

Pension Trust

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



AGENDA (revised)

PENSION TRUST BOARD OF TRUSTEES

Monday, May 23, 2022 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 SLOOPT@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.

IN-PERSON MEETING

This meeting of the Board of Trustees will be held as an in-person meeting at the place shown above. The meeting may be available for online viewing by accessing -

<https://us06web.zoom.us/j/81874482055?pwd=YWtZbUNUU0hPZUVVDDdGltUmg5T2ZLQT09>

Passcode: 142297

If you wish to listen via phone to the meeting, please dial 669/900-6833 (Meeting ID 818 7448 2055). If you have any questions or require additional service, please contact SLOOPT 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) ORGANIZATIONAL

14. Committees – appointment of members by President.
 - i. Audit Committee (standing committee)
 - a. Appointment of an interim Audit Committee member to serve until Trustee Howe returns from leave later in 2022
(*agenda item number out of sequence as a later revision to the agenda*)

C) CONSENT

2. Minutes of the Regular Meeting of March 28, 2022 (Approve Without Correction).
3. Report of Deposits and Contributions for the months of March and April 2022 (Receive and File).
4. Report of Service Retirements, Disability Retirements and DROP Participants for the months of March and April 2022 (Receive, Approve and File).
5. Monthly Investment Report for March 2022 (Receive and File).
6. Resolution Modifying and Affirming Investment and Banking authority - Resolution 2022-03 (Recommend Approval).
7. Stipulation for the Division of Pension Benefits – Option Four Pension Benefit Election (Recommend Approval)

D) APPLICATIONS FOR DISABILITY RETIREMENT

8. Application for Ordinary Disability Retirement – Case 2021-05 (Recommend Approval).
9. Application for Industrial Disability Retirement – Case 2021-06 (Recommend Approval).
10. Application for Industrial Disability Retirement – Case 2021-08 (Recommend Approval).
11. Application for Industrial Disability Retirement – Case 2022-01 (Recommend Approval).
12. Application for Industrial Disability Retirement – Case 2021-07 (Recommend Approval).
13. *reserved*

E) OLD BUSINESS

None

F) NEW BUSINESS

15. January 1, 2022, Biennial Experience Study - Presentation by Anne Harper and Alice Alsberghe, Cheiron - Plan Actuary (Discuss, Direct Actuary and Staff as necessary – Receive and File).
16. Actuarial Valuation – 2022 Actuarial Assumptions Approval - (Discuss, Direct Actuary and Staff as necessary – Recommend Approval).
17. Administrative Budget for Fiscal Year 2022-2023 - Proposed – (Recommend Approval).

G) INVESTMENTS

18. Quarterly Investment Report for the 1st Quarter of 2022 – Verus (Receive and File).
19. Monthly Investment Report for April 2022 (Receive and File).
20. Core Infrastructure Recommendation – Verus (Discuss, Direct Consultant and Staff as necessary – Recommend Approval).
21. *reserved*
22. Asset Allocation - (Review, Discuss, and Direct Staff as necessary).

H) OPERATIONS

23. Staff Reports
24. General Counsel Reports
25. Committee Reports:
 - i. Audit Committee No Report
 - ii. Personnel Committee No Report
 - iii. Private Markets Investments No Report

26. Upcoming Board Topics (subject to change)

- i. June 27, 2022
 - a. Disabilities
 - b. 2021 Financial Audit Report / ACFR Approval
 - c. 2022 Actuarial Valuation / Contribution Rate changes
 - d. Employer prefunding amount
 - e. Verus fee increase
 - f. TBD

- ii. July 25, 2022 – planned as a non-meeting month

- iii. August 22, 2022
 - a. Trustee Education
 - b. Conflict of Interest Policy
 - c. Mid-Year Unaudited Financial Statements
 - d. Quarterly Investment Report
 - e. TBD

27. Trustee Comments

I) CLOSED SESSION

None

J) ADJOURNMENT

**PENSION TRUST
BOARD OF TRUSTEES**

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MINUTES

**PENSION TRUST
BOARD OF TRUSTEES**

Monday, March 28, 2022
Regular Meeting of the Pension Trust
Board of Trustees

Board Members Present: Jeff Hamm
Jim Hamilton
Taylor Dacus
David Grim
Gere Sibbach
Michelle Shoresman

Board Members Absent: Lisa Howe

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

General Counsel: Chris Waddell Olson | Remcho

Others: Vita Miller SLOCREA
Joe Ebisa Journalist – withintelligence.com
Kate Quenzer
Ayab Aneesah

Call to Order: 9:36 AM by President Hamm

A) PUBLIC COMMENT

- 1. None

B) ORGANIZATIONAL

None

C) CONSENT

- 2. Minutes of the Regular Meeting of February 28, 2022 (Approve Without Correction).
- 3. Reports of Deposits and Contributions for the month of February 2022 (Receive and File).
- 4. Reports of Service Retirements, Disability Retirements and DROP Participants for the month of February 2022 (Receive, Approve and File).

Motion: Approve the Consent items

Discussion: -

Public Comment: None

Motion Made: Mr. Hamilton

Motion Seconded: Ms. Shoresman

Carried: Unanimous (roll call vote)

D) APPLICATIONS FOR DISABILITY RETIREMENT

- 5. *Reserved (not used)*
- 6. *Reserved (not used)*
- 7. *Reserved (not used)*
- 8. *Reserved (not used)*

D) OLD BUSINESS

None

F) NEW BUSINESS

- 9. Employer Contributions Prefunding and Discount Rate

Motion: Approve Staff recommendation to allow SLO County to prefund Employer pension contributions in FY22-23 at a discount rate benchmarked to the real rate of return assumption to be used in the 2022 Actuarial Valuation.

Discussion: Ms. Burke presented the staff recommendation on employer pension contribution rate prefunding. The staff recommendation continued the prior year

practice of using the assumed real rate of return in the Pension Trust's annual actuarial valuation (4.50% in 2021 which may change as actuarial assumptions are adopted at the May 23rd Board of Trustees meeting) as a convenient benchmark for discounting prepaid contributions.

Public Comment: None

Motion Made: Mr. Sibbach

Motion Seconded: Mr. Grim

Carried: Unanimous (roll call vote)

10. Administrative Budget for Fiscal Year 2022-2023 - Proposed

Discussion: Ms. Burke presented the Staff recommendation on the Pension Trust's administrative budget for FY22-23. The budget – possibly in revised form – will be presented for approval at the May 23rd meeting. Trustees asked questions and commented on the draft budget.

Public Comment: None

No Action Necessary

G) INVESTMENTS

11. Monthly Investment Report for February 2022

Motion: To receive and file the monthly investment report.

Discussion: Mr. Nelson presented the report. Trustee questions included the timing of the phases of increased private market investments.

Public Comment: None

Motion Made: Mr. Grim

Motion Seconded: Mr. Hamm

Carried: Unanimous (roll call vote)

12. *Reserved (not used)*

13. Asset Allocation

Discussion: Routine item included should asset allocation changes be necessary. No action needed.

Public Comment: None

No Action Necessary

H) OPERATIONS

14. Staff Reports

- i. Unreported death of retiree and spouse: Deputy Director Burke reported that a retiree and spouse passed away in mid-2021 and neither death was reported to SLOCPT until March 2022. The resulting overpayment of benefits is estimates at \$127k and staff is working with family members to secure repayment from the estate.
- ii. Limitation of hours for retired annuitants hired as temporary employees: Deputy Director Burke reported that the limit of 960 work hours for Plan employers per fiscal year, which had been temporarily waived by the Governor’s Executive Order, was scheduled to go into effect again as of April 1, 2022.
- iii. Waiting period for hiring of retired annuitants: Deputy Director Burke reported that the 180-day waiting period for re-hiring retired annuitants, which was also temporarily waived by the Governor’s Executive Order, was scheduled to go into effect again as of July 1, 2022.

15. General Counsel Reports

None

16. Committee Reports:

- i. Audit Committee No Report
- ii. Personnel Committee No Report
- iii. Private Markets Investments (ad hoc) No Report

17. Upcoming Board Topics – published on meeting agenda

18. Trustee Comments

- i. CALAPRS 2022 General Assembly – Trustee Sibbach reported on the conference and encouraged other Trustees to also attend CALAPRS training sessions. He noted that directors from both Verus and Cheiron were panelists in a session on inflation and they discussed functionally focused portfolios like that of the SLOCPT as being increasingly adopted.

Public Comment (ad hoc)

Vita Miller commented on the unreported deaths and inquired about death-reporting services available to the SLOCPT.

I) CLOSED SESSION

None

J) ADJOURNMENT

There being no further business, the meeting was adjourned at 10:24 AM. The next Regular Meeting was set for May 23, 2022, at 9:30 AM, in the Board of Supervisors chambers, 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
MARCH 2022**

PP 5	3/11/2022	Pensionable Salary	Employer Contributions	Employer Rate	Employee Contributions	Employer for	Employee Rate	Combined Rate	Additional Contributions	Service Purchases	TOTAL Contributions
						Employee Contributions					
By Employer and Tier:											
	County Tier 1	2,784,311.04	853,395.17	30.65%	386,582.43	236,838.15	22.39%	53.04%	2,537.50	725.69	1,480,078.94
	County Tier 2	975,135.44	309,707.74	31.76%	62,759.39	85,143.28	15.17%	46.93%	-	-	457,610.41
	County Tier 3	4,172,641.09	1,258,639.98	30.16%	588,076.72	-	14.09%	44.26%	-	610.15	1,847,326.85
	Superior Court Tier 1	229,852.87	68,451.81	29.78%	47,156.84	-	20.52%	50.30%	-	-	115,608.65
	Superior Court Tier 3	159,632.90	45,705.90	28.63%	25,093.53	-	15.72%	44.35%	-	-	70,799.43
	APCD Tier 1	45,970.61	12,823.35	27.89%	7,643.98	3,680.19	24.63%	52.53%	-	-	24,147.52
	APCD Tier 2	3,471.20	939.31	27.06%	481.81	199.59	19.63%	46.69%	-	-	1,620.71
	APCD Tier 3	31,458.02	8,416.72	26.76%	5,136.24	-	16.33%	43.08%	-	-	13,552.96
	SLOCPT Tier 1	8,101.67	2,347.86	28.98%	1,229.83	752.65	24.47%	53.45%	-	-	4,330.34
	SLOCPT Tier 2	9,814.40	2,844.21	28.98%	554.52	911.75	14.94%	43.92%	-	-	4,310.48
	SLOCPT Tier 3	12,970.01	3,754.81	28.95%	1,865.51	-	14.38%	43.33%	250.00	-	5,870.32
	LAFCO Tier 3	7,709.60	2,394.61	31.06%	1,068.42	-	13.86%	44.92%	-	-	3,463.03
	RTA Tier 2	28,057.40	8,246.06	29.39%	576.17	3,647.46	15.05%	44.44%	-	-	12,469.69
	RTA Tier 3	15,836.22	4,943.79	31.22%	1,876.66	-	11.85%	43.07%	-	-	6,820.45
		8,484,962.47	2,582,611.32	30.44%	1,130,102.05	331,173.07	17.22%	47.66%	2,787.50	1,335.84	\$ 4,048,009.78

PP 6	3/25/2022	Pensionable Salary	Employer Contributions	Employer Rate	Employee Contributions	Employer for	Employee Rate	Combined Rate	Additional Contributions	Service Purchases	TOTAL Contributions
						Employee Contributions					
By Employer and Tier:											
	County Tier 1	2,771,943.47	849,804.13	30.66%	384,964.39	235,835.53	22.40%	53.05%	2,537.50	6,791.83	1,479,933.38
	County Tier 2	987,058.02	315,455.96	31.96%	53,197.02	96,183.70	15.13%	47.09%	-	-	464,836.68
	County Tier 3	4,171,066.13	1,257,613.33	30.15%	587,287.99	-	14.08%	44.23%	-	610.15	1,845,511.47
	Superior Court Tier 1	228,548.72	68,063.02	29.78%	46,873.92	-	20.51%	50.29%	-	-	114,936.94
	Superior Court Tier 3	156,840.62	44,936.76	28.65%	24,576.81	-	15.67%	44.32%	-	-	69,513.57
	APCD Tier 1	45,970.63	12,823.35	27.89%	7,643.96	3,680.21	24.63%	52.53%	-	-	24,147.52
	APCD Tier 2	3,644.80	986.28	27.06%	505.89	209.58	19.63%	46.69%	-	-	1,701.75
	APCD Tier 3	30,376.22	8,129.26	26.76%	4,978.23	-	16.39%	43.15%	-	-	13,107.49
	SLOCPT Tier 1	8,101.67	2,347.86	28.98%	1,229.83	752.65	24.47%	53.45%	-	-	4,330.34
	SLOCPT Tier 2	9,814.40	2,844.21	28.98%	554.52	911.75	14.94%	43.92%	-	-	4,310.48
	SLOCPT Tier 3	12,970.01	3,754.81	28.95%	1,865.51	-	14.38%	43.33%	250.00	-	5,870.32
	LAFCO Tier 3	7,709.60	2,394.61	31.06%	1,068.42	-	13.86%	44.92%	-	-	3,463.03
	RTA Tier 2	28,057.40	8,246.06	29.39%	576.17	3,647.46	15.05%	44.44%	-	-	12,469.69
	RTA Tier 3	17,949.02	5,554.39	30.95%	2,197.17	-	12.24%	43.19%	-	-	7,751.56
		8,480,050.71	2,582,954.03	30.46%	1,117,519.83	341,220.88	17.20%	47.66%	2,787.50	7,401.98	\$ 4,051,884.22

TOTAL FOR THE MONTH	16,965,013.18	5,165,565.35	30.45%	2,247,621.88	672,393.95	17.21%	47.66%	5,575.00	8,737.82	\$ 8,099,894.00
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TOTAL YEAR TO DATE	50,852,421.19	15,482,843.47	30.45%	6,772,126.78	1,991,779.60	17.23%	47.68%	13,725.00	29,622.28	\$ 24,290,097.13
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**REPORT OF DEPOSITS AND CONTRIBUTIONS FOR THE MONTH OF
APRIL 2022**

PP 7 4/8/2022	Pensionable Salary	Employer Contributions	Employer Rate	Employee Contributions	Employer for		Employee Rate	Combined Rate	Additional Contributions	Service Purchases	TOTAL Contributions
					Employee Contributions	Employee Rate					
By Employer and Tier:											
County Tier 1	2,751,772.52	843,598.34	30.66%	382,071.61	234,014.69	22.39%	53.05%	2,537.50	1,191.83		1,463,413.97
County Tier 2	986,190.94	314,115.41	31.85%	65,524.57	84,060.40	15.17%	47.02%	-	-		463,700.38
County Tier 3	4,197,715.60	1,267,513.38	30.20%	590,931.32	-	14.08%	44.27%	-	610.15		1,859,054.85
Superior Court Tier 1	228,777.37	68,133.59	29.78%	46,922.41	-	20.51%	50.29%	-	-		115,056.00
Superior Court Tier 3	157,743.16	45,194.08	28.65%	24,700.47	-	15.66%	44.31%	-	81.71		69,976.26
APCD Tier 1	45,970.62	12,823.35	27.89%	7,643.97	3,680.20	24.63%	52.53%	-	-		24,147.52
APCD Tier 2	3,644.80	986.28	27.06%	505.89	209.58	19.63%	46.69%	-	-		1,701.75
APCD Tier 3	29,724.42	7,956.09	26.77%	4,880.83	-	16.42%	43.19%	-	-		12,836.92
SLOCPT Tier 1	8,101.67	2,347.86	28.98%	1,229.83	752.65	24.47%	53.45%	-	-		4,330.34
SLOCPT Tier 2	9,814.40	2,844.21	28.98%	554.52	911.75	14.94%	43.92%	-	-		4,310.48
SLOCPT Tier 3	13,079.62	3,786.54	28.95%	1,878.90	-	14.37%	43.32%	250.00	-		5,915.44
LAFCO Tier 3	7,709.60	2,394.61	31.06%	1,068.42	-	13.86%	44.92%	-	-		3,463.03
RTA Tier 2	28,057.40	8,246.07	29.39%	576.17	3,647.46	15.05%	44.44%	-	-		12,469.70
RTA Tier 3	15,836.22	4,943.80	31.22%	1,876.66	-	11.85%	43.07%	-	-		6,820.46
	8,484,138.34	2,584,883.61	30.47%	1,130,365.57	327,276.73	17.18%	47.65%	2,787.50	1,883.69	\$	4,047,197.10

PP 8 4/22/2022	Pensionable Salary	Employer Contributions	Employer Rate	Employee Contributions	Employer for		Employee Rate	Combined Rate	Additional Contributions	Service Purchases	TOTAL Contributions
					Employee Contributions	Employee Rate					
By Employer and Tier:											
County Tier 1	2,748,169.37	842,334.04	30.65%	381,393.10	233,956.84	22.39%	53.04%	2,537.50	14,696.58		1,474,918.06
County Tier 2	975,298.45	310,686.69	31.86%	65,696.53	82,064.68	15.15%	47.01%	-	-		458,447.90
County Tier 3	4,204,762.90	1,271,527.68	30.24%	591,764.42	-	14.07%	44.31%	-	610.15		1,863,902.25
Superior Court Tier 1	227,609.25	67,795.46	29.79%	46,678.30	-	20.51%	50.29%	-	-		114,473.76
Superior Court Tier 3	152,501.44	43,713.45	28.66%	23,867.79	-	15.65%	44.32%	-	81.71		67,662.95
APCD Tier 1	45,970.62	12,823.35	27.89%	7,643.97	3,680.20	24.63%	52.53%	-	-		24,147.52
APCD Tier 2	3,644.80	986.28	27.06%	505.89	209.58	19.63%	46.69%	-	-		1,701.75
APCD Tier 3	29,374.99	7,863.25	26.77%	4,833.30	-	16.45%	43.22%	-	-		12,696.55
SLOCPT Tier 1	8,101.67	2,347.86	28.98%	1,229.83	752.65	24.47%	53.45%	-	-		4,330.34
SLOCPT Tier 2	9,814.40	2,844.21	28.98%	554.52	911.75	14.94%	43.92%	-	-		4,310.48
SLOCPT Tier 3	13,079.61	3,786.54	28.95%	1,878.90	-	14.37%	43.32%	250.00	-		5,915.44
LAFCO Tier 3	7,709.60	2,394.61	31.06%	1,068.42	-	13.86%	44.92%	-	-		3,463.03
RTA Tier 2	28,057.40	8,246.06	29.39%	576.17	3,647.46	15.05%	44.44%	-	-		12,469.69
RTA Tier 3	12,934.61	3,989.16	30.84%	1,632.34	-	12.62%	43.46%	-	-		5,621.50
	8,467,029.11	2,581,338.64	30.49%	1,129,323.48	325,223.16	17.18%	47.67%	2,787.50	15,388.44	\$	4,054,061.22

TOTAL FOR THE MONTH	16,951,167.45	5,166,222.25	30.48%	2,259,689.05	652,499.89	17.18%	47.66%	5,575.00	17,272.13	\$	8,101,258.32
TOTAL YEAR TO DATE	67,803,588.64	20,649,065.72	30.45%	9,031,815.83	2,644,279.49	17.22%	47.67%	19,300.00	46,894.41	\$	32,391,355.45

REPORT OF RETIREMENTS**March 2022**

RETIREE NAME	DEPARTMENT	BENEFIT TYPE *	EFFECTIVE DATE	MONTHLY BENEFIT	SS TEMP ANNUITY**
Carrillo, Sara V	Department of Social Services	Service Retirement	02/20/2022	1,105.28	False
Crowell, Dorea M	SLO County Child Support Servi	Service Retirement	03/02/2022	1,434.32	True
Hajik, Steven G	Agricultural Commisioner	Service Retirement	02/12/2022	563.52	False
Hajik, Steven G	Agricultural Commisioner	Additional Annuity	02/12/2022	9.48	False
Hall, Roy M	Facilities Management	Service Retirement	02/09/2022	2,400.97	False
Hall, Roy M	Facilities Management	Additional Annuity	02/09/2022	66.98	False
Huber, Carolyn L	Airports	Service Retirement	03/10/2022	4,938.83	False
Huber, Carolyn L	Airports	Additional Annuity	03/10/2022	37.00	False
Macdonald, Shane Michael	Sheriff-Coroner	Duty Disability Retirement	01/22/2022	4,264.63	False
Negranti, Nina	County Counsel	Service Retirement	03/12/2022	8,092.85	False
Stimmel, Michael Lee	Sheriff-Coroner	Service Retirement	02/06/2022	1,171.22	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

REPORT OF RETIREMENTS**April 2022**

RETIREE NAME	DEPARTMENT	BENEFIT TYPE *	EFFECTIVE DATE	MONTHLY BENEFIT	SS TEMP ANNUITY**
Calagna, Joshua Steven	Sheriff-Coroner	DROP	04/01/2022	3,929.95	False
Gutierrez, David D	Community Parks	Service Retirement	04/02/2022	3,452.52	False
Missamore, Randy Lee	Public Works ISF	Service Retirement	04/02/2022	732.06	False
Monza, Christopher J	Department of Social Services	Service Retirement	04/16/2022	7,062.49	False
Morris, Joseph Thomas	Public Works ISF	Service Retirement	04/05/2022	2,411.99	False
Romano, Christy Lynn	Department of Social Services	Service Retirement	04/09/2022	6,119.20	False
Sanchez, Terresa Lee	Behavioral Health	Service Retirement	03/26/2022	706.60	False

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

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

Board of Trustees

1000 Mill Street
San Luis Obispo, CA 93408
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www.SLOPensionTrust.org



Date: April 25, 2022

To: Board of Trustees

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

Agenda Item 5: Monthly Investment Report for March 2022

	March	Year to Date 2022	2021	2020	2019	2018	2017
Total Trust Investments (\$ millions)	\$1,695		\$1,775	\$1,552 year end	\$1,446 year end	\$1,285 year end	\$1,351 year end
Total Fund Return	0.4% Gross	-2.5% Gross	15.2% Gross	8.9 % Gross	16.3 % Gross	-3.2 % Gross	15.5 % Gross
Policy Index Return (r)	0.1%	-3.5%	12.8%	10.0 %	16.4 %	-3.2 %	13.4 %

- (r) Policy index as of Nov. 2021 Strategic Asset Allocation Policy with 2022 Interim targets:
- Public Mkt Equity- 24% Russell 3000, 17% MSCI ACWI ex-US
 - Public Mkt Debt- 11% Barclays US Aggregate,
 - Risk Diversifying 8% Barclays US Aggregate, 4% Barclays 7-10yr Treasury, 3% Barclays 5-10yr US TIPS
 - Real Estate & Infrastructure- 13% NCREIF Index (inc. Infrastructure)
 - Private Equity- 7% actual private equity returns
 - Private Credit- 4% actual private credit returns
 - Liquidity- 6% 90 day T-Bills
- Pending annual updates to interim targets.

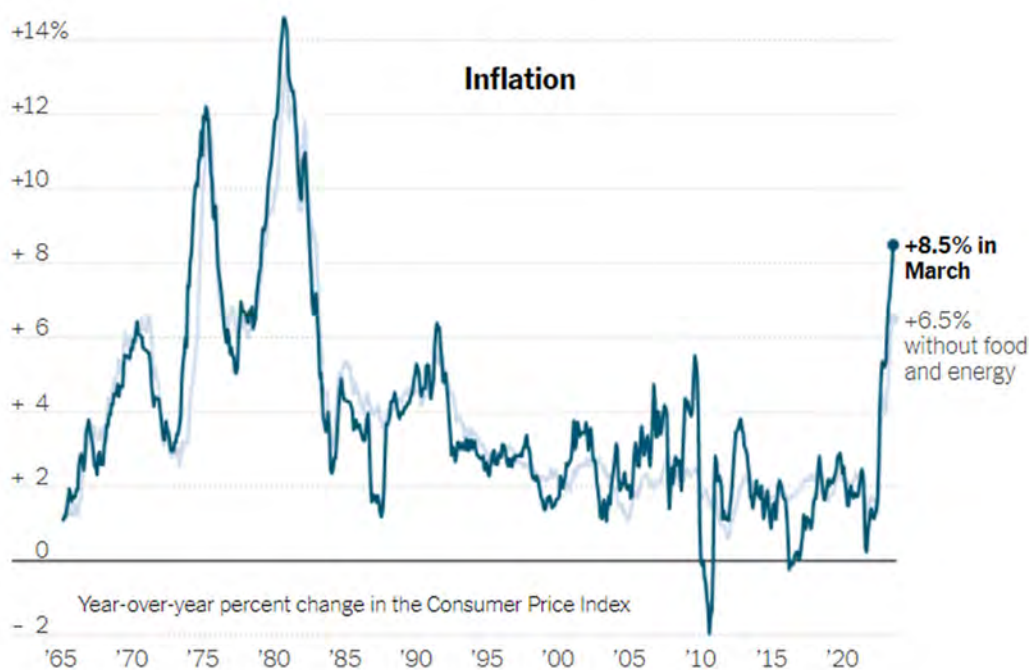
SLOCPT Investment Returns:

The attached report from Verus covers the preliminary investment returns of the SLOCPT portfolio and general market conditions through the end of March. The attached market commentary from Verus details market conditions in March, but subsequent activity in February is not yet factored into these numbers. As of April 22nd, the month has had further negative returns.

The Economy and Capital Markets:

- **The Economy**

- **GDP Growth** – The revised estimate of 4Q21 real GDP growth was at an annual rate of 6.9%. The full-year US real GDP growth in 2021 came in at a +5.7% - well above historic trends. Analyst expectations are for slowing growth in 2022 and 2023.
 - The Conference Board in March downgraded their 2022 real GDP forecast to 3.0% in 2022 and 2.3% in 2023. The economic disruptions from the Russia/Ukraine war and the sanctions on Russia are expected to push up inflation and lower GDP growth in western nations.
 - PIMCO in their March Cyclical Outlook report calls for above trend 2022 GDP growth in developed market economies of about 3% as post-pandemic re-opening and pent-up consumer savings support spending.
- **Inflation** – Inflation continues to weigh on economies worldwide. The CPI index ended March with an 8.5% year-over-year increase – the highest since 1981



Source: Bureau of Labor Statistics

- Persistently higher oil prices add significantly to inflation. Oil price increases well above \$100/barrel stem from: the 2020 pullback in drilling due to collapsing demand and regulatory uncertainties; the sudden return of energy demand as the pandemic eased; OPEC+ actions to not increase production; and sanctions on Russian oil exports all on.
- PIMCO in their March Cyclical Outlook comments that current commodities futures pricing leads them to expect an upward trend in inflation for the next

several months. However, PIMCO's 2022 forecast for developed markets inflation has increased to 5% - an increase from last year's forecast, but below the short-term trend.

- **Wage Growth** – Wage increases on a year-over-year basis in March showed a 5.6% growth. This reflects the current tight labor market as many jobs go unfilled.
 - **New Jobs** - The March jobs report from the BLS on nonfarm employment showed a healthy gain of 431k new jobs indicating continued strength in the labor markets.
 - **Unemployment** - The unemployment rate in March declined further to 3.6%. Labor force participation rates in the key age 24-55 prime working years continued to slowly climb towards their pre-pandemic rates. The continued labor shortage reflects many complex factors, including a low rate of immigration for several years.
 - **San Luis Obispo Unemployment** - The February SLO County unemployment rate fell to 3.3% - half of the rate just one year ago. SLO County's workforce has grown over 3,700 over a year ago and now numbers 137,800 (including the self-employed). The California February unemployment rate fell as well to 5.4%. California ranks third in the nation for the fastest rate of job growth behind Nevada and Hawaii.
- **Economic Policy**
 - **Monetary Policy** – After the March 16th Fed increase in short term interest rates by the widely expected amount of 0.25%. The Fed remains with a greater focus on its mandate to control inflation as its full-employment and growth mandate is satisfied.
 - PIMCO in their March Cyclical Outlook comments on central bank policies – “Most central banks seem determined to opt for fighting inflation over supporting growth. In normal times, we would expect central banks to look through the inflationary consequences of a supply-side shock, but these are not normal times, with the current shock coming at a time of already high inflation as the result of the COVID period and ongoing supply chain disruptions. Monetary policymakers therefore appear focused primarily on preventing second-round effects of higher headline inflation and a further rise in already elevated inflation expectations. Needless to say, this also raises the risk of a hard landing further down the road and implies a rising risk of recession later this year or in 2023; this is not our baseline, but a risk to monitor.

Investment Markets –

- **Russia/Ukraine War** – Markets have continued to turn negative throughout January to mid-April. Concerns over the impacts on European economic growth as economic sanctions on Russia disrupt commodity are a significant factor. Possible curtailment of natural gas supplies to western Europe raise the threat of a possible recession in Germany. Oil prices, already surging due to huge increases in demand, faced further shortages as Russian oil was limited in the market. Oil prices have moderated in March-April from above \$125/barrel to around \$106/barrel.

- **Markets and Economic Outlook** – Michael Cembalest, JP Morgan Asset Management Chief Strategist, in the April 11th “Eye on The Market” report included the following market update.

“As I wrote in the March Eye on the Market, we expect the March 15 equity market lows to hold as long as there is no US recession. Some recession indicators are rising: first inverted 2-year to 30-year yield curve since 2007; a collapse in consumer sentiment to one of the lowest levels in 70 years; declining small business surveys; and ISM business survey orders falling below inventory levels for the first time since the expansion began. In addition, more signs of prolonged goods shortages and inflation: China’s supply chain delays and spikes in anchored containerships due to COVID, and additional sanctions on Russia in response to what has been described as executions, torture and other war crimes committed by Russian soldiers. Even so, I think a low growth period in 2022 in the US is more likely than a recession. Labor markets are very tight (there has never been a recession without a large spike in jobless claims), household and corporate balance sheets are in very good shape, and the release of the Strategic Petroleum Reserve lowers risk of recession in the near term (though it’s still a bullish sign for oil prices in the medium term). US recession risks look higher for 2023-2024.”

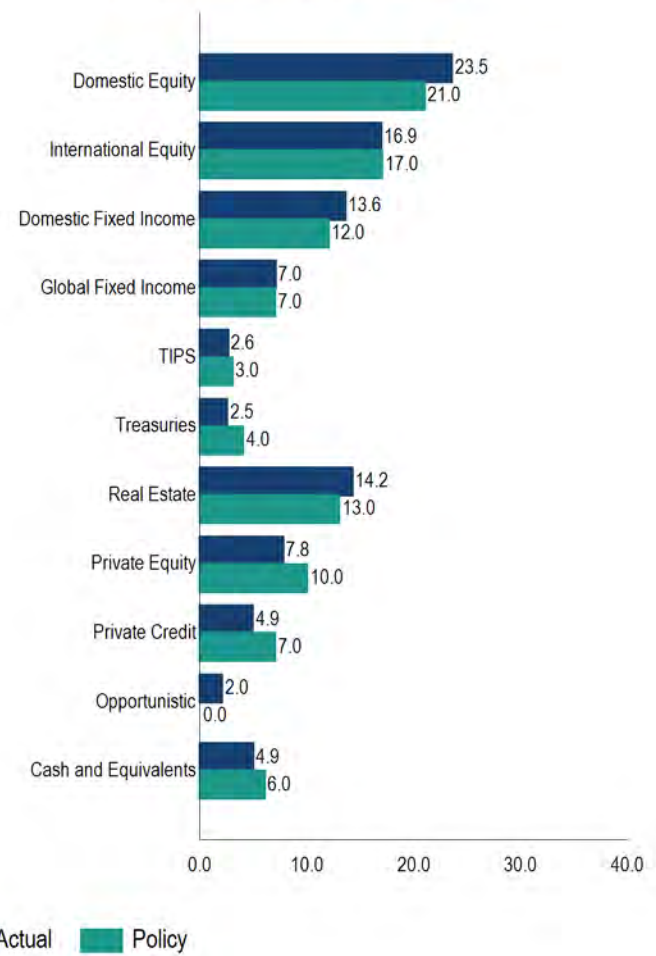
Respectfully Submitted,

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

Period Ending: March 31, 2022

	Market Value	% of Portfolio	1 Mo	YTD
Total Fund	1,695,201,761	100.0	0.4	-2.5
Interim Policy Index			0.1	-3.5
FFP SAA Index			0.5	-1.6
Total Growth	1,141,430,791	67.3	1.2	-2.0
Custom Growth Benchmark			0.8	-3.3
Total Public Equity	686,038,146	40.5	1.1	-5.8
Russell 3000			3.2	-5.3
Total Domestic Equity	399,100,347	23.5	1.1	-3.7
MSCI ACWI ex USA Gross			0.2	-5.3
Total Private Equity	131,437,064	7.8		
Total Private Credit	83,027,587	4.9		
Sixth Street Partners DCP	83,027,587	4.9		

Actual vs Interim Target Allocation (%)



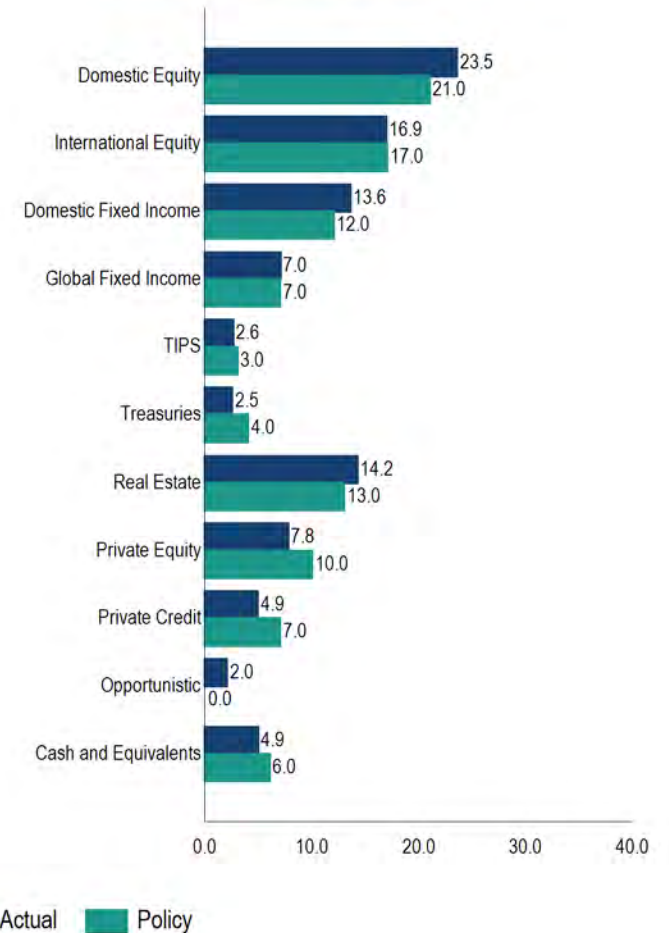
New Policy Index as of 1/1/2022 24% Russell 3000, 17% MSCI ACWI ex-US (Gross), 15% BBgBarc U.S. Aggregate, 7% FTSE WGBI, 4% BbgBarc US Treasury 7-10 yr, 3% BBgBarc US TIPS, 13% NCREIF Property Index, 7% Actual Private Equity Return, 4% Actual Private Credit Return, 6% 91 day T-Bills. 2% allocation to Infrastructure is to NCREIF Property, until a more appropriate benchmark is established. Private Equity, Private Credit and Opportunistic composite returns are lagged by one quarter. All returns are (G) Gross of fees. Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. (e) To avoid unnecessary and possibly misleading Tracking Error, the Total Fund Policy Benchmark uses actual time-weighted private markets returns applied to actual private market asset class weights rounded to the nearest whole percentage point. The difference in actual weight versus target is allocated to the private market investment's public market "equivalent" (e.g., private equity to public equity; private credit to public fixed income, private real estate to public real estate). All data is preliminary

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

Period Ending: March 31, 2022

	Market Value	% of Portfolio	1 Mo	YTD
Total Real Estate	240,927,994	14.2	1.7	5.9
<i>NCREIF Property Index</i>			0.0	0.0
<i>NCREIF Property Index</i>			0.0	0.0
Total Risk Diversifying	436,072,004	25.7	-1.6	-4.5
<i>Custom Risk Diversifying Benchmark</i>			-3.0	-5.8
Total Domestic Fixed Income	317,022,337	18.7	-1.8	-4.0
Total Global Fixed	119,049,667	7.0	-0.9	-5.8
<i>FTSE World Govt Bond Index</i>			-3.4	-6.5
<i>Brandywine Global Fixed Income</i>	58,168,403	3.4	-0.4	-1.6
<i>FTSE WGBI ex US TR</i>			-3.7	-7.1
<i>Ashmore EM Blended Debt Fund</i>	60,881,264	3.6	-1.4	-9.5
<i>50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELMI+</i>			-1.8	-8.0

Actual vs Interim Target Allocation (%)



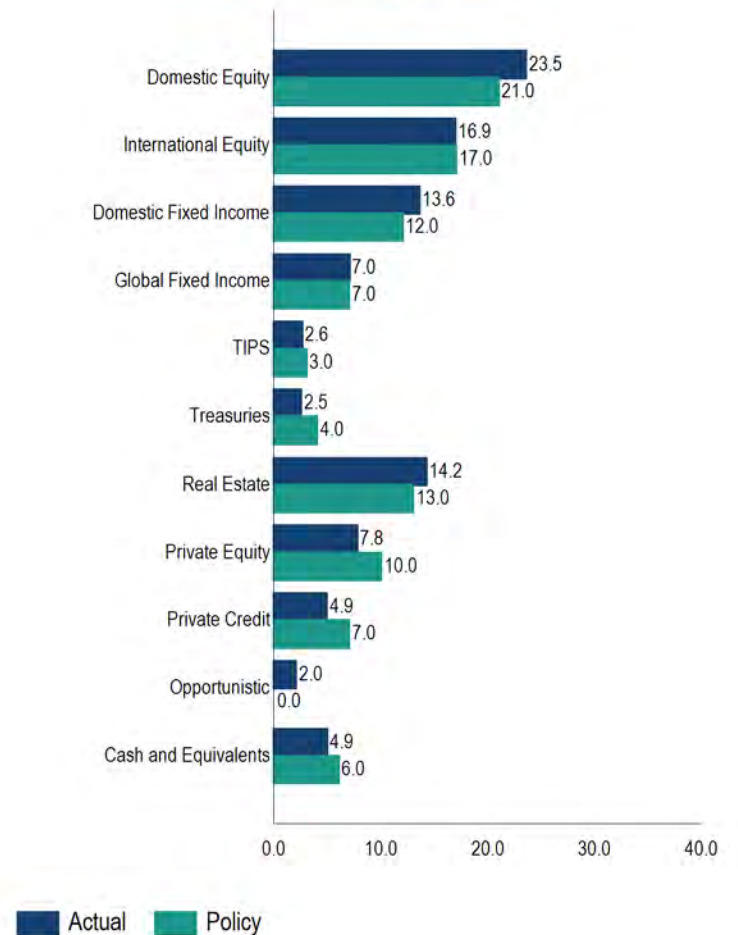
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San Luis Obispo County Pension Trust
 Executive Summary - Preliminary (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	1 Mo	YTD
Total Liquidity	83,449,511	4.9	-0.6	-0.9
91 Day T-Bills			0.0	0.0
Total Cash	83,449,511	4.9	-0.6	-0.9
91 Day T-Bills			0.0	0.0
PIMCO Short Duration Fund	33,861,147	2.0	-1.6	-2.8
Bloomberg US Govt/Credit 1-3 Yr. TR			-1.4	-2.5
Cash Account	31,206,111	1.8	0.0	0.2
91 Day T-Bills			0.0	0.0
Investment Cash	18,382,253	1.1	0.0	0.0
91 Day T-Bills			0.0	0.0
Total Opportunistic	34,249,455	2.0		
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	5,267,936	0.3		
Sixth Street Partners TAO	28,981,519	1.7		

Actual vs Interim Target Allocation (%)



New Policy Index as of 1/1/2022 24% Russell 3000, 17% MSCI ACWI ex-US (Gross), 15% BbgBarc U.S. Aggregate, 7% FTSE WGBI, 4% BbgBarc US Treasury 7-10 yr, 3% BbgBarc US TIPS, 13% NCREIF Property Index, 7% Actual Private Equity Return, 4% Actual Private Credit Return, 6% 91 day T-Bills. 2% allocation to Infrastructure is to NCREIF Property, until a more appropriate benchmark is established. Private Equity, Private Credit and Opportunistic composite returns are lagged by one quarter. All returns are (G) Gross of fees. Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. (e) To avoid unnecessary and possibly misleading Tracking Error, the Total Fund Policy Benchmark uses actual time-weighted private markets returns applied to actual private market asset class weights rounded to the nearest whole percentage point. The difference in actual weight versus target is allocated to the private market investment's public market "equivalent" (e.g., private equity to public equity; private credit to public fixed income, private real estate to public real estate). All data is preliminary

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**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

**MARCH 2022
Capital Markets Update**

Market commentary

U.S. ECONOMICS

- U.S. non-farm payrolls grew by 431,000 in March, marking 11 consecutive months of additions to payrolls exceeding 400,000 – a streak not seen since the 1930s. Job gains broadened but remained focused in leisure and hospitality and professional services sectors.
- The U.S. ISM Manufacturing PMI slowed to 57.1 and fell short of expectations (59.0). While the overall print was cooler than expected, the prices paid component quickened to 87.1 – far exceeding the expected level of 80.0. Rising costs of manufacturing inputs have likely been attributed to rapid increases in commodity prices.
- U.S. consumers have seen a rise in prices as well; gasoline prices at the pump reached their highest recorded average level intra-month, with consumers paying on average \$4.33 a gallon per AAA's national gauge. Some states took the drastic move of suspending gas taxes to provide some level of temporary relief to consumers.

U.S. EQUITIES

- The S&P 500 (+3.7%) recovered some losses but ended Q1 2022 down -4.6%. The increasingly hawkish stance of the Federal Reserve over the quarter as well as the Russian invasion of Ukraine and the ensuing disruption of commodity markets have weighed on markets.
- Net profit margins for the S&P 500 are expected to decline to 12.1% for Q1 2022, per FactSet. While 12.1% represents a decrease from one-year prior (12.8%) and prior quarter (12.4%) profitability, margins are expected to remain well above the 5-year average level of 11.2%.
- The U.S. continued to levy new sanctions against Russia in response to the invasion of Ukraine. Added measures in March include a ban on Russian oil and gas imports as well as a ban on the export of luxury goods to the pariah state.

U.S. FIXED INCOME

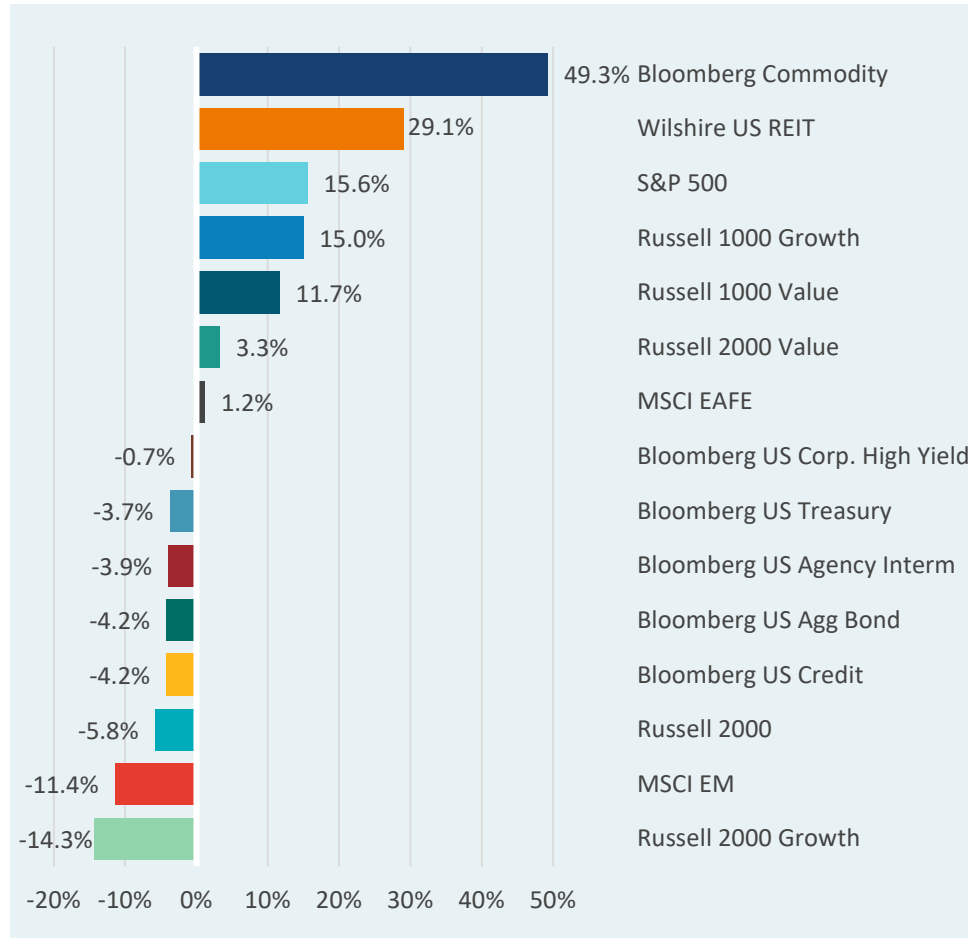
- The Federal Reserve enacted the first of more than eight quarter-point rate hikes expected by markets this year. The Fed left open the possibility of one or more half-point rate hikes and has laid out plans to begin unwinding the balance sheet by a maximum of \$95 billion per month, phased in over several months.
- The Bloomberg U.S. Aggregate Index fell -2.8% and ended Q1 2022 down -5.9%, the worst quarter for the index since Q3 1980, as markets priced in an increasingly more hawkish Fed. At month-end, the Fed Funds rate expected at year end – as implied by Fed Fund Futures – was 2.4% as compared to 1.3% just a month ago.
- The yield curve flattened aggressively as yields climbed at the short end of the curve in anticipation of continual rate action by the Fed. The two-year Treasury yield climbed 84 basis points to 2.28% while the 10-year Treasury yield rose just 49 basis points.

INTERNATIONAL MARKETS

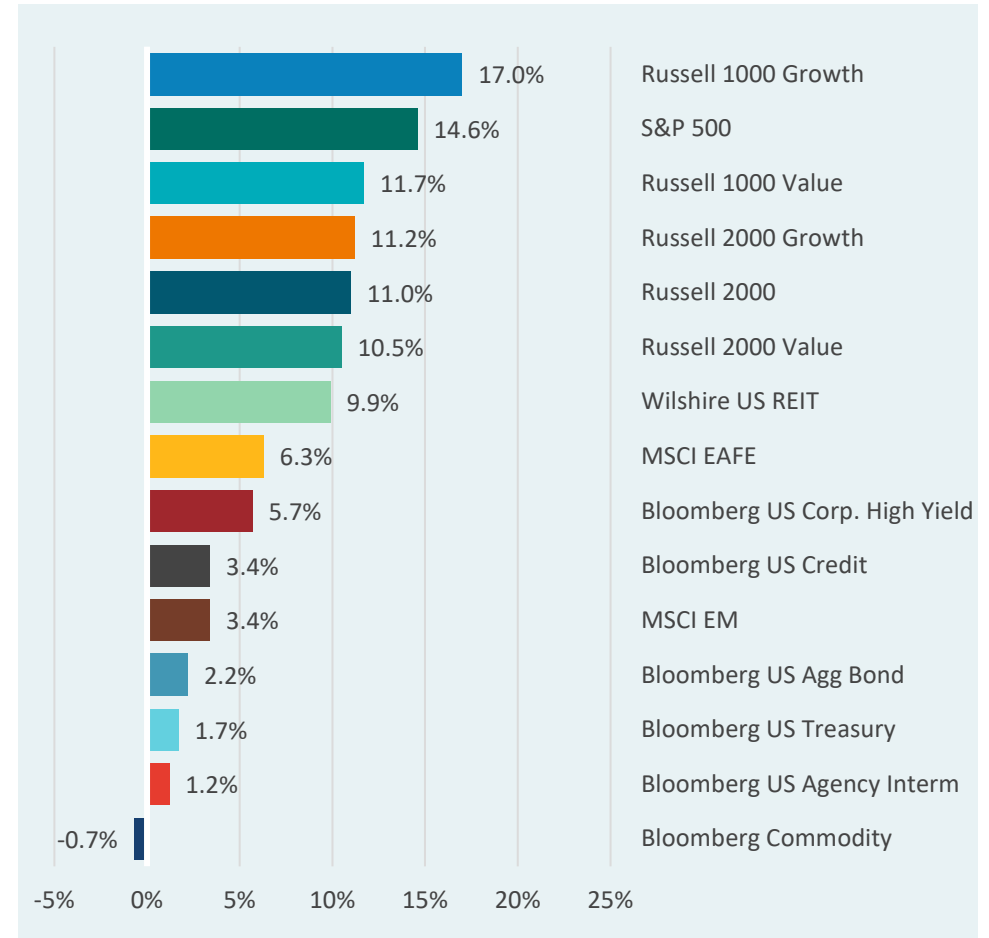
- The MSCI China Index fell -7.8% as continued Covid lockdowns in major cities dragged on markets. Shanghai became the target of lockdowns implemented under China's 'zero-covid' policy.
- Emerging markets (MSCI EM -2.3%) saw continued losses and were pulled lower by Eastern Europe (-5.8%) and Asia Pacific (-4.3%). In contrast, MSCI EM Latin America (+13.0%) gained as several regions benefited from lofty commodity prices.
- Russian markets reopened towards the end of the month but remain largely inaccessible to investors. Russian equities were stripped from many leading equity index providers. Markets have written down Russian equities to almost zero across most exchanges.

Major asset class returns

ONE YEAR ENDING MARCH



TEN YEARS ENDING MARCH



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

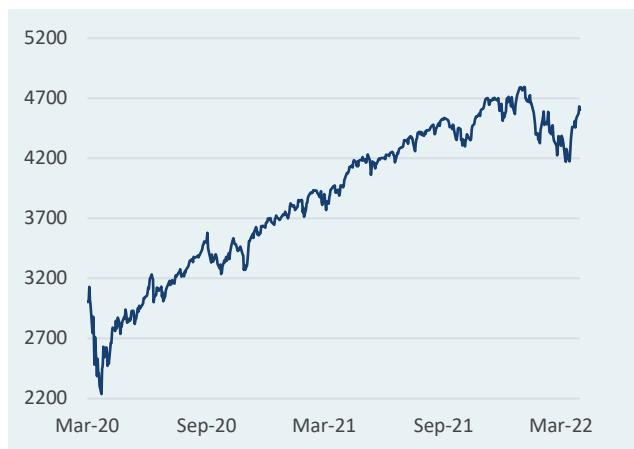
Source: Morningstar, as of 3/31/22

Source: Morningstar, as of 3/31/22

U.S. large cap equities

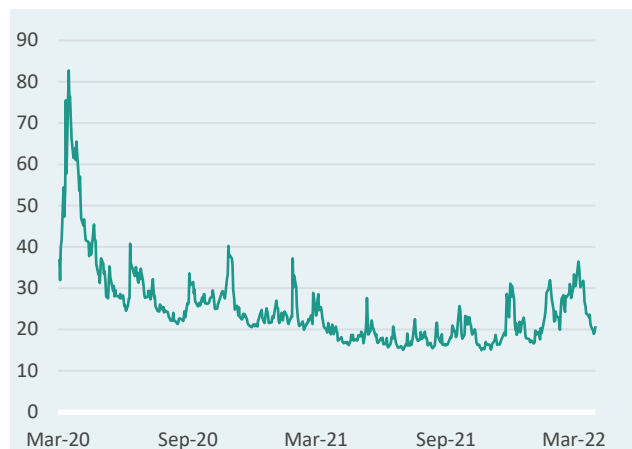
- The S&P 500 declined -4.5% from the start of the month to the lowest level in nine months before the large-cap equity index saw a strong rebound in the second half of the month and gained +8.6%. The index closed +3.7% higher relative to the end of February.
- Of the 11 S&P 500 (+3.7%) GICS sectors, the Financials sector (-0.2%) was the only sector to post a negative return, though the Communication Services (+1.0%) and Consumer Staples (+1.8%) sectors also weighed on the broader Index. Utilities (+10.4%), Energy (+9.0%), and Real Estate (+7.8%) all posted strong gains.
- The Financials sector (-0.2%) lagged the broader index partially due to the aggressive flattening of the yield curve. The shape of the yield curve is an important driver of profitability for many financial institutions, which typically borrow money at the short end and then lend out that money at the long end of the curve.
- The Cboe VIX Index of implied volatility of the S&P 500 Index ended the month at 20.6 after reaching an intra-month high of 36.5 – the highest level since January 2021. War in Ukraine raised volatility early in the month as the impact of sanctions and the supply of goods from the two countries rippled through markets.

S&P 500 PRICE INDEX



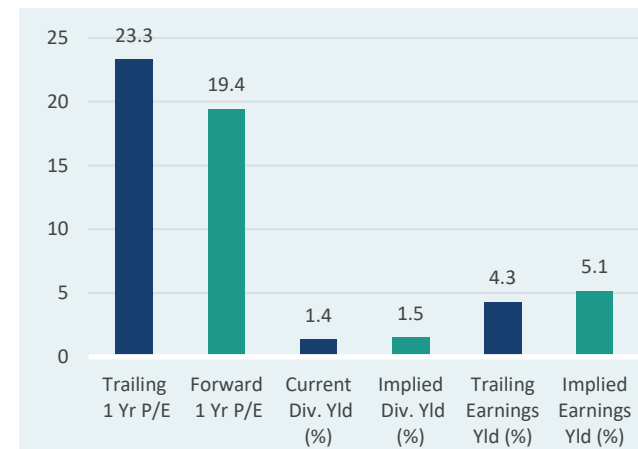
Source: Bloomberg, as of 3/31/22

IMPLIED VOLATILITY (VIX INDEX)



Source: Cboe, as of 3/31/22

S&P 500 VALUATION SNAPSHOT

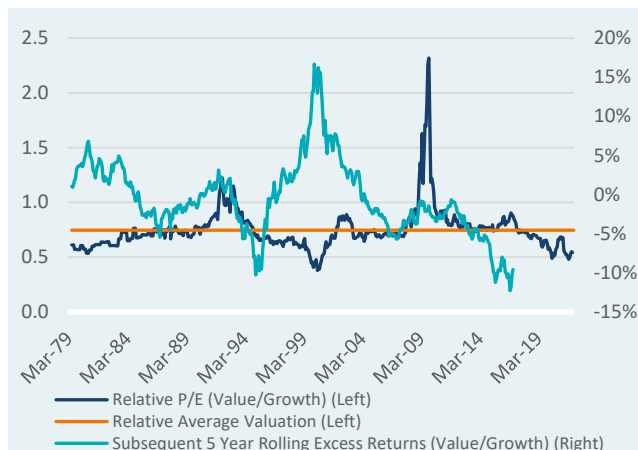


Source: Bloomberg, as of 3/31/22

Domestic equity size and style

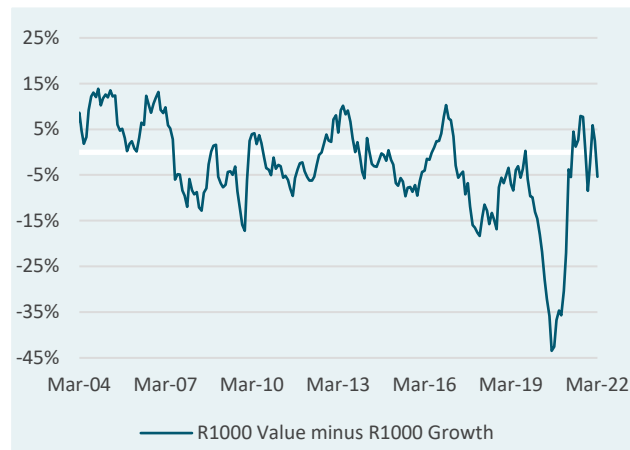
- Growth stocks (Russell 3000 Growth +3.7%) outperformed value stocks (Russell 3000 Value +2.8%) and reversed a trend of underperformance that was seen in the prior three months. The outperformance of the growth sector was concentrated in the Information Technology sector which contributed 1.5% to the total index's return.
- Large-cap companies (Russell 1000 +3.4%) beat small-cap companies (Russell 2000 +1.2%) across almost every sector. The only sector where smaller companies fared better was within the Energy sector where small-caps posted a +16.8% return.
- U.S. investors drove into defensive-style stocks (MSCI US Defensive Sectors +5.2%) which outpaced the more economic-data-driven cyclical stocks (MSCI US Cyclical Sectors +2.8%). Defensive companies tend to have products with demand more insulated from changing economic conditions and exhibit lower volatility and tend to exhibit higher returns in bear markets.
- S&P 500 High Beta Index (+0.8%) – an index that tracks 100 stocks most sensitive to changes in market returns in the S&P 500 – tends to lag in bear markets and ended behind the broader market (S&P 500 +3.7%).

VALUE VS. GROWTH RELATIVE VALUATIONS



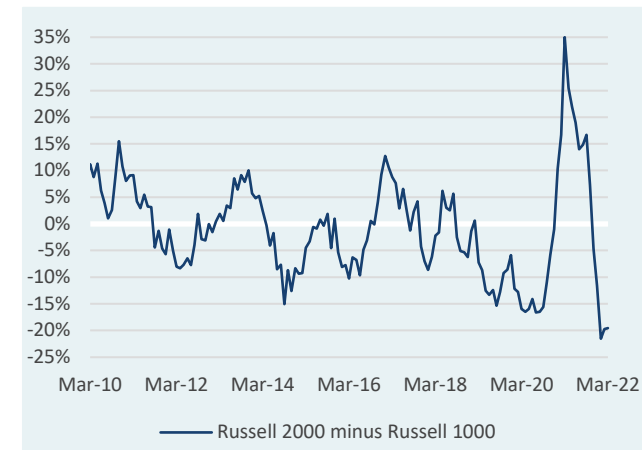
Source: FTSE, Bloomberg, as of 3/31/22

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 3/31/22

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

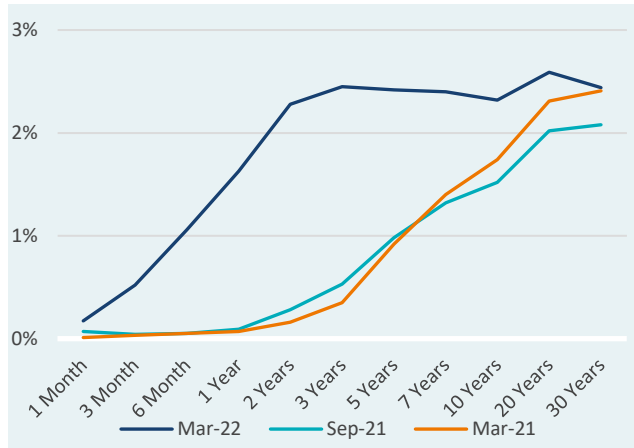


Source: FTSE, Bloomberg, as of 3/31/22

Fixed income

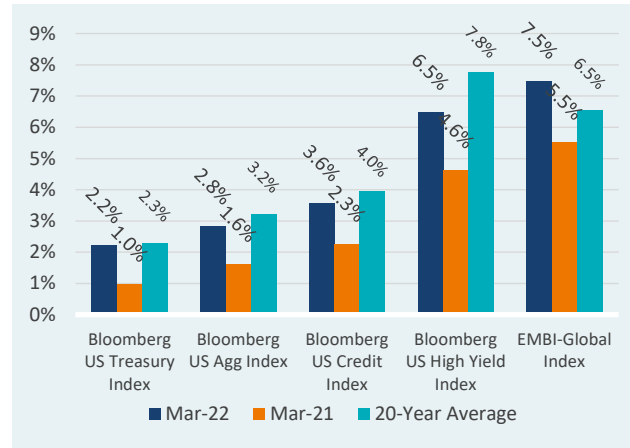
- Five-year breakeven inflation rates rallied 0.5% to 3.6% intra-month, the highest level since the measure began 20 years ago and closed at 3.4%. Soaring commodity prices amid ongoing fighting in Ukraine and continued heavy sanctioning of Russia likely stoked market expectations for higher inflation in the near-term.
- U.S. high-yield spreads climbed to 421 basis points in the first half of the month before compressing to 343 basis points. High-yield spreads and equity volatility have historically been correlated. Over the past several months high-yield spreads have not risen alongside equity volatility as much as they have in the past.
- High yield bonds (Bloomberg US Corporate High Yield -1.1%) underperformed leveraged loans (S&P/LSTA Leveraged Loan Index +0.0%). High-yield bonds lagged in part because bank loans hold covenants to float yields with interest rates and are thereby less sensitive to interest rate fluctuations.
- The spread between 10- and 2-year U.S. Treasury yields briefly inverted intra-month – a measure that some see as a sign of impending economic downturn. However, the lag between inversion and recession has varied widely from six months to three years over the last six recessions.

U.S. TREASURY YIELD CURVE



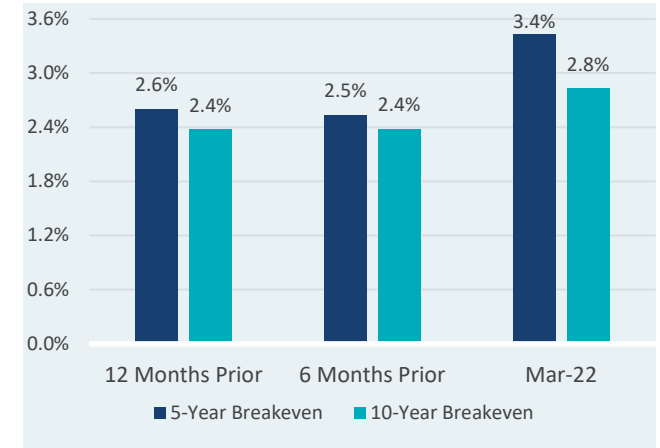
Source: Bloomberg, as of 3/31/22

NOMINAL YIELDS



Source: Morningstar, as of 3/31/22

BREAKEVEN INFLATION RATES

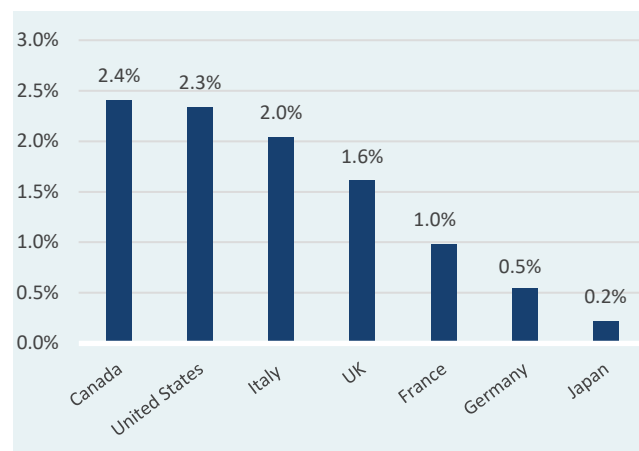


Source: Bloomberg, as of 3/31/22

Global markets

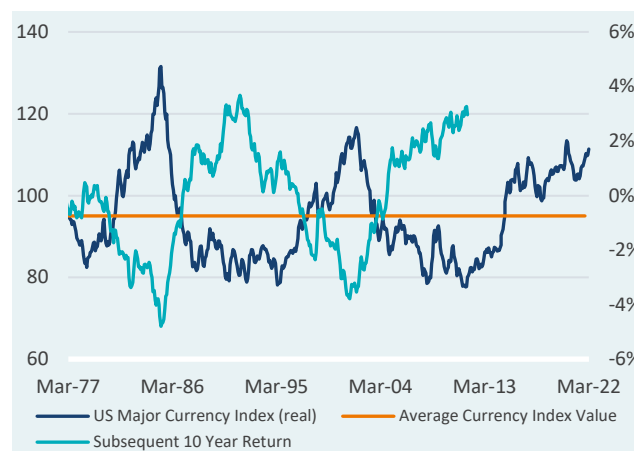
- World equities (MSCI ACWI ex US +0.2%) ended higher and posted monthly gains for the first time year-to-date. Gains were watered down by headwinds in emerging market equities (MSCE EM -2.3%) but were buoyed by developed markets (MSCI EAFE +0.6%).
- German bund yields posted the largest one-month rally since 2009 as near 40-year-high inflation data in the country likely fueled a sell-off in sovereign bonds and spurred increased expectations for rate action. The 10-year Bund yielded 55 basis points at month-end, compared to just 13 basis points one month prior.
- Within developed markets (MSCI EAFE +0.6%), Germany (MSCI Germany -1.9%) was a weak spot and weighed on European markets (MSCI Euro -1.7%). Japanese markets (MSCI Japan -0.5%) also fell despite sticking with easy monetary policy on a relative basis.
- The Bank of Japan initiated a series of government bond purchases to defend the 25-basis point cap on 10-year bond yields. Japan's effort to maintain loose monetary policy contrasts with the rising yield environments of other developed nations. The Yen depreciated -5.1% to its lowest level in over five years.

GLOBAL SOVEREIGN 10-YEAR YIELDS



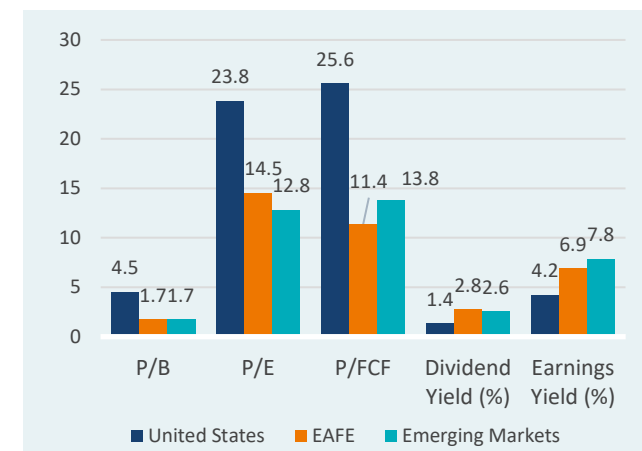
Source: Bloomberg, as of 3/31/22

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 3/31/22

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 3/31/22

Commodities

- The Bloomberg Commodity Index (+8.6%) continued to climb and ended Q1 up +25.5%, the largest quarterly return for the index since Q3 1990. Advances in the Energy (+16.1%) and Industrial Metals (+12.1%) subindices helped pull the overall index higher.
- European natural gas prices (+26.4%) rose after Putin announced ‘unfriendly’ countries would be forced to pay in Russian rubles for the commodity. Natural gas continued to flow from Russia to European counterparties through Ukraine despite the ongoing war and Russia has reportedly continued to pay Ukraine transit fees for gas flows.

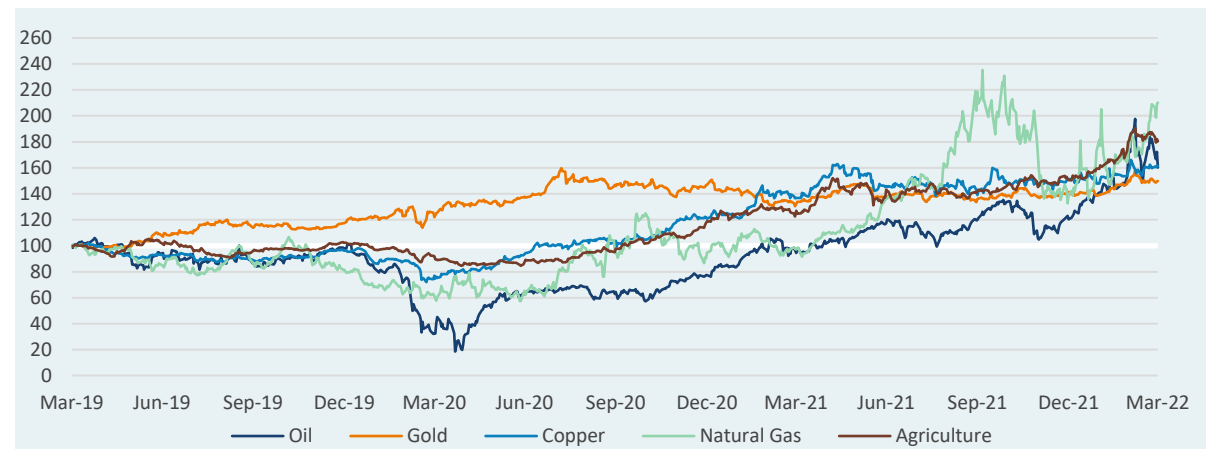
- The U.N. Food and Agriculture World Price Index surged 13% from the prior month, bringing the year-over-year advance to 33%. The index, which hit a record level in March, has been boosted by the disruption the Russo-Ukrainian war has caused in cereal crop markets.
- The Industrial Metals Sub-Index (+12.1%) was also helped higher by advances in Zinc (+14.4%), a metal commonly used in battery production. Nickel prices (+31.4%) also soared on the London Metal Exchange to begin a volatile month as an investor in China with a large short position – nearly 190,000 contracts – became the target of a short-squeeze.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	8.6	25.5	25.5	49.3	16.1	9.0	(0.7)
Bloomberg Agriculture	4.1	19.9	19.9	42.2	23.0	8.0	(0.4)
Bloomberg Energy	16.1	47.9	47.9	91.8	7.5	6.3	(6.2)
Bloomberg Grains	4.8	24.9	24.9	39.6	23.7	8.7	(0.4)
Bloomberg Industrial Metals	12.1	22.7	22.7	48.8	20.8	14.0	3.4
Bloomberg Livestock	1.2	5.8	5.8	4.0	(7.6)	(2.9)	(3.2)
Bloomberg Petroleum	11.6	43.8	43.8	90.7	14.1	12.8	(4.3)
Bloomberg Precious Metals	2.8	6.9	6.9	10.6	13.8	7.3	(0.4)
Bloomberg Softs	6.0	7.9	7.9	57.7	18.4	3.0	(4.0)

Source: Morningstar, as of 3/31/22

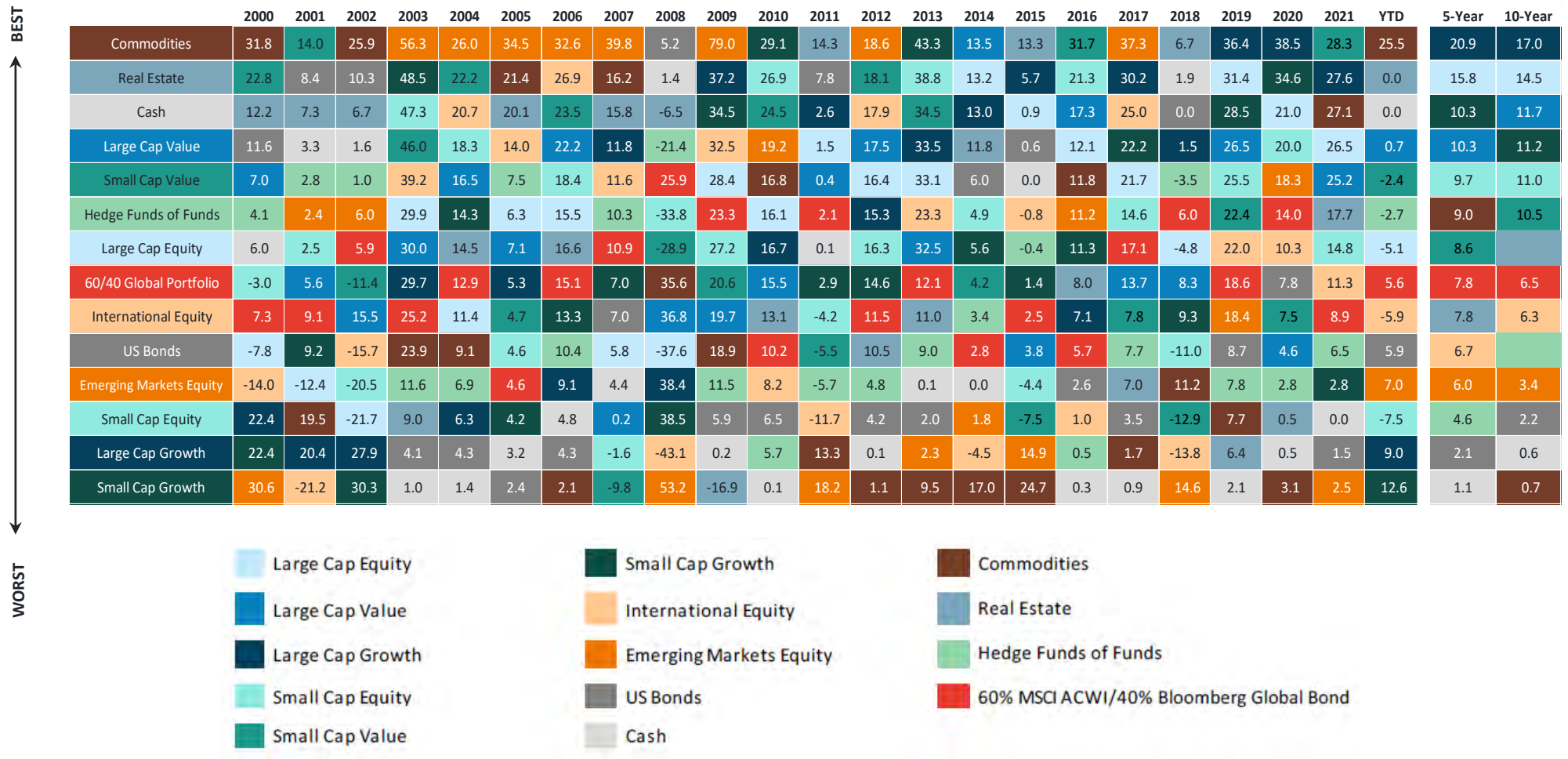
COMMODITY PERFORMANCE



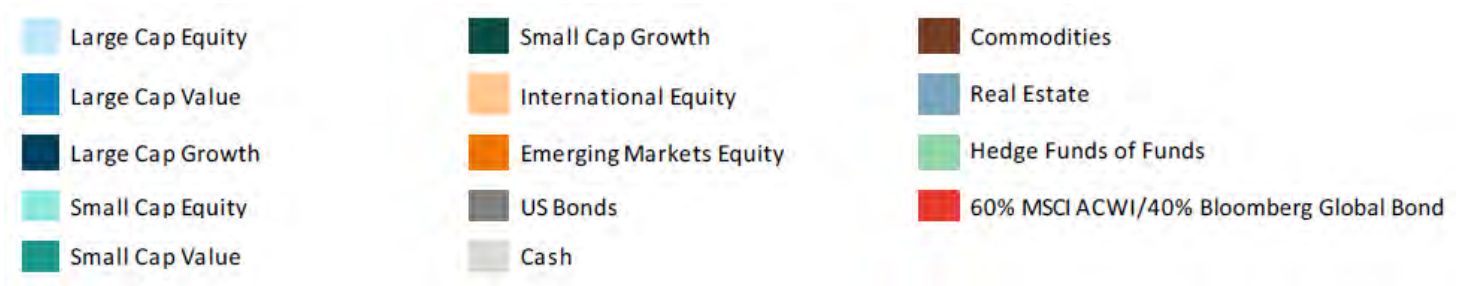
Source: Bloomberg, as of 3/31/22

Appendix

Periodic table of returns



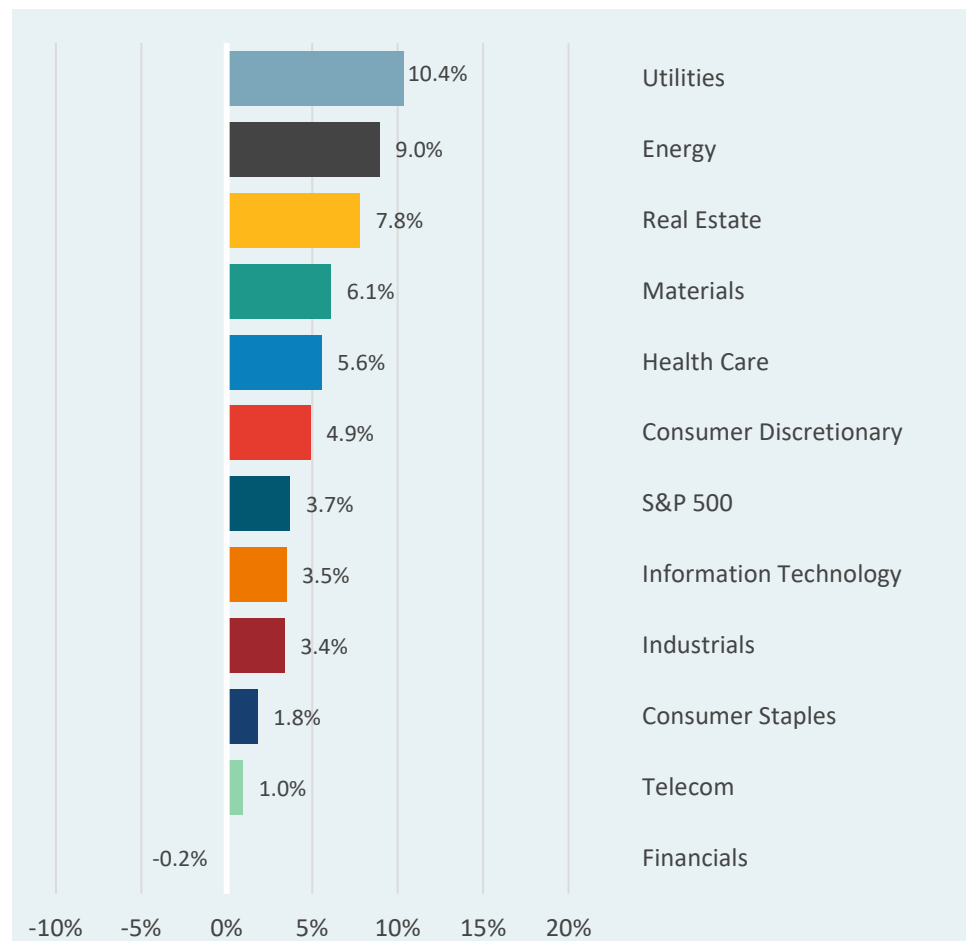
BEST
↑
↓
WORST



Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 12/31/21.

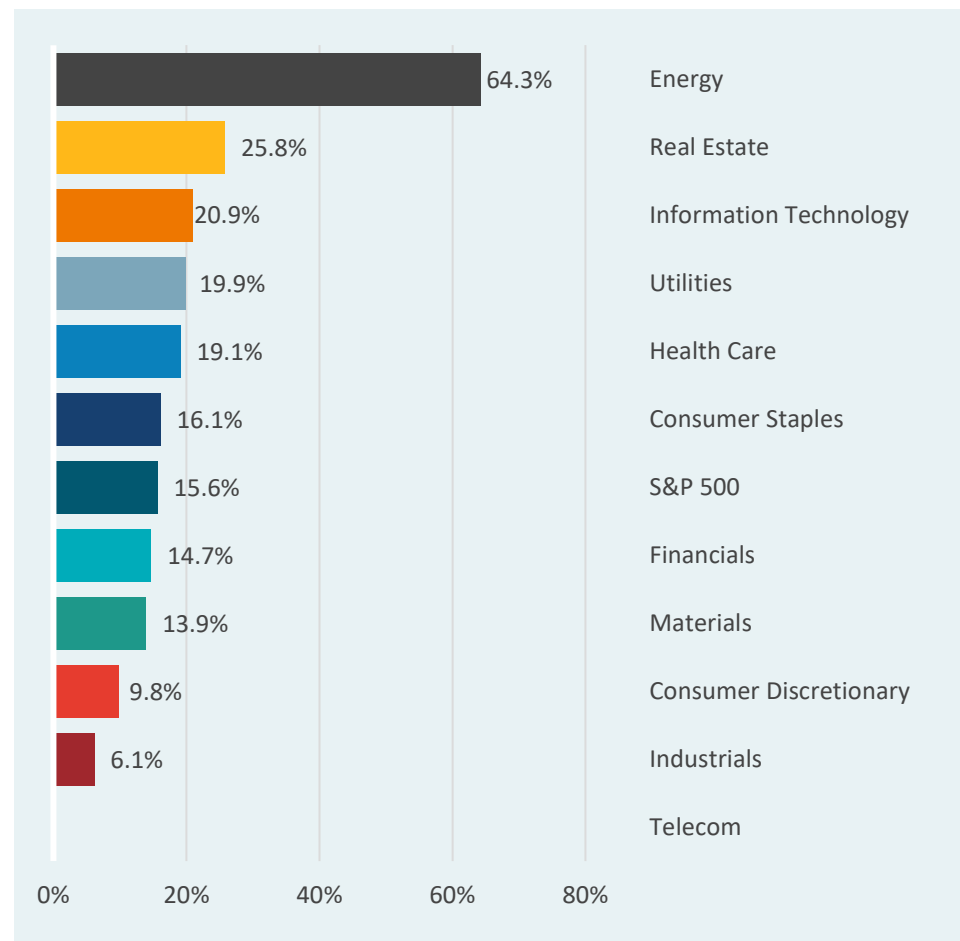
S&P 500 sector returns

Q1 2022



Source: Morningstar, as of 3/31/22

ONE YEAR ENDING MARCH



Source: Morningstar, as of 3/31/22

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	3.7	(4.6)	(4.6)	15.6	18.9	16.0	14.6
S&P 500 Equal Weighted	2.6	(2.7)	(2.7)	13.1	17.0	13.9	14.0
DJ Industrial Average	2.5	(4.1)	(4.1)	7.1	12.6	13.4	12.8
Russell Top 200	3.7	(4.9)	(4.9)	15.7	20.1	17.0	15.2
Russell 1000	3.4	(5.1)	(5.1)	13.3	18.7	15.8	14.5
Russell 2000	1.2	(7.5)	(7.5)	(5.8)	11.7	9.7	11.0
Russell 3000	3.2	(5.3)	(5.3)	11.9	18.2	15.4	14.3
Russell Mid Cap	2.6	(5.7)	(5.7)	6.9	14.9	12.6	12.9
Style Index							
Russell 1000 Growth	3.9	(9.0)	(9.0)	15.0	23.6	20.9	17.0
Russell 1000 Value	2.8	(0.7)	(0.7)	11.7	13.0	10.3	11.7
Russell 2000 Growth	0.5	(12.6)	(12.6)	(14.3)	9.9	10.3	11.2
Russell 2000 Value	2.0	(2.4)	(2.4)	3.3	12.7	8.6	10.5

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	2.2	(5.4)	(5.4)	7.3	13.8	11.6	10.0
MSCI ACWI ex US	0.2	(5.4)	(5.4)	(1.5)	7.5	6.8	5.6
MSCI EAFE	0.6	(5.9)	(5.9)	1.2	7.8	6.7	6.3
MSCI EM	(2.3)	(7.0)	(7.0)	(11.4)	4.9	6.0	3.4
MSCI EAFE Small Cap	(0.0)	(8.5)	(8.5)	(3.6)	8.5	7.4	8.3
Style Index							
MSCI EAFE Growth	0.6	(11.9)	(11.9)	(1.5)	9.8	8.9	7.5
MSCI EAFE Value	0.7	0.3	0.3	3.6	5.2	4.2	4.9
Regional Index							
MSCI UK	0.1	1.8	1.8	13.6	5.3	5.5	4.5
MSCI Japan	(0.5)	(6.6)	(6.6)	(6.5)	6.8	6.1	6.5
MSCI Euro	(1.7)	(11.1)	(11.1)	(3.4)	6.8	5.5	5.9
MSCI EM Asia	(3.1)	(8.7)	(8.7)	(15.2)	6.1	7.2	5.8
MSCI EM Latin American	13.1	27.3	27.3	23.5	3.2	4.1	(1.1)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	(1.9)	(3.0)	(3.0)	4.3	6.2	4.4	2.7
Bloomberg US Treasury Bills	(0.0)	(0.0)	(0.0)	(0.0)	0.8	1.1	0.6
Bloomberg US Agg Bond	(2.8)	(5.9)	(5.9)	(4.2)	1.7	2.1	2.2
Bloomberg US Universal	(2.7)	(6.1)	(6.1)	(4.2)	1.9	2.3	2.6
Duration							
Bloomberg US Treasury 1-3 Yr	(1.4)	(2.5)	(2.5)	(3.0)	0.8	1.0	0.8
Bloomberg US Treasury Long	(5.3)	(10.6)	(10.6)	(1.4)	3.3	3.9	4.0
Bloomberg US Treasury	(3.1)	(5.6)	(5.6)	(3.7)	1.4	1.8	1.7
Issuer							
Bloomberg US MBS	(2.6)	(5.0)	(5.0)	(4.9)	0.6	1.4	1.7
Bloomberg US Corp. High Yield	(1.1)	(4.8)	(4.8)	(0.7)	4.6	4.7	5.7
Bloomberg US Agency Interm	(2.1)	(3.7)	(3.7)	(3.9)	0.7	1.1	1.2
Bloomberg US Credit	(2.5)	(7.4)	(7.4)	(4.2)	2.8	3.2	3.4
OTHER							
Index							
Bloomberg Commodity	8.6	25.5	25.5	49.3	16.1	9.0	(0.7)
Wilshire US REIT	6.9	(3.9)	(3.9)	29.1	11.9	10.0	9.9
CS Leveraged Loans	0.0	(0.1)	(0.1)	3.2	4.1	4.1	4.5
S&P Global Infrastructure	5.9	7.5	7.5	16.7	8.0	7.7	7.8
Alerian MLP	2.0	18.9	18.9	37.5	1.4	(1.1)	1.2
Regional Index							
JPM EMBI Global Div	(0.9)	(10.0)	(10.0)	(7.4)	0.0	1.7	3.7
JPM GBI-EM Global Div	(1.5)	(6.5)	(6.5)	(8.5)	(1.1)	0.2	(0.7)
Hedge Funds							
HFRI Composite	(0.1)	(1.6)	(1.6)	2.6	8.3	6.2	5.1
HFRI FOF Composite	0.6	(2.7)	(2.7)	1.3	5.9	4.6	3.9
Currency (Spot)							
Euro	(0.9)	(2.2)	(2.2)	(5.3)	(0.3)	0.8	(1.8)
Pound Sterling	(1.9)	(2.8)	(2.8)	(4.6)	0.3	1.0	(1.9)
Yen	(5.1)	(5.1)	(5.1)	(9.0)	(3.0)	(1.7)	(3.8)

Source: Morningstar, HFRI, as of 3/31/22.

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	58.6	23.9	19.8	14.2
Global Private Equity Direct Funds *	52.3	26.6	22.7	17.4
U.S. Private Equity Direct Funds *	58.4	29.2	24.2	18.9
Europe Private Equity Direct Funds *	52.1	26.2	23.7	15.4
Asia Private Equity Direct Funds *	31.4	19.0	17.6	15.5

Public Index Time-weighted Returns				
MSCI World	28.8	13.1	13.7	12.7
S&P 500	30.0	16.0	16.9	16.6
MSCI Europe	27.3	7.8	8.8	8.2
MSCI AC Asia Pacific	18.3	8.5	9.6	8.3

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	25.3	10.7	10.6	12.6

Public Index Time-weighted Returns				
FTSE NAREIT Equity REIT	37.4	10.0	6.8	11.3

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	33.5	13.7	13.0	12.6

Public Index Time-weighted Returns				
S&P / LSTA U.S. Leveraged Loan 100 Index	6.7	3.9	4.3	4.7

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources ***	30.6	(2.4)	2.7	2.1
Global Infrastructure	14.8	10.4	11.2	10.4

Public Index Time-weighted Returns				
S&P Global Natural Resources	42.2	4.6	9.5	4.6
S&P Global Infrastructure	23.0	6.7	6.0	7.8

Source: Pooled IRRs are from Thompson Reuters C/A and Time-weighted Returns are from Investment Metrics, as of September 30th, 2021. 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: May 23, 2022

To: Board of Trustees

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

Agenda Item 6: Investment and Banking Authority

Recommendation:

Staff recommends that the Board approve and adopt the attached Resolution 2022-03 and accompanying Incumbency Certificate designating authorized signers for various investment and banking relationships.

Discussion:

SLOCPT updates the designated authorized signers for various investment and banking relationships approximately every six months so that recent documentation of such authorizations by the Board of Trustees is available if needed to execute documents of various sorts. These designations are necessary to the everyday operations of the SLOCPT.

Resolution 2022-03 and its referenced Incumbency Certificate are attached. The approval of a resolution of this type is anticipated to be a routine item before the Board of Trustees biannually or whenever authorized signers are changed.

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**SAN LUIS OBISPO COUNTY
PENSION TRUST**

PRESENT:

ABSENT:

RESOLUTION NO. 2022-03

A Resolution Affirming Investment and Banking Authority

Whereas, the San Luis Obispo County Pension Trust conducts investment and banking activities as part of its normal course of business and finds it necessary to affirm and/or appoint which of its officers and employees are authorized signers for such activities.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED AS FOLLOWS:

The attached San Luis Obispo County Pension Trust Investment and Banking Authority Incumbency Certificate dated May 23, 2022, is hereby approved.

Adopted: May 23, 2022

Approved as to Form and Legal Effect

Chris Waddell
General Counsel

SIGNED: _____

Jeff Hamm
President, Board of Trustees
San Luis Obispo County Pension Trust

ATTEST: _____
Carl Nelson, Executive Director

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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



Investment and Banking Authority Incumbency Certificate

Effective Date: May 23, 2022
Date of Certification: May 23, 2022

The undersigned, being an officer of the Board of Trustees of the San Luis Obispo County Pension Trust ("SLOCPT"), organized under the laws of the State of California does hereby certify on behalf of SLOCPT that the persons named below are officers or other designated staff members of SLOCPT and that the title and signature at the right of said name, respectively, are the true title and genuine signature of said person and that the persons listed below are each an authorized signatory for the SLOCPT for **any and all investment and banking related matters**. In addition, Carl A. Nelson as the Executive Director is designated as the Bank Contracting Officer.

<u>Name</u>	<u>Title</u>	<u>Signature</u>
Carl A. Nelson	Executive Director	_____
Amy Burke	Deputy Director	_____
Lisa Winter	Retirement Program Specialist	_____
Anna Bastidos	Retirement Program Specialist	_____

Furthermore, the undersigned does certify that the SLOCPT's Board of Trustees as of the date noted above are:

Gere Sibbach	Jeff Hamm
James Hamilton	Lisa Howe
Michelle Shoresman	Taylor Dacus
David Grim	

Signed: _____

Date: _____

Jeff Hamm, President
San Luis Obispo County Pension Trust
Board of Trustees

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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: May 23, 2022

To: Board of Trustees

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

Agenda Item 7: Stipulation for the Division of Pension Benefits – Option Four Pension Benefit Election

Recommendation:

It is recommended that the Board approve an Optional Settlement No. 4 as ordered in the attached draft of Stipulated Domestic Relations Order (DRO) Re: Division of San Luis Obispo County Pension Trust Retirement Plan Benefits and Allowances for Member William Miller. Legal counsel agrees with this recommendation.

Discussion:

The San Luis Obispo County Employees Retirement Plan (the “Plan”) provides for four different optional settlements, aside from the Unmodified Allowance. The Unmodified Allowance is the maximum allowance payable to a Member that also provides for a 50% continuance of monthly benefits to be paid to an eligible surviving spouse or registered domestic partner. Article 13: Options Available After Retirement of the Plan allows a Member to elect an actuarially reduced monthly benefit to provide for a larger continuing monthly allowance for their surviving spouse/registered domestic partner, or a continuance or lump sum payment to a named beneficiary that would not qualify as an eligible surviving spouse or registered domestic partner. The four alternative options are summarized as:

Option 1 – provides that any remaining employee contributions are paid to named beneficiary or beneficiaries upon the death of the Retiree.

Option 2 – provides a 100% continuance of the actuarially reduced monthly benefit to be paid to the named beneficiary upon death of the Retiree.

Option 3 – provides a 50% continuance of the actuarially reduced monthly benefit to be paid to the named beneficiary that is not a survivor/registered domestic partner upon death of the Retiree.

Option 4 – provides an **actuarially equivalent** continuance of monthly benefits to be paid to the named beneficiary upon the death of the Retiree (not greater than that available under Option 2). The terms of the Retirement Plan for Option 4 **require Board of Trustees approval.**

In this case, Mr. Miller is an active Member of the SLOCPT who has filed for dissolution of marriage. As part of the settlement of community property he and his former spouse (Alternate Payee) have agreed to a division of their interests with regards to the benefits provided by the SLOCPT that will occur at the time he retires from County service. The Alternate Payee will receive her portion of the monthly retirement allowance for her lifetime. When parties elect to split their interests at the point of retirement, the Alternate Payee's benefit under the Unmodified Allowance and Options 1, 2, and 3 ceases upon the death of the Retiree. As a result, Mr. Miller is required to elect **Option 4** at the time of his retirement to accommodate the continuing monthly benefit to his Alternate Payee at the time of his passing.

Attached, for your review is the draft DRO. This DRO establishes that Mr. Miller, upon retirement, must select **Option 4**. Mr. Miller's Unmodified Allowance will be calculated and then divided pursuant to that which is described in the order. At that time, the Alternate Payee's allowance will be further adjusted (reduced) using appropriate actuarial methods to reflect the Alternate Payee's life expectancy thus ensuring an actuarial equivalent benefit is distributed in a manner consistent with the Plan.

Also attached is a letter from Cheiron, SLOCPT's actuary, who has reviewed the DRO and has certified that it fulfills the definition of actuarial equivalence.

Respectfully submitted,

1 WILLIAM MILLER
2 2111 Laguna Negra
3 Arroyo Grande, CA 93420
4 (805) 710-3337
5 Wmiller0942@gmail.com

6 Self-Represented

7 SUPERIOR COURT OF THE STATE OF CALIFORNIA

8 COUNTY OF SAN LUIS OBISPO

9 In re Marriage of) Case No.: 19FL-0274
10)
11 Petitioner: WILLIAM MILLER) STIPULATED DOMESTIC RELATIONS
12) ORDER RE: DIVISION OF SAN LUIS
13 and) OBISPO COUNTY PENSION TRUST
14 Respondent: MICHELLE MILLER) RETIREMENT PLAN BENEFITS AND
15) ALLOWANCES
16)
17)
18)

19 Petitioner, WILLIAM MILLER, and Respondent, MICHELLE MILLER,
20 hereby stipulate as follows:

21 RECITALS

22 1. Petitioner and Respondent were married to each other on
23 March 6, 1999 (the "Date of Marriage"). They separated on March
24 6, 2019 (the "Date of Separation"), and this Court entered a
25 judgment of dissolution of marriage in the action on April 26,
26 2021.

27 2. This Court has personal jurisdiction over both
28 Petitioner and Respondent and jurisdiction over the subject
matter of this Order and the dissolution of marriage action. The
Pension Trust was properly joined as a party claimant to this
action pursuant to sections 2060 through 2065 of the California
Family Code.

1 3. The San Luis Obispo County Pension Trust (the "Pension
2 Trust") was formed, exists, and is administered under section
3 53215, et seq., of the Government Code and Chapter 2.56 of the
4 San Luis Obispo County Code and the Pension Trust By-Laws and
5 Pension Trust Retirement Plan ("Retirement Plan").

6 **IT IS HEREBY ORDERED BY THE COURT THAT:**

7 1. This Order is entered pursuant to the California Family
8 Code.

9 2. William Miller ("Member") and Michelle Miller
10 ("Alternate Payee") have acquired a community interest in
11 Member's rights under the Retirement Plan and attributable to the
12 Member's Pension Trust Service Credit from the Date of Marriage
13 up to the Date of Separation of the parties.

14 3. Surviving Spouse. The Court finds that, as of the
15 termination of marital status of the parties, the Member had not
16 retired from employment and that, therefore, the Alternate Payee
17 is not qualified as, and will not qualify to become the Member's
18 "Eligible Surviving Spouse" under Section 7.04(b) of the
19 Retirement Plan.

20 4. Calculation of the Community Property Interest. The
21 parties' community property interest in the Member's rights under
22 the Retirement Plan shall be a fraction:

23 a. Whose numerator is Member's Pension Trust Service
24 Credit accrued from:

25 i. The Date of Marriage of the parties, or

26 ii. The date of Member's entry into the Pension
27 Trust, whichever is later, and extending to:

28 iii. The Date of Separation of the parties, and

1 b. Whose denominator is Member's Pension Trust
2 Service Credit accrued from Member's entry into the Pension
3 Trust and extending to Member's Effective Date of
4 Retirement.

5 The resulting fraction shall be converted into a percentage
6 interest which shall be the community property interest (the
7 "Community Property Interest").

8 5. Calculation of the Alternate Payee's Share. The
9 Alternate Payee's share of the community property interest shall
10 be determined by multiplying the Community Property Interest by
11 one-half or fifty percent (50%).

12 6. Award of the Alternate Payee's Share. The Court
13 allocates and awards to the Alternate Payee, as the Alternate
14 Payee's sole and separate property, the Alternate Payee's Share
15 of the Community Property Interest in the Member's benefits under
16 the Retirement Plan.

17 The Alternate Payee's share of Member's plan allowances
18 and benefits under the Retirement Plan shall apply to, but not be
19 limited to, the Monthly Retirement Allowances paid to Member
20 during the Member's lifetime, the Alternate Payee's interest in
21 the Retirement Plan as a beneficiary of the Member and the
22 Alternate Payee's share of any Employee Additional Contribution
23 account in the name of Member. All Retirement Plan allowances and
24 benefits which are not awarded to the Alternate Payee pursuant to
25 this Order shall be the Member's sole and separate property.

26 If Member receives an Ordinary Disability Retirement or
27 Industrial Disability Retirement ("Disability Retirement
28 Benefit"), the Alternate Payee shall be entitled to a portion of

1 Members Disability Retirement Benefit equal to Alternate Payees
2 share of the amount Member would have received as a Service-
3 connected Retirement. Payment to Alternate Payee shall commence
4 on the latter of (1) the date Member would have reached his
5 earliest Date of Retirement under the Retirement Plan, or (2) the
6 date of Member's Effective Date of Retirement. The Community
7 Property Interest shall be applied to the Monthly Retirement
8 Allowance which would otherwise be paid to Member if Member had
9 retired on a Service-connected Retirement.

10 If Member retires on or is later approved for a
11 Disability Retirement Benefit, then pursuant to *In re Marriage of*
12 *Higinbotham* (1988) 203 Cal.App.3d 322, the tax benefit related to
13 Member's Disability Retirement Benefit shall be the separate
14 property of Member. However, pursuant to *Fernandez v. C.I.R.*
15 (2012) 138 TC No. 20 disability benefits paid to Alternate Payee
16 under a DRO are taxable to Alternate Payee even if tax free to
17 Member. Therefore, to the maximum extent possible, Alternate
18 Payee is awarded her share of the benefits from the taxable
19 portion of Member's benefit.

20 7. Member's Additional Contributions. In the event that
21 the Member has an Employee Additional Contribution account with
22 the Retirement Plan, the Alternate Payee's Share of that account
23 shall be paid to the Alternate Payee in accordance with Section
24 5.07 of the Retirement Plan.

25 8. Election of Retirement Allowance Method. At such time
26 as the Member applies to the Pension Trust for a Monthly
27 Retirement Allowance, the Member shall elect Optional Settlement
28 No. 4 as provided for under Article 13 of the Retirement Plan.

1 The Alternate Payee's Share of the Community Property Interest of
2 Member's Monthly Retirement Allowance (determined as an
3 unmodified Retirement Allowance under Article 6 of the Retirement
4 Plan) shall be converted from being paid for the lifetime of the
5 Member to being paid for the lifetime of the Alternate Payee. The
6 amount of the monthly benefit to the Alternate Payee (for the
7 Alternate Payee's lifetime) shall be the actuarial equivalent
8 (based on the actuarial assumptions of the Pension Trust) of the
9 Alternate Payee's share of the unmodified allowance.

10 If, on the effective date of the Member's retirement, the
11 Member is married and the Member's spouse is determined to be an
12 Eligible Survivor, then the Member's Retirement Allowance shall
13 be calculated as follows:

14 a. The unmodified allowance shall be determined in
15 accordance with the Retirement Plan formula applicable to
16 the Member on the date of retirement.

17 b. The Alternate Payee's portion of the unmodified
18 allowance shall be determined in accordance with the
19 provisions of this Order, specifically Section 4 and Section
20 5.

21 c. The Survivor Continuance portion of the Unmodified
22 Allowance (per section 7.02), which is payable to the
23 Member's spouse upon the Member's death after retirement
24 shall be determined based on the unmodified allowance that
25 remains after the award of the Alternate Payee's share of
26 the unmodified allowance has been determined.

27 d. In the case of the Member's death after
28 Retirement, the unmodified allowance payable to the

1 Alternate Payee as adjusted pursuant to this section shall
2 be paid for the remainder of the Alternate Payee's lifetime.

3 9. Payment of Retirement Allowance to the Alternate Payee
4 if the Member Retires. At such time as the Member retires and
5 commences receiving a Monthly Retirement Allowance from the
6 Pension Trust, the Alternate Payee shall commence receiving the
7 Alternate Payee's Community Property Interest of the Member's
8 Monthly Retirement Allowance by separate warrant directly from
9 the Pension Trust.

10 10. Payments to the Alternate Payee in the event of the
11 Member's Death Prior to Retirement.

12 a. Member is not qualified to retire. If the Member
13 dies before the Member is qualified to retire, then the
14 Alternate Payee shall be paid the Alternate Payee's
15 proportionate share of the death benefit provided for by
16 Section 7.03 of the Retirement Plan.

17 b. Member is qualified to retire. If the Member dies
18 after the Member is qualified to retire, and has an Eligible
19 Surviving Spouse at the time of death, and if the Eligible
20 Surviving Spouse elects to receive the death benefit
21 provided by Section 7.03 of the Retirement Plan then the
22 Alternate Payee shall be paid the Alternate Payee's
23 proportionate share of the death benefit provided for by
24 Section 7.03 of the Retirement Plan. The benefit payable to
25 the Eligible Surviving Spouse shall be adjusted to reflect
26 the payment of the Alternate Payee's share of the death
27 benefit.

1 11. Benefits Payable at Alternate Payee's Death. If the
2 Alternate Payee dies after payment of benefits to the Alternate
3 Payee has commenced pursuant to Paragraphs 8 and 9, all payments
4 shall cease, because the payments have been adjusted under Option
5 4 to be paid over the lifetime of the Alternate Payee.

6 The Alternate Payee shall have the right to name a
7 beneficiary in the event that the Alternate Payee dies prior to
8 the date that the Member retires, and shall do so as soon as
9 practicable after this Order is approved by the Court. If the
10 Alternate Payee dies prior to the date that payment of benefits
11 to the Alternate Payee has commenced, and if Member subsequently
12 dies before retirement, the Administrator shall pay the amount(s)
13 which would otherwise have been paid to the Alternate Payee
14 pursuant to Paragraph 10.a or 10.b, by separate warrant, directly
15 to the beneficiary designated by the Alternate Payee by filing a
16 Designation of Beneficiary form with the Administrator.

17 If the Alternate Payee dies prior to the date that payment
18 of benefits to the Alternate Payee has commenced, and if Member
19 subsequently receives a Monthly Retirement Allowance, the
20 Administrator shall pay the Alternate Payees Share of the
21 Community Property Interest of the Member's Monthly Retirement
22 Allowance (subject to any restrictions related to disability
23 retirement, as provided in Paragraph 6), by separate warrant,
24 directly to the beneficiary designated by the Alternate Payee.
25 Such payments shall cease upon the death of the member. If the
26 Alternate Payee designates the minor child(ren) of the parties as
27 beneficiary, then no monthly survivor benefits shall be payable
28 to said minor child(ren) pursuant to Section 704(b) of the Pension

1 Trust Retirement Plan during such time as said minor child(ren)
2 are receiving a retirement allowance as the beneficiary of the
3 Alternate Payee.

4 12. Right of Alternate Payee to Name a Beneficiary. The
5 Alternate Payee shall have the right to name a beneficiary, as
6 permitted by the terms of the Retirement Plan, to receive any
7 unpaid portion of the Community Property Interest awarded to
8 Alternate Payee under the terms of this order, in the event the
9 Alternate Payee predeceases the Member. Said beneficiary
10 designation shall be done in writing, in the form required by the
11 Retirement Plan.

12 13. Responsibility for Taxes. Member and the Alternate
13 Payee shall be responsible for, and pay, any taxes due in
14 connection with his or her receipt of distributions from the
15 Pension Trust. Accordingly, any benefit payments disbursed to the
16 Alternate Payee pursuant to this Order will be reported to the
17 Internal Revenue Service as income paid to the Alternate Payee.

18 14. Member Information. For the purpose of making any
19 retirement allowance or benefit payments provided by the terms of
20 this Order or providing any notice required by the terms of this
21 Order, Member's name, current mailing address, telephone number,
22 social security number and date of birth are as follows:

23
24 Name: William Miller

25 Address: Provided Under Separate Cover

26 Telephone No.: Provided Under Separate Cover

27 Social Security Number: Provided Under Separate Cover

28 Date of Birth: Provided Under Separate Cover

1
2 15. Alternate Payee Information. For the purpose of making
3 any retirement allowance or benefit payments provided by the terms
4 of this Order or providing any notice required by the terms of
5 this Order, Alternate Payee's name, current mailing address,
6 telephone number, social security number and date of birth are as
7 follows:

8
9 Name: Michelle Miller

10 Address: Provided Under Separate Cover

11 Telephone No.: Provided Under Separate Cover

12 Social Security Number: Provided Under Separate Cover

13 Date of Birth: Provided Under Separate Cover
14

15 16. Notice of change of address or telephone number shall
16 be made in writing to the Pension Trust, addressed as follows, or
17 as the Executive Secretary may specify in a written notice to
18 Member and Alternate Payee:

19 San Luis Obispo County Pension Trust
20 1000 Mill Street
21 San Luis Obispo, CA 93408

22 17. The Member and the Alternate Payee shall duly execute
23 all documents required to effect the distribution(s) described
24 herein and the intent of this Order.

25 18. Alternate Payee and Alternate Payee's agents and
26 attorneys are authorized to receive information from the Pension
27 Trust concerning Member's allowances and benefits as may be needed
28 to establish Alternate Payee's account.

1 19. Member shall act as constructive trustee of any
2 benefits assigned to the Alternate Payee under this Order which
3 may be paid to or received by the Member. Member, as trustee,
4 shall promptly pay or transmit any such benefits to the Alternate
5 Payee at the Alternate Payee's last known address.

