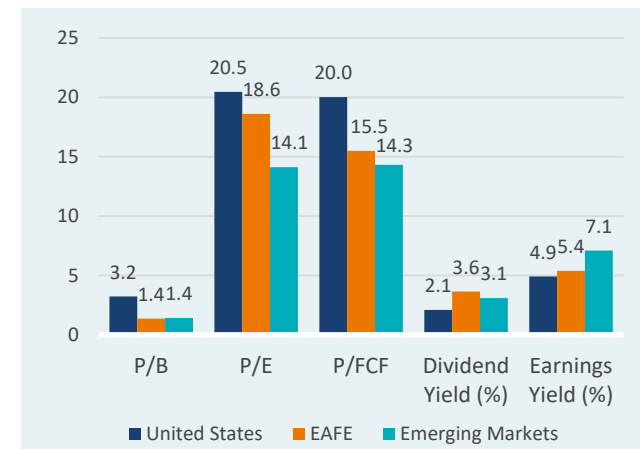
Source: Bloomberg, as of 5/31/20

**U.S. DOLLAR MAJOR CURRENCY INDEX**



Source: Federal Reserve, as of 5/31/20

**MSCI VALUATION METRICS (3-MONTH AVG)**



Source: Bloomberg, as of 5/31/20

# Commodities

- In May, the Bloomberg Commodity Index rose 4.3%. The petroleum component of the index advanced 34.9% as it recovered from the huge losses it incurred in April. The Energy component of the index also clawed back some of its losses and gained +11.4%.
- The Bloomberg Precious Metals Sub-Index posted a +6.3% return in May, bolstered by silver prices which rose 23.6%. Analysts believe global efforts to restart economies could boost demand for silver, which had slipped to an all-time low level relative to gold during the crisis.

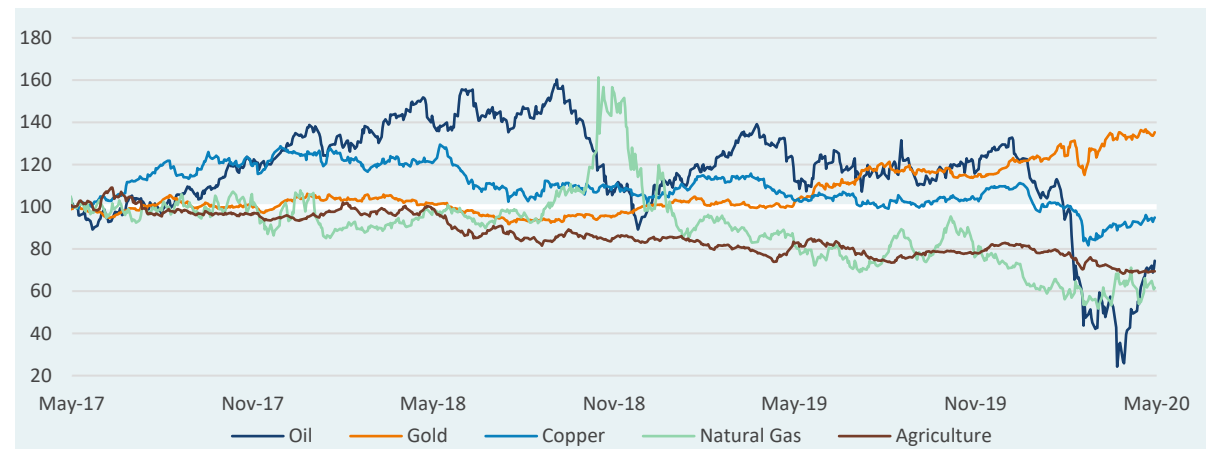
- Oil prices marked their fifth consecutive weekly gain at the end of May on the back of a tentative OPEC+ agreement to cut output. Russia and Saudi Arabia focused on tightening member countries' compliance with agreed output cuts, which resulted in Iraq as well as three other member countries agreeing to implement larger cuts in Q3 to compensate for their past quota violations.
- Recovering oil prices have prompted some U.S. producers to re-open wells just weeks after shutting down. Demand in China for oil improved although U.S. diesel demand fell to its lowest level in 21 years.

## INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	4.3	(10.4)	(21.2)	(17.1)	(6.9)	(7.8)	(6.0)
Bloomberg Agriculture	(0.9)	(9.6)	(15.7)	(14.9)	(10.1)	(7.7)	(4.0)
Bloomberg Energy	11.4	(30.2)	(47.4)	(44.8)	(16.1)	(19.4)	(15.8)
Bloomberg Grains	(0.5)	(7.0)	(13.2)	(15.7)	(9.5)	(8.6)	(4.2)
Bloomberg Industrial Metals	2.8	(5.1)	(14.3)	(10.6)	(2.4)	(2.3)	(4.1)
Bloomberg Livestock	5.3	(13.6)	(28.2)	(30.1)	(14.7)	(10.5)	(5.3)
Bloomberg Petroleum	34.9	(39.0)	(54.2)	(47.4)	(14.1)	(18.4)	(12.1)
Bloomberg Precious Metals	6.3	11.1	11.3	30.5	7.9	5.6	2.2
Bloomberg Softs	(1.6)	(17.0)	(21.1)	(16.6)	(14.6)	(8.3)	(6.0)

Source: Morningstar, as of 5/31/20

## COMMODITY PERFORMANCE



Source: Bloomberg, as of 5/31/20



# 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	2019	YTD	5-Year	10-Year
US Bonds	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	36.4	5.5	14.5	16.1
Large 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	31.4	5.2	9.6	13.1
Real Estate	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	28.5	0.7	7.7	11.7
Cash	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	26.5	0.4	6.3	10.2
Hedge Funds of Funds	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	25.5	-3.6	4.7	9.8
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	22.4	-4.5	4.4	9.2
Large Cap Equity	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.0	-4.9	3.9	6.5
Small Cap Growth	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	18.6	-6.6	3.7	6.4
International Equity	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	18.4	-14.3	1.1	5.3
Large Cap Value	-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	8.7	-15.7	0.9	3.9
Small Cap 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	7.8	-15.9	0.9	2.5
Emerging Markets Equity	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	-16.0	0.8	2.5
Commodities	-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	6.4	-21.2	0.7	0.6
Small Cap Value	-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	2.1	-25.6	-7.8	-6.0