6 20. Alternate Payee shall act as constructive trustee of
7 any benefits assigned to the Member under this Order which may be
8 paid to or received by the Alternate Payee. The Alternate Payee,
9 as trustee, shall promptly pay or transmit any such benefits to
10 the Member at Member's last known address.

11 21. This Order shall be administered and interpreted in
12 conformity with the laws governing the Pension Trust, the By-Laws
13 and Retirement Plan and other applicable law. If such laws, By-
14 Laws, or Retirement Plan are amended, then Member and Alternate
15 Payee shall immediately take the steps necessary to amend this
16 Order to comply with any such amendments, changes and/or
17 modifications, or, if permissible under any such change,
18 amendment or modification to the Pension Trust laws, the Executive
19 Secretary may treat this Order as acceptable. Member and Alternate
20 Payee shall be responsible for any of the costs and/or expenses
21 associated with such amendment to this Order.

22 22. Member, Alternate Payee and the Court intend that this
23 Order meet all requirements of a domestic relations order under
24 the Pension Trust laws and other laws of the State of California,
25 and the Court shall reserve jurisdiction to enforce the terms of
26 this Order and to resolve any disputes that may arise among the
27 parties and the Executive Secretary concerning benefit payments
28 or any other aspect of this Order. If any portion of this Order

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1 is rendered invalid or otherwise unenforceable, the Court
2 reserves jurisdiction to make an appropriate adjustment to
3 effectuate the intent of the parties. Any future fees, taxes
4 and/or penalties will be assessed against the parties who then
5 have an interest payable from the Pension Trust.

1 23. This Stipulation and Order shall not expand the
2 contractual or statutory obligations, whether substantive or
3 procedural, of the Pension Trust with respect to paying the above
4 allowances and/or benefits.
5

6 **IT IS SO STIPULATED:**
7
8

9 Date: _____

William Miller
Petitioner

11
12
13 Date: _____

Michelle Miller
Respondent

14
15 **APPROVED AS TO FORM:**
16

17 Date: 4/6/22

Carl Olson

Executive Secretary
San Luis Obispo County Pension
Trust

18
19
20 **ORDER**

21 The parties having stipulated thereto and good cause
22 appearing therefore.
23

24 **IT IS SO ORDERED.**
25

26 Date: _____

Judge of the Superior Court

Via Electronic Mail

April 15, 2022

Mr. Carl Nelson
Executive Director
San Luis Obispo County Pension Trust
1000 Mill Street
San Luis Obispo, California 93408

Re: Miller Domestic Relations Order No. 19FL-0274

Dear Carl:

The purpose of this letter is to confirm that the DRO issued by the Superior Court of California, County of San Luis Obispo, in regard to the member (William Miller) and his Alternate Payee (Michelle Miller) fulfills the definition of actuarial equivalence. In particular, this DRO includes the Option 4 benefit.

The alternate payee's unmodified allowance will be adjusted for the alternate payee's expected lifetime to create an actuarial equivalent benefit according to Section 13.05 of the By-Laws and Retirement Plan of the San Luis Obispo County Pension Trust, including revisions through December 26, 2021.

If you have any questions or need additional information, please feel free to e-mail me at aharper@cheiron.us or call me at 1-877-243-4766, ext. 1107.

Sincerely,
Cheiron



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

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Pension Trust

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



Date: May 23, 2022

To: Board of Trustees

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

Agenda Item 15: January 1, 2022 Experience Study - Presentation by Anne Harper and Alice Alsberghe of Cheiron

Recommendation:

Receive the presentation and discuss the recommendations of SLOCPT's actuary in the 2022 Experience Study. The Board of Trustees may direct the Actuary relative to specific components of the 2022 Experience Study.

Staff recommends that the Board of Trustees receive and file the 2022 Experience Study after such discussion.

The specific direction to the Actuary on assumptions to use in finalizing the 2022 Annual Actuarial Valuation will be covered in a separate agenda item at this meeting.

Discussion:

It is the policy of SLOCPT to have an annual Actuarial Valuation to set the total level of contributions necessary to fund the retirement system – the Total Combined Actuarially Determined Contribution (Total ADC). In support of that annual Actuarial Valuation, SLOCPT has performed a biennial Actuarial Experience Study. In these Experience Studies the Actuary analyzes the trailing five years of Plan demographic and financial experience to determine what actuarial assumptions to recommend to the Board of Trustees to use in the annual Actuarial Valuation.

The attached presentation and draft Experience Study report summarizes the findings of the December 31, 2021, Actuarial Experience Study.

Expected Results:

In the attached presentation –

- The results of the preliminary 2022 Actuarial Valuation indicate a recommended pension contribution rate change of -0.48% assuming no changes to current Actuarial Assumptions (page 4). Recommended decrease is primarily due to Actuarial Investment gains offset by the Plan's demographic experience (page 5).
- Proposed economic assumption changes include increasing the Inflation assumption from 2.250% to 2.500%. The Plan's current Discount Rate (real return + inflation) of 6.75% is reasonable. By increasing the Inflation assumption and not changing the Discount Rate the Real Rate of Return assumed will decline from 4.50% to 4.25%. These assumption changes are estimated to increase the recommended pension contribution rate change by 2.62%.
- Proposed Demographic Assumption changes include updating mortality tables, basing retirement and termination rates on attained service rather than attained age, increasing late career salary increases for merit, and decreasing the assumed the percentage of individuals retiring with eligible spouses. These assumption changes are estimated to increase the recommended rate change by 0.33%.
- Additional options include further reducing the assumed rate of return from 6.75% to 6.625% or 6.50%. This change are estimated to further increase the recommended pension contribution rate change by 1.54% or 3.10% respectively.

Following the approval of actuarial assumptions in a separate Board of Trustees item, Cheiron will finalize the 2022 Actuarial Valuation and present it for approval at the June 27th Board of Trustees meeting.

Attachments:

1. Presentation – 1/1/2022 Preliminary Actuarial Valuation Results and Experience Study as of 12/31/2021
2. Report – draft 2022 Actuarial Experience Study

San Luis Obispo County Pension Trust



January 1, 2022 Preliminary Actuarial Valuation Results and 2022 Experience Study

May 23, 2022

Anne D. Harper, FSA, MAAA, EA
Alice I. Alsberghe, ASA, MAAA, EA





Preliminary 2022 Valuation Results

2022 Baseline Projections

Economic Assumptions

Demographic Assumptions

Cost Impact of Proposed Assumption Changes

Preliminary 2022 Valuation Results



- Total actuarially determined contribution rate decreased from 50.34% to 49.49% of pay, a decrease of 0.85% of pay
- Funded ratio increased:
 - 67.7% to 72.3% (market value basis)
 - 65.1% to 67.0% (actuarial value basis)
- Investment returns, net of investment expenses only:
 - 13.6% on a market value basis
 - 9.5% on an actuarial value basis
- Market value of assets about 8.0% higher than actuarial value of asset; \$129 million in deferred asset gains!

Preliminary 2022 Valuation Results



Summary of Key Valuation Results (in thousands)			
	January 1, 2021	January 1, 2022	Change
Membership			
Actives	2,747	2,776	1.1%
Retirees and Beneficiaries	3,070	3,172	3.3%
Inactives	<u>799</u>	<u>861</u>	7.8%
Total	6,616	6,809	2.9%
Total Projected Payroll	\$ 214,044,000	\$ 224,010,000	4.7%
Average Pay	77,919	80,695	3.6%
Funded Status			
Actuarial Liability	\$ 2,313,128	\$ 2,420,054	4.6%
Actuarial Value of Assets (AVA)	<u>1,506,270</u>	<u>1,620,640</u>	7.6%
Unfunded Actuarial Liability (UAL)	\$ 806,858	\$ 799,414	-0.9%
Funding Ratio (AVA Basis)	65.1%	67.0%	1.9%
Market Value of Assets (MVA)	\$ 1,566,326	\$ 1,749,963	11.7%
Unfunded Actuarial Liability (MVA Basis)	746,802	670,091	-10.3%
Funding Ratio (MVA Basis)	67.7%	72.3%	4.6%
Actuarially Determined Contributions			
Total Normal Cost	20.99%	20.65%	-0.34%
Administrative Expenses	1.07%	1.05%	-0.02%
Unfunded Actuarial Liability Payment			
Interest	23.55%	20.19%	-3.36%
Principal	<u>4.73%</u>	<u>7.60%</u>	<u>2.87%</u>
Total	28.28%	27.79%	-0.49%
Total Actuarially Determined Contribution	50.34%	49.49%	-0.85%

Preliminary 2022 Valuation Results



Components of Actuarially Determined Contribution Rate and Reconciliation of Charged Rate

Valuation Date	January 1, 2021	January 1, 2022
Actuarially Determined Contribution Rate		
1. Gross Normal Cost	20.99%	20.65%
2. Employee Contributions	<u>16.89%</u>	<u>17.54%</u>
3. Employer Normal Cost [(1) - (2)]	4.10%	3.11%
4. UAL Amortization Payment	<u>28.28%</u>	<u>27.79%</u>
5. Employer Contribution Rate [(3) + (4)]	32.38%	30.90%
6. Administrative Expenses	<u>1.07%</u>	<u>1.05%</u>
7. Total Actuarially Determined Contribution [(1) + (4) + (6)]	50.34%	49.49%
Reconciliation of Charged Rate		
8. Employer Charged Rate	27.00%	30.41%
9. Member Charged Rate	<u>17.05%</u>	<u>17.18%</u>
10. Total Charged Rate [(8) + (9)]	44.05%	47.59%
11. Increase to Charged Rate ¹	<u>4.13%</u>	<u>2.39%</u>
12. Total Charged Rate as of January 1 [(10) + (11)]	48.18%	49.98%
13. Recommended Rate Change as of January 1 [(7) - (12)]	2.16%	-0.48%

¹ The recommended rate increase as of January 1, 2021 was 2.16%. However, the rate increase will be implemented on July 1, 2022, except for APCD who implemented on January 1, 2022. Therefore, it was increased to 2.39%. The recommended rate increase as of January 1, 2020 was 3.60%. However, the rate increase was implemented on July 1, 2021. Therefore, it was increased to 4.13%.

Changes Since Last Valuation



Actuarially Determined Contribution (ADC) Rate Reconciliation

	Normal Cost	Admin Expenses	UAL Payment	Total
Total ADC as of January 1, 2021	20.99%	1.07%	28.28%	50.34%
Actuarial investment gain	0.00%	0.00%	-1.26%	-1.26%
Tier 3 (PEPRA) new hires	-0.32%	0.00%	0.00%	-0.32%
Effect of payroll growth	0.00%	-0.02%	-0.51%	-0.53%
Contribution timing lag	0.00%	0.00%	0.26%	0.26%
Demographic experience	-0.02%	0.00%	1.02%	1.00%
Assumption changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
Total Change	-0.34%	-0.02%	-0.49%	-0.85%
Total ADC as of January 1, 2022	20.65%	1.05%	27.79%	49.49%

- Demographic experience losses were primarily due to higher COLA for retirees (3.0% actual compared to 2.5% assumed for Tier 1) and salary increases for actives above expectations
- Salary experience resulted in larger payroll growth than expected (4.7% compared to 2.75%); since UAL payments increase at the assumed payroll growth rate, UAL payments as a percentage of payroll decreased

Changes Since Last Valuation



Change in Unfunded Actuarial Liability (in thousands)

Unfunded Actuarial Liability, January 1, 2021	\$ 806,858
Expected change in Unfunded Actuarial Liability	(10,345)
Decrease due to actuarial asset gain	(38,923)
Increase due to liability loss	31,692
Increase due to contribution timing delay and expenses	<u>10,132</u>
Total Decrease in UAL	\$ (7,444)
Unfunded Actuarial Liability, January 1, 2022	\$ 799,414

- Contributions exceeded the interest on the UAL plus normal cost (active member benefits accruing for the next year) by \$10 million compared to \$5 million last year
- Actuarial asset gain only includes \$22 million of the \$108 million gain for FYE 2021

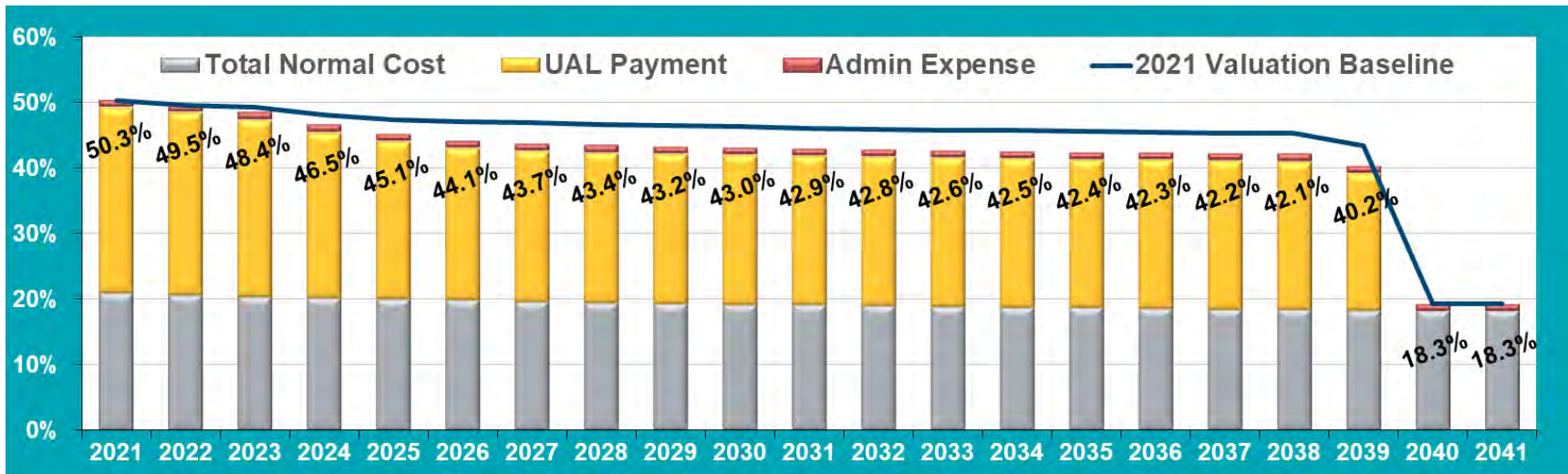
Projections





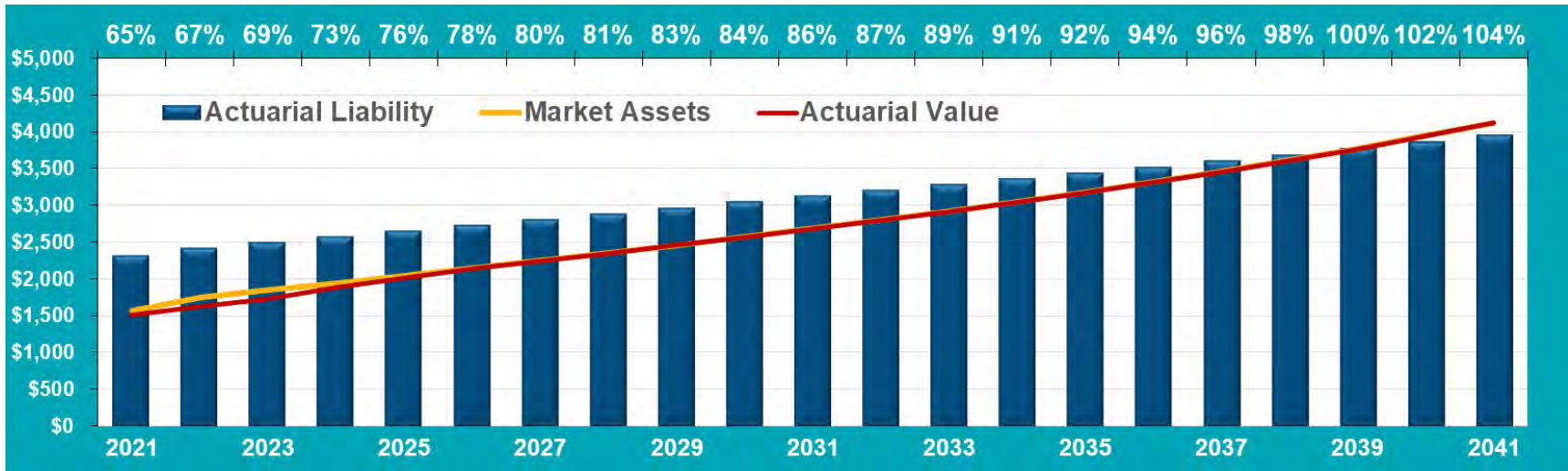
- Assume the return on the Market Value of Assets is 6.75% each and every year in the projection period
- All other actuarial assumptions are assumed to be met each and every year
- Actuarially Determined Contribution (ADC) rate will be paid by employers and members
- Stable active population; PEPRA members will replace legacy members when they leave active employment
 - Payroll expected to grow by 2.75% per year

2022 Projections – Total Contribution Rate

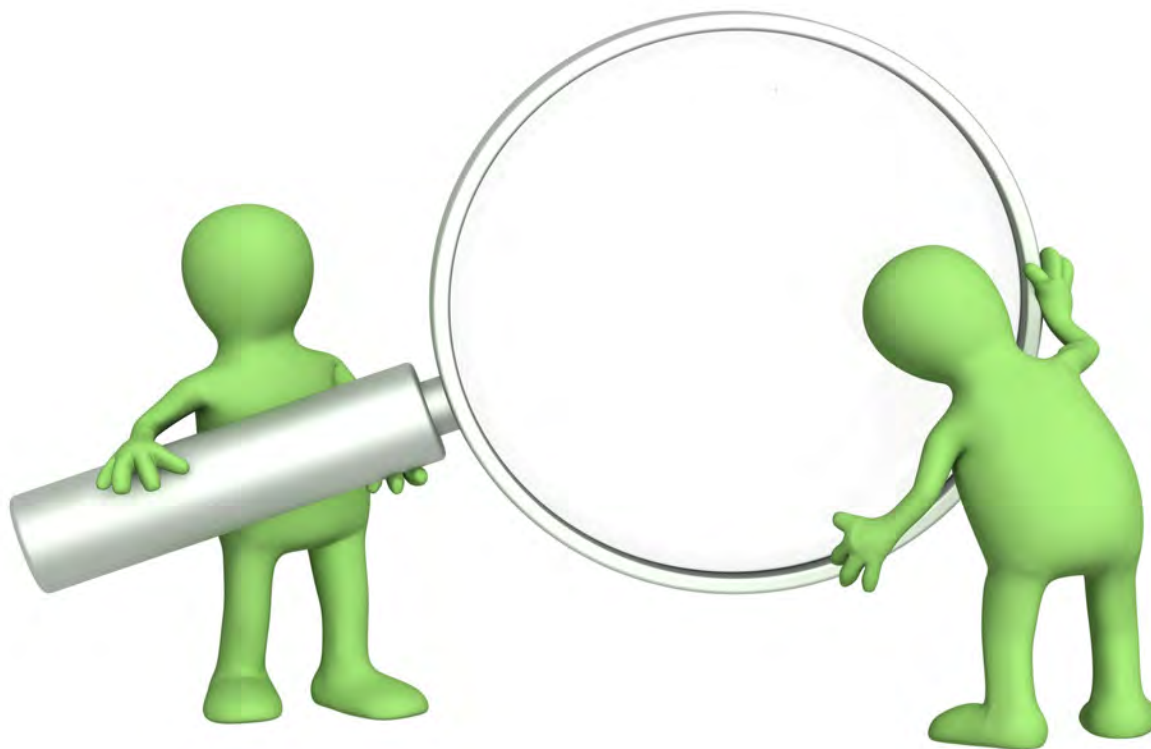


- Total contribution rate (ADC) for 2022 is 49.5% with future rates expected to be lower than the projections from the 2021 valuation
- Contribution rates are projected to decline as the \$129 million in deferred asset gains are recognized over the next four years (by 2026)
- Normal cost rate declines very gradually over the projection period from 20.7% in 2022 to 18.3% in 2041 as new hires continue to enter the PEPRA Tier

2022 Projections – Funded Ratio



- SLOCPT is projected to make steady funding progress (2% to 3% per year) over the period shown; the Trust is expected to reach 80% in 2027
- UAL payment is large enough to pay down interest and principal
- Current funding policy is sufficient for SLOCPT to reach full funding by 2039



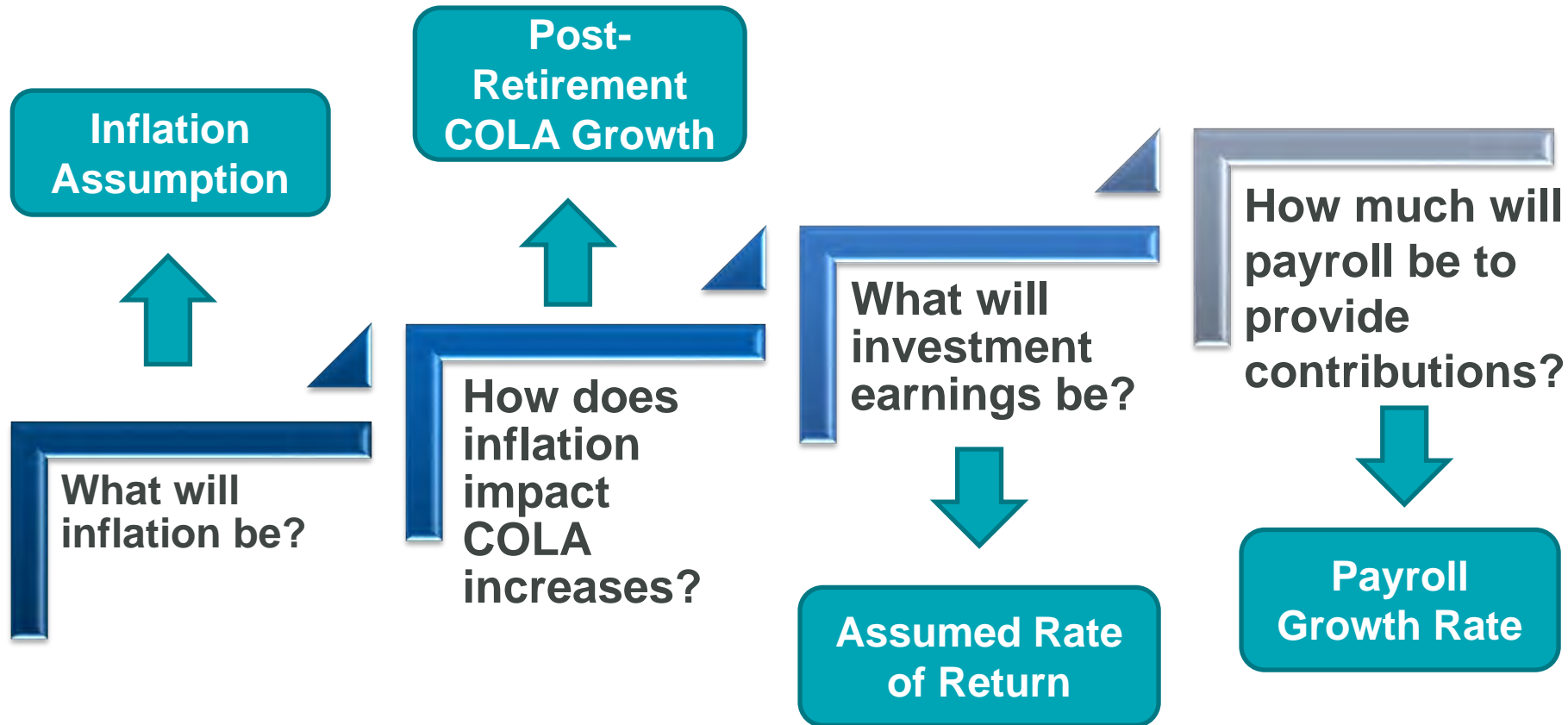
Experience Study Overview



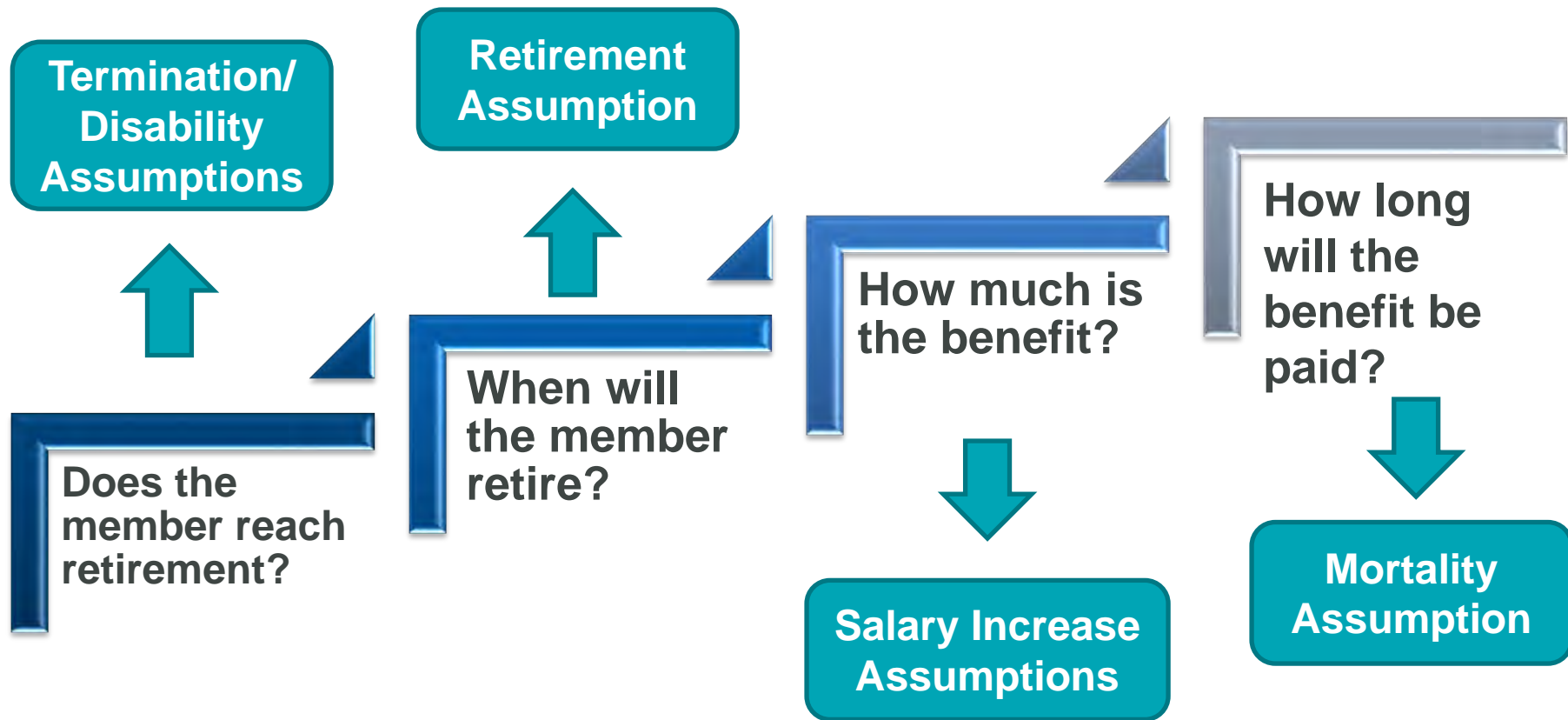
- Study is performed every 2 years
- Assumptions needed to form best estimate of each member's projected benefits and actuarial liability
- Ultimate cost of benefits depend on **actual** experience
 - Actual investment returns and participant behavior
 - Actual benefits paid are not affected by actuarial assumptions
- Good assumptions produce level costs



Actuarial Assumptions - Economic

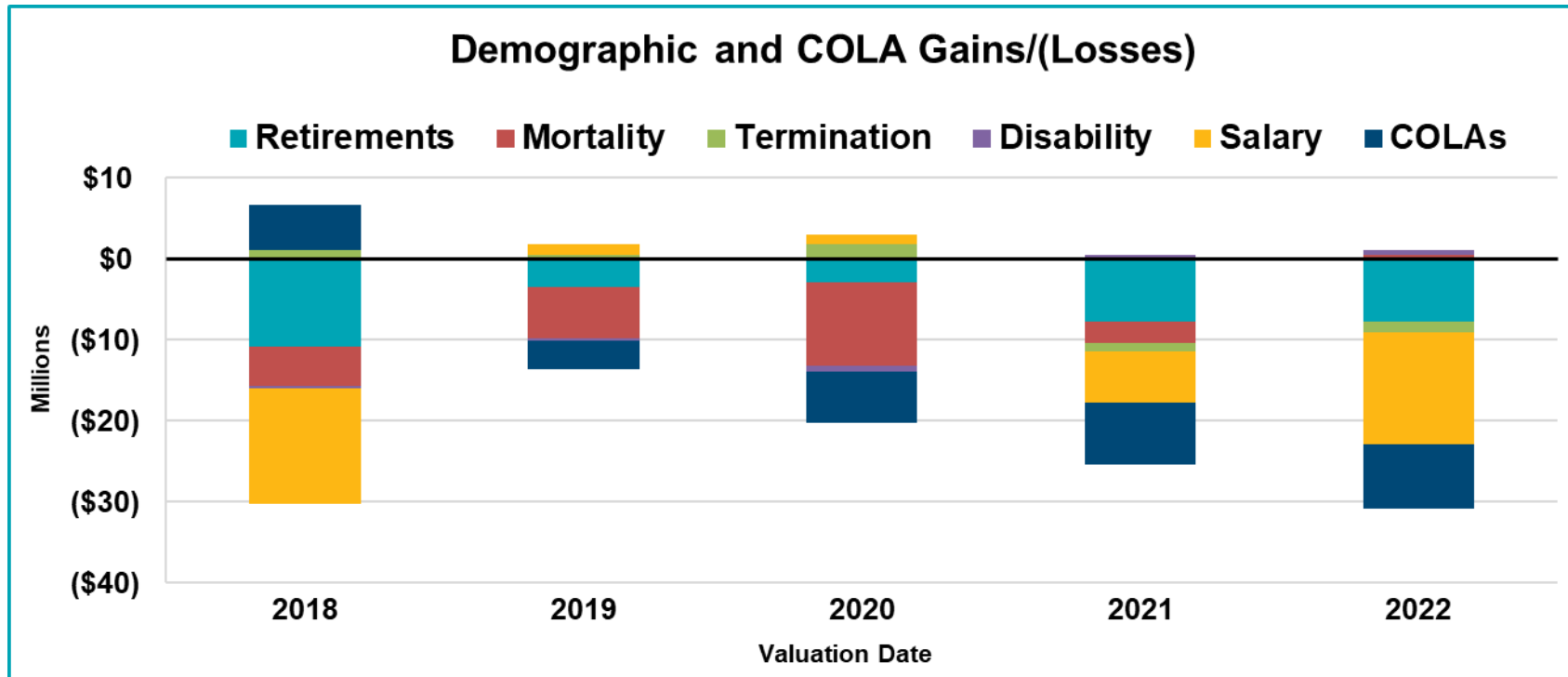


Actuarial Assumptions - Demographic





Sources of Demographic Gains and Losses



Sources of Gains/Losses Including Assets



Historical Actuarial Gain/(Loss) Analysis

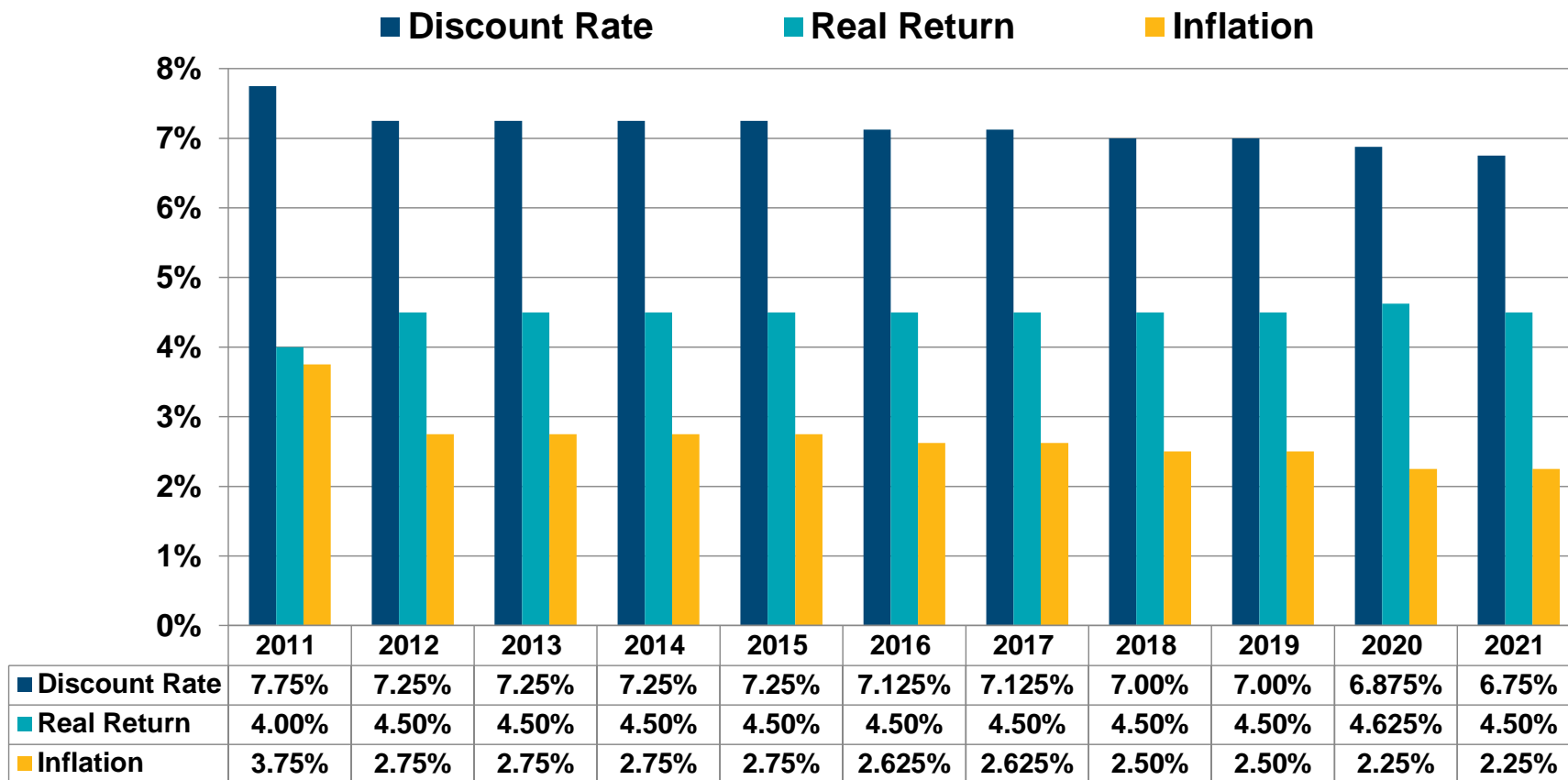
(in millions)

	2017	2018	2019	2020	2021	Total
Demographic Assumptions						
Retirement	(\$10.9)	(\$3.5)	(\$2.9)	(\$7.7)	(\$7.7)	(\$32.8)
Mortality ¹	(4.8)	(6.3)	(10.3)	(2.6)	0.5	(23.6)
Salary Merit Increase	(14.4)	1.4	1.2	(6.3)	(13.8)	(31.9)
Termination	1.0	0.4	1.8	(1.2)	(1.4)	0.7
Disability	(0.2)	(0.3)	(0.7)	0.5	0.5	(0.1)
Economic Assumptions						
Cost of Living Adjustments	5.7	(3.6)	(6.4)	(7.7)	(8.0)	(19.9)
Actuarial asset experience	(14.3)	(43.7)	(17.9)	13.5	38.9	(23.6)

¹ Includes retiree data changes in 2014 - 2019



Economic Assumptions History



Proposed Economic Assumptions



- Current assumptions
 - Expected return / Discount rate: 6.75%
 - Price inflation: 2.25%
 - Real rate of return: 4.50%
 - Wage Inflation: 2.75%
 - COLA growth rate: 2.50% (Tier 1); 2.0% (Tiers 2&3)
- We propose reducing the real rate of return by 0.125% or 0.25%
- How can this be accomplished?
 - Increasing price inflation, keeping discount rate at 6.75%
 - Reducing the discount rate, keeping inflation at 2.25%
 - A combination of increasing price inflation and reducing the discount rate

Price Inflation





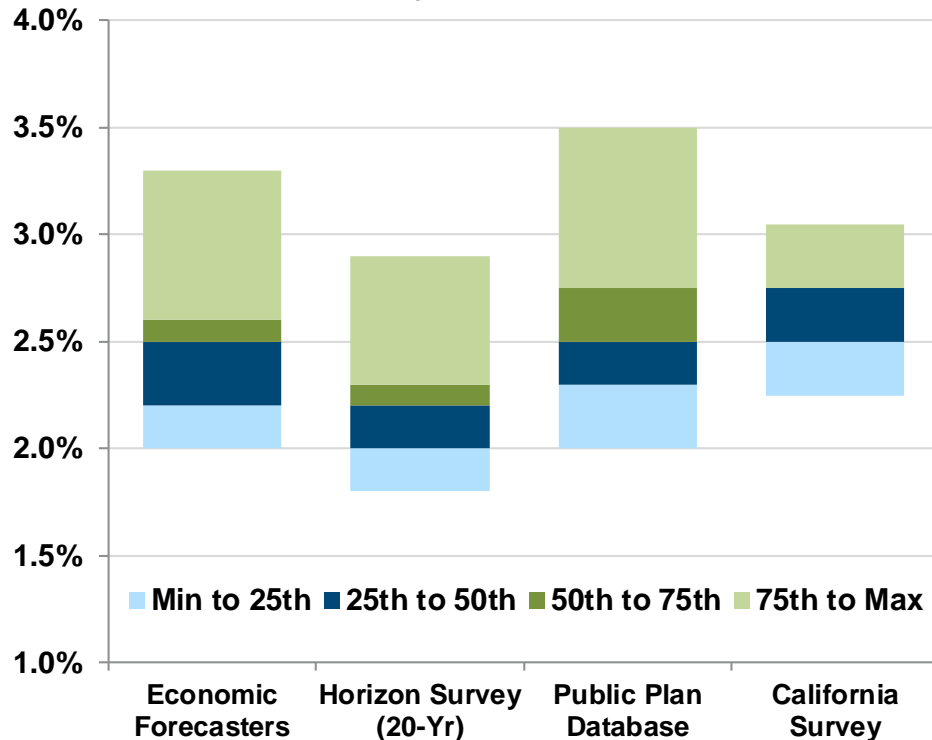
- Building block approach
 - Inflation is the foundation for all economic assumptions
 - **Expected Return (Nominal)**
Inflation + Real Return
 - **Wage Inflation**
Inflation + Real Wage Growth
 - **COLA Growth**
Inflation (CPI-US)+ CA Adjustment



Price Inflation – Industry Trends



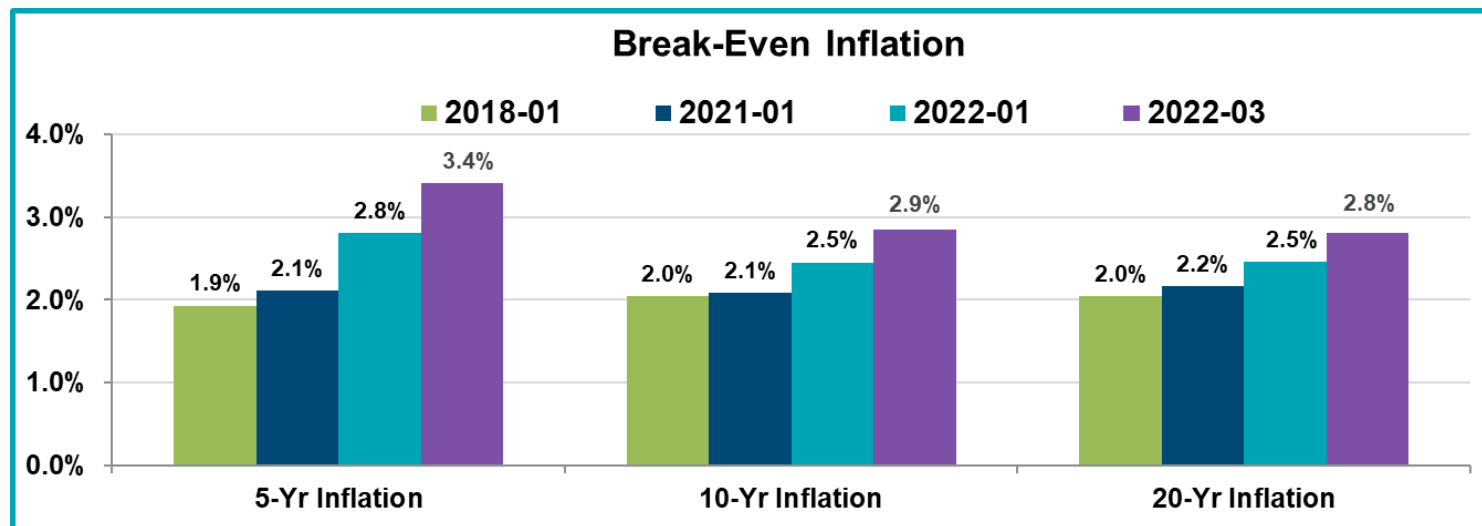
Recent Surveys of CPI Assumptions



- 3 of the 4 surveys have median price inflation expectations at 2.50% or higher
- 36 of the 39 CA systems have a price inflation assumption of 2.50% or higher

	Economic Forecasters (10-Yr)	Horizon Survey (20-Yr)	Public Plan Database	California Survey
Minimum	2.00%	1.80%	2.00%	2.25%
25th	2.20%	2.00%	2.30%	2.50%
50th	2.50%	2.20%	2.50%	2.75%
75th	2.60%	2.30%	2.75%	2.75%
Maximum	3.30%	2.90%	3.50%	3.05%

Price Inflation – Market Expectations



- Break-even inflation is the difference in yields between conventional treasury bonds and Treasury Inflation-Protected Securities (TIPS)
- It represents a market estimate of future inflation
- Both short-term and long-term inflation expectations have increased substantially in the last year



- Current assumption = 2.25%
- SLOCPT's inflation assumption is lower than your CA peers
- Average (and median) expectation of the economic forecasters is 2.50%
- Most importantly, future market expectations of inflation are above 2.8%, short and long-term
- **Assumed price inflation assumption between 2.375% or 2.50% would be reasonable**

(propose change would also impact wage inflation and COLA growth assumptions)

Discount Rate – Analysis

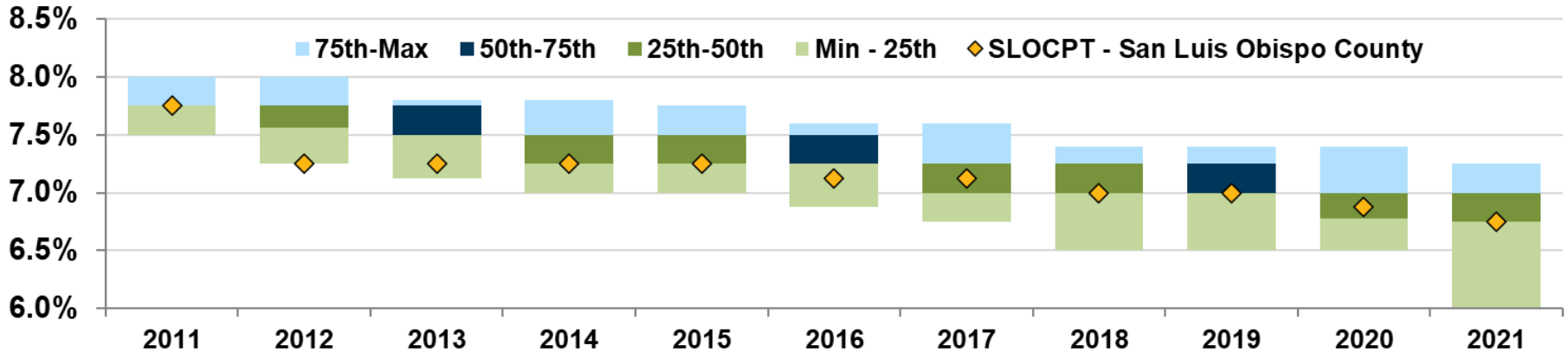


- Current assumption = 6.75%
 - Real rate of return = 4.50%
 - Price Inflation = 2.25%
- Context for selecting the discount rate
 - Historical experience
 - Industry trends
- Primary factors considered in selecting the discount rate
 - Expectations for the future
 - Board's risk preference

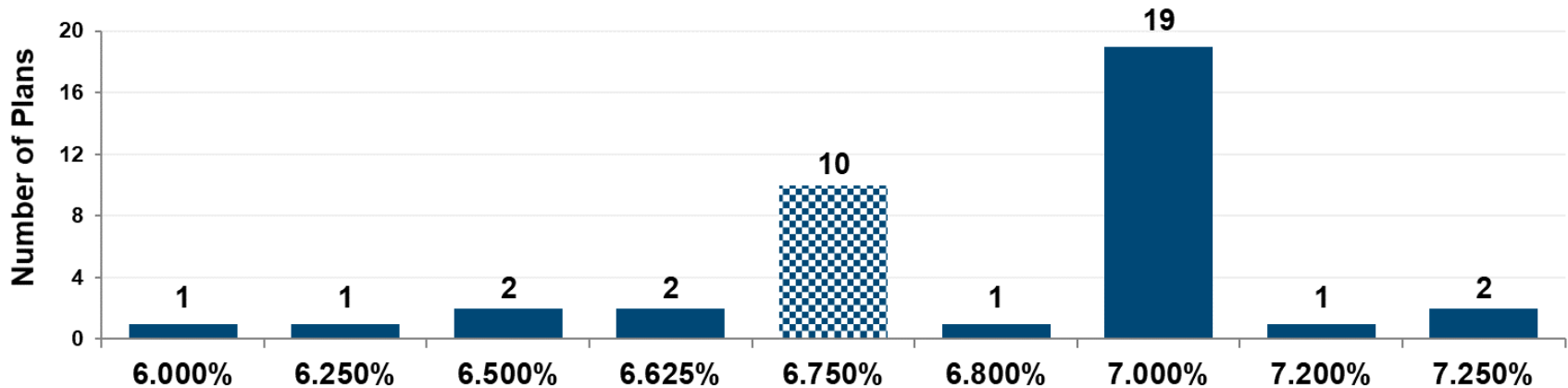
Discount Rate – Industry Trends



Discount Rate Trends
Cheiron Survey of California Systems



Distribution of Latest Discount Rates
Cheiron Survey of California Systems



Expectations for Future Returns



- Verus developed 10-year and 30-year expected returns for SLOCPT assets based on December 2021 capital market assumptions (CMAs)
- Horizon Survey develops CMAs for every asset class based on the input from 39 investment consultants
- We use Horizon CMAs and map them to SLOCPT's asset allocation to develop another perspective on SLOCPT's future returns



SLOCPT Portfolio Updated Return Expectations

Source	Nominal	Inflation	Real
Verus (10-year)	6.28%	2.50%	3.78%
Horizon Survey (10-year)	6.42%	2.12%	4.30%
Verus (30-year)	6.56%	2.30%	4.26%
Horizon Survey (20-year)	<u>7.01%</u>	<u>2.23%</u>	<u>4.78%</u>
Average	6.57%	2.29%	4.28%
Current SLOCPT Assumptions	6.75%	2.25%	4.50%



Discount Rate – Summary of Analysis



- Current assumption = 6.75%
- SLOCPT's discount rate is lower than the median (7.00%) of your CA peers
- SLOCPT's real rate of return at 4.50% since 2012 (*with the exception of 2020 when it was 4.625%*)
- Suggest more focus on reducing the real rate of return
 - Reduce the discount rate by 0.125% or 0.25%
 - Reasonable to maintain 6.75% discount rate, and increase price inflation
 - Or some other reasonable combination
- **Assumed real rate of return between 4.25% and 4.375% would be reasonable**

Demographic Assumptions



Summary of Proposed Demographic Changes



Assumption	Proposed Changes	Estimated Change in Contribution Rate
Mortality	<ul style="list-style-type: none"> Safety public plan tables for Safety/Probation active and retirees Updated projection scale from MP-2019 to MP-2021 Removed table adjustments from Miscellaneous healthy annuitants 	-0.69%
Retirement	<ul style="list-style-type: none"> Lower rates for active members with less than 25 years of service Higher rates for active members with 25 or more years of service 	0.57%
Vested Termination/ Withdrawal	<ul style="list-style-type: none"> Switched from age-based rates to service-based rates No change to reciprocity assumption No change to the assumed retirement age for Reserve/Reciprocal members 	0.11%
Merit Salary Increases	<ul style="list-style-type: none"> Separate rates for Miscellaneous and Safety/Probation Higher increases for members with 7 or more years of service 	0.47%
Family Composition	<ul style="list-style-type: none"> Increased age difference for female spouses from 3 to 4 years younger and reduced for male spouses from 3 to 2 years older Reduced male marriage assumption from 80% to 70% and female marriage assumption from 60% to 55% 	-0.12%
Disability	<ul style="list-style-type: none"> No changes 	0.00%
Total		0.33%

Demographic Analysis



- Study period from January 1, 2017 to December 31, 2021
- Charts and graphs show experience for each year in the study period
- Demographic patterns during COVID not necessarily a good indicator of future behavior or experience
- Analysis was performed and assumptions reviewed based on 2017-2019 experience only

Merit Salary Increases



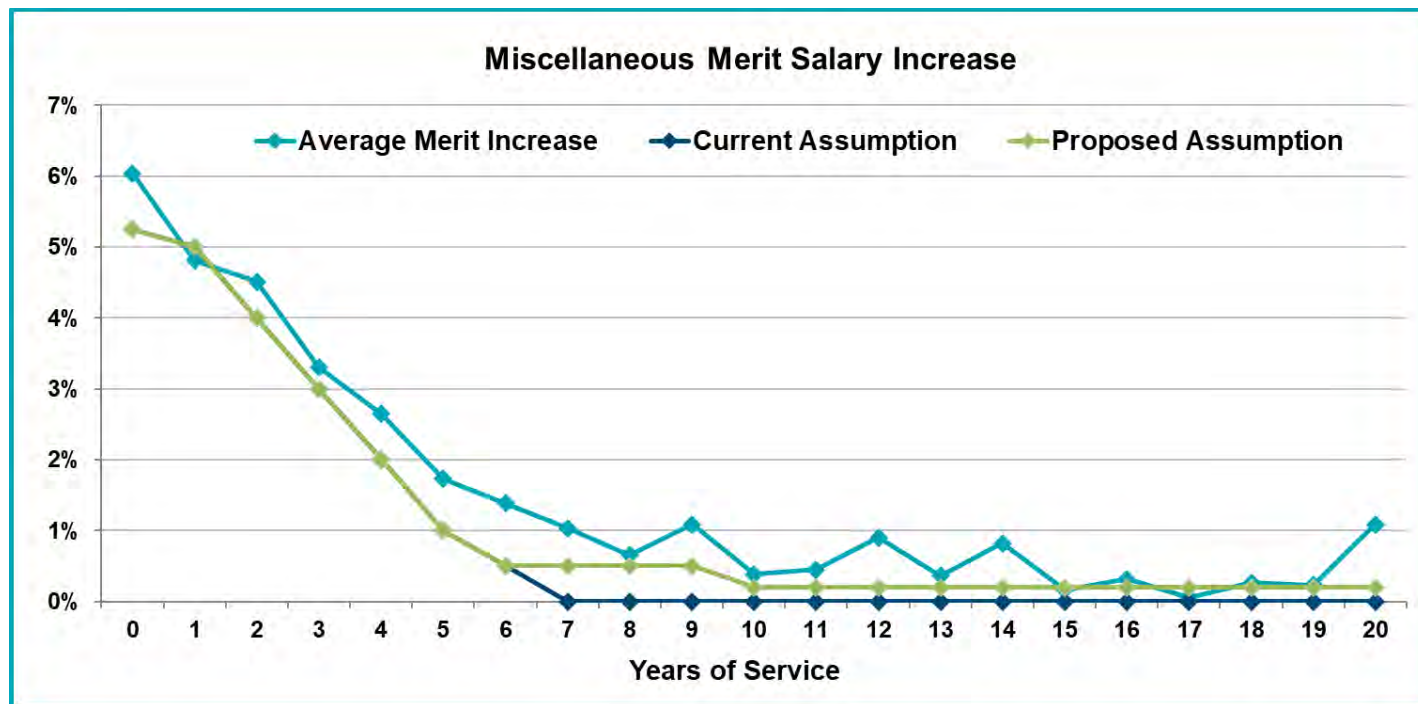
- Salary increases have three components:
 - Inflation
 - Real wage growth
 - Individual merit or longevity increases
- Inflation and real wage growth were reviewed with the economic assumptions



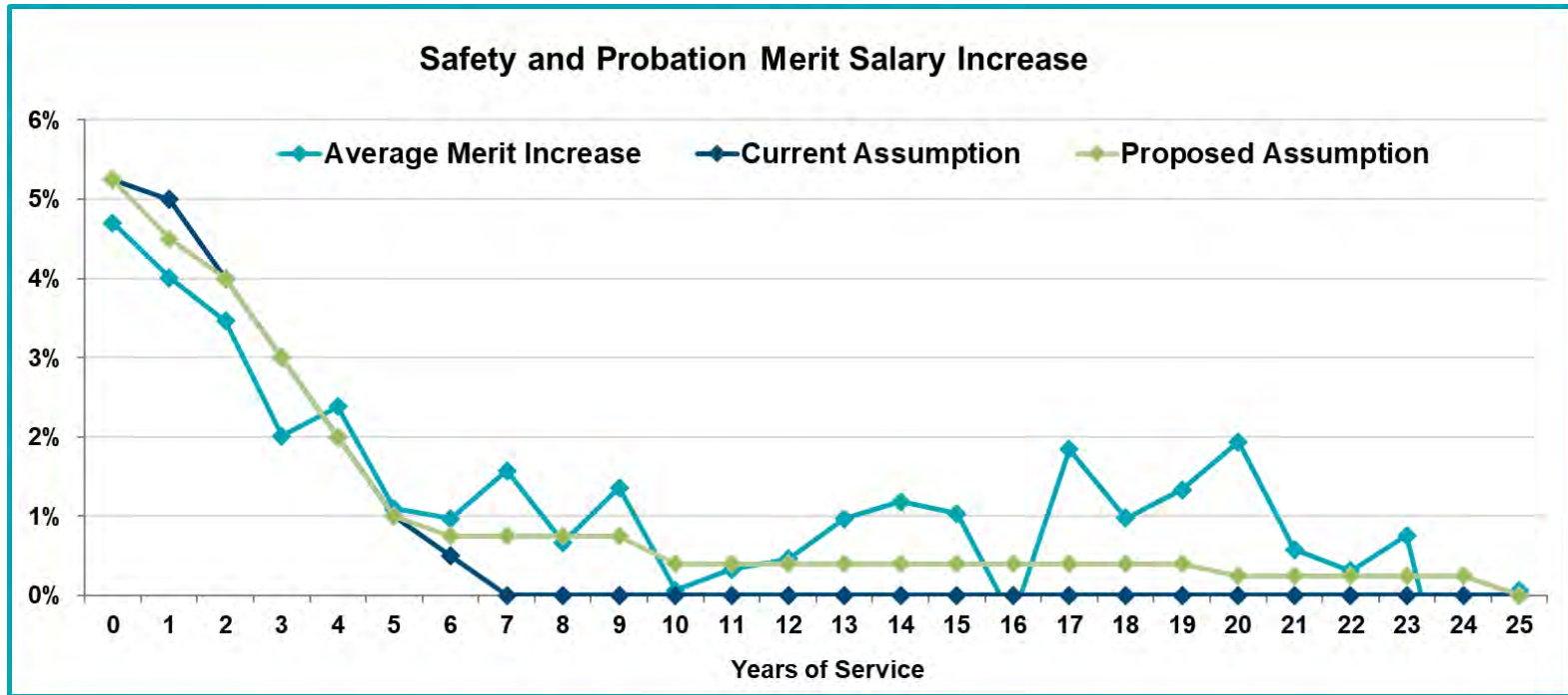
Merit Salary Increases



- Propose separate assumptions for Miscellaneous and Safety/Probation
- Increase rates after 7 years of service, currently 0%



Merit Salary Increases

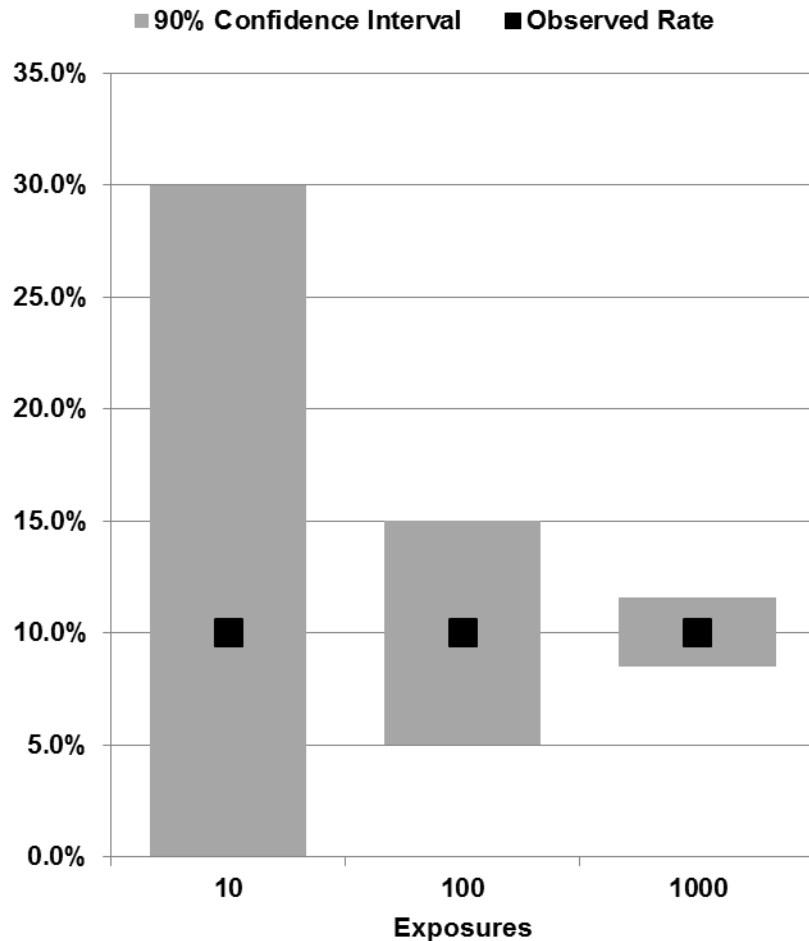




- Actual-to-Expected Ratio (A/E Ratio)
 - Actual decrements divided by expected decrements
 - Ideally equals 100%
 - Used to set overall level of assumptions
- R-Squared Statistic
 - Measures percentage of variation in experience captured by the assumption
 - Ideally equals 100%
 - Used to set pattern of assumptions
- 90% Confidence Interval
 - Range around experience within which “true” rate falls with 90% confidence
 - Used to assess credibility of experience and need to change assumptions



Confidence Interval Illustration



- How much data is available is critical in determining if the assumption warrants a change
 - 1 retirement out of 10 eligible members; rate is between 0% and 30%
 - 10 out of 100; rate is between 5% and 15%.
 - 100 out of 1000; rate is between 8.5% and 11.5%

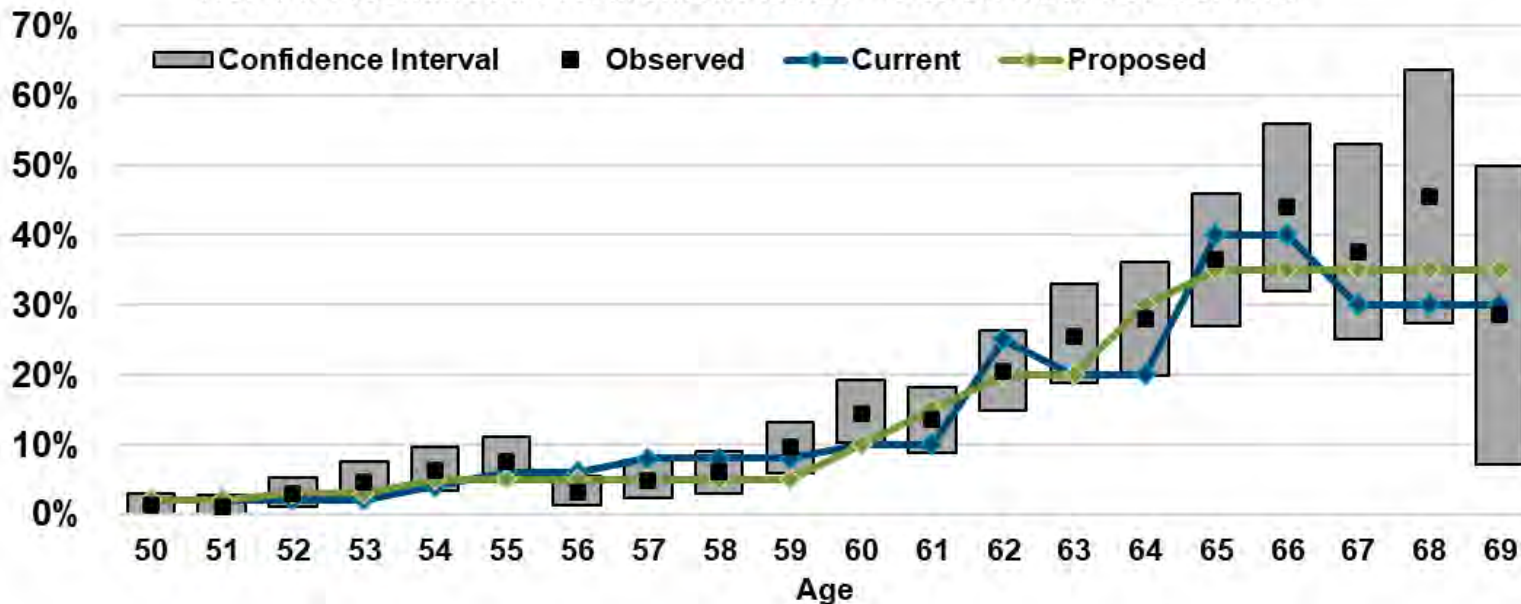


- Separate assumptions by class:
 - Miscellaneous
 - Probation
 - Safety
- Propose separate rates for members with less than 25 years of service and for members with 25 or more years of service
- Tier 1 and Tiers 2 & 3 have separate assumptions
- For retirement groups that do not have enough credible data (i.e., Tiers 2 & 3 for Safety and Probation), professional judgement was used to develop assumptions based on Tier 1 patterns

Retirement Rates – Miscellaneous



Tier 1 Miscellaneous Retirement Rates - 5 to 24 Years of Service

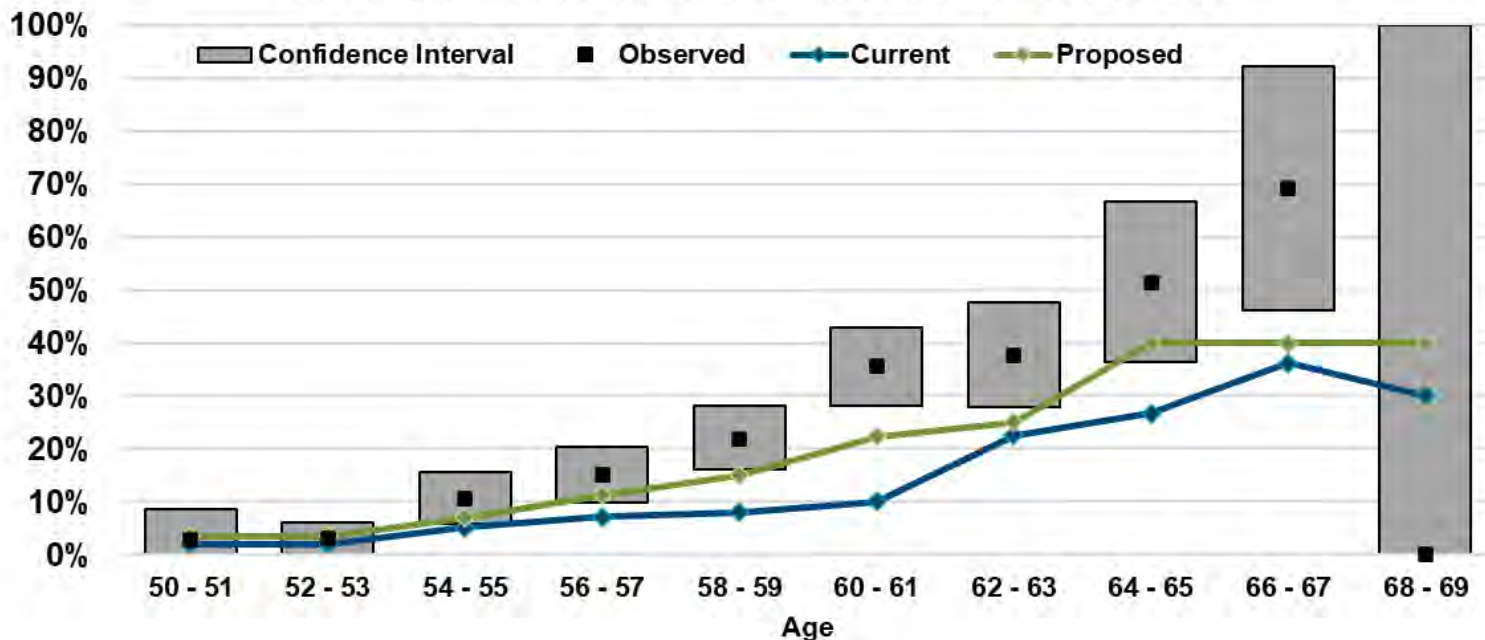


- Slight adjustments were made to the current rates
- A/E Ratio: Increased from 109% to 112%
- R-Squared Statistic: Increased from 88% to 94%

Retirement Rates – Miscellaneous



Tier 1 Miscellaneous Retirement Rates - 25+ Years of Service

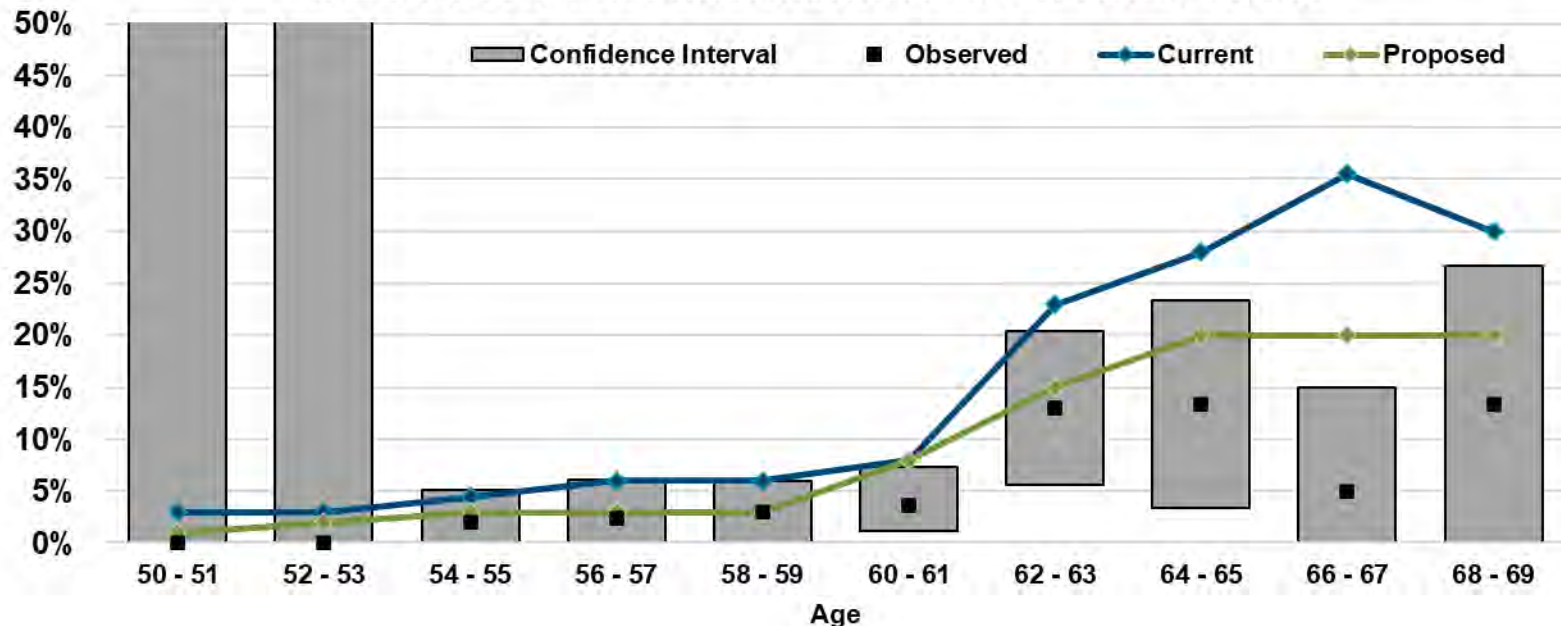


- Rates were increased, but not always to be within the confidence interval. These actual retirement rates are somewhat higher due to the experience during COVID
- A/E Ratio: Decreased from 224% to 143%
- R-Squared Statistic: Increased from 79% to 98%

Retirement Rates – Miscellaneous

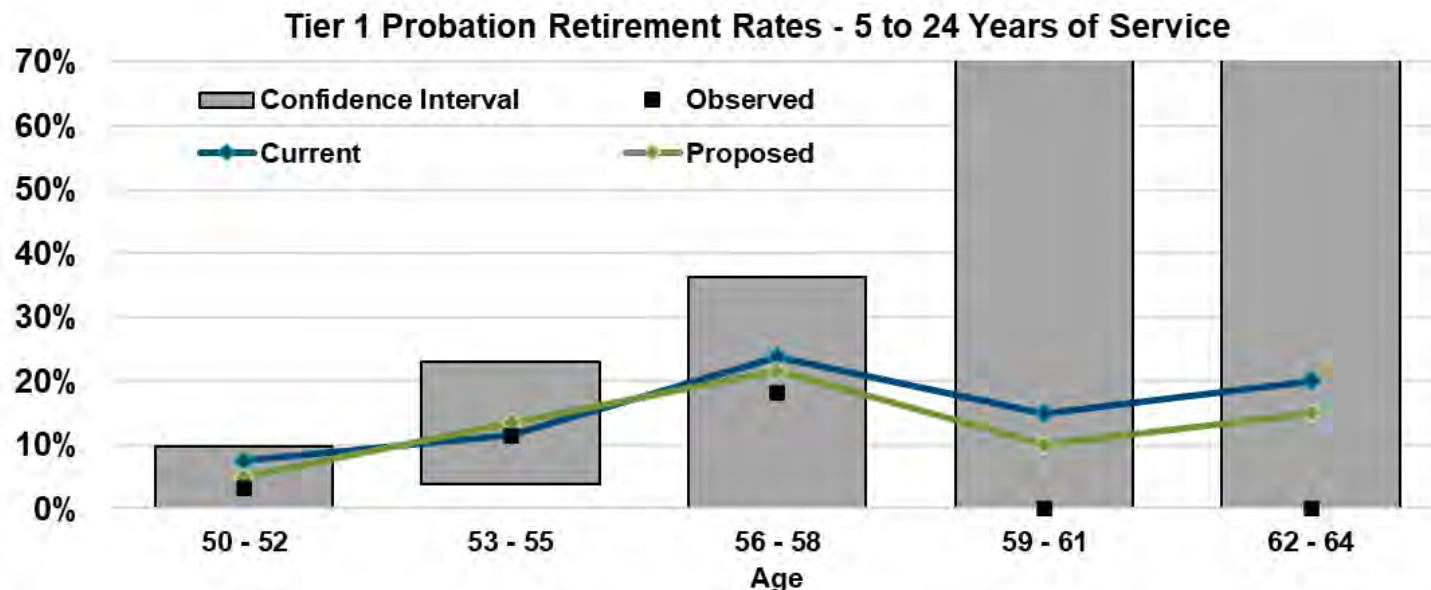


Tier 2 & 3 Miscellaneous Retirement Rates - 5 to 24 Years of Service



- Rates were decreased to better fit experience
- A/E Ratio: Increased from 41% to 61%
- R-Squared Statistic: Decreased from 83% to 77%

Retirement Rates – Probation

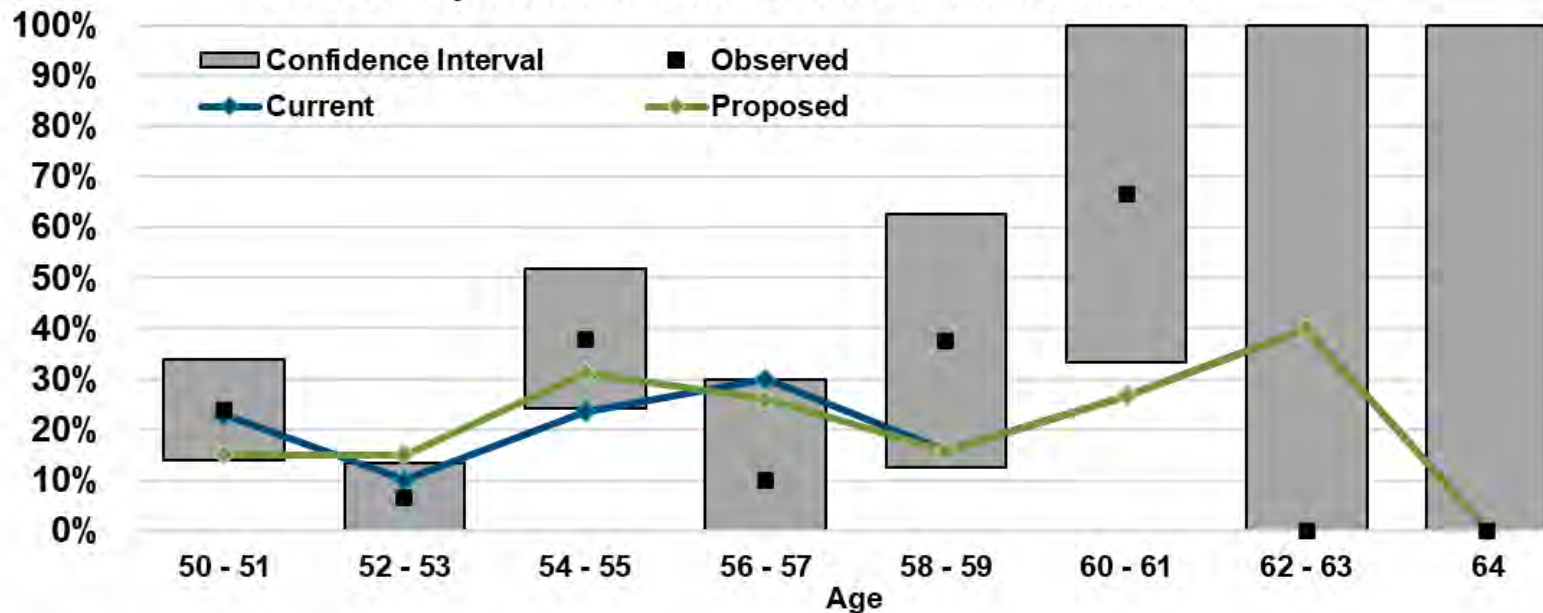


- Rates were generally decreased
- A/E Ratio: Increased from 63% to 70%
- R-Squared Statistic: Increased from 83% to 97%

Retirement Rates – Safety



Tier 1 Safety Retirement Rates - 5 to 24 Years of Service



- Rates were adjusted to better fit experience
- A/E Ratio: Increased from 120% to 123%
- R-Squared Statistic: Decreased from 84% to 80%
- Without 2020 and 2021: A/E ratio stayed at 126%, R-Squared increased from 57% to 80%



- Mortality assumptions consist of:
 - Published tables modified, if needed, to reflect SLOCPT's experience
 - Projection scale to reflect expected future mortality improvement
- Since prior experience study:
 - Updated projection scales published reflecting more recent data on mortality improvement

Summary of Base Mortality Tables



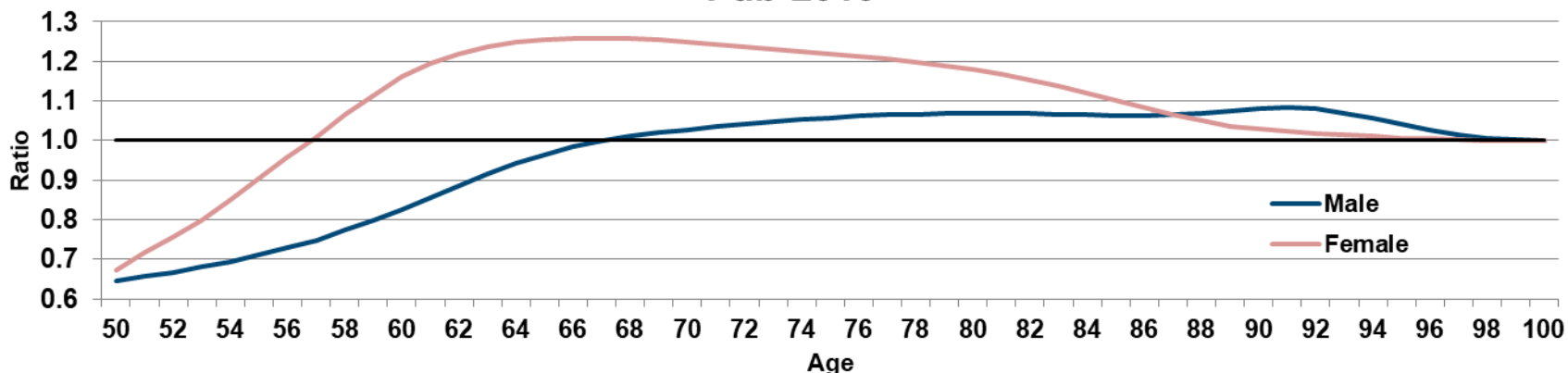
Base Mortality Table Assumptions

Group	Current Assumption	Proposed Assumption
Active Members		
Miscellaenous	Pub-2010 General Above-Median Employee Table	No Change
Safety and Probation	Pub-2010 General Above-Median Employee Table	Safety Above-Median
Healthy Annuitants		
Miscellaenous and Beneficiaries	Pub-2010 General Above-Median Annuitant Table, with 99% Male/101% Female adjustments	Same table, without adjustments
Safety and Probation	Pub-2010 General Above-Median Annuitant Table, with 99% Male/101% Female adjustments	Safety Above-Median
Disabled Members		
All Classes	Pub-2010 General Disabled Annuitant Table	No Change

Mortality – Miscellaneous vs. Safety

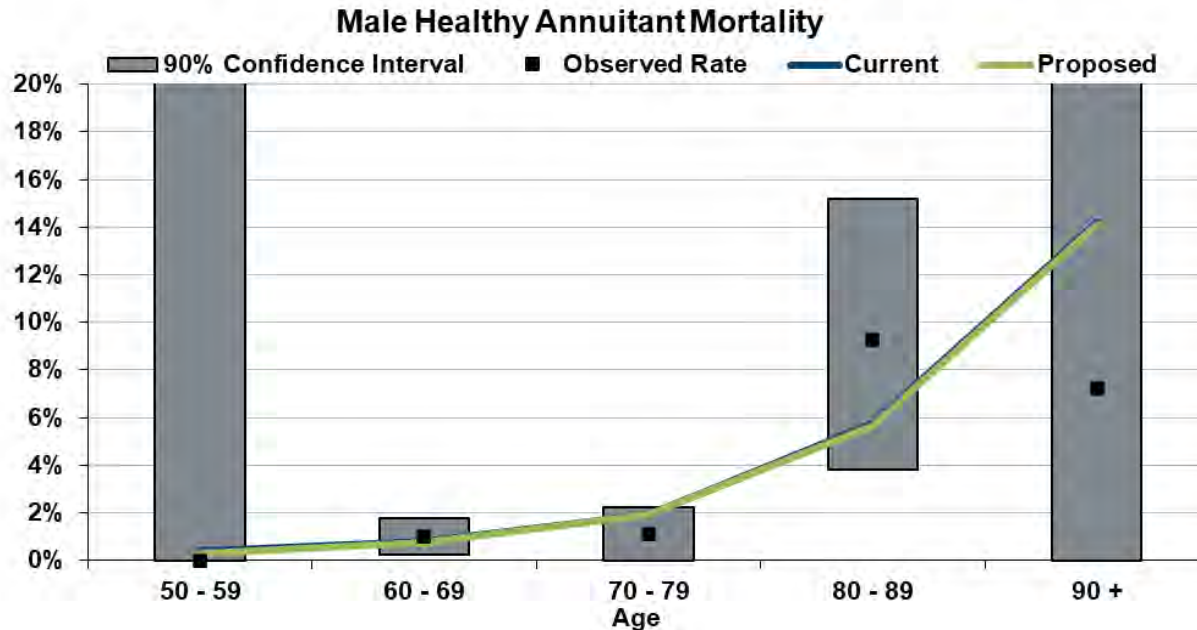


Ratio of Safety Retiree to General Retiree Mortality Rates
Pub-2010



- Current mortality assumptions are the same for Miscellaneous and Safety/Probation
 - Prior studies did not have sufficient data to find a statistically significant difference
 - Safety members have lower mortality rates at early ages in retirement, but higher mortality rates at later ages
- Propose separate mortality assumptions for Miscellaneous and Safety/Probation

Mortality Rates – Safety/Probation (male)



Healthy Annuitant Mortality - Base Table for Males								
Age Band	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
50 - 59	378	0	2,093,319	0	8,410	5,948	0%	0%
60 - 69	446	5	2,394,648	24,490	19,428	17,879	126%	137%
70 - 79	269	3	1,162,748	12,731	22,537	22,344	56%	57%
80 - 89	79	8	274,297	25,492	15,809	15,559	161%	164%
90 +	14	2	18,107	1,311	2,578	2,557	51%	51%
Total	1,186	18	5,943,119	64,024	68,762	64,287	93%	100%

Projections of Mortality Improvement



- We propose updating from the MP-2019 scale to the MP-2021 scale
 - Social Security data from 1950 through 2016
 - CDC, Census bureau, and CMS data for 2017-2019
 - No COVID-19 data
- There has been a long history of improvements in mortality, and we expect it to continue
 - COVID-19 disrupted this pattern
 - Anticipate return to prior pattern of improvement once pandemic ends
 - COVID could cause permanent disruption. We will monitor the emerging trends
- Recent mortality improvement (prior to COVID) has not been as rapid as previously assumed

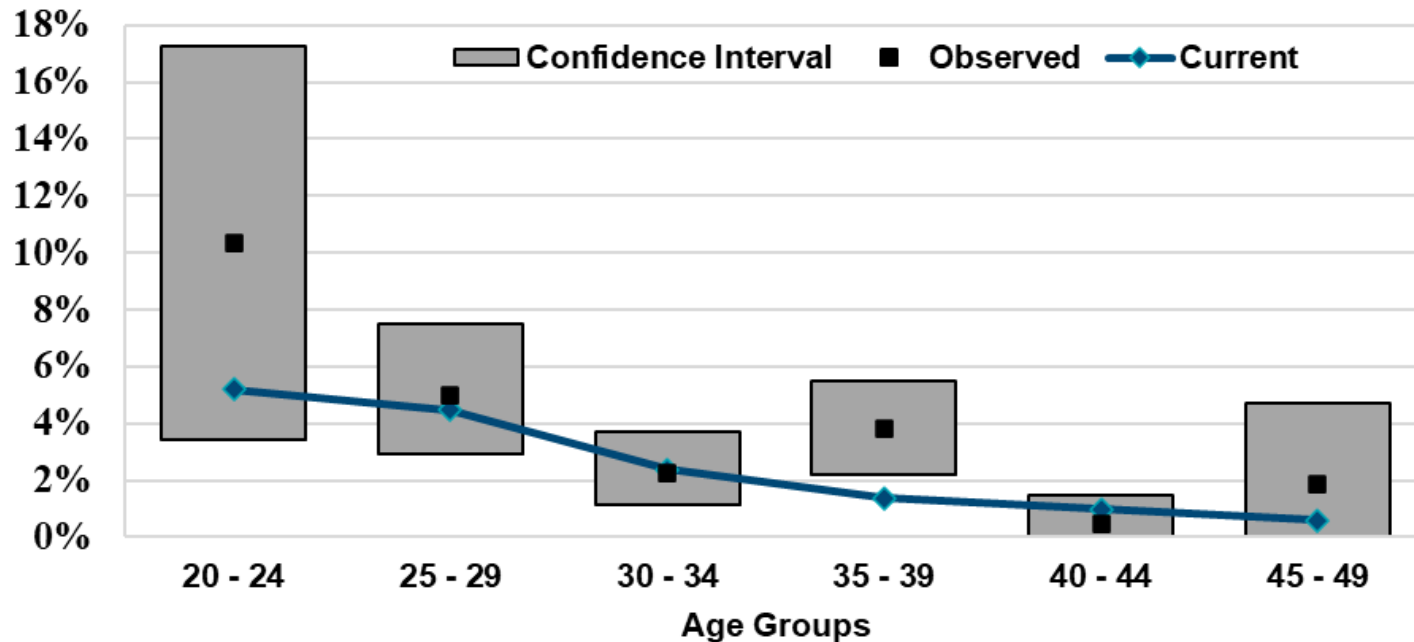


- Analyze likelihood of termination from causes other than retirement, disability and death
 - Review percentage of terminations assumed to result in withdrawal of contributions (refund) or reciprocal transfer as a separate assumption
- Recommendations
 - Change from age-based rates to service-based rates since terminations are more correlated with service rather than age
 - No changes recommended to reciprocity assumption

Withdrawal Rates – Safety/Probation

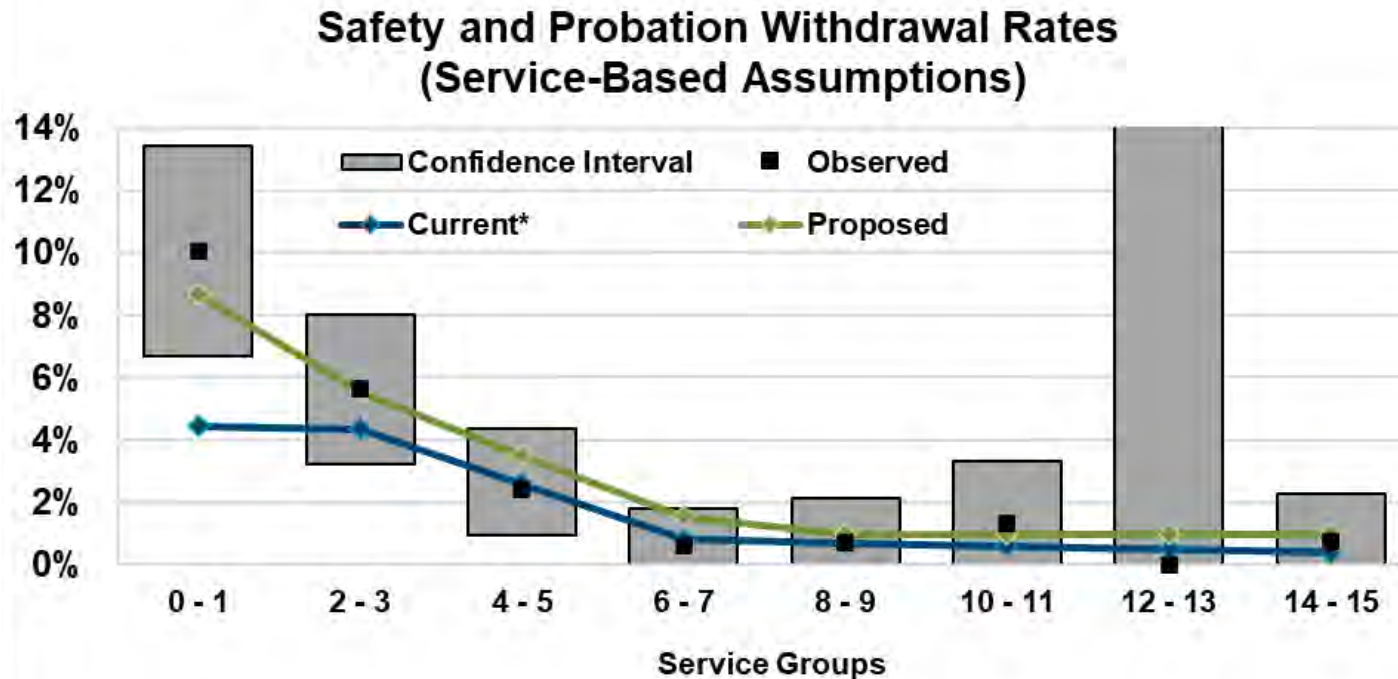


Safety and Probation Withdrawal Rates (Current Age-Based Assumptions)



- R-Squared Statistic with age-based assumptions 52%

Withdrawal Rates – Safety/Probation



- A/E Ratio: Decreased from 150% to 95%
- R-Squared Statistic: Increases to 97% with service-based assumptions

Cost Impact by Group (with Economic Changes)



Estimated Impact of Proposed Assumption Changes on January 1, 2022 Actuarially Determined Contribution Rates

	Miscellaneous	Probation	Safety	Total
Proposed Demographic Assumption Changes:				
Mortality Rates	-0.60%	-0.96%	-1.16%	-0.69%
Retirement Rates	0.56%	0.63%	0.59%	0.57%
Termination and Withdrawal Rates	0.22%	-0.28%	-0.41%	0.11%
Merit Scale	0.34%	1.13%	1.07%	0.47%
Family Composition	<u>-0.09%</u>	<u>-0.14%</u>	<u>-0.26%</u>	<u>-0.12%</u>
Estimated Impact of Demographic Assumption Changes	0.42%	0.37%	-0.18%	0.33%
Potential Economic Assumption Changes:				
1) Increase inflation assumption from 2.25% to 2.50%, and increase COLA growth assumption for Tier 1 members in pay status from 2.50% to 2.75%	2.41%	3.43%	3.67%	2.62%
2) Decrease assumed rate of return from 6.75% to 6.625%	1.42%	1.84%	2.16%	1.54%
3) Decrease assumed rate of return from 6.75% to 6.50%	2.86%	3.73%	4.37%	3.10%

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Finalize Actuarial Valuation Report

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Adopt January 1, 2022 Actuarial Valuation and Contribution Rates

Required Disclosures



The purpose of this presentation is to discuss the preliminary results of the January 1, 2022 actuarial valuation and the 2022 experience study of the San Luis Obispo County Pension Trust (SLOCPT). This presentation was prepared exclusively for the San Luis Obispo County Pension Trust and its Board of Trustees for the purpose described herein. Other users of this presentation are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

In preparing our presentation, we relied on information (some oral and some written) supplied by the SLOCPT. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23. The actuarial assumptions, data and methods are those that will be used in the preparation of the actuarial valuation report as of January 1, 2021.

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have a basic understanding of ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this valuation.

Deterministic projections in this presentation were developed using P-Scan, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the System. P-Scan uses standard roll-forward techniques that implicitly assume a stable active population.

This presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Future results may differ significantly from the current results and projections shown in this presentation due to such factors as the following: plan experience different from that anticipated by the assumptions; changes in assumptions; and changes in the plan provisions or applicable law.

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

Alice I. Alsberghe ASA, MAAA, EA
Consulting Actuary

DRAFT

San Luis Obispo County Pension Trust

**Actuarial Experience Study for
January 1, 2017 through
December 31, 2021**

Produced by Cheiron

May 2022

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May 12, 2022

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

Dear Members of the Board:

The purpose of this report is to provide the results of an Actuarial Experience Study of the San Luis Obispo County Pension Trust (SLOCPT, the Trust) covering actuarial experience from January 1, 2017, through December 31, 2021. This report is for the use of the SLOCPT Board of Trustees (the Board) in selecting assumptions to be used in actuarial valuations beginning January 1, 2022.

In preparing our report, we relied on information (some oral and some written) supplied by SLOCPT. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This report was prepared for the SLOCPT Board of Trustees for the purposes described herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any such party.

If you have any questions about the report or would like additional information, please let us know.

Sincerely,
Cheiron

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

Alice I. Alsberghe, ASA, MAAA, EA
Consulting Actuary



**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

SECTION I – EXECUTIVE SUMMARY

Actuarial assumptions (economic and demographic) are intended to be long-term in nature and should be both individually reasonable and consistent in the aggregate. The purpose of this experience study is to evaluate whether or not the current assumptions adequately reflect the long-term expectations for SLOCPT, and if not, to propose adjustments. It is important to note that frequent and significant changes in the actuarial assumptions are not typically proposed, unless there are known fundamental changes in expectations of the economy, or with respect to SLOCPT’s membership or assets that would warrant such frequent or significant changes.

Actuarial Assumption	Current	Proposed	Comments
Inflation	2.25%	2.25% to 2.50%	Purpose reducing real rate of return by either increasing inflation, or
Investment Return	6.75%	6.50% to 6.75%	Reducing investment return or a combination of both
Salary Merit Increase	0.00% to 5.25%	0.00% to 5.25%	Different rates for Safety/Probation
Payroll Growth	2.75%	2.75% to 3.00%	Assumption will change based on inflation assumption
Interest Rate -Member Contributions	6.00%	5.750%	Adopted by the Board at Nov 2021 Meeting
Mortality			
Post Retirement Mortality- Base table	Pub-2010	Pub-2010	Use Safety tables for Safety/Probation
Active member mortality- Base table	Pub-2010	Pub-2010	Use Safety tables for Safety/Probation
Disabled member mortality- Base table	Pub-2010	Pub-2010	No Change - Miscellaneous table for all classes
Mortality Improvement Projection scale	MP-2019	MP-2021	
Retirement rates	See Appendix B	See Appendix A	Separate rates for service less than 25 years, and more than 25 years
Vested termination	See Appendix B	See Appendix A	From age-based to service-based rates
Refunds	See Appendix B	See Appendix A	From age-based to service-based rates
Disability rates	See Appendix B	See Appendix A	No Change
Percent married	80% Males 60% Females	70% Males 55% Females	
COLA - Tier 1	2.50%	2.50% to 2.75%	Assumption will change based on inflation assumption
COLA - Tier 2 & 3	2.00%	2.00%	
Reserve/Reciprocal	70%/30%	70%/30%	No Change

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

SECTION I – EXECUTIVE SUMMARY

SUMMARY OF ECONOMIC ASSUMPTION ANALYSIS

The specific economic assumptions analyzed in this report are price inflation, wage inflation, COLA growth, and the discount rate. These assumptions have a significant impact on the contribution rates in the short term and the risk of negative outcomes in the long term.

The Board of Trustees elected to decrease the nominal investment return or discount rate from 7.00% to 6.875% (net of investment and administrative expenses) and the price inflation assumption from 2.50% to 2.25% based on the previous experience study in 2020. At the May 24, 2021 Board of Trustees meeting, the Board adopted to reduce the discount rate from 6.875% to 6.75% net of investment expenses only and to add an explicit administrative expenses assumption. The inflation assumption was maintained at 2.25%, resulting in a real rate of return of 4.50%.

It should be noted that Verus, the Trust's investment consultant, predicts a lower nominal and real rate of investment return in the short-term and long-term for SLOCPT's asset allocation. Verus' most recent capital market expectations over a 10-year period indicate a 6.28% expected nominal return with a 3.78% expected real return and 2.50% inflation. Verus' expectations over a 30-year period are higher with a 6.56% expected nominal return with a 4.26% real return and 2.30% inflation.

Based on recent price inflation and future market expectations, we propose the Board consider increasing the inflation assumption by 0.25% to 2.50%. Incremental changes made to the price inflation should also apply to wage inflation and COLA growth since price inflation is a building block of these assumptions. Finally, we believe reasonable ranges for the nominal rate of return to be between 6.50% to 6.75% and the real rate of return to be between 4.25% to 4.50%.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

SECTION I – EXECUTIVE SUMMARY

SUMMARY OF DEMOGRAPHIC ASSUMPTION ANALYSIS

This experience study specifically analyzes and makes the following propositions for the demographic assumptions.

- **Retirement rates** – Propose separate rates for all Classes (Miscellaneous, Probation, and Safety) and Tiers based on the number of years of service a member has at retirement with higher rates for members with 25 or more years of service.
- **Termination rates** – Propose changing termination rates from age-based to service- based for all Classes
- **Refund rates** – Propose changing termination rates from age-based to service- based for all Classes.
- **Disability rates** – Propose no changes to disability assumptions.
- **Mortality rates** – Propose using the Pub-2010 Safety (Above-Median) base tables for Safety and Probation members. Generational improvement for all members based on MP-2021.
- **Merit salary increases** – Propose separate rates for Miscellaneous members and Safety/Probation members. Slight increases to rates for Miscellaneous members after six years of service with an ultimate rate of 0%. Slight increases to rates for Safety/Probation members after six years of service with an ultimate rate of 0%.
- **Other assumptions** – Minor changes to other assumptions, including family composition.

The body of this report provides additional detail and support for our conclusions and propositions.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

SECTION I – EXECUTIVE SUMMARY

COST OF ECONOMIC AND DEMOGRAPHIC ASSUMPTION CHANGES

Among the demographic assumptions, the proposed changes to the mortality, retirement, and salary merit increase assumptions have the largest impact on contribution rates. This table summarizes the estimated cost impact – for the Miscellaneous, Probation, Safety, and combined membership – of the proposed changes to the demographic assumptions contained in this report.

Estimated Impact of Proposed Assumption Changes on Actuarially Determined Contribution Rates				
	Misc	Probation	Safety	Total
Proposed Demographic Assumption Changes:				
Mortality Rates	-0.60%	-0.96%	-1.16%	-0.69%
Retirement Rates	0.56%	0.63%	0.59%	0.56%
Termination and Withdrawal Rates	0.22%	-0.28%	-0.41%	0.11%
Merit Scale	0.34%	1.14%	1.07%	0.47%
Family Composition	<u>-0.09%</u>	<u>-0.14%</u>	<u>-0.26%</u>	<u>-0.12%</u>
Estimated Impact of Demographic Assumption Changes	0.43%	0.38%	-0.18%	0.34%
Potential Economic Assumption Changes:				
1) Increase inflation assumption from 2.25% to 2.50%, and increase COLA growth assumption for Tier 1 members in pay status from 2.50% to 2.75%	2.41%	3.43%	3.67%	2.62%
2) Decrease assumed rate of return from 6.75% to 6.625%	1.42%	1.84%	2.16%	1.54%
3) Decrease assumed rate of return from 6.75% to 6.50%	2.86%	3.73%	4.37%	3.10%

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

**SECTION II – ECONOMIC ASSUMPTIONS
PRICE INFLATION**

The economic assumptions used in actuarial valuations are intended to be long-term in nature and should be both individually reasonable and consistent with each other. The specific assumptions analyzed in this report are:

- **Price inflation** – used indirectly as an underlying component of other economic assumptions.
- **Wage inflation** – across the board wage growth used to project benefits and to amortize the unfunded liability as a level percentage of expected payroll.
- **COLA growth** – rate at which inflation-linked post-retirement COLAs are expected to change.
- **Discount rate** – used both to project long-term asset growth and to discount future cash flows in calculating the liabilities and costs of the Plan.

In order to develop recommendations for each of these assumptions, we considered historical data, both nationally and for the Plan, and expectations for the future, as expressed by the Plan’s and other external investment consultants and the Board.

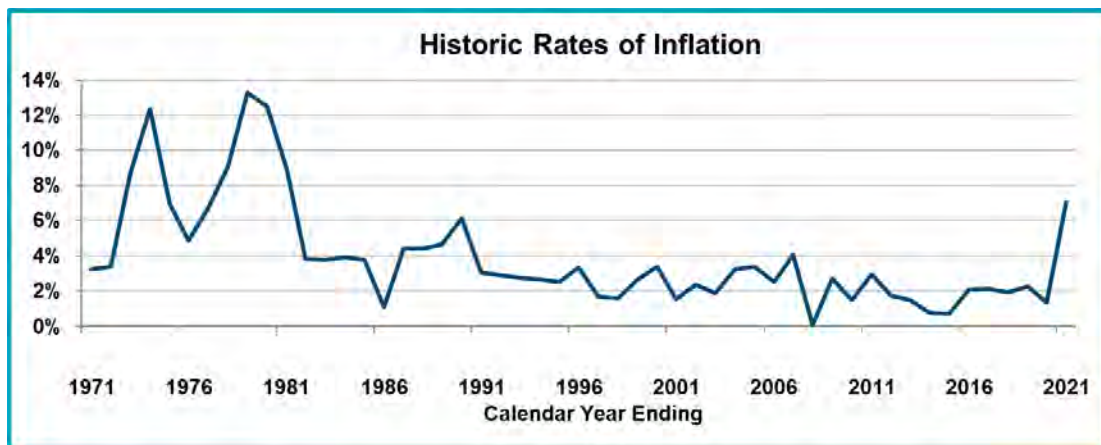
PRICE INFLATION

Long-term price inflation rates are the foundation of other economic assumptions. In a growing economy, wages and investments are expected to grow at the underlying inflation rate plus some additional real growth rate, whether it reflects productivity in terms of wages or risk premiums in terms of investments.

Historical Data

Chart II-1 below shows inflation (CPI-U) for the U.S. by individual year for the last 50 years.

Chart II-1



**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

**SECTION II – ECONOMIC ASSUMPTIONS
PRICE INFLATION**

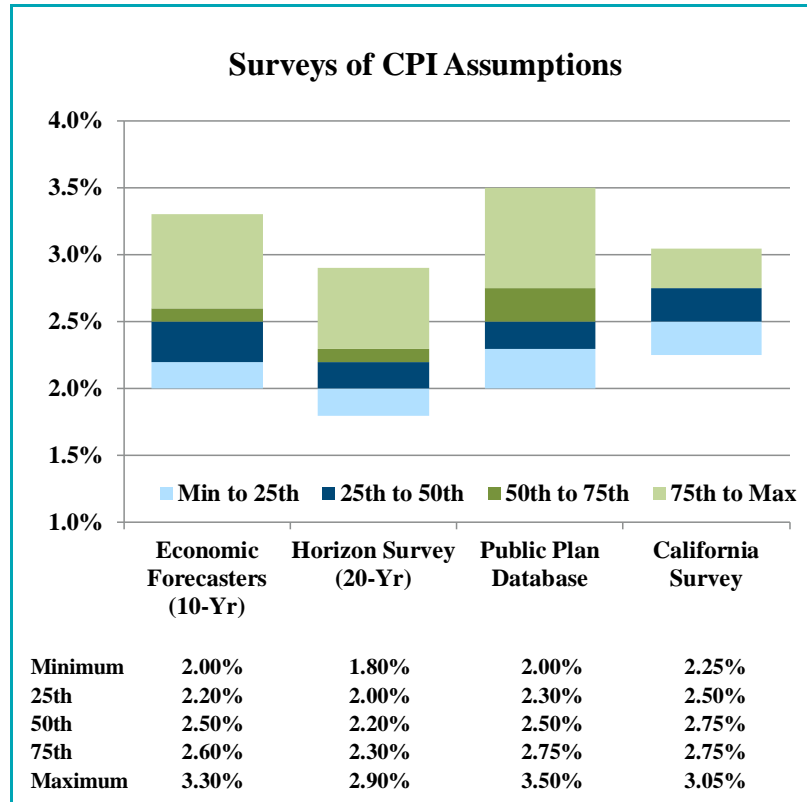
Over the 50 years ending December 2021, the geometric average inflation rate for the U.S. has been about 3.9%, but this average is heavily influenced by the high inflation rates in the 1970s and early 1980s. If you remove these periods of high inflation, the average inflation rate for the 30-year period is 2.9%, and it has been only 2.1% over the 10 years ending December 2021.

Future Expectations

The Federal Reserve publishes a quarterly survey of professional economic forecasters that includes their forecasts of inflation over the next 10 years. The survey for the first quarter of 2022 shows a median inflation forecast of 2.5%, a minimum forecast of 2.0% and a maximum of 3.3%.

Chart II-2 below shows the distribution of the professionals’ forecasts for average inflation over the next 10 years compared to the assumptions from the Horizon Actuarial Services Survey of Capital Market Assumptions (2021 Edition), the 2020 Data Survey from US Public Plan (PPD) maintained by the Center for Retirement Research at Boston College and our 2021 internal survey of California public pension plans.

Chart II-2

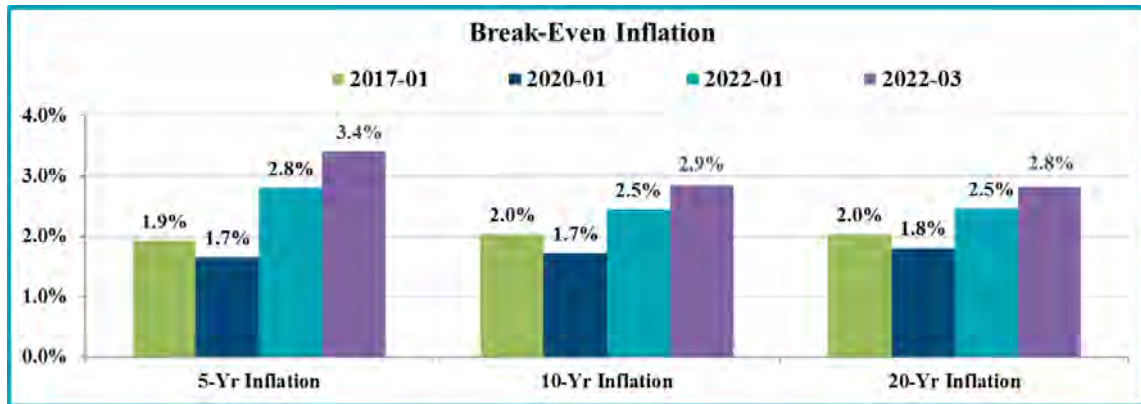


**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

**SECTION II – ECONOMIC ASSUMPTIONS
PRICE INFLATION**

Verus, the Board’s investment consultant, uses an inflation assumption of 2.5% for the next 10 years and 2.3% over the next 30 years. A broader survey of 39 investment advisors, as published by the Horizon Actuarial Services, reflects a 2.1% average assumption over the next 10 years and 2.2% over the next 20 years. Finally, SLOCPT’s current inflation assumption of 2.25% is the lowest in California and is lower than the median of the economic forecasters.

Chart II-3



Data Source: Federal Reserve, Constant Maturity Yields, Monthly Series

Another measure of the future expectations of inflation is called “break-even inflation” which is the difference between yields on nominal Treasury securities and Treasury Inflation-Protected Securities (TIPS) at the same maturity. Break-even inflation is the level of inflation needed for an investment in TIPS to “break even” with an investment in conventional treasury bonds of the same maturity. Break-even inflation rates increased from January 1, 2020 to January 1, 2022 to 2.5% or higher for all maturities. Recent market data show that the expectation has continued to increase during the first part of 2022 to 2.75% or higher, depending on the maturity. Longer-term expectations are lower than short-term expectations.

Based on all of these considerations, we believe a reasonable range for long-term price inflation for use in the Plan’s actuarial valuations is between 2.25% and 2.75%.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

**SECTION II – ECONOMIC ASSUMPTIONS
WAGE INFLATION AND COLA GROWTH**

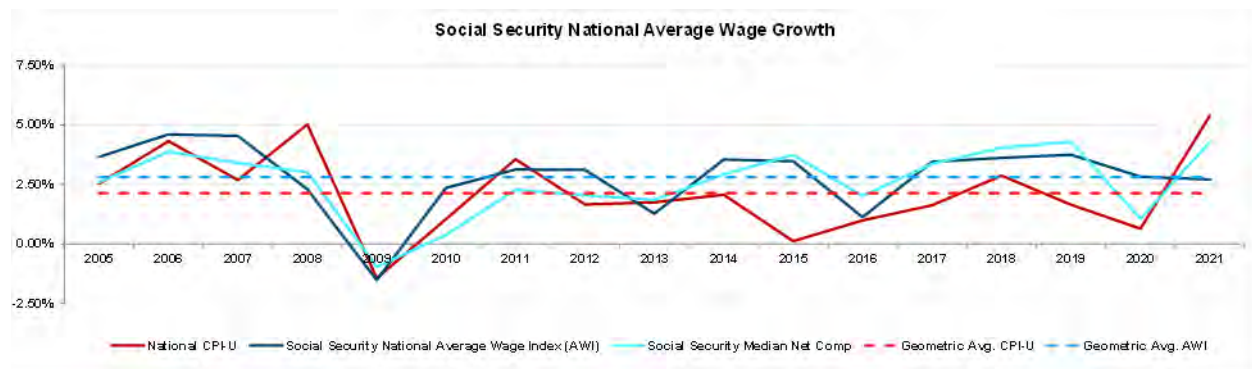
WAGE INFLATION

Wage inflation can be thought of as the annual across-the-board increase in wages. Individuals often receive salary increases in excess of the wage inflation rate, and we study these increases as a part of the merit salary scale assumption. Wage inflation generally exceeds price inflation by some margin reflecting the history of increased purchasing power.

Wage inflation is used in the actuarial valuation as the minimum expected salary increase for an individual and, for purposes of amortizing the unfunded actuarial liability, the rate at which payroll is expected to grow over the long-term, assuming a stable active member population. SLOCPT’s current wage inflation assumption is 2.75%, with 2.25% inflation and 0.50% real wage growth.

Chart III-3 shows the increase in national average wages (as reported by the Social Security Administration) compared to inflation from 2005 through 2021.

Chart II-4



Over this period, national wage inflation averaged approximately 2.8% compared to annual price inflation of 2.1%, making real wage increases about 0.7% above inflation. However, over the same time period the increase in the median real wage was only 0.5% per year, as much of the growth in wages was clustered at the top end of the wage scale.

It is acceptable to assume some additional level of base payroll increase beyond general inflation. Potential reasons contributing to the increase may include the presence of strong union representation in the collective bargaining process, competition in hiring among other similar employers, and regional factors – such as the local inflation index exceeding the national average, as has sometimes proven the case in parts of California. Also, the Social Security Administration projects real wage growth of 0.5% - 1.8% going forward in their Social Security solvency projections included in the 2021 annual Trustees Report. However, recent higher rates of inflation have resulted in negative real wage growth for US workers in 2021, and the expectation of higher inflation in the short term is anticipated to continue to put downward pressure on real wages, at least in the short term.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

**SECTION II – ECONOMIC ASSUMPTIONS
WAGE INFLATION AND COLA GROWTH**

We propose any change that is made to the inflation assumption is also made to assumed wage inflation, to keep the same assumption of real wage growth 0.50%, the lowest end of the Social Security Administration’s projections.

COLA GROWTH

Members of SLOCPT are eligible to receive automatic Cost-of-Living Adjustments (COLAs), based on the growth in the Los Angeles-Long Beach-Anaheim and San Francisco-Oakland-Hayward Consumer Price Indices (CPI-U) and a 3.0% or 2.0% cap, depending on their Tier, and the annual COLA increase. Any increase in the CPI above the maximum increase for Tier 1 can be banked for future years in which the change in the CPI is below the maximum increase.

It is important to determine an assumed rate of COLA growth by reflecting the inflation metric that impacts the actual COLA growth rate. The Tier 1 COLA growth rate assumption of 2.50% is 0.25% higher than the price inflation assumption of 2.25% due to the expected difference in the average SLOCPT inflation and the U.S. price inflation. Table II-1 below shows historically that the inflation in California is higher than the average U.S. inflation. We propose maintaining the “California” inflation adjustment of 0.25%, in addition to the price inflation assumption, for the COLA growth assumption.

Table II-1

Price Inflation Comparison					
	U.S.	San Francisco	Los Angeles	SLOCPT Average	Difference
30-year	2.37%	2.75%	2.47%	2.61%	0.24%
10-year	2.14%	3.03%	2.55%	2.79%	0.65%
5-year	2.92%	3.22%	3.55%	3.39%	0.47%

Since Tiers 2 and 3 have a cap of 2.0% and assumed price inflation is above 2.0%, the COLA growth assumption is 2.0%.

**SECTION II – ECONOMIC ASSUMPTIONS
DISCOUNT RATE**

DISCOUNT RATE

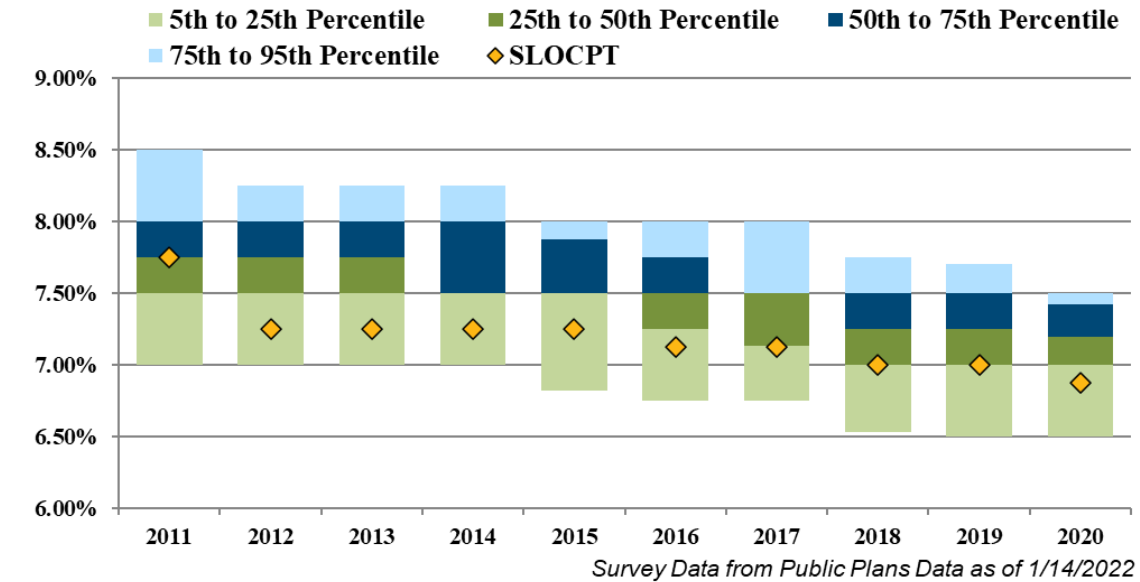
The discount rate (investment rate of return) assumption is generally the most significant of all the assumptions employed in actuarial valuations. The discount rate is based on the long-term expected return on plan investments. In the short term, a higher discount rate results in lower expected contributions. However, over the long term, actual contributions will depend on actual investment returns and not the discount rate (or expected investment returns). If actual investment returns are lower than expected, contribution rates will increase in the future. It is important to set a realistic discount rate so that projections of future contributions for budgeting purposes will not be biased.

Other Large Public Retirement Plans

Based on the Public Plans Data (PPD) which covers most of the largest public retirement systems in the country, there has been a general movement over at least the last decade to reduce the discount rate used in actuarial valuations. Chart II-5 below shows the change in the distribution of assumptions since 2010. The median assumption is now 7.20% and the number of plans using a discount rate 7.0% or lower has increased significantly. San Luis Obispo County Pension Trust has been at or lower than the 25th percentile since 2012.

Chart II-5

Discount Rate

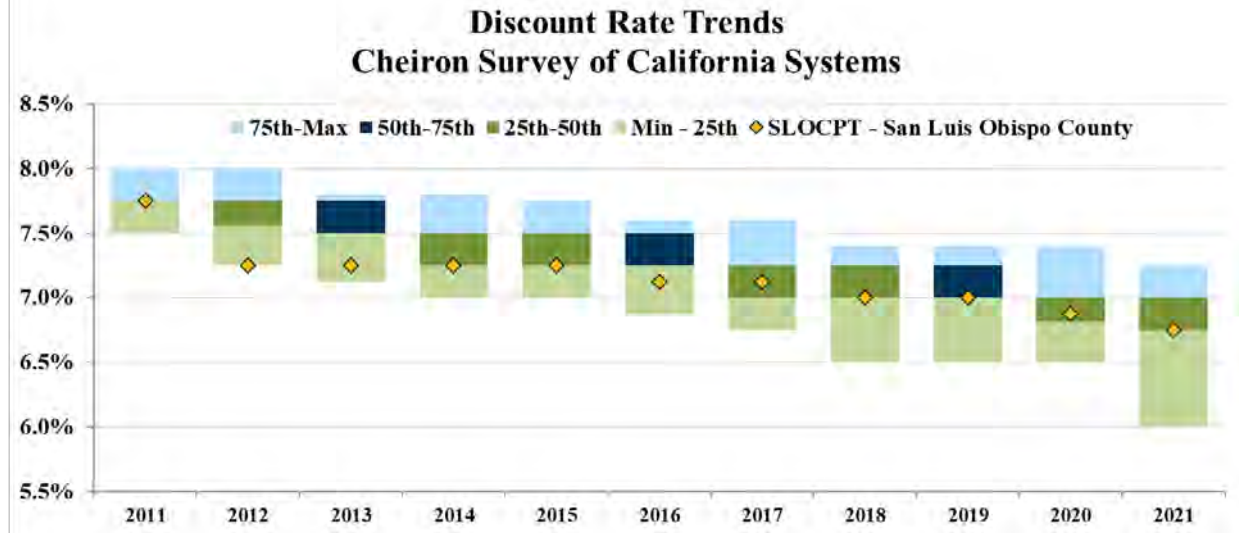


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**SECTION II – ECONOMIC ASSUMPTIONS
DISCOUNT RATE**

In our survey of California retirement systems, the median assumption is even lower at 7.00% with over half of the 39 systems using the median rate. Only three systems were using a rate of 7.00% or higher in 2021. Chart II-6 below shows the change in discount rate assumptions for California systems from 2011 to 2021.

Chart II-6



**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION II – ECONOMIC ASSUMPTIONS
DISCOUNT RATE**

Target Asset Allocation and Future Expectations

The discount rate assumption depends on the anticipated average level of inflation and the anticipated average *real rate of return*. The real rate of return is the investment return in excess of underlying inflation. The expected average real rate of return is heavily dependent on asset mix: the portion of assets in stocks, bonds, and other asset classes. Table II-2 below shows SLOCPT’s Strategic Asset Allocation (SAA) and expected returns for each asset class and in total.

Table II-2

SLOCPT Strategic Asset Allocation (SAA) <i>(Verus 2022 Capital Market Assumptions)</i>			
Asset Category	Target Allocation	Arithmetic Return	Geometric Return
Cash	4%	0.4%	0.4%
Global Equity	30%	7.1%	5.7%
Private Equity	18%	12.4%	9.5%
US TIPS	8%	1.8%	1.7%
US Treasury	7%	1.7%	1.5%
Short Duration	6%	1.6%	1.5%
Private Credit	12%	7.8%	6.8%
Real Estate	5%	7.2%	6.5%
Value Add Real Estate	5%	9.8%	8.5%
Infrastructure	5%	8.0%	6.6%
Total	100%	6.9%	6.3%
Real Return		4.4%	3.8%

Table II-3 on the next page shows the expected nominal geometric return based on the Board’s current target asset allocation and the Plan’s investment consultant (Verus) and a survey of multiple investment consultants published by Horizon Actuarial Services in 2021 over both a 10 and 20- year time horizon). The table also shows the underlying inflation assumption used in the development of these capital market assumptions and computes the expected real rate of return (nominal investment return in excess of inflation).

For some classes in the SLOCPT portfolio – in particular Private Equity, Short-Term Government Fixed Income, Private Credit, and Value-Add Real Estate – the Horizon survey did not include specific assumptions, therefore the Verus assumptions were used for these classes.

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**SECTION II – ECONOMIC ASSUMPTIONS
DISCOUNT RATE**

Table II-3

SLOCPT Portfolio Return Expectations			
Source	Nominal	Inflation	Real
Verus (10-year)	6.28%	2.50%	3.78%
Horizon Survey (10-year)	6.42%	2.12%	4.30%
Verus (30-year)	6.56%	2.30%	4.26%
Horizon Survey (20-year)	<u>7.01%</u>	<u>2.23%</u>	<u>4.78%</u>
Average	6.57%	2.29%	4.28%
Current SLOCPT Assumptions	6.75%	2.25%	4.50%

Based on these capital market assumptions, we calculated an expected geometric return of 6.56% and 7.01% under the Verus 30-year and the Horizon 20-year survey assumptions, respectively, but only a 6.28% and 6.42% return under the Verus and Horizon 10-year survey assumptions, respectively. SLOCPT’s current nominal rate of return of 6.75% and real rate of return of 4.50% are both on average about 0.2% higher than investment consultants’ expectations.

We believe reasonable ranges for the nominal rate of return to be between 6.50% to 6.75% and the real rate of return to be between 4.25% to 4.50%. However, while short-term considerations should not be unduly weighted when setting the discount rate, stakeholders should be aware of the following factors regarding short-term expectations:

- Many investment consultants expect poor rates of return in the immediate and near-term future. They reason that there is little in the way of yields on fixed income, and that the equity markets are fully valued.
- We believe that near- and mid-term return projections should be considered along with long-term projections. Fund performance is usually measured over five to ten years; longer measurement periods are often considered less relevant because of the potential for changes in the economy and in the investment markets.
- If Verus and much of the investment community are correct in their projections, we can expect returns below the 6.75% assumed rate for a number of years. This will result in actuarial losses and increases in employer contribution rates, assuming other assumptions have no gains or losses.

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**SECTION II – ECONOMIC ASSUMPTIONS
DISCOUNT RATE**

Anecdotally, we have begun to see modest increases in capital market expectations over the past few months due to the recent high level of inflation and corresponding expected increases in interest rates. We propose that the Board and staff continue to conduct at least a brief discussion of this assumption annually, in consultation with the Plan’s actuary and investment consultant, to determine if changes are appropriate.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MERIT SALARY INCREASES**

Demographic assumptions are used to predict membership behavior, including rates of retirement, termination, disability, and mortality. These assumptions are based primarily on the historical experience of SLOCPT, with some adjustments where future experience is expected to differ from historical experience and with deference to standard tables where SLOCPT experience is not fully credible, and a standard table is available. For purposes of this study, merit salary increases are also considered a demographic assumption because the assumption is based primarily on SLOCPT's historical experience.

MERIT SALARY INCREASES

Salary increases consist of three components: Increases due to cost-of-living maintenance (inflation), increases related to non-inflationary pressures on base pay (such as productivity increases), and increases in individual pay due to merit, promotion, and longevity. Increases due to cost-of-living and non-inflationary base pay factors were addressed in an earlier section of this report.

The merit salary increase assumption is analyzed by membership class and by service. Generally, newer members are more likely to earn a longevity or step increase or receive a promotion, so their merit salary increases tend to be greater than those for longer service members.

We used a longitudinal study to analyze the merit increases, wherein we reviewed the average increase in pay for each level of service. To analyze the merit component, we subtracted the Plan's real wage from the total pay increases experienced by each member during the experience study period. We have computed the real wage growth by calculating the increase in the average salary across all active members (calculated separately for Miscellaneous and Safety/Probation) each year and adjusting for changes in the average service level.

Currently, merit salary increases are the same for all membership classes. Also, the current assumption is that merit salary increases are zero after six years of service. We are proposing separate merit salary increase assumptions for Miscellaneous members and for Safety and Probation members. Our analysis of SLOCPT's historical experience shows merit salary increases continuing in service years beyond six; therefore, we are also proposing a longer service period of merit salary increases before assuming zero percent.

Chart III-1 and Chart III-2 on the following pages analyze the pay patterns for Miscellaneous and Safety/Probation members, respectively, for the five-year period from 2017 through 2021. Our charts will generally show the current assumption (dark blue line) compared to the actual experience (teal line) and the proposed assumption (green line).

Table III-1 and Table III-2 summarize the current and proposed merit salary increase assumptions by years of service.

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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MERIT SALARY INCREASES**

We have proposed new assumptions with slightly higher increases for Miscellaneous members with 7 to 20 years of service.

Chart III-1 – Miscellaneous Merit Salary Increase

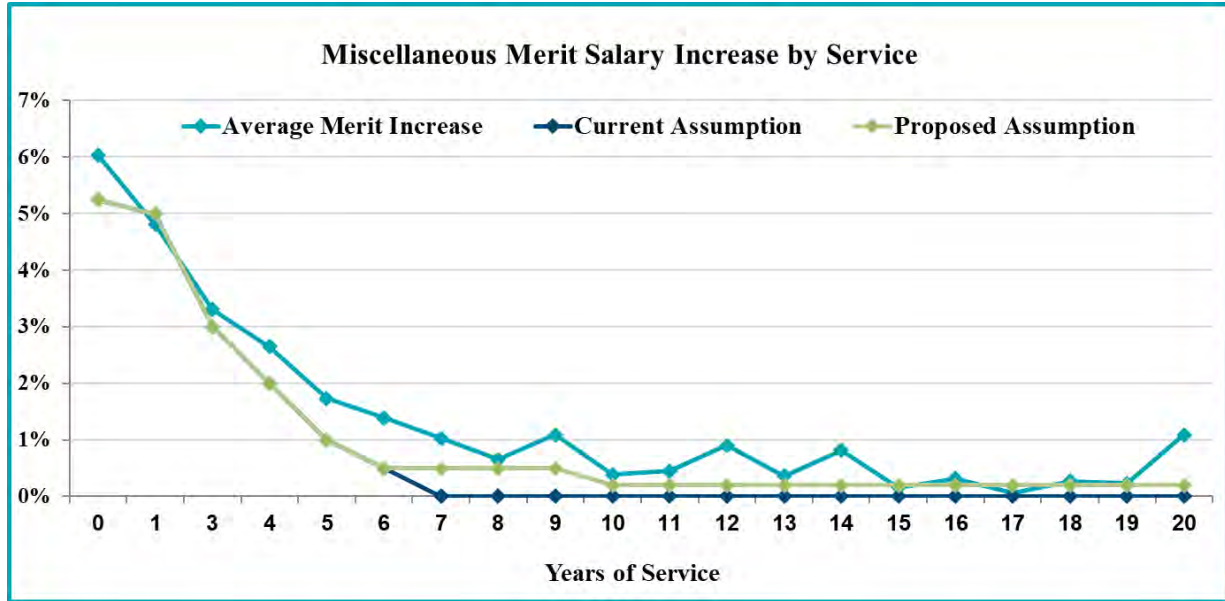


Table III-1 – Miscellaneous Merit Salary Increase

Miscellaneous - Merit Salary Increases		
Service	Current	Proposed
0	5.25%	5.25%
1	5.00%	5.00%
2	4.00%	4.00%
3	3.00%	3.00%
4	2.00%	2.00%
5	1.00%	1.00%
6	0.50%	0.50%
7 - 9	0.00%	0.50%
10 - 20	0.00%	0.20%
21+	0.00%	0.00%

**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MERIT SALARY INCREASES**

We have proposed new assumptions with a lower increase for Safety and Probation members with 1 year of service and a slightly higher increases for Safety members with 7 to 24 years of service.

Chart III-2 – Safety and Probation Merit Salary Increase

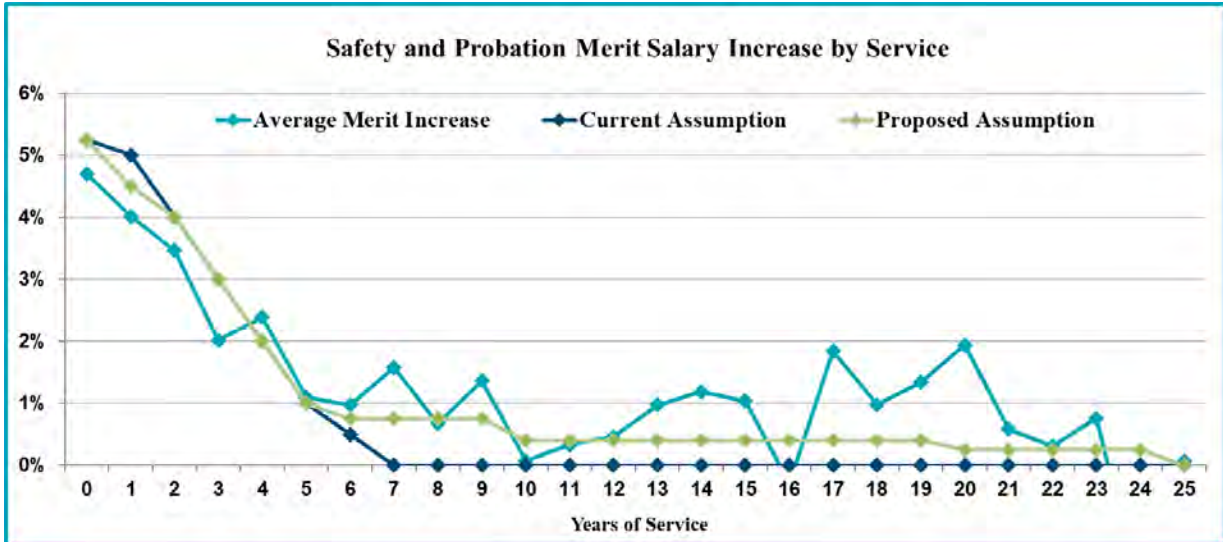


Table III-2 – Safety and Probation Merit Salary Increase

Safety and Probation - Merit Salary Increases		
Service	Current	Proposed
0	5.25%	5.25%
1	5.00%	4.50%
2	4.00%	4.00%
3	3.00%	3.00%
4	2.00%	2.00%
5	1.00%	1.00%
6	0.50%	0.75%
7 - 9	0.00%	0.75%
10 - 19	0.00%	0.40%
20 - 24	0.00%	0.25%
25+	0.00%	0.00%

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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

ANALYSIS OF OTHER DEMOGRAPHIC ASSUMPTIONS

For all of the remaining demographic assumptions, we determined the ratio of the actual number of decrements for each membership class compared to the expected number of decrements (A/E ratio or actual-to-expected ratio). If the assumption is perfect, this ratio will be 100%. Otherwise, any proposed assumption change should move from the current A/E ratio towards 100% unless future experience is expected to be different than the experience during the period of study.

We also calculate an R-Squared statistic for each assumption. R-Squared measures how well the assumption fits the actual data and can be thought of as the percentage of the variation in actual data explained by the assumption. Ideally, R-Squared would equal 1.00 although this is never the case. Any proposed assumption change should increase the R-Squared compared to the current assumption making it closer to 1.00 unless the pattern of future decrements is expected to be different from the pattern experienced during the period of study.

In addition, we calculated the 90% confidence interval, which represents the range within which the true decrement rate during the experience study period fell with 90% confidence. (If there is insufficient data to calculate a confidence interval, the confidence interval is shown as the entire range of the graph.) We generally propose assumption changes when the current assumption is outside the 90% confidence interval of the observed experience. However, adjustments are made to account for differences between future expectations and historical experience to account for the past experience represented by the current assumption and to maintain a neutral to slight conservative bias in the selection of the assumption. When analyzing the retirement, termination, withdrawal, and disability experience, we only considered 2017-2019 calendar years. Demographic patterns during COVID (2020 and 2021) are not good indications of future behavior and experience. However, our charts and tables show all experience from January 1, 2017 to December 31, 2021.

For mortality rates, we compare SLOCPT's experience to that of a standard table and, if warranted, adjust the tables to bring the proposed assumption closer to an A/E ratio of 100%.

See Appendices A and B for a full listing of all the proposed and prior assumptions.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

RETIREMENT RATES

The current retirement rates vary by age, membership class (Miscellaneous, Probation, and Safety), and plan tier (Tier I and Tier II/III) and are applied to all members who are eligible to retire. Generally, members with more service are more likely to retire than members with fewer years of service since the retirement benefit is greater, at any given age. We propose separate retirement assumptions by age, membership class, and plan tier for service groups as follows:

- Members with less than 25 years of service, and
- Members with 25 or more years of service.

In general, actual retirements rates during COVID were higher than historic rates. As a result, the proposed rates may not always to be within the confidence interval due to the inclusion of COVID experience in calculating these intervals.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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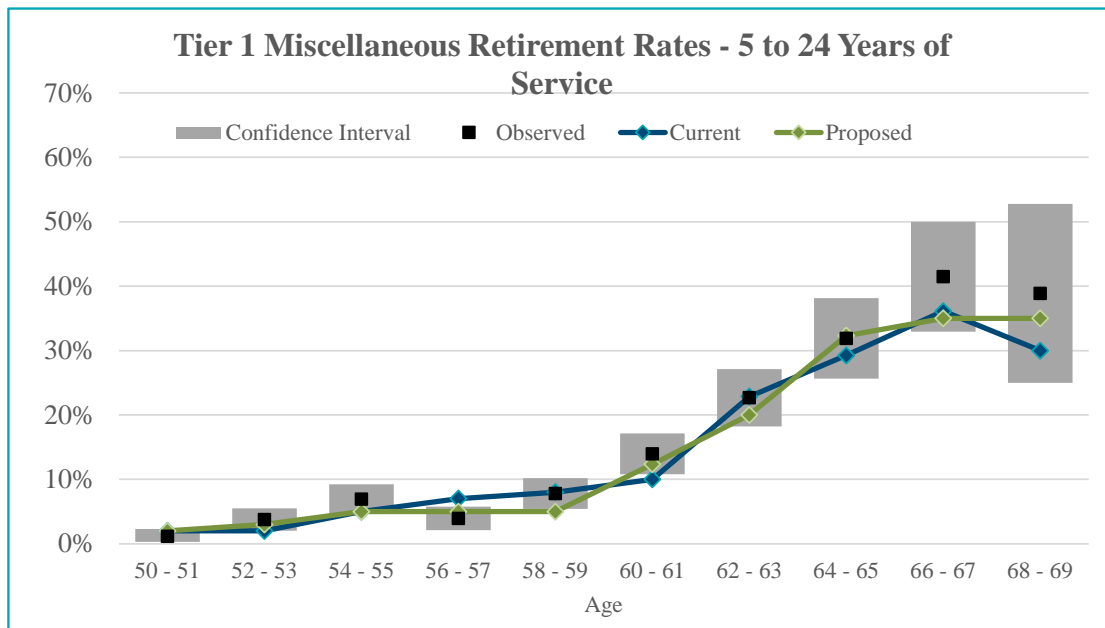
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Table III-R1 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Miscellaneous Tier 1 members with 5 to 24 years of service. Chart III-R1 shows the information graphically along with the 90% confidence interval. The data shows more actual retirements than expected under the current assumption. Actual retirements rates during COVID were higher than historic rates. The new assumptions result in a small increase the aggregate A/E ratio from 109% to 112%. But more importantly, the R-Squared statistic (how the assumption fits the actual data) improves from 88% to 94%.

Table III-R1 – Miscellaneous Tier 1 Retirement

Tier 1 Miscellaneous Retirement Rates - 5 to 24 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50 - 51	346	4	7	7	1.2%	2.0%	2.0%	58%	58%
52 - 53	344	13	7	10	3.8%	2.0%	3.0%	189%	126%
54 - 55	346	24	17	17	6.9%	5.0%	5.0%	139%	139%
56 - 57	330	13	23	17	3.9%	7.0%	5.0%	56%	79%
58 - 59	333	26	27	17	7.8%	8.0%	5.0%	98%	156%
60 - 61	315	44	32	39	14.0%	10.0%	12.3%	140%	113%
62 - 63	247	56	56	49	22.7%	22.9%	20.0%	99%	113%
64 - 65	160	51	47	52	31.9%	29.3%	32.3%	109%	99%
66 - 67	82	34	30	29	41.5%	36.1%	35.0%	115%	118%
68 - 69	36	14	11	13	38.9%	30.0%	35.0%	130%	111%
TOTAL	2,539	279	256	249	11.0%	10.1%	9.8%	109%	112%
Confidence Interval %			70%	90%					
R-squared			88%	94%					

Chart III-R1 – Miscellaneous Tier 1 Retirement



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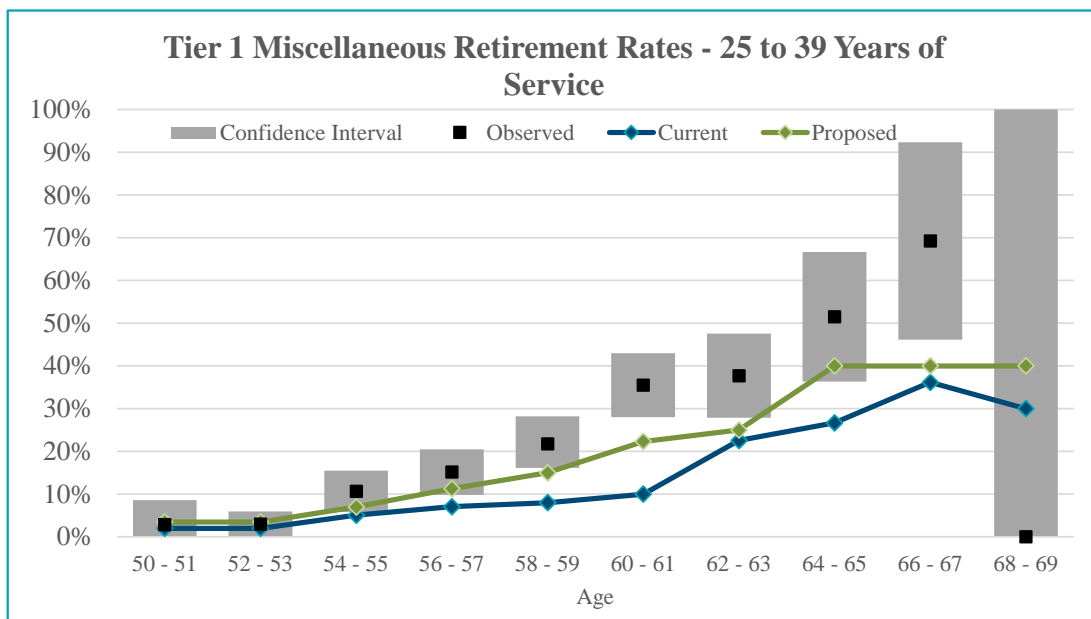
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Table III-R2 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Miscellaneous Tier 1 members with 25 to 39 years of service. Chart III-R2 shows the information graphically along with the 90% confidence interval. The proposed rates were increased but not always to be within the confidence interval due to higher retirement during COVID. The data shows more actual retirements than expected under the current assumption. The proposed assumption increases the aggregate number of assumed retirements. The new assumptions decrease the aggregate A/E ratio from 224% to 143%. The R-Squared statistic improves, increasing from 79% to 98%.

Table III-R2 – Miscellaneous Tier 1 Retirement

Tier 1 Miscellaneous Retirement Rates - 25 to 39 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50 - 51	35	1	1	1	2.9%	2.0%	3.5%	143%	82%
52 - 53	67	2	1	2	3.0%	2.0%	3.5%	149%	85%
54 - 55	103	11	5	7	10.7%	5.1%	7.0%	210%	153%
56 - 57	132	20	9	15	15.2%	7.1%	11.3%	214%	134%
58 - 59	124	27	10	19	21.8%	8.0%	15.0%	272%	145%
60 - 61	107	38	11	24	35.5%	10.0%	22.3%	355%	159%
62 - 63	61	23	14	15	37.7%	22.5%	25.0%	167%	151%
64 - 65	33	17	9	13	51.5%	26.7%	40.0%	193%	129%
66 - 67	13	9	5	5	69.2%	36.2%	40.0%	191%	173%
68 - 69	5	0	2	2	0.0%	30.0%	40.0%	0%	0%
TOTAL	680	148	66	104	21.8%	9.7%	15.3%	224%	143%
Confidence Interval %			30%	60%					
R-squared			79%	98%					

Chart III-R2 – Miscellaneous Tier 1 Retirement



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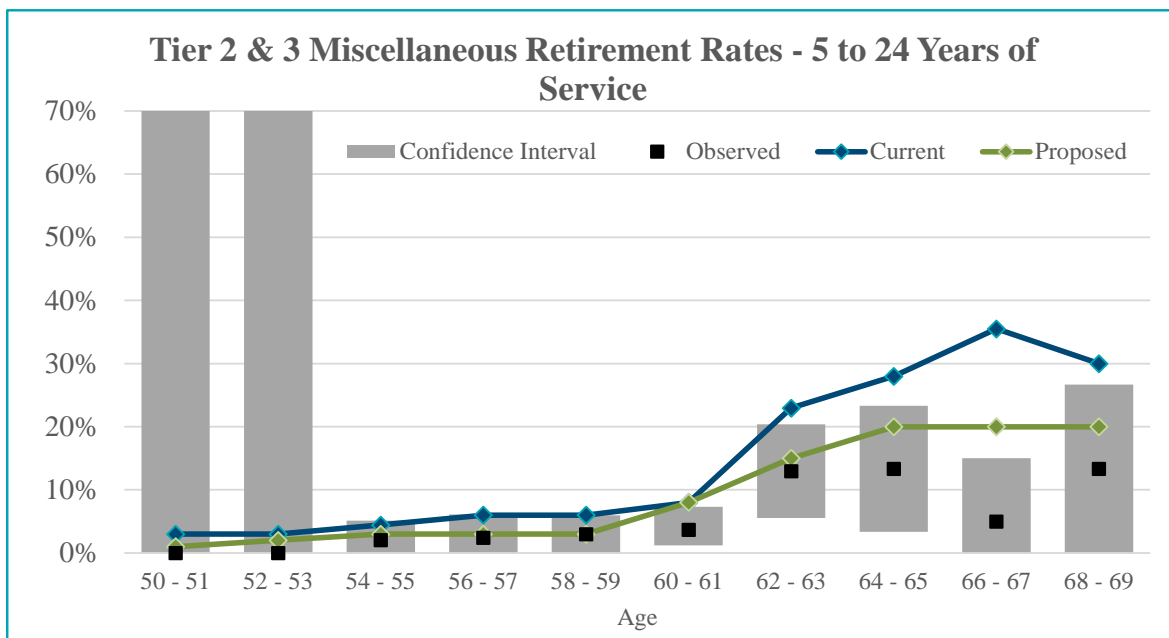
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Table III-R3 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Miscellaneous Tier 2 and 3 members with 5 to 24 years of service. Chart III-R3 shows the information graphically along with the 90% confidence interval. The data shows fewer actual retirements than expected under the current assumption. The proposed assumption decreases the aggregate number of assumed retirements and decreases the retirement rate for most age bands to be more in line with the experience. The new assumptions increase the aggregate A/E ratio from 41% to 61%. The R-Squared statistic decreases slightly from 83% to 77%.

Table III-R3 – Miscellaneous Tiers 2 and 3 Retirement

Tier 2 & 3 Miscellaneous Retirement Rates - 5 to 24 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50 - 51	60	0	2	1	0.0%	3.0%	1.0%	0%	0%
52 - 53	91	0	3	2	0.0%	3.0%	2.0%	0%	0%
54 - 55	98	2	4	3	2.0%	4.4%	3.0%	46%	68%
56 - 57	82	2	5	2	2.4%	6.0%	3.0%	41%	81%
58 - 59	67	2	4	2	3.0%	6.0%	3.0%	50%	100%
60 - 61	82	3	7	7	3.7%	8.0%	8.0%	46%	46%
62 - 63	54	7	12	8	13.0%	23.0%	15.0%	56%	86%
64 - 65	30	4	8	6	13.3%	28.0%	20.0%	48%	67%
66 - 67	20	1	7	4	5.0%	35.5%	20.0%	14%	25%
68 - 69	15	2	5	3	13.3%	30.0%	20.0%	44%	67%
TOTAL	599	23	57	37	3.8%	9.5%	6.3%	41%	61%
Confidence Interval %			40%	80%					
R-squared			83%	77%					

Chart III-R3 – Miscellaneous Tiers 2 and 3 Retirement



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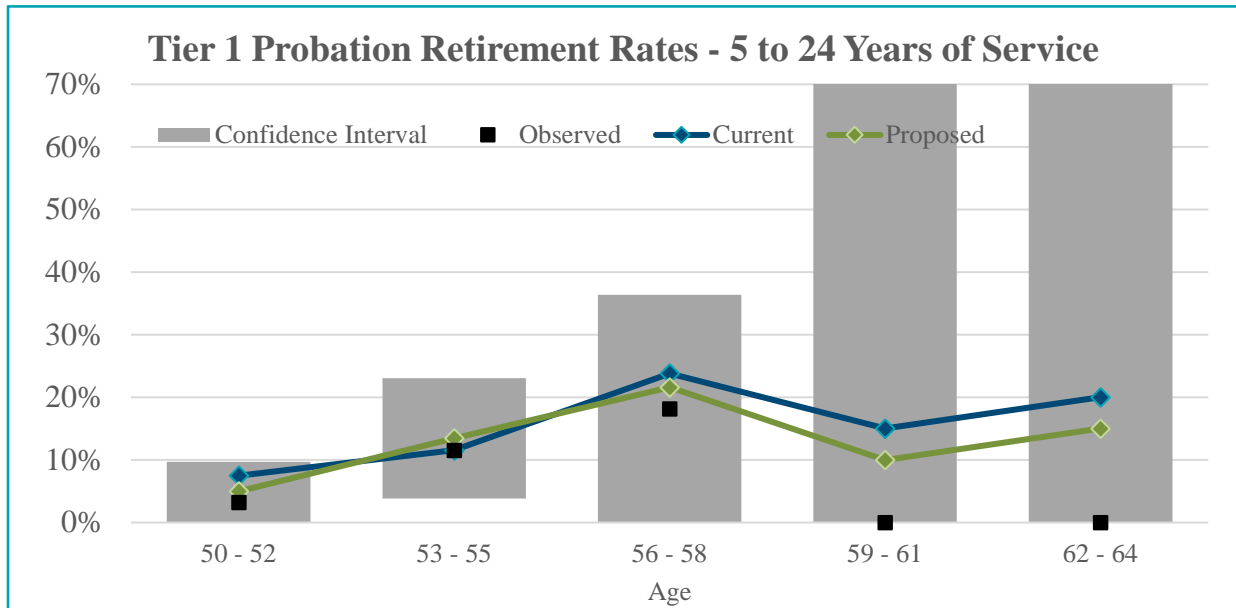
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Table III-R4 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Probation Tier 1 members with 5 to 24 years of service. Chart III-R4 shows the information graphically along with the 90% confidence interval. The data shows lower actual retirements than expected under the current assumption. The proposed assumption makes decreases to the aggregate expected retirements to be more in line with actual experience. The new assumptions increase the aggregate A/E ratio from 63% to 70%. The R-Squared statistic improves, increasing from 83% to 97%.

Table III-R4 – Probation Tier 1 Retirement

Tier 1 Probation Retirement Rates - 5 to 24 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50 - 52	31	1	2	2	3.2%	7.5%	5.0%	43%	65%
53 - 55	26	3	3	4	11.5%	11.5%	13.5%	100%	86%
56 - 58	11	2	3	2	18.2%	23.8%	21.6%	76%	84%
59 - 61	3	0	0	0	0.0%	15.0%	10.0%	0%	0%
62 - 64	6	0	1	1	0.0%	20.0%	15.0%	0%	0%
TOTAL	77	6	10	9	7.8%	12.5%	11.2%	63%	70%
Confidence Interval %			100%	100%					
R-squared			83%	97%					

Chart III-R4 – Probation Tier 1 Retirement



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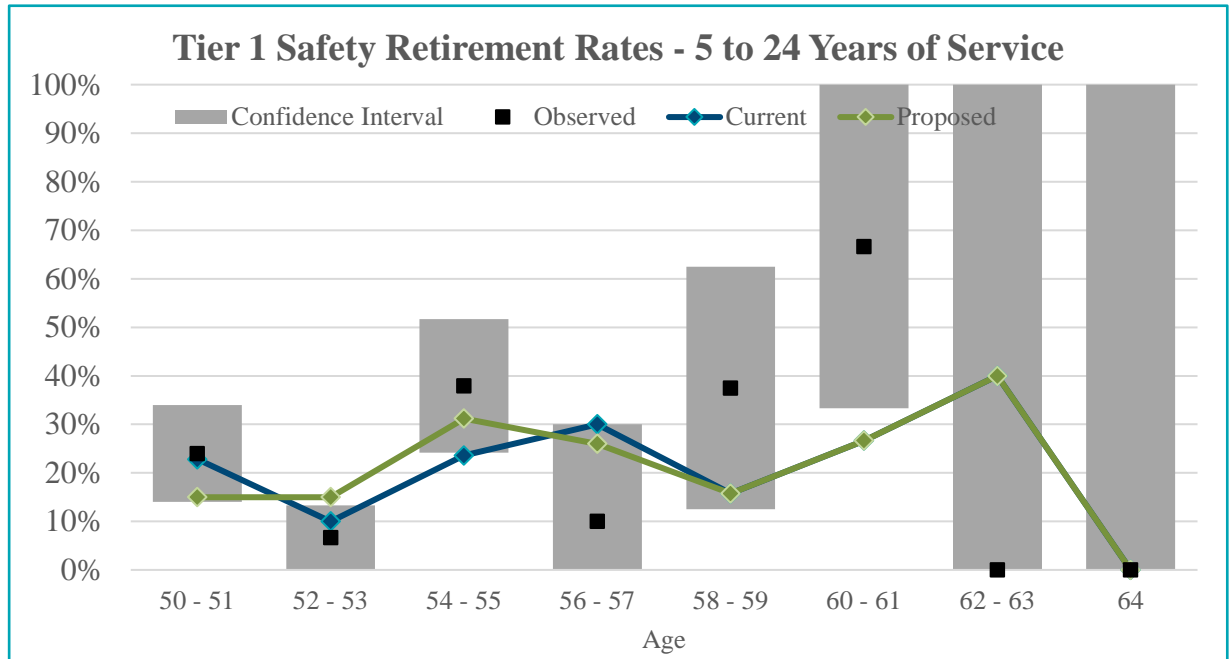
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

Table III-R5 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Safety Tier 1 members with 5 to 24 years of service. Chart III-R5 shows the information graphically along with the 90% confidence interval. The data shows higher actual retirements than expected under the current assumption. The proposed assumption slightly decreases the aggregate number of assumed retirements but increases the retirement rate for certain age bands to be more in line with the experience. The new assumptions increase the aggregate A/E ratio from 120% to 123%. The R-Squared statistic decreases slightly from 84% to 80%.

Table III-R5 – Safety Tier 1 Retirement

Tier 1 Safety Retirement Rates - 5 to 24 Years of Service									
Age	Exposures	Retirements			Retirement Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
50 - 51	50	12	11	8	24.0%	22.8%	15.0%	105%	160%
52 - 53	30	2	3	5	6.7%	10.0%	15.0%	67%	44%
54 - 55	29	11	7	9	37.9%	23.6%	31.2%	161%	122%
56 - 57	10	1	3	3	10.0%	30.0%	26.0%	33%	38%
58 - 59	8	3	1	1	37.5%	15.8%	15.8%	238%	238%
60 - 61	6	4	2	2	66.7%	26.7%	26.7%	250%	250%
62 - 63	1	0	0	0	0.0%	40.0%	40.0%	0%	0%
64	0	0	0	0	0.0%	0.0%	0.0%	0%	0%
TOTAL	134	33	28	27	24.6%	20.5%	20.1%	120%	123%
Confidence Interval %			75%	75%					
R-squared			84%	80%					

Chart III-R5 – Safety Tier 1 Retirement



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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
RETIREMENT RATES**

We have not shown the data for Probation and Safety Tier 1 members with 25 or more years of service due to the low number of actual retirements in that service group. Also, we have not shown the data for most Tiers 2 & 3 experience due to the low number of actual retirements in those Tiers. Therefore, we have used our professional judgment to propose retirement rates by age, membership class, and plan tier for these service groups based on the rate of retirement patterns exhibited by Tier 1 members in the specific group.

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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Termination rates (vested termination rates and withdrawal rates) reflect the frequency at which active members leave employment for reasons other than retirement, death, or disability. Currently, the vested termination rates are based on age only and the withdrawal rates are based on age and service for Miscellaneous, Safety, and Probation members. We have found that the rate of termination is more related to years of service rather than age. This methodology also avoids under-weighting the liabilities that can occur if using age-based rates only. The termination rates do not apply once members are eligible for a service retirement benefit.

Vested Termination Rates

Vested termination rates apply to active members who are eligible for reduced or unreduced retirement benefits. Table III-T1 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Miscellaneous members. Chart III-T1a shows the information graphically along with the 90% confidence interval for the current assumption by age and Chart III-T1b shows the current and proposed assumptions by service. The current assumption rates are shown as a weighted average of the age-based rates within the respective service bands.

The data shows actual vested termination rates close to expected under the current assumption. We are proposing to base vested termination rates on service using the following rates starting at five years of service, to be more in line with experience. The proposed assumption maintains the aggregate assumed rate of termination and the aggregate A/E ratio remains at 87%. The R-Squared statistic improves, increasing slightly.

Table III-T1: Miscellaneous Vested Termination

Miscellaneous Vested Termination Rates									
Service	Exposures	Terminations			Termination Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current*	Proposed	Current	Proposed
5 - 7	1,531	77	69	78	5.0%	4.5%	5.1%	111%	99%
8 - 10	1,065	41	40	43	3.8%	3.8%	4.0%	101%	96%
11 - 13	1,144	34	39	37	3.0%	3.4%	3.3%	88%	91%
14 - 16	916	18	27	27	2.0%	3.0%	2.9%	66%	67%
17 - 19	861	19	23	22	2.2%	2.7%	2.6%	82%	85%
20 - 22	564	6	14	10	1.1%	2.5%	1.7%	43%	63%
23 - 25	317	1	6	5	0.3%	2.0%	1.5%	16%	21%
26 - 28	302	3	5	5	1.0%	1.7%	1.5%	57%	66%
29 - 31	172	1	3	3	0.6%	1.6%	1.5%	35%	39%
32 - 34	85	0	2	1	0.0%	1.8%	1.5%	0%	0%
TOTAL	6,957	200	229	229	2.9%	3.3%	3.3%	87%	87%
Confidence Interval %			70%	80%					
R-squared			97%	99%					

**The current assumptions were determined by age. This table shows service bands, so the current termination rates are a weighted average of the age-based rates within the respective service bands.*

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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Chart III-T1a: Miscellaneous Vested Termination

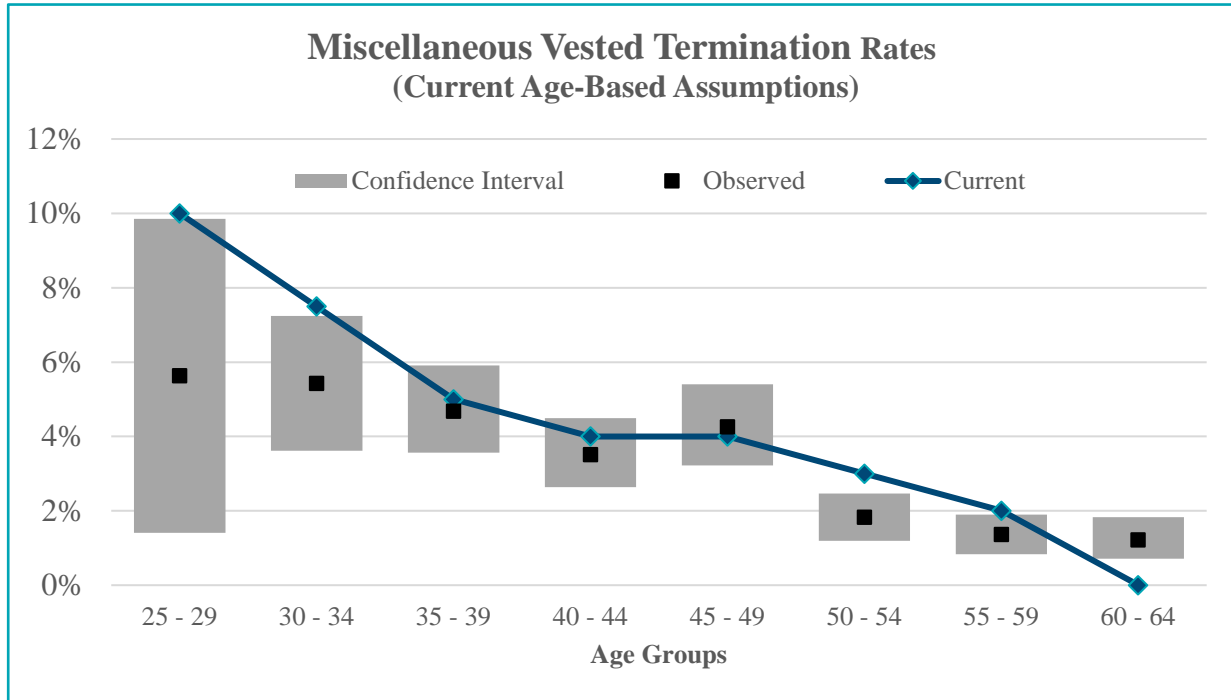
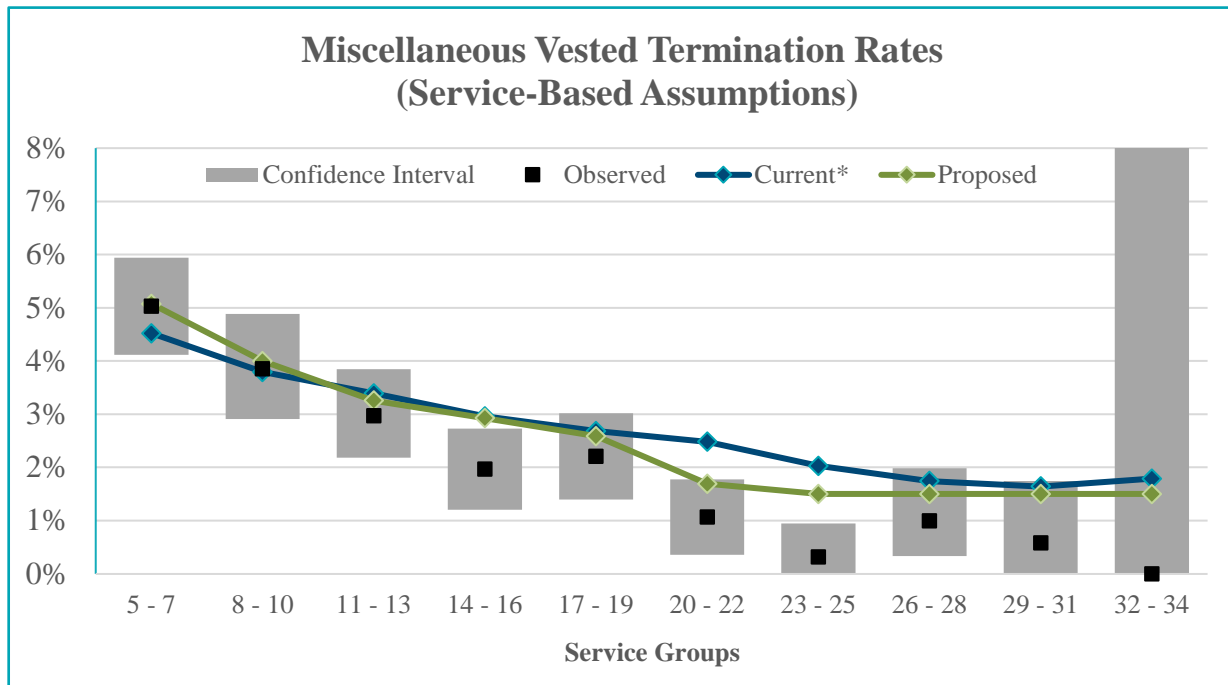


Chart III-T1b: Miscellaneous Vested Termination



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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Table III-T2 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Safety and Probation members. Chart III-T2a shows the information graphically along with the 90% confidence interval for the current assumption by age and Chart III-T2b shows the current and proposed assumptions by service. The current assumption rates are shown as a weighted average of the age-based rates within the respective service bands.

The data shows actual vested termination rates close to expected under the current assumption. We are proposing to base vested termination rates on service using the following rates starting at five years of service, to be more in line with experience. The proposed assumption increases the aggregate assumed rate of termination to align with the actual experience and the aggregate A/E ratio decreases to 102%. The R-Squared statistic improves, increasing from 88% to 98%.

Table III-T2: Safety and Probation Vested Termination

Safety and Probation Vested Termination Rates									
Service	Exposures	Terminations			Termination Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current*	Proposed	Current	Proposed
5 - 9	408	11	6	10	2.7%	1.5%	2.4%	180%	111%
10 - 14	382	8	6	6	2.1%	1.5%	1.7%	143%	123%
15 - 19	275	3	4	4	1.1%	1.4%	1.4%	80%	81%
20 - 24	284	3	4	4	1.1%	1.3%	1.3%	79%	85%
25 - 29	80	0	1	1	0.0%	1.2%	1.0%	0%	0%
TOTAL	1,429	25	20	24	1.7%	1.4%	1.7%	124%	102%
Confidence Interval %			100%	100%					
R-squared			88%	98%					

**The current assumptions were determined by age. This table shows service bands, so the current termination rates are a weighted average of the age-based rates within the respective service bands.*

**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Chart III-T2a: Safety and Probation Vested Termination

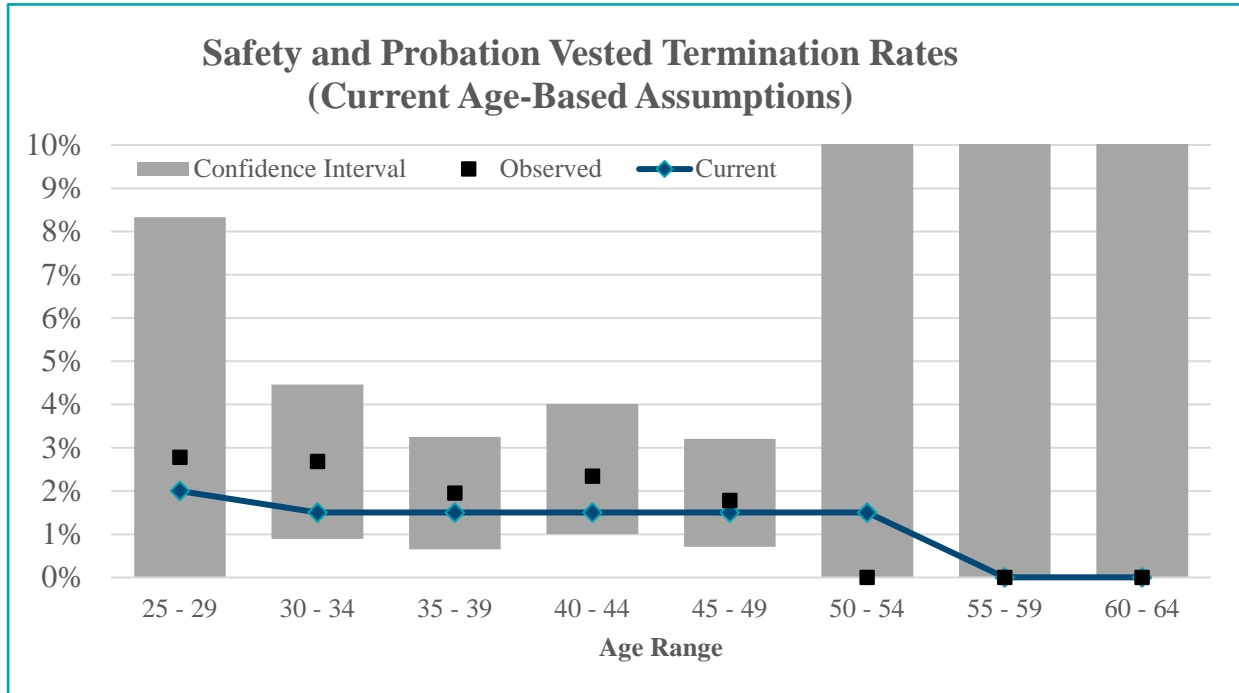
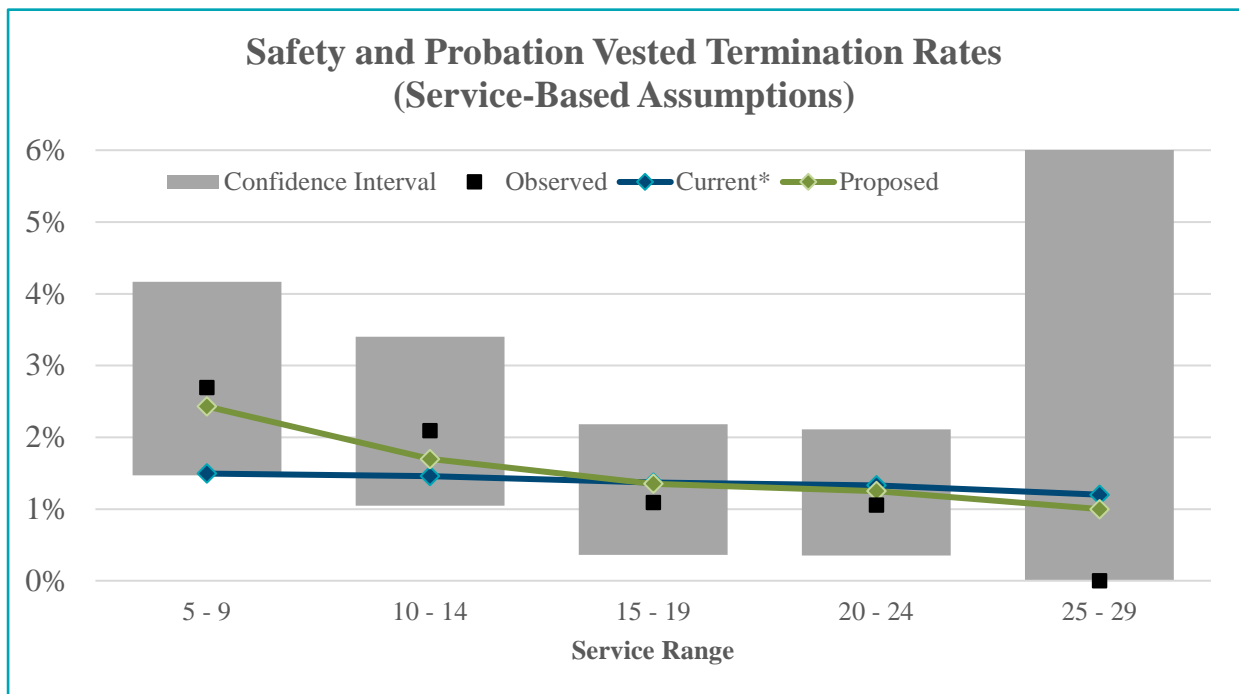


Chart III-T2b: Safety and Probation Vested Termination



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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Withdrawal Rates

Rates of withdrawal apply to active members who terminate their employment and withdraw their member contributions, forfeiting entitlement to future Plan benefits. When a vested member terminates employment, they have the option of receiving a refund of contributions with interest or a deferred annuity.

Table III-T3 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Miscellaneous members. Chart III-T3a shows the information graphically along with the 90% confidence interval for the current assumption by age and Chart III-T3b shows the current and proposed assumptions by service. The current assumption rates are shown as a weighted average of the age-based rates within the respective service bands.

The data shows actual withdrawal rates close to expected under the current assumption. We are proposing to base withdrawal rates on service using the following rates starting at zero years of service, to be more in line with experience. The proposed assumption increases the aggregate assumed rate of withdrawal and the aggregate A/E ratio decreases to 86%. The R-Squared statistic improves, increasing from 88% to 99%. We note that because the number of withdrawals and exposures is quite high, a higher degree of credibility can be assigned to the withdrawal experience, and therefore we are comfortable proposing service-based assumptions that align closely with the data.

Table III-T3: Miscellaneous Withdrawal

Miscellaneous Withdrawal Rates									
Service	Exposures	Withdrawals			Withdrawal Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current*	Proposed	Current	Proposed
0 - 1	1,749	280	184	296	16.0%	10.5%	16.9%	152%	95%
2 - 3	1,762	155	176	195	8.8%	10.0%	11.0%	88%	80%
4 - 5	1,319	48	80	54	3.6%	6.1%	4.1%	60%	88%
6 - 7	913	6	14	16	0.7%	1.5%	1.8%	42%	38%
8 - 9	698	1	9	9	0.1%	1.2%	1.3%	12%	11%
10 - 14	1,840	13	15	13	0.7%	0.8%	0.7%	84%	100%
15 - 19	1,448	5	6	7	0.3%	0.4%	0.5%	86%	69%
20 - 24	784	2	1	4	0.3%	0.1%	0.5%	201%	51%
TOTAL	10,513	510	485	594	4.9%	4.6%	5.6%	105%	86%
Confidence Interval %			38%	63%					
R-squared			88%	99%					
<i>*The current assumptions were determined primarily by age. This table shows service bands, so the current withdrawal rates are a weighted average of the age-based rates within the respective service bands.</i>									

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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Chart III-T3a: Miscellaneous Withdrawal

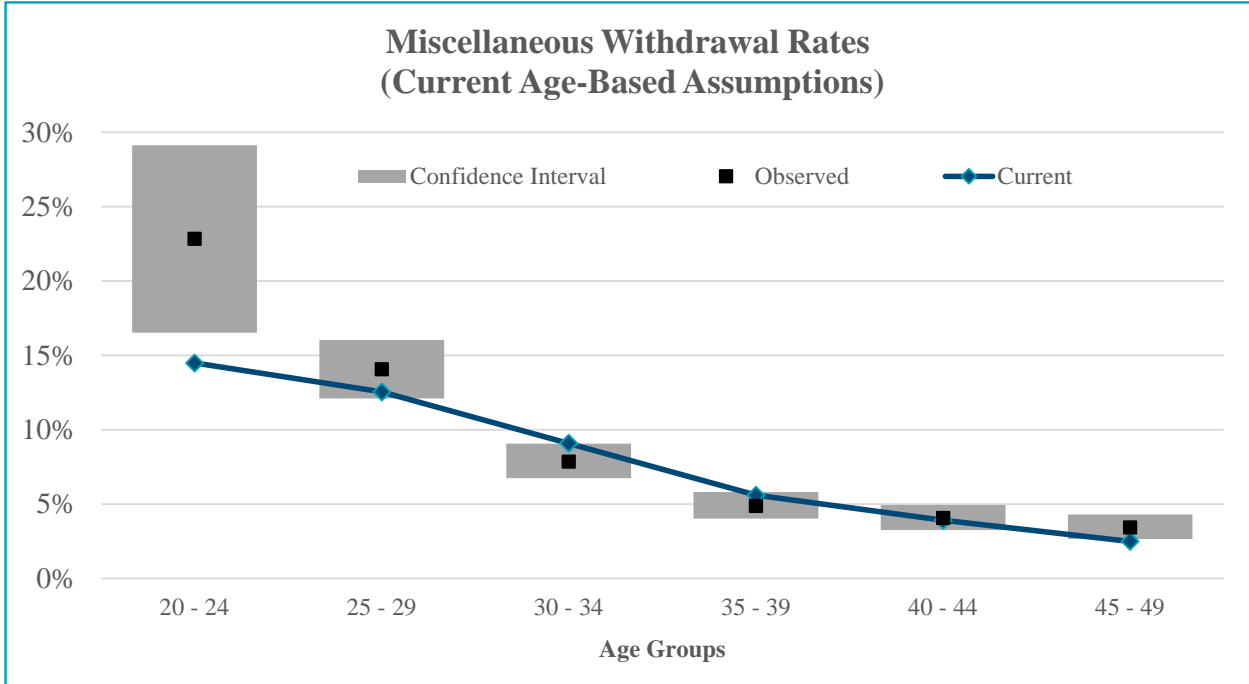
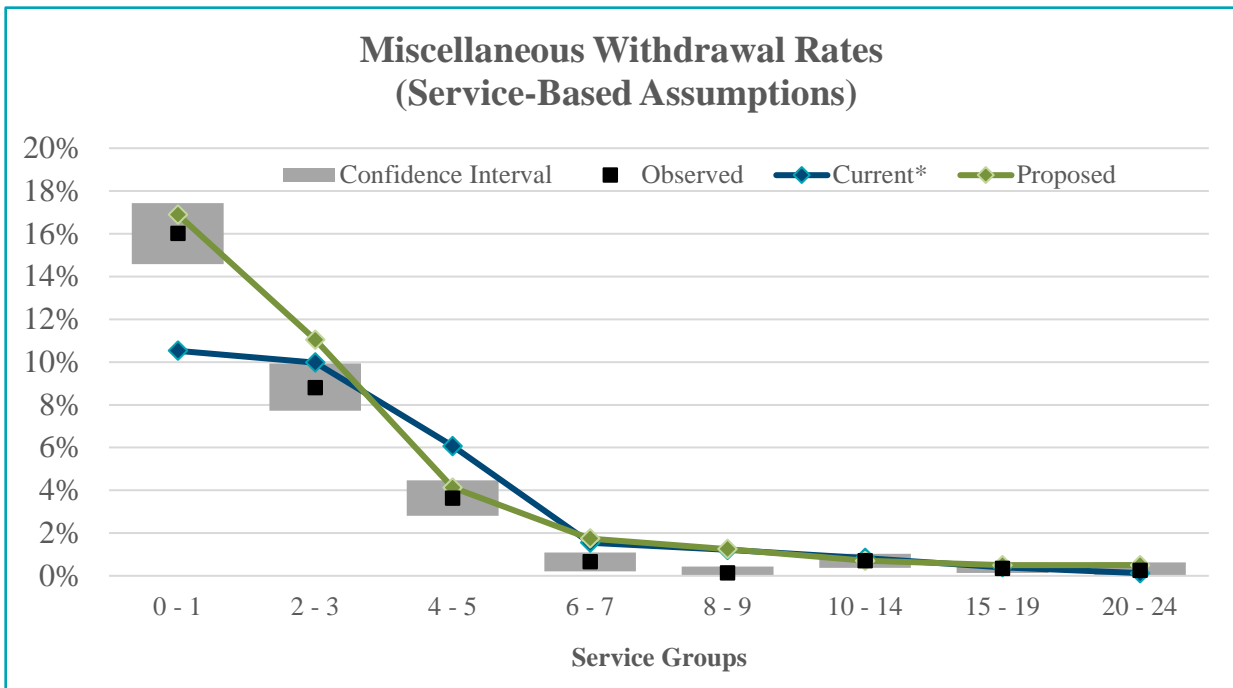


Chart III-T3b: Miscellaneous Withdrawal



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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Table III-T4 shows the calculation of actual-to-expected ratios and the R-Squared statistic for Safety and Probation members. Chart III-T4a shows the information graphically along with the 90% confidence interval for the current assumption by age and Chart III-T4b shows the current and proposed assumptions by service. The current assumption rates are shown as a weighted average of the age-based rates within the respective service bands.

The data shows actual withdrawal rates higher than expected under the current assumption. We are proposing to base withdrawal rates on service using the following rates starting at zero years of service, to be more in line with experience. The proposed assumption increases the aggregate assumed rate of withdrawal and the aggregate A/E ratio decreases from 150% to 95%. The R-Squared statistic improves, increasing from 85% to 97%.

Table III-T4: Safety and Probation Withdrawal

Safety and Probation Withdrawal Rates									
Service	Exposures	Withdrawals			Withdrawal Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current*	Proposed	Current	Proposed
0 - 1	209	21	9	18	10.0%	4.4%	8.7%	226%	116%
2 - 3	249	14	11	14	5.6%	4.3%	5.5%	130%	102%
4 - 5	206	5	5	7	2.4%	2.6%	3.5%	93%	69%
6 - 7	166	1	1	3	0.6%	0.8%	1.5%	74%	39%
8 - 9	140	1	1	1	0.7%	0.7%	1.0%	101%	71%
10 - 11	151	2	1	2	1.3%	0.6%	1.0%	216%	132%
12 - 13	161	0	1	2	0.0%	0.5%	1.0%	0%	0%
14 - 15	132	1	1	1	0.8%	0.4%	1.0%	185%	76%
TOTAL	1,414	45	30	48	3.2%	2.1%	3.4%	150%	95%
Confidence Interval %			88%	100%					
R-squared			85%	97%					
<i>*The current assumptions were determined primarily by age. This table shows service bands, so the current withdrawal rates are a weighted average of the age-based rates within the respective service bands.</i>									

**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Chart III-T4a: Safety and Probation Withdrawal

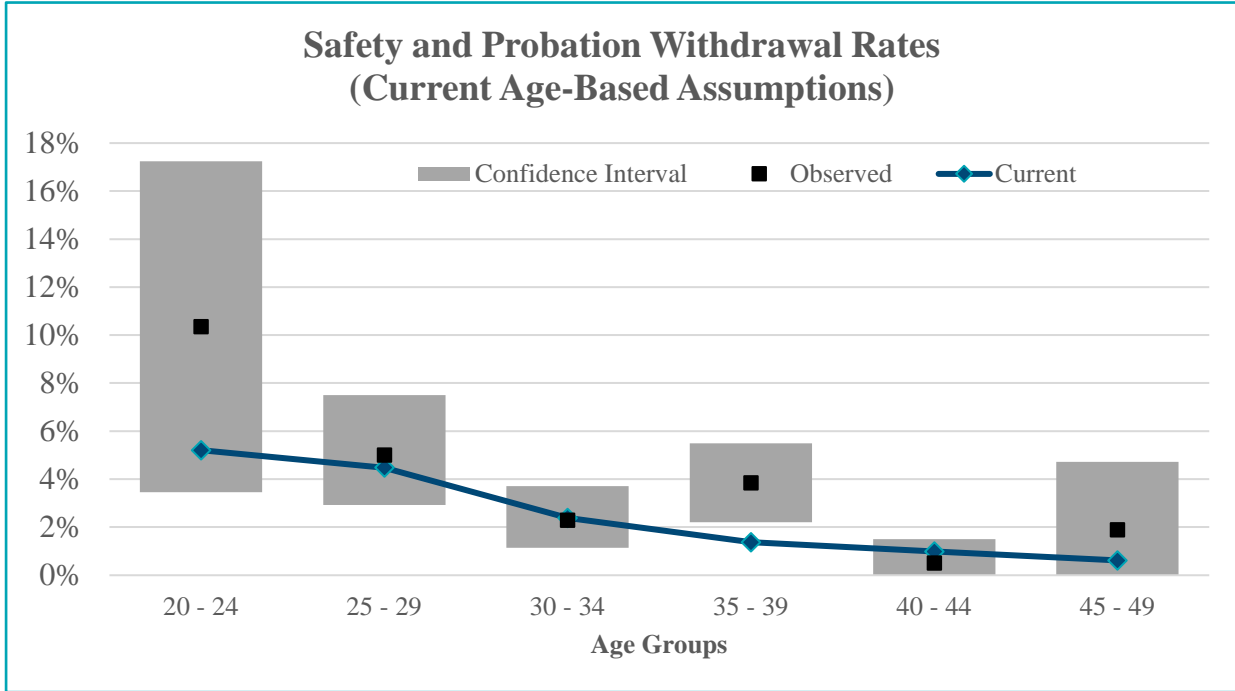
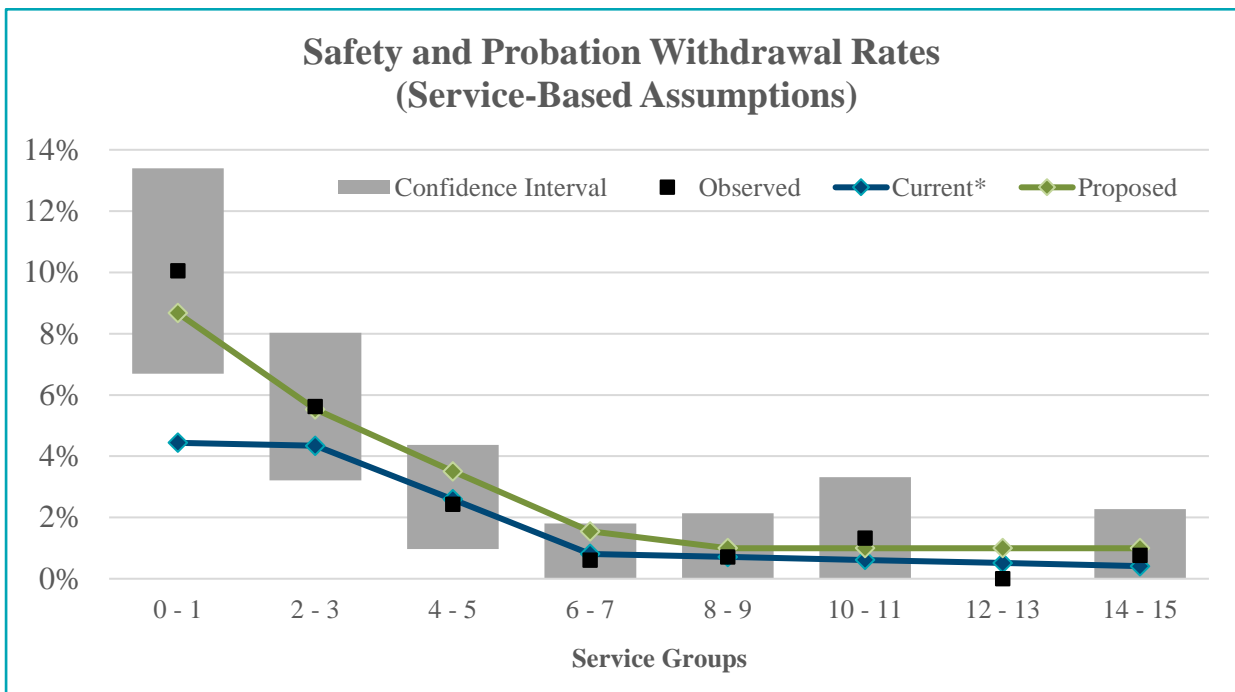


Chart III-T4b: Safety and Probation Withdrawal



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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
TERMINATION RATES**

Reciprocal Transfers

All members who terminate employment, regardless of length of service credited, have the option of receiving a refund of contributions with interest or leaving the accumulated contributions with interest in deposit with the Plan. The reciprocal transfer assumption assumes a member terminates employment, leaves their contributions with interest in the Plan, and works for a reciprocal employer.

Table III-T5 below shows the experience for the percentage of terminated members who retire from a reciprocal system. We performed the analysis from two different perspectives. The first method (Termination Analysis), which covers five years of experience, looks at the number of members who notify SLOCPT that they have been employed at a reciprocal retirement system when they terminate SLOCPT employment. The second method (Retirement Analysis), which covers the three most recent years of experience, looks at the number of members who retire from a terminated status at SLOCPT but were employed at a reciprocal system.

The first analysis results in lower rates of reciprocity. This is likely due to members not reporting to SLOCPT that they were hired at a reciprocal system and the information only becoming available once the member retires from the reciprocal system.

Based on the overall analysis, we are not proposing any changes to the current assumption. The assumption is that 30% of vested terminated members who leave their member contributions on deposit with the Plan are reciprocal transfers. In addition, all non-vested terminated members are assumed to take a refund of contributions with interest. We will continue to monitor this assumption in the next experience study.

Table III-T5: Reciprocal Transfers

Percentage of Members With Reciprocity	
Termination Analysis	
Members who terminated and left contributions on deposit	288
Members who terminated and went to a reciprocal system	65
Percentage of terminated members with reciprocity	23%
Retirement Analysis	
Members who retired from terminated or reciprocal status	79
Members who retired from reciprocal status	29
Percentage of retirements with reciprocity	37%

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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
DISABILITY RATES**

This section analyzes the incidence of disability by the age of the member by membership class. Generally, there is a very low rate of disability, and the disability assumption only has a minor impact on the liabilities as a whole. Given the lack of credible data, less emphasis is placed on the aggregate A/E ratios, confidence intervals, and R-Squared statistics. Overall, the assumed rates of disability remain within reason relative to actual experience. We are not proposing any changes to this assumption.

In addition, it is assumed that all disabilities for Safety members are assumed to be service-related and no disabilities for Miscellaneous and Probation members are assumed to be service-related. We are not proposing any change to this assumption.

Table III-D1 shows the calculation of actual-to-expected ratios and the R-Squared statistic for all disabilities for Miscellaneous members, and Chart III-D1 shows the information graphically.

The data shows actual disability rates that are lower than the current assumption. Due to the low number of actual disabilities and the lack of sufficient credible data for comparison, we are not proposing any changes to this assumption.

Table III-D1: Miscellaneous Disability

Miscellaneous Disability Rates									
Age Band	Exposures	Disabilities*			Average Disability Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
35 - 39	1,634	0	1	1	0.00%	0.05%	0.05%	0%	0%
40 - 44	1,474	1	1	1	0.07%	0.07%	0.07%	98%	98%
45 - 49	1,302	2	1	1	0.15%	0.10%	0.10%	161%	161%
50 - 54	1,560	1	2	2	0.06%	0.12%	0.12%	53%	53%
55 - 59	1,614	1	2	2	0.06%	0.15%	0.15%	43%	43%
60 - 64	1,203	0	2	2	0.00%	0.17%	0.17%	0%	0%
TOTAL	8,787	5	9	9	0.06%	0.11%	0.11%	54%	54%
Confidence Interval %			100%	100%					
R-squared			0%	0%					

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SECTION III – DEMOGRAPHIC ASSUMPTIONS
DISABILITY RATES

Chart III-D1: Miscellaneous Disability

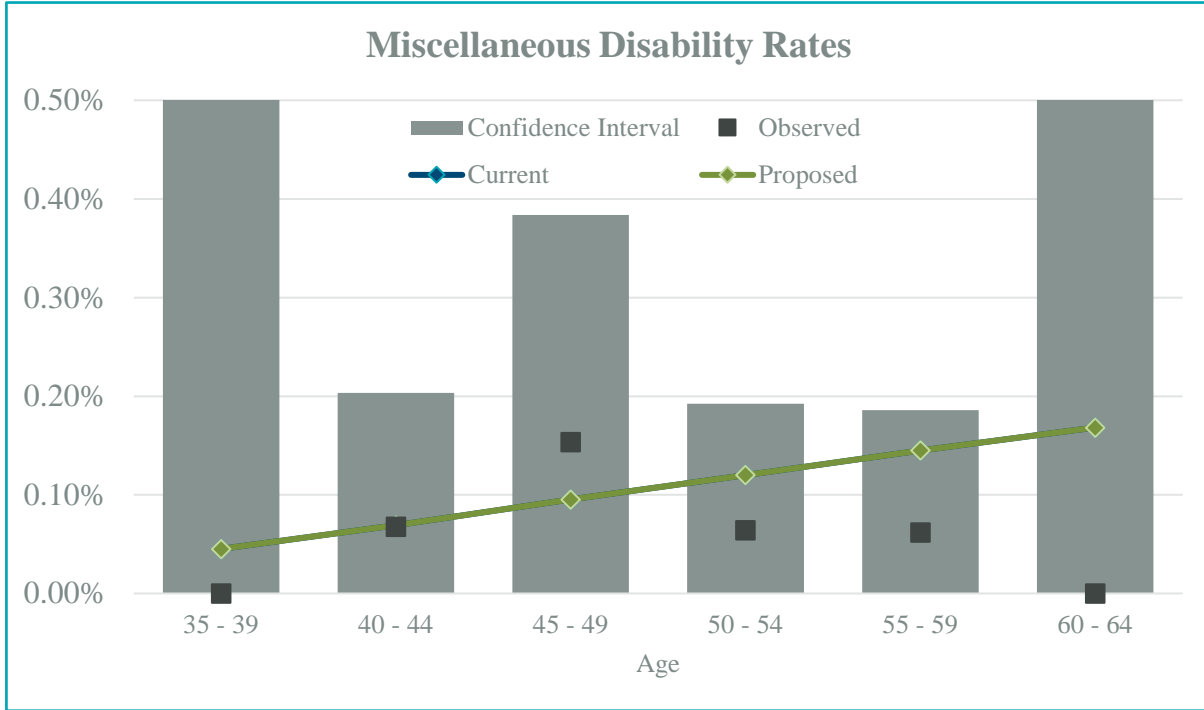


Table III-D2 on the next page shows the calculation of actual-to-expected ratios and the R-Squared statistic for all disabilities for Safety and Probation members, and Chart III-D2 shows the information graphically.

The data shows actual disability rates that are higher than the current assumption. Due to the low number of actual disabilities and the lack of sufficient credible data for comparison, we are not proposing any changes to this assumption.

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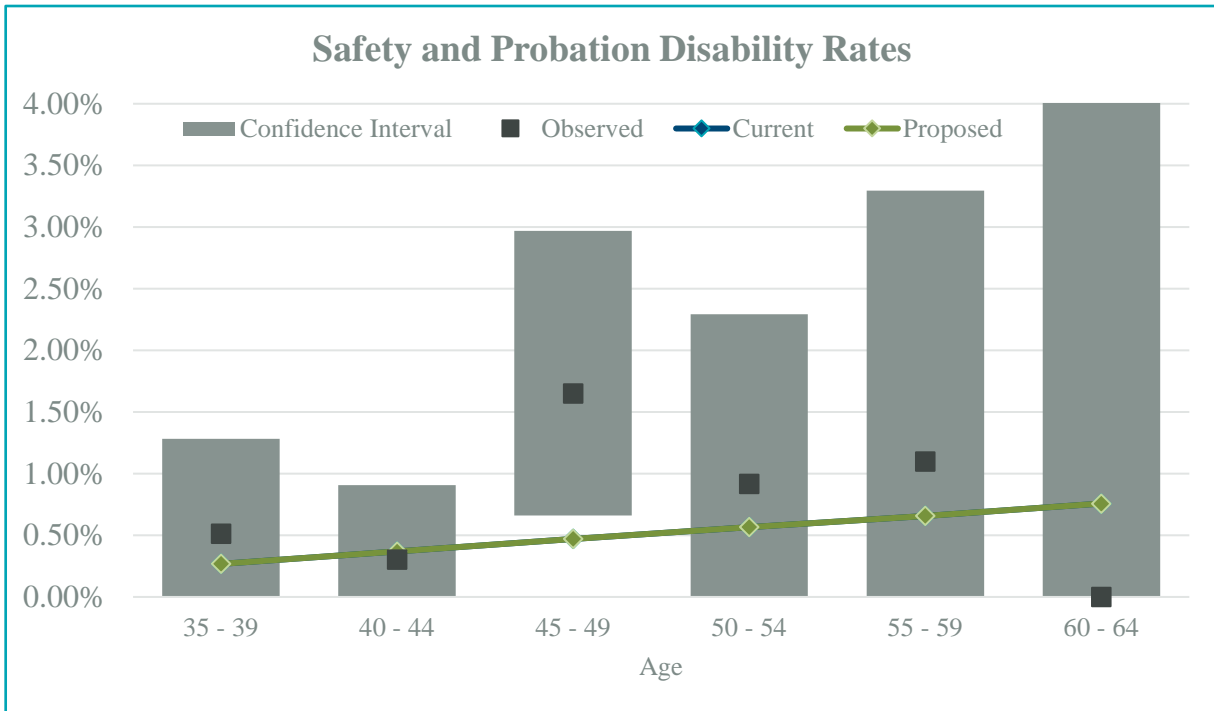
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
DISABILITY RATES**

Table III-D2: Safety and Probation Disability

Safety and Probation Disability Rates									
Age Band	Exposures	Disabilities*			Average Disability Rates			A/E Ratios	
		Actual	Current	Proposed	Actual	Current	Proposed	Current	Proposed
35 - 39	390	2	1	1	0.51%	0.27%	0.27%	191%	191%
40 - 44	331	1	1	1	0.30%	0.37%	0.37%	82%	82%
45 - 49	303	5	1	1	1.65%	0.47%	0.47%	350%	350%
50 - 54	218	2	1	1	0.92%	0.57%	0.57%	162%	162%
55 - 59	91	1	1	1	1.10%	0.66%	0.66%	167%	167%
60 - 64	19	0	0	0	0.00%	0.76%	0.76%	0%	0%
TOTAL	1,352	11	6	6	0.81%	0.42%	0.42%	194%	194%
Confidence Interval %			83%	83%					
R-squared			56%	56%					

*Current and proposed values shown are rounded to the ones place. Totals may differ from visible total due to rounding.

Chart III-D2: Safety and Probation Disability



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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Post-retirement mortality assumptions are typically developed separately by gender for both healthy annuitants and disabled annuitants. Pre-retirement mortality assumptions are also developed separately for males and females. Unlike most of the other demographic assumptions that rely exclusively on the experience of the plan, for mortality, standard mortality tables and projection scales serve as the primary basis for the assumption.

In January 2019, the Retirement Plans Experience Committee (RPEC) of the SOA completed an extensive mortality study and published a new set of mortality tables for U.S. public pension plans, the Pub-2010 Mortality Tables, with separate tables for teachers, safety members, and other public employees. The experience covered 35 public systems with 78 plans from calendar years 2008–2013, which included approximately 46 million exposures and 580 thousand deaths. Since benefits for retirees and salaries for active members are a significant predictor of mortality differences, separate tables were also developed for Above-Median and Below-Median. RPEC also published the most recent mortality improvement projection scale, MP-2021. We used these tables as the basis for our analysis.

The steps in our analysis are as follows:

1. Select a standard mortality table that, based on experience, most closely matches the anticipated experience of SLOCPT.
2. Compare actual SLOCPT experience to what would have been predicted by the selected standard table for the period of the experience study.
3. Adjust the standard table depending on the level of credibility for SLOCPT experience. This adjusted table is called the base table.
4. Select an appropriate standard mortality improvement projection scale and apply it to the base table.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Based on the last experience study performed by the prior actuary, SLOCPT elected to use the following base tables:

Active members

- Sex Distinct Public General 2010 Amount-Weighted Above-Median Income Employee Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2019, without adjustment.

Healthy retirees and beneficiaries

- Sex Distinct Public General 2010 Amount-Weighted Above-Median Income Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2019, with a 99% multiplier for males and a 101% multiplier for females.

Disabled members

- Sex Distinct Public General 2010 Amount-Weighted Above-Median Income Disabled Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2019, without adjustment.

Since the prior experience study, the Society of Actuaries' Retirement Plans Experience Committee (RPEC) has released a new mortality improvement scale, Scale MP-2021, which reflects more up-to-date data than was used in the development of Scale MP-2019.

MP-2021 continues to represent the Society of Actuaries' most advanced actuarial methodology in incorporating mortality improvement trends with actual recent mortality rates, by using rates that vary not only by age but also by calendar year – known as a two-dimensional approach to projecting mortality improvements. Scale MP-2021 was designed with the intent of being applied to mortality on a generational basis. The effect of this is to build in an automatic expectation of future improvements in mortality.

SLOCPT's mortality experience over the past five years matches well with the Pub-2010 mortality rates for members, after applying the improvement projections from the base year of the tables (2010) using the new MP-2021 mortality improvement projections through the mid-point of the five-year period (2019).

**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Based on SLOCPT's mortality experience from December 31, 2016, through December 31, 2021, we are proposing the following base mortality tables:

Active members

- **Miscellaneous Members:** Sex Distinct Public General 2010 Amount-Weighted Above-Median Income Employee Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.
- **Safety and Probation Members:** Sex Distinct Public Safety 2010 Amount-Weighted Above-Median Income Employee Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.

Healthy retirees and beneficiaries

- **Miscellaneous Members and all beneficiaries:** Sex Distinct Public General 2010 Amount-Weighted Above-Median Income Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.
- **Safety and Probation Members:** Sex Distinct Public Safety 2010 Amount-Weighted Above-Median Income Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.

Disabled members

- **All Members:** Sex Distinct Public General 2010 Amount-Weighted Disabled Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.

We propose using the Pub-2010 Mortality Tables by job category as developed by RPEC. Specifically, we propose using the Pub-2010 General Tables for Miscellaneous Members, all beneficiaries, and all disabled members. We propose using the Pub-2010 Safety Tables for Safety and Probation Members who are active or healthy retirees. We also propose projecting these base tables generationally using the MP-2021 mortality improvement scale described above for all types of mortality.

Rather than weighting the experience based on the number of members living and dying, we have weighted the experience based on benefit size (salary for current active members). This approach has been proposed by RPEC, since members with larger benefits are expected to live longer, and a benefit-weighted approach helps avoid underestimating the liabilities.

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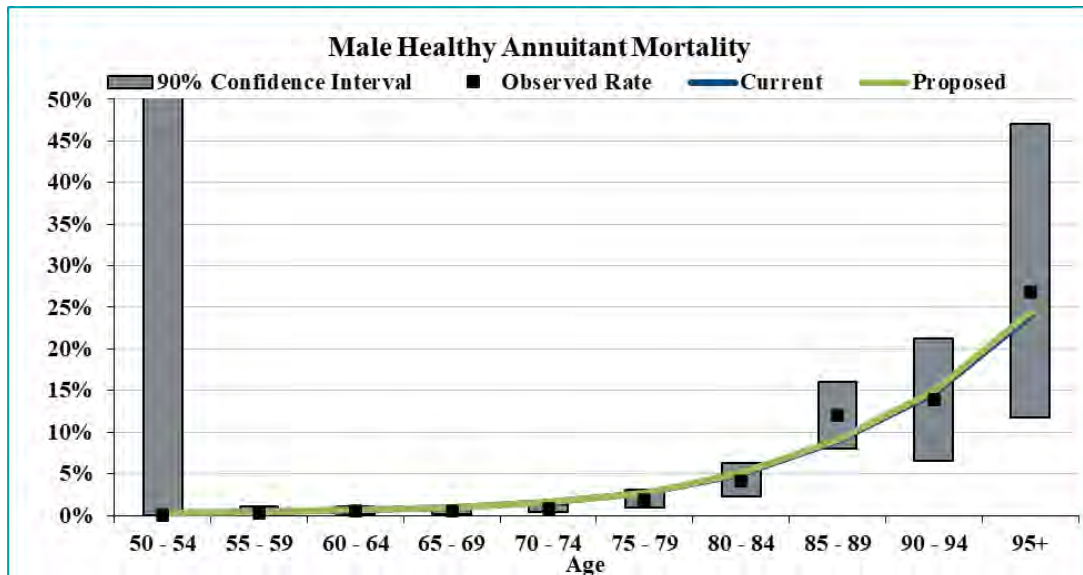
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

As shown in Table III-M1 and Table III-M2 that follow, our proposed mortality rates for Miscellaneous healthy annuitants do not significantly change the expected number of deaths, with A/E ratios increasing by 0% and 1% for male and female annuitants, respectively. They do, however use the most recent mortality improvement projection scale, better aligning them with up-to-date research on the topic. To perform our comparisons, the applicable Pub-2010 base rates were projected from their base year (2010) to the midpoint of the five-year study period (2019).

Table III-M1 – Miscellaneous Healthy Annuitant Male Mortality

Healthy Annuitant Mortality - Base Table for Males								
Age Band	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
50 - 54	31	0	40,593	0	132	133	0%	0%
55 - 59	197	2	457,819	1,265	2,159	2,170	59%	58%
60 - 64	673	5	2,300,691	12,917	15,778	15,908	82%	81%
65 - 69	1,102	8	4,012,890	21,733	39,538	39,899	55%	54%
70 - 74	1,007	11	3,908,160	31,447	61,449	61,674	51%	51%
75 - 79	496	13	1,929,126	36,241	51,877	51,967	70%	70%
80 - 84	221	10	742,103	31,218	37,106	37,276	84%	84%
85 - 89	162	20	351,290	42,184	31,569	31,862	134%	132%
90 - 94	61	11	117,769	16,411	17,338	17,582	95%	93%
95 +	17	5	33,509	8,999	8,059	8,189	112%	110%
Total	3,967	85	13,893,951	202,415	265,005	266,659	76%	76%

Chart III-M1 – Miscellaneous Healthy Annuitant Male Mortality



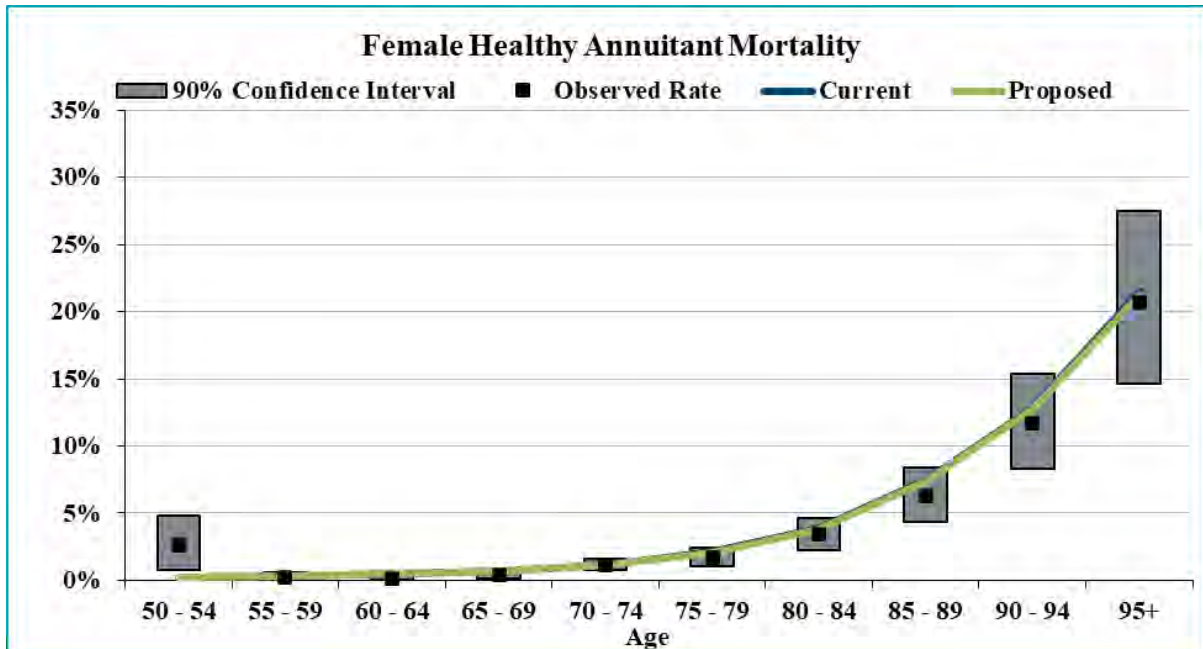
**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Table III-M2 – Miscellaneous Healthy Annuitant Female Mortality

Healthy Annuitant Mortality - Base Table for Females								
Age Band	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
50 - 54	124	2	171,004	4,454	420	402	1060%	1108%
55 - 59	492	4	1,003,397	2,119	3,489	3,370	61%	63%
60 - 64	1,442	6	3,349,688	4,099	15,817	15,470	26%	26%
65 - 69	2,011	10	4,981,515	18,426	35,079	34,290	53%	54%
70 - 74	1,739	26	3,887,067	43,561	45,816	44,683	95%	97%
75 - 79	1,043	17	2,012,455	34,347	42,641	41,717	81%	82%
80 - 84	578	23	979,487	33,796	37,846	37,164	89%	91%
85 - 89	370	18	542,222	34,263	40,401	39,947	85%	86%
90 - 94	240	35	312,959	36,699	40,177	39,866	91%	92%
95 +	109	22	148,723	30,769	31,996	31,672	96%	97%
Total	8,148	163	17,388,517	242,532	293,681	288,582	83%	84%

Chart III-M2 – Miscellaneous Healthy Annuitant Female Mortality



**SAN LUIS OBISPO COUNTY PENSION TRUST
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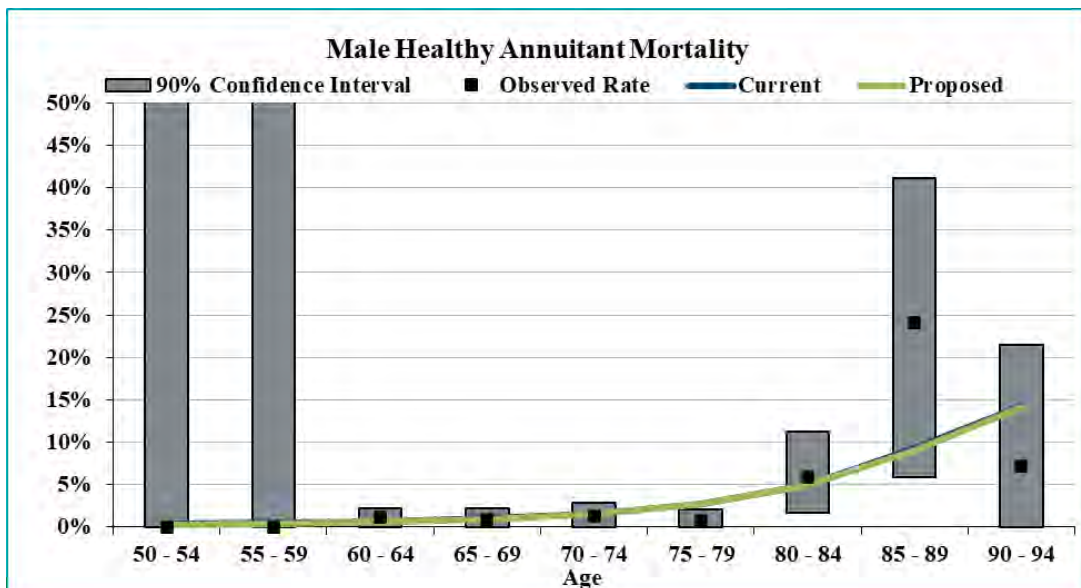
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Table III-M3 and Table III-M4 summarize our analysis and selection of the base mortality table for healthy Safety and Probation male and female retirees. As shown in Table III-M3 our proposed mortality rates for male Safety and Probation healthy annuitants are close to recent experience with an A/E ratio of 99%. For Safety and Probation members, we analyzed the experience for beneficiaries with the Miscellaneous annuitant experience, rather than as Safety and Probation retiree experience. As a result, there are only two deaths among female Safety retirees. Given the limited experience data, we propose using the same Safety Pub-2010 Table for females as is used for males.

Table III-M3 – Safety and Probation Healthy Annuitant Male Mortality

Healthy Annuitant Mortality - Base Table for Males								
Age Band	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
50 - 54	134	-	706,537	-	2,154	1,397	0%	0%
55 - 59	249	-	1,392,868	-	6,276	4,565	0%	0%
60 - 64	224	2	1,231,193	13,505	8,094	6,942	167%	195%
65 - 69	223	3	1,163,456	10,985	11,334	10,937	97%	100%
70 - 74	176	2	801,554	9,805	12,542	12,404	78%	79%
75 - 79	98	1	376,206	2,926	10,332	10,275	28%	28%
80 - 84	62	5	223,266	13,164	11,073	10,929	119%	120%
85 - 89	17	3	51,031	12,328	4,737	4,630	260%	266%
90 - 94	14	2	18,107	1,311	2,578	2,557	51%	51%
95 +	-	-	-	-	-	-	0%	0%
Total	1,197	18	5,964,217	64,024	69,120	64,636	93%	99%

Chart III-M3 - Safety Healthy Annuitant Male Mortality



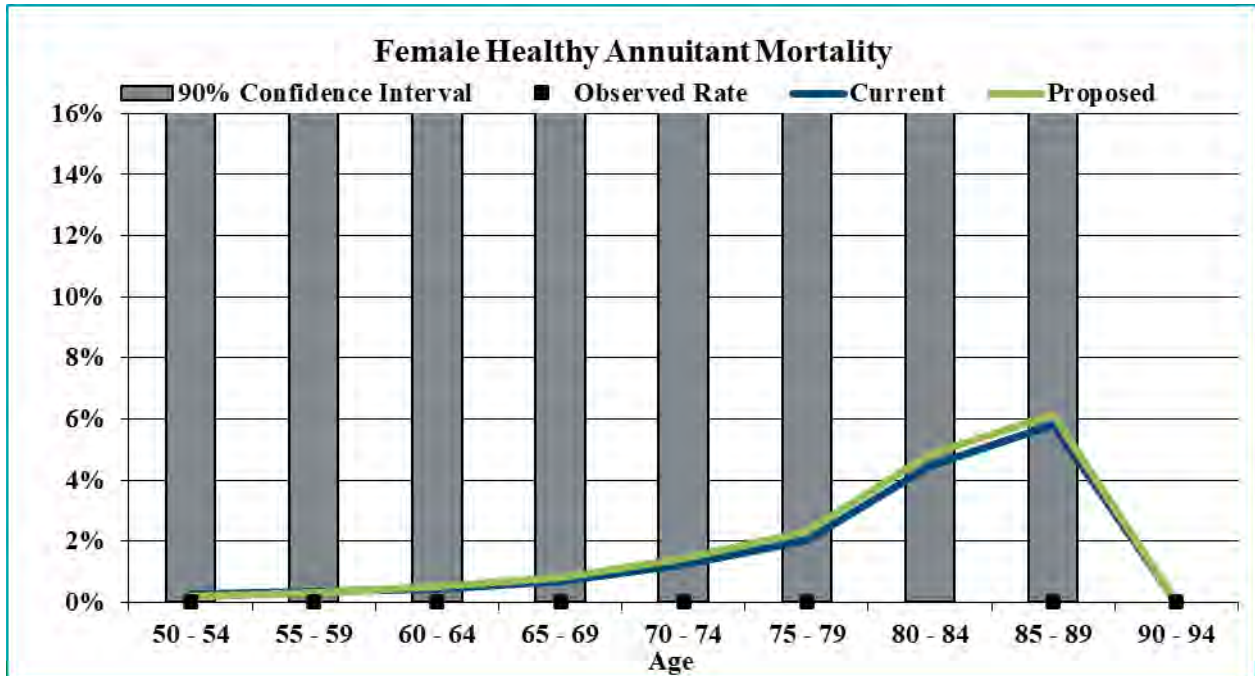
**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Table III-M4 - Safety Healthy Annuitant Female Mortality

Healthy Annuitant Mortality - Base Table for Females								
Age Band	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
50 - 54	34	0	116,956	0	287	213	0%	0%
55 - 59	79	0	381,554	0	1,278	1,231	0%	0%
60 - 64	61	0	233,710	0	1,050	1,203	0%	0%
65 - 69	37	0	160,089	0	1,093	1,303	0%	0%
70 - 74	32	0	94,321	0	1,155	1,350	0%	0%
75 - 79	21	0	65,870	0	1,332	1,525	0%	0%
80 - 84	6	2	18,508	3,136	829	899	378%	349%
85 - 89	1	0	3,299	0	192	203	0%	0%
90 - 94	0	0	0	0	0	0	0%	0%
95 +	0	0	0	0	-	0	0%	0%
Total	271	2	1,074,306	3,136	7,217	7,927	43%	40%

Chart III-M4 - Safety Healthy Annuitant Female Mortality



**SAN LUIS OBISPO COUNTY PENSION TRUST
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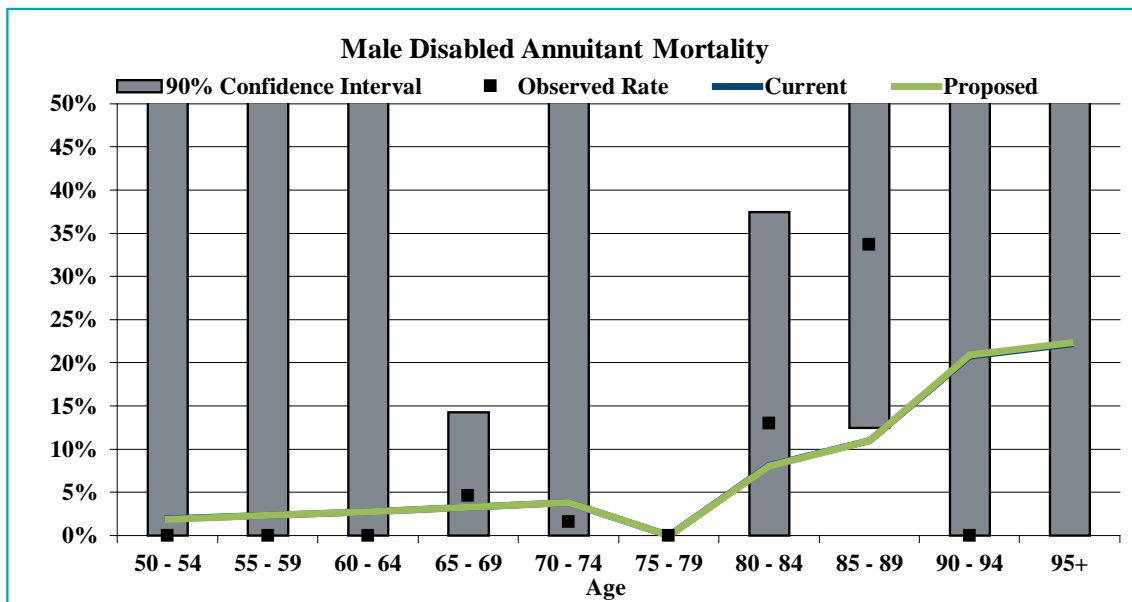
**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Table III-M5 and Table III-M6 summarize our analysis and selection of the base mortality table for disabled Miscellaneous male and female retirees. As shown in Table III-M5, the current mortality rates for male disabled Miscellaneous retirees are relatively close to recent experience with an A/E ratio 87%. As shown in Table III-M6, there was only one death among female disabled Miscellaneous retirees. Given the limited experience data, we propose using the same General Pub-2010 Disabled Annuitant Table for females as is used for males.