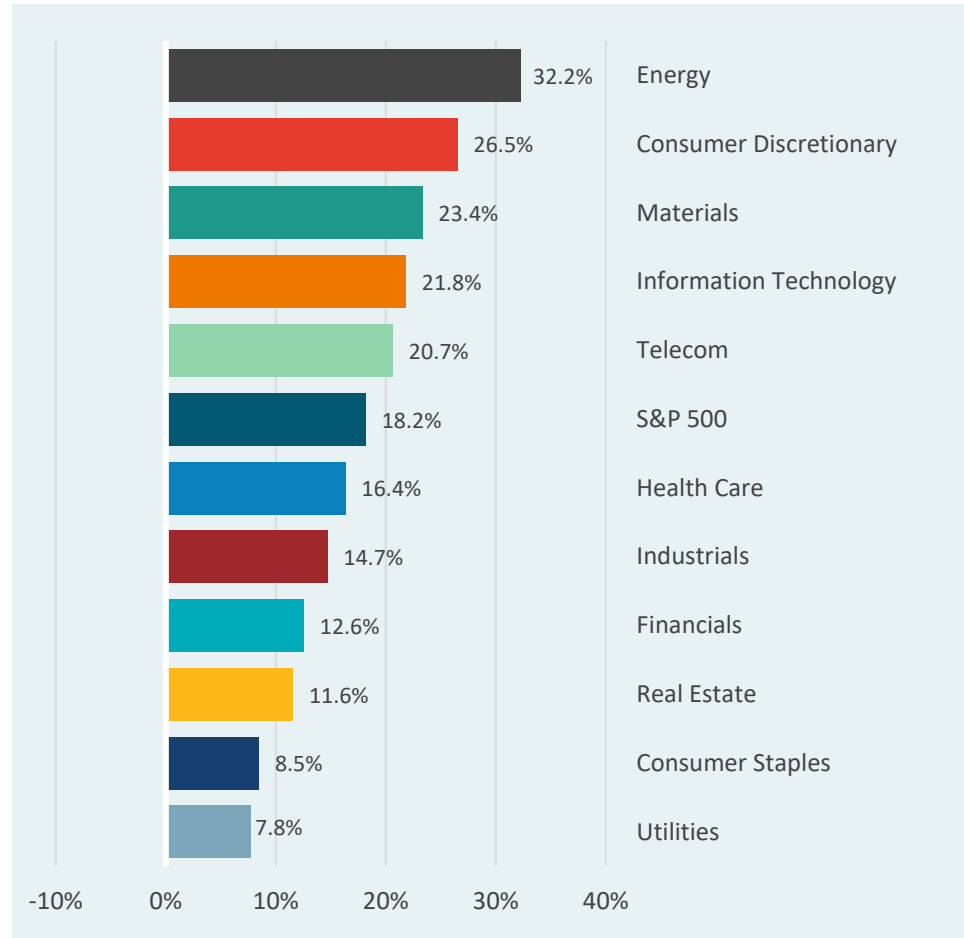
BEST  
↑  
↓  
WORST

- Large Cap Equity
- Small Cap Growth
- Commodities
- Large Cap Value
- International Equity
- Real Estate
- Large Cap Growth
- Emerging Markets Equity
- Hedge Funds of Funds
- US Bonds
- 60% MSCI ACWI/40% BBgBarc Global Bond
- 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 3/31/20.

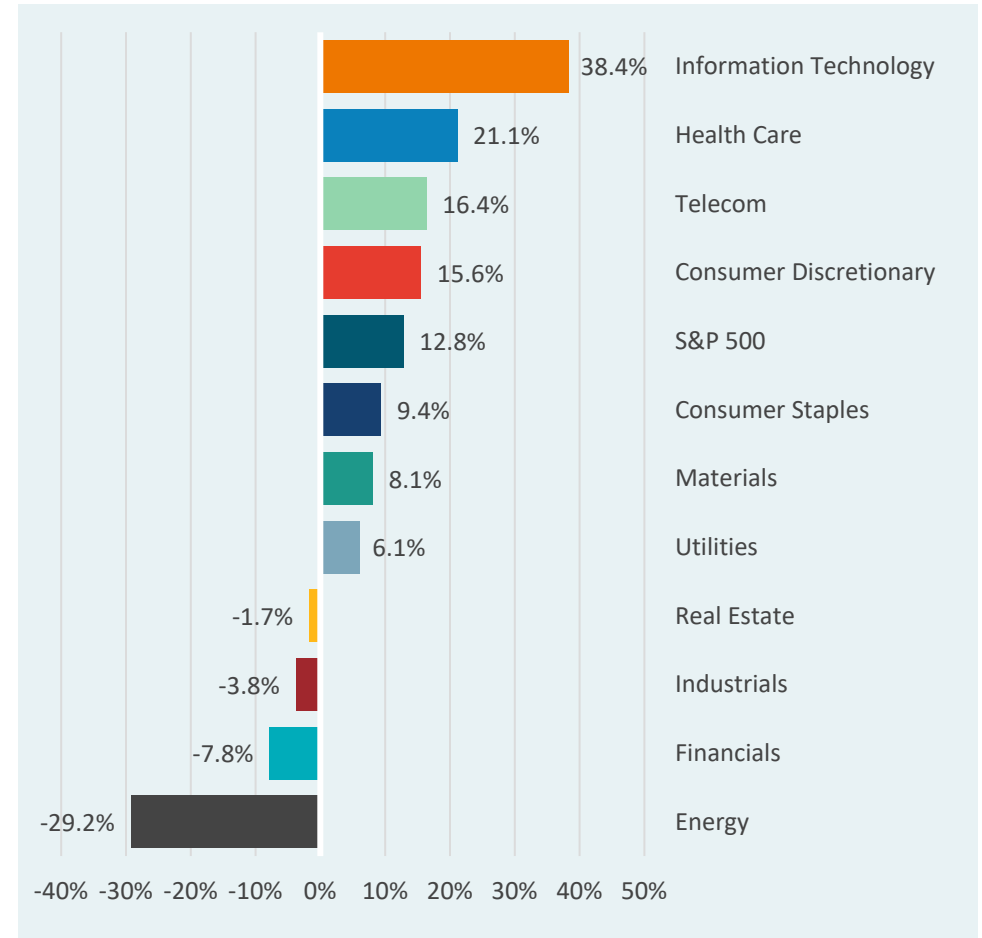
# S&P 500 sector returns

QTD



Source: Morningstar, as of 5/31/20

ONE YEAR ENDING MAY



Source: Morningstar, as of 5/31/20

# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	4.8	18.2	(5.0)	12.8	10.2	9.9	13.2
S&P 500 Equal Weighted	4.7	19.8	(12.2)	2.4	5.3	6.3	11.7
DJ Industrial Average	4.7	16.4	(10.1)	4.8	9.1	9.8	12.4
Russell Top 200	4.7	18.1	(2.8)	16.3	11.8	11.0	13.7
Russell 1000	5.3	19.2	(4.9)	12.5	10.1	9.6	13.1
Russell 2000	6.5	21.1	(15.9)	(3.4)	2.0	3.7	9.2
Russell 3000	5.3	19.3	(5.6)	11.5	9.5	9.2	12.8
Russell Mid Cap	7.0	22.4	(10.7)	2.6	5.5	5.9	11.4
<b>Style Index</b>							
Russell 1000 Growth	6.7	22.5	5.2	26.3	17.2	14.5	16.1
Russell 1000 Value	3.4	15.1	(15.7)	(1.6)	2.6	4.4	9.8
Russell 2000 Growth	9.4	25.8	(6.6)	7.3	7.7	6.3	11.7
Russell 2000 Value	2.9	15.6	(25.6)	(14.7)	(4.2)	0.7	6.5

## INTERNATIONAL EQUITY

<b>Broad Index</b>							
MSCI ACWI	4.3	15.5	(9.2)	5.4	5.2	5.3	8.5
MSCI ACWI ex US	3.3	11.1	(14.8)	(3.4)	(0.2)	0.8	4.4
MSCI EAFE	4.4	11.1	(14.3)	(2.8)	(0.4)	0.8	5.3
MSCI EM	0.8	10.0	(16.0)	(4.4)	(0.2)	0.9	2.5
MSCI EAFE Small Cap	7.1	18.3	(14.3)	(0.8)	0.1	3.3	7.8
<b>Style Index</b>							
MSCI EAFE Growth	5.5	13.3	(6.6)	7.4	4.6	4.3	7.4
MSCI EAFE Value	3.0	8.6	(22.1)	(13.0)	(5.4)	(2.9)	3.0
<b>Regional Index</b>							
MSCI UK	1.1	6.3	(24.4)	(14.9)	(5.0)	(3.4)	3.5
MSCI Japan	5.9	11.6	(7.1)	7.0	3.3	3.1	5.9
MSCI Euro	6.5	12.6	(17.9)	(6.6)	(3.3)	(0.1)	4.2
MSCI EM Asia	(0.3)	8.9	(10.8)	3.0	2.0	2.3	5.1
MSCI EM Latin American	6.4	13.2	(38.5)	(31.9)	(8.6)	(4.0)	(4.6)

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
BBgBarc US TIPS	0.3	3.1	4.8	8.0	4.3	3.3	3.6
BBgBarc US Treasury Bills	0.0	0.0	0.6	1.9	1.8	1.2	0.7
BBgBarc US Agg Bond	0.5	2.3	5.5	9.4	5.1	3.9	3.9
<b>Duration</b>							
BBgBarc US Treasury 1-3 Yr	0.1	0.2	3.0	4.6	2.7	1.9	1.4
BBgBarc US Treasury Long	(1.9)	0.1	21.0	26.9	12.1	8.4	8.2
BBgBarc US Treasury	(0.3)	0.4	8.6	11.4	5.5	3.9	3.6
<b>Issuer</b>							
BBgBarc US MBS	0.1	0.8	3.6	6.5	3.9	3.1	3.2
BBgBarc US Corp. High Yield	4.4	9.1	(4.7)	1.3	3.0	4.3	6.7
BBgBarc US Agency Interm	0.3	0.6	3.6	5.5	3.2	2.4	2.2
BBgBarc US Credit	1.6	6.3	2.9	9.5	5.6	4.8	5.3