Table III-M5 – Miscellaneous Disabled Annuitant Male Mortality

Disabled Annuitant Mortality - Base Table for Males								
Age Band	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
50 - 54	1	0	2,839	0	55	55	0%	0%
55 - 59	27	0	42,096	0	991	986	0%	0%
60 - 64	28	0	52,287	0	1,459	1,456	0%	0%
65 - 69	21	1	44,630	2,060	1,463	1,462	141%	141%
70 - 74	9	0	25,759	408	990	985	41%	41%
75 - 79	0	0	0	0	0	0	0%	0%
80 - 84	8	1	13,826	1,796	1,122	1,116	160%	161%
85 - 89	8	1	3,927	1,324	433	432	306%	307%
90 - 94	0	0	77	0	16	16	0%	0%
95 +	2	2	80	80	18	18	451%	448%
Total	104	5	185,522	5,668	6,546	6,524	87%	87%

Chart III-M5 – Miscellaneous Disabled Annuitant Male Mortality



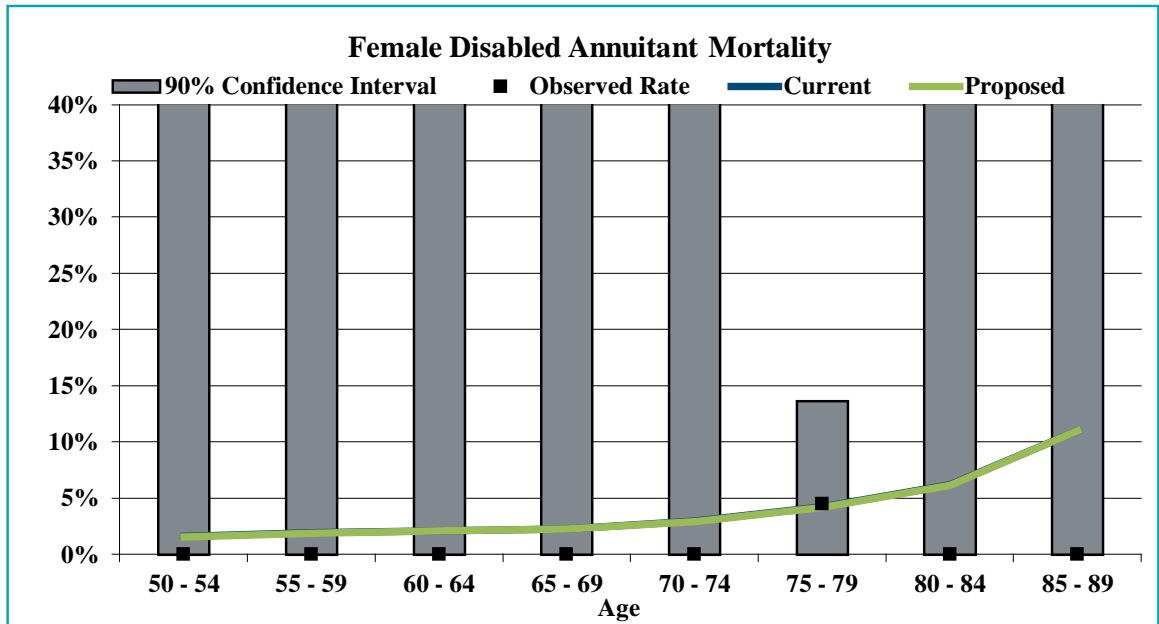
**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Table III-M6 – Miscellaneous Disabled Annuitant Female Mortality

Disabled Annuitant Mortality - Base Table for Females								
Age Band	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
50 - 54	19	0	17,299	0	281	271	0%	0%
55 - 59	49	0	58,347	0	1,147	1,117	0%	0%
60 - 64	105	0	163,074	0	3,455	3,411	0%	0%
65 - 69	55	0	64,964	0	1,482	1,463	0%	0%
70 - 74	37	0	42,985	0	1,281	1,262	0%	0%
75 - 79	22	1	28,336	1,270	1,197	1,183	106%	107%
80 - 84	3	0	6,288	0	392	388	0%	0%
85 - 89	8	0	14,343	0	1,581	1,580	0%	0%
90 - 94	2	0	3,847	0	505	506	0%	0%
95 +	0	0	0	0	-	0	0%	0%
Total	300	1	399,483	1,270	11,320	11,182	11%	11%

Chart III-M6 – Miscellaneous Disabled Annuitant Female Mortality



**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
MORTALITY RATES**

Table III-M7 summarize our analysis and selection of the base mortality table for male disabled Safety and Probation retirees. As shown in Table III-M7, the current mortality rates for male disabled Safety and Probation retirees are relatively close to recent experience with an A/E ratio 94%. We do not propose any change to the current table, and we propose using the same General Pub-2010 Disabled Annuitant Table for females as is used for males.

Table III-M7 – Safety and Probation Disabled Annuitant Male Mortality

Disabled Annuitant Mortality - Base Table for Males								
Age Band	Exposures	Actual Deaths	Weighted Exposures	Weighted Deaths			A/E Ratios	
				Actual	Current	Proposed	Current	Proposed
50 - 54	38	0	131,706	0	2,275	2,269	0%	0%
55 - 59	43	0	221,359	0	5,106	5,078	0%	0%
60 - 64	42	0	133,141	3,599	3,691	3,683	98%	98%
65 - 69	12	0	78,395	0	2,632	2,629	0%	0%
70 - 74	39	1	132,314	12,622	5,252	5,220	240%	242%
75 - 79	14	2	33,425	4,717	1,746	1,731	270%	272%
80 - 84	2	0	6,606	0	465	462	0%	0%
85 - 89	5	0	8,553	0	1,027	1,026	0%	0%
90 - 94	0	0	0	0	0	0	0%	0%
95 +	0	0	0	0	0	0	0%	0%
Total	195	3	745,500	20,937	22,193	22,097	94%	95%

We have not shown the data for the disabled Safety and Probation mortality experience for females or for any of the active mortality experience, as the number of deaths is very low and is not enough data to produce sufficiently credible assumptions. Therefore, we have used our professional judgment to propose appropriate base tables based the respective General and Safety Pub-2010 Employee mortality rates for active members according to membership class. In addition, we applied the same generational improvement scales as proposed for all other members.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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**SECTION III – DEMOGRAPHIC ASSUMPTIONS
OTHER DEMOGRAPHIC ASSUMPTIONS**

FAMILY COMPOSITION

The current assumption for percentage married is that 80% of active male and 60% of active female SLOCPT members will have beneficiaries eligible for a surviving spouse allowance. This assumption will also be applied to determine the number of active members eligible for a pre-retirement surviving spouse death benefit. Table III-O1 shows the results of the analysis during the experience study period for members who retired or became disabled.

Table III-O1: Percent Married

	Percent of Retired, Disabled and Active DROP Members with Spouses or Domestic Partners					
	<u>Males</u>			<u>Females</u>		
	Disabled, Retirees or DROP members	Eligible Spouses	Percent Eligible	Disabled, Retirees or DROP members	Eligible Spouses	Percent Eligible
Actual Experience	76	48	63%	244	116	48%
Current Assumption			80%			60%
Proposed Assumption			70%			55%

We propose changing the current assumptions for males to 70% and females to 55% to match recent experience more closely.

The current assumption for age difference of those married for surviving spouse benefits is that male members are three years older than their spouses and female members are assumed to be three years younger than their spouses. Table III-O2 compiles the average age difference for retired or disabled members between spouses and domestic partners.

This information is used to predict spouse age for future retirees. We propose changing the assumption for male members to be 4 years older than their spouses and for female members to be two years younger than their spouses to match recent experience more closely.

Table III-O3: Age Difference

	Age Difference Between Retired or Disabled Members and Spouses or Domestic Partners	
	<u>Males</u> Spouse Age (Years Younger)	<u>Females</u> Spouse Age (Years Younger)
Actual Experience	4.13	-1.98
Current Assumption	3	3
Proposed Assumption	4	-2

**Members with spouse outlier age differences greater than 20 years were excluded from this analysis*

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

**SECTION III – DEMOGRAPHIC ASSUMPTIONS
OTHER DEMOGRAPHIC ASSUMPTIONS**

PLAN EXPENSES

An explicit administrative expense assumption was adopted by the Board of Trustees at their May 24, 2021 Board meeting and was effective with the January 1, 2021 actuarial valuation. The administrative expense assumption was set at \$2.3 million, assumed to increase annually at the payroll growth rate of 2.75%. This explicit administrative expense was added as a component of the Actuarially Determined Contribution.

The actual Plan administrative expenses for FYE 2020 were \$2,569,774. Using the average expenses over the three prior years (FYE 2018-2020) and adjusting for assumed expense growth equal to wage inflation, we proposed, and the Board adopted an assumed Plan administrative expense of \$2,300,000 for FYE 2021. These expenses are split between employees and employers based on their share of the overall contributions. Expenses are expected to grow with wage inflation (by 2.75% per year) in future years.

We do not propose any change to the administrative expense assumption at this time, continuing with the assumed amount of \$2,363,250 for FYE 2022, as indexed for inflation.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

The proposed assumptions are listed below. The assumptions are based on this experience study covering the period from January 1, 2017 through December 31, 2021.

1. Rate of Return

Assets are assumed to earn 6.50% to 6.75% net of investment expenses.

2. Administrative Expenses

Administrative expenses are assumed to be \$2,363,250 for the next year, to be split between employees and employers based on their share of the overall contributions. Administrative expenses are assumed to increase by the assumed wage inflation each year.

3. Cost-of-Living

The cost-of-living as measured by the Consumer Price Index (CPI) is assumed to increase at the rate of 2.25% to 2.50% per year. The price inflation assumption is used for increasing the compensation limit that applies to Tier 3 (PEPRA) members.

COLA Growth

The COLA growth assumption for members in pay status is assumed inflation plus an additional 0.25% “California” adjustment for Tier 1 Members. For Tier 2 and Tier 3 members it is 2.0%.

4. Internal Revenue Code Section 415 Limit

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member’s benefit after retirement.

5. Internal Revenue Code Section 401(a)(17)

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member’s benefit after retirement.

6. Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 6.00%. The actual crediting rate was changed to 5.75% at the November 2021 Board meeting, with Additional Contributions credited at 0.28%.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

7. Family Composition

Percentage married for all active members who retire, become disabled, or die during active service is shown in the table below. Male members are assumed to be four years older than their spouses and female members are assumed to be two years younger than their spouses.

Percentage Married	
Gender	Percentage
Males	70%
Females	55%

8. Payroll Growth

Price inflation component: 2.25% to 2.50%

Productivity increase component: 0.50%

Total Payroll Growth: 2.75% to 3.00%

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY REPORT AS OF DECEMBER 31, 2021**

APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

9. Increases in Pay

Price inflation component: 2.25% to 2.50%

Productivity increase component: 0.50%

Additional longevity and promotion component:

Miscellaneous Merit Increases		Safety Merit Increases	
Service	Rate	Service	Rate
0	5.25%	0	5.25%
1	5.00%	1	4.50%
2	4.00%	2	4.00%
3	3.00%	3	3.00%
4	2.00%	4	2.00%
5	1.00%	5	1.00%
6	0.50%	6	0.75%
7	0.50%	7	0.75%
8	0.50%	8	0.75%
9	0.50%	9	0.75%
10	0.20%	10	0.40%
11	0.20%	11	0.40%
12	0.20%	12	0.40%
13	0.20%	13	0.40%
14	0.20%	14	0.40%
15	0.20%	15	0.40%
16	0.20%	16	0.40%
17	0.20%	17	0.40%
18	0.20%	18	0.40%
19	0.20%	19	0.40%
20	0.20%	20	0.25%
21+	0.00%	21	0.25%
		22	0.25%
		23	0.25%
		24	0.25%
		25+	0.00%

Increases are compound rather than additive.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

10. Rates of Termination

Sample rates of termination are shown in the following table below.

Rates of Termination		
Service	Miscellaneous	Safety/Probation
0	0.00%	0.00%
1	0.00%	0.00%
2	0.00%	0.00%
3	0.00%	0.00%
4	0.00%	0.00%
5	5.50%	2.75%
6	5.00%	2.50%
7	4.50%	2.25%
8	4.25%	2.25%
9	4.00%	2.25%
10	3.75%	2.00%
11	3.50%	2.00%
12	3.25%	1.50%
13	3.00%	1.50%
14	3.00%	1.50%
15	3.00%	1.50%
16	2.75%	1.50%
17	2.75%	1.25%
18	2.50%	1.25%
19	2.50%	1.25%
20	2.00%	1.25%
21	1.50%	1.25%
22	1.50%	1.25%
23	1.50%	1.25%
24	1.50%	1.25%
25	1.50%	1.00%
26	1.50%	1.00%
27	1.50%	1.00%
28	1.50%	1.00%
29	1.50%	1.00%
30	1.50%	0.00%
31	1.50%	0.00%
32	1.50%	0.00%
33	1.50%	0.00%
34	1.50%	0.00%
35+	0.00%	0.00%

**Termination rates do not apply once member is eligible for retirement*

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY REPORT AS OF DECEMBER 31, 2021**

APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

11. Rates of Withdrawal

Rates of withdrawal apply to active members who terminate their employment and withdraw their member contributions, forfeiting entitlement to future Plan benefits.

Rates of Withdrawal		
Service	General	Safety
0	20.00%	10.00%
1	15.00%	8.00%
2	12.00%	6.00%
3	10.00%	5.00%
4	6.00%	4.00%
5	2.00%	3.00%
6	1.75%	2.00%
7	1.75%	1.00%
8	1.50%	1.00%
9	1.00%	1.00%
10	1.00%	1.00%
11	1.00%	1.00%
12	0.50%	1.00%
13	0.50%	1.00%
14	0.50%	1.00%
15	0.50%	1.00%
16	0.50%	0.00%
17	0.50%	0.00%
18	0.50%	0.00%
19	0.50%	0.00%
20	0.50%	0.00%
21	0.50%	0.00%
22	0.50%	0.00%
23	0.50%	0.00%
24	0.50%	0.00%
25	0.00%	0.00%
26	0.00%	0.00%
27	0.00%	0.00%
28	0.00%	0.00%
29	0.00%	0.00%
30+	0.00%	0.00%

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY REPORT AS OF DECEMBER 31, 2021**

APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

12. Reciprocal Transfers

30% of vested terminated Members that leave their member contributions on deposit with the Plan are assumed to be reciprocal.

Reciprocal members are assumed to remain with the reciprocal agency until retirement, and receive annual salary increases of **2.75 to 3.00%**.

**SAN LUIS OBISPO COUNTY PENSION TRUST
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APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

13. Rates of Disability

Representative disability rates of active participants are shown below.

Rates of Disability		
Age	Miscellaneous	Safety and Probation
25 or less	0.010%	0.030%
26	0.010%	0.050%
27	0.010%	0.070%
28	0.010%	0.090%
29	0.010%	0.110%
30	0.010%	0.130%
31	0.015%	0.150%
32	0.020%	0.170%
33	0.025%	0.190%
34	0.030%	0.210%
35	0.035%	0.230%
36	0.040%	0.250%
37	0.045%	0.270%
38	0.050%	0.290%
39	0.055%	0.310%
40	0.060%	0.330%
41	0.065%	0.350%
42	0.070%	0.370%
43	0.075%	0.390%
44	0.080%	0.410%
45	0.085%	0.430%
46	0.090%	0.450%
47	0.095%	0.470%
48	0.100%	0.490%
49	0.105%	0.510%
50	0.110%	0.530%
51	0.115%	0.550%
52	0.120%	0.570%
53	0.125%	0.590%
54	0.130%	0.610%
55	0.135%	0.630%
56	0.140%	0.650%
57	0.145%	0.670%
58	0.150%	0.690%
59	0.155%	0.710%
60	0.160%	0.730%
61	0.165%	0.750%
62	0.170%	0.770%
63	0.175%	0.790%
64	0.180%	0.810%
65 or more	0.000%	0.000%

All disabilities for Safety members are assumed to be service-related and no disabilities for Miscellaneous and Probation members are assumed to be service-related.

APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

14. Rates of Mortality for Healthy Lives

Mortality rates for Miscellaneous active members are based on the sex distinct Public General 2010 Amount-Weighted Above-Median Income Employee Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.

Mortality rates for Safety and Probation active members are based on the sex distinct Public Safety 2010 Amount-Weighted Above-Median Income Employee Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.

Mortality rates for healthy Miscellaneous annuitants are based on the sex distinct Public General 2010 Amount-Weighted Above-Median Income Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021.

Mortality rates for healthy Safety and Probation annuitants are based the sex distinct Public Safety 2010 Amount-Weighted Above-Median Income Retiree Mortality Table, with generational improvements projected from 2010 using Projection Scale MP-2021.

15. Rates of Mortality for Disabled Lives

Mortality rates for Miscellaneous disabled members are based on the sex distinct Public General 2010 Amount-Weighted Disabled Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.

Mortality rates for Safety and Probation disabled members are based on the sex distinct Public Safety 2010 Amount-Weighted Disabled Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, without adjustment.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY REPORT AS OF DECEMBER 31, 2021**

APPENDIX A – SUMMARY OF PROPOSED ASSUMPTIONS

16. Rates of Retirement

Rates of retirement are based on age and service according to the following tables.

Rates of Retirement for YOS Less Than 25						
Age	Tier 1			Tiers 2 and 3		
	Miscellaneous	Probation	Safety	Miscellaneous	Probation	Safety
50	2.00%	5.00%	15.00%	1.00%	2.50%	6.75%
51	2.00%	5.00%	15.00%	1.00%	2.50%	6.75%
52	3.00%	5.00%	15.00%	2.00%	2.50%	7.50%
53	3.00%	5.00%	15.00%	2.00%	2.50%	7.50%
54	5.00%	15.00%	25.00%	3.00%	5.00%	7.50%
55	5.00%	25.00%	40.00%	3.00%	5.00%	7.50%
56	5.00%	25.00%	30.00%	3.00%	5.00%	7.50%
57	5.00%	20.00%	20.00%	3.00%	10.00%	7.50%
58	5.00%	7.50%	12.00%	3.00%	7.50%	8.25%
59	5.00%	7.50%	18.00%	3.00%	7.50%	11.25%
60	10.00%	10.00%	25.00%	8.00%	7.50%	15.00%
61	15.00%	10.00%	30.00%	8.00%	7.50%	18.75%
62	20.00%	15.00%	40.00%	15.00%	15.00%	22.50%
63	20.00%	15.00%	50.00%	15.00%	15.00%	30.00%
64	30.00%	15.00%	75.00%	20.00%	15.00%	45.00%
65	35.00%	100.00%	100.00%	20.00%	100.00%	100.00%
66	35.00%			20.00%		
67	35.00%			20.00%		
68	35.00%			20.00%		
69	35.00%			20.00%		
70+	100.00%			100.00%		

Rates of Retirement for YOS 25 or More						
Age	Tier 1			Tiers 2 and 3		
	Miscellaneous	Probation	Safety	Miscellaneous	Probation	Safety
50	3.50%	7.50%	25.00%	1.75%	5.00%	12.00%
51	3.50%	7.50%	25.00%	1.75%	5.00%	12.00%
52	3.50%	7.50%	20.00%	2.50%	5.00%	12.00%
53	3.50%	7.50%	20.00%	2.50%	5.00%	12.00%
54	7.00%	15.00%	30.00%	5.50%	10.00%	12.00%
55	7.00%	35.00%	40.00%	5.50%	10.00%	12.00%
56	7.00%	25.00%	40.00%	6.00%	10.00%	12.00%
57	15.00%	25.00%	30.00%	10.00%	15.00%	12.00%
58	15.00%	12.00%	20.00%	10.00%	10.00%	10.00%
59	15.00%	12.00%	20.00%	10.00%	10.00%	12.50%
60	20.00%	15.00%	30.00%	15.00%	10.00%	18.00%
61	25.00%	15.00%	35.00%	15.00%	10.00%	20.00%
62	25.00%	20.00%	50.00%	20.00%	20.00%	30.00%
63	25.00%	20.00%	50.00%	20.00%	20.00%	30.00%
64	40.00%	20.00%	75.00%	25.00%	20.00%	45.00%
65	40.00%	100.00%	100.00%	25.00%	100.00%	100.00%
66	40.00%			25.00%		
67	40.00%			25.00%		
68	40.00%			25.00%		
69	40.00%			25.00%		
70+	100.00%			100.00%		

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

APPENDIX B – SUMMARY OF PRIOR ASSUMPTIONS

The return and administrative experience assumptions were adopted by the Board at their May 24, 2021 meeting, based on the information presented by Cheiron and the Plan's investment consultant (Verus) updated capital market assumptions. The other assumptions used in this report reflect the results of an Experience Study performed by the prior actuary covering the period from January 1, 2015 through December 31, 2019 and adopted by the Board for the January 1, 2020 actuarial valuation. More details on the rationale for these assumptions can be found in the Actuarial Experience Study dated May 5, 2020.

1. Rate of Return

Assets are assumed to earn 6.75% net of investment expenses.

2. Administrative Expenses

Administrative expenses are assumed to be \$2.3 million for the next year, to be split between employees and employers based on their share of the overall contributions. Administrative expenses are assumed to increase by the assumed wage inflation of 2.75% each year.

3. Cost-of-Living Increases

The cost-of-living as measured by the Consumer Price Index (CPI) is assumed to increase at the rate of 2.25% per year. The price inflation assumption is used for increasing the compensation limit that applies to Tier 3 (PEPRA) members.

COLA Growth

The COLA growth assumption for members in pay status is assumed inflation plus an additional 0.25% "California" adjustment for Tier 1 Members. For Tier 2 and Tier 3 members it is 2.0%.

4. Internal Revenue Code Section 415 Limit

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

5. Internal Revenue Code Section 401(a)(17)

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

APPENDIX B – SUMMARY OF PRIOR ASSUMPTIONS

6. Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 6.00%. The actual crediting rate was changed to 5.875% at the November 2020 Board meeting, with Additional Contributions credited at 0.28%.

7. Family Composition

Percentage married for all active members who retire, become disabled, or die during active service is shown in the table below. Male members are assumed to be three years older than their spouses and female members are assumed to be three years younger than their spouses.

Percentage Married	
Gender	Percentage
Males	80%
Females	60%

8. Increases in Pay

Price inflation component: 2.25%
 Productivity increase component: 0.50%
 Additional Merit component based on service:

Merit Increases		Total Increases	
Service	Rate	Service	Rate
0	5.25%	0	8.00%
1	5.00%	1	7.75%
2	4.00%	2	6.75%
3	3.00%	3	5.75%
4	2.00%	4	4.75%
5	1.00%	5	3.75%
6	0.50%	6	3.25%
7+	0.00%	7+	2.75%

Increases are compound rather than additive.

9. Payroll Growth

Price inflation component: 2.25%
 Productivity increase component: 0.50%
 Total Payroll Growth: 2.75%

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

APPENDIX B – SUMMARY OF PRIOR ASSUMPTIONS

10. Rates of Termination

Rates of termination based on age and group are shown in the following table below. Vested termination rates are applied after the member is eligible for reduced or unreduced retirement benefits.

Rates of Vested Termination		
Age	Miscellaneous	Safety and Probation
24 or less	10.00%	3.00%
25	10.00%	2.00%
26	10.00%	2.00%
27	10.00%	2.00%
28	10.00%	2.00%
29	10.00%	2.00%
30	7.50%	1.50%
31	7.50%	1.50%
32	7.50%	1.50%
33	7.50%	1.50%
34	7.50%	1.50%
35	5.00%	1.50%
36	5.00%	1.50%
37	5.00%	1.50%
38	5.00%	1.50%
39	5.00%	1.50%
40	4.00%	1.50%
41	4.00%	1.50%
42	4.00%	1.50%
43	4.00%	1.50%
44	4.00%	1.50%
45	4.00%	1.50%
46	4.00%	1.50%
47	4.00%	1.50%
48	4.00%	1.50%
49	4.00%	1.50%
50	3.00%	1.50%
51	3.00%	1.50%
52	3.00%	1.50%
53	3.00%	1.50%
54	3.00%	1.50%
55	2.00%	0.00%
56	2.00%	
57	2.00%	
58	2.00%	
59	2.00%	
60 or more	0.00%	

Termination rates do not apply once a member is eligible for retirement.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

APPENDIX B – SUMMARY OF PRIOR ASSUMPTIONS

11. Rates of Withdrawal

Rates of withdrawal apply to active Members who terminate their employment and withdraw their member contributions, forfeiting entitlement to future Plan benefits.

Age	Rates of Withdrawal			
	Miscellaneous		Safety and Probation	
	<5 YOS	>= 5 YOS	<5 YOS	>= 5 YOS
24 or less	14.50%	8.50%	5.20%	1.50%
25	13.00%	7.75%	5.00%	1.50%
26	13.00%	7.75%	5.00%	1.50%
27	13.00%	7.75%	5.00%	1.50%
28	13.00%	7.75%	5.00%	1.50%
29	13.00%	7.75%	5.00%	1.50%
30	11.50%	3.75%	4.70%	1.50%
31	11.50%	3.75%	4.70%	1.00%
32	11.50%	3.75%	4.70%	1.00%
33	11.50%	3.75%	4.70%	1.00%
34	11.50%	3.75%	4.70%	1.00%
35	10.00%	2.00%	4.00%	1.00%
36	10.00%	2.00%	4.00%	0.50%
37	10.00%	2.00%	4.00%	0.50%
38	10.00%	2.00%	4.00%	0.50%
39	10.00%	2.00%	4.00%	0.50%
40	10.00%	1.25%	3.50%	0.50%
41	10.00%	1.25%	3.50%	0.50%
42	10.00%	1.25%	3.50%	0.50%
43	10.00%	1.25%	3.50%	0.50%
44	10.00%	1.25%	3.50%	0.50%
45	8.00%	0.50%	2.50%	0.50%
46	8.00%	0.50%	2.50%	0.00%
47	8.00%	0.50%	2.50%	
48	8.00%	0.50%	2.50%	
49	8.00%	0.50%	2.50%	
50	6.00%	0.00%	1.50%	
51	6.00%		1.50%	
52	6.00%		1.50%	
53	6.00%		1.50%	
54	6.00%		1.50%	
55	6.00%		0.00%	
56	6.00%			
57	6.00%			
58	6.00%			
59	6.00%			
60	6.00%			
61	6.00%			
62	6.00%			
63	6.00%			
64	6.00%			
65 or more	0.00%			

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

APPENDIX B – SUMMARY OF PRIOR ASSUMPTIONS

12. Reciprocal Transfers

30% of vested terminated Members that leave their member contributions on deposit with the Plan are assumed to be reciprocal.

Reciprocal members are assumed to remain with the reciprocal agency until retirement, and receive annual salary increases of 2.75%.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

APPENDIX B – SUMMARY OF PRIOR ASSUMPTIONS

13. Rates of Disability

Representative disability rates of active participants are shown below.

Rates of Disability		
Age	Miscellaneous	Safety and Probation
25 or less	0.010%	0.030%
26	0.010%	0.050%
27	0.010%	0.070%
28	0.010%	0.090%
29	0.010%	0.110%
30	0.010%	0.130%
31	0.015%	0.150%
32	0.020%	0.170%
33	0.025%	0.190%
34	0.030%	0.210%
35	0.035%	0.230%
36	0.040%	0.250%
37	0.045%	0.270%
38	0.050%	0.290%
39	0.055%	0.310%
40	0.060%	0.330%
41	0.065%	0.350%
42	0.070%	0.370%
43	0.075%	0.390%
44	0.080%	0.410%
45	0.085%	0.430%
46	0.090%	0.450%
47	0.095%	0.470%
48	0.100%	0.490%
49	0.105%	0.510%
50	0.110%	0.530%
51	0.115%	0.550%
52	0.120%	0.570%
53	0.125%	0.590%
54	0.130%	0.610%
55	0.135%	0.630%
56	0.140%	0.650%
57	0.145%	0.670%
58	0.150%	0.690%
59	0.155%	0.710%
60	0.160%	0.730%
61	0.165%	0.750%
62	0.170%	0.770%
63	0.175%	0.790%
64	0.180%	0.810%
65 or more	0.000%	0.000%

All disabilities for Safety members are assumed to be service-related and no disabilities for Miscellaneous and Probation members are assumed to be service-related.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

APPENDIX B – SUMMARY OF PRIOR ASSUMPTIONS

14. Rates of Mortality for Healthy Lives

Mortality rates for General active members are based on the sex distinct Public General 2010 Amount-Weighted Above-Median Income Employee Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2019, without adjustment.

Mortality rates for healthy annuitants are based on the sex distinct Public General 2010 Amount-Weighted Above-Median Income Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2019 with a 99% multiplier for males, and a 101% multiplier for females.

15. Rates of Mortality for Disabled Lives

Mortality rates for disabled members are based on distinct Public General 2010 Amount-Weighted Above-Median Income Disabled Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2019, without adjustment.

**SAN LUIS OBISPO COUNTY PENSION TRUST
EXPERIENCE STUDY AS OF DECEMBER 31, 2021**

APPENDIX B – SUMMARY OF PRIOR ASSUMPTIONS

16. Rates of Retirement

Rates of retirement are based on age, group, and tier according to the following table.

Rates of Retirement						
Age	Tier 1			Tiers 2 and 3		
	Miscellaneous	Probation	Safety	Miscellaneous	Probation	Safety
<50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
50	2.00%	7.50%	25.00%	3.00%	7.50%	9.00%
51	2.00%	7.50%	20.00%	3.00%	7.50%	9.00%
52	2.00%	7.50%	10.00%	3.00%	7.50%	10.00%
53	2.00%	7.50%	10.00%	3.00%	7.50%	10.00%
54	4.00%	7.50%	3.00%	3.00%	7.50%	10.00%
55	6.00%	25.00%	40.00%	6.00%	7.50%	10.00%
56	6.00%	25.00%	30.00%	6.00%	7.50%	10.00%
57	8.00%	25.00%	30.00%	6.00%	7.50%	10.00%
58	8.00%	12.00%	12.00%	6.00%	9.00%	11.00%
59	8.00%	12.00%	18.00%	6.00%	9.00%	15.00%
60	10.00%	15.00%	25.00%	8.00%	10.00%	20.00%
61	10.00%	15.00%	30.00%	8.00%	10.00%	25.00%
62	25.00%	20.00%	40.00%	25.00%	20.00%	30.00%
63	20.00%	20.00%	50.00%	20.00%	20.00%	40.00%
64	20.00%	20.00%	75.00%	20.00%	20.00%	60.00%
65	40.00%	100.00%	100.00%	40.00%	100.00%	100.00%
66	40.00%			40.00%		
67	30.00%			30.00%		
68	30.00%			30.00%		
69	30.00%			30.00%		
70	100.00%			100.00%		

Tier 1 Reserve Members are assumed to retire at the later of age 55 or attained age. All other Reciprocal and Reserve members are assumed to retire at the later of age 60 or attained age.



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San Luis Obispo County Pension Trust *SLOCPT*

Date: May 23, 2022

To: Board of Trustees

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

Agenda Item 16: Actuarial Valuation – 2022 Actuarial Assumptions Approval

Recommendation:

Following the receipt and discussion of SLOCPT’s Actuary’s findings from the 2022 Actuarial Experience Study (Item 15 on the agenda), direct the Actuary to use the following changes in Actuarial Assumptions in the preparation of the 2022 annual Actuarial Valuation -

	2021 Valuation	Recommended for 2022 Valuation <i>Changes highlighted</i>
Rate of Return		
Inflation	2.25%	2.50%
Real Rate of Return	<u>4.50%</u>	<u>4.25%</u>
Earnings Assumption & Discount Rate	6.75%	6.75%
Administrative Expenses	\$2.3 million/year + annual increases at 2.75%	No change recommended

	2021 Valuation	Recommended for 2022 Valuation <i>Changes highlighted</i>
Retiree COLAs		
Tier 1	2.50% <i>(inflation + 0.25%)</i>	2.750% <i>(inflation + 0.25%)</i>
Tiers 2 & 3 (<i>max.</i>)	2.00%	2.00%
Interest on Member Contributions	6.000%	5.750%
Family Composition (% married)	80% Males 60% Females	70% Males 55% Females Increase female spouses from 3 to 4 years younger and reduce male spouses from 3 to 2 years older
Salary Increase	2.75% + merit 2.25% inflation + 0.50% merit	3.00% + merit 2.50% inflation + <i>Separate rate for Misc. and Safety/Probation, higher increases for members with 7+ years of service</i>
Payroll Growth		
Wage Inflation	2.25%	2.50%
Productivity Increase	<u>0.50%</u>	<u>0.50%</u>
	2.75%	3.00%
Termination/Withdrawal	Age-based	Service-based
Reciprocal Transfers		
% of non-active Members	30.00%	No change recommended
Rates of Disability		No change recommended

	2021 Valuation	Recommended for 2022 Valuation <i>Changes highlighted</i>
Mortality - Healthy Lives		
Active members – Miscellaneous	Pub-2010 General Above-Median Employee table	No Change recommended
Active members – Safety and Probation	Pub-2010 General Above-Median Employee table	Pub-2010 Safety Above-Median Employee table
Retirees – Miscellaneous and Beneficiaries	Pub-2010 General Above-Median Annuitant table, with 99% Male / 101% Female adjustments	Pub-2010 Above-Median Annuitant table, without adjustments
Retirees – Safety and Probation	Pub-2010 General Above-Median Annuitant table, with 99% Male / 101% Female adjustments	Pub-2010 Safety Above-Median Annuitant table, with 99% Male / 101% Female adjustments
Mortality - Disabled Lives	Pub-2010 General Disabled Annuitant Table	No change recommended
Rates of Retirement		Separate rates for members with less than 25 years of service and members with more Also adjusted based on actual experience

Discussion:

It is the policy of SLOCPT to have an annual Actuarial Valuation to assist in setting the total level of contributions necessary to fund the retirement system – the Total Combined Actuarially Determined Contribution (Total ADC). In support of that annual Actuarial Valuation, SLOCPT conducts a biennial Actuarial Experience Study to ensure future projections are consistent with experience and are realistic. In these Experience Studies the Actuary analyzes the trailing five years of Plan demographic and financial experience to determine what actuarial assumptions should be recommend to the Board of Trustees for use in the annual Actuarial Valuation.

It has been the practice of SLOCPT to change major actuarial assumptions (if change is warranted) on a biennial basis in conjunction with the Actuarial Experience Study and in a coordinated manner. For example, changes in expected inflation have an impact on multiple assumptions – Earnings, Salary Growth, Retiree COLAs – so logically those changes should be made at the same time.

Based on the 2022 Actuarial Experience Study, SLOCPT’s Actuary recommends changes to major assumptions noted above. These assumptions will determine the resulting Actuarially Determined Contribution (ADC) rate increase to be presented to the Board in June.

Expected Results:

As discussed in Agenda Item 15, the adoption of the recommended changes, if applied to the results of the preliminary 2022 Actuarial Valuation, is estimated to lead to an increase in pension contribution rates. The current Charged Rate of pension contributions is compared to the Actuarially Determined Contribution rate to determine if the current charged rate is enough to fund future promised benefits.

Actuarially Determined Contribution (ADC) rate (% of pensionable payroll):

A - Start with what the ADC would be based just on actual 2021 experience – Actual investment returns, actual demographic experience:

	<u>ADC</u>	
2021 ADC as of Jan. 1, 2021 (current assumptions)	50.34%	
Decrease due to Investments, demographic results	- 0.85%	
2022 ADC with no other changes	<u>49.49%</u>	(a)

B - Adjust the starting point for changes to Pension Contribution Rates by what the actual rate currently being charged is considering the actual demographic changes in the active member payroll:

	<u>ADC</u>	
Charged Rate as of Jan. 1, 2022 – actual *	47.59%	
Plus future rate increase from 2021 Valuation	+ 2.39%	
2022 Charged Rate – baseline	<u>49.98%</u>	(b)

C - Total the impact on the ADC and Pension Contribution Rates if no other changes were made:

	<u>ADC change</u>	
2022 Rate Change - baseline (rounding diff.)	-0.48%	(a-b= c)

D - Modify Demographic assumptions (e.g., mortality tables Rates of retirement, etc.) and measure the estimated impact on the ADC:

	<u>ADC change</u>	
Demographic Assumption changes proposed	+0.33%	(d)

E - Modify Economic assumptions (e.g., Inflation rate, Discount Rate, etc.) and measure the estimated impact on the ADC:

Economic Assumption changes proposed		
Inflation =	Increase 0.25% to	2.50%
+Salary Growth =	3.00%	
+Payroll Growth =	3.00%	
+ Tier 1 COLA =	2.75%	
Discount Rate =	no change =	6.75%
	Real Rate of Return decrease 0.25% to	4.25%

	<u>ADC change</u>
Net Change from Economic Assumption changes	<u>+2.62%</u> (e)

F - Modify Economic assumptions (e.g., Inflation rate, Discount Rate, etc.) and measure the estimated impact on the ADC:

	<u>ADC change</u>
Pension Contribution Rate Change **	<u>+2.47%</u> (c+d+e= f)

G – Total the changes and calculate the estimated Aggregate ADC to be charged:

	<u>ADC</u>
2022 Total ADC after assumption changes ***	52.45% (b+f= g)

H – Consider other economic assumption changes. If the Discount Rate were to be decreased from the recommended 6.750% the impact on the ADC would be -

Decrease Discount Rate to 6.625%	1.54% additional increase
Decrease Discount Rate to 6.500%	3.10% additional increase

Footnotes:

* Charged Rate - the results of the 2021 Valuation called for an ADC of 50.34%. The actual Charged Rate will naturally vary as the demographics of the Plan change through the year. The erosion in the Charged Rate due to demographic changes is approximately 0.36%.

** Final amount will be presented to the Board for adoption with the final Actuarial Valuation at the June 27th Board meeting. Assumes implementation of increase on Jan. 1, 2022. Later implementation dates (e.g., July 1, 2023) will require a higher rate increase. This difference will be included in the Actuarial Valuation.

*** The allocation of the contribution rate increase between Employer and Employee is determined by the sponsoring Employer and its various collective bargaining and unrepresented employee agreements.

Contribution rates shown are aggregate across the entire Plan and will differ based on Classification (Miscellaneous/Probation/Safety), Tier, and Member's age at entry into the Plan.

These results are subject to change upon final delivery of the 2022 Actuarial Valuation to be presented at the June 27, 2022, Board of Trustees meeting.

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Pension Trust

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Date: May 23, 2022

To: Board of Trustees

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

Agenda Item 17: Administrative and Capital Expenditures Budget for Fiscal Year 2022-2023

Recommendation:

It is recommended that the Board of Trustees approve the Proposed Administrative Budget and Capital Expenditures Budget for the Fiscal Year 2022-2023 (“FY22/23”) (Attachments A, B, C, and D).

Discussion:

Revisions have been incorporated in the Proposed Administrative budget based on updated projections mainly affecting investment expense, actuarial expenses, and insurance categories. Additionally, a Capital Expenditures Budget has been added due to the need to roll forward the time frame for the modernization of SLOCPT’s elevator into FY22/23.

The expense categories presented in the attached **Proposed Administrative Budget** for the FY22/23 have been updated based upon varied assumptions, prior year experiences and staff’s best estimates of future events. **Overall staff believes an 1.9% increase in the total budgeted amount when compared to the Fiscal Year 2021-2022 Administrative Budget is appropriate. This represents a \$61,000 increase compared to prior year from \$3.132 million to \$3.193 million** including a 5% contingency.

Staff’s basis for components of this change are further detailed in the sections bellow. This proposed amount represents 0.19% of the total unaudited Net Position of SLOCPT as of December 31, 2021.

- **Investment Expense (discretionary)** – includes Investment Consultant (Verus – a flat rate contract) and Custodian Bank (JP Morgan – contract and market value dependent) fees and does not include Investment Management fees. The calculation of total predicted expenses uses assumptions based on the unaudited market value of investment assets as of 12/31/2021 where appropriate and adds a 6.3% investment return that was taken from Verus’ Capital Market Expectations report presented earlier this year. The overall decrease when compared to FY21-22 is attributable to the removal of the Private Markets Discretionary Advisor Search Consultant expense related to the hiring of HarbourVest. The increase when compared to the draft budget presented to the Board in March is related to an increase in the flat rate fee for Verus’s investment consulting services. Staff plans to bring Verus’s request for a 10% increase to their flat rate consulting fee last set four years ago to the Board for consideration at the June 27th meeting.
- **Personnel Services** – (see Attachment B) Includes all expenses related to SLOCPT’s staff. Assumes the following: 1) 2% increase in salaries for FY22-23, 2) payroll tax rates will stay consistent with 2022 rates currently in place, 3) cafeteria benefit of \$11,700 (employee only), \$13,200 (employee +1) and \$16,080 (family) annually per eligible employee (benchmarked to County positions in Bargaining Units 7 & 11 and pro-rated for part-time employees), 4) employer pension rate increase of 1.10% effective with the pay period that includes 7/1/22, 5) applicable salary step increases and promotions for staff members determined to be eligible, 6) \$500 matched contribution to employees’ deferred compensation account (benchmarked to County positions in Bargaining Units 7 & 11). An additional amount was added to this year’s budget to account for a 27 pay period cycle. This occurs every 11 years and a reduction will be reflected in next year’s budget when we are back to the regular 26 pay period cycle.

Note: Salary ranges presented in Attachment B do not include the estimated 2.0% prevailing wage increase. However, the 2.0% increase is included in the overall Administrative Budget presented in Attachment A.

- **Professional Services** –
 - Accounting & Auditing: Based on quoted price from 2020 engagement letter with Brown Armstrong (SLOCPT’s annual financial statement audit firm). The 2021 Audit is the fourth of the current 5-year engagement with Brown Armstrong.
 - Actuarial: Based on 2021 contract with Cheiron (SLOCPT’s Actuary). Also includes estimate of expected costs relating to additional Actuarial services performed throughout the year. The overall decrease in expense is attributable to the removal of the biennial Experience Study costs that are to be performed in the current fiscal year. The increase when compared to the draft budget presented to the Board in March is due to updated estimate of future Actuarial expenses relating to SLOCPT requested projections and are based on current year experience.

- Legal: Based on General Counsel Retainer and legal consultation relating to investment contracts, tax qualification and disability hearings. Future unforeseen legal expenses will be handled with either a Board-approved budget amendment or the use of contingency funds.
 - Medical Evaluations – Disabilities: Assumes costs associated with medical review services to be performed by MMRO and other Independent Medical Examiners (IMEs) as necessary. The increase this year is due to the increased disability applications experienced in the current year.
 - Human Resources Consulting: Based on estimated costs associated with services provided by the County’s Human Resources Department.
 - Information Technology Services: Includes expenses related to PensionGold software system maintenance (per contract) and IT services provided by the County of San Luis Obispo. The decrease in budgeted expense is related to the County’s restructuring of IT costs which were based off the County’s IT Department’s estimates.
 - Banking & Payroll: Includes estimated banking fees for SLOCPT’s two banking relationships (Union Bank and Pacific Premier) and fees associated with payroll services provided by Paychex.
 - Other Professional Services: Based on estimated expense for professional services not related to categories listed above.
- **Other Expenses –**
 - Trustee Election Expenses: County Clerk Recorder fees related to annual Trustee elections. Actual cost will be lower if there is an uncontested candidacy.
 - Insurance: Includes Fiduciary, General, Property, and Cyber Liability coverages. Estimate is based on current year expense plus 5%. The increase when compared to the draft budget presented to the Board in March is due to updated experience in early 2022.
 - Building & Maintenance: Estimate based on current year expenses. Totals include operating expenses such as janitorial services, building utilities and landscape maintenance. Costs associated with parking lot resurfacing have been rolled into FY22-23 and are reflected in proposed total.
 - Office Expense: Expense includes general office supplies and printing and mailing services provided by ASAP Reprographics.
 - Memberships & Publications: Includes industry specific memberships and publications.
 - Postage: Estimate based on current year expenses.

- Communications: Includes costs associated with telephone services provided by County IT. Estimate is based on County-supplied budget document.
 - Training & Travel: (see Attachment C) Based on optimistic view that business travel will resume to normal levels.
 - Information Technology: Expense includes all purchases relating to tangible IT equipment. Assumes staggered four-year replacement cycle for office computers.
 - Equipment: Includes expenses associated with copier and office furniture purchases. Decrease is due to removal of furniture expense as furniture needs are not expected.
 - Bad Debt Expense: This is a new category that will not be budgeted for but may see an expense from time to time. It is directly tied to benefit overpayments relating to late death notifications that we were not able to collect.
- **Contingencies** – 5% of total budget to be used for unexpected expenses.
 - **Capital Expenditures** – (see Attachment D) Staff has added a Capital Expenditures Budget to plan for and obtain approval for costs that would be capitalized. These costs will be directly related to substantial software upgrades or improvements, building improvements, and large equipment purchases and will only be included in years when necessary. Since these costs are typically depreciated over their useful lives on SLOCPT’s income statement, Staff has chosen to present these on a different schedule and account for them using the balance sheet totals rather than the annual depreciation that is expensed. Last year Staff anticipated the need to modernize its building’s elevator to bring it up to code and improve its existing functionality. However, this project has been delayed and its completion and final payment is not expected until FY22/23.

Attachments:

Attachment A – Proposed Administrative Budget for Fiscal Year 2022--2023

Attachment B – Proposed Staffing

Attachment C – Proposed Training & Travel

Attachment D – Proposed Capital Expenditures

San Luis Obispo County Pension Trust
PROPOSED ADMINISTRATIVE BUDGET:
Fiscal Year 2022-2023

	FY20-21 Actual Expenses	FY21-22 Estimated Expenses	FY21-22 Adopted Budget	FY22-23 Proposed Budget	Increase/ Decrease From PY
INVESTMENT EXPENSE:					
Invest. Exp. (Custody, Consultant)	\$ 550,579	\$ 669,000	\$ 664,000	\$ 634,000	\$ (30,000)
ADMINISTRATIVE EXPENSE:					
Personnel Services	\$ 1,193,398	\$ 1,224,000	\$ 1,239,000	\$ 1,356,500	\$ 117,500
Professional Service					
Accounting & Auditing	58,632	60,000	60,000	60,000	-
Actuarial	98,789	135,000	114,000	96,000	(18,000)
Legal	185,504	208,000	220,000	220,000	-
Medical Evaluations - Disabilities	22,575	35,000	25,000	30,000	5,000
Human Resources Consulting	5,000	5,000	5,000	5,000	-
Information Technology Services	194,624	265,000	267,500	249,000	(18,500)
Banking and Payroll	17,989	21,000	21,000	21,000	-
Other Professional Services	1,601	9,000	2,000	2,000	-
Total Professional Services	\$ 584,714	\$ 738,000	\$ 714,500	\$ 683,000	\$ (31,500)
Other Expenses					
Trustee Election Expenses	-	6,000	6,000	6,000	-
Insurance	136,445	140,000	145,000	147,000	2,000
Building Maintenance	48,219	84,000	58,000	58,000	-
Office Expense	17,243	19,000	28,000	25,000	(3,000)
Memberships & Publications	5,531	5,000	6,500	6,500	-
Postage	28,019	32,000	30,000	32,000	2,000
Communications	2,853	3,000	4,500	3,000	(1,500)
Training & Travel	7,330	17,000	47,000	56,000	9,000
Information Technology	16,146	16,000	30,500	31,000	500
Equipment	2,875	5,000	10,000	3,000	(7,000)
Bad Debt	-	6,000	-	-	-
Total Other Expenses	\$ 264,661	\$ 333,000	\$ 365,500	\$ 367,500	\$ 2,000
Contingencies	\$ -	\$ -	\$ 149,000	\$ 152,000	\$ 3,000
TOTAL ADMINISTRATIVE	\$ 2,042,773	\$ 2,295,000	\$ 2,468,000	\$ 2,559,000	\$ 91,000
ADMIN. + INVESTMENT	\$ 2,593,352	\$ 2,964,000	\$ 3,132,000	\$ 3,193,000	\$ 61,000

Increase from Prior Year Budget

1.9%

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San Luis Obispo County Pension Trust PROPOSED STAFFING:									
	FY20-21 Actual	FY21-22 Amended Budget	FY21-22 Actual	FY22-23 Proposed Budget	Increase / (Decrease) From PY	Projected FY23-24	Projected FY24-25	Projected FY25-26	Projected FY26-27
Positions (FTEs):									
Executive Director	1.00	1.00	1.00	1.00	-	1.00	1.00	1.00	1.00
Deputy Directory	1.00	1.00	1.00	1.00	-	1.00	1.00	1.00	1.00
Retirement Programs Spec. III	2.00	2.00	2.00	2.00	-	2.00	2.00	2.00	2.00
Retirement Programs Spec. II	-	-	-	-	-	-	-	-	-
Retirement Programs Spec. I	-	-	-	-	-	-	-	-	-
Retirement Technician	1.75	1.75	1.75	1.75	-	1.75	1.75	1.75	1.75
Accountant IV	0.80	0.80	0.80	0.80	-	0.80	0.80	0.80	0.80
Accountant III	-	-	-	-	-	-	-	-	-
Accountant II	-	-	-	-	-	-	-	-	-
Accountant I	-	-	-	-	-	-	-	-	-
Administrative Asst. III	1.00	1.00	1.00	1.00	-	1.00	1.00	1.00	1.00
Administrative Asst. II	-	-	-	-	-	-	-	-	-
Part-Time Temporary Office Asst.	-	0.50	-	0.50	-	0.50	0.50	0.50	0.50
TOTAL POSITIONS	7.55	8.05	7.55	8.05	-	8.05	8.05	8.05	8.05

PROPOSED SALARY & BENEFIT BENCHMARKS:

***Note: SLOCPT compensation benchmarks would be updated in concurrence with any County enacted wage adjustments (i.e. prevailing wage etc.).*

FY 22-23	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Benefits: (health, pension, other)
Executive Director <i>Subject to change per Contract Approval</i>	76.25	80.03	84.05	88.26	92.66		Benchmarked to County BU 7 + \$450/month auto allowance (not pensionable)
Deputy Director <i>80% of Executive Director</i>	61.00	64.02	67.24	70.61	74.13		Benchmarked to County BU 7
Retirement Programs Spec. III <i>#9663 Risk Mgmt. Analyst III</i>	41.94	44.04	46.24	48.55	50.98	53.53	Benchmarked to County BU 7

PROPOSED SALARY & BENEFIT BENCHMARKS: (continued)

FY 22-23	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Benefits: (health, pension, other)
Retirement Programs Spec. II <i>#9658 Risk Mgmt. Analyst II</i>	35.85	37.64	39.52	41.50	43.58	45.76	Benchmarked to County BU 7
Retirement Programs Spec. I <i>#9657 Risk Mgmt. Analyst I</i>	31.06	32.61	34.24	35.96	37.75	39.64	Benchmarked to County BU 7
Accountant IV <i>#2055 Auditor-Analyst III</i>	41.94	44.04	46.24	48.55	50.98	53.53	Benchmarked to County BU 7
Accountant III <i>#907 Accountant III</i>	36.25	38.06	39.96	41.96	44.06	46.26	Benchmarked to County BU 7
Accountant II <i>#906 Accountant II</i>	31.52	33.10	34.76	36.50	38.33	40.25	Benchmarked to County BU 7
Accountant I <i>#905 Accountant I</i>	26.90	28.25	29.66	31.14	32.70	34.34	Benchmarked to County BU 7
Retirement Technician <i>#913 Accounting Technician - Conf.</i>	24.87	26.11	27.42	28.79	30.23	31.74	Benchmarked to County BU 11
Administrative Asst. III <i>#2203 Administrative Asst. III - Conf.</i>	20.30	21.32	22.39	23.51	24.69	25.92	Benchmarked to County BU 11
Administrative Asst. II <i>#2222 Administrative Asst. II - Conf.</i>	18.45	19.37	20.34	21.36	22.43	23.55	Benchmarked to County BU 11
Administrative Asst. I <i>#2221 Administrative Asst. I - Conf.</i>	16.74	17.58	18.46	19.38	20.35	21.37	Benchmarked to County BU 11
Part-Time Temporary Office Assistant <i>#911 Account Clerk</i>	19.67	20.65	21.68	22.76	23.90		N/A

San Luis Obispo County Pension Trust
PROPOSED TRAINING & TRAVEL:

	FY20-21 Actual	Current FY21-22 YTD	FY21-22 Amended Budget	FY22-23 Proposed Budget	Increase / (Decrease) From PY Budget
<i>CALAPRS General Assembly</i>					
Attendees - Board	6	2	3	3	-
Attendees - Staff	2	1	2	2	-
Total Expense	2,500	4,046	7,250	7,250	-
<i>CALAPRS Advanced Trustee Institute (UCLA)</i>					
Attendees - Board	1	-	1	2	1
Attendees - Staff	-	-	-	-	-
Total Expense	650	-	3,450	6,900	3,450
<i>CALAPRS Trustees Training-Pepperdine</i>					
Attendees - Board	2	2	3	3	-
Attendees - Staff	-	-	-	-	-
Total Expense	1,000	1,000	9,900	9,900	-
<i>SACRS Trustees Training- Berkeley (new)</i>					
Attendees - Board	-	-	2	3	1
Attendees - Staff	-	1	1	1	-
Total Expense	-	500	11,250	15,000	3,750
<i>SACRS Semi-Annual Conferences</i>					
Attendees - Board	-	-	1	1	-
Attendees - Staff	-	-	-	-	-
Total Expense	-	-	1,550	1,550	-
<i>Nossaman Fiduciaries Forum</i>					
Attendees - Board	-	-	1	-	(1)
Attendees - Staff	-	-	-	1	1
Total Expense	-	-	1,025	1,025	-
<i>CALAPRS Administrators Institute</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	2	2	2	1	(1)
Total Expense	1,000	1,000	3,200	1,600	(1,600)
<i>CALAPRS Management Academy</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	-	-	-	1	1
Total Expense	-	-	-	3,350	3,350

**San Luis Obispo County Pension Trust
PROPOSED TRAINING & TRAVEL:**

	FY20-21 Actual	Current FY21-22 YTD	FY21-22 Amended Budget	FY22-23 Proposed Budget	Increase / (Decrease) From PY Budget
<i>CALAPRS Trustees Roundtables (2/yr)</i>					
Attendees - Board	1	1	2	2	-
Attendees - Staff	-	-	-	-	-
Total Expense	50	50	100	100	-
<i>CALAPRS Administrators Roundtables (2/yr)</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	2	3	4	4	-
Total Expense	100	150	200	200	-
<i>CALAPRS Investment Officers Roundtables (2/yr)</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	1	-	-	-	-
Total Expense	50	-	-	-	-
<i>CALAPRS Attorneys Roundtables (3/yr)</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	3	1	3	3	-
Total Expense	225	50	150	150	-
<i>CALAPRS Operations Roundtables (4/yr)</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	6	2	6	6	-
Total Expense	350	100	300	300	-
<i>CALAPRS Disability training</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	-	-	1	-	(1)
Total Expense	-	-	50	-	(50)
<i>CALAPRS Overview Course (3 class series)</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	4	-	1	-	(1)
Total Expense	800	-	250	-	(250)
<i>CALAPRS - Board, Faculty, and related travel</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	-	-	4	3	(1)
Total Expense	-	-	2,200	1,550	(650)

**San Luis Obispo County Pension Trust
PROPOSED TRAINING & TRAVEL:**

	FY20-21 Actual	Current FY21-22 YTD	FY21-22 Amended Budget	FY22-23 Proposed Budget	Increase / (Decrease) From PY Budget
<i>NCPERS Trustee Educational Seminar</i>					
Attendees - Board	-	4	-	-	-
Attendees - Staff	-	1	-	-	-
Total Expense	-	1,500	-	-	-
<i>Investment Seminars</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	-	-	1	1	-
Total Expense	-	-	1,600	1,600	-
<i>Software Training</i>					
Attendees - Board	-	-	-	-	-
Attendees - Staff	-	-	2	2	-
Total Expense	-	-	3,000	4,000	1,000
<i>Misc. Board and Staff Training</i>					
Total Expense	605	447	1,525	1,525	-
Subtotal Training and Travel					
Training	7,330	5,547	25,320	32,370	7,050
Travel (air, hotel, food)	-	3,121	14,100	16,950	2,850
Mileage Reimb.	-	21	7,050	6,150	(900)
Misc. Travel	-	153	530	530	-
Total Training and Travel	7,330	8,842	47,000	56,000	9,000

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San Luis Obispo County Pension Trust
PROPOSED CAPITAL EXPENDITURES BUDGET:
 Fiscal Year 2022-2023

	FY20-21 Actual Expenditures	FY21-22 Estimated Expenditures	FY21-22 Adopted Budget	FY22-23 Proposed Budget	Increase/ Decrease From PY
BUILDING EXPENDITURES:					
Exterior					
Roof	-	-	-	-	-
Windows	-	-	-	-	-
Paint	-	-	-	-	-
Parking Lot	-	-	-	-	-
Landscape	-	-	-	-	-
Total Exterior	\$ -	\$ -	\$ -	\$ -	\$ -
Interior					
HVAC	-	-	-	-	-
Paint	-	-	-	-	-
Flooring	-	-	-	-	-
Plumbing	-	-	-	-	-
Elevator	-	65,000	150,000	85,000	(65,000)
Security System	-	-	-	-	-
Total Interior	\$ -	\$ 65,000	\$ 150,000	\$ 85,000	\$ (65,000)
SOFTWARE EXPEDITURES:					
Software Purchases ***	\$ -	\$ -	\$ -	\$ -	\$ -
Software Upgrades and Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
EQUIPMENT EXPEDITURES:					
Capitalized Equipment Purchases	\$ -	\$ -	\$ -	\$ -	\$ -
CONTINGENCIES	\$ -	\$ -	\$ 7,500	\$ 4,250	\$ (3,250)
TOTAL CAPITAL EXPENDITURES	\$ -	\$ 65,000	\$ 157,500	\$ 89,250	\$ (68,250)

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Board of Trustees

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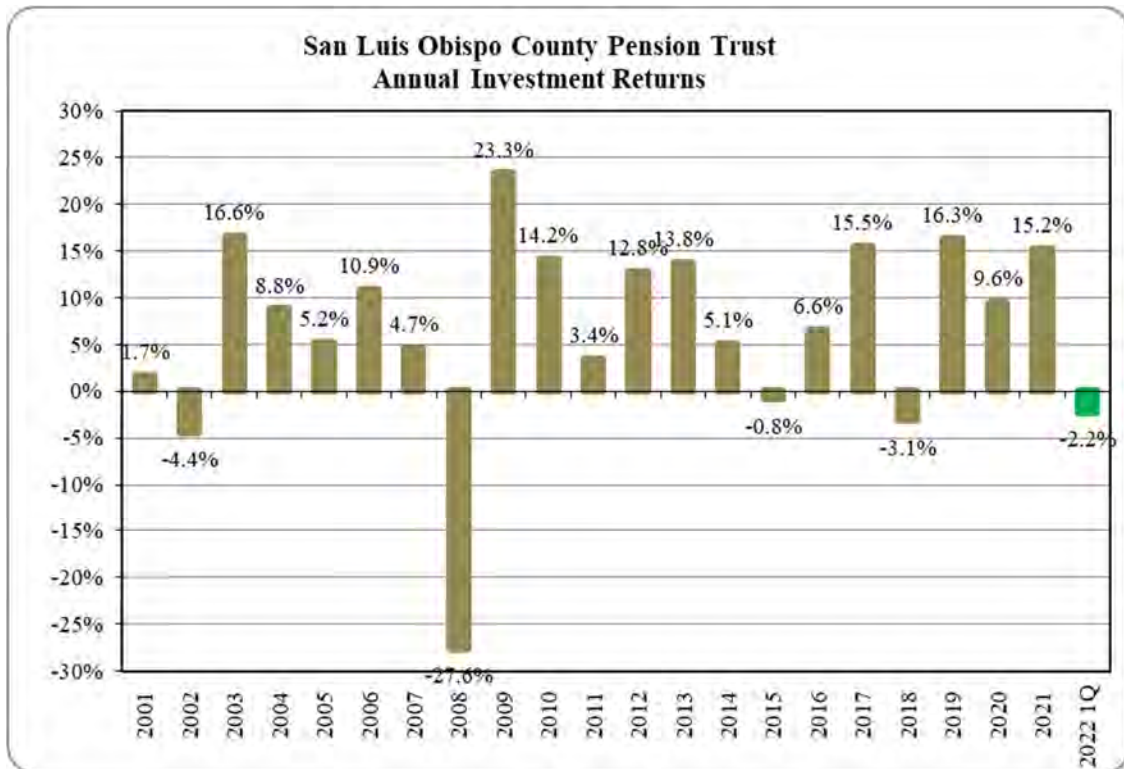
Date: May 23, 2022

To: Board of Trustees

From: Carl Nelson – Executive Director
Amy Burke – Deputy Director
Scott Whalen - Verus

Agenda Item 18: Quarterly Investment Report for the 1st Quarter of 2022

Attached to this memo is the 1Q22 quarterly investment report prepared by the Trust’s investment consultant Verus. Scott Whalen of Verus will make a detailed presentation and discuss the quarterly report. The history of the rates of return gross of fees of the Pension Trust are shown below as an extension of the data in the Verus report.



Respectfully submitted

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**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



PERIOD ENDING: MARCH 31, 2022

Investment Performance Review for

San Luis Obispo County Pension Trust

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[VERUSINVESTMENTS.COM](https://www.verusinvestments.com)

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Investment Landscape

TAB I

Investment Performance
Review

TAB II



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

2ND QUARTER 2022
Investment Landscape

Recent Verus research

Visit: <https://www.verusinvestments.com/insights/>

Sound thinking

2022: BACK TOWARDS NORMAL?

As we do every year, during January we sit down to think about what might matter for the coming year – and that process always begins with us assessing how we did the previous year. The goal of this is to help boards prioritize their work, whether it is actually allocating money or simply setting the agenda of topics they should be thinking about. In the latest Sound Thinking, our CIO, Ian Toner, CFA will review topics from the previous year and outline the following topics that an investor might want to add to their agenda for the coming year.

Annual research

2022 ACTIVE MANAGEMENT ENVIRONMENT

Active manager dispersion has been very wide recently, as the pandemic-induced global recession and subsequent fast-paced recovery resulted in considerable economic divergence. These dynamics have created interesting opportunities for active managers to show differentiated performance and deliver alpha to clients. We hope that the insights from this unique mathematical approach provide a deeper understanding of active manager behavior and assists investors in their selection process.

Verus business update

Since our last Investment Landscape webinar:

- Verus has hired three employees. **Tim McEnery**, Managing Director | Senior Consultant; **Samantha Grant**, Senior Consultant; and **Kyle Jangard**, Public Markets Research Analyst.
 - Tim and Samantha will establish a Verus office in Chicago. Expanding our Midwest presence has been a long-term strategic goal to grow our nationwide services.
- We've had success over the last three months in retaining several new clients. Our national client footprint expanded to 25 states, with our recent additions of clients in Hawaii and North Dakota.
- The IIDC grew to 25 consulting firms with over \$42 trillion in assets under advisement. Verus founded the Institutional Investing Diversity Cooperative in December 2020, leading a call to action in the consulting industry for disclosure of asset manager diversity data at the investment team level.



TIM MCENERY, CFA
Managing Director | Senior Consultant



SAMANTHA GRANT, CFA, CAIA
Senior Consultant



KYLE JANGARD
Public Markets Research Analyst

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1st quarter summary

THE ECONOMIC CLIMATE

- Real GDP grew at a 5.5% rate year-over-year in Q4 (+6.9% quarterly annualized rate). Strong expenditures into new inventory boosted growth, as many businesses have struggled to replenish inventory levels in the face of global supply chain issues. Business investment and rising exports also contributed to the strong pace of growth. **p. 8**
- The rate of unemployment in the U.S. has continued to fall, improving from 3.9% to 3.6% during the quarter. The labor force participation rate has gradually increased, rising from 61.6% to 62.4%. A historic shortage of workers may remain a sticky issue, as 11.3 million job openings are posted, but only 6.0 million Americans are seeking work. **p. 11**

PORTFOLIO IMPACTS

- High yield credit spreads expanded from 2.8% to 3.3%, although default activity is expected to remain historically low. It appears spread movement has been more of an effect of broader risk-off market moves, rather than a specific reflection of changing credit conditions. **p. 24**
- U.S. core CPI, excluding food & energy, rose by 6.5% year-over-year in March. Headline inflation, which is being closely watched at the moment as this includes energy & food prices, reached 8.5%. Prices in some other areas have stabilized. Many investors believe inflation peaked in March, though there remains much uncertainty around the path from here. **p. 9**

THE INVESTMENT CLIMATE

- In late February, Russian forces invaded Ukraine—a move which was anticipated by major Western intelligence communities. Ukraine has put together a remarkable defense thus far, as many citizens have taken up arms to defend their country. **p. 18**
- Multi-year underinvestment in energy, and now the Russia/Ukraine war, has created a shock to energy markets and crisis-level prices in many European countries. Government officials have been hesitant to vocally support increased local energy production, primarily due to climate concerns. In the U.S., many shale firms have opted to increase production on existing land, but have been slow to pursue new projects—partly due to supply chain issues (shortages in labor, truck drivers, and frack sand) and also due to prioritization of profits over growth. **p. 38**

ASSET ALLOCATION ISSUES

- Nearly every asset class delivered negative performance in Q1. Equity markets pulled back, credit spreads widened, and interest rates headed higher. Certain real assets including commodities were the exception. **p. 49**
- Value stocks outperformed Growth stocks by a substantial margin during Q1, as the Energy sector outpaced the index by 43.6% (Energy 39.0%, S&P 500 -4.6%). Large capitalization stocks outperformed small capitalization stocks (Russell 1000 +9.8%, Russell 2000 +2.1%). **p. 30**

Nearly every asset class delivered losses during Q1, as risk assets sold off, credit spreads widened, and interest rates moved higher

What drove the market in Q1?

“U.S. Inflation Accelerated to 8.5% in March, Hitting Four-Decade High”

HEADLINE CONSUMER PRICE INFLATION (YEAR-OVER-YEAR)

Oct	Nov	Dec	Jan	Feb	Mar
6.2%	6.8%	7.0%	7.5%	7.9%	8.5%

Article Source: Wall Street Journal, April 12th, 2022

“Russian Stocks’ 33% Crash Is Fifth-Worst in Market History”

MOEX RUSSIA EQUITY INDEX PRICE LEVEL

Oct	Nov	Dec	Jan	Feb	Mar
4150	3891	3787	3530	2470	2704

Article Source: Bloomberg, February 24th, 2022

“Commodity prices surge after Russia’s Ukraine invasion”

BLOOMBERG COMMODITY SPOT INDEX

Oct	Nov	Dec	Jan	Feb	Mar
525.1	487.3	502.2	546.8	577.7	625.3

Article Source: Axios, March 1st, 2022

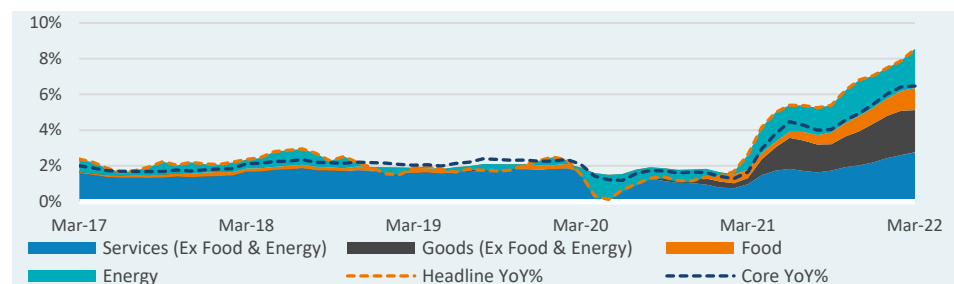
“Global Bond Rout Deepens on Fear Rate Hikes Will Stoke Recession”

BLOOMBERG GLOBAL AGGREGATE TREASURIES TOTAL RETURN

Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
3.2%	(5.5%)	0.9%	(1.1%)	(1.0%)	(6.2%)

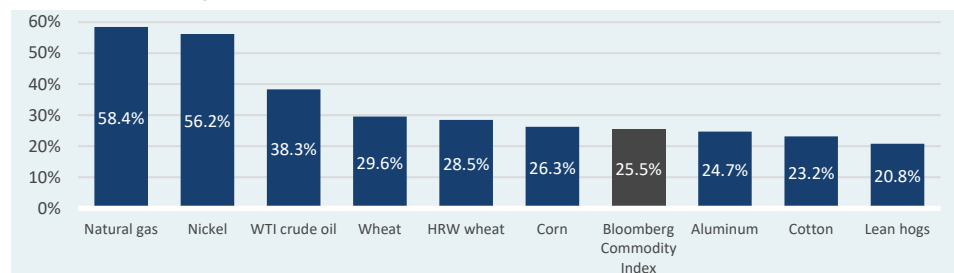
Article Source: Bloomberg, March 27th, 2022

CONTRIBUTION TO HEADLINE CONSUMER PRICE INFLATION



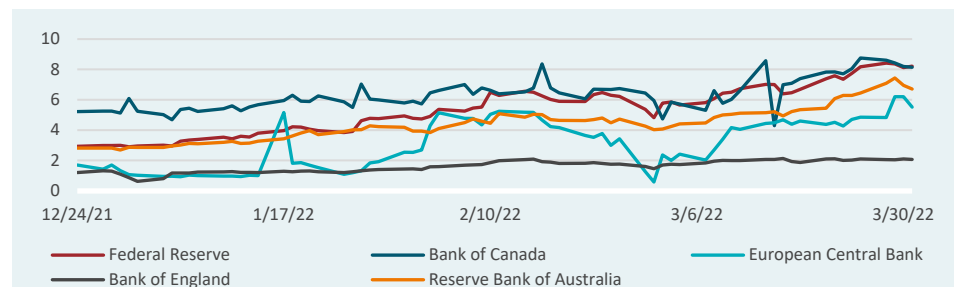
Source: Bureau of Labor Statistics, as of 3/31/22

COMMODITY Q1 PERFORMANCE



Source: Bloomberg, as of 3/31/22

EXPECTED NUMBER OF RATE HIKES BY DECEMBER 2022



Source: Bloomberg, as of 3/31/22

Economic environment

U.S. economics summary

- Real GDP grew at a 5.5% rate year-over-year in the fourth quarter (+6.9% quarterly annualized rate). Strong expenditures into new inventory boosted the economy during the quarter, as many businesses had struggled to replenish inventory levels in the face of global supply chain issues. Business investment and rising exports also contributed to the strong Q4 pace of growth.
- In economic terms, the effects of COVID-19 seem to be in the rearview mirror. Travel volumes have risen closer to prior levels, credit card transactions are extremely strong, and Americans are once again dining out and spending on entertainment.
- U.S. core CPI, which excludes food & energy prices, rose by 6.5% year-over-year in March. Headline inflation, which is being closely watched at the moment as this includes many of the goods that exhibited the largest price gains (energy & food), reached 8.5%. Price rises have become more broad-based in recent months, with many goods and services experiencing increases.
- U.S. unemployment continued to fall, improving from 3.9% to 3.6%. The labor force participation rate has gradually increased, rising from 61.6% to 62.4%. The historic shortage of workers may remain a sticky issue, as 11.3 million job openings are currently posted, but only 6.0 million Americans are seeking work.
- The fast rise of 30-year fixed mortgage rates to near 5.0%, along with skyrocketing home prices, has made homeownership a nearly impossible goal for some Americans, and is squeezing the budgets of many (though at the same time generating much wealth for homeowners). This effect is captured in the Housing Affordability Index, which further deteriorated during Q1.

	Most Recent	12 Months Prior
Real GDP (YoY)	5.5% 12/31/21	(2.3%) 12/31/21
Inflation (CPI YoY, Core)	6.5% 3/31/22	1.6% 3/31/21
Expected Inflation (5yr-5yr forward)	2.4% 3/31/22	2.3% 3/31/21
Fed Funds Target Range	0.25% – 0.50% 3/31/22	0.00% – 0.25% 3/31/21
10-Year Rate	2.34% 3/31/22	1.74% 3/31/21
U-3 Unemployment	3.6% 3/31/22	6.0% 3/31/21
U-6 Unemployment	6.9% 3/31/22	10.7% 3/31/21

GDP growth

Real GDP grew at a 5.5% rate year-over-year in the fourth quarter (+6.9% quarterly annualized rate). Strong expenditures into new inventory boosted growth, as many businesses had struggled to replenish inventory levels in the face of global supply chain issues. Business investment and rising exports also contributed to strong fourth quarter GDP.

During Q1 2022, concerns rose around the possibility of slowing economic growth or even a recession in the near-term, though the chances of recession appear low. The Atlanta Fed GDPNow real-time forecast for first quarter growth was 1.1%, as of April 11th (seasonally adjusted QoQ annualized rate).

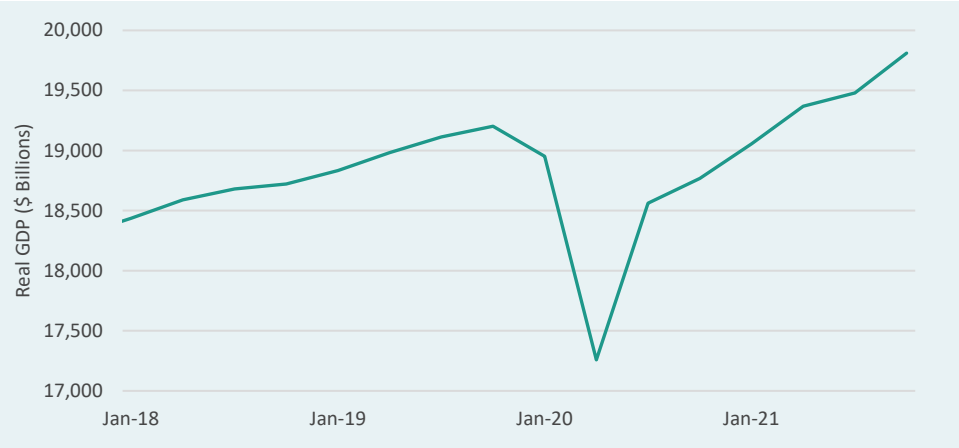
However, it is broadly expected that economic growth picks back up to around 3% throughout the remainder of 2022.

As we mentioned last quarter, U.S. GDP growth is quoted in *inflation-adjusted* terms. This will mean that inflation trends could have large impacts on upcoming U.S. GDP growth numbers. Higher inflation would depress the rate of GDP growth, and falling inflation would likely boost GDP figures, all else equal. Multiple past U.S. recessions were caused at least partially by rising inflation rather than solely by slowing growth (see 1970s, 1980s).

Q4 GDP growth was very strong

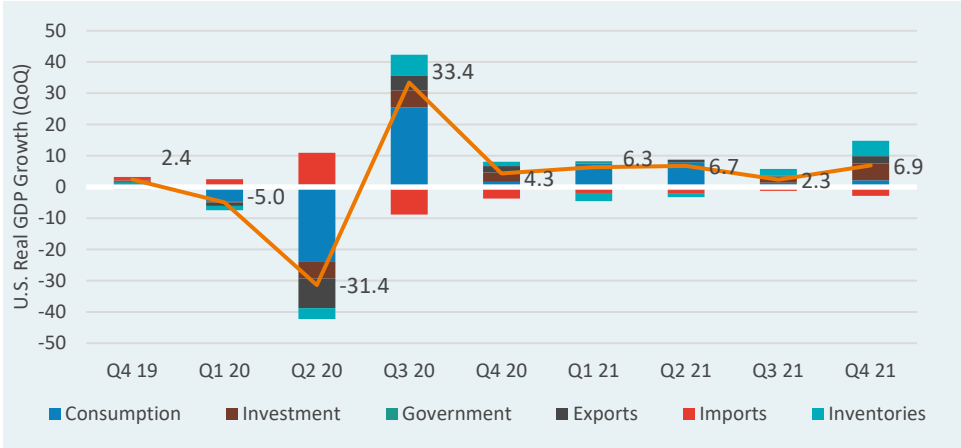
Economists expect weak growth in Q1, followed by a mild economic reacceleration

U.S. REAL GROSS DOMESTIC PRODUCT



Source: FRED, as of 12/31/21

U.S. REAL GDP COMPONENTS (QOQ)



Source: FRED, as of 12/31/21

Inflation

U.S. core CPI, which excludes food & energy prices, rose by 6.5% year-over-year in March. Headline inflation, which is being closely watched at the moment as this includes many goods that have exhibited the most notable price gains (energy & food), reached 8.5%. While price rises in energy and food have been large in recent months, prices in some other areas have stabilized. Many investors believe inflation peaked in March, though much uncertainty exists regarding the path from here.

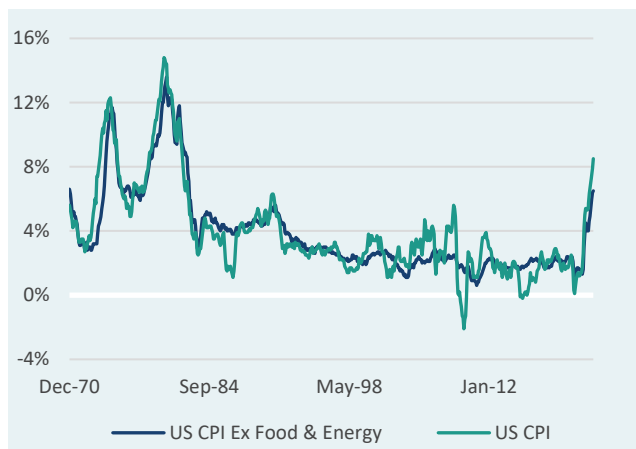
There are both inflationary and deflationary forces at play in the current environment. On the inflationary side, Russia's invasion of Ukraine has led to substantial disruptions to energy and agricultural markets, which flowed through to price spikes in many commodity markets. These moves can be seen in the March

inflation report. Geopolitical crises tend to result in *upward* commodity price movement, which suggests continued war or wider conflict could have inflationary effects. On the *deflationary* side, large single-month inflation numbers are beginning to *fall out* of the 12-month CPI calculation window. This will naturally have a depressing effect on future CPI figures. Furthermore, many pandemic-specific issues are beginning to be resolved, such as clogged supply chains, unusually high demand for physical goods, and abnormally strong spending patterns. On the next slide we visualize some of these *inflationary* and *deflationary* effects.

Overall, we believe that inflation will most likely begin falling later in 2022, though this could be a slower process than originally believed.

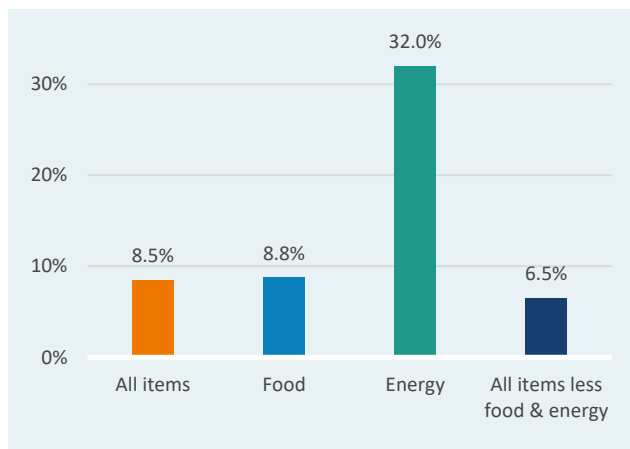
Inflation has proven more sticky (less transitory) than previously expected

U.S. CPI (YOY)



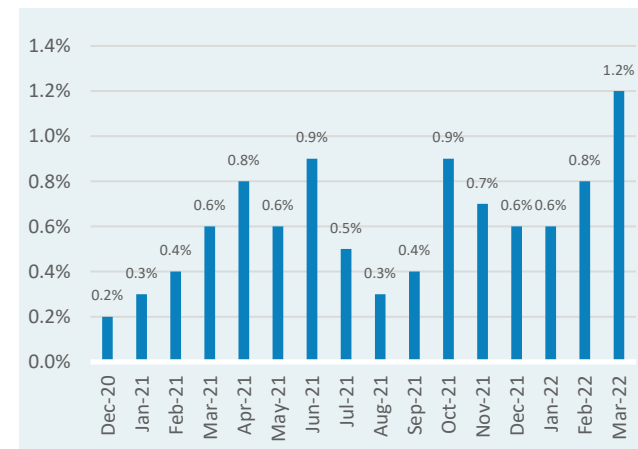
Source: BLS, as of 3/31/22

U.S. CPI (YOY)



Source: BLS, as of 3/31/22

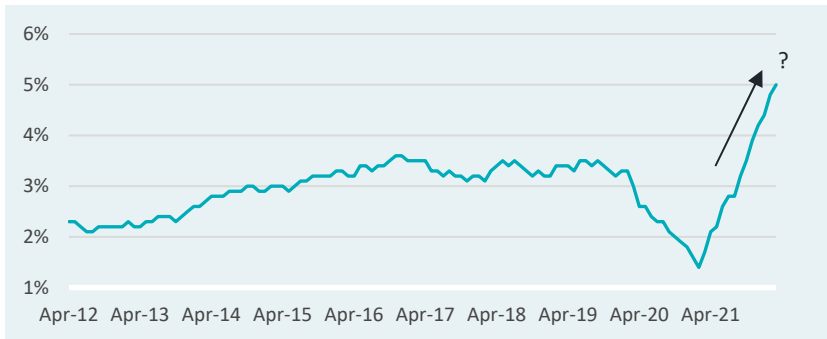
MONTHLY PRICE MOVEMENT



Source: BLS, as of 3/31/22

Inflationary & deflationary forces

CPI SHELTER COSTS (YEAR-OVER-YEAR)



Shelter costs, which account for ~40% of the core CPI gauge, have continued to track rent prices higher. The continuation of this trend could mute the impact of a potential rollover in prices for consumer durables like used cars, and result in a higher floor for inflation near-term.

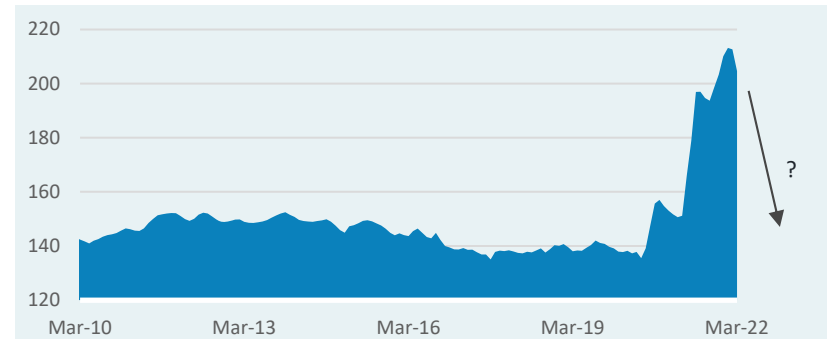
U.S. CORNBELT AMMONIUM NITRATE (FERTILIZER) PRICES



Russia, the world's largest fertilizer exporter, imposed a two-month ban on ammonium nitrate exports, which will threaten the reduction of fertilizer supplies. The export ban is likely to result in higher prices for U.S. farmers.

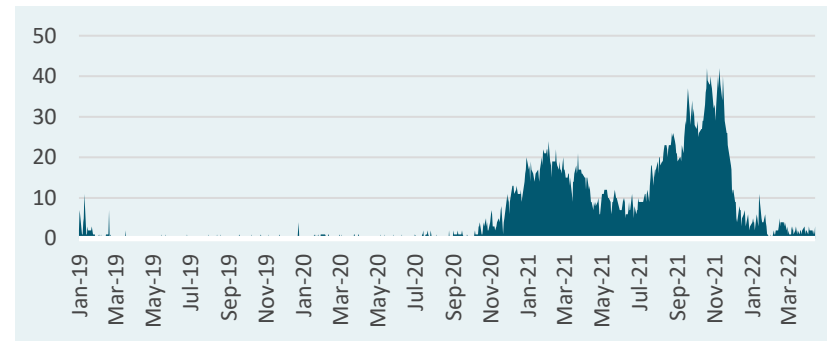
Source: FRED, as of 3/31/22 (upper), Bloomberg, as of 3/31/22 (lower)

USED CAR & TRUCK PRICES



If certain pandemic-related price rises were to reverse as conditions ease, this could bring inflation down materially

SHIPS AT ANCHOR – PORT OF L.A.



Pandemic-related supply and demand complexities contributed to many supply shortages and price spikes. As these issues are resolved, we would expect prices of some goods to stabilize and perhaps even move closer to prior levels.

Source: FRED, as of 3/31/22 (upper), Port of Los Angeles, as of 4/15/22 (lower)

Inflation dynamics are complex. On this slide we take a look at a few potentially *inflationary* forces (left side) and *deflationary* forces (right side)

Labor market

The rate of unemployment in the U.S. has continued to fall, improving from 3.9% to 3.6% during the quarter. The labor force participation rate has gradually increased, rising from 61.6% to 62.4%. The historic shortage of workers may remain a sticky issue, as 11.3 million job openings are posted, but only 6.0 million Americans seeking work.

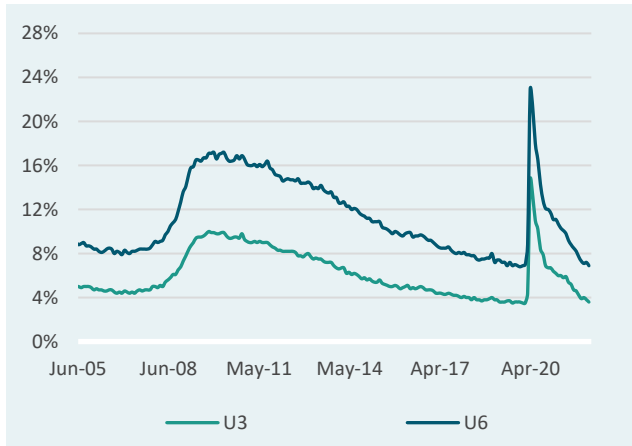
Throughout the latter part of the pandemic, our belief has been that abnormally early retirements have shrunk the overall labor force, and that the U.S. labor participation rate will not likely fully rebound to prior levels. This forecast has proven accurate, as much of the 55+ U.S. worker age cohort remains out of the workforce and not seeking employment. This compares to

younger age cohorts which have made greater progress toward rejoining the labor pool.

The shortage of workers is likely having a dampening effect on the U.S. economy, as fewer workers means less productive activity, which translates to fewer paychecks and total household income. At the onset of the labor supply shortage, some held the view that fewer workers might mean greater overall wage income if this gave workers more negotiating power with employers. Unfortunately, the results have not met those expectations, as wages have failed to keep up with inflation.

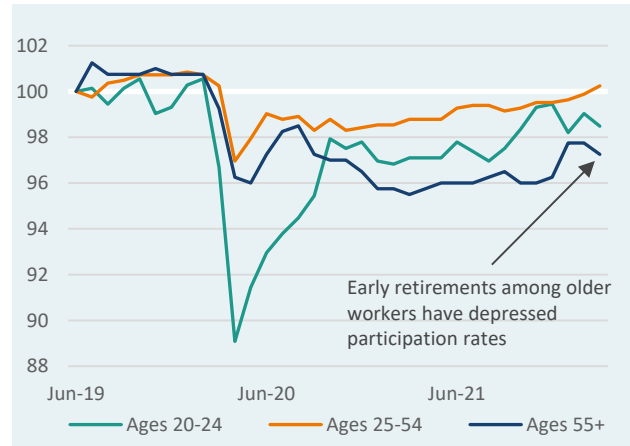
U.S. labor participation continues to see gradual improvement

U.S. UNEMPLOYMENT



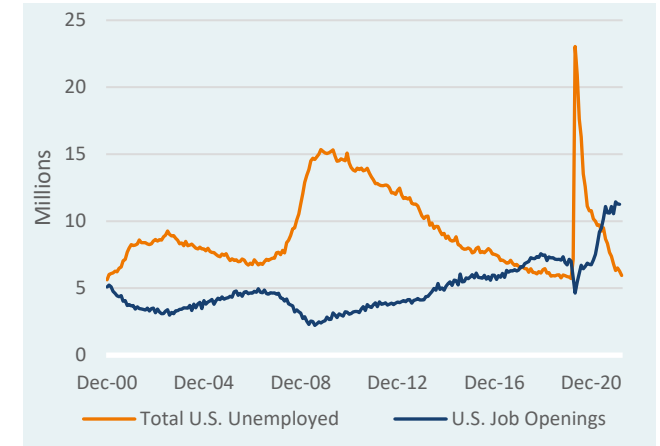
Source: FRED, as of 3/31/22

LABOR PARTICIPATION RATE



Source: FRED, as of 3/31/22

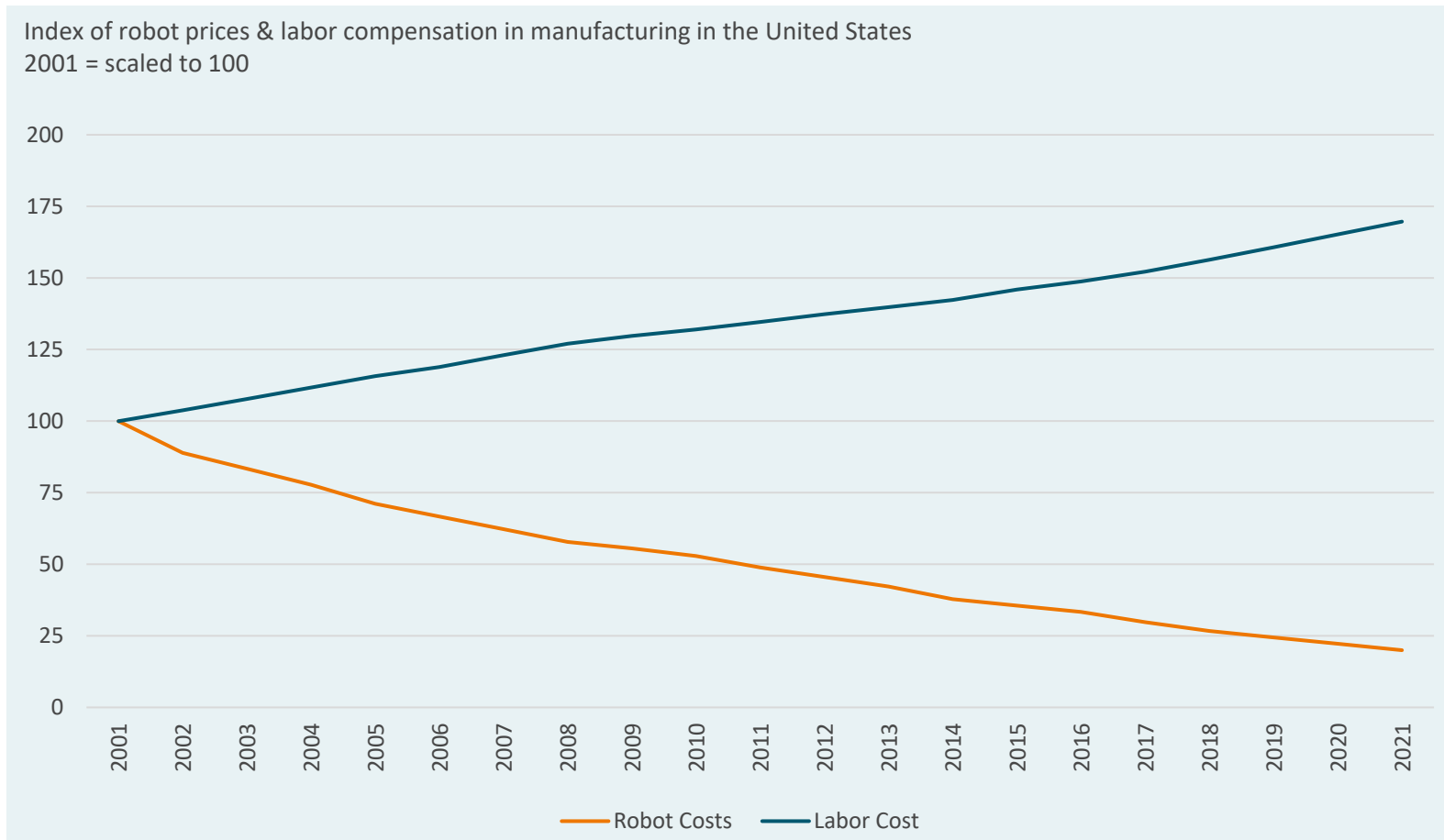
UNEMPLOYED VS # JOBS AVAILABLE



Source: FRED, as of 2/28/22 or most recent data

Labor costs alternatives

COSTS OF AUTOMATION



With widespread labor shortages, companies are increasingly adopting robotics and automation to stay competitive

Spending on robotics was approximately \$2 billion in 2021 (a 14% increase over the previous high in 2017)

Source: U.S. Bureau of Labor Statistics; ARK Investment Management ark-investment.com; United Nations Economic Commission; BCG

The consumer

U.S. personal consumption expenditures (PCE) represents consumer spending across a broad basket of goods. Spending boomed during the COVID-19 recovery, with a surprisingly large shift towards purchases of goods and away from services. This substantial shift was believed to be a major contributor to demand/supply imbalances and price inflation of goods during the pandemic. After adjusting for inflation, consumption has risen 1.6% per year since February of 2020.

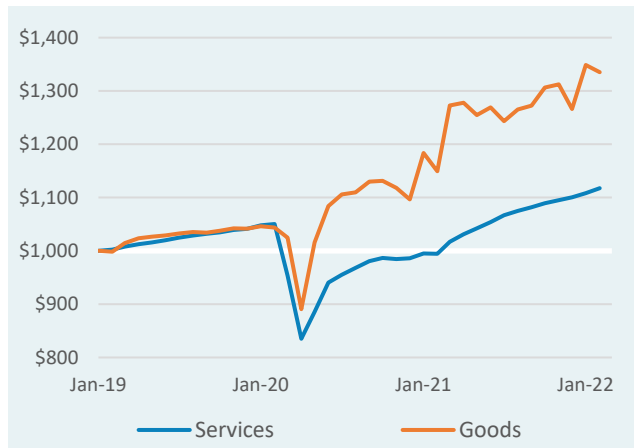
Auto sales remain depressed relative to pre-pandemic volumes and are at the lowest level since 2011. Sales have likely been hindered by supply chain and therefore inventory issues surrounding new vehicles as well as affordability issues for used

vehicles due to the unprecedented rise in prices.

While economic growth and spending appears to be slowing, it is worth noting how significant the increase in U.S. household wealth has been. Asset prices broadly headed higher during the COVID-19 recovery, which included skyrocketing home prices. While these moves certainly create difficulties for new investors (dollars invested today are expected to generate relatively lower long-term returns) and also for future homebuyers (home affordability has been very negatively affected), rising markets have created great profits for many Americans, as indicated by surging total household wealth.

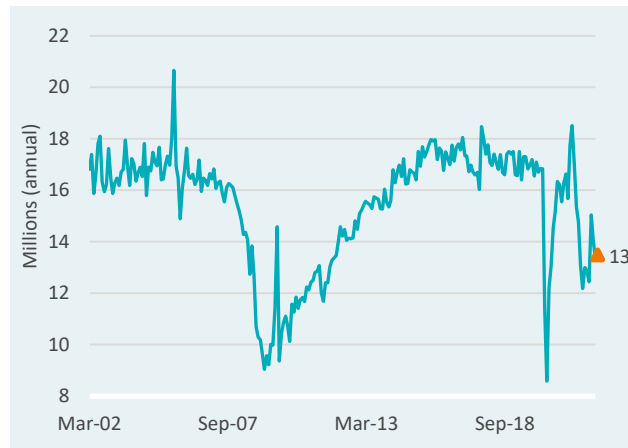
Despite vastly increased American wealth and strong job prospects, sentiment is very depressed as living costs rocket higher

PERSONAL CONSUMPTION EXPENDITURES



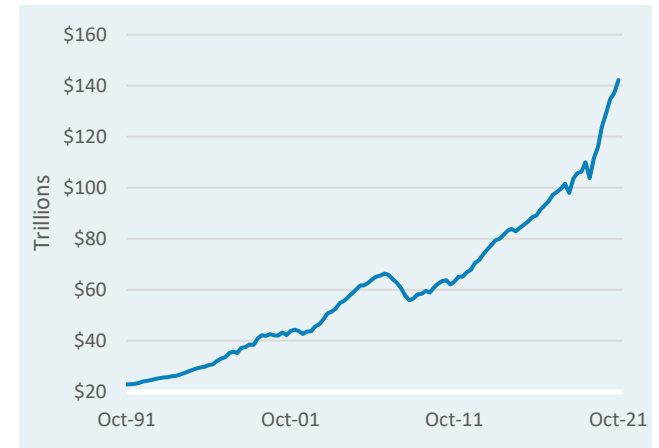
Source: FRED, as of 2/28/22

AUTO SALES



Source: Federal Reserve, as of 2/28/22

U.S. HOUSEHOLD WEALTH



Source: FRED, as of 12/31/21

Sentiment

Consumer sentiment has collapsed to levels not seen since the depths of the 2008-2009 Global Financial Crisis. The University of Michigan survey fell from 70.6 to 59.4 during the quarter, as survey respondents indicated deteriorating living conditions due to high inflation and expectations that household financial conditions will worsen throughout the year. On a more positive note, Americans are reportedly optimistic about job prospects and the strong labor market.

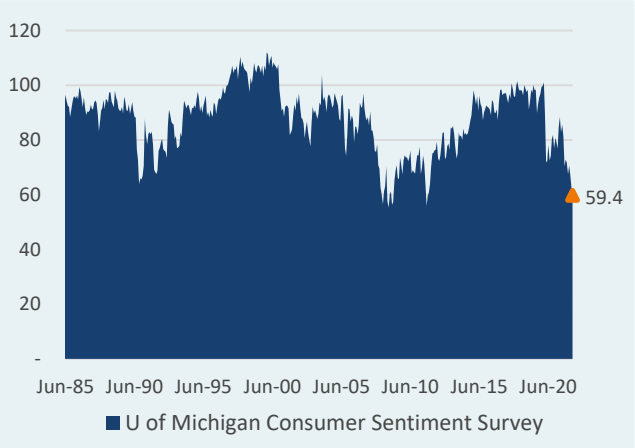
There remain 11.3 million open jobs but only 6.0 million unemployed people in the labor force, indicating significant

labor market tightness. Per the Conference Board, the percentage of Americans who believe it is difficult to land a job right now is at the lowest level since year 2000. A competitive market has led to strong nominal wage gains, but real (adjusted for inflation) average hourly earnings failed to keep up with inflation, and have actually contracted -2.7% over the last year.

The NFIB Small Business Optimism index weakened further. As detailed in the survey, 31% of small businesses see inflation as the largest problem they face. Labor shortages and supply chain issues continue to weigh on business activity.

Sentiment, by some measures, has reached lows not seen since the 2008-2009 Global Financial Crisis

CONSUMER SENTIMENT



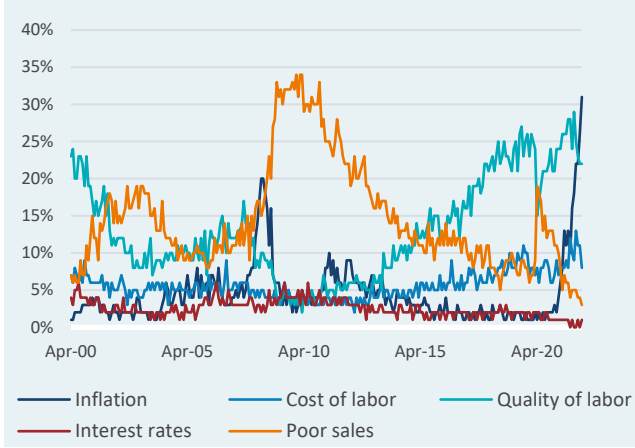
Source: University of Michigan, as of 3/31/22

CONSUMER VIEWS ON THE LABOR MARKET



Source: Conference Board, as of 3/31/22

BIGGEST ISSUES FOR SMALL BUSINESSES



Source: NFIB, as of 3/31/22

Housing

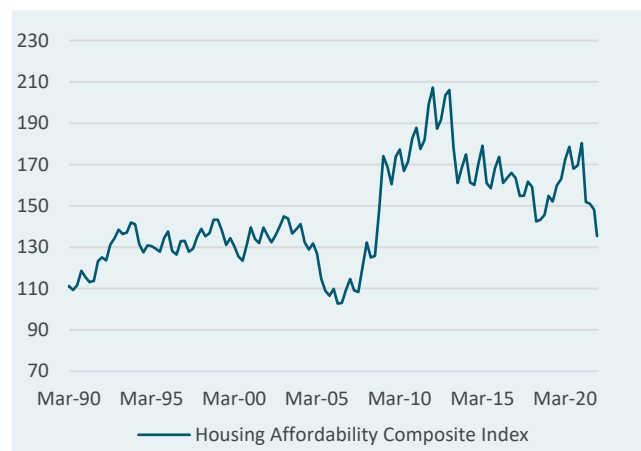
U.S. home prices continued higher, up +19% over the past year ending January, and up a whopping 32% since pre-pandemic. Price appreciation may be set to cool off as the 30-year fixed mortgage rate has risen to 5%, inventories have risen, and sales activity has slowed considerably.

The fast rise of 30-year fixed mortgage rates to near 5%, along with skyrocketing home prices, has made homeownership a nearly impossible goal for some Americans, and is squeezing the budgets of many (though at the same time generating much wealth for homeowners). This effect is captured in the

Housing Affordability Index, which deteriorated during Q1.

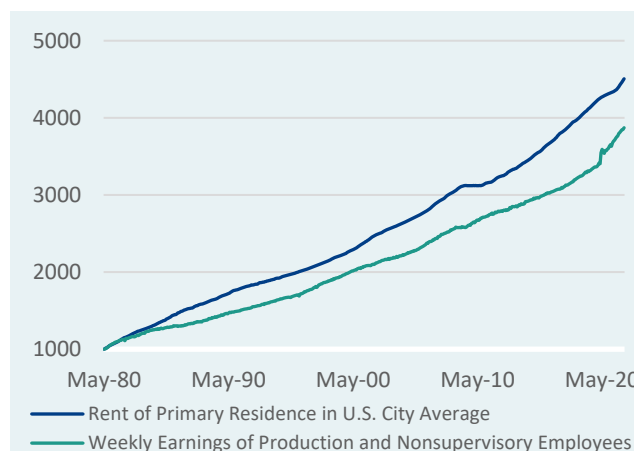
The cost of housing has outpaced wage gains for decades, although only mildly so (not as dramatically as some might assume). Lower and lower interest rates had largely counteracted higher home prices in terms of total ownership costs. This rough equilibrium seems to have swung in the other direction over the past year. Lack of affordability may mean a continued slowdown in home sales activity, and perhaps a plateauing or even decline in property values in some areas.

HOUSING AFFORDABILITY INDEX



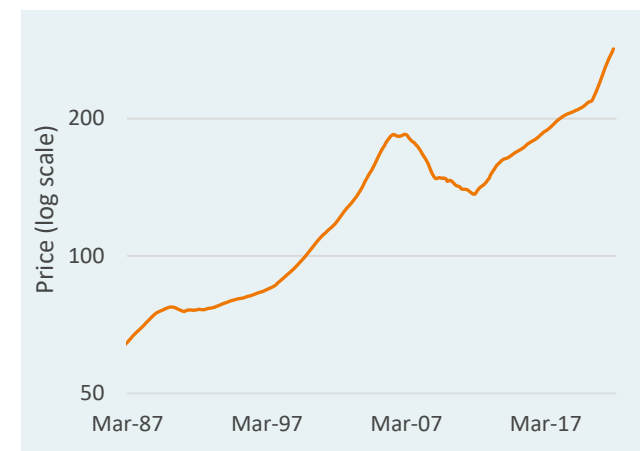
Source: NFIB, as of 2/28/22

WAGES VS RENTING COSTS



Source: FRED, as of 2/28/22

CASE-SHILLER HOME PRICE INDEX



Source: FRED, as of 1/31/22

International economics summary

- The pace of economic growth has moved further back toward average levels in most economies. In January, the International Monetary Fund cut their 2021 advanced economy growth projections from 5.2% to 4.3%. Growth in 2022 is expected to slow to 3.1%.
- Unemployment continued to fall to, or below, pre-pandemic levels. However, in countries such as the United States these data do not tell the whole story, since the total size of the labor pool has shrunk substantially.
- Inflation trends have been surprisingly bifurcated by region. While the United States and Europe are generally contending with a spike in prices and inflation not seen in decades, Japan and China are experiencing very low inflation and muted price pressures.
- In late February, Russian forces invaded Ukraine—a move which was anticipated by major Western intelligence communities. Ukraine has put together a remarkable defense thus far, as many citizens have taken up arms to defend their country.
- Russia’s invasion of Ukraine led to substantial spikes in energy and agricultural prices as concerns grew of a potential supply shock. Eurozone producer prices grew 31.4% over the 12 months ending February, reflecting the impact of surging natural gas prices (+58.4%).
- COVID-19 case growth rose to record levels in China, which led CCP officials to reinstate lockdowns in some of the largest provinces in the country. Continued commitment to the “zero-Covid” policy in China could weigh on the outlook for global growth, as well as elongate the process of supply chain normalization, particularly within the freight shipping industry.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	5.5% 12/31/21	8.5% 3/31/22	3.6% 3/31/22
Eurozone	4.6% 12/31/21	7.5% 3/31/22	6.8% 2/28/22
Japan	0.4% 12/31/21	1.3% 3/31/22	2.6% 2/28/22
BRICS Nations	4.0% 12/31/21	3.2% 3/31/22	5.2% 12/31/21
Brazil	1.6% 12/31/21	10.5% 2/28/22	11.2% 2/28/22
Russia	5.0% 12/31/21	9.2% 2/28/22	4.1% 2/28/22
India	5.4% 12/31/21	6.1% 2/28/22	7.6% 3/31/22
China	4.8% 3/31/22	0.9% 2/28/22	5.8% 3/31/22

NOTE: India lacks reliable government unemployment data. Unemployment rate shown above is estimated from the Centre for Monitoring Indian Economy. The Chinese unemployment rate represents the monthly surveyed urban unemployment rate in China.