## OTHER

<b>Index</b>							
Bloomberg Commodity	4.3	2.7	(21.2)	(17.1)	(6.9)	(7.8)	(6.0)
Wilshire US REIT	(0.3)	8.1	(19.6)	(13.0)	0.3	5.7	12.7
CS Leveraged Loans	3.8	8.3	(6.0)	(3.4)	1.7	4.6	5.0
Alerian MLP	8.7	60.3	(32.8)	(37.6)	(16.1)	(13.7)	0.1
<b>Regional Index</b>							
JPM EMBI Global Div	6.1	8.5	(6.1)	0.4	2.4	4.2	5.9
JPM GBI-EM Global Div	5.2	9.3	(7.3)	2.1	1.1	2.0	1.7
<b>Hedge Funds</b>							
HFRI Composite	2.5	7.3	(4.8)	0.3	1.7	1.8	3.5
HFRI FOF Composite	2.1	5.7	(3.6)	1.6	1.6	0.9	2.5
<b>Currency (Spot)</b>							
Euro	1.6	1.4	(0.9)	(0.2)	(0.4)	0.3	(1.0)
Pound	(2.0)	(0.3)	(6.7)	(1.9)	(1.4)	(4.1)	(1.6)
Yen	(0.7)	0.2	0.9	0.8	0.9	2.9	(1.7)

Source: Morningstar, HFR, as of 5/31/20

# Detailed private market returns

## Comparison to public market index returns

Private Equity Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Private Equity FoFs & Secondary Funds	11.9	13.0	10.0	11.9
Global Private Equity Direct Funds *	17.6	16.5	13.3	14.3
U.S. Private Equity Direct Funds *	18.8	16.7	13.7	15.6
Europe Private Equity Direct Funds *	18.8	20.4	15.0	12.2
Asia Private Equity Direct Funds *	12.6	13.4	11.9	13.2

Public Index Time-weighted Returns				
MSCI World	27.7	12.6	8.7	9.5
S&P 500	31.5	15.3	11.7	13.6
MSCI Europe	23.8	9.8	5.1	5.2
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	9.1	9.8	10.4	13.1

Public Index Time-weighted Returns				
FTSE NAREIT Equity REIT	26.0	8.1	7.2	11.9

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	9.0	9.2	8.3	11.1

Public Index Time-weighted Returns				
S&P / LSTA U.S. Leveraged Loan 100 Index	10.7	4.3	4.1	4.7

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources ***	(5.8)	0.2	(0.4)	3.3
Global Infrastructure	10.3	12.3	11.3	9.8

Public Index Time-weighted Returns				
S&P Global Natural Resources	17.2	7.9	4.8	1.6
S&P Global Infrastructure	27.0	11.3	6.6	7.7

Source: Pooled IRRs are from Thompson Reuters C/A and Time-weighted Returns are from Investment Metrics, as of December 31<sup>st</sup>, 2019. All returns in U.S. dollars.

\* Includes Buyout, Growth Equity and Venture Capital.

\*\* Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.

\*\*\* Includes Private Equity Energy, Timber and Upstream Energy & Royalties.

# Notices & disclosures

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# Board of Trustees

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



Date: June 22, 2020

To: Board of Trustees

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

## **Agenda Item 11: Asset Allocation & Rebalancing - June 2020**

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.

The normal investment portfolio drawdowns for liquidity to fund benefit payments and capital calls for 2Q20 are in process throughout the quarter. Additional transfers for the purpose of rebalancing are planned during the remainder of 2Q20 and through 3Q20 as recommended by Verus. The anticipated changes are administrative matters pursuant to the adopted investment policy and are summarized below.

Operational Transfers – 2Q20				
Timing	Source	Amount	To	Comment
June	Dodge & Cox Bonds	~ - \$6m	Cash	liquidity
June	BlackRock Bonds	~ - \$0	Cash	Liquidity
June	Cash	~ + \$2m	Private Credit & Private Equity	Est. capital calls
June	Private Credit & Private Equity	~ - \$2m	Cash	Est. capital distributions
Late June	Cash + Treasury	~ - \$9m	Retiree payroll	Mthly liquidity

Rebalancing Transfers – 2Q20 and 3Q20				
Timing	Source	Amount	To	Comment
TBD	Gresham Commodities	-\$6m	Cash	Gradual drawdown
TBD	Dodge & Cox Bonds	TBD	Cash	rebalance
TBD	BlackRock Bonds	TBD	Cash	rebalance
TBD	Cash	+\$2m	PIMCO RA US equity	rebalance
TBD	Cash	+\$2m	Boston Partners US equity	rebalance
TBD	Cash	+\$2m	Dodge & Cox Intl. equity	rebalance
Pending	JP Morgan Core Real Estate	-\$35m	TBD	Multi-qtr drawdown for rebalance to Value-Add Real estate and others TBD

Respectfully submitted