International economics

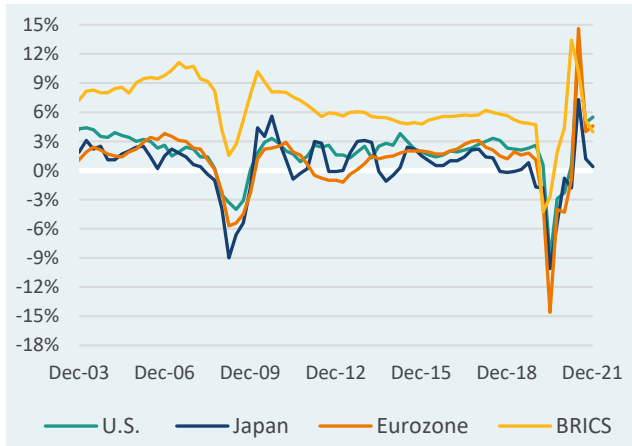
The pace of economic growth has moved further back towards average levels in most economies. This is reflected in quarter-over-quarter GDP growth figures, as these provide a better gauge of *short-term* growth trends. The International Monetary Fund estimates a 4.3% growth rate for calendar year 2021, and then a slowing to 3.1% in 2022. The IMF reports that recovery strength will likely vary considerably by location, due to access to medical care, types of government policy support, and regional cross-country spillovers.

Inflation trends continue to be disparate from country-to-country, as spiking inflation is a problem for a certain subset

of economies. While the United States and Europe are generally contending with a jump in prices and inflation not seen in decades, Japan and China are experiencing very low inflation and muted price pressure.

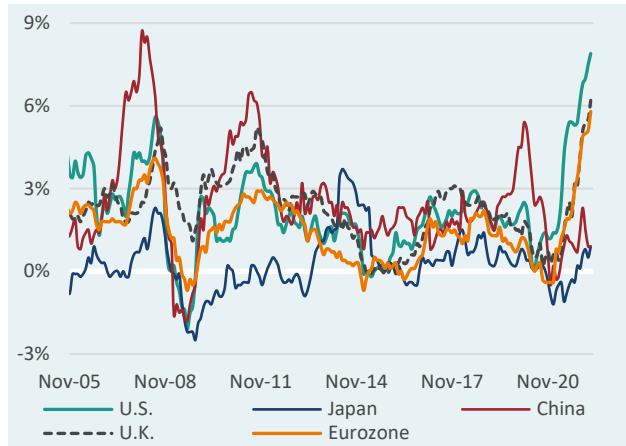
Unemployment has further improved to, or below, pre-pandemic levels. Investors should also note the change in labor market *size*. For example, disenfranchised workers falling out of the workforce or early retirements may not be captured in popular unemployment metrics but can have just as deleterious effects on economic activity as traditional job loss.

REAL GDP GROWTH (YOY)



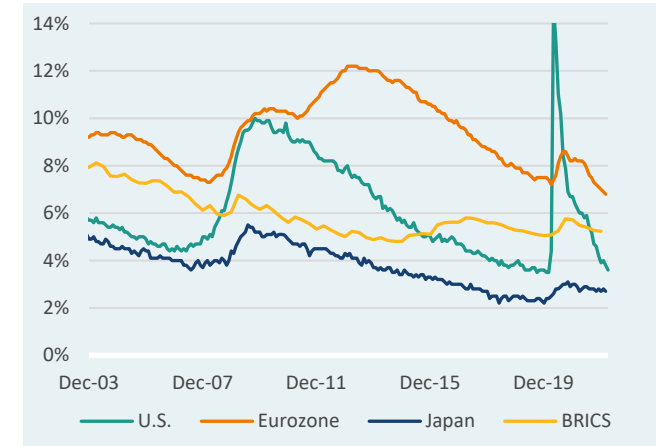
Source: Bloomberg, as of 12/31/21

INFLATION (CPI YOY)



Source: Bloomberg, as of 3/31/22 – or most recent release

UNEMPLOYMENT



Source: Bloomberg, as of 3/31/22 – or most recent release

Assessed control of terrain in Ukraine

3/15/2022 – 12:00PM PST



4/13/2022 – 12:00PM PST



Russian forces have been repelled from Kyiv, and have shifted their focus to consolidating control over area around the separatist-controlled Donetsk and Luhansk Oblasts in Eastern Ukraine

Source: Institute for the Study of War, as of 4/13/22, 12:00 PM PST

Conflict summary and key themes

Russian forces were unsuccessful in their attempt to take Kyiv, and have since withdrawn to refocus efforts on taking the territory around the Donetsk and Luhansk Oblasts in Eastern Ukraine. What have been the drivers of Ukrainian success thus far?

Ukrainian Tactics

- Effective withdrawal into major population centers which have proven easier to defend
- Efficient utilization of anti-aircraft (Stinger) and anti-armor (Javelin) technology
- Judicious use of airpower to disrupt Russian supply lines

Russian Military Incompetence

- Issues transporting adequate oil and fuel supplies to the front lines to support the advance
- Lack of experienced troops (many conscripts have 1-2 years experience and were not expecting to actually be sent into combat)
- Low morale (many troops have surrendered to Ukrainian forces, or have sabotaged their vehicles to slow the advance)
- Poor battlefield intelligence (many Russian troops are wandering into Ukrainian cities with little awareness of those cities, which has left them in an incredibly vulnerable positions and made it easier for Ukrainians to use their anti-armor weaponry)
- NATO estimated that between 7-15K Russian troops have been killed, and another 15-30K have been injured

Western Sanctions

- The Federal Reserve and the European Central Bank officially sanctioned the Central Bank of Russia, an unprecedented strategy for containing a G20 economy
- Key Russian banks have been excluded from SWIFT, disconnecting them from sources of foreign capital and preventing them from sending or receiving money from other financial institutions around the world. This is often considered the “nuclear option” relative to the menu of economic sanctions
- Entire industries have instituted export controls, banning the shipment of key technology input goods such as semiconductors, aircraft, aircraft parts, and oil equipment to Russia

Source: Verus, as of 4/13/22

Fixed income rates & credit

Fixed income environment

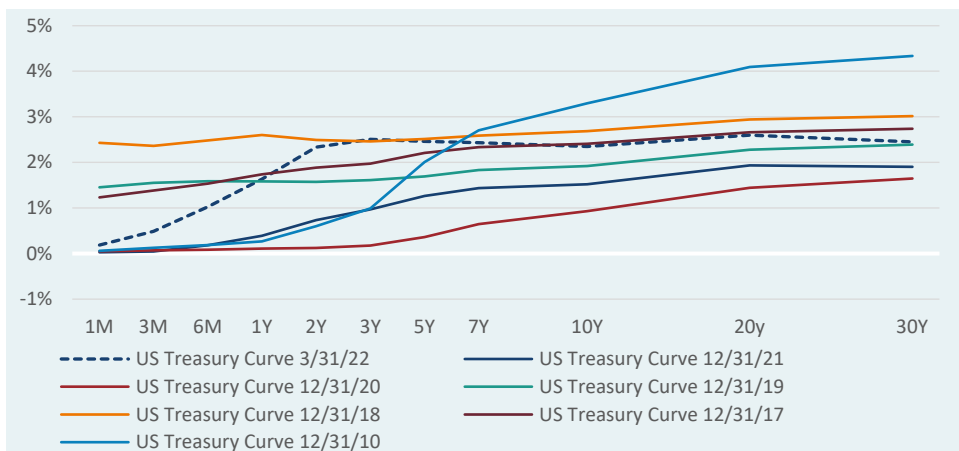
- The 10-year U.S. Treasury yield jumped during Q1, from 1.51% to 2.34%, as the Federal Reserve signaled that more aggressive tightening is ahead.
- Fixed income broadly delivered losses during the first quarter, as interest rates headed higher and credit spreads expanded. Higher duration exposures (Bloomberg U.S. Aggregate -5.9%) underperformed lower duration exposures (Bloomberg U.S. Corporate High Yield -4.8%). This theme was also visible over the past year.
- The U.S. yield curve has flattened, or even inverted, depending on the measure. The 10-year minus 2-year yield spread ended the quarter at exactly +0.00%. Yield curve inversion is generally believed to be a sign of nearing recession, as in most cases recession occurs within 1 to 2 years following the initial inversion.
- History suggests that interest rate rises have been more of an effect of Federal Reserve action rather than solely due to spiking inflation. This likely means that the Fed's plans for moderate tightening will translate to only moderate rate rises. This statement is of course not intended to minimize the pain of interest rate rises on bond portfolios, which has been notable.
- Credit spreads expanded during the quarter, with U.S. high yield spreads moving from 2.8% to 3.3% and U.S. investment grade spreads heading from 0.9% to 1.2%. Spread movement often occurs alongside broader market risk-off environments, which implies that investors should not necessarily assume that these moves were specific to the credit outlook.
- Write-downs of Russian (-100%) and Ukrainian (-51.4%) bonds weighed heavily on hard-currency emerging market debt (JPM EMBI Global Diversified -10.0%).

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	(5.9%)	(4.2%)
Core Plus Fixed Income (Bloomberg U.S. Universal)	(6.1%)	(4.2%)
U.S. Treasuries (Bloomberg U.S. Treasury)	(5.6%)	(3.7%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	(4.8%)	(0.7%)
Bank Loans (S&P/LSTA Leveraged Loan)	(0.1%)	3.3%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(6.5%)	(8.5%)
Emerging Market Debt Hard (JPM EMBI Global Diversified)	(10.0%)	(7.4%)
Mortgage-Backed Securities (Bloomberg MBS)	(5.0%)	(4.9%)

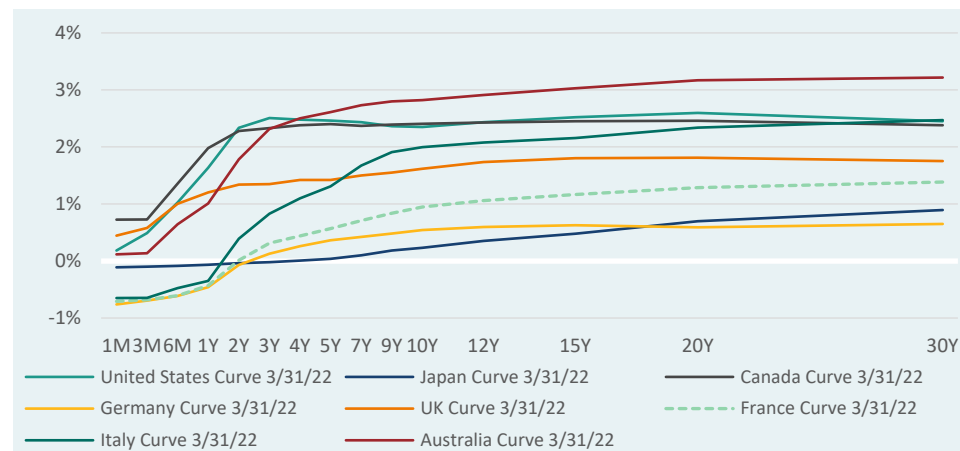
Source: Bloomberg, as of 3/31/22

Yield environment

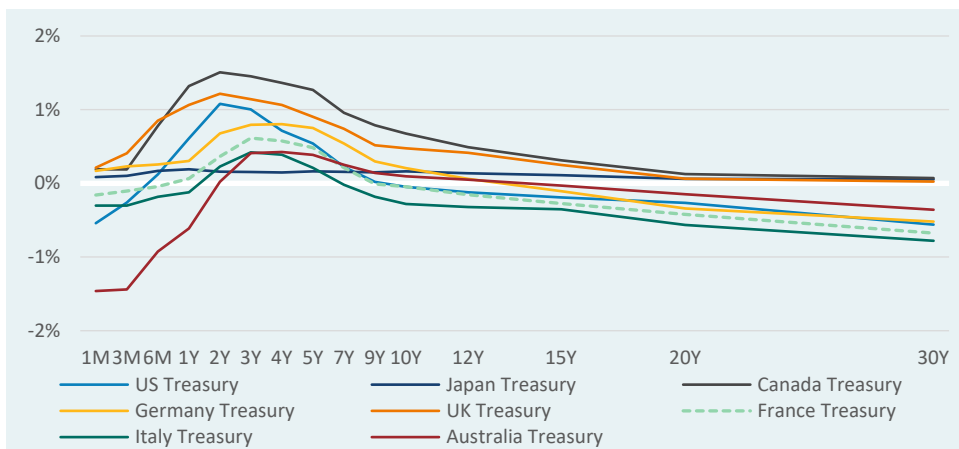
U.S. YIELD CURVE



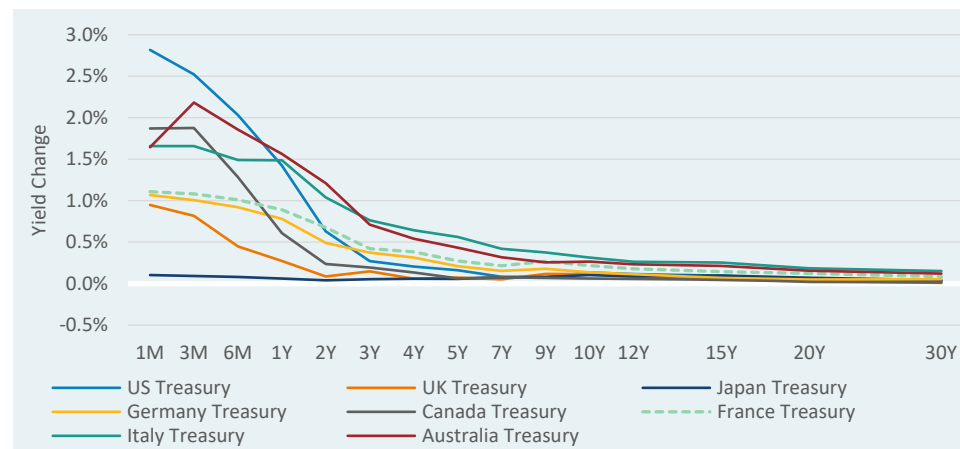
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR

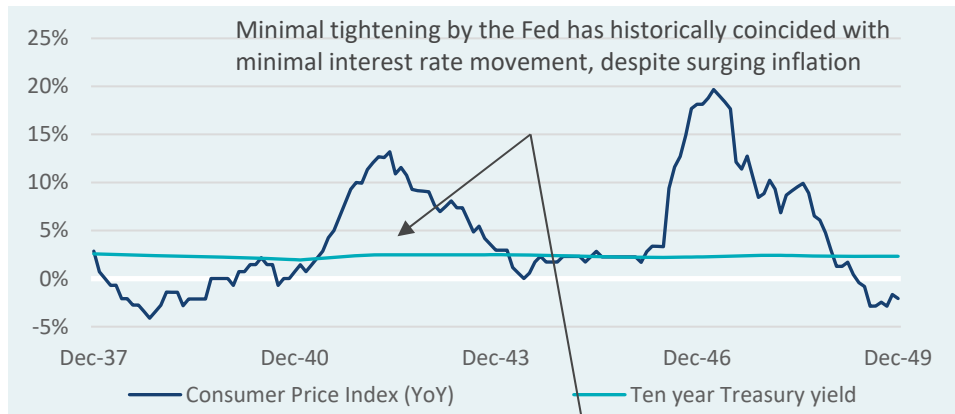


Source: Bloomberg, as of 3/31/22

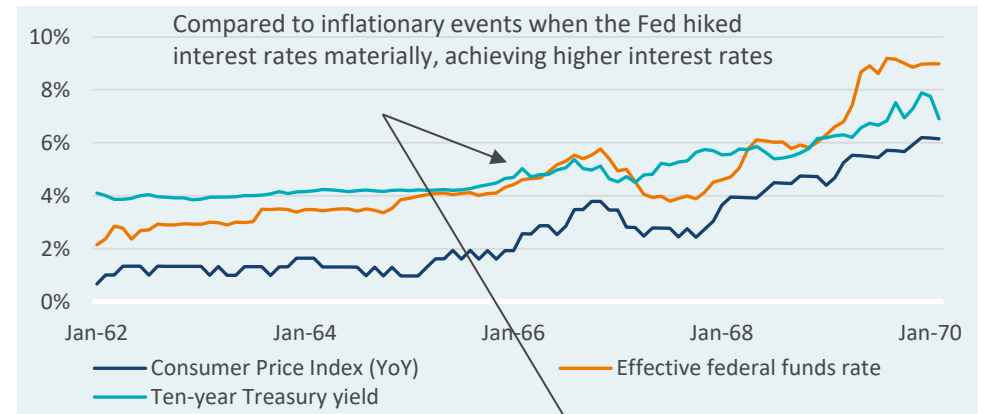
What history tells us about *rising rates*

During historical periods where inflation was rising but the Fed was not hiking rates, interest rate moves were minimal. This may mean that the Federal Reserve's currently moderate interest rate policy suggests only moderate interest rate rises from here.

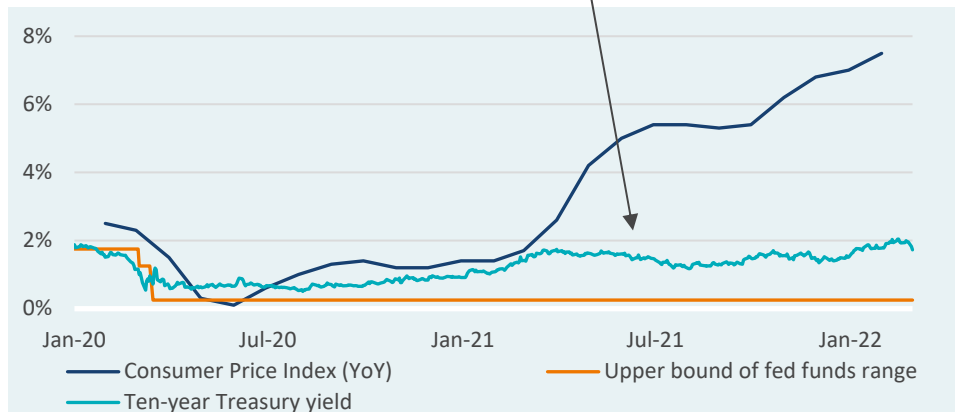
WORLD WAR II



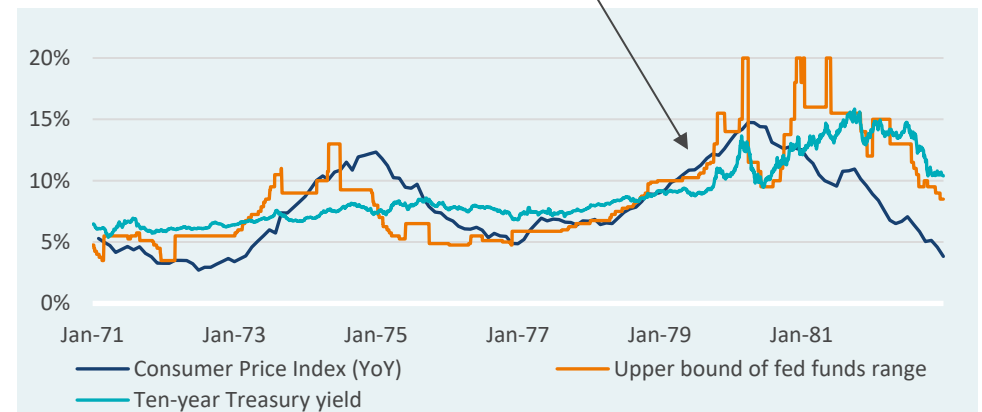
LATE 1960S



COVID-19



1970S OIL SHOCKS



Source: BLS, Federal Reserve, Bloomberg, as of 3/1/22

NOTE: These conclusions were reached via a broader historical inflation and interest rate analysis. For further information about these findings, please reach out to your Verus consultant.

Credit environment

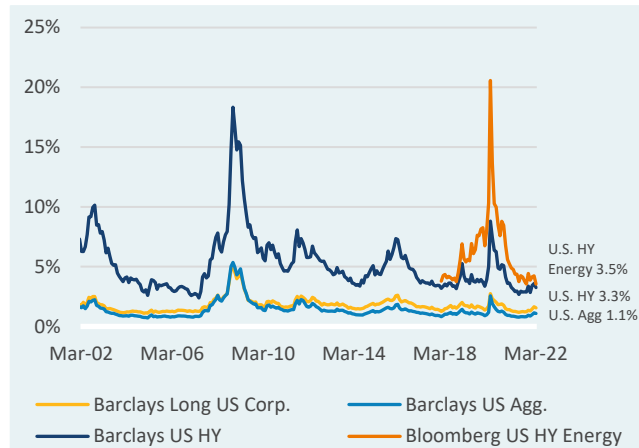
Fixed income broadly delivered losses during the first quarter, as interest rates headed higher and credit spreads expanded. Higher duration exposures such as core fixed income (Bloomberg U.S. Aggregate -5.9%) underperformed lower duration exposures such as U.S. high yield (Bloomberg U.S. Corporate High Yield -4.8%). This effect was also visible over the past year.

Credit spreads expanded moderately during the quarter, with U.S. high yield spreads moving from 2.8% to 3.3% and U.S. investment grade spreads heading upward from 0.9% to 1.2%. Spread movement of this nature often occurs alongside broader market risk-off environments,

which implies investors should not necessarily assume that these moves are specific to a worsening credit outlook.

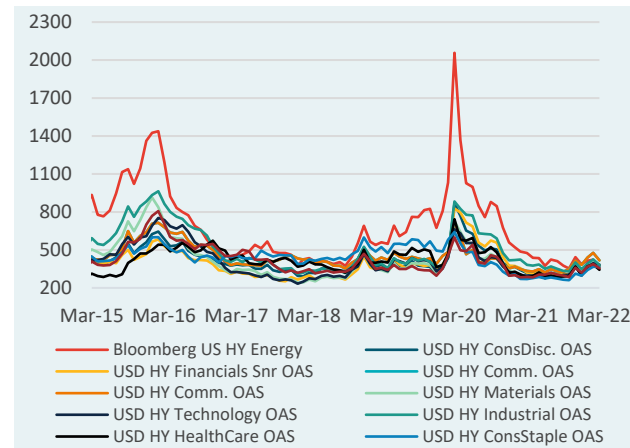
The low yield environment has pushed many investors to search for greater yield, such as through the pursuit of increased private markets exposure and/or taking on riskier holdings. The mild move higher in the yield curve likely helps ease this market environment issue, although high inflation has created new problems for investors. Looking further into the future, following the Fed's planned hiking cycle, markets are expecting interest rates to fall back down, presumably as economic conditions worsen and the Fed begins easing.

SPREADS



Source: Barclays, Bloomberg, as of 3/31/22

HIGH YIELD SECTOR SPREADS (BPS)



Source: Bloomberg, as of 3/31/22

Market	Credit Spread (OAS)	
	3/31/22	3/31/21
Long U.S. Corp	1.6%	1.3%
U.S. Inv Grade Corp	1.2%	0.9%
U.S. High Yield	3.3%	3.1%
U.S. Bank Loans*	4.3%	4.3%

Source: Barclays, Credit Suisse, Bloomberg, as of 3/31/22

*Discount margin (4-year life)

Default & issuance

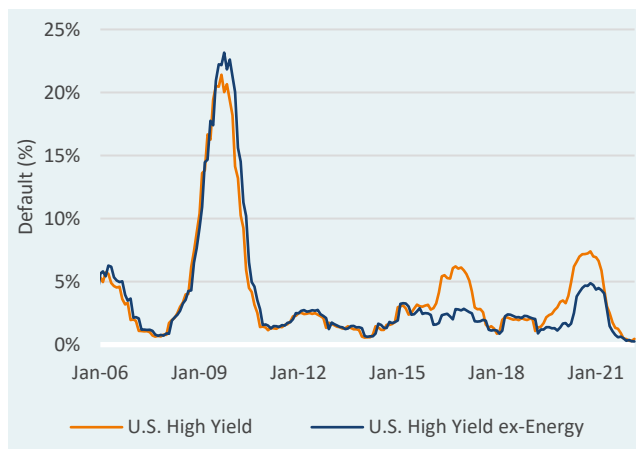
Despite a general increase in volatility and a sell-off across high-yield and leveraged loan markets, default activity remained negligible. Over the first quarter only \$1.6 billion in defaults occurred, marking the third-lowest quarterly total since Q4 2013. Realized recovery rates for high yield bonds over the past 12 months have lingered around 48%, significantly elevated above the 25-year average (39.9%). Loan recovery rates have come in slightly lower than the historical average (58.6% vs. 64.4%).

High-yield and loan default rates ended the quarter at 0.50% and 0.86%, respectively, and are expected to rise slightly through the rest of the year. J.P. Morgan forecasts default rates of 0.75% for high yield bonds and loans in 2022, with those rates picking up to 1.25% in 2023. For context, the long-

term average historical default rates for bonds and loans have been around 3.6% and 3.1%, respectively.

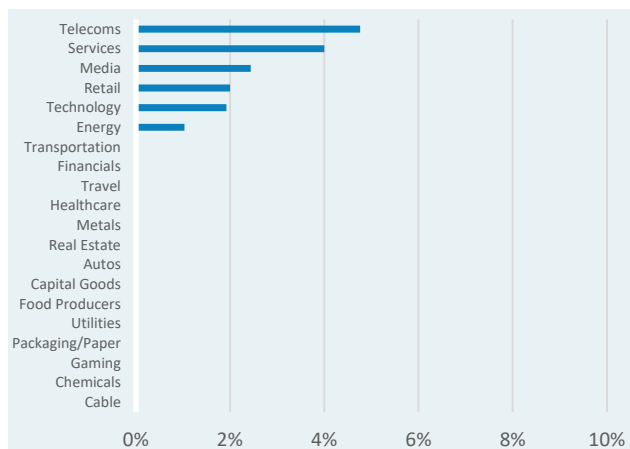
High yield issuance hit its lowest level since March 2020 in February, and then fell further in March, as issuers contended with a sharp increase in global bond yields. High-yield issuance totaled just \$46.5 billion so far this year, down from \$158.8 billion (-71%) over the same period a year ago. Year-to-date loan issuance is also down approximately 60% relative to Q1 2021. Extensive capital raises that occurred in 2021, as well as broadly higher interest rates, have likely contributed to very low financing activity so far this year.

HY DEFAULT RATE (ROLLING 1-YEAR)



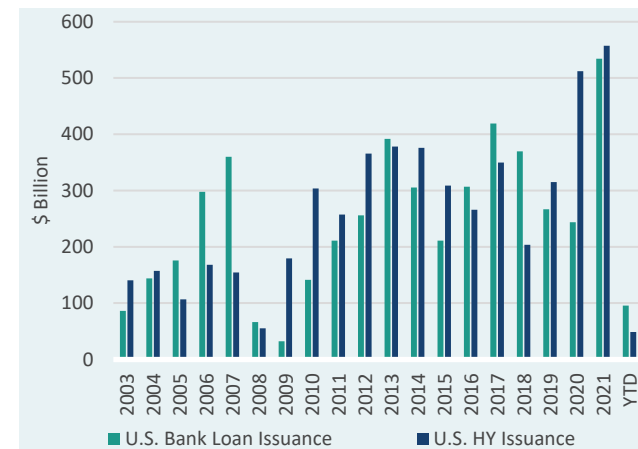
Source: BofA Merrill Lynch, as of 3/31/22

U.S. HY SECTOR DEFAULTS (LAST 12 MONTHS)



Source: BofA Merrill Lynch, as of 3/31/22 – par weighted

U.S. ISSUANCE (\$ BILLIONS)



Source: BofA Merrill Lynch, as of 3/31/22

Alternative credit

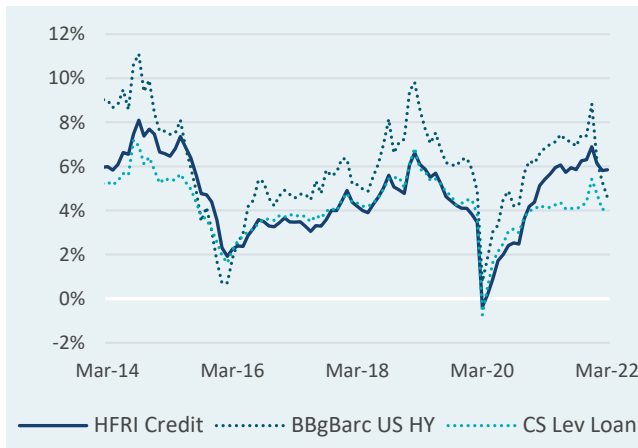
Credit hedge fund strategies were a bright spot in Q1 relative to fixed income markets. The HFRI Credit Index, which typically tracks between high yield and leveraged loan indices, gained 0.2% during the quarter despite widening credit spreads and rising rates which detracted from the performance of traditional credit.

Looking more closely at hedge fund credit, distressed/restructuring strategies, as well as asset-backed, were strong performers during the quarter

and have outperformed credit markets over the past year.

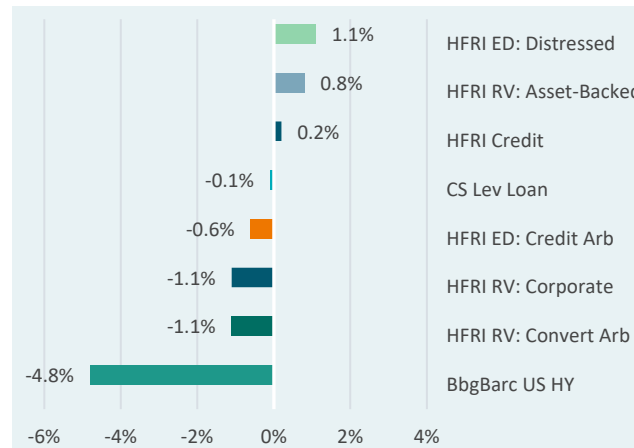
Distressed investors have benefitted from out-of-favor, deep value assets rebounding over the prior 18 months. Asset-backed strategies have been able to limit duration exposure while finding new ways to maintain access to higher yielding securitized instruments, such as by expanding into origination/securitization or moving further out on the liquidity spectrum.

3 YEAR ROLLING RETURN



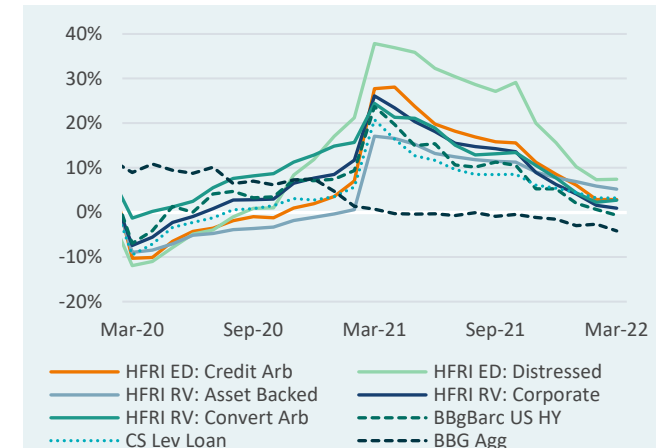
Source: HFRI, as of 3/31/22

1Q 2022 QUARTERLY RETURN



Source: HFRI, as of 3/31/22

1 YEAR ROLLING RETURN



Source: HFRI, as of 3/31/22

Equity

Equity environment

- U.S. equities held up marginally better during the first quarter (S&P 500 -4.6%), followed by international developed equities (MSCI EAFE -5.9%) and emerging market equities (MSCI Emerging Markets -7.0%), on an unhedged currency basis.
- Currency movement during the quarter detracted from the performance of investors who do not hedge foreign currency exposure. Currency movements in international developed markets generated losses of -2.4% (MSCI EAFE).
- Value stocks outperformed Growth stocks by a substantial margin during Q1 (Russell 1000 Value -0.7% vs Russell 1000 Growth -9.0%) as Growth stocks fell sharply, reversing the gains delivered in the second half of 2021. Large capitalization stocks beat small capitalization stocks by a narrower margin (Russell 1000 -5.1%, Russell 2000 -7.5%).
- The Cboe VIX Index spiked mid-quarter during Russia's invasion of Ukraine, as fears of potential broader global conflict, food shortages, and higher inflation roiled markets. The index fell to 20 to end the quarter, moderately above the longer-term average. Realized volatility over the past year was more muted as the pandemic has moved into the rearview mirror.
- Emerging market equities appear attractively priced, as EM equities are in the 8th percentile of cheapness relative to U.S. equities, looking back to 2003. Much of this valuation difference is due to Chinese markets, which have sold off massively over concerns around possible sanctions due to relations with Russia, regulatory crackdowns on the real estate and internet sectors, and major city lockdowns due to COVID-19.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	(4.6%)		15.6%	
U.S. Small Cap (Russell 2000)	(7.5%)		(5.8%)	
U.S. Equity (Russell 3000)	(5.3%)		11.9%	
U.S. Large Value (Russell 1000 Value)	(0.7%)		11.7%	
US Large Growth (Russell 1000 Growth)	(9.0%)		15.0%	
Global Equity (MSCI ACWI)	(5.4%)	(4.8%)	7.3%	8.8%
International Large (MSCI EAFE)	(5.9%)	(3.5%)	1.2%	7.1%
Eurozone (Euro Stoxx 50)	(10.9%)	(8.7%)	(3.9%)	2.7%
U.K. (FTSE 100)	0.0%	2.8%	10.7%	16.4%
Japan (NIKKEI 225)	(7.8%)	(2.6%)	(11.9%)	(2.9%)
Emerging Markets (MSCI Emerging Markets)	(7.0%)	(7.0%)	(11.4%)	(11.5%)

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 3/31/22

Domestic equity

U.S. equities fell during the first quarter (S&P 500 -4.6%), though less so than other global markets (MSCI ACWI ex-USA -5.4%). Within the U.S. market, sector dispersion was very wide, with large-cap energy companies advancing 39.0% on spiking energy prices, and large-cap technology stocks (-8.4%) and consumer discretionary (-9.0%) selling off on concerns that higher inflation (influenced by spiking energy prices) might result in a much more hawkish outlook for Fed policy and interest rates. Energy sector earnings are expected to bolster overall index level earnings on a year-on-year basis in Q1, primarily due to the average price of oil rising from \$58.14 to \$95.01. If the energy sector were excluded, Q1 year-over-year earnings growth would be expected at -0.6%, instead of +5.1%.

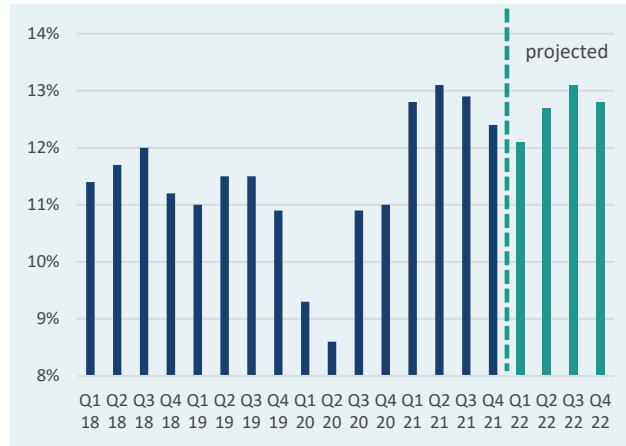
Companies continue to contend with headwinds from supply chain disruptions, surging commodity prices which were given a leg higher by the conflict in Ukraine, ongoing labor shortages and higher prices in general. In Q4 of 2021, 365 S&P 500 companies mentioned “inflation” on earnings calls, which was the highest number in at least 10 years, per FactSet. Under this backdrop, companies are raising their prices to help offset higher costs, and the S&P 500 Index is expected to report a fifth consecutive quarter of revenue growth north of 10% in Q1. Interestingly, analysts expect net profit margins will be higher through the rest of the year than they are expected to be in Q1 (+12.1%).

S&P 500 PRICE INDEX



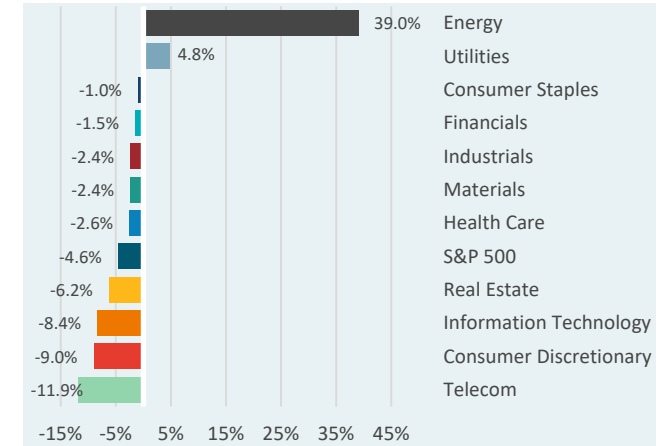
Source: Standard & Poor's, as of 3/31/22

NET PROFIT MARGIN – S&P 500 INDEX



Source: FactSet, as of 4/14/22

Q1 SECTOR PERFORMANCE



Source: Standard & Poor's, as of 3/31/22

Domestic equity size & style

Value stocks outperformed Growth stocks by a substantial margin during the first quarter (Russell 1000 Value -0.7% vs Russell 1000 Growth -9.0%) as Growth stocks fell sharply, reversing the gains delivered in the second half of 2021. Large capitalization stocks outperformed small capitalization stocks by a narrower margin (Russell 1000 -5.1%, Russell 2000 -7.5%).

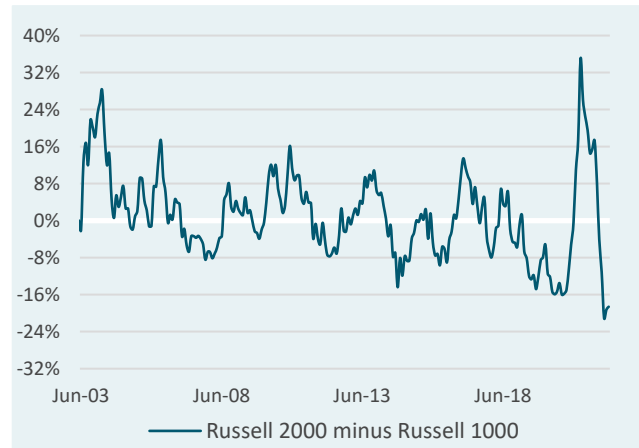
Energy stocks dramatically outperformed during Q1, as global demand has outpaced energy production for quite some time, pushing prices higher. Additionally, Russia's invasion of Ukraine led to widespread fears of an energy supply crunch, which temporarily sent oil to \$123/bbl—the highest level since 2008. Attractive conditions for energy producers coincided with outperformance of

Utilities, Financials, Industrials, and Materials sectors, which tend to have a Value tilt. During Q1, the Information Technology sector, which is tilted towards Growth, underperformed the index.

Further tightening of Fed policy and interest rate hikes will likely impact Value and Growth stock behavior, though these relationships are complex. For example, rate rises that result in a flattening of the yield curve may not be as boosting to financial sector performance, since banks profit from interest curve steepening (banks lend at the long end of the curve and borrow at the short end). The nature of the environment in which interest rates rise will contribute to future style factor behavior.

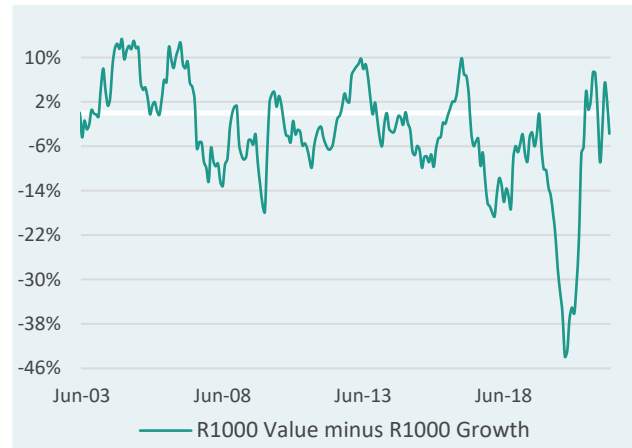
Value strongly outperformed during Q1

SMALL CAP VS LARGE CAP (YOY)



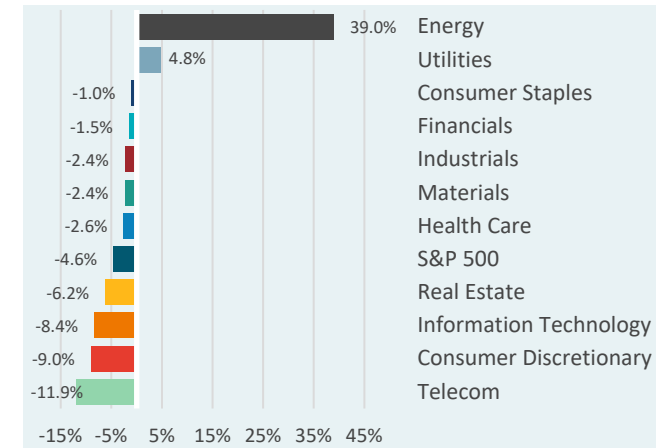
Source: FTSE, as of 3/31/22

VALUE VS GROWTH (YOY)



Source: FTSE, as of 3/31/22

Q1 SECTOR PERFORMANCE



Source: Standard & Poor's, as of 3/31/22

International developed equity

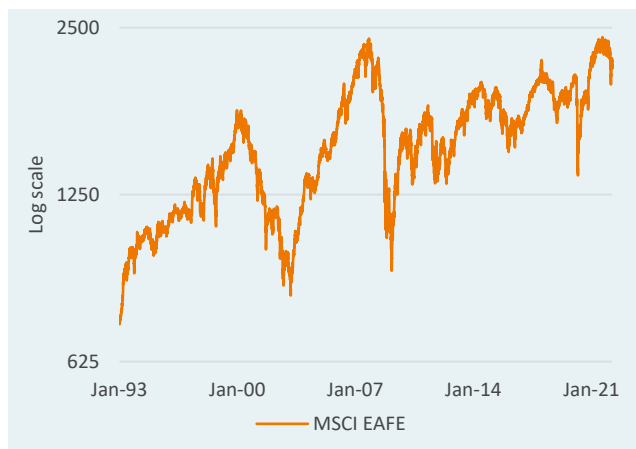
International developed equities fell -5.9% during the quarter, while U.S. equities performed slightly better (S&P 500 -4.6%) and emerging market equities trailed (MSCI Emerging Markets -7.0%), on an unhedged currency basis. Currency movement during the quarter detracted from the performance of investors who do not hedge foreign currency exposure. Currency movements in international developed markets generated losses of -2.4% (MSCI EAFE).

Eurozone and Japanese equities were among the worst performers during the quarter (Euro Stoxx 50 -10.9%, Nikkei 225 -7.8%), though much of these losses were driven by currency market movement. U.K. equities were among the top

performers at 1.8% (MSCI UK). Investors with a currency hedging program would have outperformed unhedged investors by roughly +2.2% in Eurozone equities, +5.2% in Japanese equities, and +2.8% in U.K. equities.

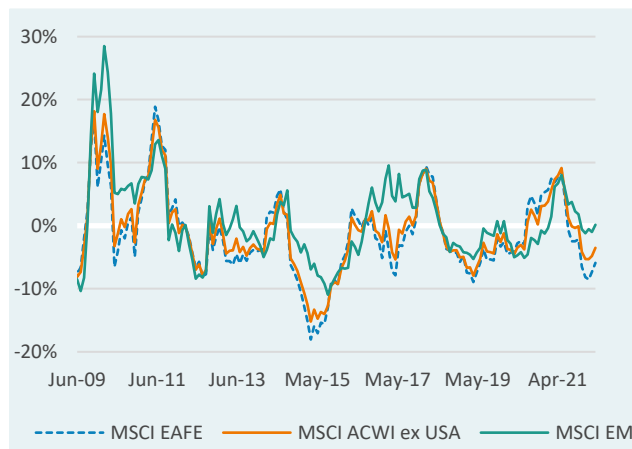
German equities (MSCI Germany -13.1%) detracted significantly from international developed equity returns, as investors expressed concern over the country's large exposure to Russian energy imports. Producer prices in Germany rose 25.9% year-over-year in February, partly due to surging gas prices. It is not yet known the degree to which businesses will be able to pass through higher prices to customers. Inflation in Germany rose to 7.3%—the highest level in decades.

INTERNATIONAL DEVELOPED EQUITY



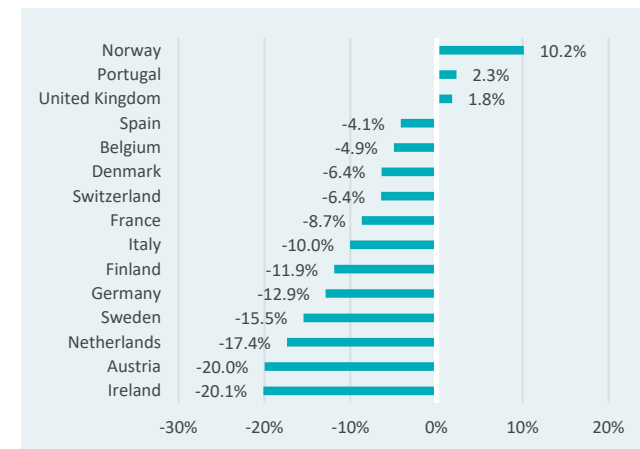
Source: MSCI, as of 3/31/22

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MSCI, as of 3/31/22

EUROPEAN EQUITY PERFORMANCE – Q1 2022



Source: MSCI, Bloomberg, as of 3/31/22. Returns in USD terms.

Emerging market equity

Emerging market equities delivered losses (MSCI EM -7.0%) on an unhedged currency basis, lagging developed markets during the quarter. Latin American markets substantially outperformed Asian markets (MSCI EM Latin America +27.3%, MSCI EM Asia -8.7%).

Chinese equities have seen large losses over the last year. The Nasdaq Golden Dragon China Index recently drew down further than its maximum loss during the Global Financial Crisis. Concerns over imposed sanctions due to relations with Russia, regulatory crackdowns on the real estate and internet sectors, and rising COVID-19 cases resulting in major city lockdowns

have provided the backdrop to the massive sell-off in Chinese equities. More supportive government policies appear to be coming down the pike, which may contribute to a turnaround.

Emerging market equities are attractively priced relative to developed markets. The valuation divide is now extremely large. On a price-to-earnings basis, emerging market equities are in the 8th percentile cheap relative to U.S. equities going back to 2003, meaning they have been cheaper just 7% of the time since 2003. Emerging market equities have also recently fallen back to more average valuations relative to international developed markets.

EMERGING MARKET EQUITY



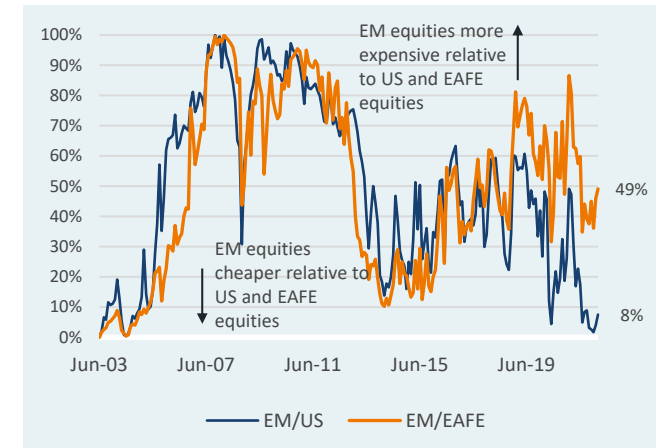
Source: MSCI, as of 12/31/21

CHINESE EQUITY DRAWDOWNS



Source: MSCI, Nasdaq, as of 3/22/22

VALUATION PERCENTILES



Source: MSCI, forward 12m price multiples, as of 2/28/22

Equity valuations

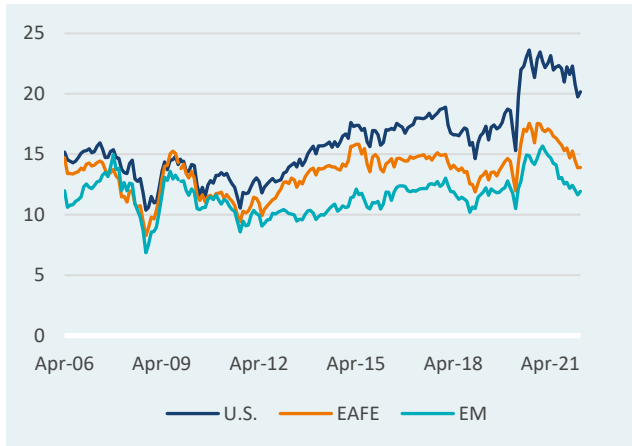
Valuations drifted lower over the first quarter as earnings expectations remained relatively steady and prices moderated. The forward 12-month P/E ratio for the S&P 500 closed the quarter at 19.0—slightly above the five-year average. Forward multiples have fallen back to pre-pandemic levels for most international developed and emerging equity markets.

In the domestic market, analysts appear optimistic about the outlook. If earnings over the next 12 months meet expectations and valuations hold at current levels, the S&P 500 Price Index is forecast to rise 18.5% to around an index level of 5250.

U.S. equity forward P/E valuations remain at historically stretched levels relative to international developed and emerging market equities. U.S. forward price multiples closed the quarter in the 99th percentile relative to EAFE, and in the 92nd percentile relative to EM, using monthly data going back to 2003. The strength of U.S. institutions, the resilience of the U.S. consumer, the United States' energy independence, as well its distance from ongoing conflict in Ukraine may help to tilt international investor flows toward U.S. equities, likely supporting a healthy U.S. equity valuation premium.

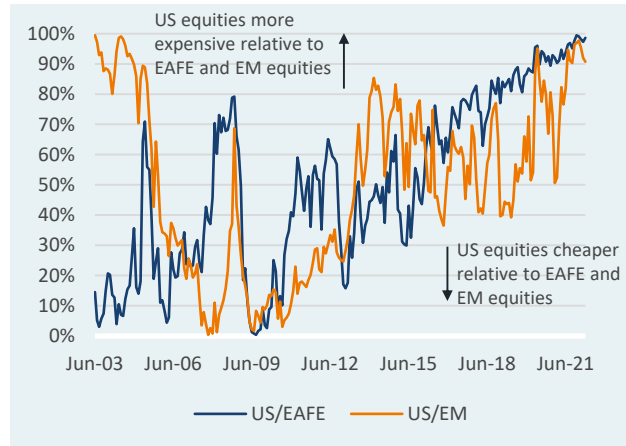
Most equity valuations have moved back towards normal levels, though U.S. prices remain rich

FORWARD P/E RATIOS



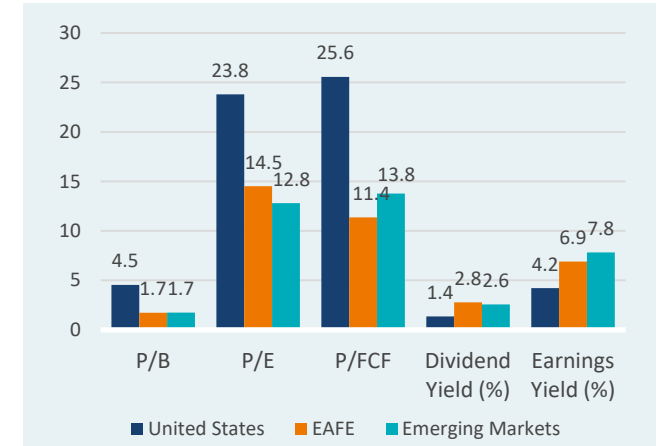
Source: MSCI, 12m forward P/E, as of 3/31/22

RELATIVE FORWARD PRICE MULTIPLES – VALUATION PERCENTILE ANALYSIS



Source: Bloomberg, MSCI, as of 3/31/22

VALUATION METRICS (3-MONTH AVERAGE)



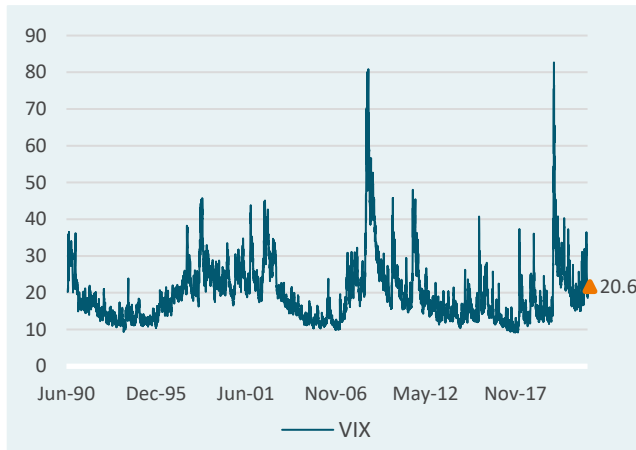
Source: Bloomberg, MSCI as of 3/31/22 - trailing P/E

Equity volatility

The Cboe VIX Index spiked mid-quarter during Russia’s invasion of Ukraine, as fears of potential global conflict, food shortages, and higher inflation roiled markets. The index fell to 20 to end the quarter—moderately above the longer-term average. Realized volatility over the past year was muted as the pandemic and its associated pain has moved into the rearview mirror. U.S. markets were the most volatile among developed and emerging markets, which has been rare historically. Implied volatility for close-to-the-money put and call options on U.S. large-cap stocks appears to be reflecting fairly-neutral risk positioning. In short, the price of downside protection relative to upside participation is around average.

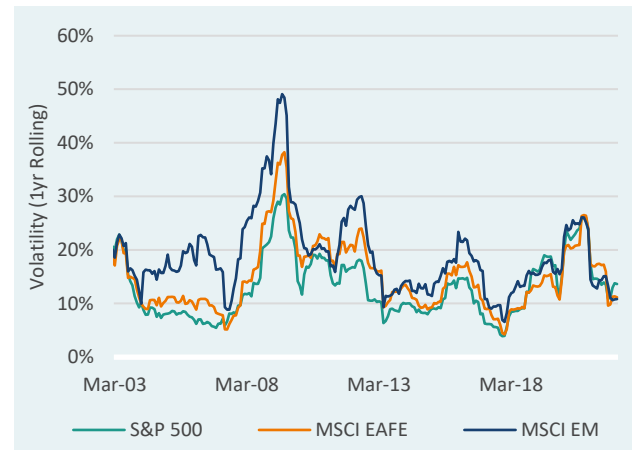
While realized volatility in emerging market equities was fairly low relative to history in Q1, weakness in tech shares and concerns over potential sanctions resulted in material selloffs in highly-tech-weighted regional markets. In U.S. dollar terms, the MSCI China Index closed the quarter -44% below previous records, and Russian stocks were marked down -100%. Moving forward, the exclusion of Russian equities from MSCI’s Emerging Market benchmark will result in an even higher weighting for the Asian segment of the EM complex, which tends to be more growth-tilted and more volatile.

U.S. IMPLIED VOLATILITY (VIX)



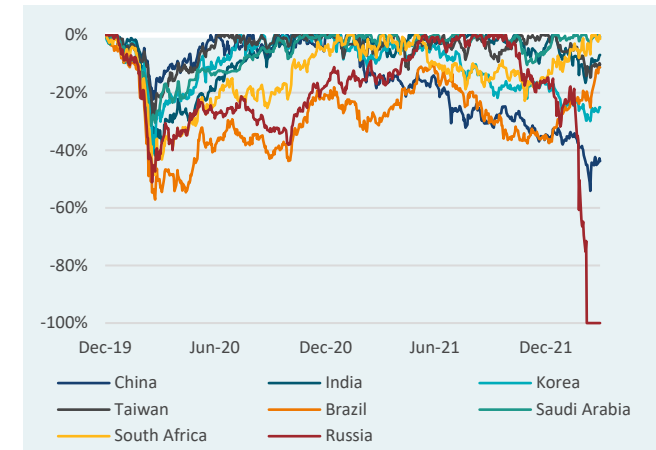
Source: Cboe, as of 3/31/22

REALIZED VOLATILITY



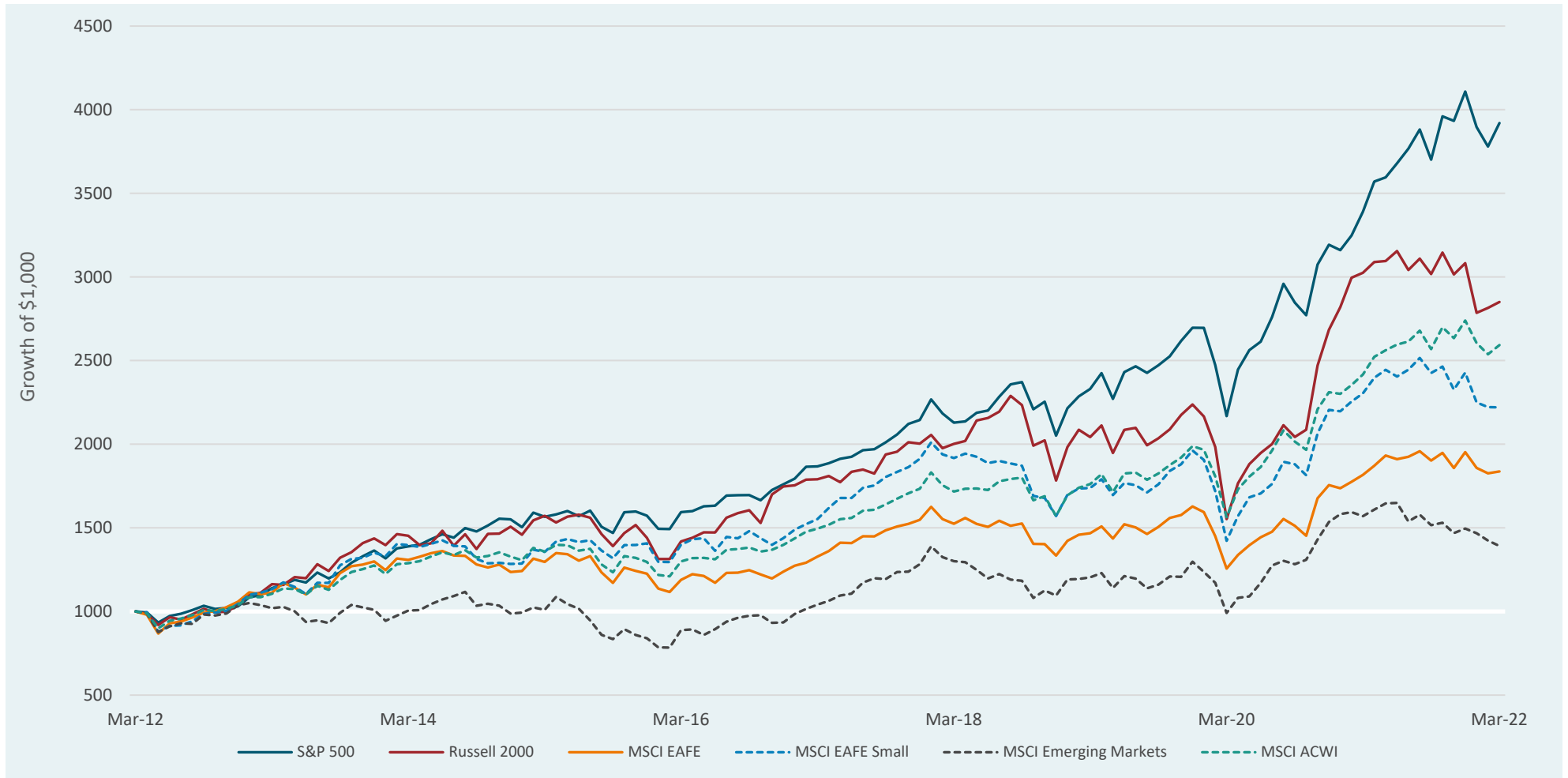
Source: Standard & Poor’s, MSCI, as of 3/31/22

EM EQUITY – MAX DRAWDOWNS FROM PEAKS



Source: MSCI, Bloomberg, as of 3/31/22, returns in USD

Long-term equity performance



Source: Morningstar, as of 3/31/22

Other assets

Commodities

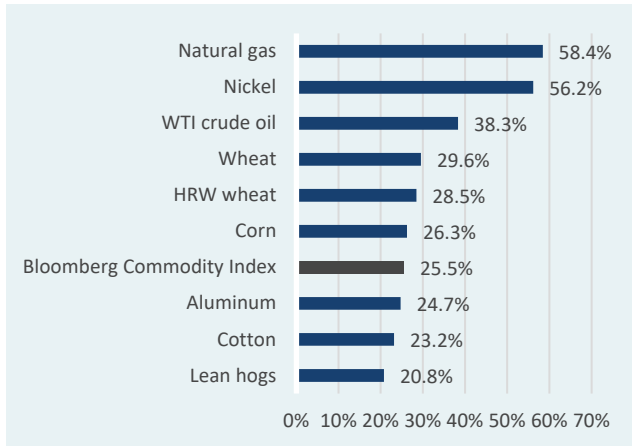
Commodities were by far the best-performing major asset class in Q1 2022 (Bloomberg Commodity Index +25.5%), with every major sector contributing positively to overall index returns. The Energy (+47.9%) and Grains (+24.9%) sectors drove the advance, as investors speculated on what war in the Ukraine and the economic ostracization of Russia might mean for energy access and wheat and corn production.

Industrial metals (+22.7%) also rallied substantially, influenced by clean energy transition efforts that have ramped up in recent months. A short squeeze in nickel (+56.2%) was

additive to performance.

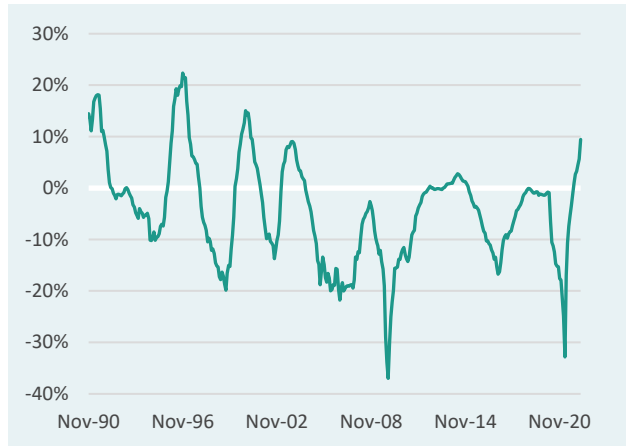
Improving roll yield has been a huge component of the outsized total return offered by commodities, adding +9.4% to performance over the last twelve months. Massive increases in spot prices relative to further-dated contracts pushed many commodity futures curves into relatively steep backwardation over the near-term, allowing investors to roll their contracts for a profit. In order for this roll yield to be sustainable, spot prices will need to stay elevated relative to futures pricing.

BLOOMBERG COMMODITY INDEX – Q1 2022



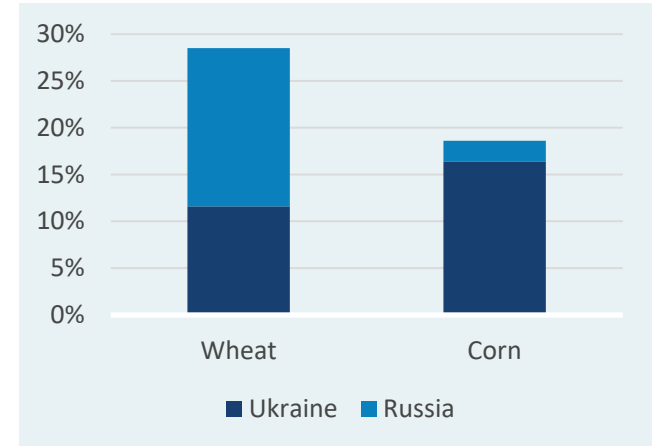
Source: Bloomberg, as of 3/31/22

S&P GSCI INDEX ROLL YIELD (LAST 12 MONTHS)



Source: Standard & Poor's, Bloomberg, as of 3/31/22

SHARE OF GLOBAL GRAIN EXPORTS



Source: Food and Agriculture Organization of the United Nations

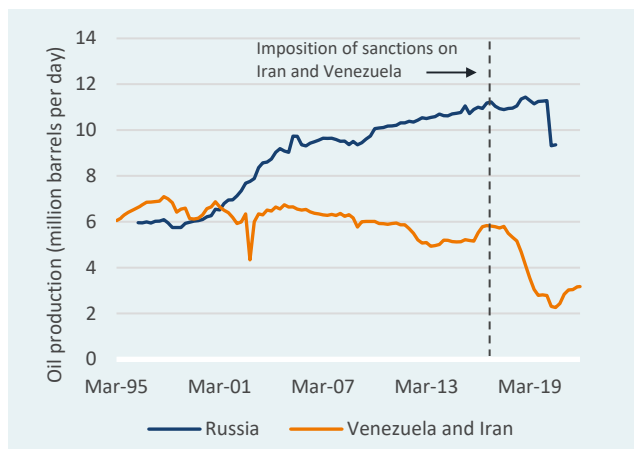
How can the Russian oil gap be filled?

Russia produced approximately 11 million barrels of oil per day prior the onset of Covid-19 and the recent economic sanctions. Since then, many countries have imposed embargoes on Russian oil, and higher prices have incentivized policymakers to reopen discussions with other producers, including Venezuela and Iran.

Prior to the imposition of sanctions on Venezuelan and Iranian oil in January 2019 and June 2019, respectively, the two countries were producing around 5.8 million barrels per day. Today, they are producing around 3.2 million barrels per day. Even if the two countries were able to ramp up production back to pre-sanction levels, which would be an impressive feat both diplomatically and physically, that would only replace roughly a quarter of Russian output.

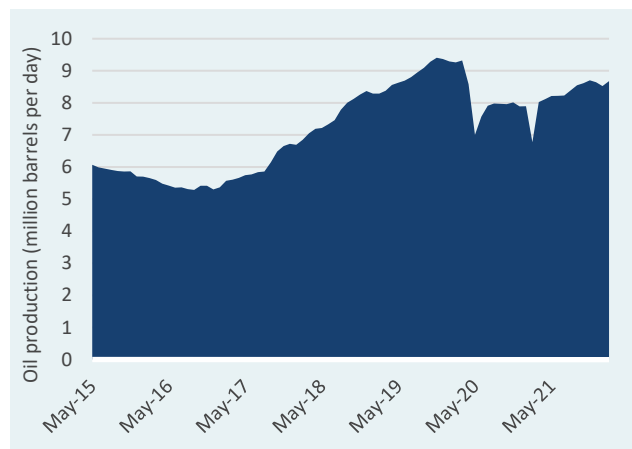
Increased energy production is needed to alleviate high prices, but this conflicts with the West's climate priorities. U.S. government officials have given mixed signals to oil producers. For example, the administration announced in April that it will resume its sale of leases for drilling on federal land, though 80% less land will be leased relative to the footprint that had been originally evaluated. Furthermore, required royalties for energy extraction were raised from 12.5% to 18.75%. In the U.S., many shale firms have opted to increase production on existing land, but have been slow to pursue new projects—partly due to supply chain issues (shortages in labor, truck drivers, and frack sand) and also due to prioritization of profits over growth. This newfound conservatism is reflected by recent comments from Scott Sheffield, CEO of Pioneer Natural Resources Co., who said his company, the largest oil producer in the Permian Basin, is not currently considering raising its long-term goal of increasing oil production by 0-5% per year. As shown on the bottom right, Pioneer's goal this year is to return 80% of cash flow to investors.

WHAT ABOUT VENEZUELA AND IRAN?



Source: Bloomberg News, as of 2/28/22

TOTAL U.S. SHALE PRODUCTION



Source: Rystad Energy, as of 4/30/22

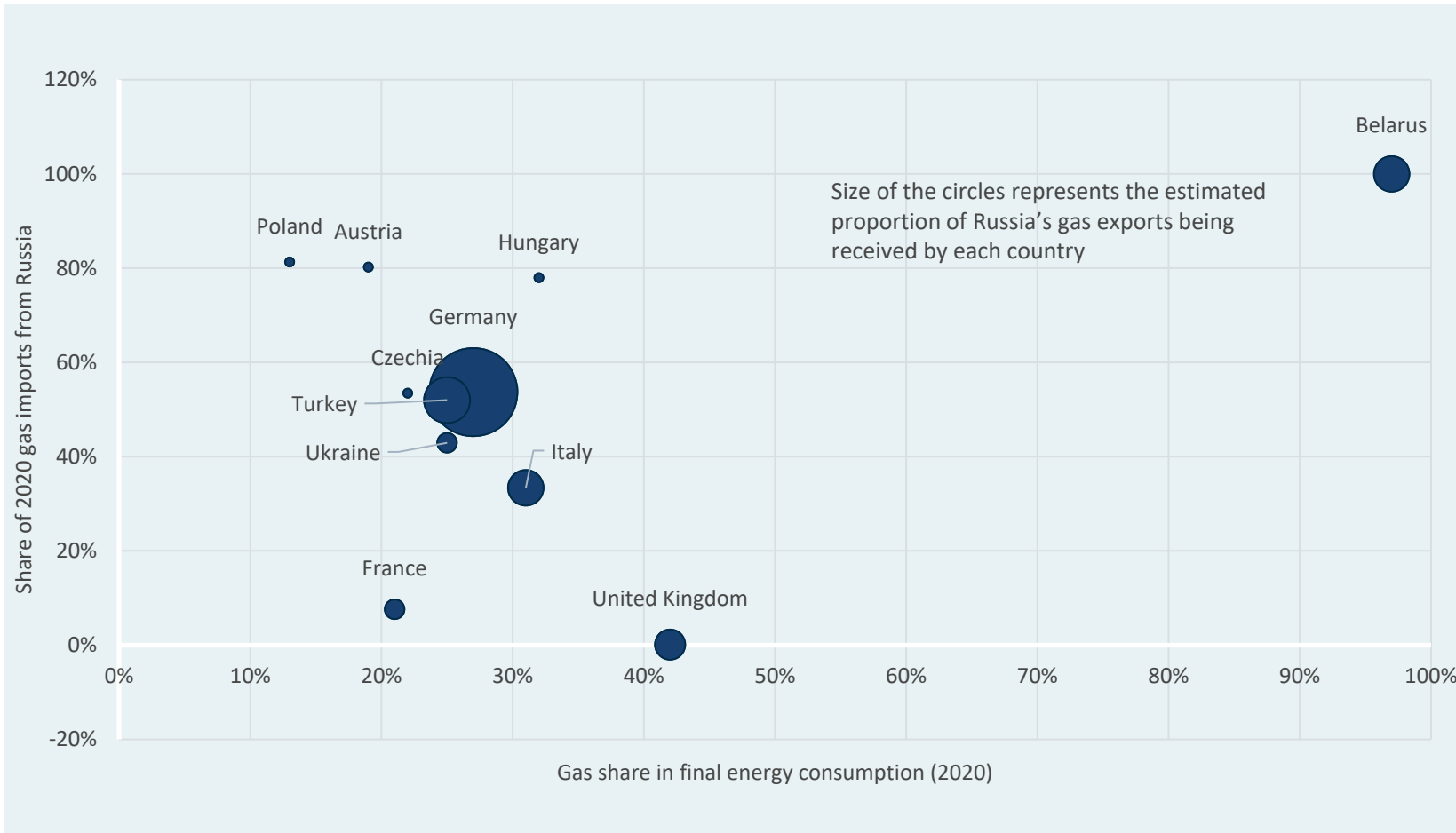
SHALE PRODUCERS' FOCUS ON DIVIDENDS



Source: Pioneer Natural Resources, Q4 2021 Earnings Presentation

Russian energy embargoes

RUSSIAN GAS EXPOSURE VS. GAS DEPENDENCE



Most countries which have banned Russian oil and gas do not rely heavily on Russia for their energy resources

Source: Bruegel, as of 2/28/22

Grain supply outlook

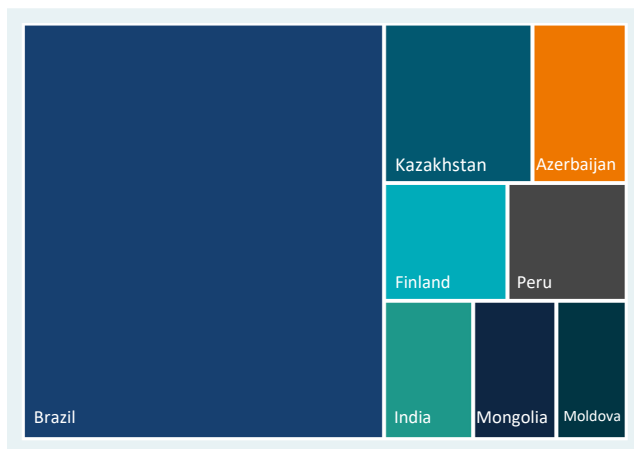
Russia, the world's largest fertilizer exporter, imposed a two-month ban on ammonium nitrate exports, which threatens the availability of fertilizer supplies, especially to South America, as the region enters a critical point in the growing season. Although the United States is not a direct buyer of Russian ammonium nitrate, the export ban is likely to result in higher prices for U.S. farmers.

The outlook for South America's soybean crops has deteriorated as a second year of drought, brought on by La Nina, drags down yield and production forecasts. *Gro*

Intelligence's yield forecast model indicates a production decline which would take soybean stocks to the tightest levels since 2015/2016. The outlook for corn is less dire, as planted acreage is up approximately 5% in Brazil this year, though falling crop yields could offset greater acreage.

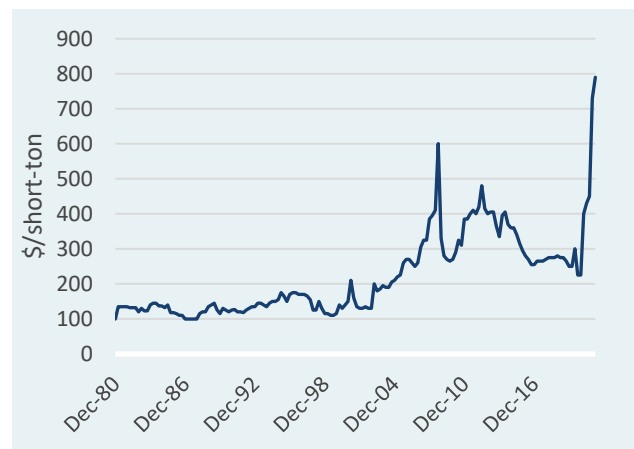
China, the world's largest grain consumer is also facing significant food shortages. Recently, the country's agriculture minister stated that the condition of the winter wheat crop was the "worst in history", and that yields are expected to fall around 20%.

MAJOR DESTINATIONS FOR RUSSIAN AMMONIUM NITRATE EXPORTS (VOLUME)



Source: COMTRADE, *Gro Intelligence*, as of 12/31/20

U.S. CORNBELT AMMONIUM NITRATE PRICES



Source: Bloomberg, as of 3/23/22

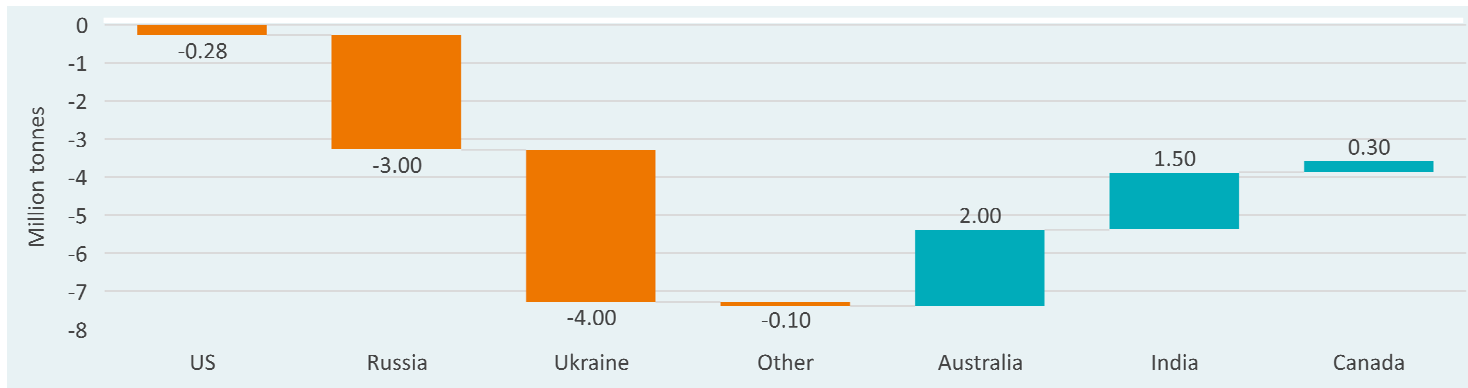
UKRAINE – CROP CALENDAR



Source: USDA, Ukraine Ministry of Agriculture

Where will incremental supply come from?

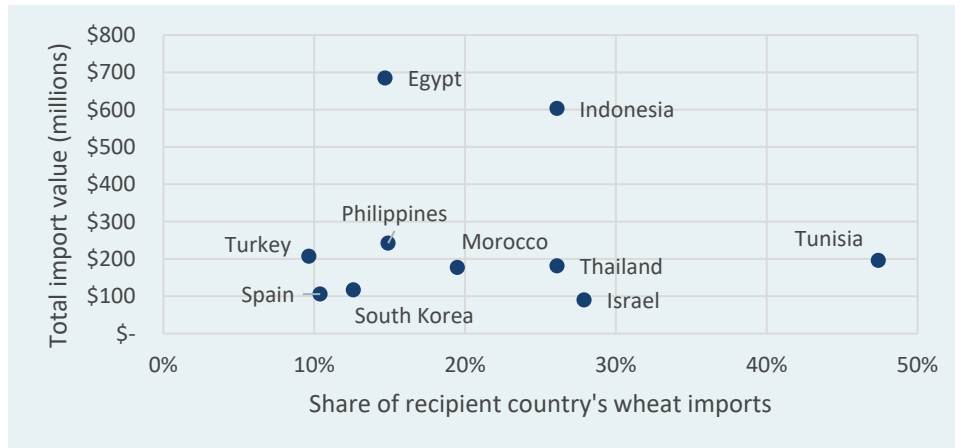
FEBRUARY TO MARCH CHANGE IN 2022 GLOBAL WHEAT EXPORTS



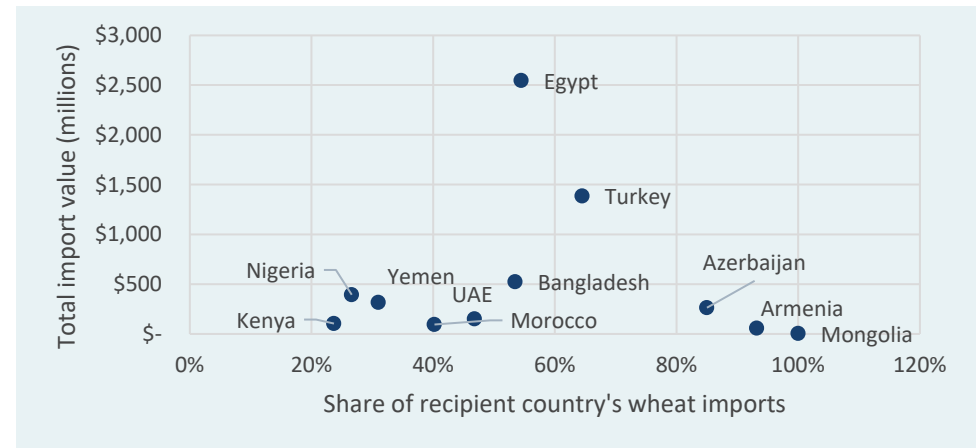
Global production is expected to drop 3.5 million metric tons in 2022, as substitution from farmers in Australia, India, and Canada is not expected to be able to fully offset production declines in the Black Sea region

Source: USDA March 2022 World Agricultural Supply and Demand Estimates. Export change based on revised projections from the USDA World Agricultural Supply and Demand Estimates

UKRAINIAN GLOBAL WHEAT EXPORTS



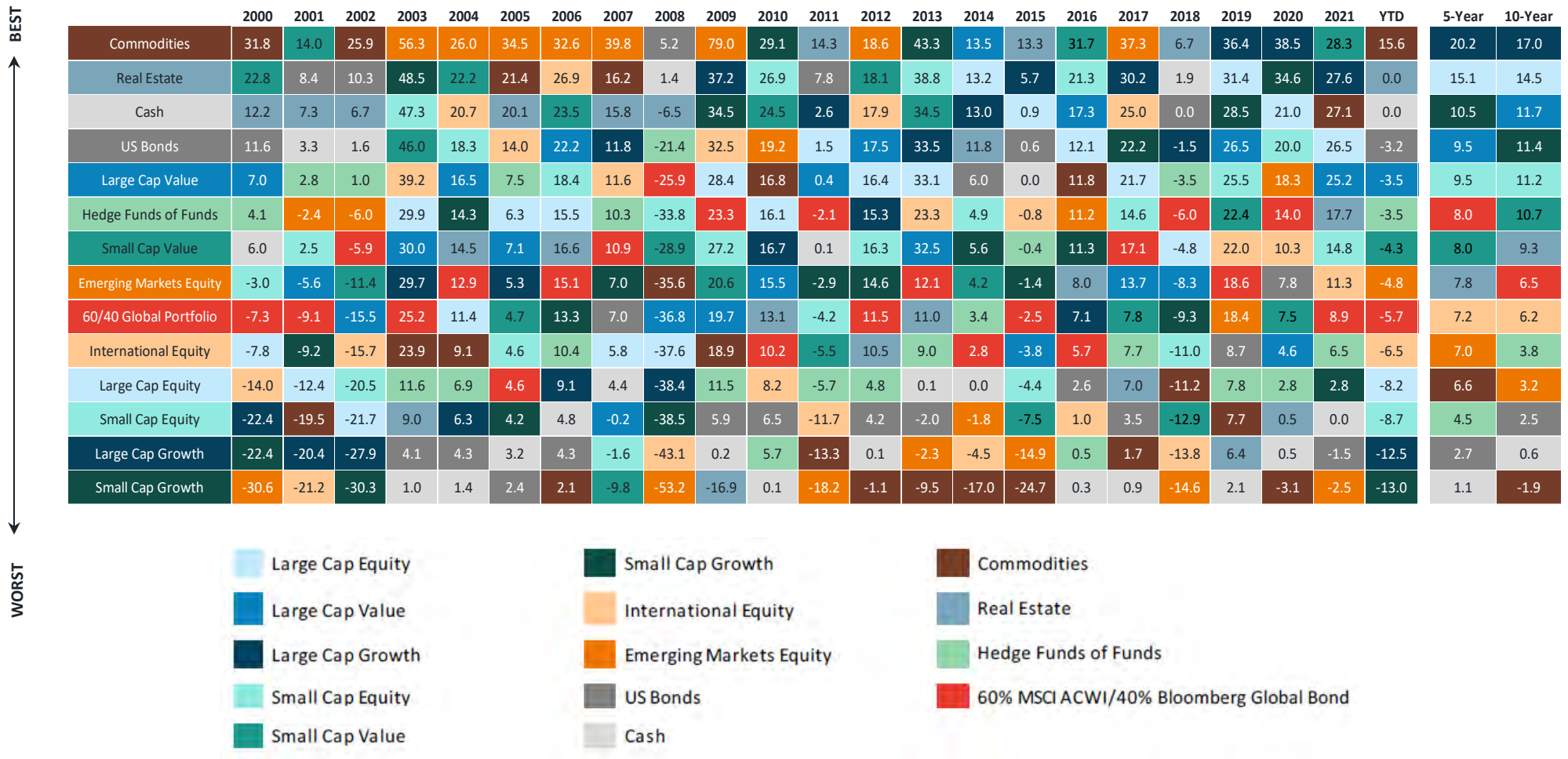
RUSSIAN GLOBAL WHEAT EXPORTS



Source: OEC, BACI

Appendix

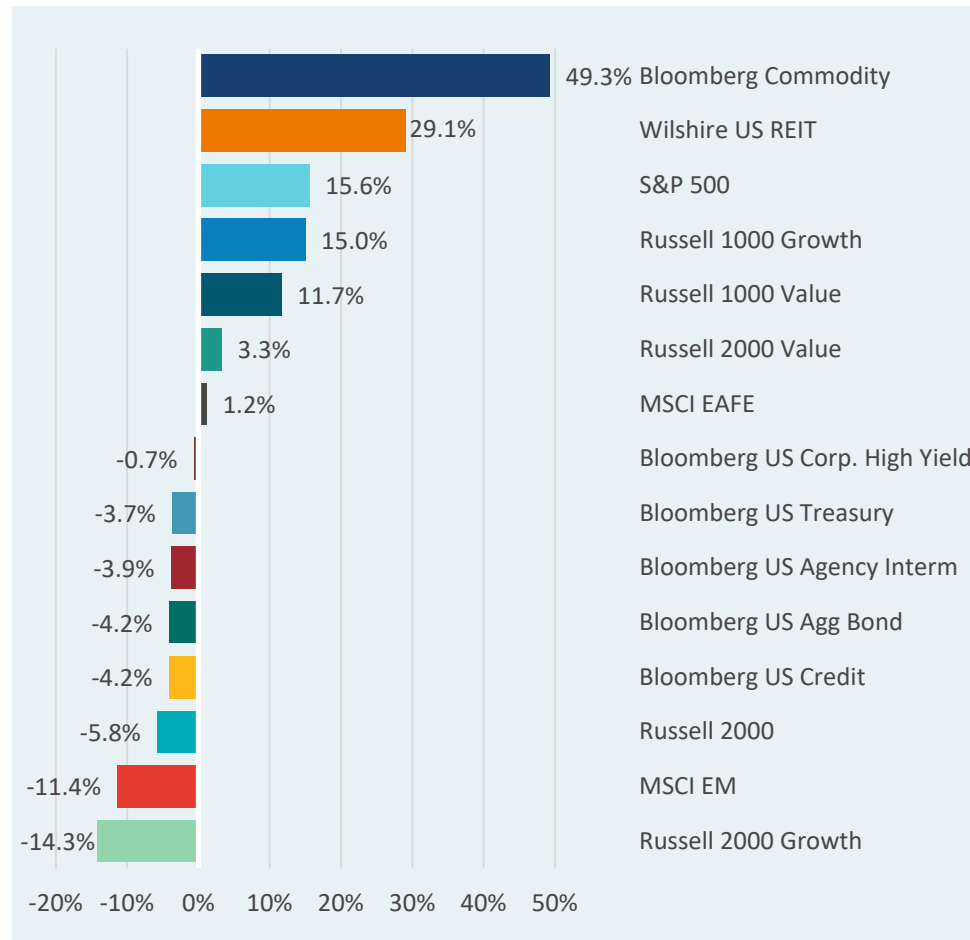
Periodic table of returns



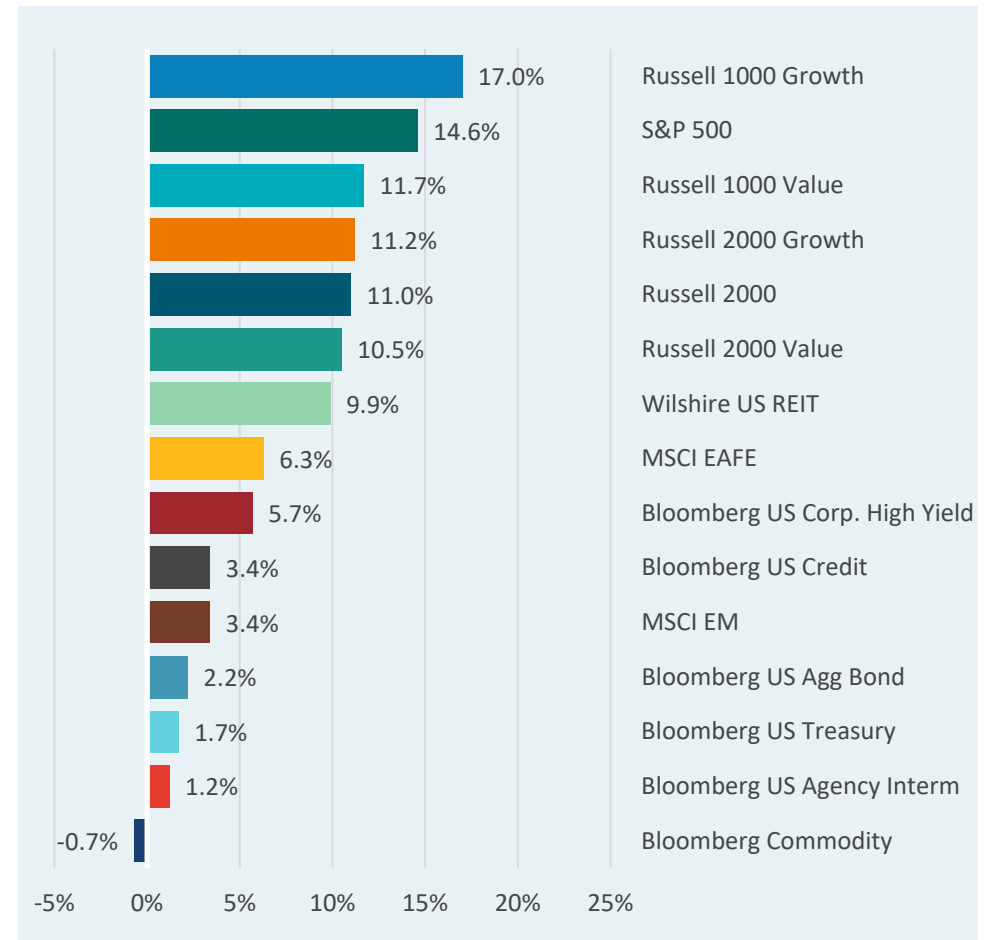
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 12/31/21.

Major asset class returns

ONE YEAR ENDING MARCH



TEN YEARS ENDING MARCH



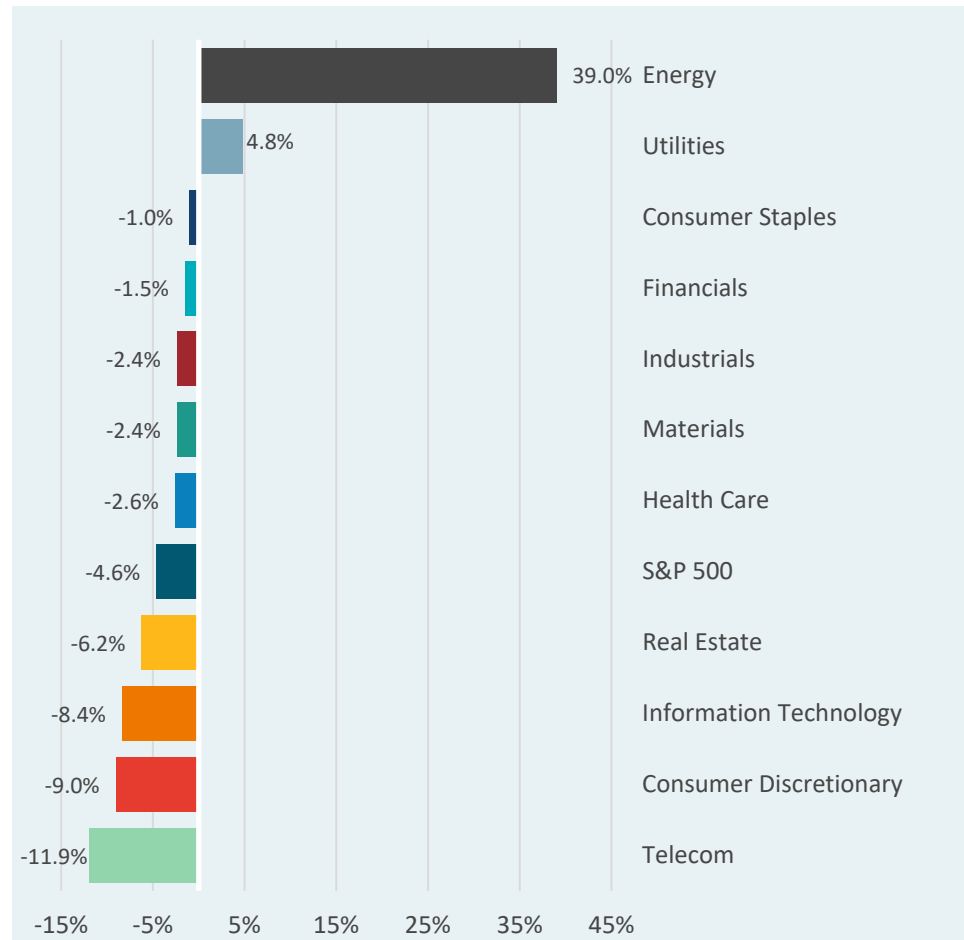
*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 3/31/22

Source: Morningstar, as of 3/31/22

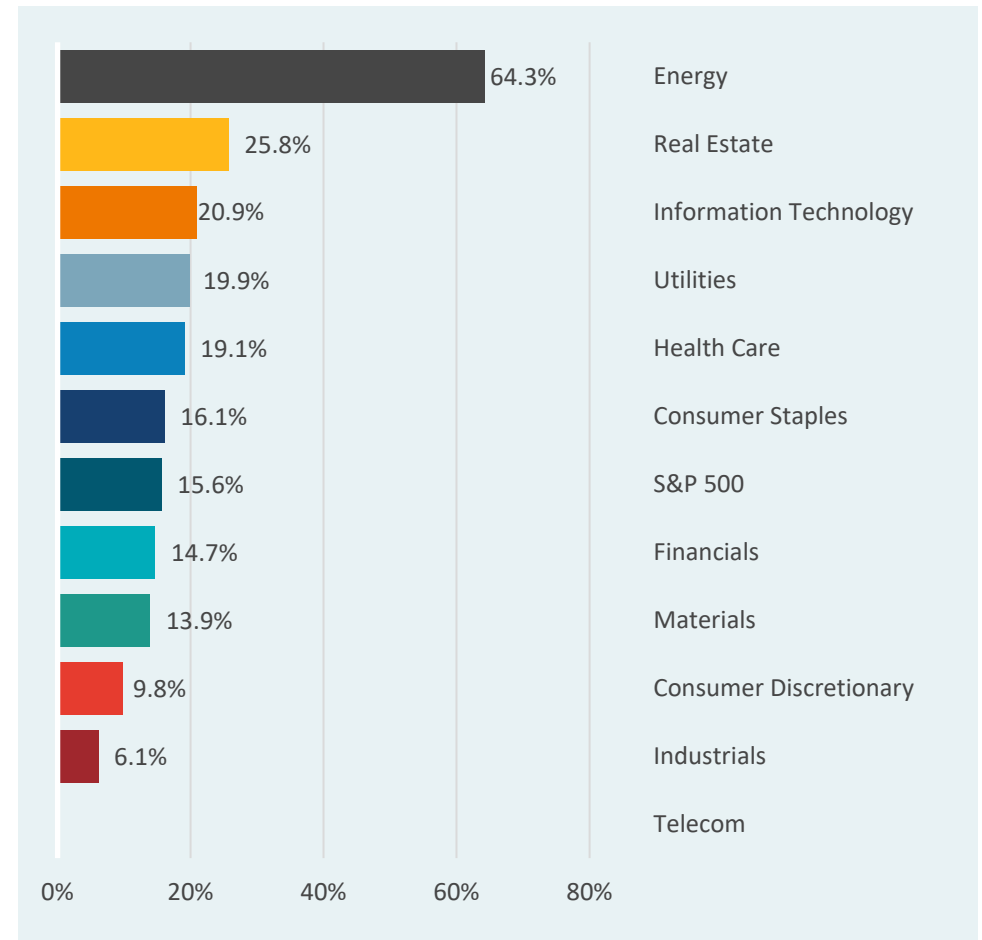
S&P 500 sector returns

Q1 2022



Source: Morningstar, as of 3/31/22

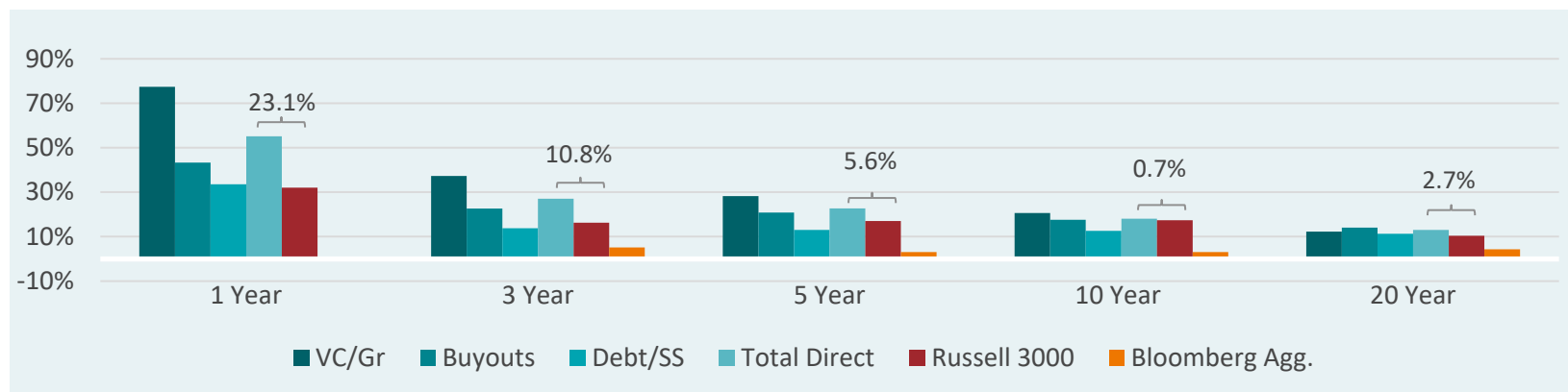
ONE YEAR ENDING MARCH



Source: Morningstar, as of 3/31/22

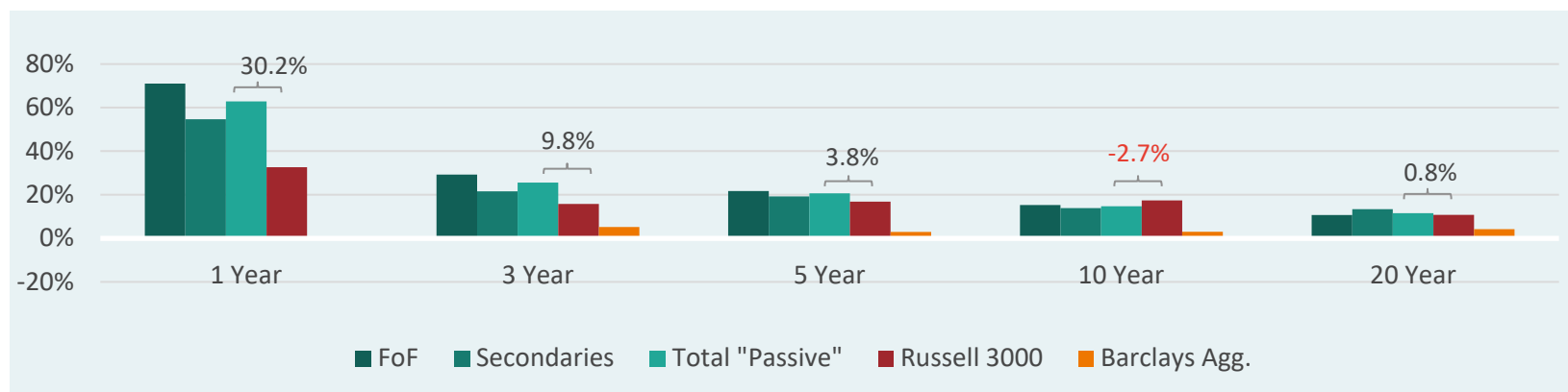
Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E Fund Investments outperformed comparable public equities across all time periods.

“PASSIVE” STRATEGIES

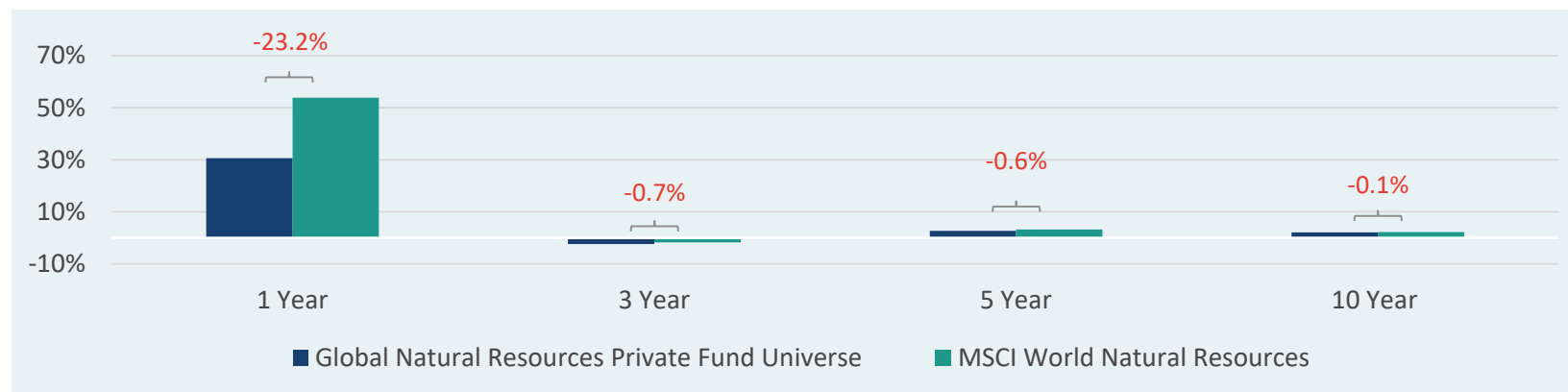


“Passive” strategies outperformed comparable public equities across all time periods, aside from the 10-year basis.

Sources: CJA PME: U.S. Private Equity Funds sub asset classes as of September 30, 2021. Public Market Equivalent returns resulted from “Total Passive” and Total Direct’s identical cash flows invested into and distributed from respective traditional asset comparable.

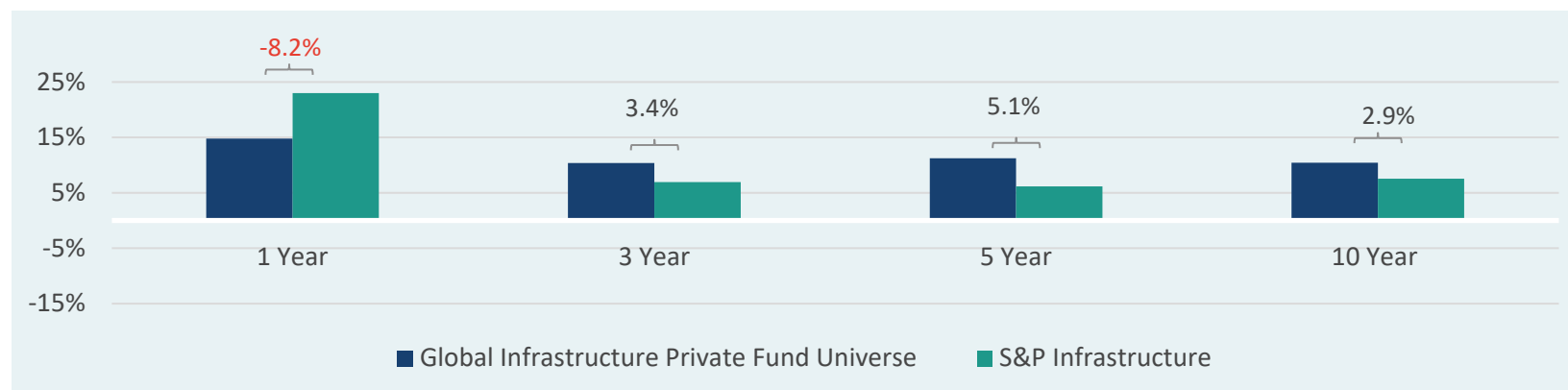
Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



N.R. funds underperformed the MSCI World Natural Resources benchmark across all time periods.

GLOBAL INFRASTRUCTURE FUNDS

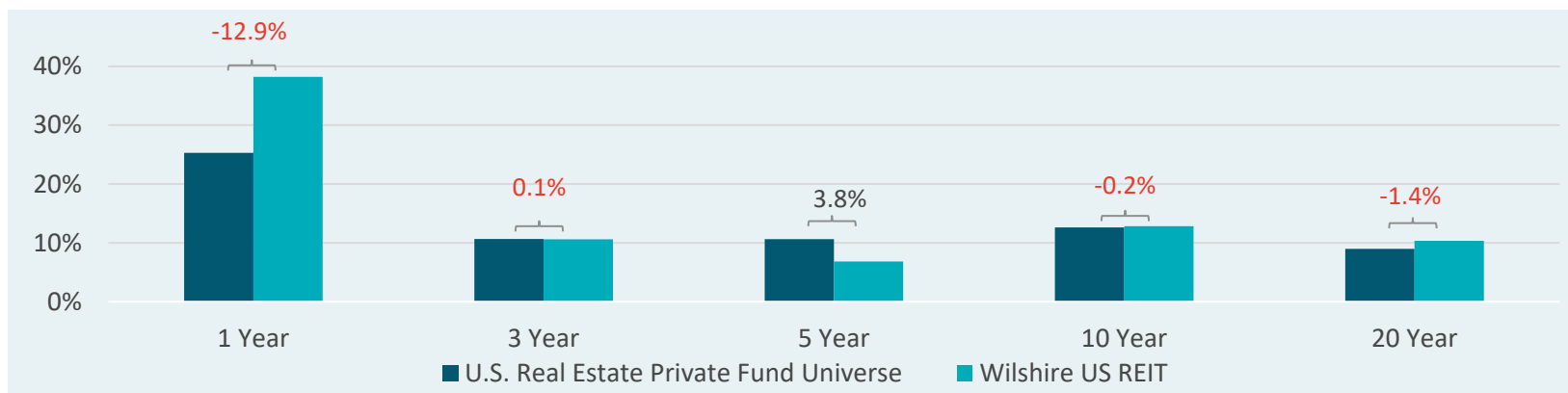


Infra. funds outperformed the S&P Infra. across all periods, aside from the 1-year basis.

Sources: CJA PME: Global Natural Resources (vintage 1999 and later, inception of MSCI World Natural Resources benchmark) and Global Infrastructure (vintage 2002 and later, inception of S&P Infrastructure benchmark) universes as of September 30, 2021. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.

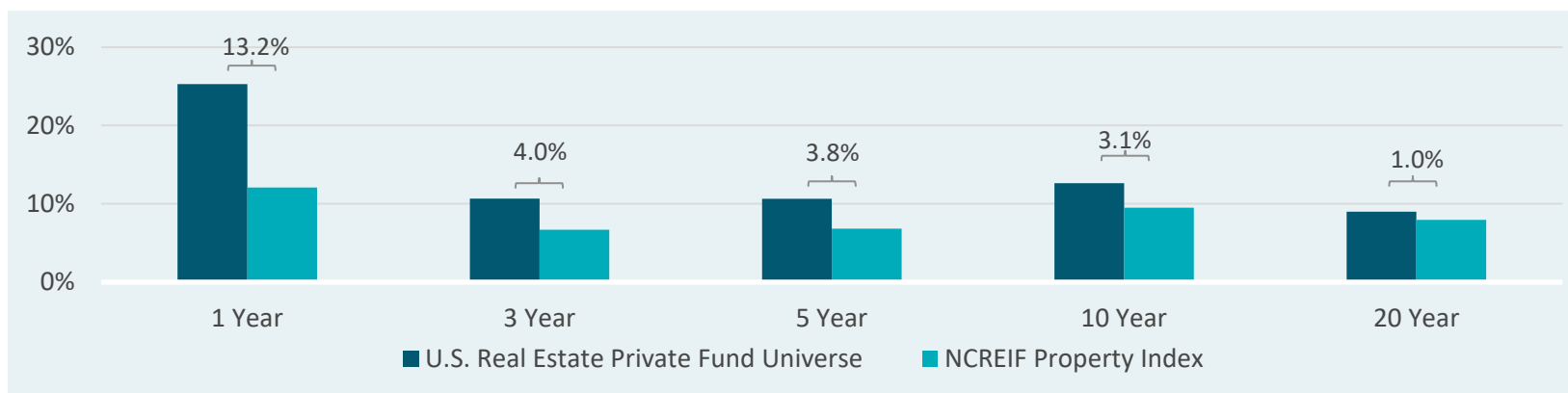
Private vs. liquid and core real estate performance

U.S. PRIVATE REAL ESTATE FUNDS VS. LIQUID UNIVERSE



U.S. Private R.E. funds underperformed the Wilshire U.S. REIT Index across all time periods, aside on a 5-year basis.

U.S. PRIVATE REAL ESTATE FUNDS VS. CORE FUNDS



U.S. Private R.E. Funds outperformed the NCREIF Property Index across all time periods.

Sources: CJA PME: U.S. Real Estate universes as of September 30, 2021. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real estate universes.

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	3.7	(4.6)	(4.6)	15.6	18.9	16.0	14.6
S&P 500 Equal Weighted	2.6	(2.7)	(2.7)	13.1	17.0	13.9	14.0
DJ Industrial Average	2.5	(4.1)	(4.1)	7.1	12.6	13.4	12.8
Russell Top 200	3.7	(4.9)	(4.9)	15.7	20.1	17.0	15.2
Russell 1000	3.4	(5.1)	(5.1)	13.3	18.7	15.8	14.5
Russell 2000	1.2	(7.5)	(7.5)	(5.8)	11.7	9.7	11.0
Russell 3000	3.2	(5.3)	(5.3)	11.9	18.2	15.4	14.3
Russell Mid Cap	2.6	(5.7)	(5.7)	6.9	14.9	12.6	12.9
Style Index							
Russell 1000 Growth	3.9	(9.0)	(9.0)	15.0	23.6	20.9	17.0
Russell 1000 Value	2.8	(0.7)	(0.7)	11.7	13.0	10.3	11.7
Russell 2000 Growth	0.5	(12.6)	(12.6)	(14.3)	9.9	10.3	11.2
Russell 2000 Value	2.0	(2.4)	(2.4)	3.3	12.7	8.6	10.5

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	2.2	(5.4)	(5.4)	7.3	13.8	11.6	10.0
MSCI ACWI ex US	0.2	(5.4)	(5.4)	(1.5)	7.5	6.8	5.6
MSCI EAFE	0.6	(5.9)	(5.9)	1.2	7.8	6.7	6.3
MSCI EM	(2.3)	(7.0)	(7.0)	(11.4)	4.9	6.0	3.4
MSCI EAFE Small Cap	(0.0)	(8.5)	(8.5)	(3.6)	8.5	7.4	8.3
Style Index							
MSCI EAFE Growth	0.6	(11.9)	(11.9)	(1.5)	9.8	8.9	7.5
MSCI EAFE Value	0.7	0.3	0.3	3.6	5.2	4.2	4.9
Regional Index							
MSCI UK	0.1	1.8	1.8	13.6	5.3	5.5	4.5
MSCI Japan	(0.5)	(6.6)	(6.6)	(6.5)	6.8	6.1	6.5
MSCI Euro	(1.7)	(11.1)	(11.1)	(3.4)	6.8	5.5	5.9
MSCI EM Asia	(3.1)	(8.7)	(8.7)	(15.2)	6.1	7.2	5.8
MSCI EM Latin American	13.1	27.3	27.3	23.5	3.2	4.1	(1.1)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	(1.9)	(3.0)	(3.0)	4.3	6.2	4.4	2.7
Bloomberg US Treasury Bills	(0.0)	(0.0)	(0.0)	(0.0)	0.8	1.1	0.6
Bloomberg US Agg Bond	(2.8)	(5.9)	(5.9)	(4.2)	1.7	2.1	2.2
Bloomberg US Universal	(2.7)	(6.1)	(6.1)	(4.2)	1.9	2.3	2.6
Duration							
Bloomberg US Treasury 1-3 Yr	(1.4)	(2.5)	(2.5)	(3.0)	0.8	1.0	0.8
Bloomberg US Treasury Long	(5.3)	(10.6)	(10.6)	(1.4)	3.3	3.9	4.0
Bloomberg US Treasury	(3.1)	(5.6)	(5.6)	(3.7)	1.4	1.8	1.7
Issuer							
Bloomberg US MBS	(2.6)	(5.0)	(5.0)	(4.9)	0.6	1.4	1.7
Bloomberg US Corp. High Yield	(1.1)	(4.8)	(4.8)	(0.7)	4.6	4.7	5.7
Bloomberg US Agency Interim	(2.1)	(3.7)	(3.7)	(3.9)	0.7	1.1	1.2
Bloomberg US Credit	(2.5)	(7.4)	(7.4)	(4.2)	2.8	3.2	3.4

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	8.6	25.5	25.5	49.3	16.1	9.0	(0.7)
Wilshire US REIT	6.9	(3.9)	(3.9)	29.1	11.9	10.0	9.9
CS Leveraged Loans	0.0	(0.1)	(0.1)	3.2	4.1	4.1	4.5
S&P Global Infrastructure	5.9	7.5	7.5	16.7	8.0	7.7	7.8
Alerian MLP	2.0	18.9	18.9	37.5	1.4	(1.1)	1.2
Regional Index							
JPM EMBI Global Div	(0.9)	(10.0)	(10.0)	(7.4)	0.0	1.7	3.7
JPM GBI-EM Global Div	(1.5)	(6.5)	(6.5)	(8.5)	(1.1)	0.2	(0.7)
Hedge Funds							
HFRI Composite	(0.1)	(1.6)	(1.6)	2.6	8.3	6.2	5.1
HFRI FOF Composite	0.6	(2.7)	(2.7)	1.3	5.9	4.6	3.9
Currency (Spot)							
Euro	(0.9)	(2.2)	(2.2)	(5.3)	(0.3)	0.8	(1.8)
Pound Sterling	(1.9)	(2.8)	(2.8)	(4.6)	0.3	1.0	(1.9)
Yen	(5.1)	(5.1)	(5.1)	(9.0)	(3.0)	(1.7)	(3.8)

Source: Morningstar, HFRI, as of 3/31/22.

Definitions

Bloomberg US Weekly Consumer Comfort Index - tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. (www.lanqerresearch.com)

University of Michigan Consumer Sentiment Index - A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. (www.Bloomberg.com)

NFIB Small Business Outlook - Small Business Economic Trends (SBET) is a monthly assessment of the U.S. small-business economy and its near-term prospects. Its data are collected through mail surveys to random samples of the National Federal of Independent Business (NFIB) membership. The survey contains three broad question types: recent performance, near-term forecasts, and demographics. The topics addressed include: outlook, sales, earnings, employment, employee compensation, investment, inventories, credit conditions, and single most important problem. (<http://www.nfib-sbet.org/about/>)

NAHB Housing Market Index - the housing market index is a weighted average of separate diffusion indices for three key single-family indices: market conditions for the sale of new homes at the present time, market conditions for the sale of new homes in the next six months, and the traffic of prospective buyers of new homes. The first two series are rated on a scale of Good, Fair, and Poor and the last is rated on a scale of High/Very High, Average, and Low/Very Low. A diffusion index is calculated for each series by applying the formula $(\text{Good-Poor} + 100)/2$ to the present and future sales series and $(\text{High/Very High-Low/Very Low} + 100)/2$ to the traffic series. Each resulting index is then seasonally adjusted and weighted to produce the HMI. Based on this calculation, the HMI can range between 0 and 100.

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San Luis Obispo County Pension Trust

Investment Performance Review

Period Ending: March 31, 2022



[VERUSINVESTMENTS.COM](https://www.verusinvestments.com)

SEATTLE 206-622-3700

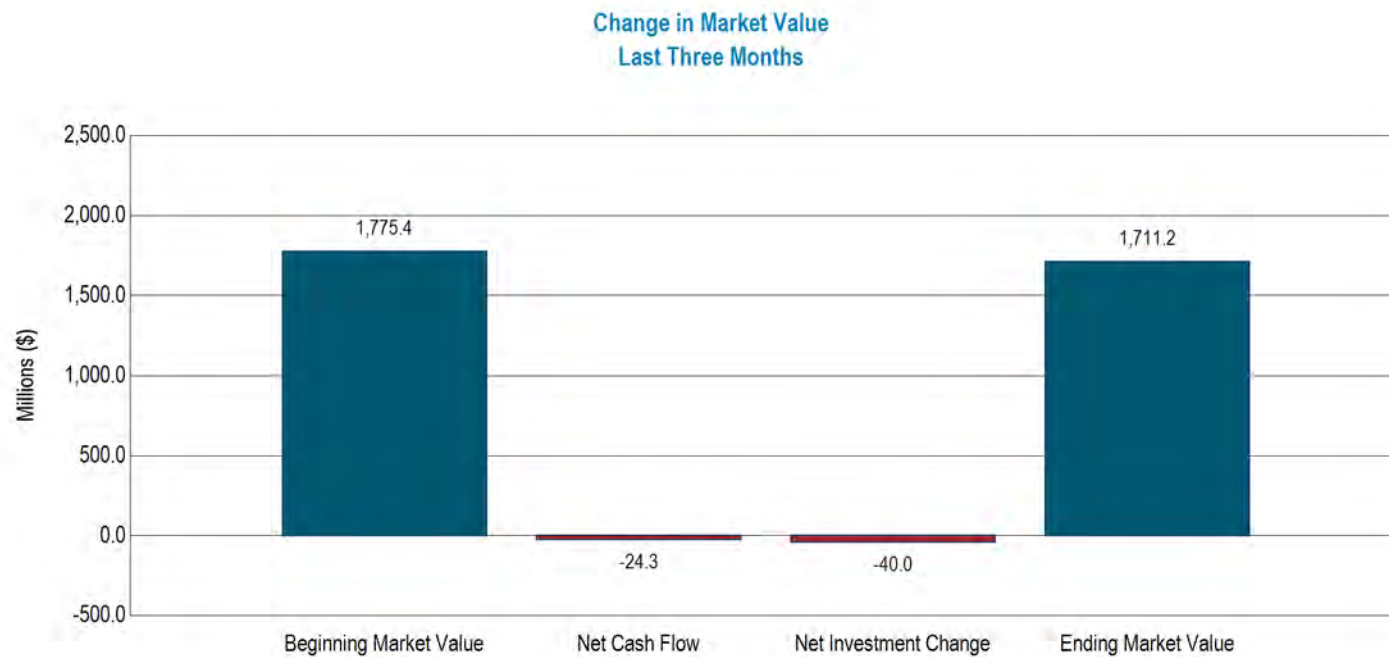
LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

PITTSBURGH 412-784-6678

Portfolio Reconciliation

	Last Three Months	One Year
Beginning Market Value	\$1,775,445,132	\$1,603,908,224
Net Cash Flow	-\$24,316,866	-\$23,422,858
Net Investment Change	-\$39,954,464	\$130,688,436
Ending Market Value	\$1,711,173,802	\$1,711,173,802



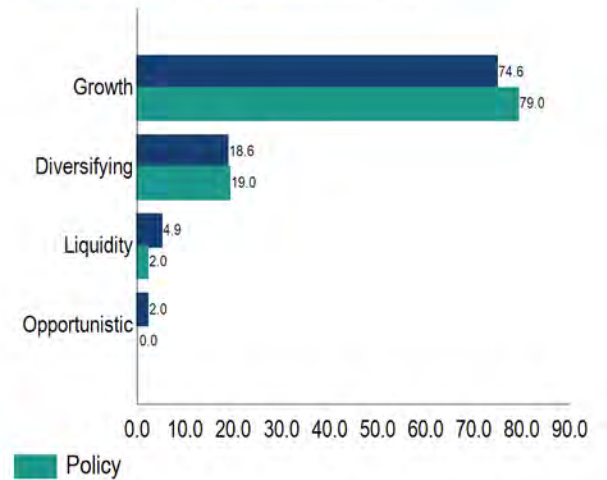
Contributions and withdrawals may include intra-account transfers between managers/funds.

Total Fund Executive Summary (Gross of Fees)

Period Ending: March 31, 2022

	QTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Total Fund	-2.2	13	8.4	35	10.5	58	9.0	70
Interim Policy Index	-2.9	40	7.0	54	9.8	85	8.4	83
FFP SAA Index	-0.8	1	14.4	1	--	--	--	--
Total Growth	-1.6	--	14.0	--	14.6	--	12.2	--
Custom Growth Benchmark	-2.4	--	9.6	--	12.1	--	10.1	--
Total Public Equity	-5.1	37	7.1	72	15.4	12	13.0	16
Russell 3000	-5.3	47	11.9	1	18.2	1	15.4	1
Total Domestic Equity	-2.5	1	11.2	60	16.6	76	15.0	28
Russell 3000	-5.3	63	11.9	44	18.2	7	15.4	13
Total International Equity	-8.5	89	1.8	3	13.7	1	10.9	1
MSCI ACWI ex USA Gross	-5.3	7	-1.0	17	8.0	39	7.3	32
Total Private Equity	3.3	--	46.8	--	30.3	--	23.6	--
Private Equity Benchmark	3.3	--	46.8	--	--	--	--	--
Total Private Credit	2.6	--	12.2	--	10.6	--	9.1	--
Private Credit Benchmark	2.6	--	12.2	--	--	--	--	--
Total Real Estate	5.9	--	23.7	--	9.6	--	8.5	--
NCREIF Property Index	5.3	--	21.9	--	9.6	--	8.5	--

Actual vs Interim Target Allocation (%)



Rolling Annualized Excess Performance and Tracking Error
Total Fund vs. Interim Policy Index



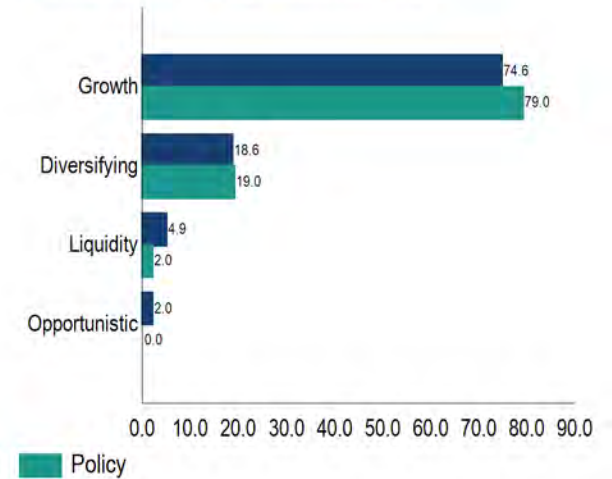
Interim Policy Index as of 1/1/2021: 23% Russell 3000, 20% MSCI ACWI ex-US (Gross), 12% Bloomberg U.S. Aggregate, 3% Bloomberg US Treasury 7-10 yr, 2% Bloomberg US TIPS, 11% FTSE World Govt Bond Index, 15% NCREIF Property Index, 5% Actual Private Equity Return, 5% Actual Private Credit Bench Return, 2% 91 day T-Bills, 2% Bloomberg 1-3 yr Gov/Credit. FFP SAA Index as of 1/1/2021: 30% MSCI ACWI, 8% Bloomberg U.S. Treasury 7-10 yr, 7% Bloomberg U.S. TIPS, 4% 91 day T-Bills, 6% Bloomberg U.S. Govt/Credit 1-3 yr, 18% Actual Private Equity Return, 12% Actual Private Credit Return, 15% NCREIF Property Index. Private Equity, Private Credit and Opportunistic composite returns are lagged by one quarter. All returns are (G) Gross of fees. Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. (e) To avoid unnecessary and possibly misleading Tracking Error, the Total Fund Policy Benchmark uses actual time-weighted private markets returns applied to actual private market asset class weights rounded to the nearest whole percentage point. The difference in actual weight versus target is allocated to the private market investment's public market "equivalent" (e.g., private equity to public equity; private credit to public fixed income).

Total Fund Executive Summary (Gross of Fees)

Period Ending: March 31, 2022

	QTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Total Risk Diversifying	-4.5	48	-3.4	53	1.8	70	2.3	38
<i>Custom Risk Diversifying Benchmark</i>	-5.8	88	-4.9	99	1.2	99	1.8	88
Total Domestic Fixed Income	-4.0	9	-1.6	7	3.5	4	3.5	3
<i>Bloomberg US Aggregate TR</i>	-5.9	89	-4.2	94	1.7	79	2.1	64
Total Global Fixed	-5.8	--	-8.2	--	-0.7	--	0.6	--
<i>FTSE World Govt Bond Index</i>	-6.5	--	-7.7	--	-0.1	--	1.3	--
Total Liquidity	-0.9	--	-0.8	--	0.8	--	1.4	--
<i>91 Day T-Bills</i>	0.0	--	0.1	--	0.7	--	1.1	--
Total Cash	-0.9	--	-0.8	--	0.8	--	1.4	--
<i>91 Day T-Bills</i>	0.0	--	0.1	--	0.7	--	1.1	--
Total Opportunistic	2.5	--	13.5	--	8.2	--	10.1	--
<i>Russell 3000 + 3%</i>	-4.6	--	15.3	--	21.7	--	18.8	--

Actual vs Interim Target Allocation (%)



Rolling Annualized Excess Performance and Tracking Error
Total Fund vs. Interim Policy Index



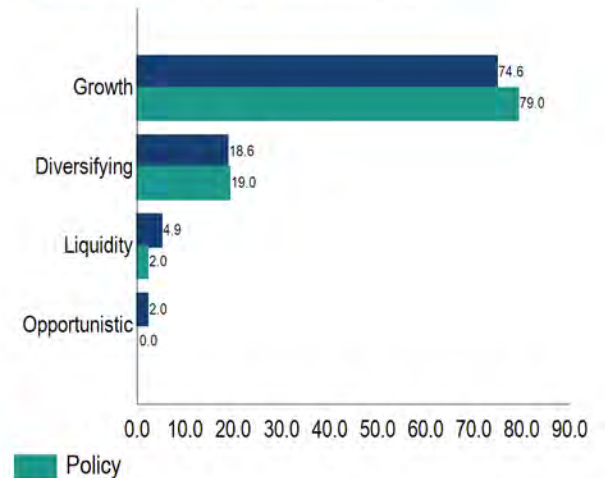
Interim Policy Index as of 1/1/2021: 23% Russell 3000, 20% MSCI ACWI ex-US (Gross), 12% Bloomberg U.S. Aggregate, 3% Bloomberg US Treasury 7-10 yr, 2% Bloomberg US TIPS, 11% FTSE World Govt Bond Index, 15% NCREIF Property Index, 5% Actual Private Equity Return, 5% Actual Private Credit Bench Return, 2% 91 day T-Bills, 2% Bloomberg 1-3 yr Gov/Credit. FFP SAA Index as of 1/1/2021: 30% MSCI ACWI, 8% Bloomberg U.S. Treasury 7-10 yr, 7% Bloomberg U.S. TIPS, 4% 91 day T-Bills, 6% Bloomberg U.S. Govt/Credit 1-3 yr, 18% Actual Private Equity Return, 12% Actual Private Credit Return, 15% NCREIF Property Index. Private Equity, Private Credit and Opportunistic composite returns are lagged by one quarter. All returns are (G) Gross of fees. Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. (e) To avoid unnecessary and possibly misleading Tracking Error, the Total Fund Policy Benchmark uses actual time-weighted private markets returns applied to actual private market asset class weights rounded to the nearest whole percentage point. The difference in actual weight versus target is allocated to the private market investment's public market "equivalent" (e.g., private equity to public equity; private credit to public fixed income).

Total Fund Executive Summary (Net of Fees)

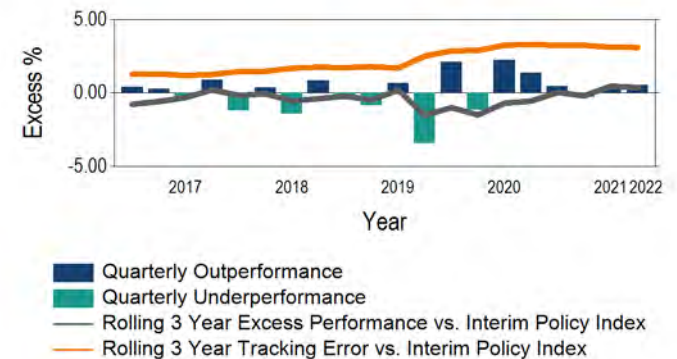
Period Ending: March 31, 2022

	QTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Total Fund	-2.3	15	8.0	38	10.1	72	8.5	81
Interim Policy Index	-2.9	40	7.0	54	9.8	85	8.4	83
FFP SAA Index	-0.8	1	14.4	1	--	--	--	--
Total Growth	-1.7	--	13.6	--	14.2	--	11.8	--
Custom Growth Benchmark	-2.4	--	9.6	--	12.1	--	10.1	--
Total Public Equity	-5.2	45	6.5	85	14.7	28	12.4	42
Russell 3000	-5.3	47	11.9	1	18.2	1	15.4	1
Total Domestic Equity	-2.6	1	10.6	68	16.1	83	14.4	61
Russell 3000	-5.3	63	11.9	44	18.2	7	15.4	13
Total International Equity	-8.6	92	1.2	4	12.9	1	10.1	2
MSCI ACWI ex USA Gross	-5.3	7	-1.0	17	8.0	39	7.3	32
Total Private Equity	3.3	--	46.8	--	30.3	--	23.6	--
Private Equity Benchmark	3.3	--	46.8	--	--	--	--	--
Total Private Credit	2.6	--	12.2	--	10.6	--	9.1	--
Private Credit Benchmark	2.6	--	12.2	--	--	--	--	--
Total Real Estate	5.9	--	23.7	--	9.6	--	8.5	--
NCREIF Property Index	5.3	--	21.9	--	9.6	--	8.5	--

Actual vs Interim Target Allocation (%)



Rolling Annualized Excess Performance and Tracking Error
Total Fund vs. Interim Policy Index



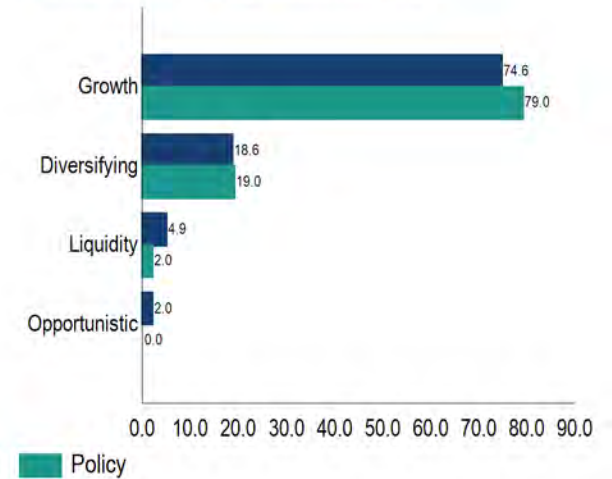
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Total Fund Executive Summary (Net of Fees)

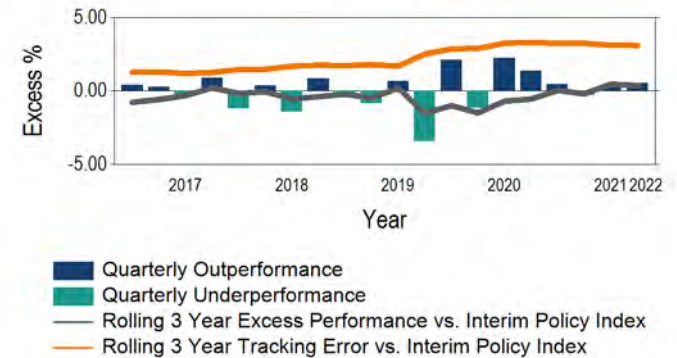
Period Ending: March 31, 2022

	QTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Total Risk Diversifying	-4.6	57	-3.9	78	1.4	93	1.9	87
<i>Custom Risk Diversifying Benchmark</i>	-5.8	88	-4.9	99	1.2	99	1.8	88
Total Domestic Fixed Income	-4.1	10	-1.9	8	3.1	8	3.2	13
<i>Bloomberg US Aggregate TR</i>	-5.9	89	-4.2	94	1.7	79	2.1	64
Total Global Fixed	-6.0	--	-8.9	--	-1.4	--	0.1	--
<i>FTSE World Govt Bond Index</i>	-6.5	--	-7.7	--	-0.1	--	1.3	--
Total Liquidity	-0.9	--	-0.9	--	0.8	--	1.4	--
<i>91 Day T-Bills</i>	0.0	--	0.1	--	0.7	--	1.1	--
Total Cash	-0.9	--	-0.9	--	0.8	--	1.4	--
<i>91 Day T-Bills</i>	0.0	--	0.1	--	0.7	--	1.1	--
Total Opportunistic	2.5	--	13.5	--	8.2	--	10.1	--
<i>Russell 3000 + 3%</i>	-4.6	--	15.3	--	21.7	--	18.8	--

Actual vs Interim Target Allocation (%)



Rolling Annualized Excess Performance and Tracking Error
Total Fund vs. Interim Policy Index

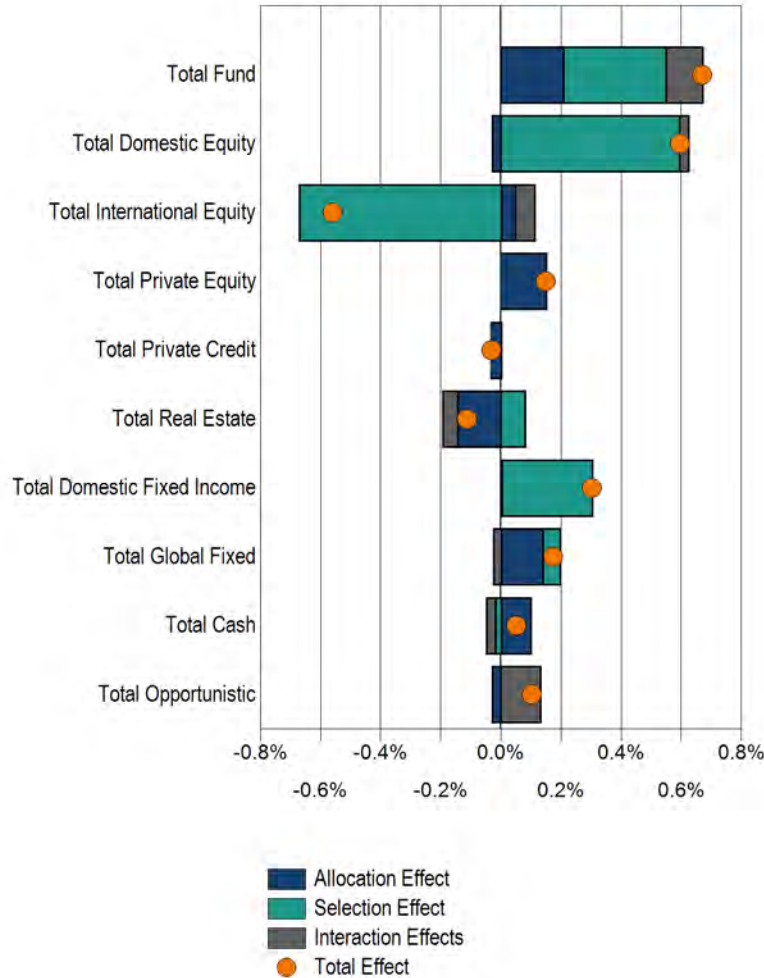


Interim Policy Index as of 1/1/2021: 23% Russell 3000, 20% MSCI ACWI ex-US (Gross), 12% Bloomberg U.S. Aggregate, 3% Bloomberg US Treasury 7-10 yr, 2% Bloomberg US TIPS, 11% FTSE World Govt Bond Index, 15% NCREIF Property Index, 5% Actual Private Equity Return, 5% Actual Private Credit Bench Return, 2% 91 day T-Bills, 2% Bloomberg 1-3 yr Govt/Credit. FFP SAA Index as of 1/1/2021: 30% MSCI ACWI, 8% Bloomberg U.S. Treasury 7-10 yr, 7% Bloomberg U.S. TIPS, 4% 91 day T-Bills, 6% Bloomberg U.S. Govt/Credit 1-3 yr, 18% Actual Private Equity Return, 12% Actual Private Credit Return, 15% NCREIF Property Index. Private Equity, Private Credit and Opportunistic composite returns are lagged by one quarter. All returns are (G) Gross of fees. Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. (e) To avoid unnecessary and possibly misleading Tracking Error, the Total Fund Policy Benchmark uses actual time-weighted private markets returns applied to actual private market asset class weights rounded to the nearest whole percentage point. The difference in actual weight versus target is allocated to the private market investment's public market "equivalent" (e.g., private equity to public equity; private credit to public fixed income).

Total Fund
Attribution (Net of Fees)

Period Ending: March 31, 2022

Attribution Effects
3 Months Ending March 31, 2022



Performance Attribution

	Last 3 Mo.
Wtd. Actual Return	-2.3%
Wtd. Index Return *	-3.0%
Excess Return	0.7%
Selection Effect	0.3%
Allocation Effect	0.2%
Interaction Effect	0.1%

*Calculated from policy benchmark returns and policy weightings of each component of the policy benchmark.

Attribution Summary
3 Months Ending March 31, 2022

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Domestic Equity	-2.6%	-5.3%	2.7%	0.6%	0.0%	0.0%	0.6%
Total International Equity	-8.6%	-5.3%	-3.3%	-0.7%	0.0%	0.1%	-0.6%
Total Private Equity	3.3%	3.3%	0.0%	0.0%	0.1%	0.0%	0.1%
Total Private Credit	2.6%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	5.9%	5.3%	0.6%	0.1%	-0.1%	0.0%	-0.1%
Total Domestic Fixed Income	-4.1%	-5.6%	1.6%	0.3%	0.0%	0.0%	0.3%
Total Global Fixed	-6.0%	-6.5%	0.5%	0.1%	0.1%	0.0%	0.2%
Total Cash	-0.9%	0.0%	-0.9%	0.0%	0.1%	0.0%	0.1%
Total Opportunistic	2.5%	-4.6%	7.0%	0.0%	0.0%	0.1%	0.1%
Total	-2.3%	-3.0%	0.7%	0.3%	0.2%	0.1%	0.7%

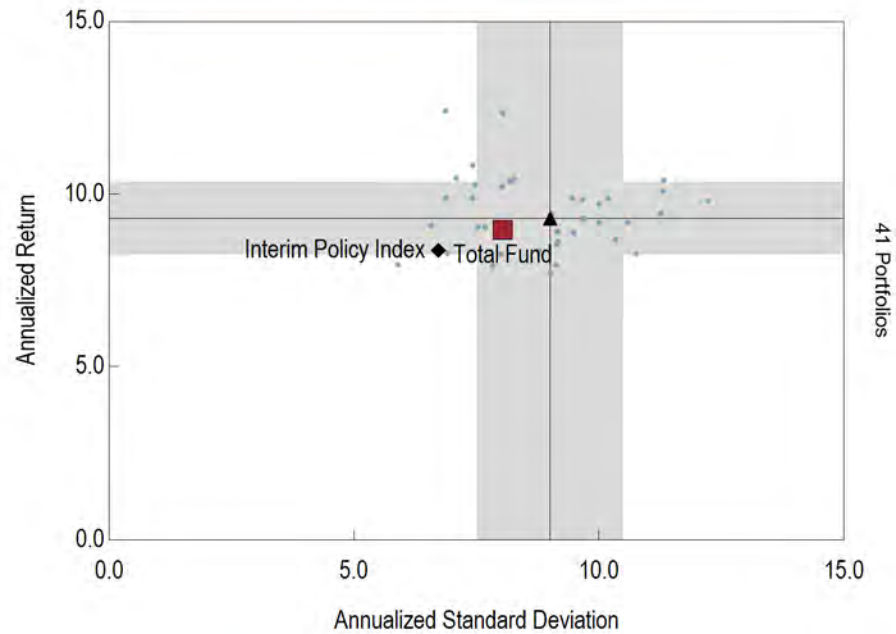
Attribution does not account for effects of overlay program. Weighted returns shown in attribution analysis may differ from actual returns. Wtd. Actual Return is the sum of the products of each group's return and its respective weight at the beginning of the period.

Total Fund
Risk Analysis - 5 Years (Gross of Fees)

Period Ending: March 31, 2022

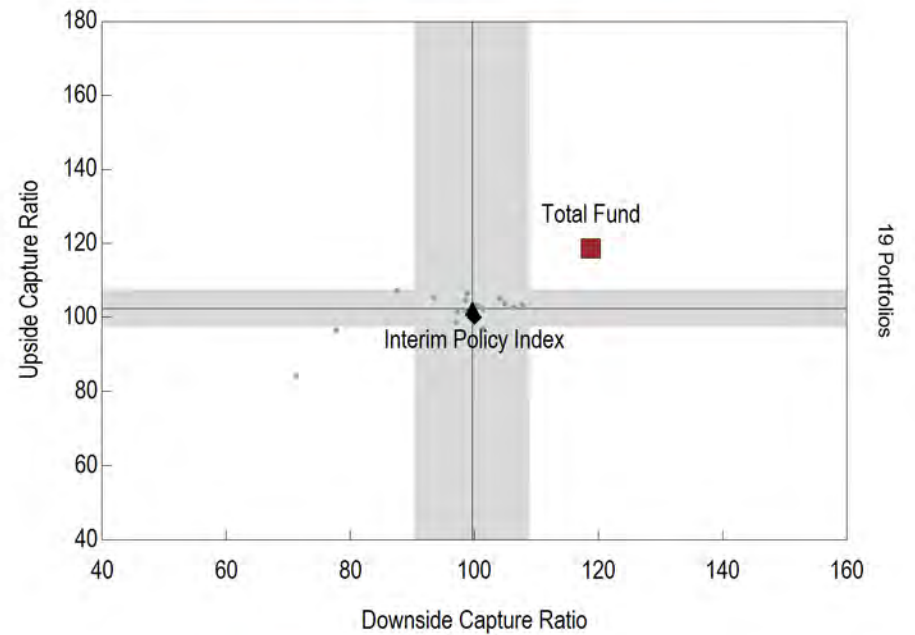
	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Total Fund	8.95%	0.59%	8.04%	-0.68%	1.15	2.41%	0.93	0.98	0.24	118.70%	118.75%

Annualized Return vs. Annualized Standard Deviation



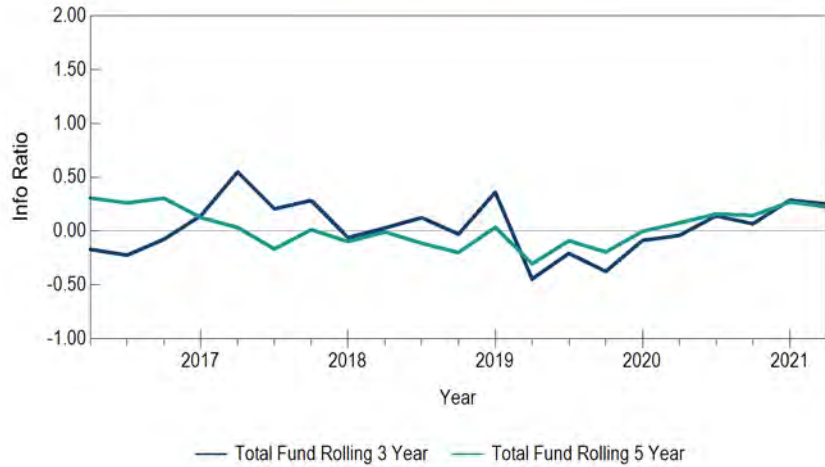
- Total Fund
- ◆ Interim Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Gross

Upside Capture Ratio vs. Downside Capture Ratio

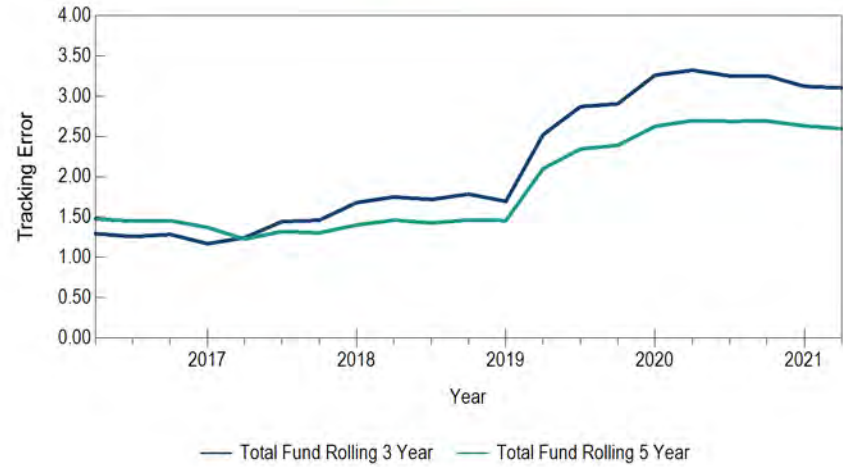


- Total Fund
- ◆ Interim Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Gross

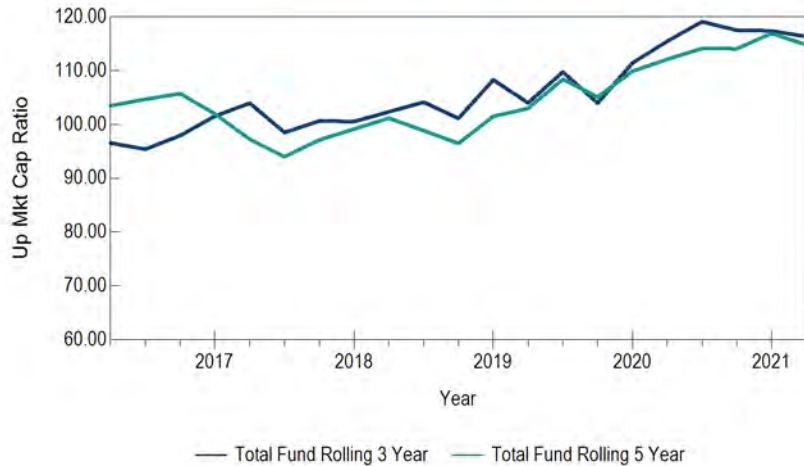
Rolling Information Ratio



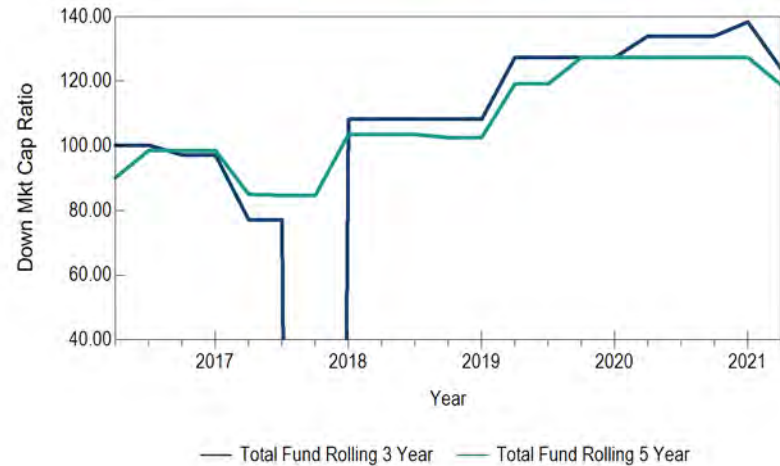
Rolling Tracking Error



Rolling Up Market Capture Ratio (%)



Rolling Down Market Capture Ratio (%)



Total Fund Performance Summary (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017	Inception	Inception Date
Total Fund	1,711,173,802	100.0	-2.2	8.4	10.5	9.0	8.0	15.2	9.6	16.3	-3.1	15.5	--	Feb-07
<i>Interim Policy Index</i>			-2.9	7.0	9.8	8.4	7.5	12.8	10.3	15.3	-2.1	13.3	--	Feb-07
<i>FFP SAA Index</i>			-0.8	14.4	--	--	--	21.0	--	--	--	--		
<i>InvMetrics Public DB > \$1B Gross Rank</i>			13	35	58	70	83	47	74	60	36	69		
Total Growth	1,156,901,704	67.6	-1.6	14.0	14.6	12.2	10.9	23.5	11.2	20.3	-4.0	20.2		
<i>Custom Growth Benchmark</i>			-2.4	9.6	12.1	10.1	8.8	16.7	12.3	16.6	-2.8	16.4		
Total Public Equity	691,009,059	40.4	-5.1	7.1	15.4	13.0	11.5	20.3	16.5	29.8	-9.0	25.9		
<i>Russell 3000</i>			-5.3	11.9	18.2	15.4	14.3	25.7	20.9	31.0	-5.2	21.1		
<i>InvMetrics Public DB Total Eq Gross Rank</i>			37	72	12	16	64	51	31	5	67	14		
Total Domestic Equity	404,185,287	23.6	-2.5	11.2	16.6	15.0	14.1	25.3	13.7	29.4	-5.2	25.1		
<i>Russell 3000</i>			-5.3	11.9	18.2	15.4	14.3	25.7	20.9	31.0	-5.2	21.1		
<i>InvMetrics Public DB US Eq Gross Rank</i>			1	60	76	28	30	62	91	66	36	4		
PIMCO RAE US	115,924,247	6.8	0.8	13.2	15.0	12.3	12.9	28.3	4.4	25.5	-6.6	17.0	9.3	Nov-07
<i>S&P 500</i>			-4.6	15.6	18.9	16.0	14.6	28.7	18.4	31.5	-4.4	21.8	10.3	Nov-07
<i>eV US Large Cap Core Equity Gross Rank</i>			2	58	85	91	84	47	96	83	72	89		
Loomis Sayles Large Cap Growth	96,245,627	5.6	-7.7	7.0	18.7	18.7	--	19.4	32.8	32.7	-1.7	34.1	19.6	Dec-16
<i>Russell 1000 Growth</i>			-9.0	15.0	23.6	20.9	--	27.6	38.5	36.4	-1.5	30.2	21.8	Dec-16
<i>eV US Large Cap Growth Equity Gross Rank</i>			23	70	76	59	--	81	61	68	58	16		
Boston Partners Large Cap Value	108,377,875	6.3	0.8	14.7	15.3	12.1	--	30.9	2.4	24.3	-8.5	--	12.4	Jan-17
<i>Russell 1000 Value</i>			-0.7	11.7	13.0	10.3	--	25.2	2.8	26.5	-8.3	--	10.5	Jan-17
<i>eV US Large Cap Value Equity Gross Rank</i>			32	37	47	50	--	19	64	77	54	--		
Atlanta Capital Mgmt	83,637,538	4.9	-4.6	8.4	15.1	15.1	14.9	23.0	11.4	35.1	-4.5	26.6	17.0	Aug-10
<i>Russell 2500</i>			-5.8	0.3	13.8	11.6	12.1	18.2	20.0	27.8	-10.0	16.8	13.7	Aug-10
<i>eV US Small-Mid Cap Equity Gross Rank</i>			41	24	55	30	14	58	62	14	25	15		
Total International Equity	286,823,772	16.8	-8.5	1.8	13.7	10.9	8.8	15.2	19.4	30.2	-12.2	26.6		
<i>MSCI ACWI ex USA Gross</i>			-5.3	-1.0	8.0	7.3	6.0	8.3	11.1	22.1	-13.8	27.8		
<i>InvMetrics Public DB ex-US Eq Gross Rank</i>			89	3	1	1	1	1	12	1	9	81		
Dodge & Cox Intl Stock	151,018,245	8.8	-0.4	3.7	8.7	5.8	6.9	11.7	2.8	23.6	-17.5	24.7	3.6	Dec-07
<i>MSCI ACWI ex USA Value Gross</i>			0.3	4.0	6.1	5.3	4.8	11.1	-0.2	16.5	-13.4	23.3	1.9	Dec-07
<i>eV ACWI ex-US All Cap Value Eq Gross Rank</i>			20	22	29	52	39	46	33	35	84	71		
WCM International Growth	135,805,527	7.9	-16.5	-1.3	17.0	15.1	--	18.5	34.0	36.7	-6.7	--	15.7	Feb-17
<i>MSCI ACWI ex USA Growth Gross</i>			-10.7	-5.9	9.5	9.0	--	5.4	22.6	27.8	-14.1	--	9.4	Feb-17
<i>eV ACWI ex-US All Cap Growth Eq Gross Rank</i>			79	10	15	13	--	6	28	11	1	--		

Since Inception ranking is from the beginning of the first complete month of performance. Stone Harbor Local Markets terminated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Direct RE liquidated as of 12/19/2019. Pathway Private Equity Fund Investors 10 L.P. funded 3/25/2020. Sixth Street Partners TAO funded 4/16/2020.

Total Fund
Performance Summary (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017	Inception	Inception Date
Total Private Equity	131,437,064	7.7												
Harbourvest Partners IX Buyout Fund L.P.	15,651,235	0.9												
Pathway Private Equity Fund Investors 9 L.P.	87,483,543	5.1												
Harbourvest 2018 Global Fund L.P.	18,597,751	1.1												
Pathway Private Equity Fund Investors 10 L.P.	9,704,535	0.6												
Total Private Credit	93,527,587	5.5												
Sixth Street Partners DCP	83,027,587	4.9												
Harbourvest SLO Fund	10,500,000	0.6												
Total Real Estate	240,927,994	14.1	5.9	23.7	9.6	8.5	10.1	18.5	1.1	4.3	7.5	7.8		
<i>NCREIF Property Index</i>			5.3	21.9	9.6	8.5	9.6	17.7	1.6	6.4	6.7	7.0		
JP Morgan Core Real Estate	177,719,728	10.4	6.3	25.4	9.7	8.1	10.2	19.9	0.5	3.4	7.0	6.1	6.4	Mar-08
<i>NCREIF-ODCE</i>			7.4	28.5	11.3	9.9	10.9	22.2	1.2	5.3	8.3	7.6	6.6	Mar-08
<i>NCREIF Property Index</i>			5.3	21.9	9.6	8.5	9.6	17.7	1.6	6.4	6.7	7.0		
ARA American Strategic Value Realty	63,208,266	3.7	5.0	18.7	9.5	8.7	--	14.0	3.8	7.3	9.1	7.4	9.1	Jun-16
<i>NCREIF-ODCE</i>			7.4	28.5	11.3	9.9	--	22.2	1.2	5.3	8.3	7.6	9.7	Jun-16
<i>NCREIF Property Index</i>			5.3	21.9	9.6	8.5	--	17.7	1.6	6.4	6.7	7.0		
Total Risk Diversifying	436,557,597	25.5	-4.5	-3.4	1.8	2.3	2.4	-1.6	6.6	8.8	-1.8	7.9		
<i>Custom Risk Diversifying Benchmark</i>			-5.8	-4.9	1.2	1.8	2.1	-3.2	7.5	8.7	0.0	3.5		
<i>InvMetrics Public DB US Fix Inc Gross Rank</i>			48	53	70	38	38	89	75	32	99	4		
Total Domestic Fixed Income	317,507,905	18.6	-4.0	-1.6	3.5	3.5	3.3	0.9	8.1	9.9	0.4	4.3		
<i>Bloomberg US Aggregate TR</i>			-5.9	-4.2	1.7	2.1	2.2	-1.5	7.5	8.7	0.0	3.5		
<i>InvMetrics Public DB US Fix Inc Gross Rank</i>			9	7	4	3	9	15	46	11	55	50		
BlackRock Core Bond	73,213,021	4.3	-6.4	-4.8	2.3	2.7	--	-1.6	9.4	10.2	0.3	--	2.7	Jan-17
<i>Bloomberg US Aggregate TR</i>			-5.9	-4.2	1.7	2.1	--	-1.5	7.5	8.7	0.0	--	2.2	Jan-17
<i>eV US Core Fixed Inc Gross Rank</i>			95	99	49	49	--	77	23	10	27	--		
Dodge & Cox Income Fund	78,393,429	4.6	-5.1	-3.2	3.3	3.5	--	-0.5	9.9	10.2	0.1	--	3.5	Jan-17
<i>Bloomberg US Aggregate TR</i>			-5.9	-4.2	1.7	2.1	--	-1.5	7.5	8.7	0.0	--	2.2	Jan-17
<i>eV US Core Fixed Inc Gross Rank</i>			11	15	5	4	--	20	14	11	43	--		
Pacific Asset Corporate Loan	79,062,912	4.6	0.3	4.2	4.6	4.4	--	5.6	3.0	9.1	1.0	4.9	4.5	Sep-14
<i>S&P/LSTA Leveraged Loan Index</i>			-0.1	3.3	4.2	4.0	--	5.2	3.1	8.6	0.4	4.1	3.9	Sep-14
<i>eV US Float-Rate Bank Loan Fixed Inc Gross Rank</i>			5	17	28	27	--	38	42	36	29	26		
SSGA U.S. Govt Bond Index	42,497,694	2.5	-5.5	--	--	--	--	--	--	--	--	--	-6.1	Jul-21
<i>Bloomberg US Treasury 7-10 Yr TR</i>			-6.6	--	--	--	--	--	--	--	--	--	-6.3	Jul-21
<i>eV US Government Fixed Inc Gross Rank</i>			83	--	--	--	--	--	--	--	--	--		

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Total Fund Performance Summary (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017	Inception	Inception Date
BlackRock TIPS	44,340,849	2.6	-3.0	--	--	--	--	--	--	--	--	--	-1.4	Sep-21
<i>Bloomberg US TIPS TR</i>			-3.0	--	--	--	--	--	--	--	--	--	-1.4	Sep-21
<i>eV US TIPS / Inflation Fixed Inc Gross Rank</i>			75	--	--	--	--	--	--	--	--	--		
Total Global Fixed	119,049,692	7.0	-5.8	-8.2	-0.7	0.6	0.4	-7.0	6.7	7.4	-4.3	13.8		
<i>FTSE World Govt Bond Index</i>			-6.5	-7.7	-0.1	1.3	0.3	-7.0	10.1	5.9	-0.8	7.5		
Brandywine Global Fixed Income	58,168,428	3.4	-1.6	-2.9	--	--	--	-4.0	--	--	--	--	3.9	Jun-20
<i>FTSE WGBI ex US TR</i>			-7.1	-10.4	--	--	--	-9.7	--	--	--	--	-4.7	Jun-20
<i>eV All Global Fixed Inc Gross Rank</i>			9	38	--	--	--	71	--	--	--	--		
Ashmore EM Blended Debt Fund	60,881,264	3.6	-9.5	-12.5	-3.8	--	--	-9.5	3.2	--	--	--	-3.8	Mar-19
<i>50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELMI+</i>			-8.0	-7.3	-0.5	--	--	-3.9	3.9	--	--	--	-0.5	Mar-19
<i>eV All Emg Mkts Fixed Inc Gross Rank</i>			84	97	99	--	--	97	85	--	--	--		
Total Liquidity	83,465,045	4.9	-0.9	-0.8	0.8	1.4	1.5	0.2	1.5	2.1	1.6	8.4		
<i>91 Day T-Bills</i>			0.0	0.1	0.7	1.1	0.6	0.0	0.5	2.1	1.9	0.9		
Total Cash	83,465,045	4.9	-0.9	-0.8	0.8	1.4	1.5	0.2	1.5	2.1	1.6	8.4		
<i>91 Day T-Bills</i>			0.0	0.1	0.7	1.1	0.6	0.0	0.5	2.1	1.9	0.9		
PIMCO Short Duration Fund	33,876,681	2.0	-2.8	--	--	--	--	--	--	--	--	--	-3.4	Jul-21
<i>Bloomberg US Govt/Credit 1-3 Yr. TR</i>			-2.5	--	--	--	--	--	--	--	--	--	-3.0	Jul-21
<i>Short-Term Bond MStar MF Rank</i>			54	--	--	--	--	--	--	--	--	--		
Cash Account	31,206,111	1.8	0.2	0.7	1.5	1.5	0.9	0.8	1.9	2.2	1.5	1.0		
<i>91 Day T-Bills</i>			0.0	0.1	0.7	1.1	0.6	0.0	0.5	2.1	1.9	0.9		
Investment Cash	18,382,253	1.1	0.0	--	--	--	--	--	--	--	--	--	0.1	Jun-21
<i>91 Day T-Bills</i>			0.0	--	--	--	--	--	--	--	--	--	0.1	Jun-21
Total Opportunistic	34,249,455	2.0												
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	5,267,936	0.3												
Sixth Street Partners TAO	28,981,519	1.7												

Since Inception ranking is from the beginning of the first complete month of performance. Stone Harbor Local Markets terminated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Direct RE liquidated as of 12/19/2019. Pathway Private Equity Fund Investors 10 L.P. funded 3/25/2020. Sixth Street Partners TAO funded 4/16/2020. Gresham liquidated as of 9/30/2020. PIMCO Short Duration funded 7/14/2021. SSGA U.S. Govt Bond Index funded 7/16/2021. BlackRock TIPS funded 9/1/2021.

Total Fund Performance Summary (Net of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Fund	1,711,173,802	100.0	-2.3	8.0	10.1	8.5	7.5	14.8	9.2	15.8	-3.5	15.0
<i>Interim Policy Index</i>			-2.9	7.0	9.8	8.4	7.5	12.8	10.3	15.3	-2.1	13.3
<i>FFP SAA Index</i>			-0.8	14.4	--	--	--	21.0	--	--	--	--
Total Growth	1,156,901,704	67.6	-1.7	13.6	14.2	11.8	10.3	23.1	10.8	19.9	-4.4	19.7
<i>Custom Growth Benchmark</i>			-2.4	9.6	12.1	10.1	8.8	16.7	12.3	16.6	-2.8	16.4
Total Public Equity	691,009,059	40.4	-5.2	6.5	14.7	12.4	10.9	19.6	15.9	29.1	-9.5	25.2
<i>Russell 3000</i>			-5.3	11.9	18.2	15.4	14.3	25.7	20.9	31.0	-5.2	21.1
Total Domestic Equity	404,185,287	23.6	-2.6	10.6	16.1	14.4	13.5	24.6	13.1	28.7	-5.7	24.5
<i>Russell 3000</i>			-5.3	11.9	18.2	15.4	14.3	25.7	20.9	31.0	-5.2	21.1
PIMCO RAE US	115,924,247	6.8	0.7	12.8	14.5	11.8	12.5	27.8	3.9	25.0	-7.0	16.5
<i>S&P 500</i>			-4.6	15.6	18.9	16.0	14.6	28.7	18.4	31.5	-4.4	21.8
Loomis Sayles Large Cap Growth	96,245,627	5.6	-7.8	6.5	18.2	18.1	--	18.9	32.3	32.1	-2.1	33.5
<i>Russell 1000 Growth</i>			-9.0	15.0	23.6	20.9	--	27.6	38.5	36.4	-1.5	30.2
Boston Partners Large Cap Value	108,377,875	6.3	0.7	14.2	14.8	11.7	--	30.4	2.0	23.8	-8.9	--
<i>Russell 1000 Value</i>			-0.7	11.7	13.0	10.3	--	25.2	2.8	26.5	-8.3	--
Atlanta Capital Mgmt	83,637,538	4.9	-4.8	7.6	14.2	14.2	14.1	22.0	10.5	34.1	-5.3	25.6
<i>Russell 2500</i>			-5.8	0.3	13.8	11.6	12.1	18.2	20.0	27.8	-10.0	16.8
Total International Equity	286,823,772	16.8	-8.6	1.2	12.9	10.1	8.1	14.4	18.6	29.3	-12.8	25.8
<i>MSCI ACWI ex USA Gross</i>			-5.3	-1.0	8.0	7.3	6.0	8.3	11.1	22.1	-13.8	27.8
Dodge & Cox Intl Stock	151,018,245	8.8	-0.6	3.0	8.0	5.2	6.2	11.0	2.1	22.8	-18.0	23.9
<i>MSCI ACWI ex USA Value Gross</i>			0.3	4.0	6.1	5.3	4.8	11.1	-0.2	16.5	-13.4	23.3
WCM International Growth	135,805,527	7.9	-16.7	-2.0	16.2	14.3	--	17.7	33.1	35.8	-7.4	--
<i>MSCI ACWI ex USA Growth Gross</i>			-10.7	-5.9	9.5	9.0	--	5.4	22.6	27.8	-14.1	--
Total Private Equity	131,437,064	7.7										
Harbourvest Partners IX Buyout Fund L.P.	15,651,235	0.9										
Pathway Private Equity Fund Investors 9 L.P.	87,483,543	5.1										
Harbourvest 2018 Global Fund L.P.	18,597,751	1.1										
Pathway Private Equity Fund Investors 10 L.P.	9,704,535	0.6										

Global Fund L.P. funded 12/14/2018. Stone Harbor Local Markets terminated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Direct RE liquidatrf as of 12/19/2019. Pathway Private Equity Fund Investors 10 L.P. funded 3/25/2020. Sixth Street Partners TAO funded 4/16/2020. Brandywine has changed its strategy from Global Fixed Income to International Fixed Income as of 6/30/2020.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Private Credit	93,527,587	5.5										
Sixth Street Partners DCP	83,027,587	4.9										
Harbourvest SLO Fund	10,500,000	0.6										
Total Real Estate	240,927,994	14.1	5.9	23.7	9.6	8.5	9.7	18.5	1.1	4.3	7.5	7.8
<i>NCREIF Property Index</i>			5.3	21.9	9.6	8.5	9.6	17.7	1.6	6.4	6.7	7.0
JP Morgan Core Real Estate	177,719,728	10.4	6.3	25.4	9.7	8.1	9.7	19.9	0.5	3.4	7.0	6.1
<i>NCREIF-ODCE</i>			7.4	28.5	11.3	9.9	10.9	22.2	1.2	5.3	8.3	7.6
<i>NCREIF Property Index</i>			5.3	21.9	9.6	8.5	9.6	17.7	1.6	6.4	6.7	7.0
ARA American Strategic Value Realty	63,208,266	3.7	5.0	18.7	9.5	8.7	--	14.0	3.8	7.3	9.1	7.4
<i>NCREIF-ODCE</i>			7.4	28.5	11.3	9.9	--	22.2	1.2	5.3	8.3	7.6
<i>NCREIF Property Index</i>			5.3	21.9	9.6	8.5	--	17.7	1.6	6.4	6.7	7.0
Total Risk Diversifying	436,557,597	25.5	-4.6	-3.9	1.4	1.9	2.0	-2.0	6.1	8.4	-2.2	7.5
<i>Custom Risk Diversifying Benchmark</i>			-5.8	-4.9	1.2	1.8	2.1	-3.2	7.5	8.7	0.0	3.5
Total Domestic Fixed Income	317,507,905	18.6	-4.1	-1.9	3.1	3.2	2.9	0.5	7.7	9.5	0.0	3.9
<i>Bloomberg US Aggregate TR</i>			-5.9	-4.2	1.7	2.1	2.2	-1.5	7.5	8.7	0.0	3.5
BlackRock Core Bond	73,213,021	4.3	-6.4	-5.0	2.0	2.4	--	-1.8	9.1	9.9	0.1	--
<i>Bloomberg US Aggregate TR</i>			-5.9	-4.2	1.7	2.1	--	-1.5	7.5	8.7	0.0	--
Dodge & Cox Income Fund	78,393,429	4.6	-5.2	-3.6	2.8	3.0	--	-0.9	9.4	9.7	-0.3	--
<i>Bloomberg US Aggregate TR</i>			-5.9	-4.2	1.7	2.1	--	-1.5	7.5	8.7	0.0	--
Pacific Asset Corporate Loan	79,062,912	4.6	0.2	3.8	4.2	4.1	--	5.2	2.6	8.7	0.7	4.6
<i>S&P/LSTA Leveraged Loan Index</i>			-0.1	3.3	4.2	4.0	--	5.2	3.1	8.6	0.4	4.1
SSGA U.S. Govt Bond Index	42,497,694	2.5	-5.5	--	--	--	--	--	--	--	--	--
<i>Bloomberg US Treasury 7-10 Yr TR</i>			-6.6	--	--	--	--	--	--	--	--	--
BlackRock TIPS	44,340,849	2.6	-3.0	--	--	--	--	--	--	--	--	--
<i>Bloomberg US TIPS TR</i>			-3.0	--	--	--	--	--	--	--	--	--

Stone Harbor Local Markets terminated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Direct RE liquidatrf as of 12/19/2019. Pathway Private Equity Fund Investors 10 L.P. funded 3/25/2020. Sixth Street Partners TAO funded 4/16/2020. Gresham liquidated as of 9/30/2020. PIMCO Short Duration funded 7/14/2021. SSGA U.S. Govt Bond Index funded 7/16/2021. BlackRock TIPS funded 9/1/2021.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Global Fixed	119,049,692	7.0	-6.0	-8.9	-1.4	0.1	-0.1	-7.7	6.0	6.9	-4.7	13.3
<i>FTSE World Govt Bond Index</i>			-6.5	-7.7	-0.1	1.3	0.3	-7.0	10.1	5.9	-0.8	7.5
Brandywine Global Fixed Income	58,168,428	3.4	-1.7	-3.3	--	--	--	-4.4	--	--	--	--
<i>FTSE WGBI ex US TR</i>			-7.1	-10.4	--	--	--	-9.7	--	--	--	--
Ashmore EM Blended Debt Fund	60,881,264	3.6	-9.7	-13.4	-4.8	--	--	-10.4	2.1	--	--	--
<i>50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELMI+</i>			-8.0	-7.3	-0.5	--	--	-3.9	3.9	--	--	--
Total Liquidity	83,465,045	4.9	-0.9	-0.9	0.8	1.4	1.5	0.2	1.5	2.1	1.6	8.4
<i>91 Day T-Bills</i>			0.0	0.1	0.7	1.1	0.6	0.0	0.5	2.1	1.9	0.9
Total Cash	83,465,045	4.9	-0.9	-0.9	0.8	1.4	1.5	0.2	1.5	2.1	1.6	8.4
<i>91 Day T-Bills</i>			0.0	0.1	0.7	1.1	0.6	0.0	0.5	2.1	1.9	0.9
PIMCO Short Duration Fund	33,876,681	2.0	-2.9	--	--	--	--	--	--	--	--	--
<i>Bloomberg US Govt/Credit 1-3 Yr. TR</i>			-2.5	--	--	--	--	--	--	--	--	--
Cash Account	31,206,111	1.8	0.2	0.7	1.5	1.5	0.9	0.8	1.9	2.2	1.5	1.0
<i>91 Day T-Bills</i>			0.0	0.1	0.7	1.1	0.6	0.0	0.5	2.1	1.9	0.9
Investment Cash	18,382,253	1.1	0.0	--	--	--	--	--	--	--	--	--
<i>91 Day T-Bills</i>			0.0	--	--	--	--	--	--	--	--	--
Total Opportunistic	34,249,455	2.0										
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	5,267,936	0.3										
Sixth Street Partners TAO	28,981,519	1.7										

Stone Harbor Local Markets terminated 3/22/2019. Ashmore EM Blended Debt funded 3/31/2019. Direct RE liquidatrf as of 12/19/2019. Pathway Private Equity Fund Investors 10 L.P. funded 3/25/2020. Sixth Street Partners TAO funded 4/16/2020. Gresham liquidated as of 9/30/2020. PIMCO Short Duration funded 7/14/2021. BlackRock TIPS funded 9/1/2021.

Investment Manager
Performance Analysis - 3 & 5 Years (Net of Fees)

Period Ending: March 31, 2022

3 Years

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
PIMCO RAE US	14.51%	-4.42%	19.64%	-4.71%	1.02	7.77%	0.84	0.70	-0.57	84.61%	101.35%
Loomis Sayles Large Cap Growth	18.16%	-5.44%	17.04%	-1.84%	0.85	5.19%	0.94	1.03	-1.05	72.49%	89.01%
Boston Partners Large Cap Value	14.85%	1.82%	20.16%	1.27%	1.04	3.17%	0.98	0.70	0.58	105.69%	98.23%
Atlanta Capital Mgmt	14.17%	0.38%	20.68%	2.35%	0.86	7.77%	0.88	0.65	0.05	81.96%	84.89%
Dodge & Cox Intl Stock	8.01%	1.92%	22.82%	1.00%	1.15	5.24%	0.96	0.32	0.37	132.86%	111.96%
WCM International Growth	16.20%	6.74%	17.97%	6.11%	1.07	6.12%	0.89	0.86	1.10	122.96%	90.53%
BlackRock Core Bond	2.01%	0.33%	5.00%	0.09%	1.14	2.02%	0.85	0.27	0.16	127.23%	124.08%
Dodge & Cox Income Fund	2.85%	1.16%	4.30%	1.34%	0.89	2.39%	0.70	0.51	0.49	113.11%	91.49%
Pacific Asset Corporate Loan	4.25%	0.02%	6.13%	1.23%	0.72	2.56%	0.98	0.58	0.01	79.17%	68.47%
Ashmore EM Blended Debt Fund	-4.77%	-4.27%	15.54%	-3.99%	1.57	6.34%	0.96	-0.35	-0.67	147.82%	154.11%
JP Morgan Core Real Estate	9.74%	-1.55%	3.77%	6.65%	0.27	6.27%	0.29	2.38	-0.25	31.74%	109.22%
ARA American Strategic Value Realty	9.54%	-1.76%	5.29%	11.32%	-0.16	10.05%	0.05	1.68	-0.17	--	--

5 Years

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
PIMCO RAE US	11.85%	-4.14%	17.04%	-4.22%	1.00	6.24%	0.87	0.63	-0.66	79.36%	100.71%
Loomis Sayles Large Cap Growth	18.12%	-2.76%	15.93%	-0.25%	0.88	4.80%	0.93	1.07	-0.58	78.13%	92.72%
Boston Partners Large Cap Value	11.66%	1.37%	17.55%	0.91%	1.04	3.03%	0.97	0.60	0.45	106.66%	98.86%
Atlanta Capital Mgmt	14.25%	2.67%	18.37%	4.30%	0.86	6.80%	0.89	0.72	0.39	88.96%	86.07%
Dodge & Cox Intl Stock	5.16%	-0.13%	19.55%	-0.90%	1.14	4.68%	0.96	0.21	-0.03	124.68%	109.84%
WCM International Growth	14.29%	5.33%	15.63%	5.12%	1.02	5.34%	0.88	0.85	1.00	113.72%	85.95%
JP Morgan Core Real Estate	8.14%	-1.74%	3.01%	5.61%	0.26	5.21%	0.27	2.34	-0.33	27.81%	109.22%
Dodge & Cox Income Fund	3.01%	0.87%	3.56%	1.23%	0.83	2.06%	0.69	0.55	0.42	99.36%	78.02%
Pacific Asset Corporate Loan	4.09%	0.08%	5.08%	1.14%	0.73	1.99%	0.97	0.60	0.04	85.32%	75.29%

Private Markets
Non Marketable Securities Overview

Period Ending: March 31, 2022

Vintage	Manager & Fund Name	Estimated 3/31 Market Value ³	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value as of IRR date	Distrib./ Paid-In (DPI) ¹	Tot. Value/ Paid-In (TVPI) ²	Net IRR Since Inception ⁵	IRR Date
2011	HarbourVest Partners IX-Buyout Fund L.P.	\$15,651,235	\$20,000,000	\$17,050,000	85%	\$2,950,000	\$22,392,994	\$15,651,235	131.3%	223.1%	20.4%	12/31/21
2018	HarbourVest Partners 2018 Global Fund L.P.	\$18,597,751	\$20,000,000	\$11,600,000	58%	\$8,400,000	\$1,022,070	\$18,597,751	8.8%	169.1%	37.0%	12/31/21
2010	KKR Mezzanine Partners I L.P. ⁴	\$5,267,936	\$20,000,000	\$26,893,560	134%	-\$6,893,560	\$26,702,877	\$5,267,936	99.3%	118.9%	6.9%	12/31/21
2016	Sixth Street Partners DCP	\$83,027,587	\$132,500,000	\$91,546,054	69%	\$40,953,946	\$35,788,692	\$80,501,361	39.1%	129.8%	11.0%	12/31/21
2017	Pathway Private Equity Fund Investors 9 L.P.	\$87,483,543	\$65,000,000	\$51,323,786	79%	\$13,676,214	\$12,290,037	\$57,153,982	23.9%	194.4%	29.8%	3/31/21
2020	Pathway Private Equity Fund Investors 10 L.P.	\$9,704,535	\$20,000,000	\$6,030,938	30%	\$13,969,062	\$0	-	0.0%	160.9%	-	-
2020	Sixth Street Partners TAO	\$28,981,519	\$60,000,000	\$27,607,512	46%	\$32,392,488	\$5,379,626	\$29,066,551	19.5%	124.5%	11.3%	12/31/21
Total Alternative Illiquids		\$248,714,106	\$337,500,000	\$232,051,851	69%	\$105,448,149	\$103,576,296	\$206,238,816	88.9%	133.5%		
% of Portfolio (Market Value)		14.5%										

	Management Fee	Admin Fee	Interest Expense	Other Expense	Total Expense ⁶
HarbourVest Partners IX-Buyout Fund L.P.	\$49,819	\$0	\$0	\$6,498	\$56,317
HarbourVest Partners 2018 Global Fund L.P.	\$46,695	\$0	\$0	\$16,716	\$63,411
KKR Mezzanine Partners I L.P.	\$7,919	\$0	\$0	\$1,100	\$9,019
Sixth Street Partners DCP	\$0	\$0	\$0	\$60,272	\$60,272
Pathway Private Equity Fund Investors 9 L.P.	\$0	\$0	\$0	\$0	\$0
Pathway Private Equity Fund Investors 10 L.P.	\$0	\$0	\$0	\$0	\$0
Sixth Street Partners TAO	\$134,966	\$0	\$64,378	\$48,213	\$247,557
	\$239,399	\$0	\$64,378	\$132,799	\$436,576

¹(DPI) is equal to (capital returned / capital called)

²(TVPI) is equal to (market value + capital returned) / capital called

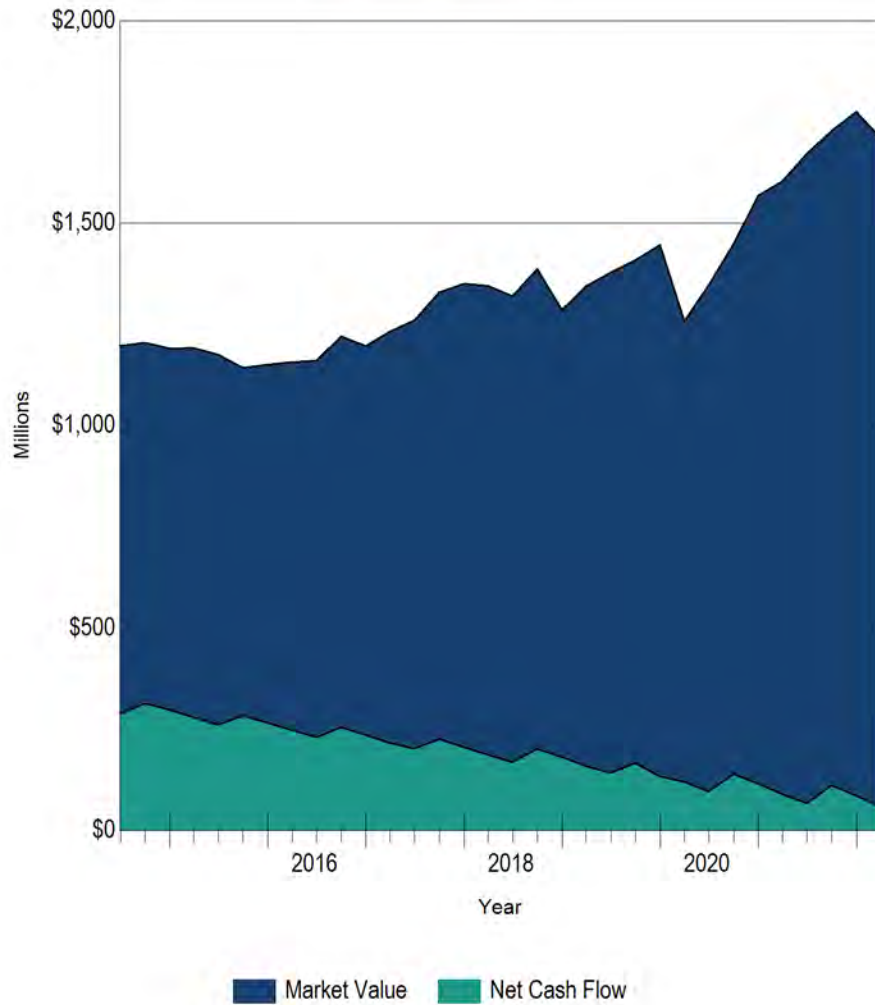
³Last known market value + capital calls - distributions

⁴Investment period ended, capital called includes recycled capital. Liquidated as of June 2020.

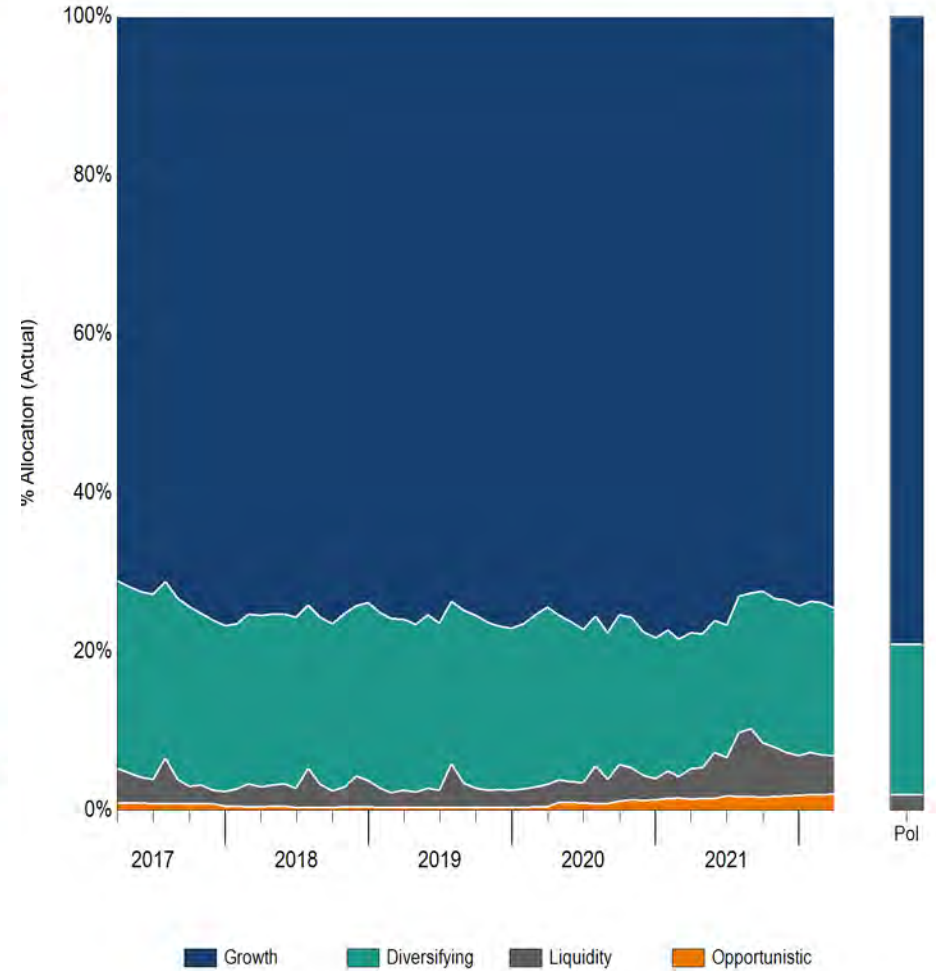
⁵Net IRR is calculated on the cash flows of the underlying investments of the fund and is net of the underlying fund fees and carried interest.

⁶All fees and expenses are for 4Q 2021.

Market Value History



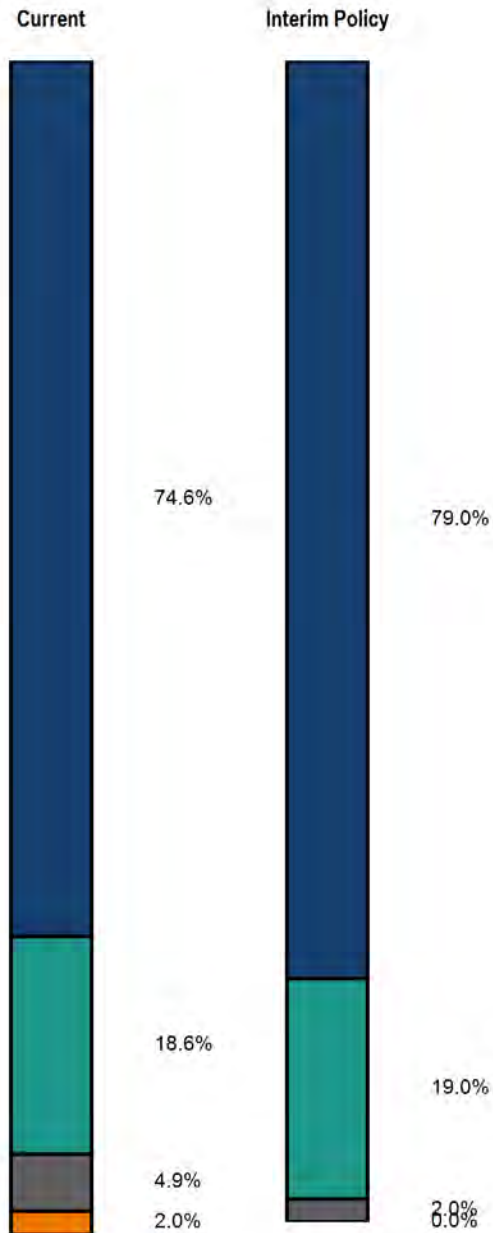
Asset Allocation History



Total Fund

Asset Allocation vs. Interim Policy

Period Ending: March 31, 2022



	Current Balance	Current Allocation	Interim Policy	Difference	Interim Policy Range	Within IPS Range?
Growth	\$1,275,951,396	74.6%	79.0%	-\$75,875,908	0.0% - 100.0%	Yes
Diversifying	\$317,507,905	18.6%	19.0%	-\$7,615,117	10.0% - 30.0%	Yes
Liquidity	\$83,465,045	4.9%	2.0%	\$49,241,569	0.0% - 5.0%	Yes
Opportunistic	\$34,249,455	2.0%	0.0%	\$34,249,455	0.0% - 10.0%	Yes
Total	\$1,711,173,802	100.0%	100.0%			

Total Fund Investment Fund Fee Analysis

Period Ending: March 31, 2022

Account	Fee Schedule	Market Value As of 3/31/2022	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
ARA American Strategic Value Realty	1.25% of First 10.0 Mil, 1.20% of Next 15.0 Mil, 1.10% of Next 25.0 Mil, 1.00% Thereafter	\$63,208,266	3.7%	\$712,083	1.13%
Ashmore EM Blended Debt Fund	1.00% of Assets	\$60,881,264	3.6%	\$608,813	1.00%
Atlanta Capital Mgmt	0.80% of First 50.0 Mil, 0.70% of Next 100.0 Mil, 0.60% Thereafter	\$83,637,538	4.9%	\$635,463	0.76%
BlackRock Core Bond	0.28% of First 100.0 Mil, 0.26% Thereafter	\$73,213,021	4.3%	\$204,996	0.28%
BlackRock TIPS	0.02% of First 100.0 Mil, 0.02% of Next 400.0 Mil, 0.01% Thereafter	\$44,340,849	2.6%	\$9,977	0.02%
Boston Partners Large Cap Value	0.40% of Assets	\$108,377,875	6.3%	\$433,512	0.40%
Brandywine Global Fixed Income	0.45% of First 50.0 Mil, 0.40% of Next 50.0 Mil, 0.35% Thereafter	\$58,168,428	3.4%	\$257,674	0.44%
Cash Account	No Fee	\$31,206,111	1.8%	--	--
Dodge & Cox Income Fund	0.41% of Assets	\$78,393,429	4.6%	\$321,413	0.41%
Dodge & Cox Intl Stock	0.64% of Assets	\$151,018,245	8.8%	\$966,517	0.64%
Harbourvest 2018 Global Fund L.P.	282,000 Annually	\$18,597,751	1.1%	\$282,000	1.52%
Harbourvest Partners IX Buyout Fund L.P.	200,000 Annually	\$15,651,235	0.9%	\$200,000	1.28%
Harbourvest SLO Fund	No Fee	\$10,500,000	0.6%	--	--
Investment Cash	No Fee	\$18,382,253	1.1%	--	--
JP Morgan Core Real Estate	0.92% of First 100.0 Mil, 0.80% of Next 150.0 Mil, 0.70% of Next 250.0 Mil, 0.50% Thereafter	\$177,719,728	10.4%	\$1,541,758	0.87%

HarbourVest, KKR and PIMCO Distressed Credit fees are estimated gross management fees only and do not include incentive allocations or offsetting cash flows received by the fund. Pathway fee steps up and down over time, with an effective average of 0.71% up to \$25m, 0.67% up to \$50m, 0.63% up to \$75m, and 0.40% above \$75m.

Clifton Group fee schedule represents contractual minimum fee. Actual fee charged is \$1,500 per month through at least 6/30/2015.

TPG: No management fee at SMA level. Subject to the annual fees of each of the underlying TSSP funds. (1) TAO 65bps on unfunded commitments and 1.35% on remaining capital contributions (long-term designation) (2) TSLE 1.5% on commitments, 1.25% on remaining capital contributions post commitment period (3) TICP 30bps on remaining capital contributions (4) TCS 1.0% on unfunded commitments, 1.5% on remaining capital contributions.

Total Fund Investment Fund Fee Analysis

Period Ending: March 31, 2022

Account	Fee Schedule	Market Value As of 3/31/2022	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	300,000 Annually	\$5,267,936	0.3%	\$300,000	5.69%
Loomis Sayles Large Cap Growth	0.45% of First 100.0 Mil, 0.40% Thereafter	\$96,245,627	5.6%	\$433,105	0.45%
Pacific Asset Corporate Loan	0.37% of Assets	\$79,062,912	4.6%	\$292,533	0.37%
Pathway Private Equity Fund Investors 10 L.P.	Please see footnote	\$9,704,535	0.6%	--	--
Pathway Private Equity Fund Investors 9 L.P.	Please see footnote	\$87,483,543	5.1%	--	--
PIMCO RAE US	0.40% of Assets	\$115,924,247	6.8%	\$463,697	0.40%
PIMCO Short Duration Fund	0.50% of Assets	\$33,876,681	2.0%	\$169,383	0.50%
Sixth Street Partners DCP	Please see footnote	\$83,027,587	4.9%	--	--
Sixth Street Partners TAO	Please see footnote	\$28,981,519	1.7%	--	--
SSGA U.S. Govt Bond Index	0.04% of First 50.0 Mil, 0.03% of Next 50.0 Mil, 0.03% Thereafter	\$42,497,694	2.5%	\$16,999	0.04%
WCM International Growth	0.70% of Assets	\$135,805,527	7.9%	\$950,639	0.70%
Investment Management Fee		\$1,711,173,802	100.0%	\$8,800,560	0.51%

HarbourVest, KKR and PIMCO Distressed Credit fees are estimated gross management fees only and do not include incentive allocations or offsetting cash flows received by the fund. Pathway fee steps up and down over time, with an effective average of 0.71% up to \$25m, 0.67% up to \$50m, 0.63% up to \$75m, and 0.40% above \$75m.

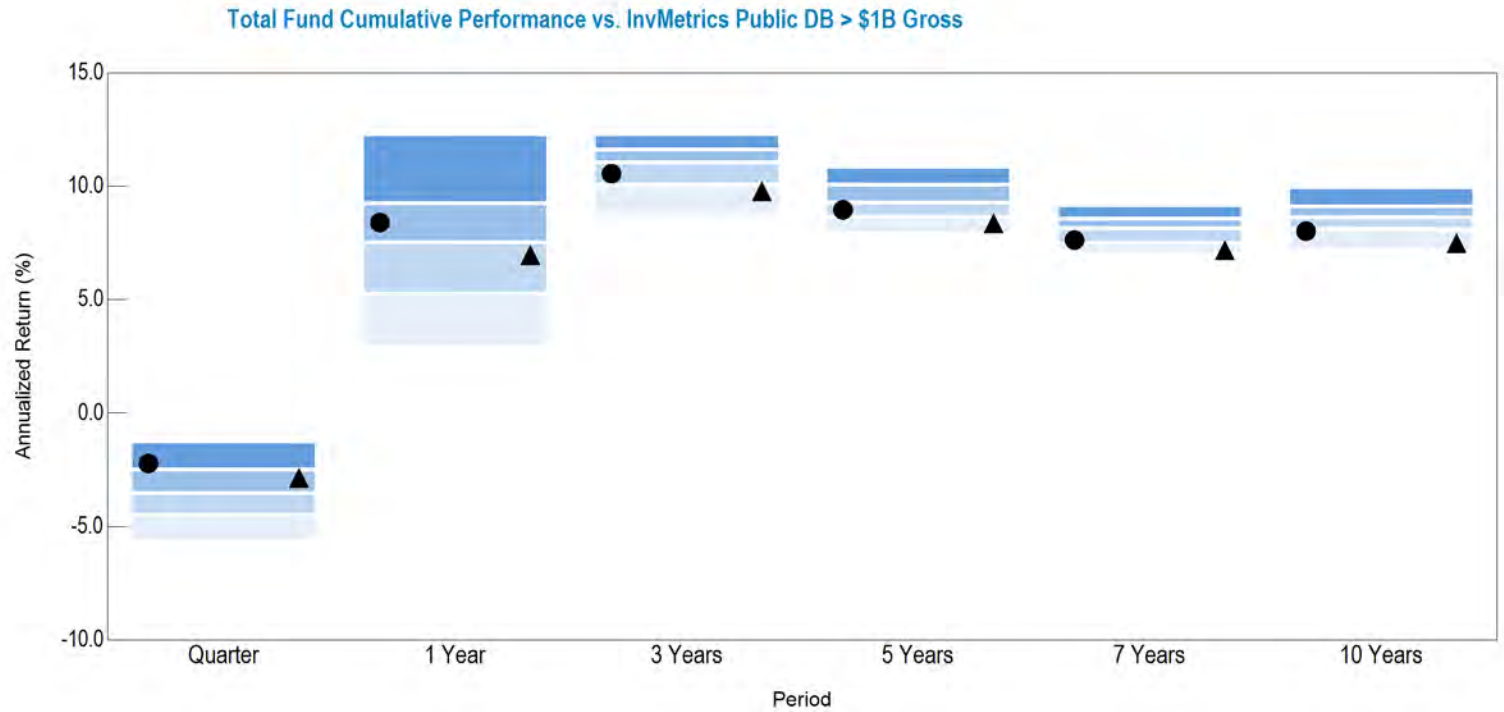
Clifton Group fee schedule represents contractual minimum fee. Actual fee charged is \$1,500 per month through at least 6/30/2015.

TPG: No management fee at SMA level. Subject to the annual fees of each of the underlying TSSP funds. (1) TAO 65bps on unfunded commitments and 1.35% on remaining capital contributions (long-term designation) (2) TSLE 1.5% on commitments, 1.25% on remaining capital contributions post commitment period (3) TICP 30bps on remaining capital contributions (4) TCS 1.0% on unfunded commitments, 1.5% on remaining capital contributions.

Total Fund

Peer Universe Comparison: Cumulative Performance (Gross of Fees)

Period Ending: March 31, 2022

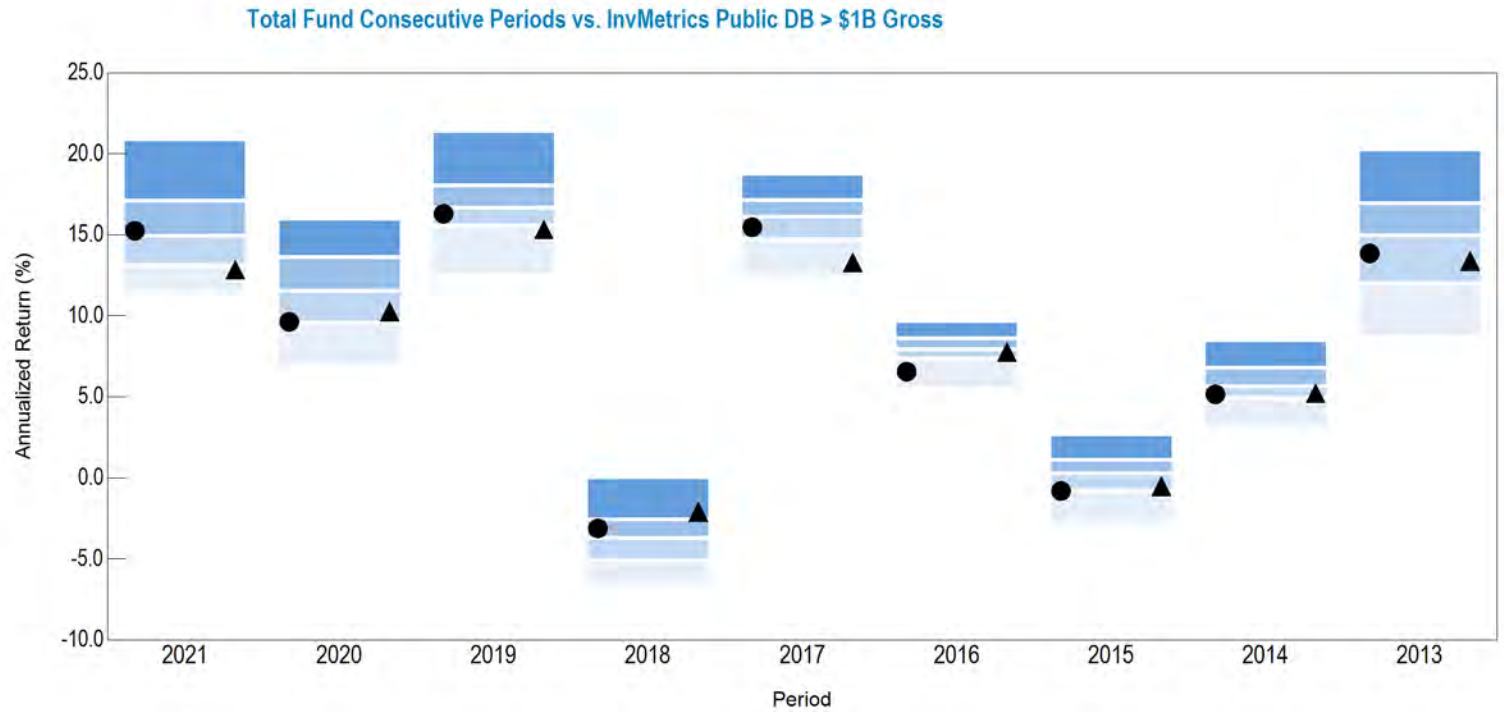


	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-1.2		12.3		12.3		10.8		9.1		9.9	
25th Percentile	-2.5		9.3		11.6		10.1		8.6		9.1	
Median	-3.5		7.6		11.1		9.3		8.2		8.7	
75th Percentile	-4.5		5.3		10.1		8.7		7.5		8.1	
95th Percentile	-5.6		3.0		8.7		7.9		7.1		7.2	
# of Portfolios	42		41		41		41		41		40	
● Total Fund	-2.2	(13)	8.4	(35)	10.5	(58)	9.0	(70)	7.6	(70)	8.0	(83)
▲ Interim Policy Index	-2.9	(40)	7.0	(54)	9.8	(85)	8.4	(83)	7.2	(91)	7.5	(93)

Total Fund

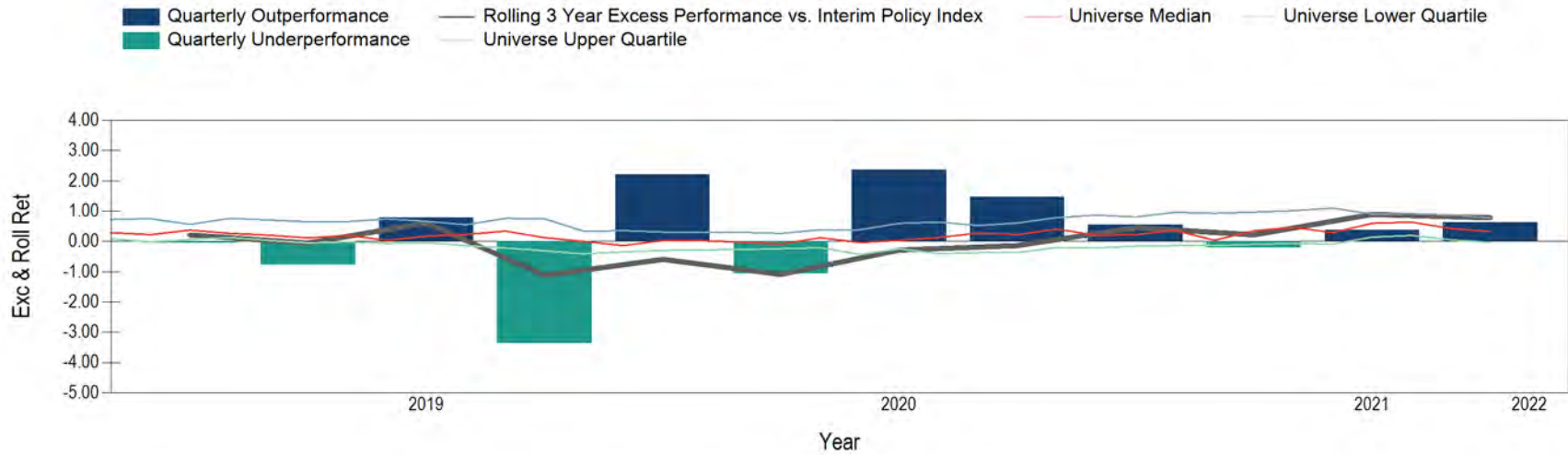
Peer Universe Comparison: Consecutive Periods (Gross of Fees)

Period Ending: March 31, 2022

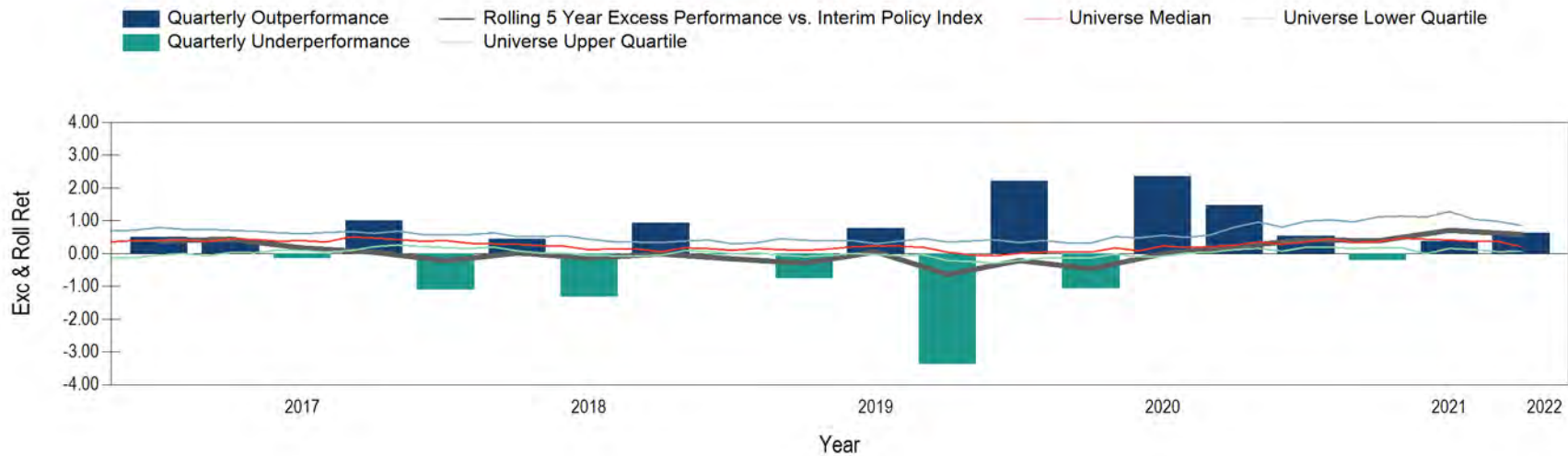


	2021	2020	2019	2018	2017	2016	2015	2014	2013
5th Percentile	20.9	16.0	21.4	0.0	18.8	9.7	2.7	8.5	20.2
25th Percentile	17.1	13.6	18.1	-2.6	17.2	8.6	1.1	6.8	17.0
Median	14.9	11.5	16.7	-3.7	16.2	8.0	0.3	5.7	15.0
75th Percentile	13.2	9.6	15.6	-5.1	14.8	7.4	-0.7	4.9	12.0
95th Percentile	11.4	6.9	12.5	-6.6	12.4	5.5	-2.8	3.1	8.7
# of Portfolios	84	94	81	71	98	92	98	79	67
● Total Fund	15.2 (47)	9.6 (74)	16.3 (60)	-3.1 (36)	15.5 (69)	6.6 (91)	-0.8 (80)	5.1 (69)	13.8 (69)
▲ Interim Policy Index	12.8 (81)	10.3 (69)	15.3 (81)	-2.1 (20)	13.3 (90)	7.8 (62)	-0.5 (70)	5.2 (67)	13.4 (70)

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance

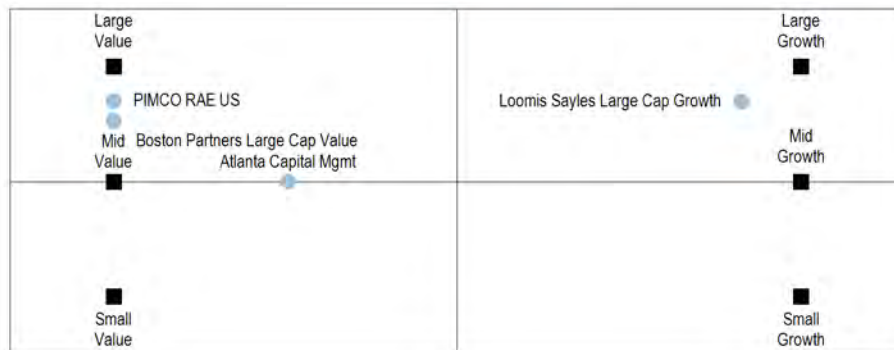


Total Domestic Equity Asset Class Overview (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Domestic Equity	404,185,287	-2.5	11.2	16.6	15.0	14.1	25.3	13.7	29.4	-5.2	25.1
<i>Russell 3000</i>		-5.3	11.9	18.2	15.4	14.3	25.7	20.9	31.0	-5.2	21.1
<i>InvMetrics Public DB US Eq Gross Rank</i>		1	60	76	28	30	62	91	66	36	4
PIMCO RAE US	115,924,247	0.8	13.2	15.0	12.3	12.9	28.3	4.4	25.5	-6.6	17.0
<i>S&P 500</i>		-4.6	15.6	18.9	16.0	14.6	28.7	18.4	31.5	-4.4	21.8
<i>eV US Large Cap Core Equity Gross Rank</i>		2	58	85	91	84	47	96	83	72	89
Loomis Sayles Large Cap Growth	96,245,627	-7.7	7.0	18.7	18.7	--	19.4	32.8	32.7	-1.7	34.1
<i>Russell 1000 Growth</i>		-9.0	15.0	23.6	20.9	--	27.6	38.5	36.4	-1.5	30.2
<i>eV US Large Cap Growth Equity Gross Rank</i>		23	70	76	59	--	81	61	68	58	16
Boston Partners Large Cap Value	108,377,875	0.8	14.7	15.3	12.1	--	30.9	2.4	24.3	-8.5	--
<i>Russell 1000 Value</i>		-0.7	11.7	13.0	10.3	--	25.2	2.8	26.5	-8.3	--
<i>eV US Large Cap Value Equity Gross Rank</i>		32	37	47	50	--	19	64	77	54	--
Atlanta Capital Mgmt	83,637,538	-4.6	8.4	15.1	15.1	14.9	23.0	11.4	35.1	-4.5	26.6
<i>Russell 2500</i>		-5.8	0.3	13.8	11.6	12.1	18.2	20.0	27.8	-10.0	16.8
<i>eV US Small-Mid Cap Equity Gross Rank</i>		41	24	55	30	14	58	62	14	25	15

U.S. Effective Style Map
3 Years Ending March 31, 2022



U.S. Effective Style Map
5 Years Ending March 31, 2022



Total Domestic Equity
Asset Class Overview (Net of Fees)

Period Ending: March 31, 2022

	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Domestic Equity	404,185,287	-2.6	10.6	16.1	14.4	13.5	24.6	13.1	28.7	-5.7	24.5
<i>Russell 3000</i>		-5.3	11.9	18.2	15.4	14.3	25.7	20.9	31.0	-5.2	21.1
PIMCO RAE US	115,924,247	0.7	12.8	14.5	11.8	12.5	27.8	3.9	25.0	-7.0	16.5
<i>S&P 500</i>		-4.6	15.6	18.9	16.0	14.6	28.7	18.4	31.5	-4.4	21.8
Loomis Sayles Large Cap Growth	96,245,627	-7.8	6.5	18.2	18.1	--	18.9	32.3	32.1	-2.1	33.5
<i>Russell 1000 Growth</i>		-9.0	15.0	23.6	20.9	--	27.6	38.5	36.4	-1.5	30.2
Boston Partners Large Cap Value	108,377,875	0.7	14.2	14.8	11.7	--	30.4	2.0	23.8	-8.9	--
<i>Russell 1000 Value</i>		-0.7	11.7	13.0	10.3	--	25.2	2.8	26.5	-8.3	--
Atlanta Capital Mgmt	83,637,538	-4.8	7.6	14.2	14.2	14.1	22.0	10.5	34.1	-5.3	25.6
<i>Russell 2500</i>		-5.8	0.3	13.8	11.6	12.1	18.2	20.0	27.8	-10.0	16.8

Total Domestic Equity
 Asset Class Overview (Net of Fees)

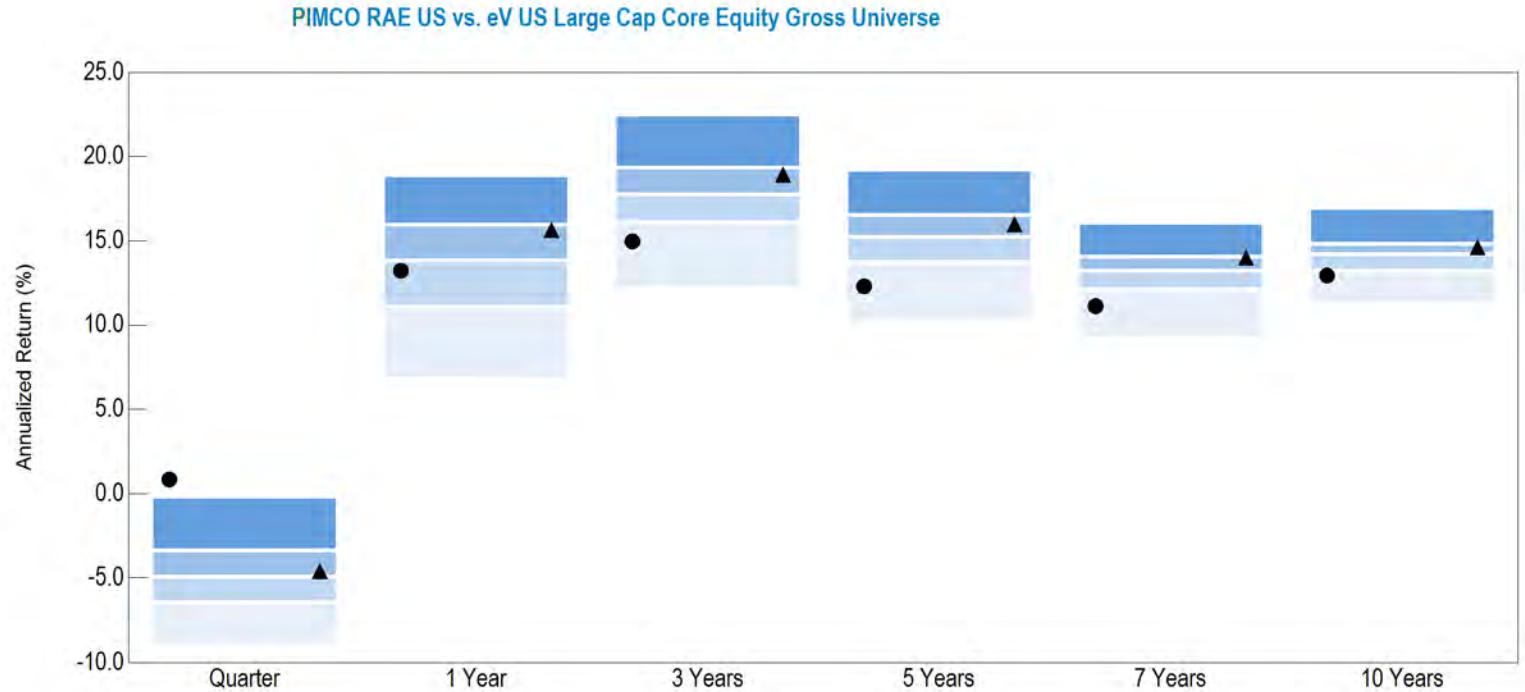
Period Ending: March 31, 2022

Correlation Matrix
 Last 1 Year

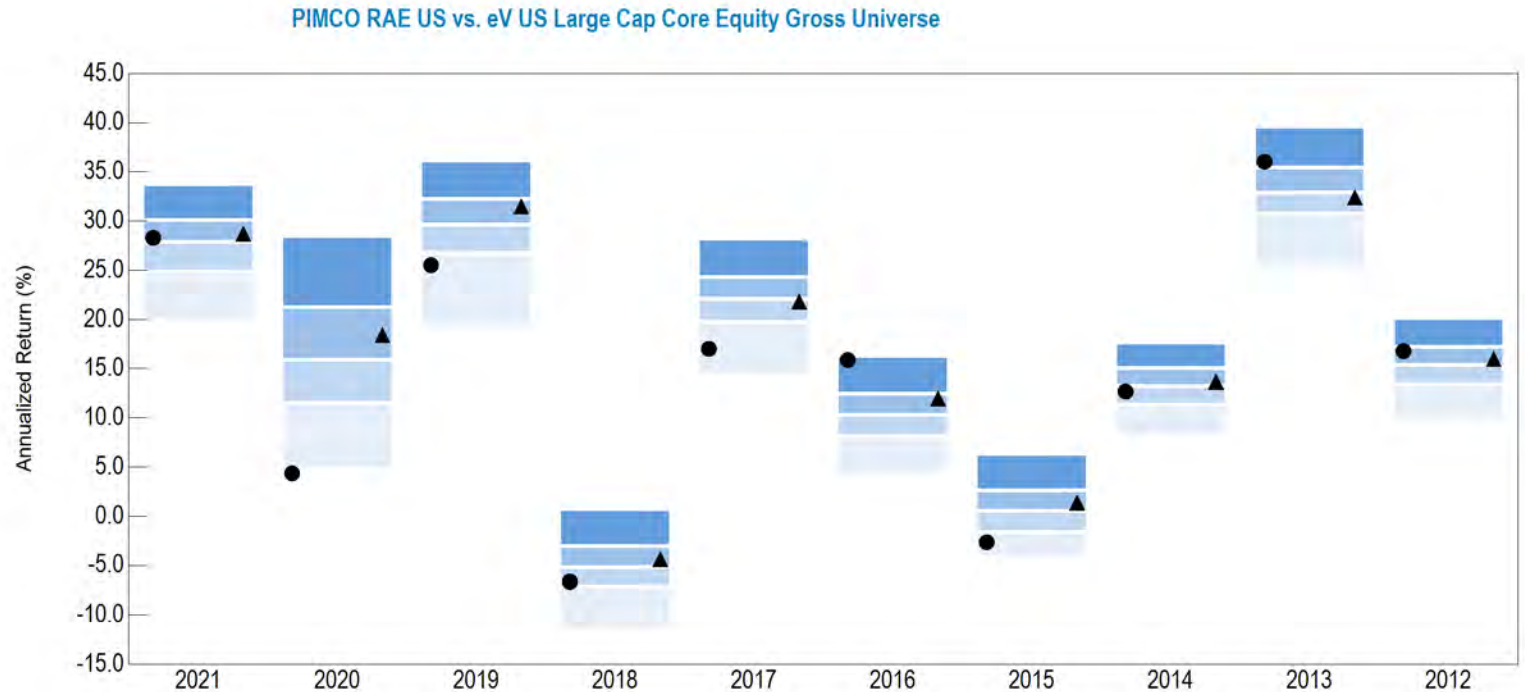
	Total Domestic Equity	PIMCO RAE US	Loomis Sayles Large Cap Growth	Boston Partners Large Cap Value	Atlanta Capital Mgmt	Russell 3000
Total Domestic Equity	1.00	--	--	--	--	--
PIMCO RAE US	0.94	1.00	--	--	--	--
Loomis Sayles Large Cap Growth	0.92	0.73	1.00	--	--	--
Boston Partners Large Cap Value	0.95	1.00	0.76	1.00	--	--
Atlanta Capital Mgmt	0.98	0.90	0.89	0.93	1.00	--
Russell 3000	0.96	0.81	0.97	0.84	0.97	1.00

PIMCO RAE US
Cumulative Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022

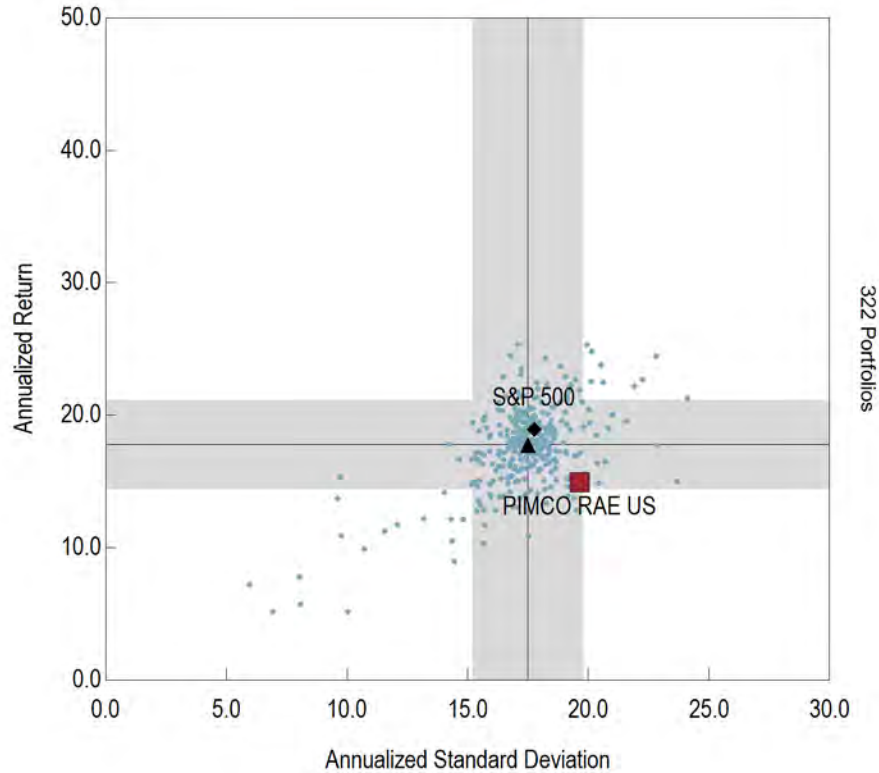


	Return (Rank)		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-0.2		18.9		22.5		19.2		16.1		17.0	
25th Percentile	-3.3		16.0		19.4		16.6		14.1		14.9	
Median	-4.9		13.9		17.8		15.3		13.3		14.2	
75th Percentile	-6.4		11.1		16.1		13.8		12.1		13.3	
95th Percentile	-8.9		6.9		12.2		10.3		9.3		11.3	
# of Portfolios	330		330		322		302		279		244	
● PIMCO RAE US	0.8	(2)	13.2	(58)	15.0	(85)	12.3	(91)	11.1	(88)	12.9	(84)
▲ S&P 500	-4.6	(45)	15.6	(31)	18.9	(31)	16.0	(37)	14.0	(29)	14.6	(34)



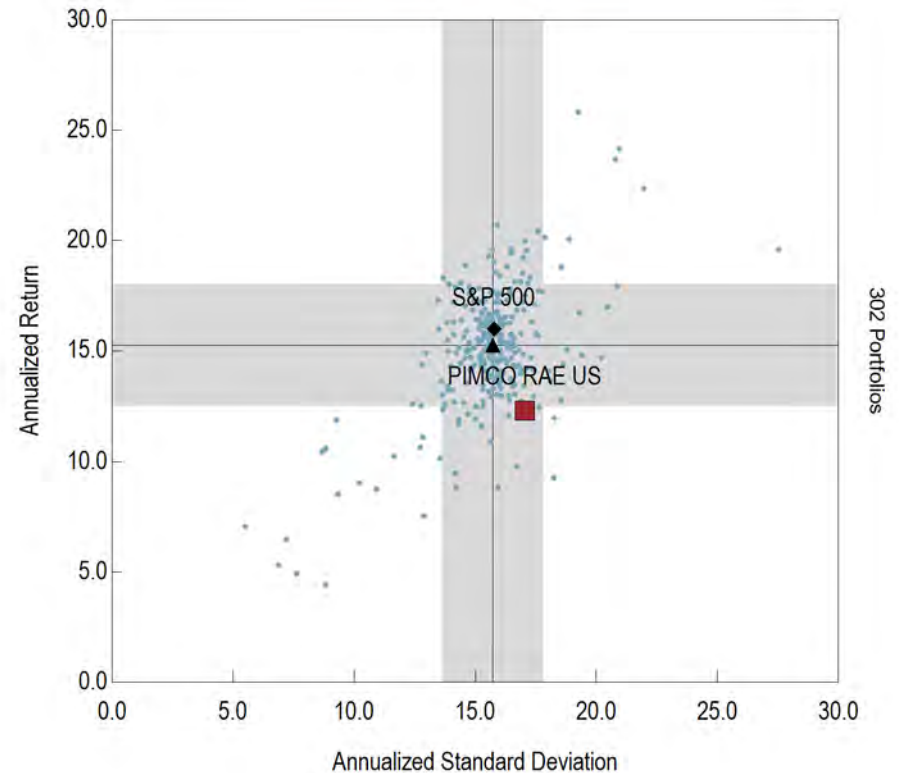
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
5th Percentile	33.7	28.5	36.1	0.7	28.2	16.3	6.3	17.7	39.6	20.1
25th Percentile	30.1	21.3	32.3	-3.0	24.3	12.5	2.7	15.1	35.5	17.2
Median	27.9	15.9	29.7	-5.1	22.1	10.4	0.6	13.3	32.9	15.4
75th Percentile	25.0	11.6	26.8	-7.1	19.8	8.2	-1.6	11.4	30.8	13.4
95th Percentile	19.9	4.8	19.2	-11.4	14.4	4.3	-4.1	8.2	25.4	9.8
# of Portfolios	328	323	318	316	318	308	267	267	261	254
● PIMCO RAE US	28.3 (47)	4.4 (96)	25.5 (83)	-6.6 (72)	17.0 (89)	15.9 (6)	-2.7 (86)	12.7 (58)	36.0 (22)	16.8 (29)
▲ S&P 500	28.7 (40)	18.4 (41)	31.5 (33)	-4.4 (40)	21.8 (53)	12.0 (31)	1.4 (42)	13.7 (42)	32.4 (58)	16.0 (41)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022

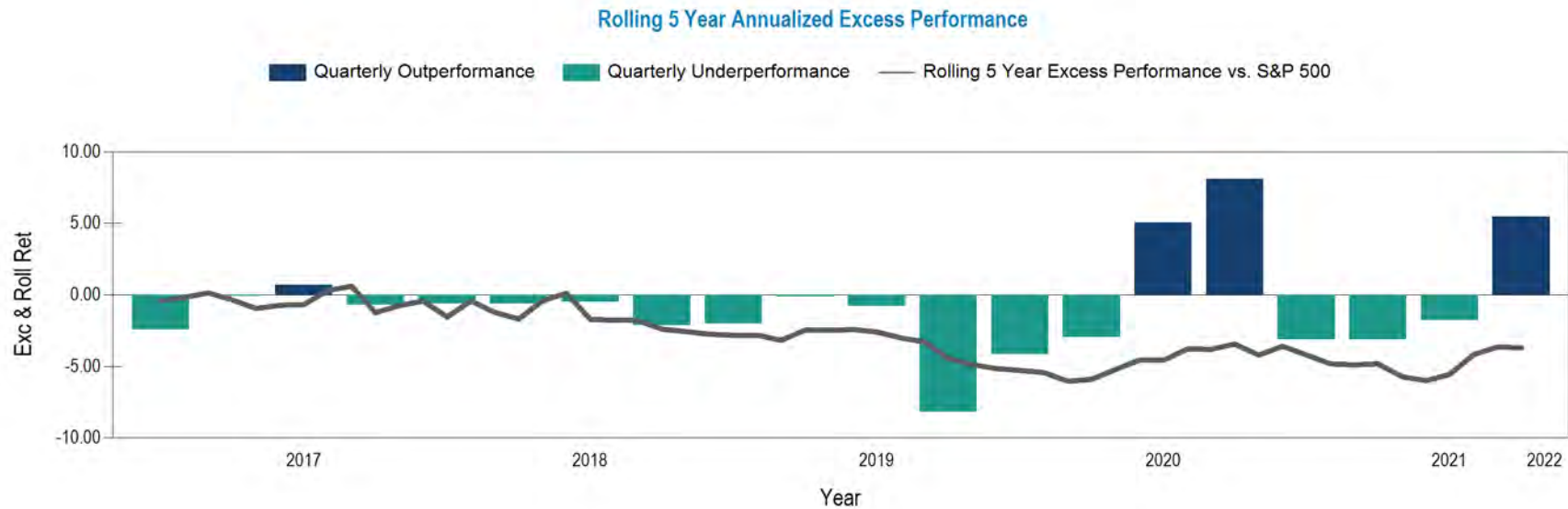
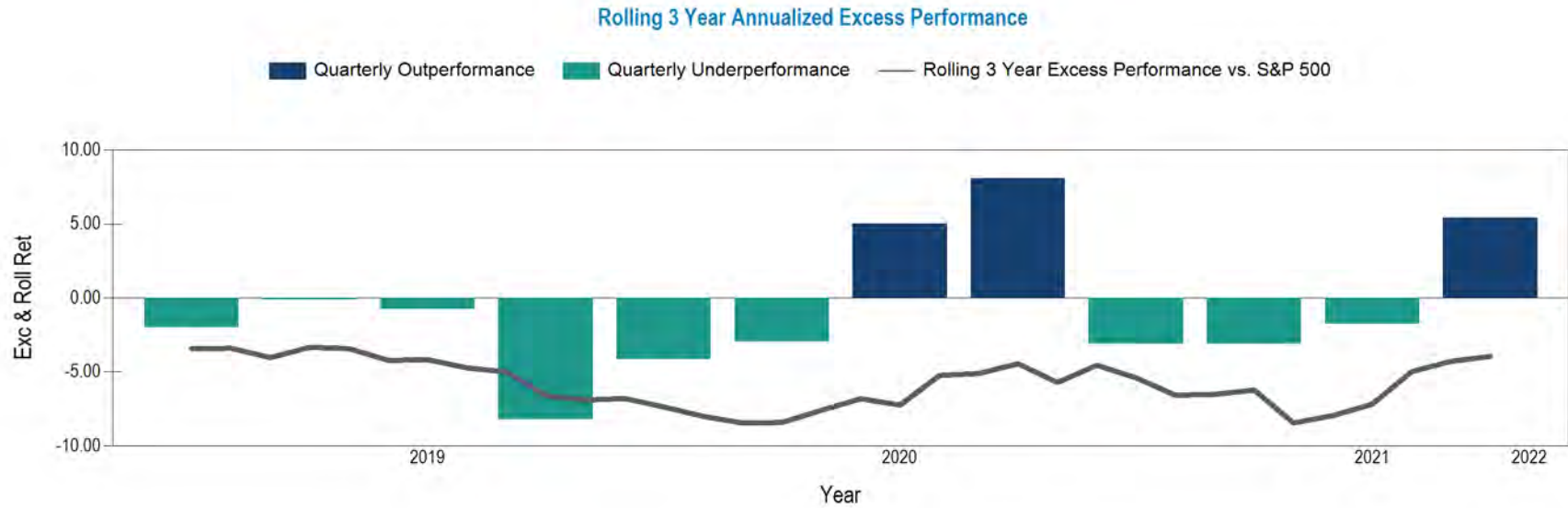


- PIMCO RAE US
- ◆ S&P 500
- ▲ Universe Median
- 68% Confidence Interval
- eV US Large Cap Core Equity Gross

Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022

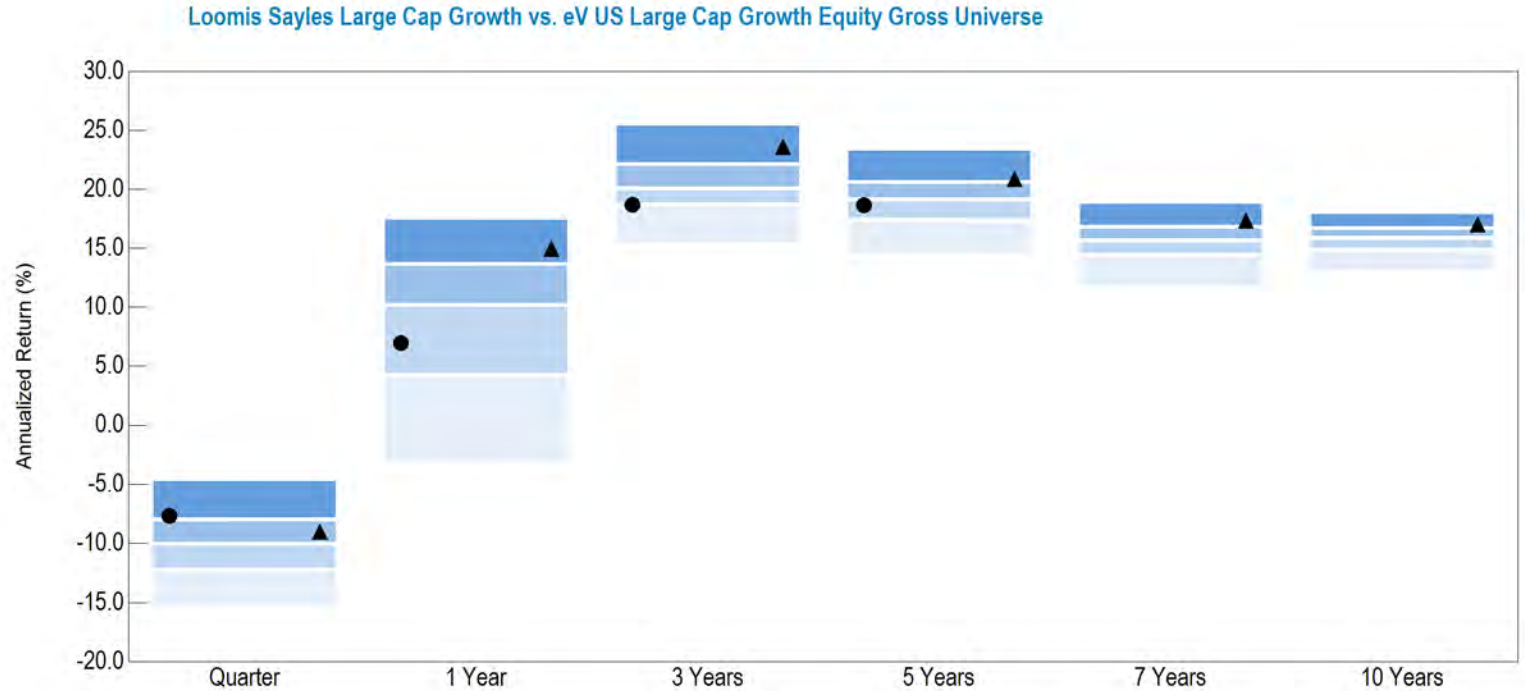


- PIMCO RAE US
- ◆ S&P 500
- ▲ Universe Median
- 68% Confidence Interval
- eV US Large Cap Core Equity Gross



Loomis Sayles Large Cap Growth
 Cumulative Performance Comparison (Gross of Fees)

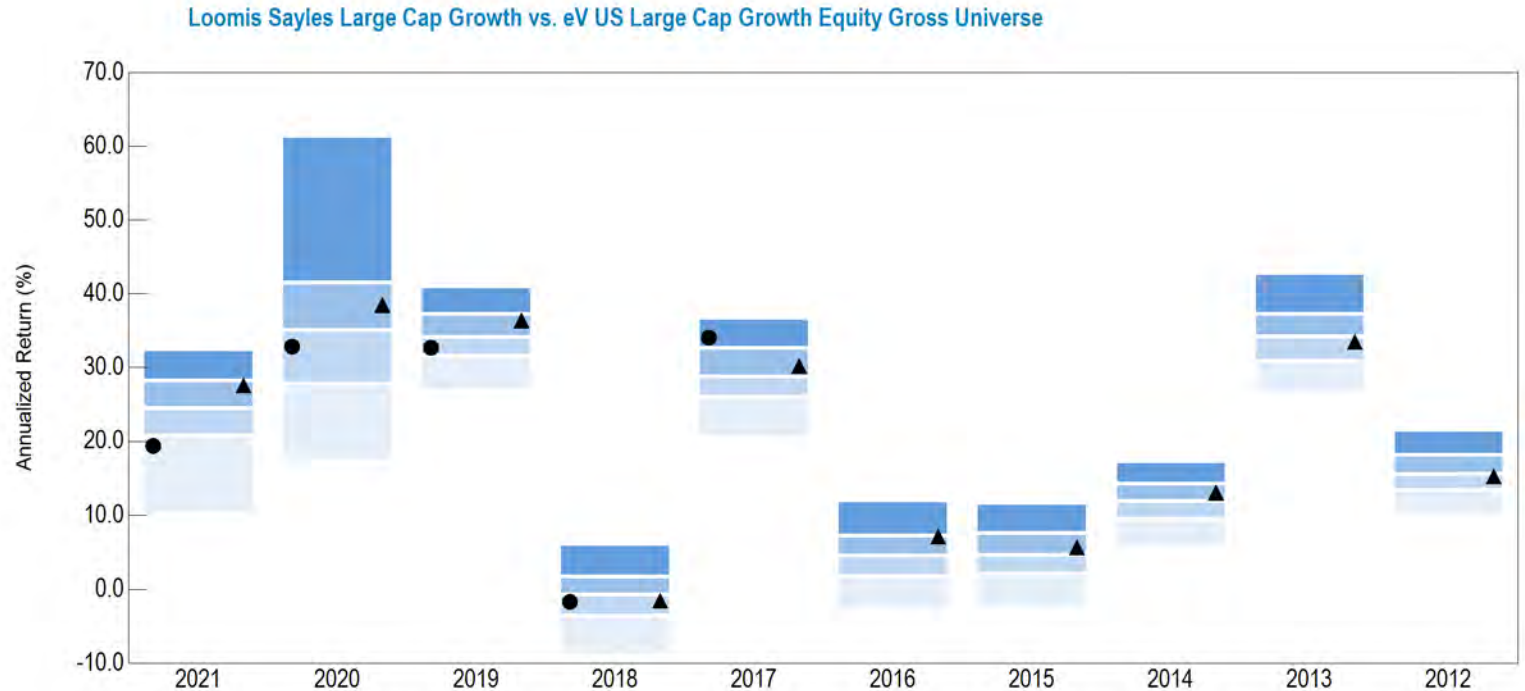
Period Ending: March 31, 2022



	Return (Rank)											
	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-4.6		17.5		25.5		23.4		18.9		18.1	
25th Percentile	-7.9		13.7		22.2		20.7		16.9		16.8	
Median	-10.0		10.2		20.1		19.2		15.7		15.9	
75th Percentile	-12.2		4.3		18.7		17.5		14.5		14.9	
95th Percentile	-15.3		-3.2		15.4		14.5		11.7		13.0	
# of Portfolios	259		259		254		238		226		209	
● Loomis Sayles Large Cap Growth	-7.7	(23)	7.0	(70)	18.7	(76)	18.7	(59)	--	(--)	--	(--)
▲ Russell 1000 Growth	-9.0	(38)	15.0	(18)	23.6	(14)	20.9	(21)	17.3	(18)	17.0	(18)

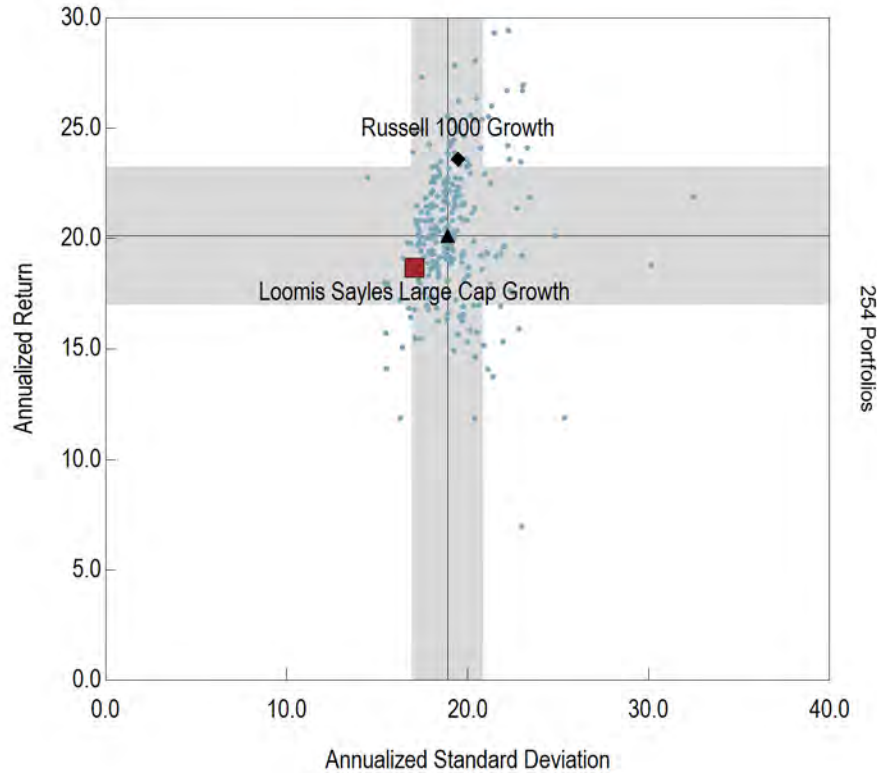
Loomis Sayles Large Cap Growth
 Consecutive Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022

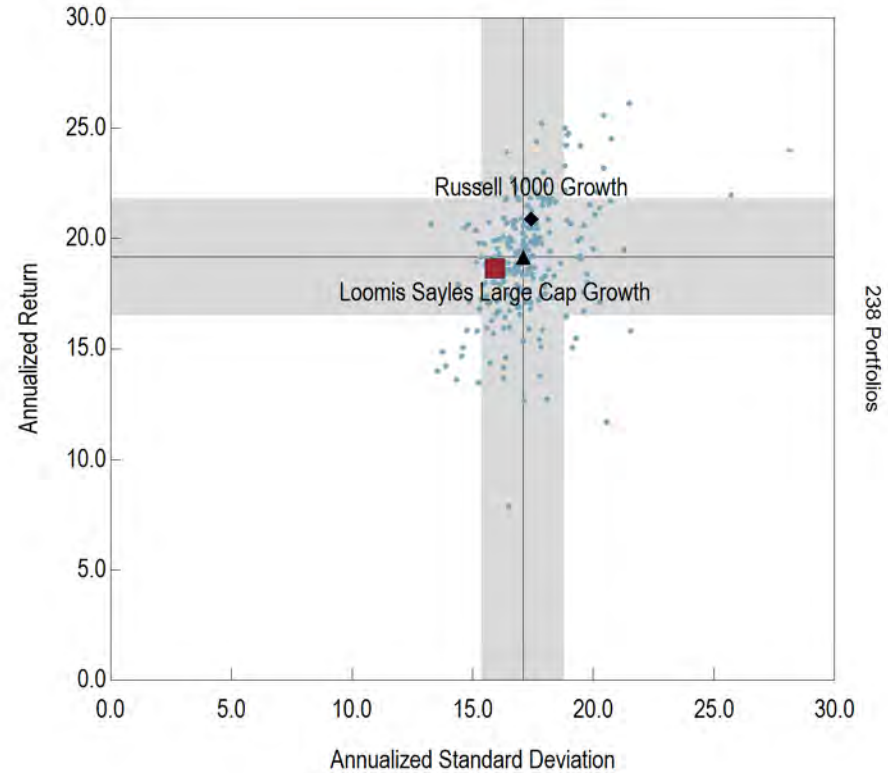


	Return (Rank)									
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
5th Percentile	32.5	61.4	41.0	6.1	36.7	12.0	11.6	17.3	42.8	21.6
25th Percentile	28.3	41.6	37.3	1.7	32.7	7.3	7.6	14.3	37.3	18.2
Median	24.6	35.2	34.2	-0.6	28.8	4.6	4.7	12.0	34.3	15.7
75th Percentile	20.8	27.9	31.7	-3.5	26.2	1.8	2.1	9.5	31.0	13.4
95th Percentile	10.2	17.4	26.9	-8.8	20.5	-2.7	-2.4	5.8	26.6	10.2
# of Portfolios	258	263	253	255	265	282	270	291	274	274
● Loomis Sayles Large Cap Growth	19.4 (81)	32.8 (61)	32.7 (68)	-1.7 (58)	34.1 (16)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Russell 1000 Growth	27.6 (29)	38.5 (34)	36.4 (32)	-1.5 (57)	30.2 (42)	7.1 (26)	5.7 (42)	13.0 (38)	33.5 (56)	15.3 (55)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022



Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022



- Loomis Sayles Large Cap Growth
- ◆ Russell 1000 Growth
- ▲ Universe Median
- 68% Confidence Interval
- eV US Large Cap Growth Equity Gross

- Loomis Sayles Large Cap Growth
- ◆ Russell 1000 Growth
- ▲ Universe Median
- 68% Confidence Interval
- eV US Large Cap Growth Equity Gross

Boston Partners Large Cap Value
 Cumulative Performance Comparison (Gross of Fees)

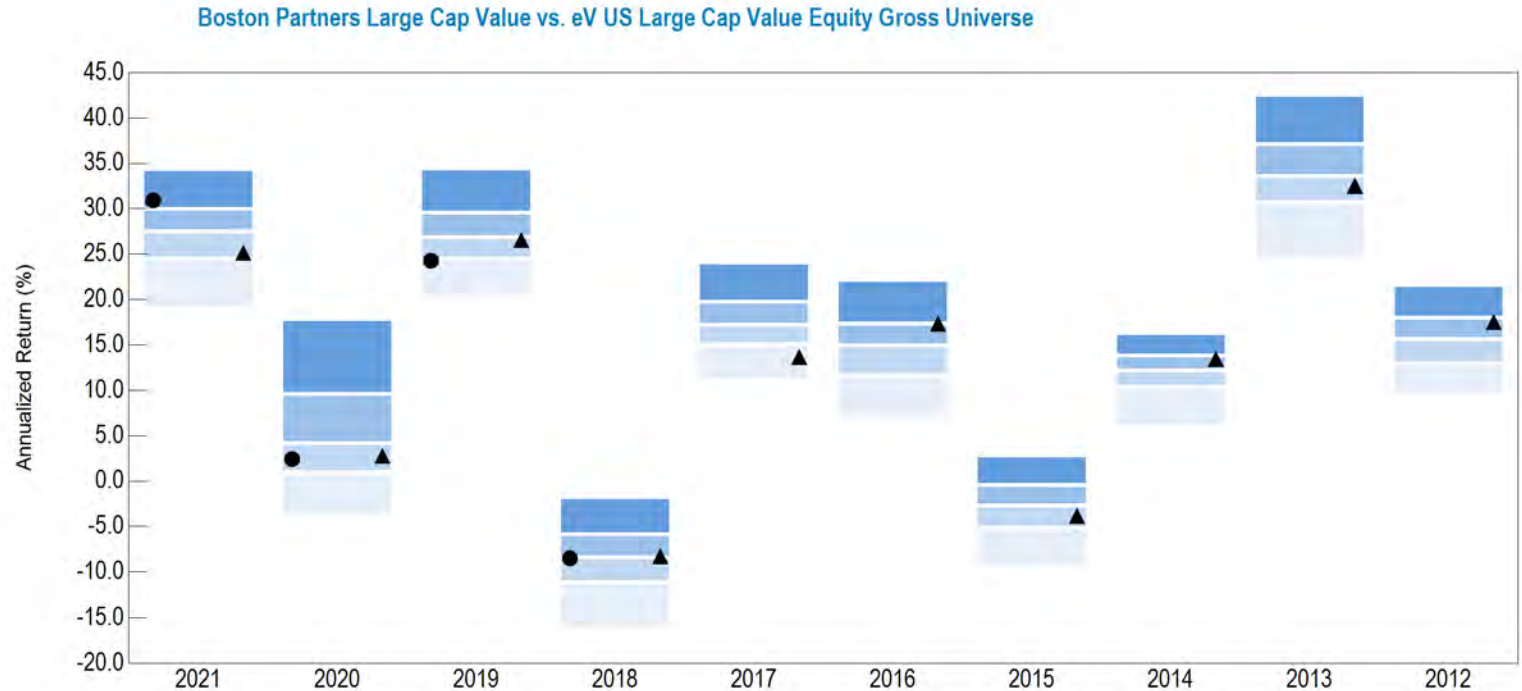
Period Ending: March 31, 2022



	Return (Rank)											
5th Percentile	4.2		19.2		20.2		16.3		13.7	14.9		
25th Percentile	1.4		15.6		16.8		13.3		11.9	13.3		
Median	-0.4		13.7		15.0		12.1		10.8	12.5		
75th Percentile	-2.3		11.2		13.2		10.7		9.8	11.7		
95th Percentile	-6.5		6.6		10.6		9.0		8.7	10.3		
# of Portfolios	339		339		327		315		301	279		
● Boston Partners Large Cap Value	0.8	(32)	14.7	(37)	15.3	(47)	12.1	(50)	--	(--)	--	(--)
▲ Russell 1000 Value	-0.7	(56)	11.7	(72)	13.0	(80)	10.3	(84)	9.7	(79)	11.7	(75)

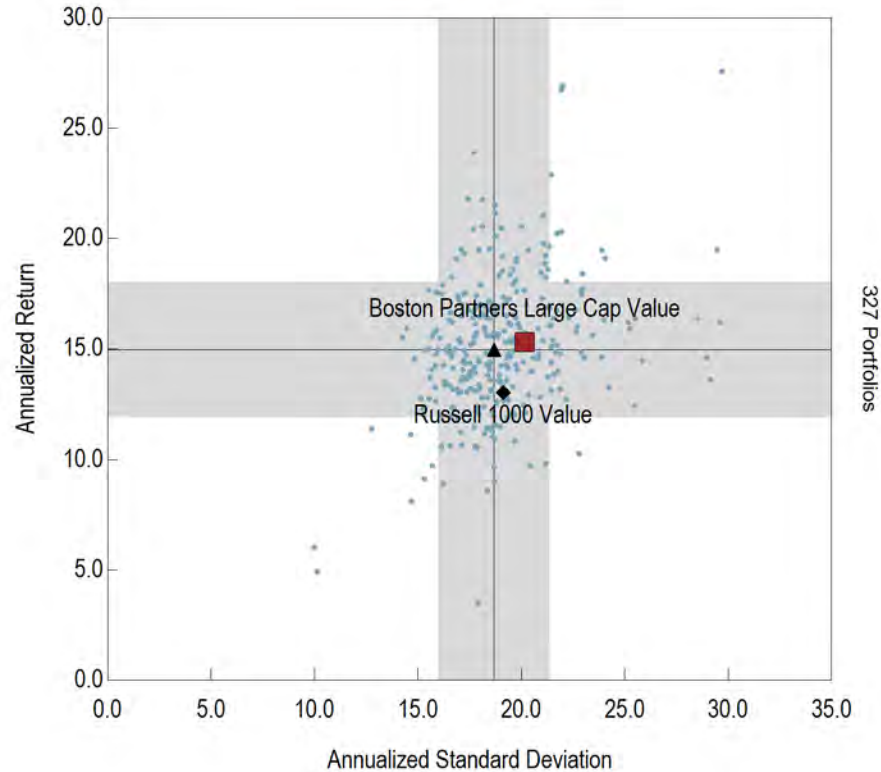
Boston Partners Large Cap Value
 Consecutive Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022



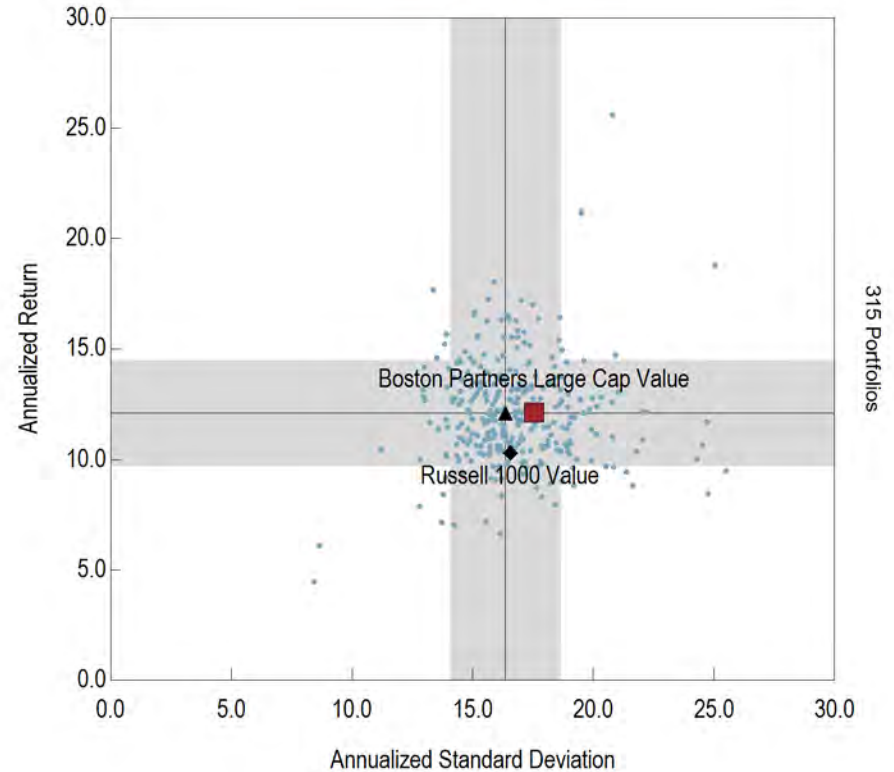
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Return (Rank)										
5th Percentile	34.4	17.8	34.4	-1.8	24.0	22.1	2.8	16.3	42.5	21.5
25th Percentile	30.0	9.6	29.6	-5.8	19.8	17.4	-0.4	13.9	37.2	18.0
Median	27.6	4.2	26.9	-8.3	17.2	15.0	-2.6	12.2	33.6	15.7
75th Percentile	24.5	1.1	24.5	-11.1	15.1	11.8	-5.1	10.4	30.8	13.0
95th Percentile	19.1	-3.8	20.3	-16.1	11.2	7.0	-9.4	5.9	24.6	9.6
# of Portfolios	337	326	331	336	342	346	312	307	310	303
● Boston Partners Large Cap Value	30.9 (19)	2.4 (64)	24.3 (77)	-8.5 (54)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Russell 1000 Value	25.2 (72)	2.8 (62)	26.5 (54)	-8.3 (50)	13.7 (87)	17.3 (26)	-3.8 (64)	13.5 (33)	32.5 (60)	17.5 (30)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022



- Boston Partners Large Cap Value
- ◆ Russell 1000 Value
- ▲ Universe Median
- 68% Confidence Interval
- eV US Large Cap Value Equity Gross

Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022

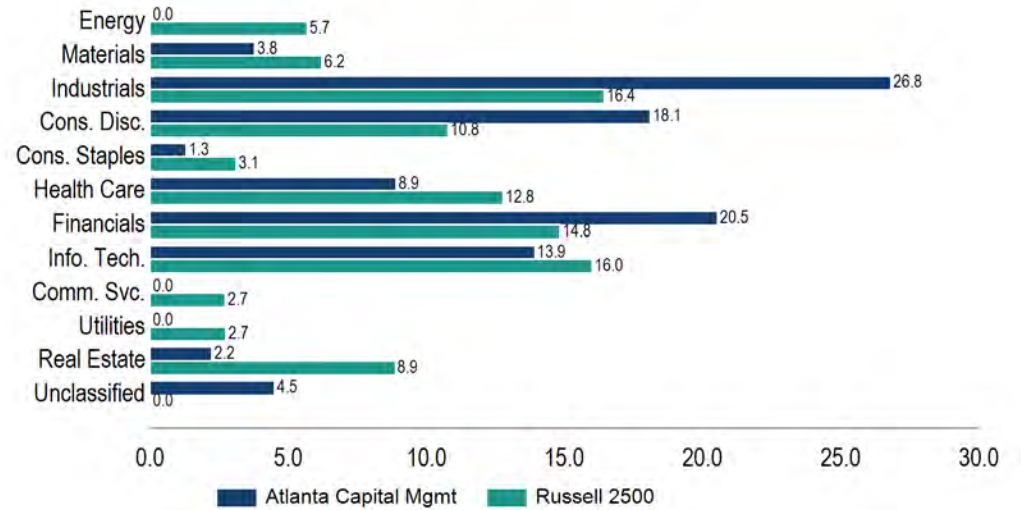


- Boston Partners Large Cap Value
- ◆ Russell 1000 Value
- ▲ Universe Median
- 68% Confidence Interval
- eV US Large Cap Value Equity Gross

Characteristics

	Portfolio	Russell 2500
Number of Holdings	55	2,517
Weighted Avg. Market Cap. (\$B)	11.44	7.96
Median Market Cap. (\$B)	10.63	1.69
Price To Earnings	24.47	16.64
Price To Book	3.71	2.77
Price To Sales	2.19	1.71
Return on Equity (%)	24.95	9.83
Yield (%)	0.72	1.32
Beta	0.82	1.00

Sector Allocation (%) vs Russell 2500



*Unclassified includes Cash

Top Holdings
 Ending Period Weight

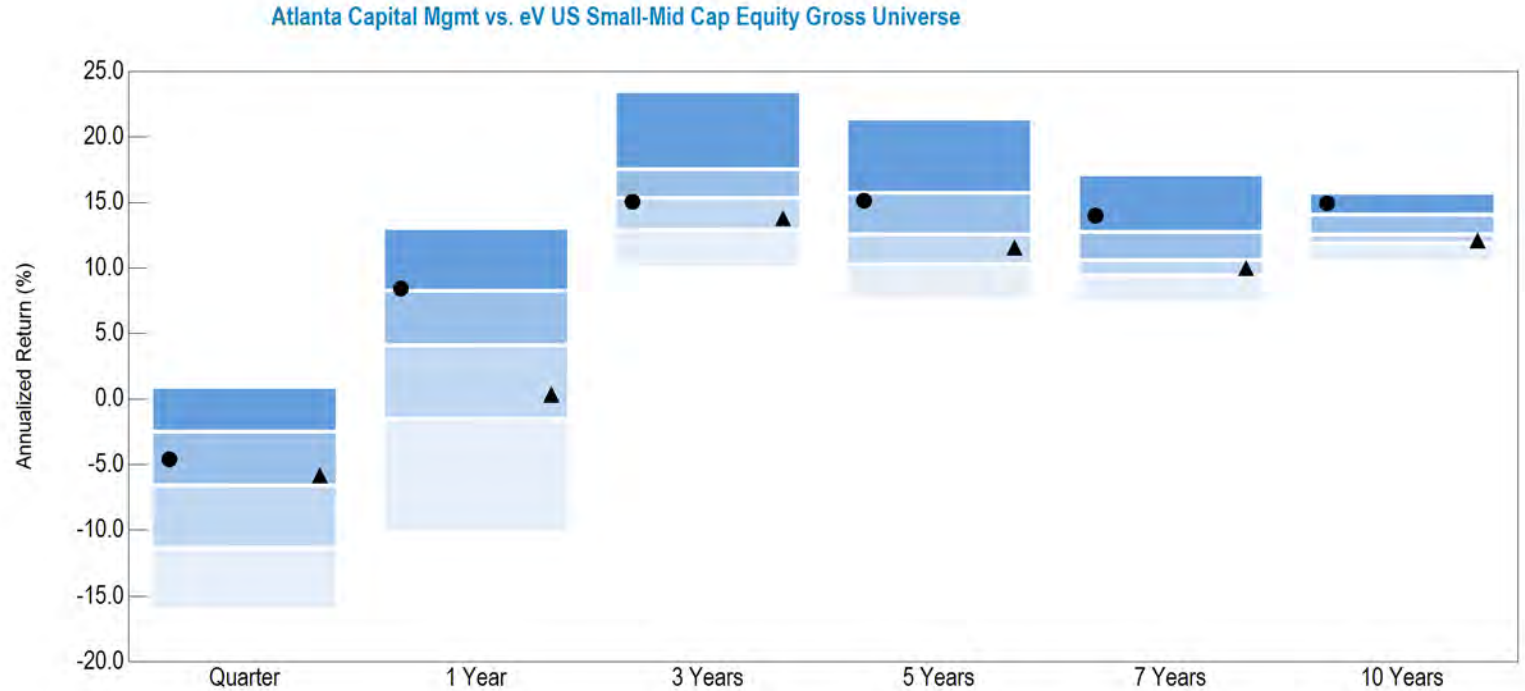
BERKLEY (W.R.) CORP	4.97%
CARLISLE COS INC	4.92%
CASH - USD	4.50%
ARAMARK	3.94%
ENVISTA HOLDINGS CORP	3.76%
BROWN & BROWN INC	2.90%
TERMINIX GLOBAL HOLDINGS INC	2.80%
MARKEL CORP	2.68%
SEI INVESTMENTS CO	2.49%
J.B. HUNT TRANSPORT SERVICES INC.	2.40%
Total	35.35%

Top Contributors

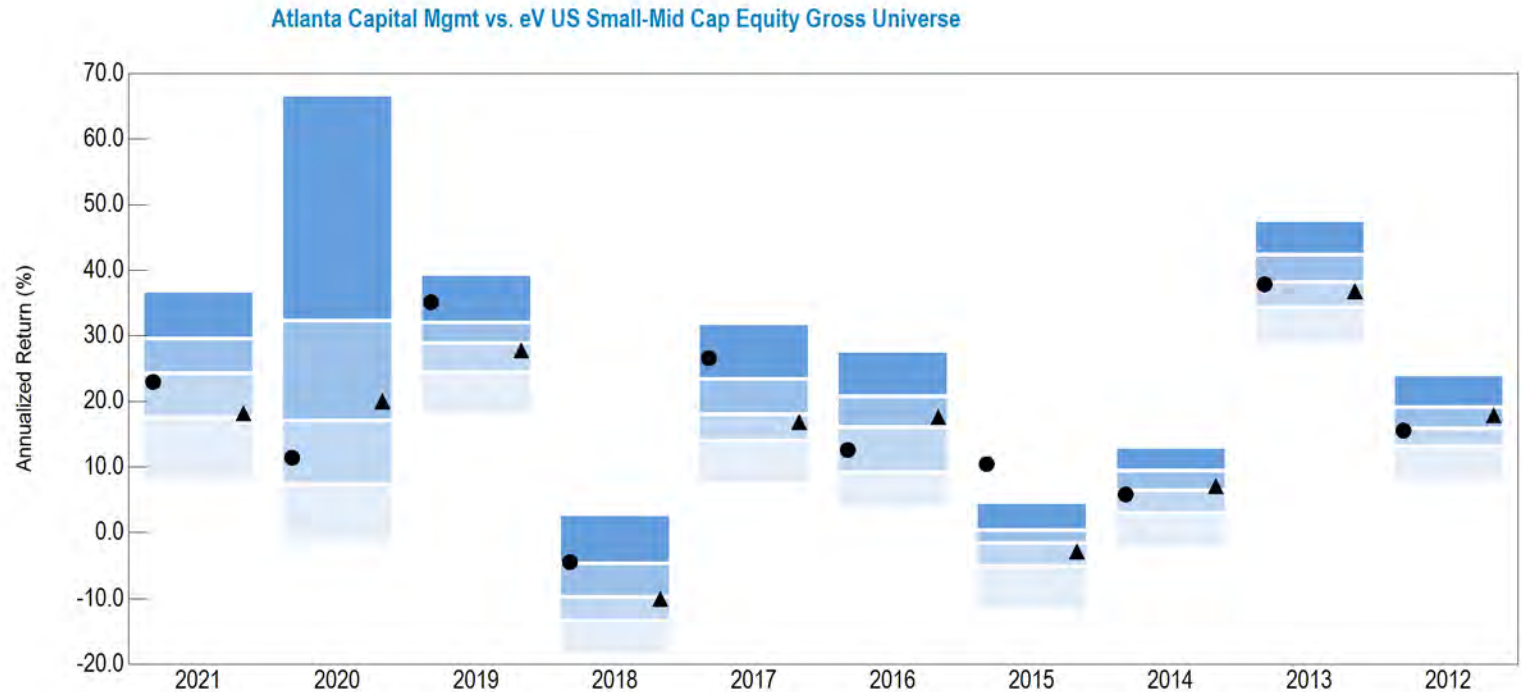
	Avg Wgt	Return	Contribution
BERKLEY (W.R.) CORP	4.68	21.41	1.00
WEX INC	2.04	27.11	0.55
MARKEL CORP	2.14	19.55	0.42
KIRBY CORP	1.33	21.49	0.29
ENVISTA HOLDINGS CORP	3.32	8.10	0.27
HEXCEL CORP	1.61	15.02	0.24
CACI INTERNATIONAL INC	1.74	11.91	0.21
HENRY (JACK) & ASSOCIATES INC	0.69	18.32	0.13
TELEFLEX INC	1.55	8.13	0.13
WOODWARD INC	0.83	14.30	0.12

Bottom Contributors

	Avg Wgt	Return	Contribution
IAA INC	2.20	-24.44	-0.54
MORNINGSTAR INC	2.52	-19.93	-0.50
BLACK KNIGHT INC	1.66	-30.04	-0.50
LKQ CORPORATION	2.00	-23.95	-0.48
LENNOX INTERNATIONAL INC.	2.23	-20.23	-0.45
DOLBY LABORATORIES INC	2.40	-17.59	-0.42
RPM INTERNATIONAL INC	2.00	-19.01	-0.38
BLACKBAUD INC	1.50	-24.20	-0.36
AFFILIATED MANAGERS GROUP INC.	2.30	-14.32	-0.33
BURLINGTON STORES INC	0.83	-37.51	-0.31

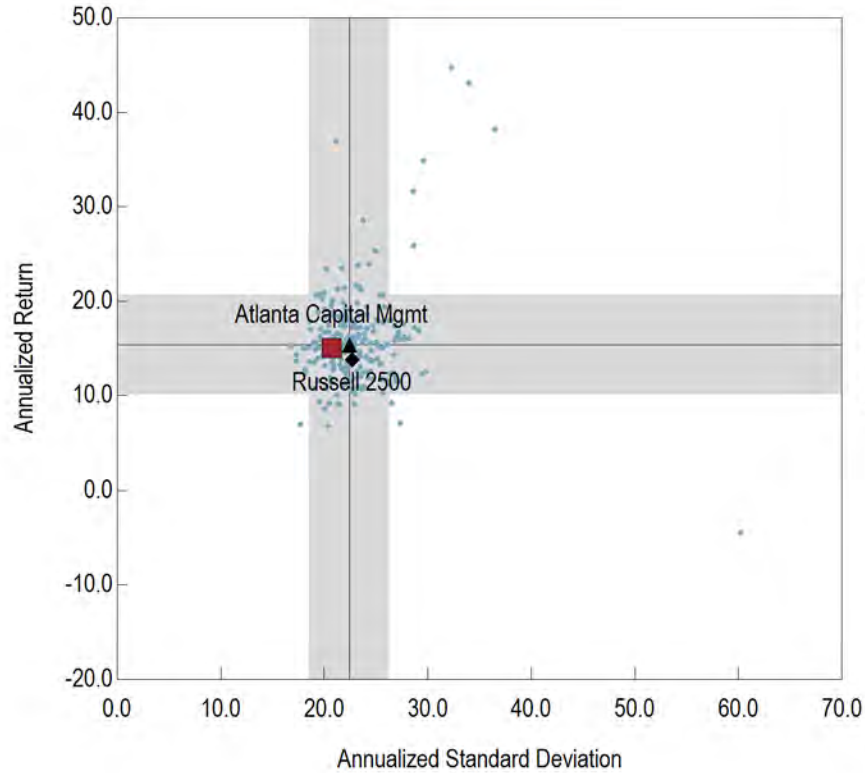


	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	0.9		13.0		23.5		21.4		17.1		15.7	
25th Percentile	-2.5		8.3		17.5		15.7		12.8		14.1	
Median	-6.6		4.1		15.4		12.6		10.7		12.6	
75th Percentile	-11.3		-1.5		12.9		10.3		9.4		11.9	
95th Percentile	-16.0		-10.1		10.1		7.6		7.3		10.5	
# of Portfolios	240		240		227		208		184		151	
● Atlanta Capital Mgmt	-4.6	(41)	8.4	(24)	15.1	(55)	15.1	(30)	14.0	(15)	14.9	(14)
▲ Russell 2500	-5.8	(47)	0.3	(68)	13.8	(68)	11.6	(60)	10.0	(63)	12.1	(69)



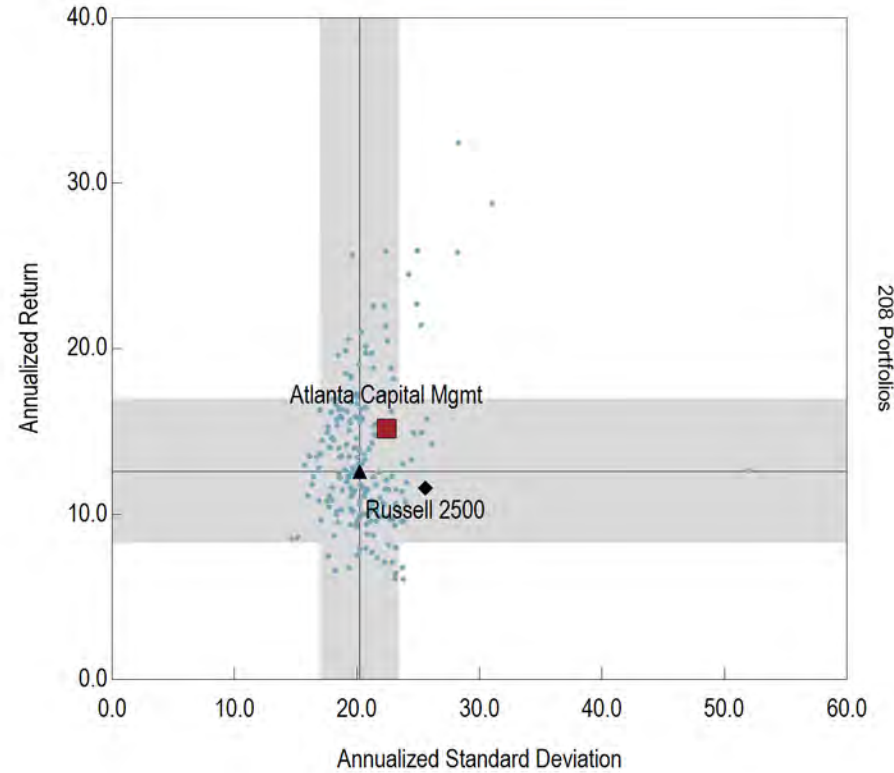
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Return (Rank)										
5th Percentile	36.9	66.8	39.4	2.8	31.9	27.6	4.6	13.0	47.6	24.1
25th Percentile	29.6	32.3	32.1	-4.6	23.5	20.8	0.4	9.6	42.5	19.2
Median	24.3	17.2	29.0	-9.6	18.1	16.1	-1.5	6.5	38.2	16.0
75th Percentile	17.6	7.4	24.5	-13.3	14.1	9.2	-5.0	3.1	34.4	13.3
95th Percentile	7.9	-1.4	18.1	-18.5	7.5	3.8	-11.6	-2.3	28.7	7.8
# of Portfolios	245	238	237	236	233	238	215	210	210	216
● Atlanta Capital Mgmt	23.0 (58)	11.4 (62)	35.1 (14)	-4.5 (25)	26.6 (15)	12.6 (62)	10.4 (1)	5.8 (56)	37.8 (52)	15.5 (55)
▲ Russell 2500	18.2 (74)	20.0 (45)	27.8 (58)	-10.0 (53)	16.8 (61)	17.6 (38)	-2.9 (64)	7.1 (46)	36.8 (58)	17.9 (36)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022

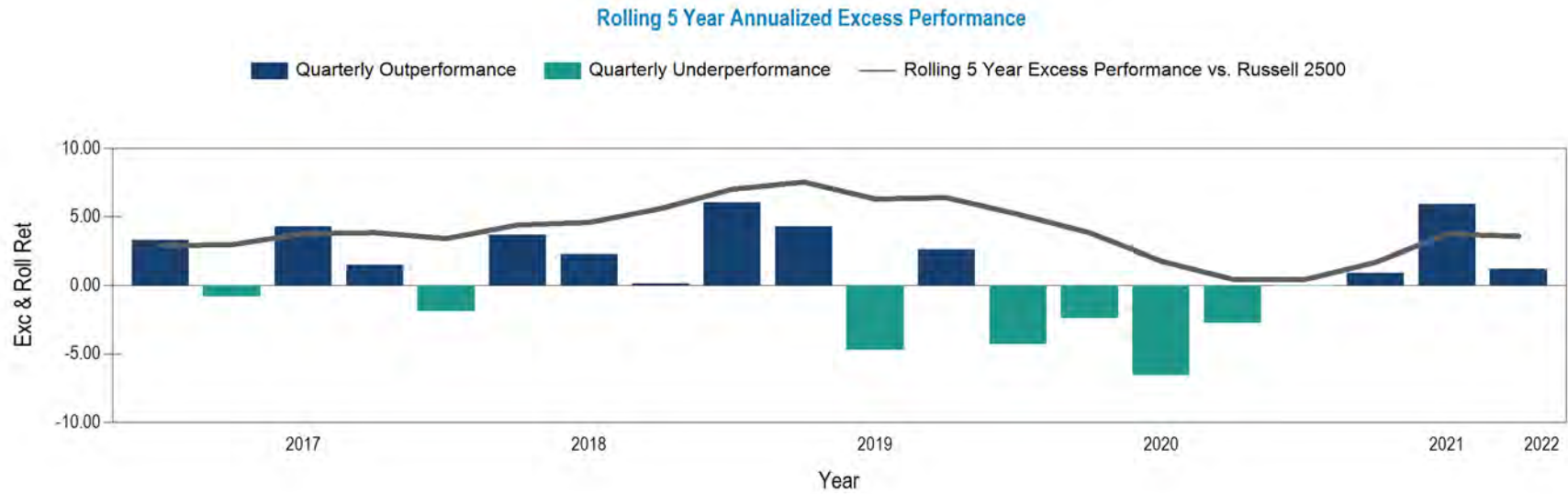
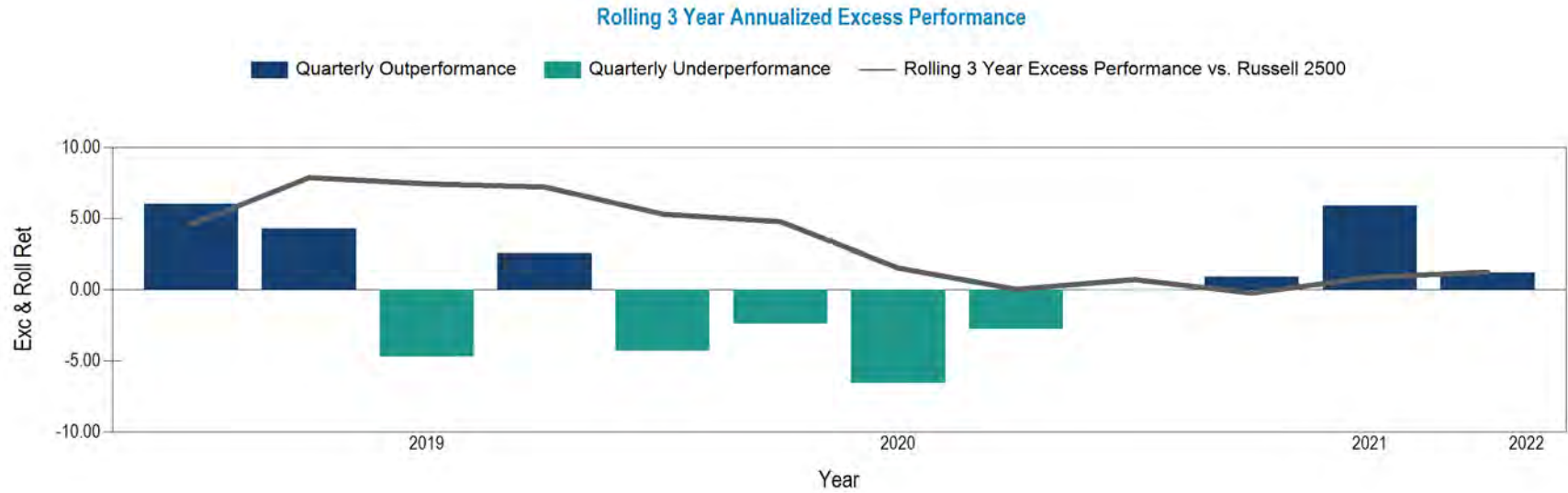


- Atlanta Capital Mgmt
- ◆ Russell 2500
- ▲ Universe Median
- 68% Confidence Interval
- eV US Small-Mid Cap Equity Gross

Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022



- Atlanta Capital Mgmt
- ◆ Russell 2500
- ▲ Universe Median
- 68% Confidence Interval
- eV US Small-Mid Cap Equity Gross

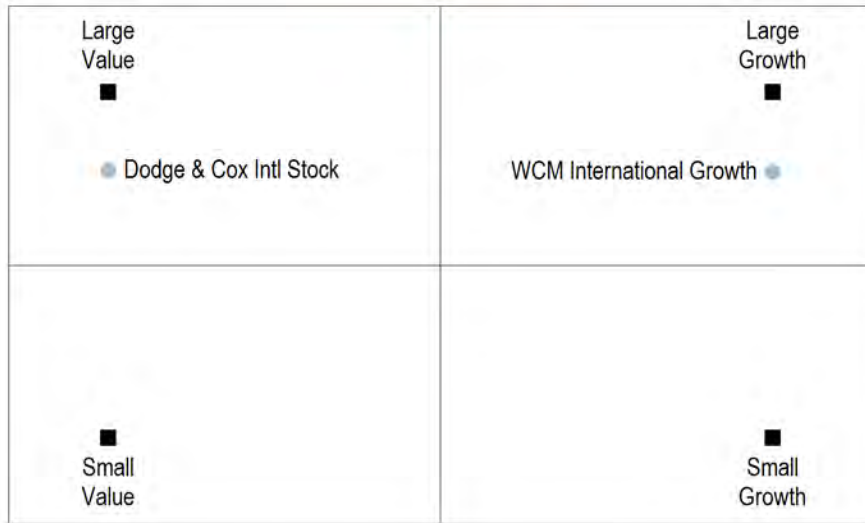


Total International Equity
Asset Class Overview (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total International Equity	286,823,772	-8.5	1.8	13.7	10.9	8.8	15.2	19.4	30.2	-12.2	26.6
<i>MSCI ACWI ex USA Gross</i>		-5.3	-1.0	8.0	7.3	6.0	8.3	11.1	22.1	-13.8	27.8
<i>InvMetrics Public DB ex-US Eq Gross Rank</i>		89	3	1	1	1	1	12	1	9	81
Dodge & Cox Intl Stock	151,018,245	-0.4	3.7	8.7	5.8	6.9	11.7	2.8	23.6	-17.5	24.7
<i>MSCI ACWI ex USA Value Gross</i>		0.3	4.0	6.1	5.3	4.8	11.1	-0.2	16.5	-13.4	23.3
<i>eV ACWI ex-US All Cap Value Eq Gross Rank</i>		20	22	29	52	39	46	33	35	84	71
WCM International Growth	135,805,527	-16.5	-1.3	17.0	15.1	--	18.5	34.0	36.7	-6.7	--
<i>MSCI ACWI ex USA Growth Gross</i>		-10.7	-5.9	9.5	9.0	--	5.4	22.6	27.8	-14.1	--
<i>eV ACWI ex-US All Cap Growth Eq Gross Rank</i>		79	10	15	13	--	6	28	11	1	--

EAFE Effective Style Map
3 Years Ending March 31, 2022



EAFE Effective Style Map
5 Years Ending March 31, 2022



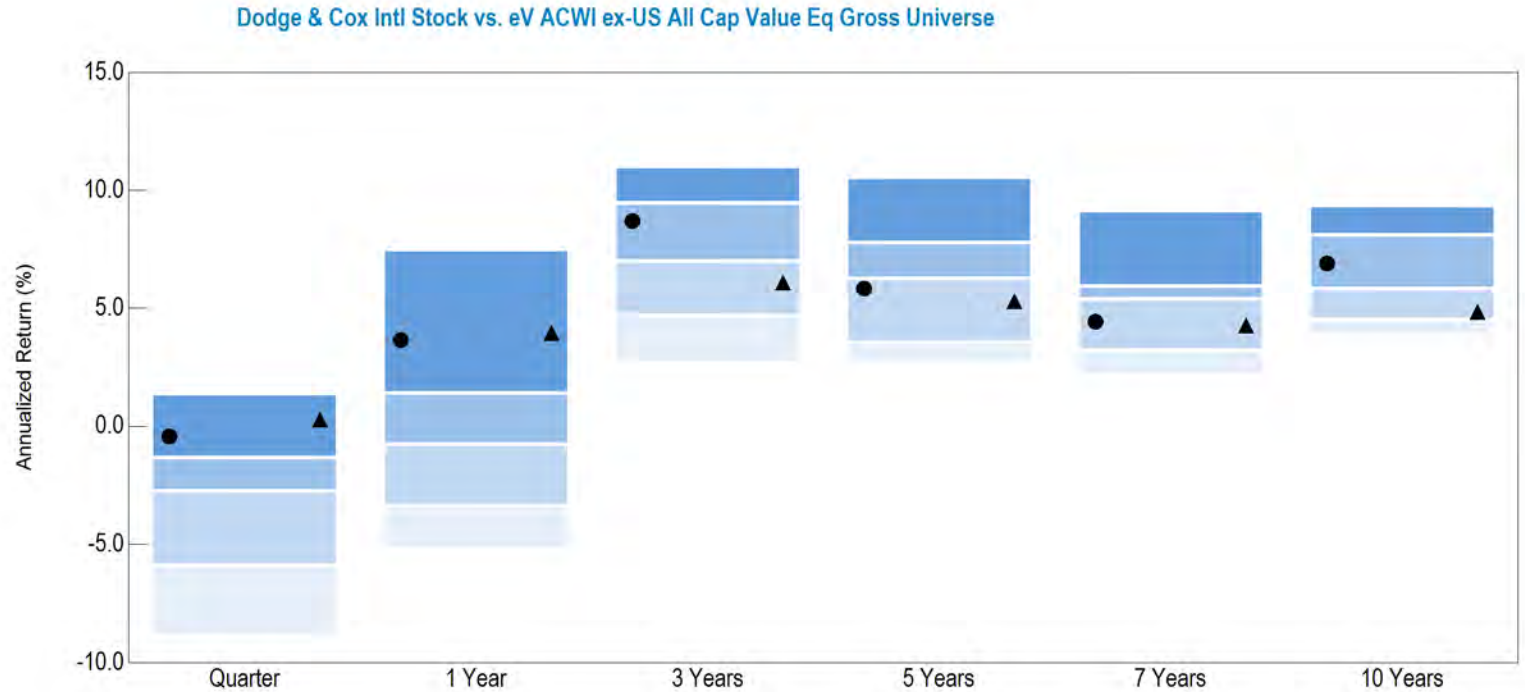
Total International Equity
Asset Class Overview (Net of Fees)

Period Ending: March 31, 2022

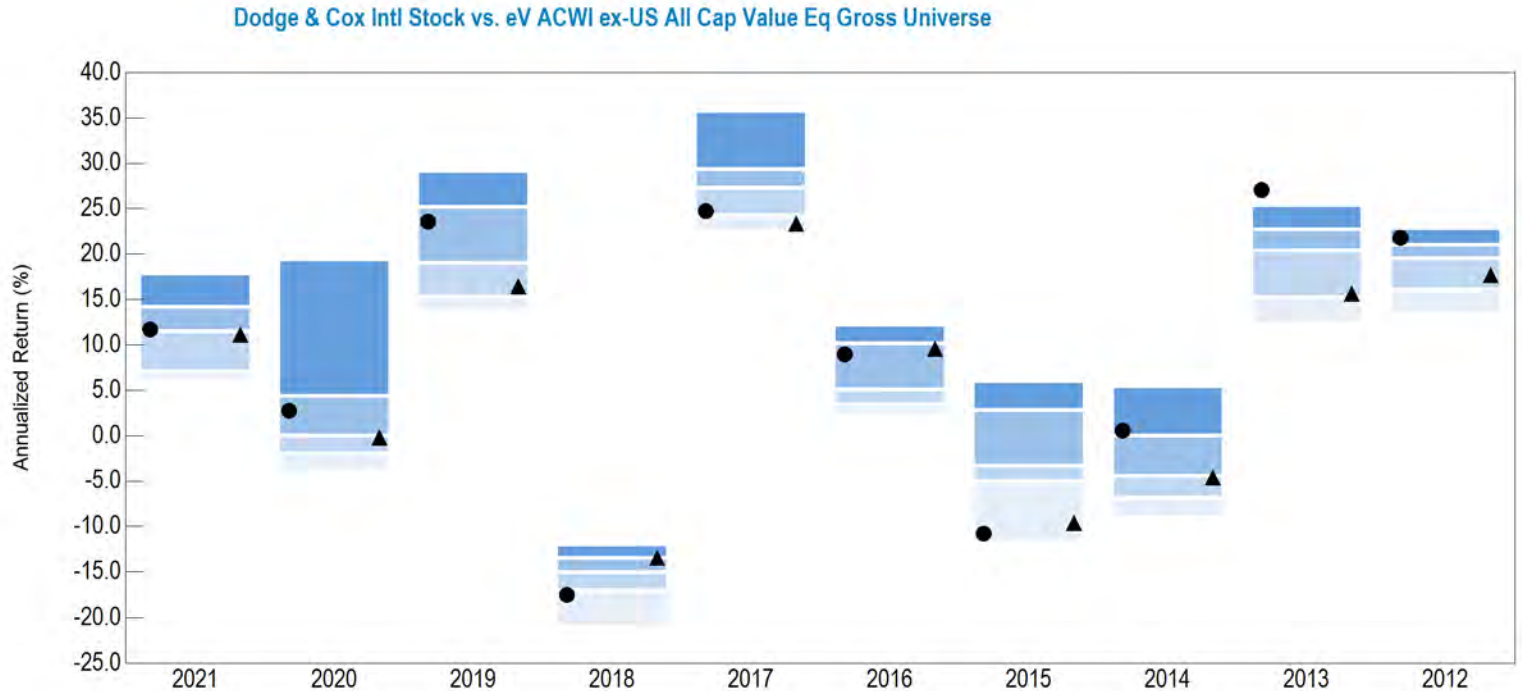
	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total International Equity	286,823,772	-8.6	1.2	12.9	10.1	8.1	14.4	18.6	29.3	-12.8	25.8
<i>MSCI ACWI ex USA Gross</i>		-5.3	-1.0	8.0	7.3	6.0	8.3	11.1	22.1	-13.8	27.8
Dodge & Cox Intl Stock	151,018,245	-0.6	3.0	8.0	5.2	6.2	11.0	2.1	22.8	-18.0	23.9
<i>MSCI ACWI ex USA Value Gross</i>		0.3	4.0	6.1	5.3	4.8	11.1	-0.2	16.5	-13.4	23.3
WCM International Growth	135,805,527	-16.7	-2.0	16.2	14.3	--	17.7	33.1	35.8	-7.4	--
<i>MSCI ACWI ex USA Growth Gross</i>		-10.7	-5.9	9.5	9.0	--	5.4	22.6	27.8	-14.1	--

Dodge & Cox Intl Stock
 Cumulative Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022

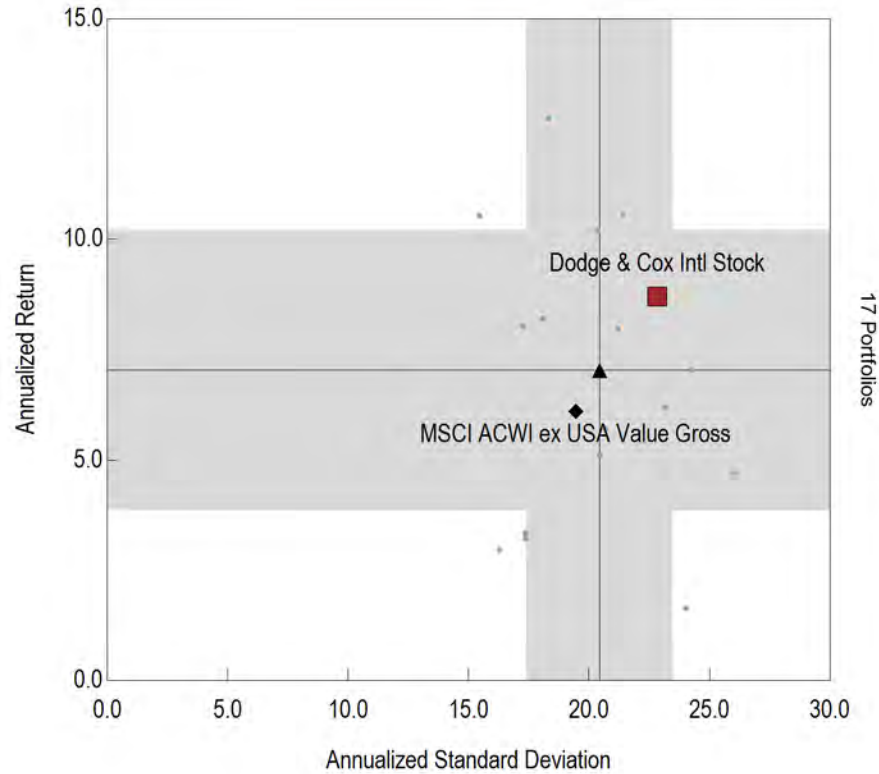


	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
Return (Rank)	1.4	(17)	7.5	(17)	11.0	(17)	10.5	(17)	9.1	(15)	9.3	(14)
5th Percentile	-8.9		-5.2		2.7		2.7		2.2		3.8	
25th Percentile	-5.9		-3.4		4.7		3.6		3.2		4.6	
Median	-2.7		-0.8		7.0		6.3		5.4		5.9	
75th Percentile	-1.3		1.4		9.5		7.8		6.0		8.1	
95th Percentile	1.4		7.5		11.0		10.5		9.1		9.3	
# of Portfolios	17		17		17		17		15		14	
● Dodge & Cox Intl Stock	-0.4	(20)	3.7	(22)	8.7	(29)	5.8	(52)	4.4	(62)	6.9	(39)
▲ MSCI ACWI ex USA Value Gross	0.3	(11)	4.0	(21)	6.1	(58)	5.3	(54)	4.3	(63)	4.8	(74)



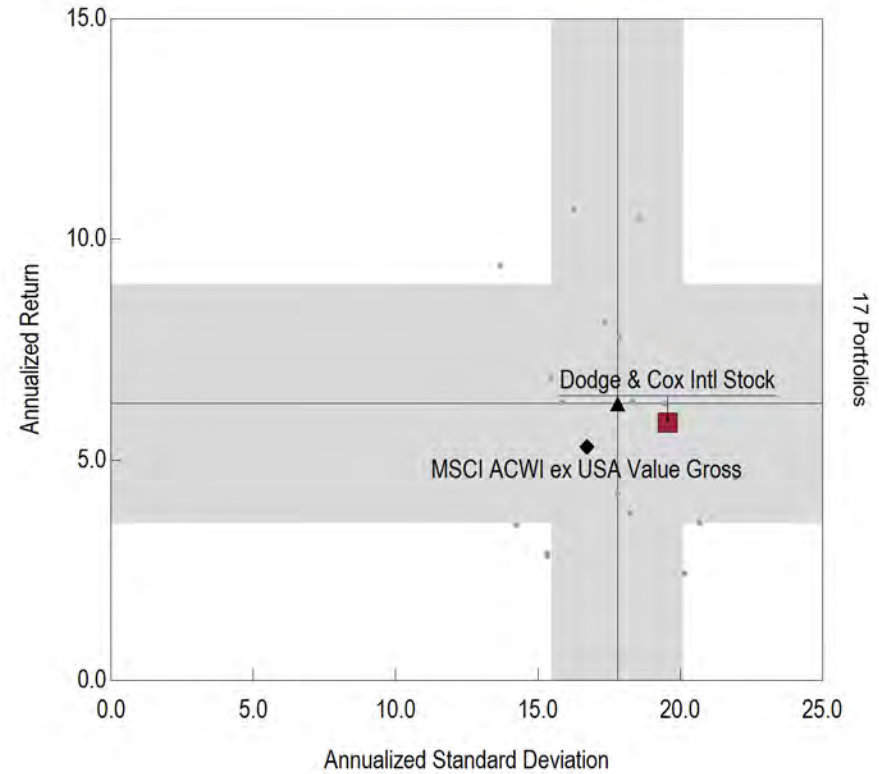
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Return (Rank)										
5th Percentile	17.8	19.4	29.1	-12.0	35.8	12.2	6.0	5.4	25.4	22.9
25th Percentile	14.2	4.4	25.2	-13.4	29.4	10.2	2.9	0.0	22.8	21.1
Median	11.5	0.1	19.1	-15.0	27.3	5.1	-3.3	-4.4	20.5	19.6
75th Percentile	7.1	-1.9	15.4	-16.9	24.3	3.5	-4.9	-6.8	15.3	16.1
95th Percentile	6.2	-3.7	13.8	-21.0	22.6	2.4	-11.7	-8.9	12.5	13.5
# of Portfolios	16	21	21	24	23	21	13	13	12	11
● Dodge & Cox Intl Stock	11.7 (46)	2.8 (33)	23.6 (35)	-17.5 (84)	24.7 (71)	9.0 (31)	-10.8 (92)	0.6 (16)	27.1 (2)	21.8 (18)
▲ MSCI ACWI ex USA Value Gross	11.1 (55)	-0.2 (52)	16.5 (71)	-13.4 (26)	23.3 (81)	9.6 (30)	-9.6 (89)	-4.6 (52)	15.7 (74)	17.7 (66)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022

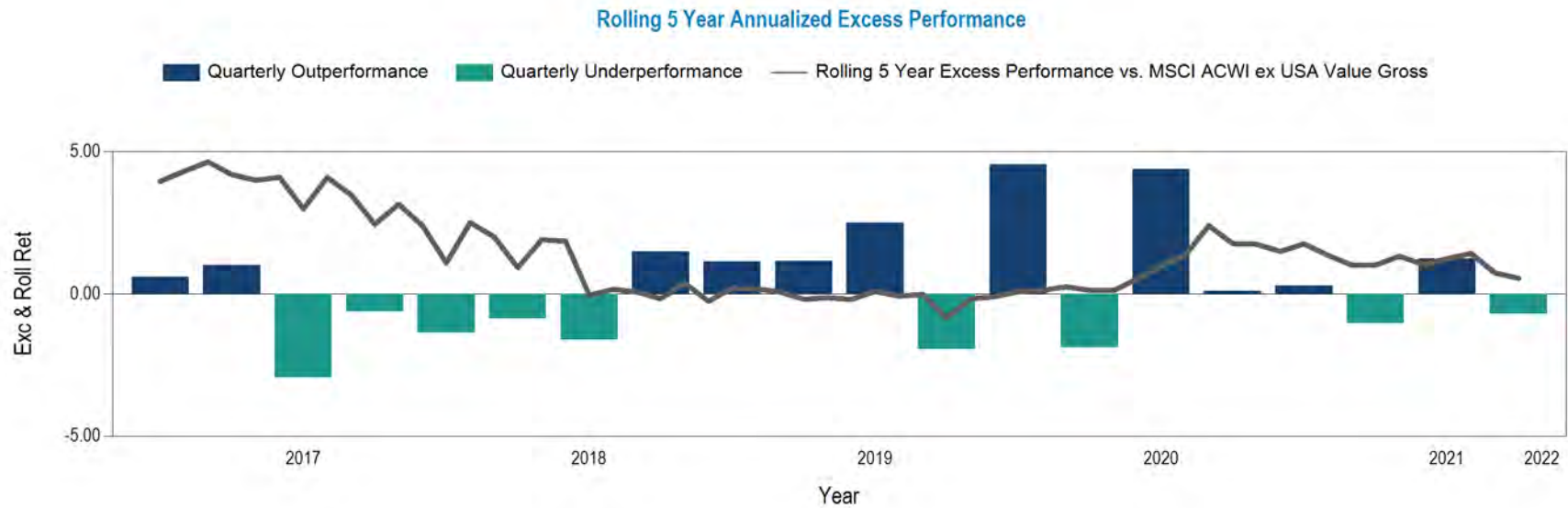
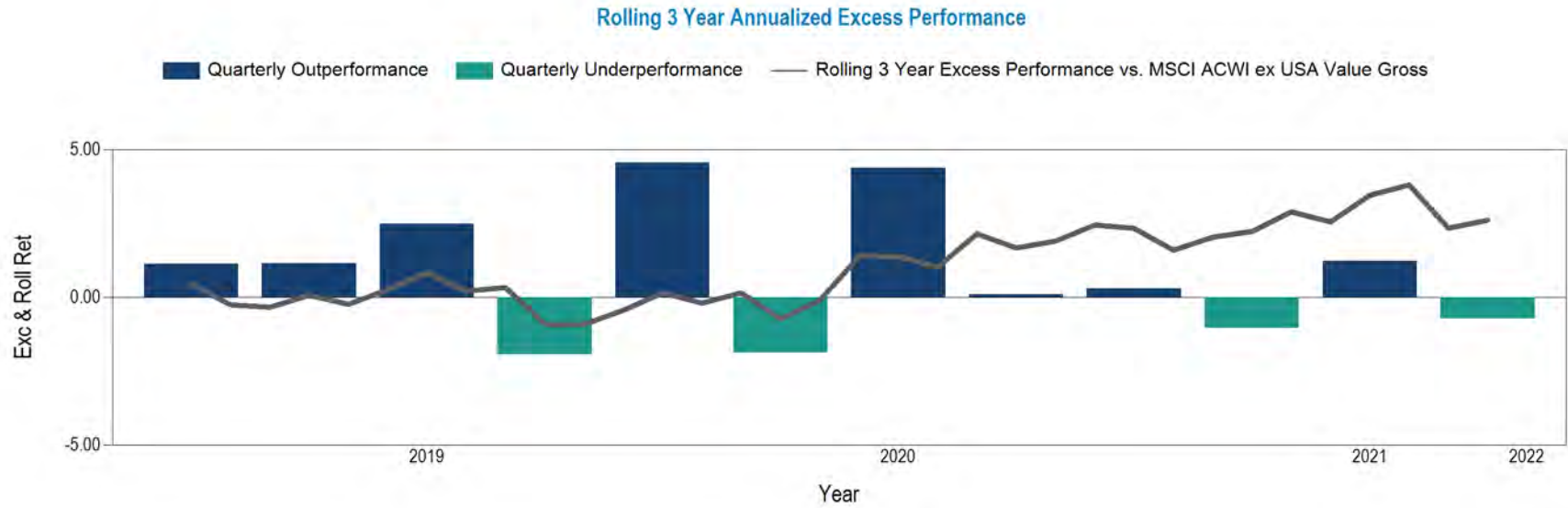


- Dodge & Cox Intl Stock
- ◆ MSCI ACWI ex USA Value Gross
- ▲ Universe Median
- 68% Confidence Interval
- eV ACWI ex-US All Cap Value Eq Gross

Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022

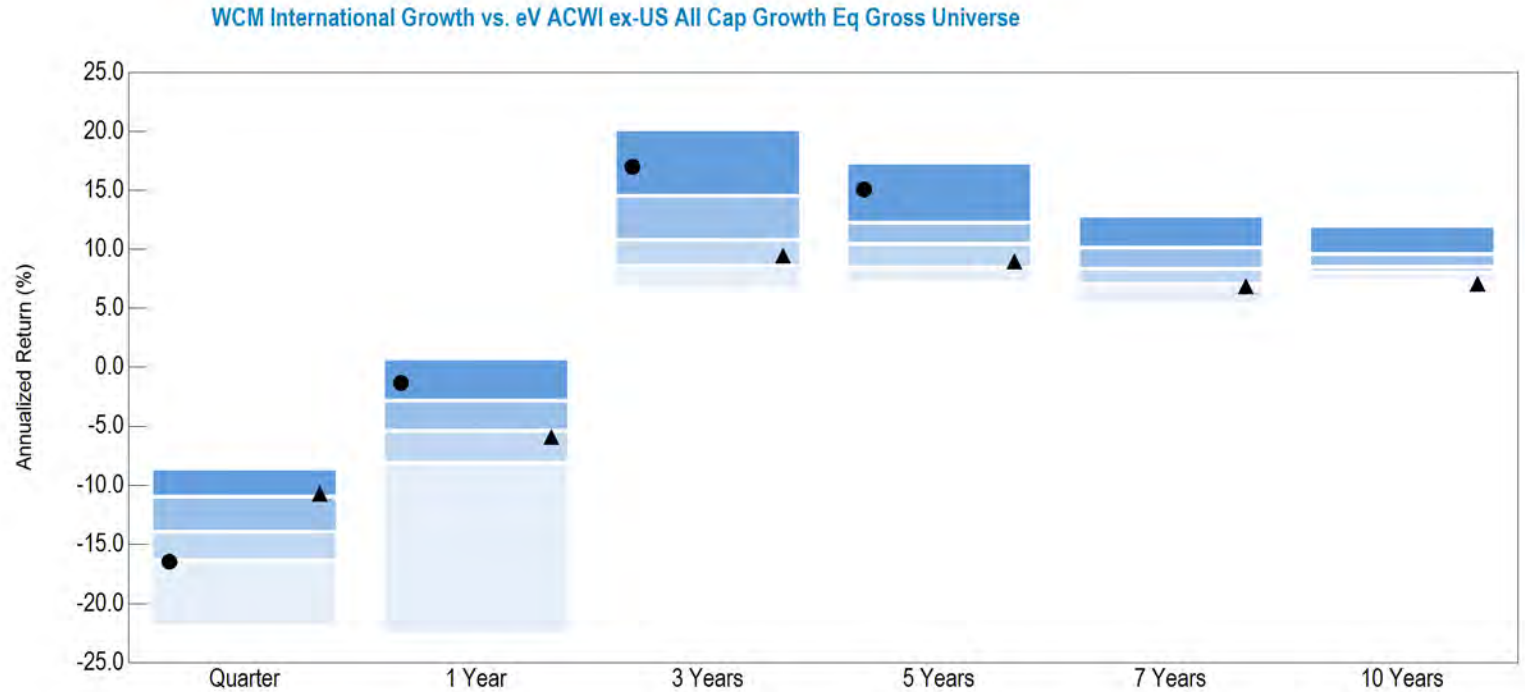


- Dodge & Cox Intl Stock
- ◆ MSCI ACWI ex USA Value Gross
- ▲ Universe Median
- 68% Confidence Interval
- eV ACWI ex-US All Cap Value Eq Gross



WCM International Growth
Cumulative Performance Comparison (Gross of Fees)

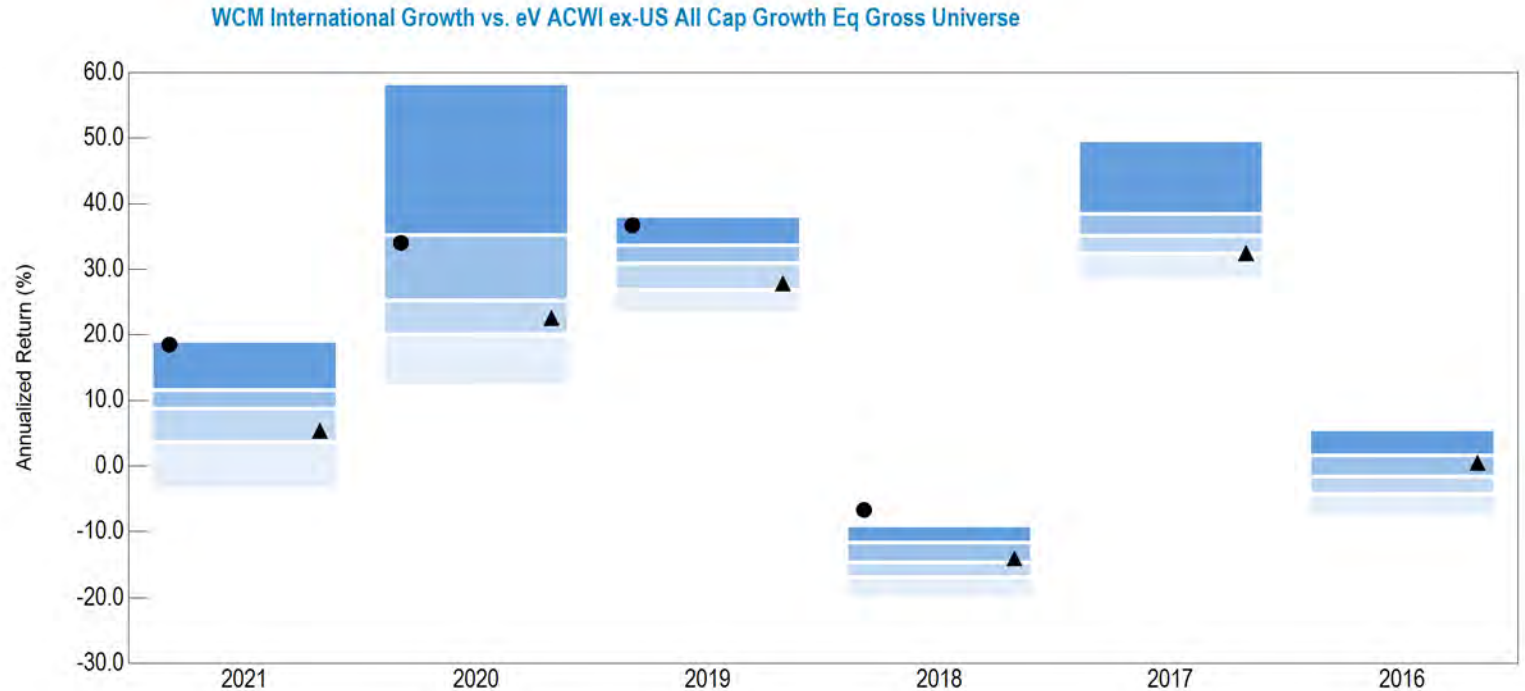
Period Ending: March 31, 2022



	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-8.6		0.7		20.1		17.4		12.8		12.0	
25th Percentile	-11.0		-2.8		14.6		12.3		10.2		9.6	
Median	-14.0		-5.3		10.8		10.5		8.4		8.6	
75th Percentile	-16.3		-8.1		8.7		8.5		7.1		8.0	
95th Percentile	-21.9		-22.5		6.6		7.2		5.3		7.4	
# of Portfolios	33		33		31		29		27		24	
● WCM International Growth	-16.5	(79)	-1.3	(10)	17.0	(15)	15.1	(13)	--	(--)	--	(--)
▲ MSCI ACWI ex USA Growth Gross	-10.7	(22)	-5.9	(58)	9.5	(71)	9.0	(68)	6.9	(81)	7.1	(97)

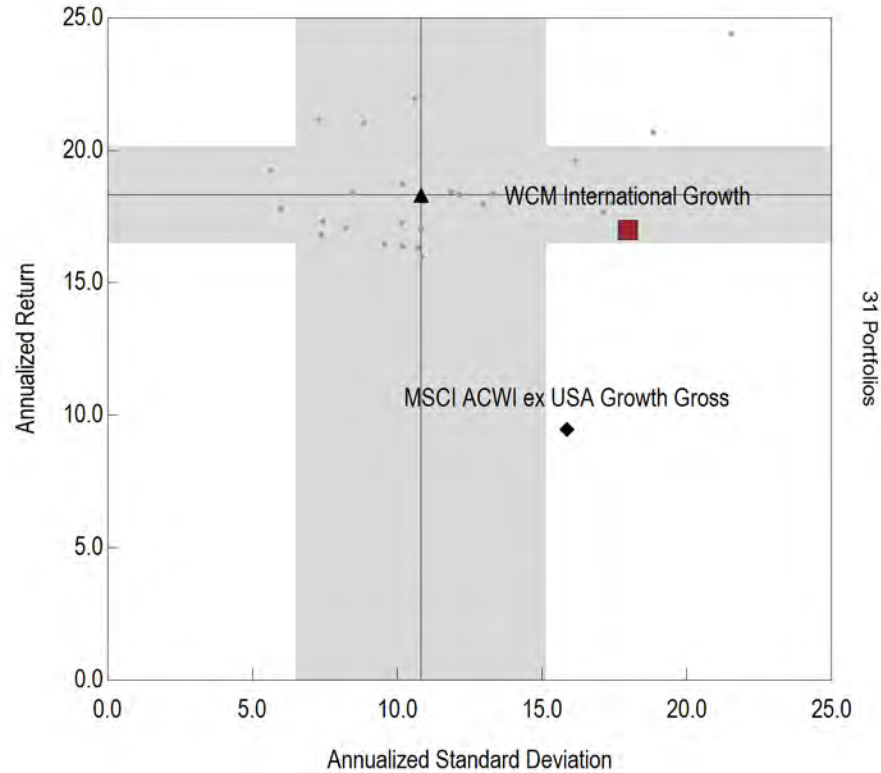
WCM International Growth
 Consecutive Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022



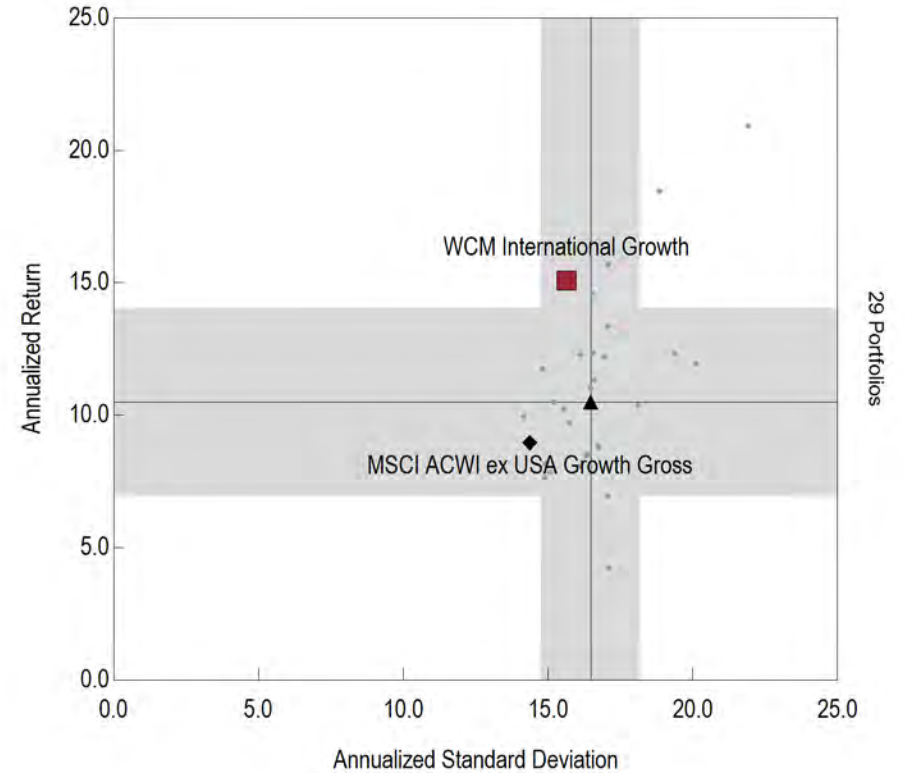
	2021		2020		2019		2018		2017		2016	
Return (Rank)												
5th Percentile	19.0		58.3		38.1		-9.1		49.7		5.5	
25th Percentile	11.6		35.2		33.7		-11.6		38.5		1.7	
Median	8.7		25.3		31.0		-14.6		35.2		-1.6	
75th Percentile	3.8		20.1		26.9		-16.9		32.4		-4.2	
95th Percentile	-3.5		12.2		23.3		-19.8		28.5		-7.7	
# of Portfolios	36		38		35		28		29		28	
● WCM International Growth	18.5	(6)	34.0	(28)	36.7	(11)	-6.7	(1)	--	(--)	--	(--)
▲ MSCI ACWI ex USA Growth Gross	5.4	(72)	22.6	(62)	27.8	(71)	-14.1	(50)	32.5	(70)	0.5	(37)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022



- WCM International Growth
- ◆ MSCI ACWI ex USA Growth Gross
- ▲ Universe Median
- 68% Confidence Interval
- eV ACWI ex-US All Cap Growth Eq Gross

Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022



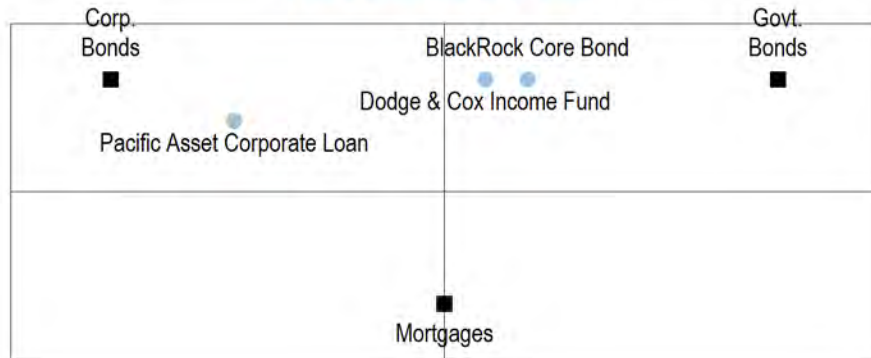
- WCM International Growth
- ◆ MSCI ACWI ex USA Growth Gross
- ▲ Universe Median
- 68% Confidence Interval
- eV ACWI ex-US All Cap Growth Eq Gross

Total Domestic Fixed Income Asset Class Overview (Gross of Fees)

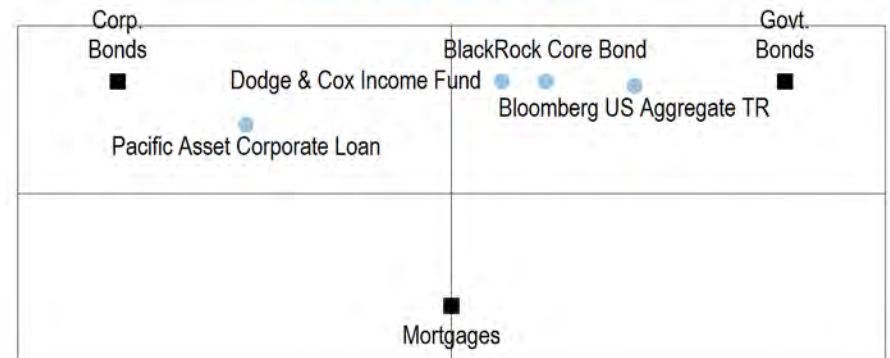
Period Ending: March 31, 2022

	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Domestic Fixed Income	317,507,905	-4.0	-1.6	3.5	3.5	3.3	0.9	8.1	9.9	0.4	4.3
<i>Bloomberg US Aggregate TR</i>		-5.9	-4.2	1.7	2.1	2.2	-1.5	7.5	8.7	0.0	3.5
<i>InvMetrics Public DB US Fix Inc Gross Rank</i>		9	7	4	3	9	15	46	11	55	50
BlackRock Core Bond	73,213,021	-6.4	-4.8	2.3	2.7	--	-1.6	9.4	10.2	0.3	--
<i>Bloomberg US Aggregate TR</i>		-5.9	-4.2	1.7	2.1	--	-1.5	7.5	8.7	0.0	--
<i>eV US Core Fixed Inc Gross Rank</i>		95	99	49	49	--	77	23	10	27	--
Dodge & Cox Income Fund	78,393,429	-5.1	-3.2	3.3	3.5	--	-0.5	9.9	10.2	0.1	--
<i>Bloomberg US Aggregate TR</i>		-5.9	-4.2	1.7	2.1	--	-1.5	7.5	8.7	0.0	--
<i>eV US Core Fixed Inc Gross Rank</i>		11	15	5	4	--	20	14	11	43	--
Pacific Asset Corporate Loan	79,062,912	0.3	4.2	4.6	4.4	--	5.6	3.0	9.1	1.0	4.9
<i>S&P/LSTA Leveraged Loan Index</i>		-0.1	3.3	4.2	4.0	--	5.2	3.1	8.6	0.4	4.1
<i>eV US Float-Rate Bank Loan Fixed Inc Gross Rank</i>		5	17	28	27	--	38	42	36	29	26
SSGA U.S. Govt Bond Index	42,497,694	-5.5	--	--	--	--	--	--	--	--	--
<i>Bloomberg US Treasury 7-10 Yr TR</i>		-6.6	--	--	--	--	--	--	--	--	--
<i>eV US Government Fixed Inc Gross Rank</i>		83	--	--	--	--	--	--	--	--	--
BlackRock TIPS	44,340,849	-3.0	--	--	--	--	--	--	--	--	--
<i>Bloomberg US TIPS TR</i>		-3.0	--	--	--	--	--	--	--	--	--
<i>eV US TIPS / Inflation Fixed Inc Gross Rank</i>		75	--	--	--	--	--	--	--	--	--

Fixed Income Effective Style Map
3 Years Ending March 31, 2022



Fixed Income Effective Style Map
5 Years Ending March 31, 2022



Total Domestic Fixed Income
Asset Class Overview (Net of Fees)

Period Ending: March 31, 2022

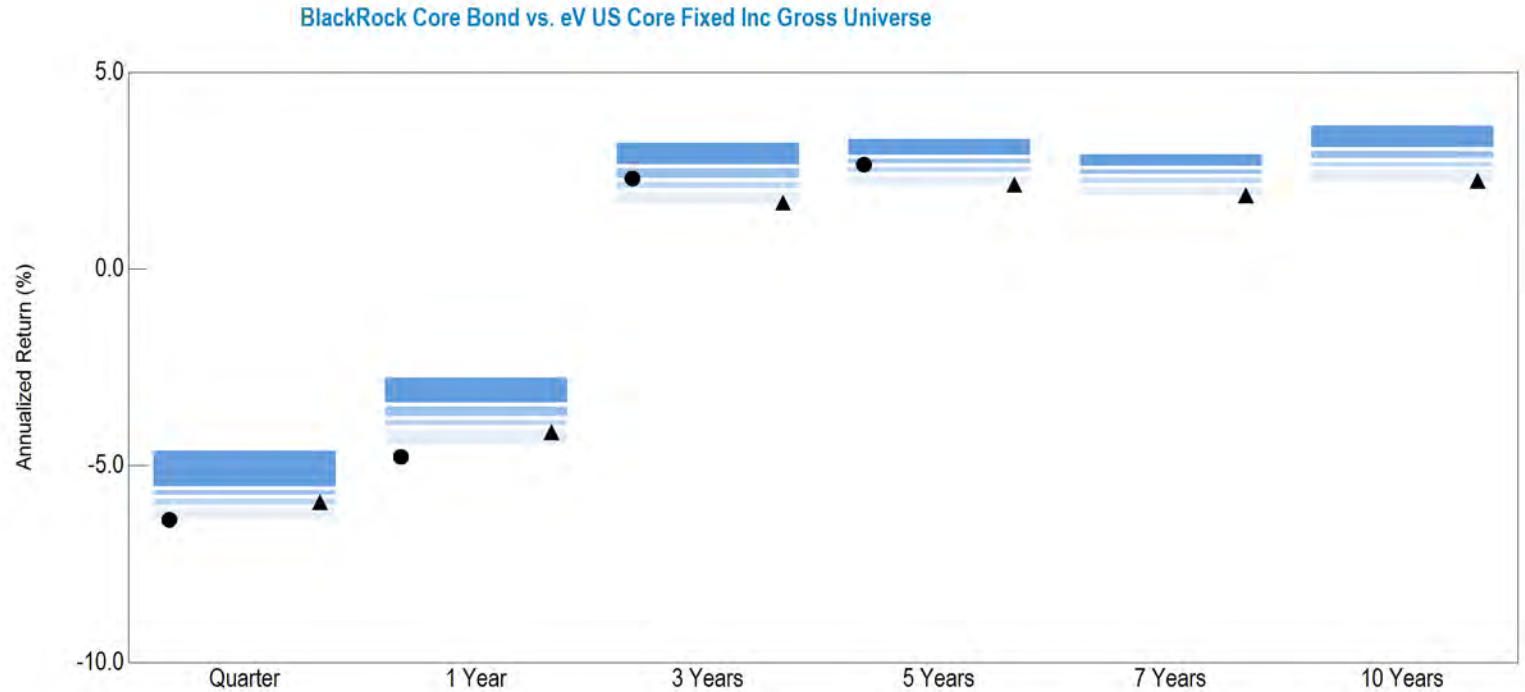
	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Domestic Fixed Income	317,507,905	-4.1	-1.9	3.1	3.2	2.9	0.5	7.7	9.5	0.0	3.9
<i>Bloomberg US Aggregate TR</i>		-5.9	-4.2	1.7	2.1	2.2	-1.5	7.5	8.7	0.0	3.5
BlackRock Core Bond	73,213,021	-6.4	-5.0	2.0	2.4	--	-1.8	9.1	9.9	0.1	--
<i>Bloomberg US Aggregate TR</i>		-5.9	-4.2	1.7	2.1	--	-1.5	7.5	8.7	0.0	--
Dodge & Cox Income Fund	78,393,429	-5.2	-3.6	2.8	3.0	--	-0.9	9.4	9.7	-0.3	--
<i>Bloomberg US Aggregate TR</i>		-5.9	-4.2	1.7	2.1	--	-1.5	7.5	8.7	0.0	--
Pacific Asset Corporate Loan	79,062,912	0.2	3.8	4.2	4.1	--	5.2	2.6	8.7	0.7	4.6
<i>S&P/LSTA Leveraged Loan Index</i>		-0.1	3.3	4.2	4.0	--	5.2	3.1	8.6	0.4	4.1
SSGA U.S. Govt Bond Index	42,497,694	-5.5	--	--	--	--	--	--	--	--	--
<i>Bloomberg US Treasury 7-10 Yr TR</i>		-6.6	--	--	--	--	--	--	--	--	--
BlackRock TIPS	44,340,849	-3.0	--	--	--	--	--	--	--	--	--
<i>Bloomberg US TIPS TR</i>		-3.0	--	--	--	--	--	--	--	--	--

Correlation Matrix
Last 1 Year

	Total Domestic Fixed Income	BlackRock Core Bond	Dodge & Cox Income Fund	Pacific Asset Corporate Loan	Bloomberg US Aggregate TR
Total Domestic Fixed Income	1.00	--	--	--	--
BlackRock Core Bond	1.00	1.00	--	--	--
Dodge & Cox Income Fund	1.00	1.00	1.00	--	--
Pacific Asset Corporate Loan	0.98	0.98	0.99	1.00	--
Bloomberg US Aggregate TR	1.00	1.00	0.99	0.97	1.00

BlackRock Core Bond
 Cumulative Performance Comparison (Gross of Fees)

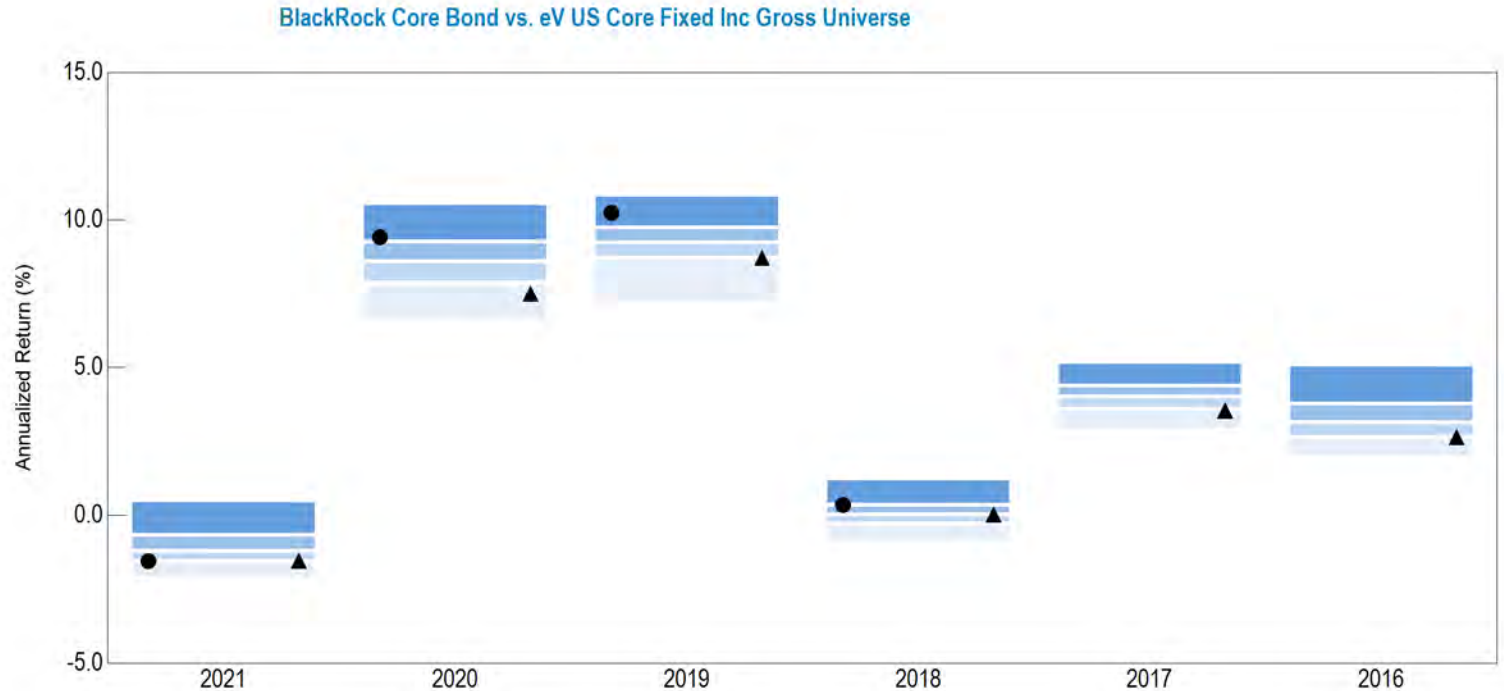
Period Ending: March 31, 2022



	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-4.6		-2.7		3.3		3.3		3.0		3.7	
25th Percentile	-5.6		-3.4		2.6		2.9		2.6		3.1	
Median	-5.8		-3.8		2.3		2.6		2.4		2.8	
75th Percentile	-6.0		-4.0		2.0		2.4		2.1		2.6	
95th Percentile	-6.4		-4.5		1.6		2.1		1.8		2.2	
# of Portfolios	210		210		207		204		200		196	
● BlackRock Core Bond	-6.4	(95)	-4.8	(99)	2.3	(49)	2.7	(49)	--	(--)	--	(--)
▲ Bloomberg US Aggregate TR	-5.9	(66)	-4.2	(82)	1.7	(94)	2.1	(95)	1.9	(95)	2.2	(95)

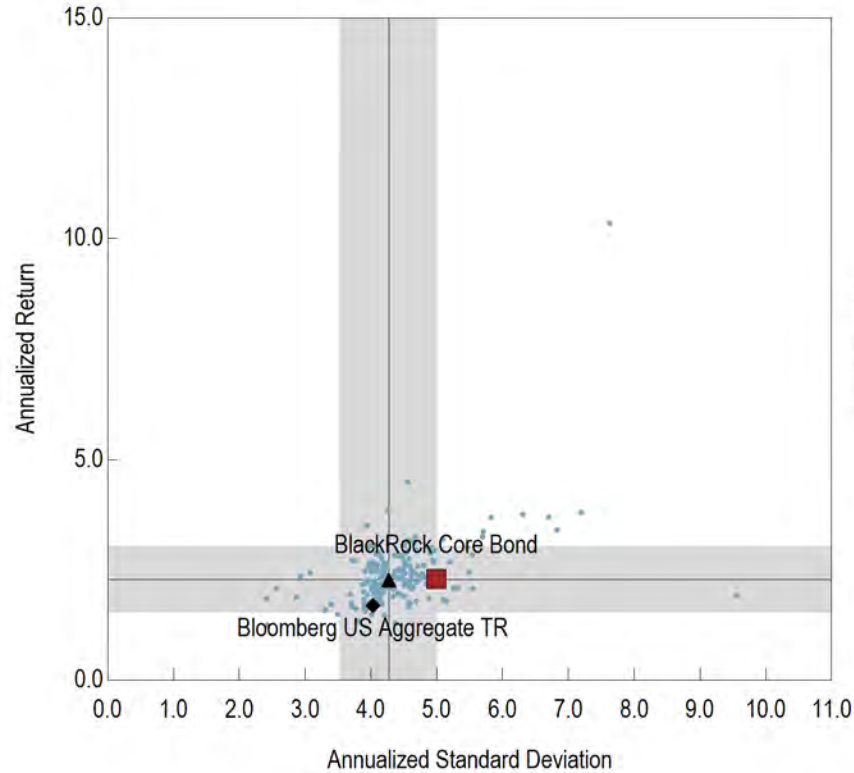
BlackRock Core Bond
 Consecutive Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022



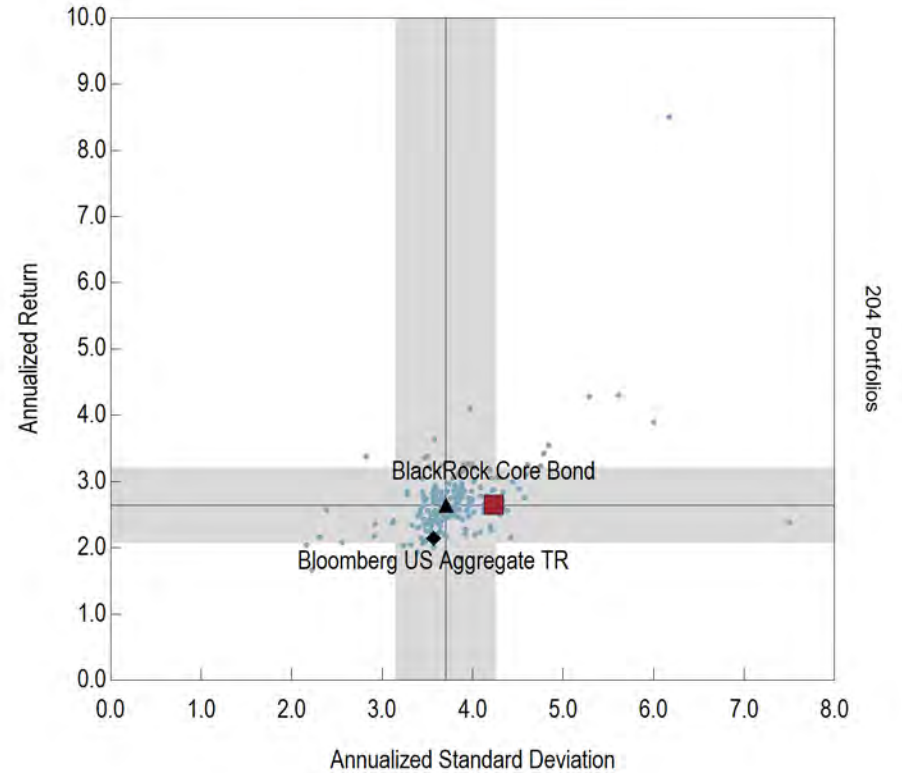
	2021		2020		2019		2018		2017		2016	
Return (Rank)	0.5		10.6		10.9		1.2		5.2		5.1	
5th Percentile	-0.7		9.3		9.8		0.4		4.4		3.8	
25th Percentile	-1.2		8.6		9.3		0.0		4.0		3.2	
Median	-1.5		7.9		8.7		-0.3		3.6		2.7	
75th Percentile	-2.1		6.6		7.2		-0.9		2.9		2.0	
95th Percentile	217		225		228		240		233		223	
# of Portfolios												
● BlackRock Core Bond	-1.6	(77)	9.4	(23)	10.2	(10)	0.3	(27)	--	(--)	--	(--)
▲ Bloomberg US Aggregate TR	-1.5	(76)	7.5	(85)	8.7	(77)	0.0	(54)	3.5	(79)	2.6	(77)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022



- BlackRock Core Bond
- ◆ Bloomberg US Aggregate TR
- ▲ Universe Median
- 68% Confidence Interval
- eV US Core Fixed Inc Gross

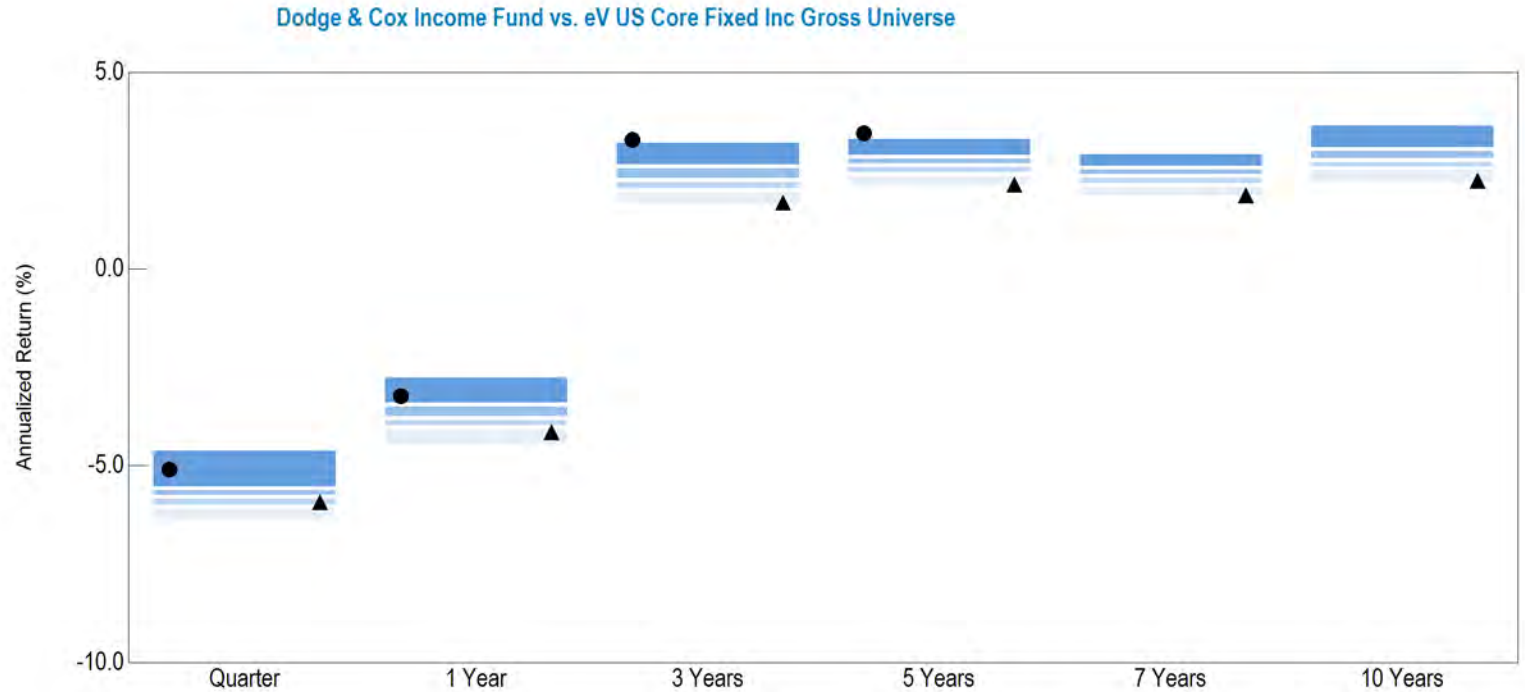
Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022



- BlackRock Core Bond
- ◆ Bloomberg US Aggregate TR
- ▲ Universe Median
- 68% Confidence Interval
- eV US Core Fixed Inc Gross

Dodge & Cox Income Fund
 Cumulative Performance Comparison (Gross of Fees)

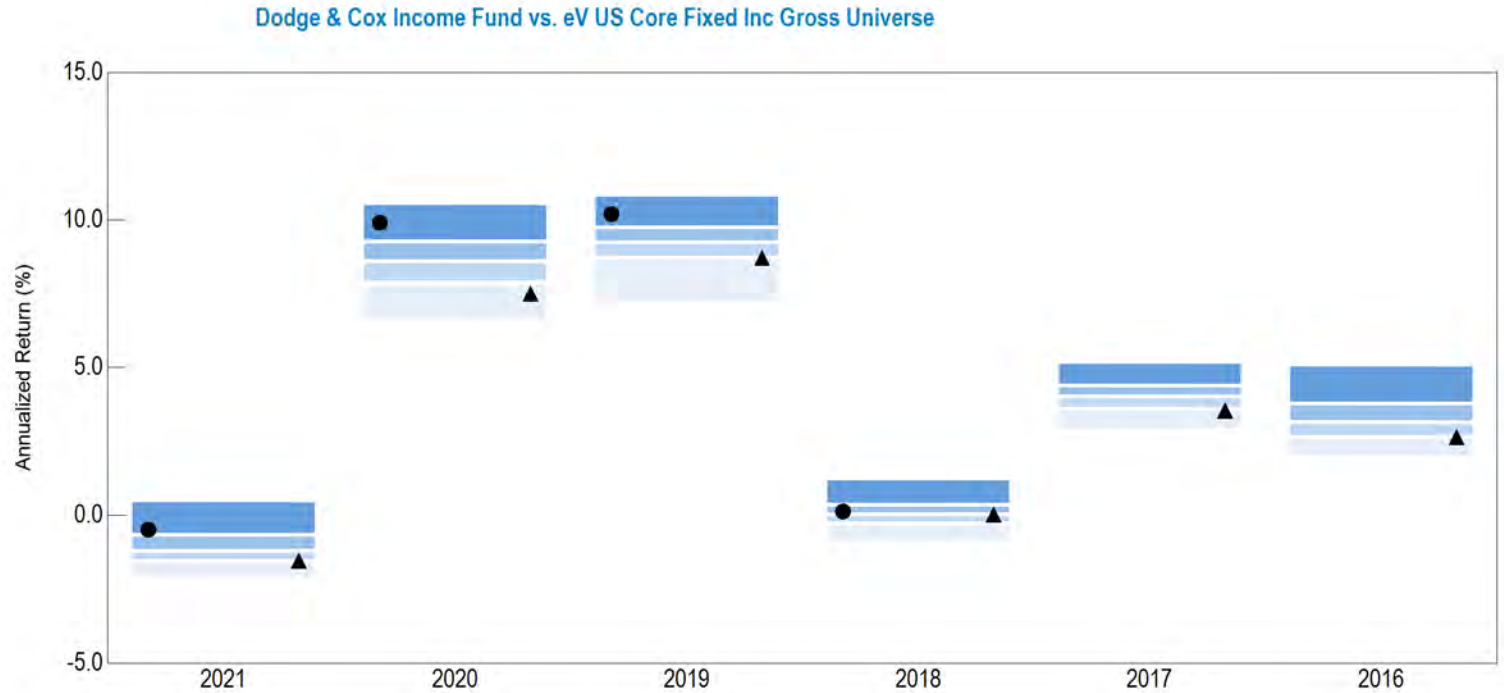
Period Ending: March 31, 2022



	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-4.6		-2.7		3.3		3.3		3.0		3.7	
25th Percentile	-5.6		-3.4		2.6		2.9		2.6		3.1	
Median	-5.8		-3.8		2.3		2.6		2.4		2.8	
75th Percentile	-6.0		-4.0		2.0		2.4		2.1		2.6	
95th Percentile	-6.4		-4.5		1.6		2.1		1.8		2.2	
# of Portfolios	210		210		207		204		200		196	
● Dodge & Cox Income Fund	-5.1	(11)	-3.2	(15)	3.3	(5)	3.5	(4)	--	(--)	--	(--)
▲ Bloomberg US Aggregate TR	-5.9	(66)	-4.2	(82)	1.7	(94)	2.1	(95)	1.9	(95)	2.2	(95)

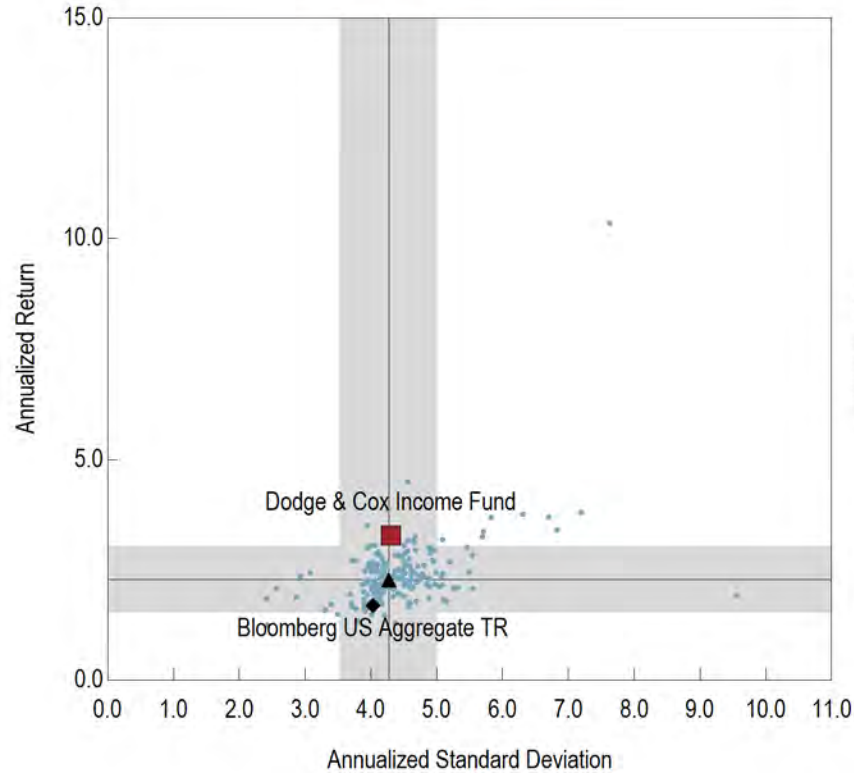
Dodge & Cox Income Fund
 Consecutive Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022



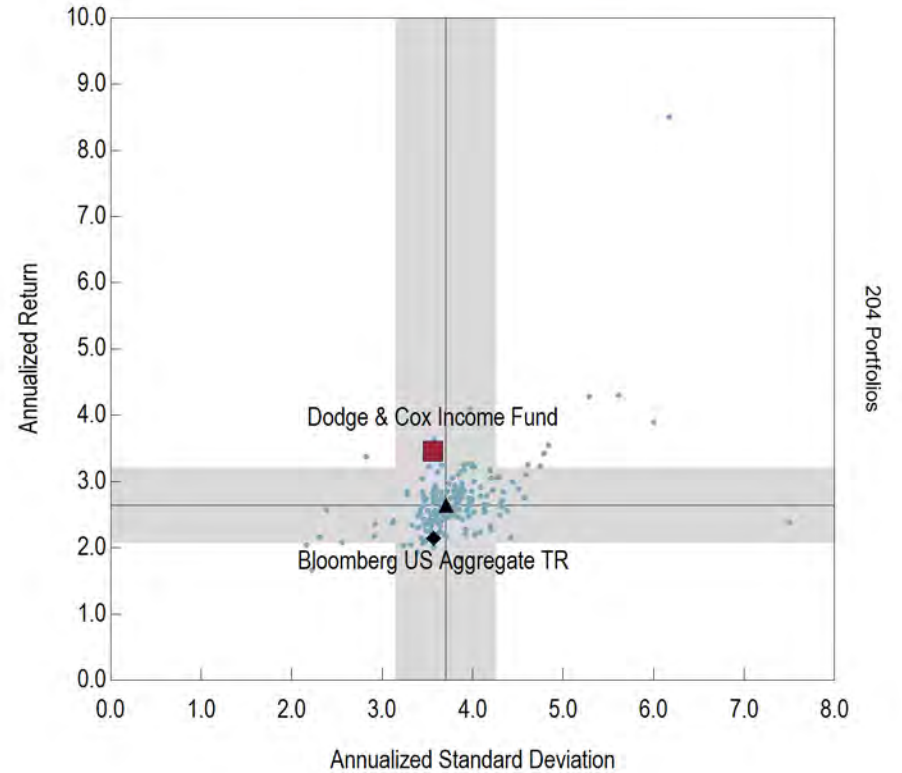
	2021		2020		2019		2018		2017		2016	
Return (Rank)	0.5	(20)	10.6	(14)	10.9	(11)	1.2	(43)	5.2	(--)	5.1	(--)
5th Percentile	-0.7	(76)	9.3	(85)	9.8	(77)	0.4	(54)	4.4	(79)	3.8	(77)
25th Percentile	-1.2		8.6		9.3		0.0		4.0		3.2	
Median	-1.5		7.9		8.7		-0.3		3.6		2.7	
75th Percentile	-2.1		6.6		7.2		-0.9		2.9		2.0	
95th Percentile												
# of Portfolios	217		225		228		240		233		223	
● Dodge & Cox Income Fund	-0.5	(20)	9.9	(14)	10.2	(11)	0.1	(43)	--	(--)	--	(--)
▲ Bloomberg US Aggregate TR	-1.5	(76)	7.5	(85)	8.7	(77)	0.0	(54)	3.5	(79)	2.6	(77)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022



- Dodge & Cox Income Fund
- ◆ Bloomberg US Aggregate TR
- ▲ Universe Median
- 68% Confidence Interval
- eV US Core Fixed Inc Gross

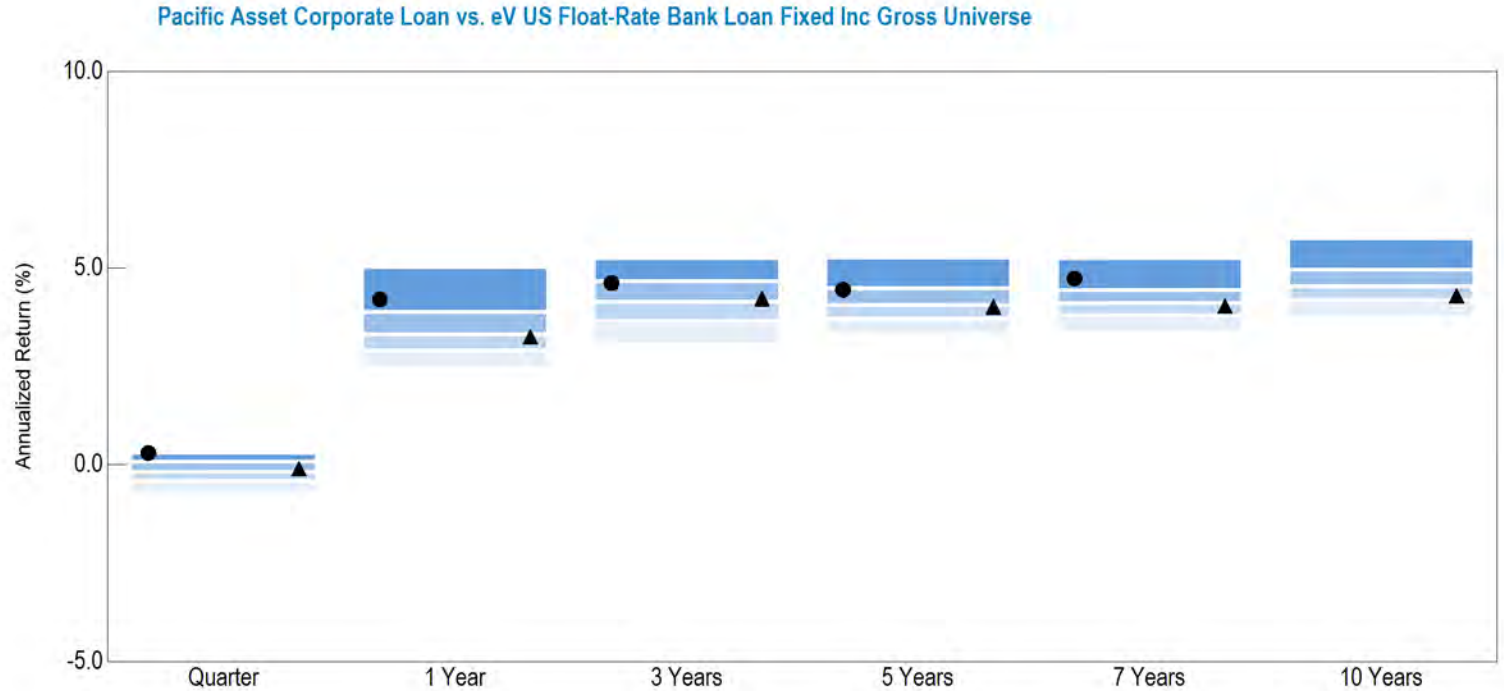
Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022



- Dodge & Cox Income Fund
- ◆ Bloomberg US Aggregate TR
- ▲ Universe Median
- 68% Confidence Interval
- eV US Core Fixed Inc Gross

Pacific Asset Corporate Loan
 Cumulative Performance Comparison (Gross of Fees)

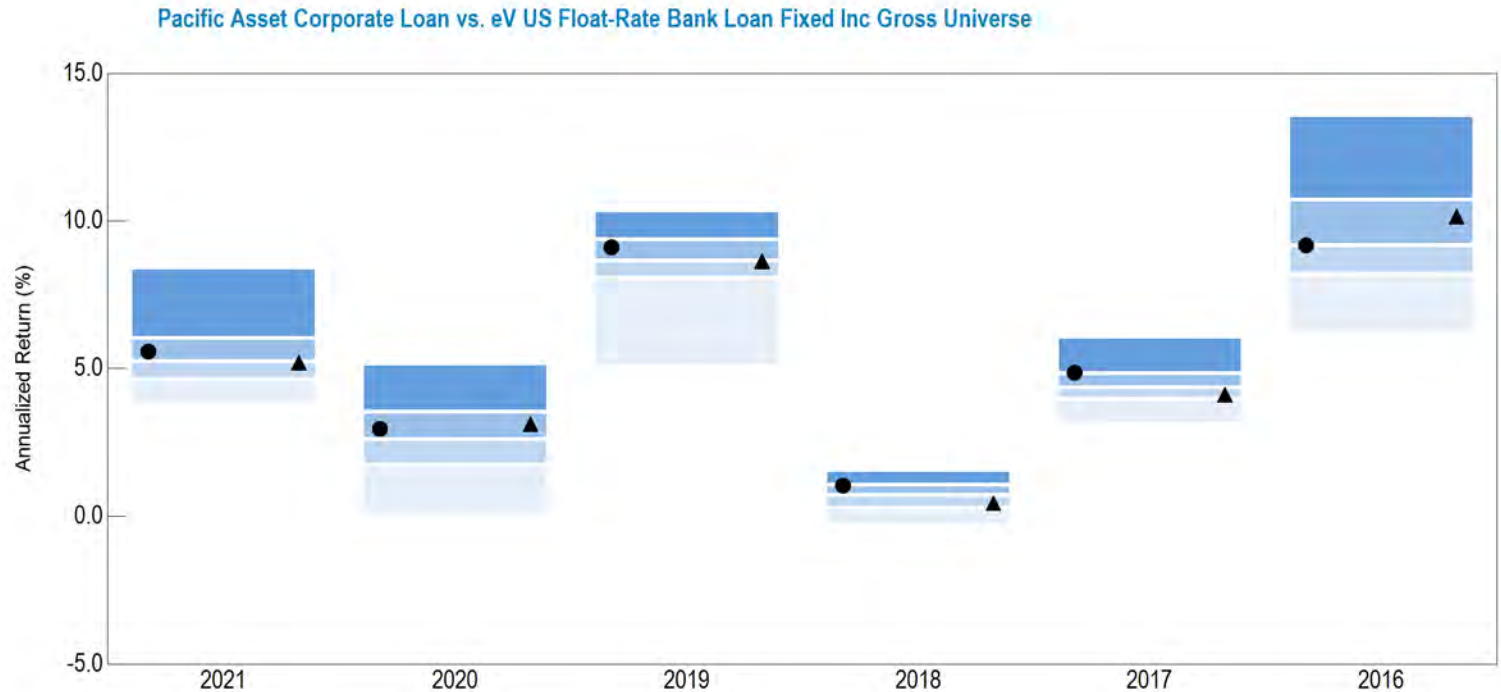
Period Ending: March 31, 2022



	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	0.3		5.0		5.2		5.3		5.2		5.7	
25th Percentile	0.1		3.9		4.7		4.5		4.4		5.0	
Median	-0.2		3.3		4.2		4.1		4.1		4.5	
75th Percentile	-0.4		2.9		3.7		3.7		3.8		4.2	
95th Percentile	-0.7		2.5		3.1		3.3		3.4		3.8	
# of Portfolios	70		70		70		68		67		59	
● Pacific Asset Corporate Loan	0.3	(5)	4.2	(17)	4.6	(28)	4.4	(27)	4.7	(14)	--	(--)
▲ S&P/LSTA Leveraged Loan Index	-0.1	(40)	3.3	(55)	4.2	(48)	4.0	(55)	4.0	(58)	4.3	(70)

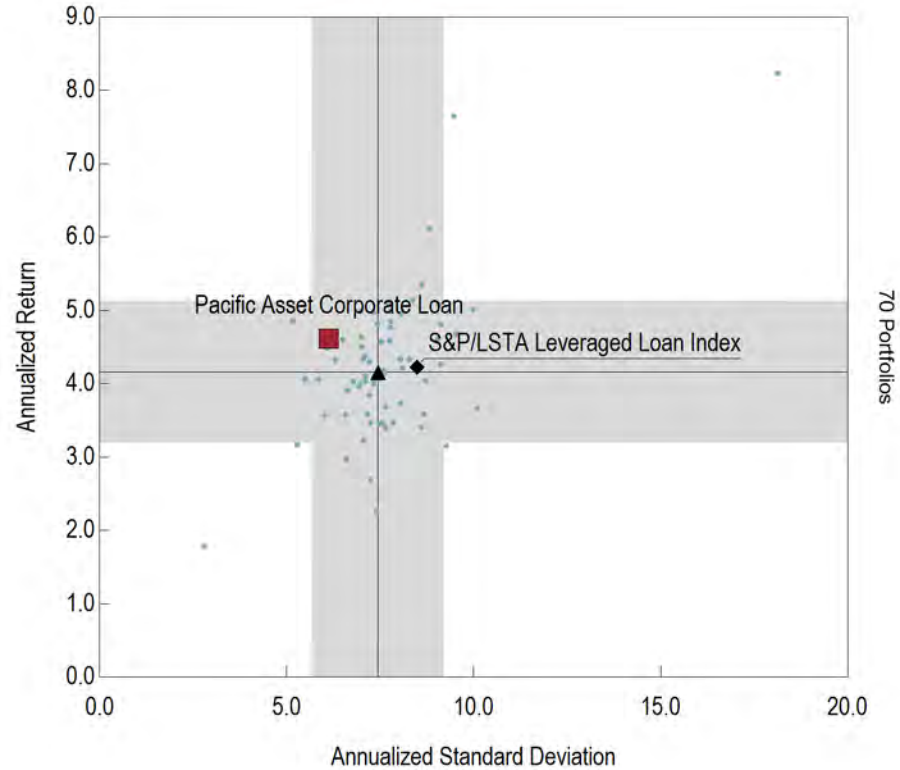
Pacific Asset Corporate Loan
 Consecutive Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022



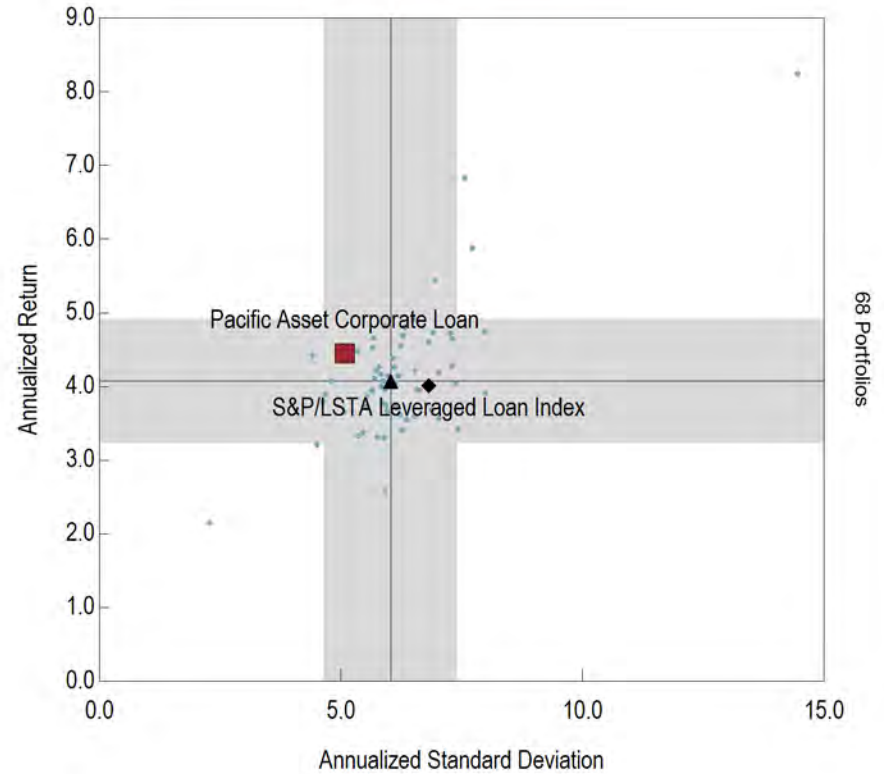
	2021		2020		2019		2018		2017		2016	
5th Percentile	8.4		5.2		10.3		1.6		6.1		13.6	
25th Percentile	6.1		3.6		9.4		1.1		4.9		10.7	
Median	5.3		2.6		8.7		0.7		4.4		9.2	
75th Percentile	4.7		1.7		8.1		0.3		4.0		8.2	
95th Percentile	3.8		0.0		5.1		-0.3		3.1		6.2	
# of Portfolios	76		82		76		76		75		69	
● Pacific Asset Corporate Loan	5.6	(38)	3.0	(42)	9.1	(36)	1.0	(29)	4.9	(26)	9.2	(51)
▲ S&P/LSTA Leveraged Loan Index	5.2	(52)	3.1	(36)	8.6	(52)	0.4	(68)	4.1	(71)	10.2	(35)

Annualized Return vs. Annualized Standard Deviation
 3 Years Ending March 31, 2022

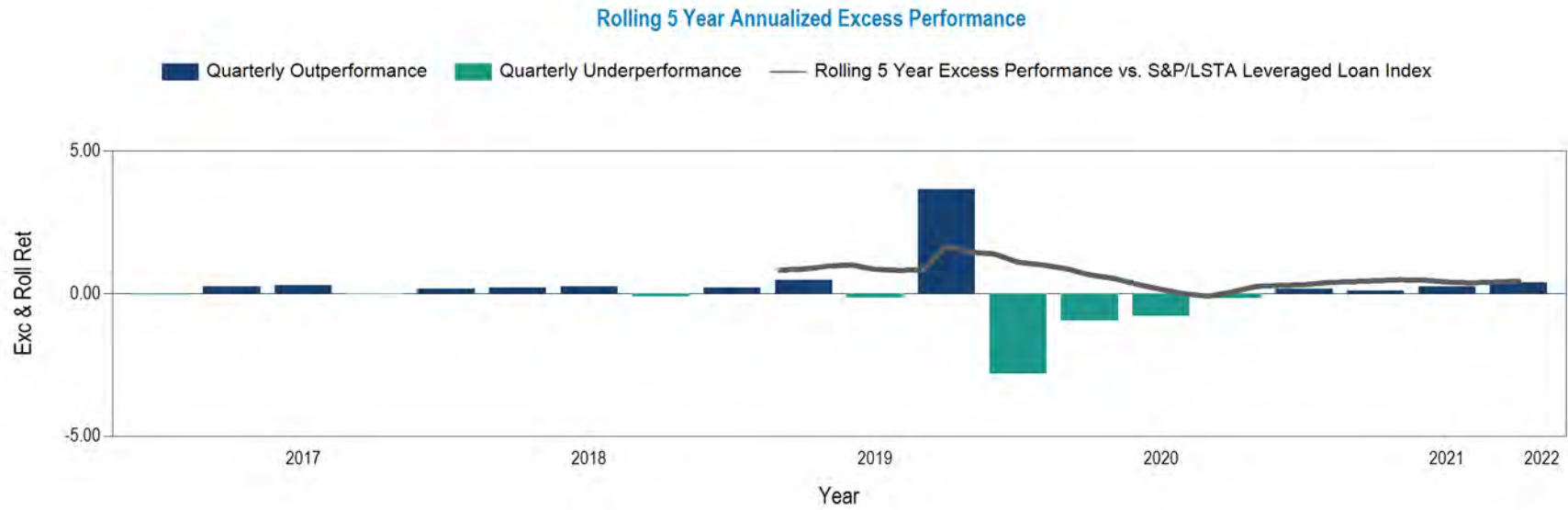
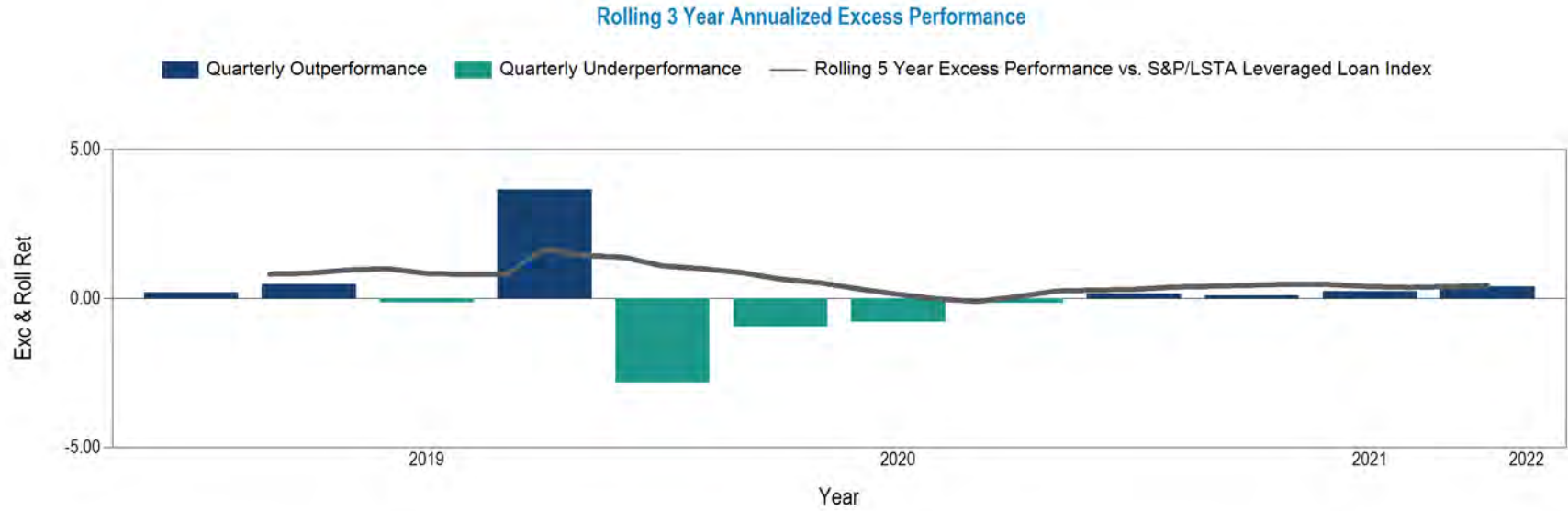


- Pacific Asset Corporate Loan
- ◆ S&P/LSTA Leveraged Loan Index
- ▲ Universe Median
- 68% Confidence Interval
- eV US Float-Rate Bank Loan Fixed Inc Gross

Annualized Return vs. Annualized Standard Deviation
 5 Years Ending March 31, 2022



- Pacific Asset Corporate Loan
- ◆ S&P/LSTA Leveraged Loan Index
- ▲ Universe Median
- 68% Confidence Interval
- eV US Float-Rate Bank Loan Fixed Inc Gross



Total Global Fixed
Asset Class Overview (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Global Fixed	119,049,692	-5.8	-8.2	-0.7	0.6	0.4	-7.0	6.7	7.4	-4.3	13.8
<i>FTSE World Govt Bond Index</i>		-6.5	-7.7	-0.1	1.3	0.3	-7.0	10.1	5.9	-0.8	7.5
Brandywine Global Fixed Income	58,168,428	-1.6	-2.9	--	--	--	-4.0	--	--	--	--
<i>FTSE WGBI ex US TR</i>		-7.1	-10.4	--	--	--	-9.7	--	--	--	--
<i>eV All Global Fixed Inc Gross Rank</i>		9	38	--	--	--	71	--	--	--	--
Ashmore EM Blended Debt Fund	60,881,264	-9.5	-12.5	-3.8	--	--	-9.5	3.2	--	--	--
<i>50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELMI+</i>		-8.0	-7.3	-0.5	--	--	-3.9	3.9	--	--	--
<i>eV All Emg Mkts Fixed Inc Gross Rank</i>		84	97	99	--	--	97	85	--	--	--

Total Global Fixed
Asset Class Overview (Net of Fees)

Period Ending: March 31, 2022

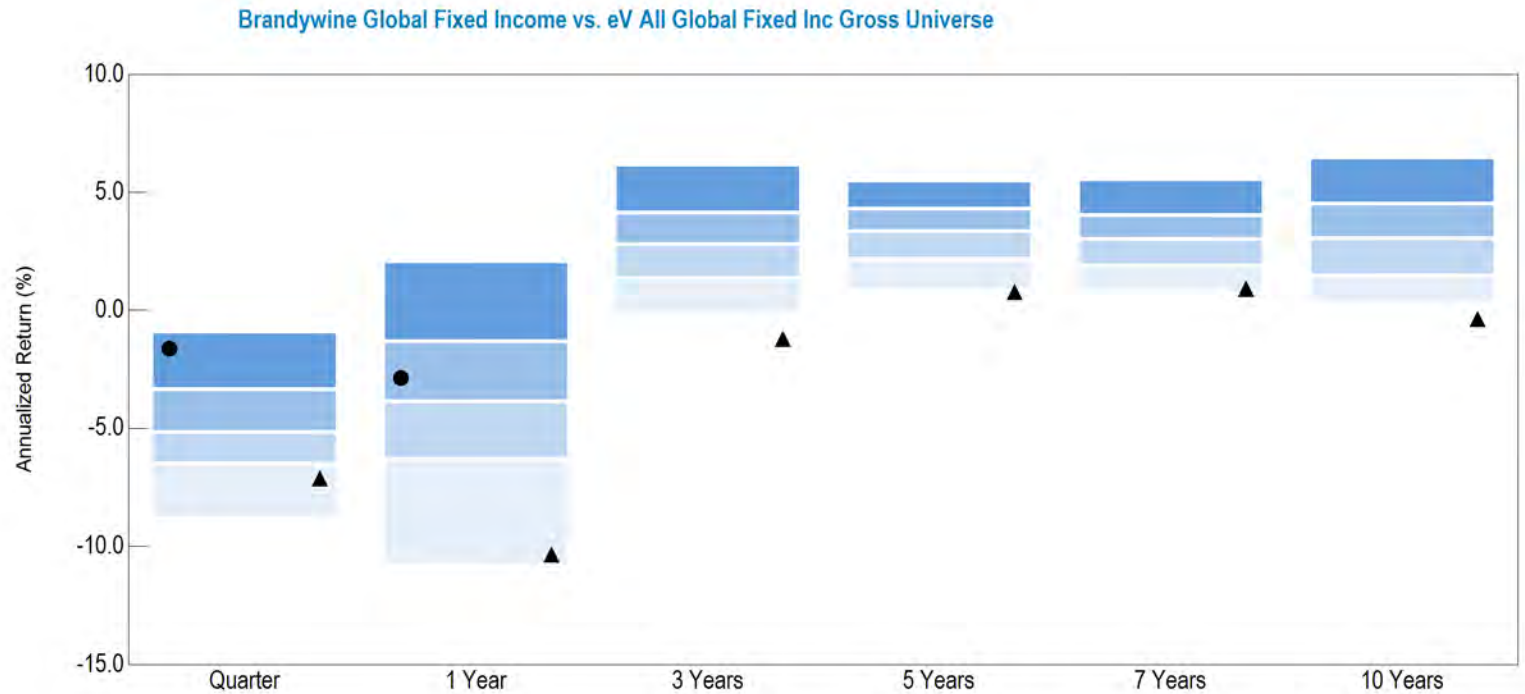
	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Global Fixed	119,049,692	-6.0	-8.9	-1.4	0.1	-0.1	-7.7	6.0	6.9	-4.7	13.3
<i>FTSE World Govt Bond Index</i>		-6.5	-7.7	-0.1	1.3	0.3	-7.0	10.1	5.9	-0.8	7.5
Brandywine Global Fixed Income	58,168,428	-1.7	-3.3	--	--	--	-4.4	--	--	--	--
<i>FTSE WGBI ex US TR</i>		-7.1	-10.4	--	--	--	-9.7	--	--	--	--
Ashmore EM Blended Debt Fund	60,881,264	-9.7	-13.4	-4.8	--	--	-10.4	2.1	--	--	--
<i>50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELMI+</i>		-8.0	-7.3	-0.5	--	--	-3.9	3.9	--	--	--

Correlation Matrix
Last 1 Year

	Total Global Fixed	Brandywine Global Fixed Income	Ashmore EM Blended Debt Fund	FTSE World Govt Bond Index
Total Global Fixed	1.00	--	--	--
Brandywine Global Fixed Income	0.86	1.00	--	--
Ashmore EM Blended Debt Fund	0.99	0.79	1.00	--
FTSE World Govt Bond Index	0.84	0.57	0.86	1.00

Brandywine Global Fixed Income
 Cumulative Performance Comparison (Gross of Fees)

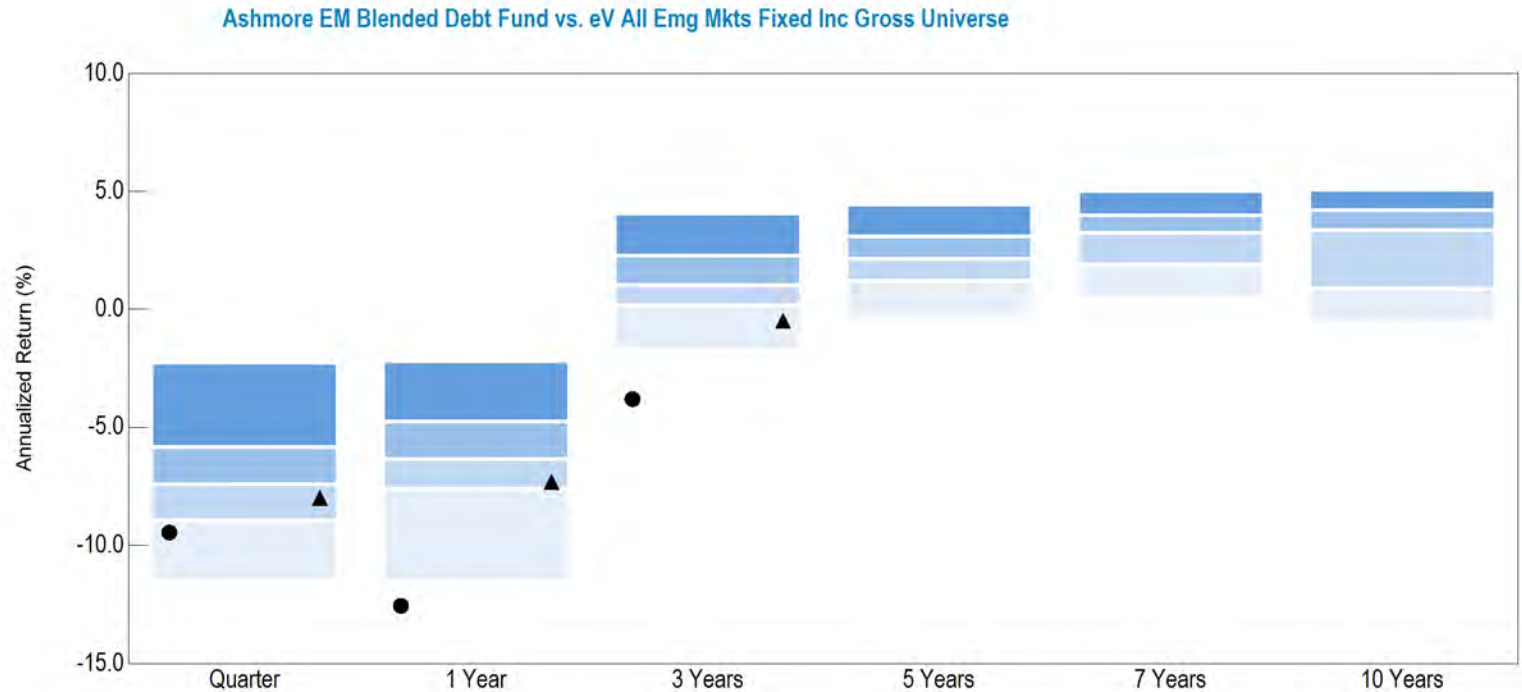
Period Ending: March 31, 2022



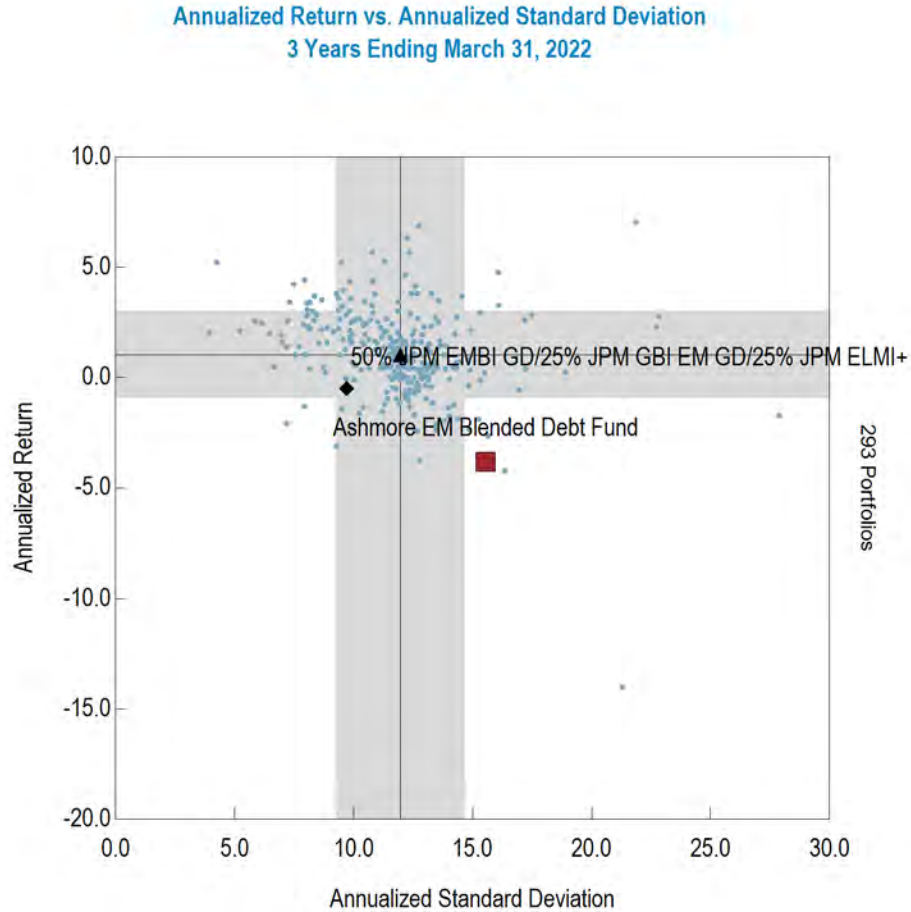
	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-0.9		2.1		6.2		5.5		5.6		6.5	
25th Percentile	-3.3		-1.3		4.2		4.3		4.1		4.5	
Median	-5.2		-3.8		2.8		3.4		3.0		3.1	
75th Percentile	-6.5		-6.3		1.4		2.2		1.9		1.5	
95th Percentile	-8.8		-10.8		-0.2		0.9		0.8		0.3	
# of Portfolios	517		516		499		461		415		321	
● Brandywine Global Fixed Income	-1.6	(9)	-2.9	(38)	--	(--)	--	(--)	--	(--)	--	(--)
▲ FTSE WGBI ex US TR	-7.1	(85)	-10.4	(95)	-1.2	(98)	0.8	(96)	0.9	(94)	-0.4	(97)

Ashmore EM Blended Debt Fund
 Cumulative Performance Comparison (Gross of Fees)

Period Ending: March 31, 2022



	Quarter		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-2.3	-2.2	4.0	4.4	5.0	5.0						
25th Percentile	-5.8	-4.7	2.3	3.1	4.0	4.2						
Median	-7.4	-6.3	1.0	2.2	3.3	3.4						
75th Percentile	-8.9	-7.6	0.2	1.2	1.9	0.9						
95th Percentile	-11.5	-11.5	-1.7	-0.3	0.5	-0.6						
# of Portfolios	309	309	293	273	240	172						
● Ashmore EM Blended Debt Fund	-9.5	(84)	-12.5	(97)	-3.8	(99)	--	(--)	--	(--)	--	(--)
▲ 50% JPM EMBI GD/25% JPM GBI EM GD/25%	-8.0	(60)	-7.3	(71)	-0.5	(86)	--	(--)	--	(--)	--	(--)



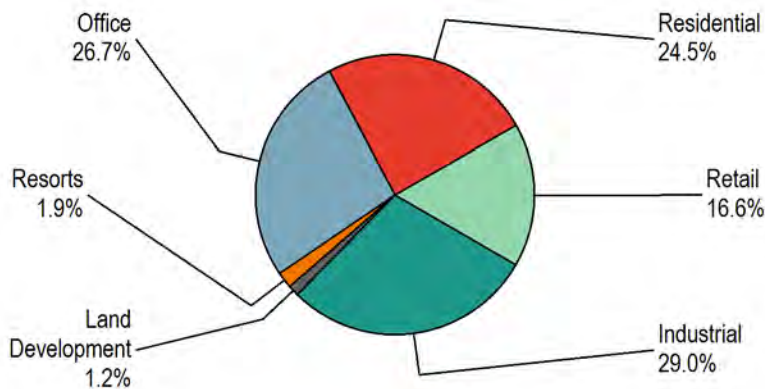
- Ashmore EM Blended Debt Fund
- ◆ 50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELMI+
- ▲ Universe Median
- 68% Confidence Interval
- eV All Emg Mkts Fixed Inc Gross

Total Real Estate Asset Class Overview (Gross of Fees)

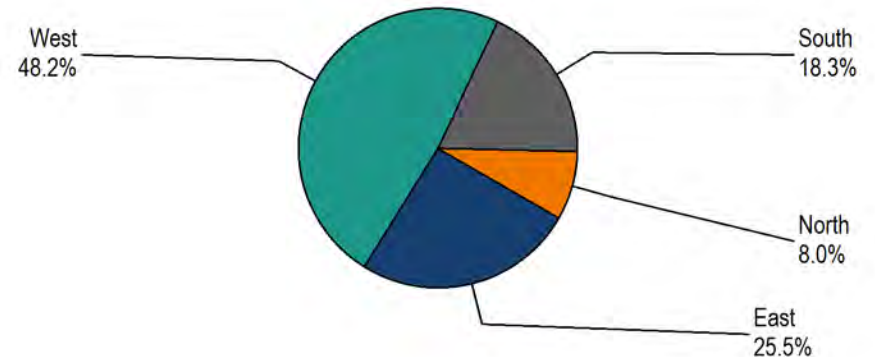
Period Ending: March 31, 2022

	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
Total Real Estate	240,927,994	5.9	23.7	9.6	8.5	10.1	18.5	1.1	4.3	7.5	7.8
<i>NCREIF Property Index</i>		5.3	21.9	9.6	8.5	9.6	17.7	1.6	6.4	6.7	7.0
JP Morgan Core Real Estate	177,719,728	6.3	25.4	9.7	8.1	10.2	19.9	0.5	3.4	7.0	6.1
<i>NCREIF-ODCE</i>		7.4	28.5	11.3	9.9	10.9	22.2	1.2	5.3	8.3	7.6
<i>NCREIF Property Index</i>		5.3	21.9	9.6	8.5	9.6	17.7	1.6	6.4	6.7	7.0
ARA American Strategic Value Realty	63,208,266	5.0	18.7	9.5	8.7	--	14.0	3.8	7.3	9.1	7.4
<i>NCREIF-ODCE</i>		7.4	28.5	11.3	9.9	--	22.2	1.2	5.3	8.3	7.6
<i>NCREIF Property Index</i>		5.3	21.9	9.6	8.5	--	17.7	1.6	6.4	6.7	7.0

Property Type Allocation
Allocation as of March 31, 2022



Geographic Diversification
Allocation as of March 31, 2022



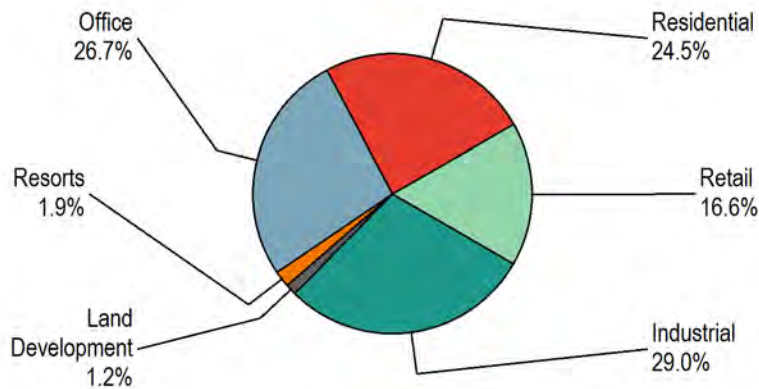
ARA American Strategic Value Realty is lagged one quarter.

Total Real Estate
Asset Class Overview (Net of Fees)

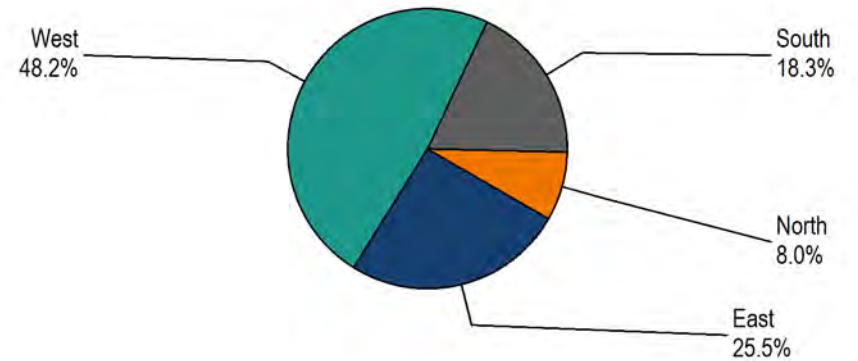
Period Ending: March 31, 2022

	Market Value	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
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JP Morgan Core Real Estate	177,719,728	6.3	25.4	9.7	8.1	9.7	19.9	0.5	3.4	7.0	6.1
<i>NCREIF-ODCE</i>		7.4	28.5	11.3	9.9	10.9	22.2	1.2	5.3	8.3	7.6
<i>NCREIF Property Index</i>		5.3	21.9	9.6	8.5	9.6	17.7	1.6	6.4	6.7	7.0
ARA American Strategic Value Realty	63,208,266	5.0	18.7	9.5	8.7	--	14.0	3.8	7.3	9.1	7.4
<i>NCREIF-ODCE</i>		7.4	28.5	11.3	9.9	--	22.2	1.2	5.3	8.3	7.6
<i>NCREIF Property Index</i>		5.3	21.9	9.6	8.5	--	17.7	1.6	6.4	6.7	7.0

Property Type Allocation
Allocation as of March 31, 2022



Geographic Diversification
Allocation as of March 31, 2022



ARA American Strategic Value Realty is lagged one quarter.

Performance Return Calculations

Performance is calculated using Time Weighted Rates of Return (TWRR) methodologies. Monthly returns are geometrically linked and annualized for periods longer than one year.

Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

Illiquid Alternatives

Due to the inability to receive final valuation prior to report production, closed end funds (including but are not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit) performance is typically reported at a one-quarter lag. Valuation is reported at a one-quarter lag, adjusted for current quarter flow (cash flows are captured real time). Closed end fund performance is calculated using a time-weighted return methodology consistent with all portfolio and total fund performance calculations. For Private Markets, performance reports also include Verus-calculated multiples based on flows and valuations (e.g. DPI and TVPI) and manager-provided IRRs.

Manager Line Up

Manager	Inception Date	Data Source	Manager	Inception Date	Data Source
PIMCO RAE Fundamental PLUS	11/30/2007	J.P. Morgan	JP Morgan Core Real Estate	3/6/2008	J.P. Morgan
Loomis Sayles Large Cap Growth	12/31/2016	J.P. Morgan	Gresham MTAP Commodity	8/31/2013	BNY Mellon
Boston Partners Large Cap Value	1/31/2017	Boston Partners	Cash Account	-	SLOCPT
Atlanta Capital Management	8/31/2010	J.P. Morgan	HarbourVest Partners IX-Buyout	2011 ¹	HarbourVest
Dodge & Cox Intl Stock	12/6/2007	J.P. Morgan	HarbourVest 2018 Global Fund L.P.	-	HarbourVest
WCM International Growth	2/15/2017	WCM	HarbourVest SLO Fund	-	HarbourVest
BlackRock Core Bond	1/19/2017	J.P. Morgan	KKR Mezzanine Partners	2010 ¹	KKR
Dodge & Cox Income	1/19/2017	Deutsche Bank	PIMCO Distressed Credit Fund	2010 ¹	Brown Brothers Harriman
Pacific Asset Corporate Loan	9/1/2014	Deutsche Bank	ARA American Strategic Value	6/22/2016	American Realty Adv.
SSGA U.S. Govt Bond Index	7/16/2021	SSGA	Sixth Street Partners DCP	2016 ¹	TPG
BlackRock TIPS	9/1/2021	BlackRock	Pathway Private Equity Fund 9	2017 ¹	Pathway
Brandywine Global Fixed	6/24/2020	J.P. Morgan	Pathway Private Equity Fund 10	3/25/2020	Pathway
Ashmore EM Blended Debt Fund	3/31/2019	Ashmore	Sixth Street Partners TAO	4/16/2020	TPG
PIMCO Short Duration Fund	7/14/2021	PIMCO			

¹ Represents fund vintage year.

Policy & Custom Index Composition

Policy Index (1/1/2021-Current)	20% Russell 3000, 20% MSCI ACWI ex-US (Gross), 12% Bloomberg U.S. Aggregate, 11% FTSE World Govt Bond Index, 3% Bloomberg US Treasury 7-10 yr, 2% Bloomberg US TIPS, 15% NCREIF Property Index, 3% Russell 3000, 5% Private Equity Benchmark, 5% Private Credit Benchmark, 2% Bloomberg US Govt/Credit 1-3 yr, 2% 91 Day T-Bill.
Policy Index (10/1/2020-12/31/2020)	21% Russell 3000, 21% MSCI ACWI ex-US (Gross), 31% Bloomberg U.S. Aggregate, 17% NCREIF Property Index, 1% Russell 3000, 4 Private Equity Benchmark, 5% Private Credit Benchmark.
Policy Index (4/1/2020-9/30/2020)	21% Russell 3000, 21% MSCI ACWI ex-US (Gross), 31% Bloomberg U.S. Aggregate, 17% NCREIF Property Index, 5% Russell 3000+ 300 bps (lagged), 5% Bloomberg High Yield +2% (lagged).
Policy Index (1/1/2017-3/31/2020)	20% Russell 3000, 20% MSCI ACWI ex-US (Gross), 30% Bloomberg U.S. Aggregate, 15% NCREIF Property Index, 5% Bloomberg Commodity Index, 5% Russell 3000+ 300 bps (lagged), 5% Bloomberg High Yield +2% (lagged).
Policy Index (10/1/2016-12/31/2016)	20% Russell 3000, 20% MSCI ACWI ex-US (Gross), 30% Bloomberg U.S. Aggregate, 15% NCREIF Property Index, 5% Bloomberg Commodity Index, 5% Russell 3000+ 300 bps, 5% Bloomberg High Yield +2% (lagged).
Policy Index (7/1/2014-9/30/2016)	23% Russell 3000, 22% MSCI ACWI ex-US (Gross), 35% Bloomberg U.S. Aggregate, 10% NCREIF Property Index, 5% Bloomberg Commodity Index, 5% Russell 3000+ 300 bps.
Policy Index (7/1/2013-6/30/2014)	27% Russell 3000, 23% MSCI ACWI ex-US (Gross), 30% Bloomberg U.S. Aggregate, 10% NCREIF Property Index, 5% Bloomberg Commodity Index, 5% Russell 3000+ 300 bps.
Policy Index (4/1/2011-6/30/2013)	27% Russell 3000, 23% MSCI ACWI ex-US (Gross), 20% Bloomberg U.S. Aggregate, 5% Citi World Gov't Bond, 5% Barclays US TIPS, 10% NCREIF Property Index, 5% Bloomberg Commodity Index, 5% Russell 3000+ 300 bps.

Private Equity Index (1/1/2017-10/1/2020)

Russell 3000 +3% (Lagged)

Private Equity Index (6/1/2011-12/31/2016)

Russell 3000 +3%

Private Equity Benchmark and Private Credit Benchmarks are equal to the actual private equity and private credit returns, respectively.

Custom Growth Benchmark (1/1/2021-Present)

29.11% Russell 3000, 25.32% MSCI ACWI Gross, 6.33% Private Equity Benchmark, 6.33% Private Credit Benchmark, 13.92% FTSE World Govt Bond Index, 18.99% NCREIF Property Index.

Custom Fixed Income Benchmark (1/1/2021-Present)

63.15% Bloomberg U.S. Aggregate, 15.79% Bloomberg US Treasury 7-10 yr, 10.53% Bloomberg US TIPS, 10.53% Bloomberg US Govt/Credit 1-3 yr.

Custom Risk Diversifying Benchmark (1/1/2021-Present)

63.33% Custom Fixed Income Benchmark, 36.67% FTSE World Govt Bond Index.

Other Disclosures

Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: $\text{Portfolio Return} - [\text{Risk-free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk-free Rate})]$.

Benchmark R-squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book-to-Market: The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price-to-Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

R-Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$.

Sortino Ratio: Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

Board of Trustees

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Date: May 23, 2022

To: Board of Trustees

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

Agenda Item 19: Monthly Investment Report for April 2022

	April	Year to Date 2022	2021	2020	2019	2018	2017
Total Trust Investments (\$ millions)	\$1,645		\$1,775	\$1,552 year end	\$1,446 year end	\$1,285 year end	\$1,351 year end
Total Fund Return	-3.4% Gross	-5.5% Gross	15.2% Gross	8.9 % Gross	16.3 % Gross	-3.2 % Gross	15.5 % Gross
Policy Index Return (r)	-4.4%	-7.1%	12.8%	10.0 %	16.4 %	-3.2 %	13.4 %

- (r) Policy index as of Nov. 2021 Strategic Asset Allocation Policy with 2022 Interim targets:
- Public Mkt Equity- 24% Russell 3000, 17% MSCI ACWI ex-US
 - Public Mkt Debt- 11% Barclays US Aggregate,
 - Risk Diversifying 8% Barclays US Aggregate, 4% Barclays 7-10yr Treasury, 3% Barclays 5-10yr US TIPS
 - Real Estate & Infrastructure- 13% NCREIF Index (inc. Infrastructure)
 - Private Equity- 7% actual private equity returns
 - Private Credit- 4% actual private credit returns
 - Liquidity- 6% 90 day T-Bills
- Pending annual updates to interim targets.

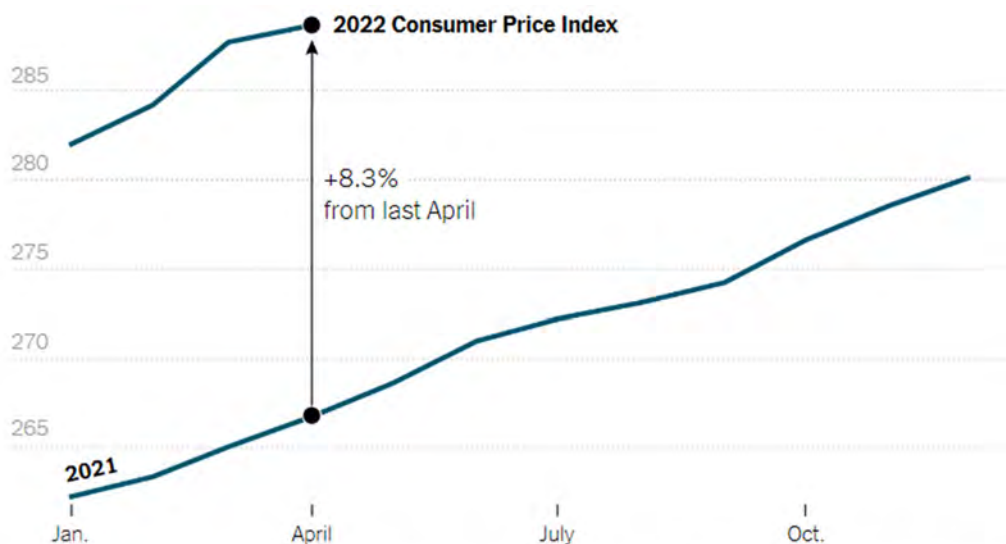
SLOCPT Investment Returns:

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. As of May 20th, the month has had significantly negative returns.

The Economy and Capital Markets:

- **The Economy**

- **GDP Growth** – The U.S. economy contracted in the first three months of the year with an estimate of 1Q22 real GDP growth at -0.4%. However, the 1Q22 negative GDP growth was largely caused by business' contracting their inventories after a burst of inventory building in 4Q21 and government Covid stimulus spending winding down. The economic growth in the first quarter remained fundamentally strong with consumer spending growing 0.7%.
 - Many analysts report expectations for moderating, but positive growth rates for the remainder of 2022 and into 2023. Large amounts of pent-up demand for goods and services provide a tailwind to the economy that defers concerns about when the next recession may start. A 2022 GDP growth around a 3% number seems to be a common analyst expectation.
- **Inflation** – Inflation continues to weigh on economies worldwide. The U.S. CPI index ended April with an 8.3% year-over-year increase – down slightly from the March increase. Inflationary pressures from excess consumer demand relative to supply and crisis-driven oil price highs fuel the high year-over-year CPI increase. The base effects of year-over-year inflation compared to 2021 data should work out of the mathematics of the inflation rate later this year. Prices rose significantly in 2Q21 so the comparison to 2022 data in coming months should show less of an annual CPI increase.

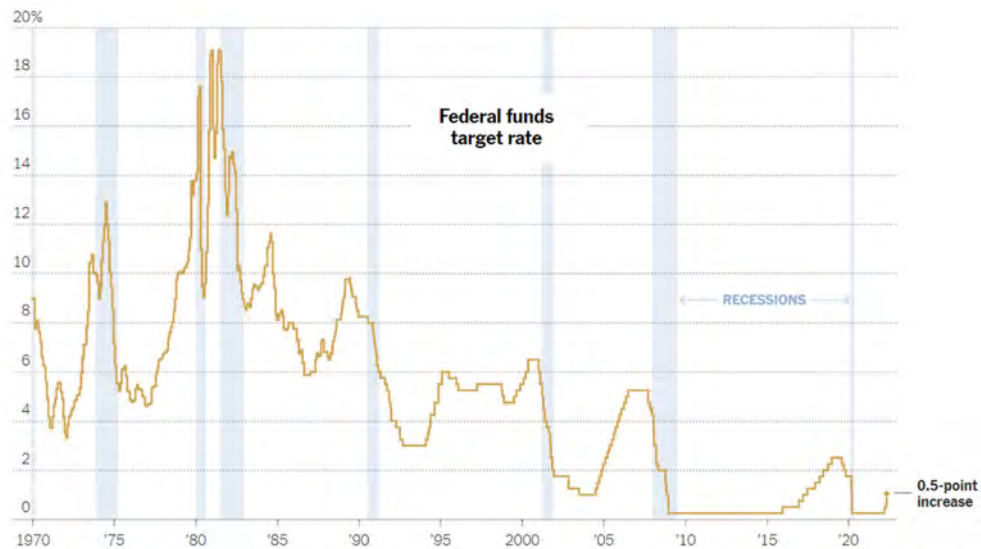


Notes: C.P.I. of 100 is equal to prices in 1984. Source: Bureau of Labor Statistics By Ella Koeze

- Economists' forecasts as well as the Treasury bond market still predict a moderating of inflation to the mid 3% range over 2023-2024. The spread between Treasury bond yields and those of Treasury Inflation Protected Securities (TIPS) provides a bond market forecast of the rate of inflation. This Breakeven TIPS yield persists in predicting substantially lower inflation in the near-to-medium term.

- **Wage Growth** – Wage increases on an inflation adjusted Real Wage Growth measure on a year-over-year basis in April showed a 2.6% growth. Average hourly earnings unadjusted for inflation showed a year-over-year increase of 5.5%. Both statistics reflect the current tight labor market as many jobs go unfilled.
- **New Jobs** - The April jobs report from the BLS on nonfarm employment showed a healthy gain of 428k new jobs indicating continued strength in the labor markets.
- **Unemployment** - The unemployment rate in April was unchanged at 3.6%. The labor force participation rate remains at 62.2% of the working age population.
 - **San Luis Obispo Unemployment** - The March SLO County unemployment rate fell further to 2.8%. SLO County's workforce continues to grow post-pandemic along with the number of workers employed. The California March unemployment rate fell as well to 4.9%.
- **Residential Real Estate** – While global concerns over war, trade disruption and inflation surge, capital markets plummet and the possibility of recession in 2023-2024 is talked about – residential real estate values boom. Demand for housing from relatively good economic times continues to push against the supply of housing. Whether the supply of housing is less than demand due to the physical limits of where and how fast housing can be built, the lack of sellers as homeowners stay put in their houses or regulatory barriers to new housing – it all meets up to fuel record rises in housing costs. Many economists believe that a 2008-style global property crash is unlikely. Households' finances are stronger than during the financial crisis, and lending standards are tighter. Limited housing supply along with robust demand, high levels of net household wealth and a strong employment situation also support property prices.
- **Economic Policy**
 - **Monetary Policy** – At the May 4th meeting the Fed increased short term interest rates by the expected 0.50%. The targeted range for Fed Funds rates is now 0.75% to 1.00%. This was the first 50 bp rate increase since 2006 and also a back-to-back Fed meeting rate increase cadence that demonstrates the Fed's resolve to fight inflation.
 - Fed guidance on future rate increases indicated multiple 50 BP and 25 BP rate hikes before year end. This is consistent with the Fed's focus on becoming more hawkish on fighting inflation but trying to engineer the desired soft-landing for the economy by late 2023 without triggering a recession. Fed guidance also included expectations for an asset sale pace of around \$95 billion per month that is strong action, but not over-hasty reduction of the Fed's \$9 trillion balance sheet reduction.
 - Stock and bond markets were buoyed by the Fed guidance on rates that was less aggressive than expected. This market perception reflected less uncertainty about the course of rates.

- The graph below shows the Fed Funds rate since 1970. The persistent and high Stagflation of the 1970s took the extremely high Fed Funds rates of 1978-1983 and two recessions to get squeezed out of the economy. It is important to note that the current surge in inflation is a fraction of the inflationary pressures of the 1970s. The present economy has strong economic growth, low unemployment, substantial pent-up demand for goods and services and inflation still feeling the effects of excess fiscal policy stimulation during the pandemic. These factors suggest that while current inflation is not transitory, it is temporary.

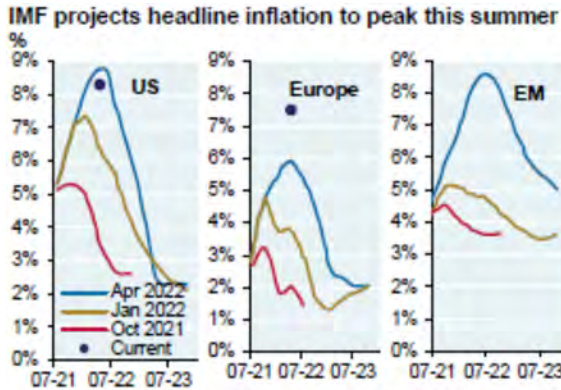


Investment Markets –

- **Russia/Ukraine War** – Markets have assimilated the economic impacts of the war as it slides into a more protracted stalemate in the eastern areas of Ukraine. The primary economic impacts are the war are in energy prices continuing at high levels with oil persistent at well above \$100/barrel. Although oil prices are also pushed higher by the surging demand post-pandemic combined with lags in new production. Natural gas prices globally are 25% or more higher for the year reflecting constrained European supply from Russia. Global inflation expectations also reflect future concern over interrupted agricultural exports from Ukraine that could impact food prices globally.
- **Markets** – Michael Cembalest, JP Morgan Asset Management Chief Strategist, in the May 17th “Eye on The Market” report included the following commentary on equity valuations and inflation.

“A bottom for equities is likely to coincide with a peak in inflation, since that will signify how much central banks have to tighten. A lot of Wall Street research claims that inflation is peaking now, and a recent IMF report came to similar conclusions. As per the first chart, the IMF sees US inflation peaking around current levels. Even so, I don’t think we’re there yet. Inflation has already blown past the IMF forecast for Europe and as shown below,

there's evidence of a wage-price spiral in the US in low wage industries; US labor markets are still at their tightest levels in the post-war era; and supply chain pressures which spiked last year have yet to abate (some of which is due to the China lockdowns). On top of all that, rising food and energy prices are now feeding into airlines, restaurant and lodging prices. Bottom line: there's a lot riding on when inflation peaks. Even if that happens now (which I doubt), the Fed has a ways to go before it can stop tightening."



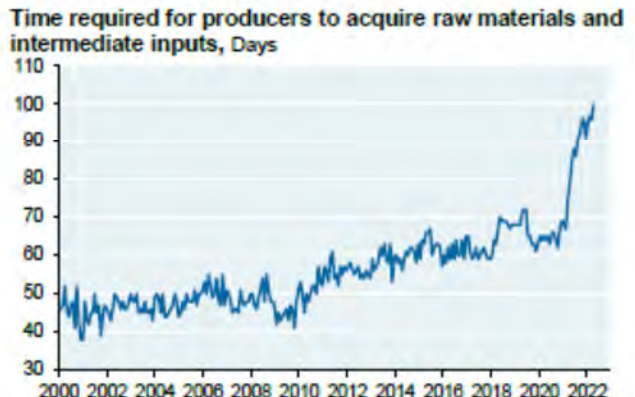
Source: IMF, World Economic Outlook, JPMAM, April 19, 2022.



Source: BLS, BEA, JPMAM, April 2022.



Source: BLS, JPMAM, March 2022.



Source: ISM, JPMAM, April 2022.

Respectfully Submitted,

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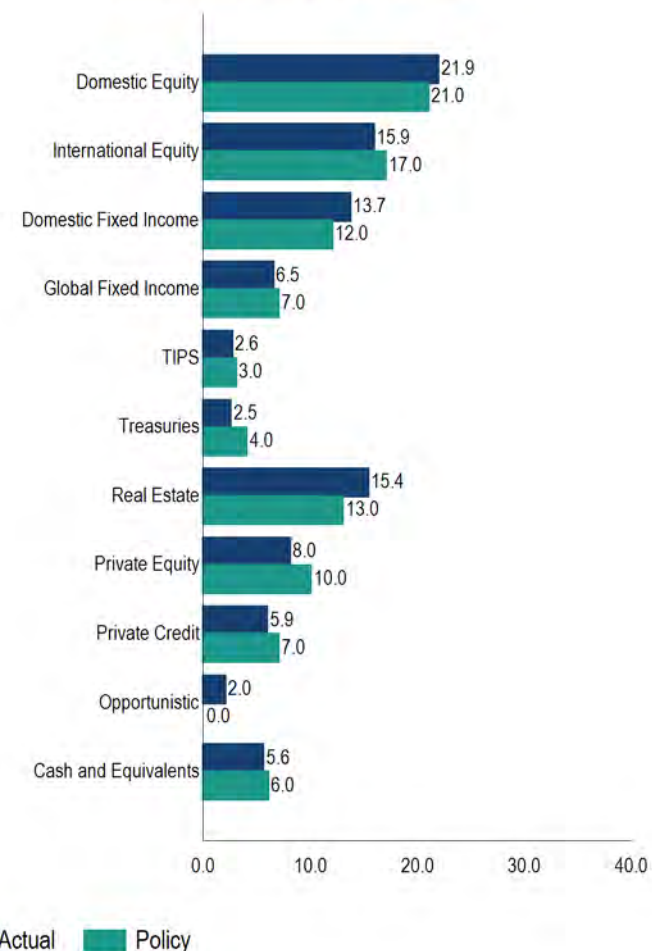
San Luis Obispo County Pension Trust

Executive Summary - Preliminary (Gross of Fees)

Period Ending: April 30, 2022

	Market Value	% of Portfolio	1 Mo	YTD
Total Fund	1,644,564,163	100.0	-3.4	-5.5
Interim Policy Index			-4.4	-7.1
FFP SAA Index			-2.9	-3.7
Total Growth	1,104,193,833	67.1	-3.6	-5.2
Custom Growth Benchmark			-5.0	-7.3
Total Public Equity	621,880,650	37.8	-7.1	-11.8
Russell 3000			-9.0	-13.8
Total Domestic Equity	360,519,642	21.9	-7.1	-9.4
Russell 3000			-9.0	-13.8
PIMCO RAE US	106,048,222	6.4	-4.4	-3.6
S&P 500			-8.7	-12.9
Loomis Sayles Large Cap Growth	82,533,469	5.0	-14.1	-20.7
Russell 1000 Growth			-12.1	-20.0
Boston Partners Large Cap Value	97,594,012	5.9	-5.3	-4.6
Russell 1000 Value			-5.6	-6.3
Atlanta Capital Mgmt	74,343,939	4.5	-5.3	-9.7
Russell 2500			-8.5	-13.8
Total International Equity	261,361,008	15.9	-7.1	-15.0
MSCI ACWI ex USA Gross			-6.2	-11.2
Dodge & Cox Intl Stock	138,441,179	8.4	-5.1	-5.5
MSCI ACWI ex USA Value Gross			-5.1	-4.8
WCM International Growth	122,919,829	7.5	-9.4	-24.4
MSCI ACWI ex USA Growth Gross			-7.4	-17.3
Total Private Equity	132,342,155	8.0		
Harbourvest Partners IX Buyout Fund L.P.	15,651,235	1.0		
Pathway Private Equity Fund Investors 9 L.P.	87,483,543	5.3		
Harbourvest 2018 Global Fund L.P.	18,597,751	1.1		
Pathway Private Equity Fund Investors 10 L.P.	10,609,626	0.6		
Total Private Credit	97,382,139	5.9		
Sixth Street Partners DCP	82,232,139	5.0		
Harbourvest SLO Fund	15,150,000	0.9		

Actual vs Interim Target Allocation (%)



New Policy Index as of 1/1/2022 24% Russell 3000, 17% MSCI ACWI ex-US (Gross), 15% Bloomberg U.S. Aggregate, 7% FTSE WGBI, 4% Bloomberg US Treasury 7-10 yr, 3% Bloomberg US TIPS, 13% NCREIF Property Index, 7% Actual Private Equity Return, 4% Actual Private Credit Return, 6% 91 day T-Bills. 2% allocation to Infrastructure is to NCREIF Property, until a more appropriate benchmark is established. Private Equity, Private Credit and Opportunistic composite returns are lagged by one quarter. All returns are (G) Gross of fees. Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. (e) To avoid unnecessary and possibly misleading Tracking Error, the Total Fund Policy Benchmark uses actual time-weighted private markets returns applied to actual private market asset class weights rounded to the nearest whole percentage point. The difference in actual weight versus target is allocated to the private market investment's public market "equivalent" (e.g., private equity to public equity; private credit to public fixed income, private real estate to public real estate). All data is preliminary

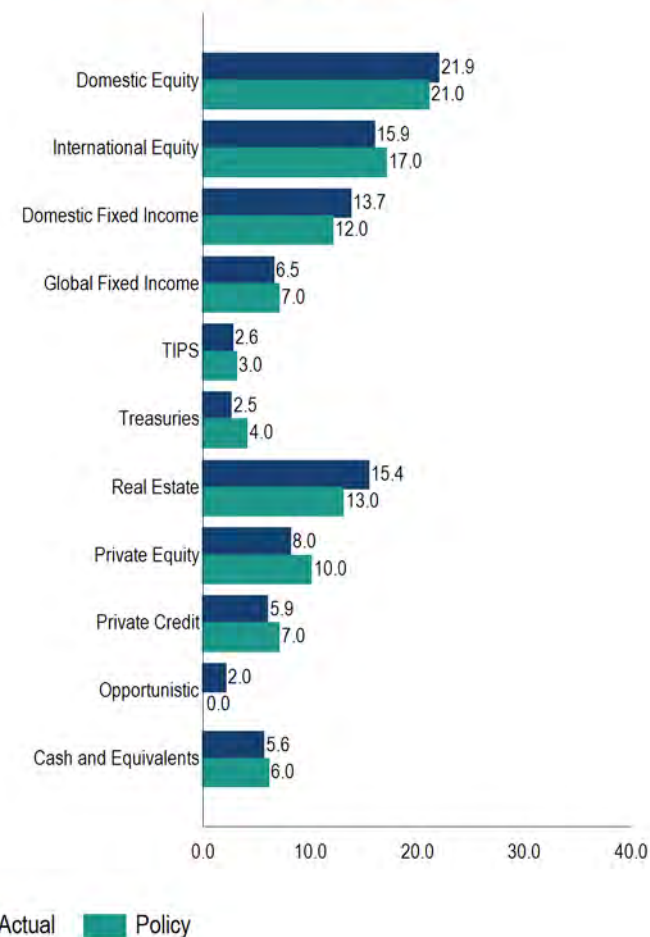
San Luis Obispo County Pension Trust

Executive Summary - Preliminary (Gross of Fees)

Period Ending: April 30, 2022

	Market Value	% of Portfolio	1 Mo	YTD
Total Real Estate	252,588,889	15.4	2.9	9.0
NCREIF Property Index			0.0	5.3
JP Morgan Core Real Estate	181,035,274	11.0	1.9	8.3
NCREIF-ODCE			0.0	7.4
NCREIF Property Index			0.0	5.3
ARA American Strategic Value Realty	71,553,615	4.4	6.3	11.6
NCREIF-ODCE			0.0	7.4
NCREIF Property Index			0.0	5.3
Total Risk Diversifying	415,891,641	25.3	-3.6	-7.9
Custom Risk Diversifying Benchmark			-4.2	-9.8
Total Domestic Fixed Income	309,287,743	18.8	-2.6	-6.5
Bloomberg US Aggregate TR			-3.8	-9.5
BlackRock Core Bond	69,728,446	4.2	-4.7	-10.8
Bloomberg US Aggregate TR			-3.8	-9.5
Dodge & Cox Income Fund	75,851,284	4.6	-3.2	-8.1
Bloomberg US Aggregate TR			-3.8	-9.5
Pacific Asset Corporate Loan	79,085,907	4.8	0.1	0.4
S&P/LSTA Leveraged Loan Index			0.2	0.1
SSGA U.S. Govt Bond Index	41,198,710	2.5	-3.1	-8.4
Bloomberg US Treasury 7-10 Yr TR			-4.2	-10.5
BlackRock TIPS	43,423,397	2.6	-2.1	-5.0
Bloomberg US TIPS TR			-2.0	-5.0
Total Global Fixed	106,603,898	6.5	-6.3	-11.7
FTSE World Govt Bond Index			-5.9	-12.0
Brandywine Global Fixed Income	49,159,261	3.0	-7.1	-8.6
FTSE WGBI ex US TR			-7.8	-14.4
Ashmore EM Blended Debt Fund	57,444,637	3.5	-5.6	-14.6
50% JPM EMBI GD/25% JPM GBI EM GD/25% JPM ELMI+			-5.1	-12.6

Actual vs Interim Target Allocation (%)



New Policy Index as of 1/1/2022 24% Russell 3000, 17% MSCI ACWI ex-US (Gross), 15% Bloomberg U.S. Aggregate, 7% FTSE WGBI, 4% Bloomberg US Treasury 7-10 yr, 3% Bloomberg US TIPS, 13% NCREIF Property Index, 7% Actual Private Equity Return, 4% Actual Private Credit Return, 6% 91 day T-Bills. 2% allocation to Infrastructure is to NCREIF Property, until a more appropriate benchmark is established. Private Equity, Private Credit and Opportunistic composite returns are lagged by one quarter. All returns are (G) Gross of fees. Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. (e) To avoid unnecessary and possibly misleading Tracking Error, the Total Fund Policy Benchmark uses actual time-weighted private markets returns applied to actual private market asset class weights rounded to the nearest whole percentage point. The difference in actual weight versus target is allocated to the private market investment's public market "equivalent" (e.g., private equity to public equity; private credit to public fixed income, private real estate to public real estate). All data is preliminary

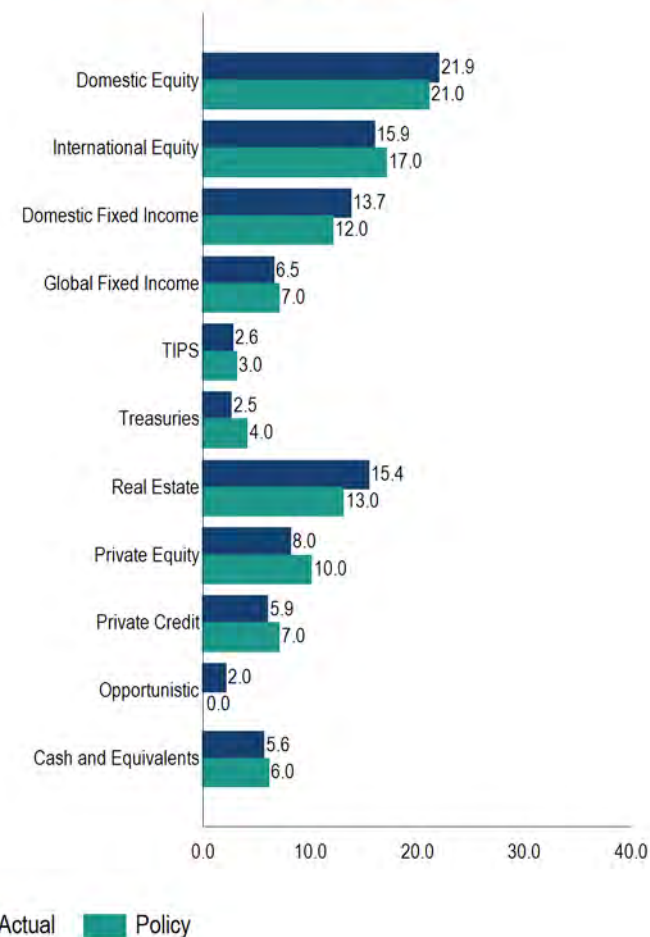
San Luis Obispo County Pension Trust

Executive Summary - Preliminary (Gross of Fees)

Period Ending: April 30, 2022

	Market Value	% of Portfolio	1 Mo	YTD
Total Liquidity	91,490,812	5.6	-0.3	-1.1
91 Day T-Bills			0.0	0.1
Total Cash	91,490,812	5.6	-0.3	-1.1
91 Day T-Bills			0.0	0.1
PIMCO Short Duration Fund	33,645,247	2.0	-0.6	-3.4
Bloomberg US Govt/Credit 1-3 Yr. TR			-0.5	-3.0
Cash Account	32,791,187	2.0	0.0	0.2
91 Day T-Bills			0.0	0.1
Investment Cash	25,054,378	1.5	0.0	0.0
91 Day T-Bills			0.0	0.1
Total Opportunistic	32,987,877	2.0		
Kohlberg Kravis Roberts & Co. Mezzanine Partners I	3,217,560	0.2		
Sixth Street Partners TAO	29,770,317	1.8		

Actual vs Interim Target Allocation (%)



New Policy Index as of 1/1/2022 24% Russell 3000, 17% MSCI ACWI ex-US (Gross), 15% Bloomberg U.S. Aggregate, 7% FTSE WGBI, 4% Bloomberg US Treasury 7-10 yr, 3% Bloomberg US TIPS, 13% NCREIF Property Index, 7% Actual Private Equity Return, 4% Actual Private Credit Return, 6% 91 day T-Bills. 2% allocation to Infrastructure is to NCREIF Property, until a more appropriate benchmark is established. Private Equity, Private Credit and Opportunistic composite returns are lagged by one quarter. All returns are (G) Gross of fees. Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. (e) To avoid unnecessary and possibly misleading Tracking Error, the Total Fund Policy Benchmark uses actual time-weighted private markets returns applied to actual private market asset class weights rounded to the nearest whole percentage point. The difference in actual weight versus target is allocated to the private market investment's public market "equivalent" (e.g., private equity to public equity; private credit to public fixed income; private real estate to public real estate). All data is preliminary

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**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

APRIL 2022
Capital Markets Update

Market commentary

U.S. ECONOMICS

- U.S. GDP contracted at an annualized rate of -1.4% in the first quarter, well short of consensus expectations (+1.0%). The print was largely pulled down by a sharp increase in the U.S. trade deficit and a decline in inventory investment. Strength from the U.S. consumers helped soften the decline in GDP with a 2.7% increase in consumer spending.
- U.S. non-farm payrolls rose by 428,000, the print exceeded expectations and marked the 12th consecutive month of increases greater than 400,000. While payrolls continued to advance, the labor force participation rate fell -0.2% – the first contraction since March 2021 as the labor force fell by 363,000.
- Average hourly earnings rose +0.3% month-over-month and brought year-over-year wage growth to +5.5% from +5.6% in the month prior. Tight labor markets and continued wage growth has caused concern for some investors that rising wages could exacerbate inflation.

U.S. EQUITIES

- Large-cap equities fell precipitously (S&P 500 -8.7%) and brought the year-to-date return for the index to -12.9% as markets digested quarterly earnings and an increasingly hawkish tone from the Federal Reserve.
- Within the S&P 500, 87% of companies have reported earnings, of those who have reported 79% have had positive earnings surprises. Earnings surprises have generally been more moderate than in recent quarters with an average surprise of 4.9% above analyst estimates, compared to the 5-year average of 8.9% above estimates per FactSet.
- As equity markets have sold off, valuation metrics have fallen from historically high levels. The price to earnings ratio of the S&P 500 has declined 20% year-to-date to 18.2.

U.S. FIXED INCOME

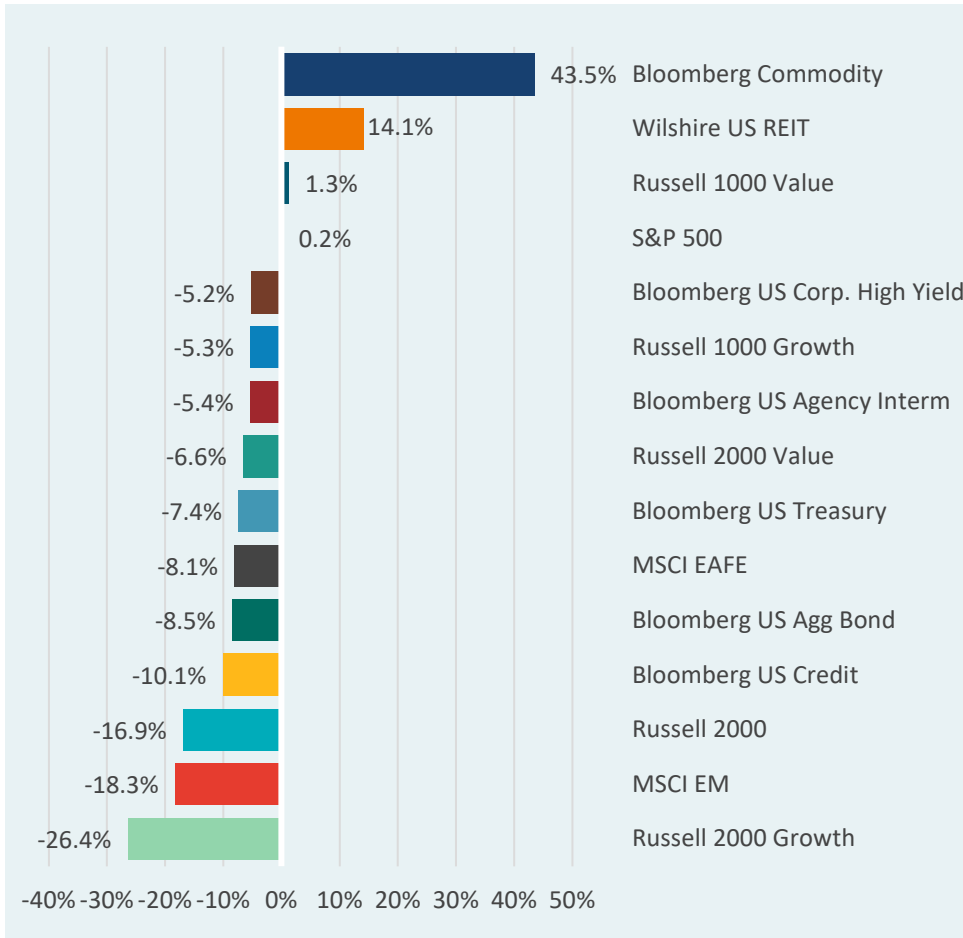
- The Fed raised rates 50 basis points in the most recent meeting. Fed officials voiced that more aggressive rate action may be necessary to combat inflation. The market now expects the Fed to tighten monetary policy to a greater extent than previously thought. Markets priced in two additional quarter-point hikes and now expect a total of 10 hikes by year end.
- U.S. Treasury yields climbed across the curve as investors priced in an increasingly hawkish fed. The 10-year yield was 57 basis points higher from the month before and ended the month at 2.89%. The 10-year yield reached its highest-level more than three years.
- The Bloomberg U.S. Aggregate Index declined -3.8% as yields climbed in the worst month for the Index in more than 40 years.

INTERNATIONAL MARKETS

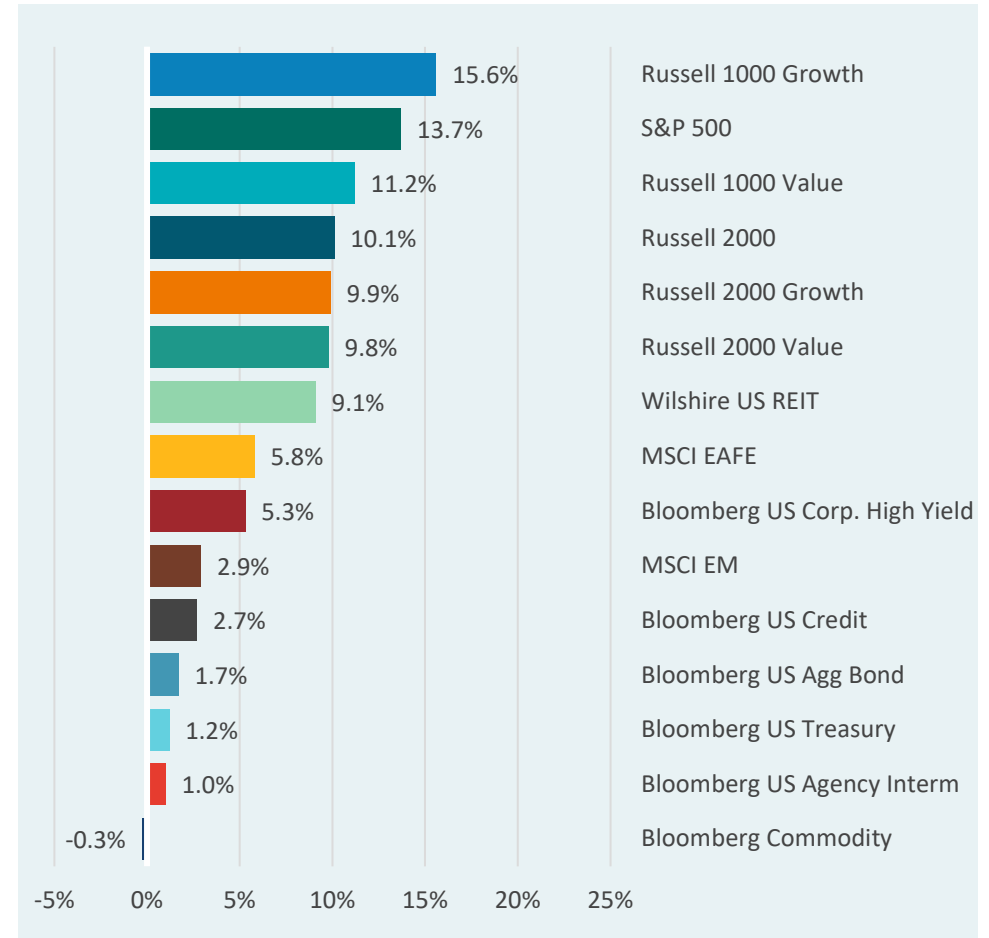
- The Russian Ruble (+16.3%) has now more than recovered from initial weakness in the wake of Russia's invasion of Ukraine and reached a two-year high against the U.S. Dollar to end the month. Russia's ability to avoid defaulting on debt, even without access to most hard dollar reserves, has helped support the currency.
- The MSCI China Index (-4.1%) fell for the sixth consecutive month and has receded -17.7% year-to-date. The index has now drawn down -46.2% from highs seen in February of 2021. Regulatory crackdowns and continued enforcement of a strict zero-covid policy has likely weighed on the index.
- The Japanese Yen (-6.3%) fell to multi-decade lows as the spread between 10-year US Treasury and Japanese yields widened by 0.6%. While U.S. and other developed sovereign bond yields have climbed, Japanese yields remain capped by central bank action.

Major asset class returns

ONE YEAR ENDING APRIL



TEN YEARS ENDING APRIL



*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 4/30/22

Source: Morningstar, as of 4/30/22

U.S. large cap equities

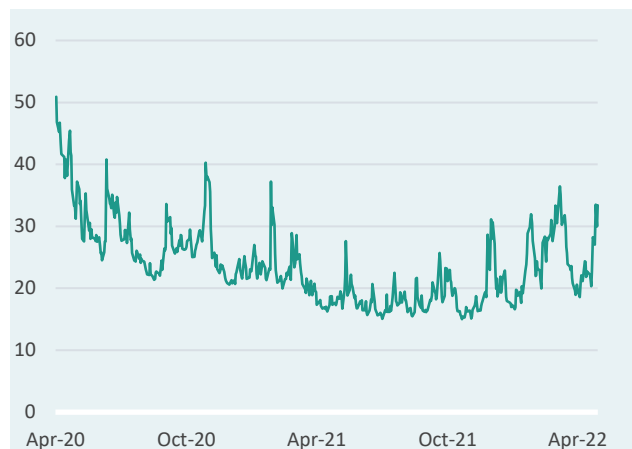
- The S&P 500 declined -8.7% and marked the worst monthly return for the index in more than two years. Declines in the S&P 500 Index were concentrated within a small number of names. Amazon (-23.8%), Apple (-9.7%) and Microsoft (-10.0%), are included in the list of only nine names which were responsible for more than half of the index's decline.
- The Cboe VIX Index of implied volatility climbed to 33.4 to end the month and remains at elevated levels relative to the 200-day moving average of 21.5. An erosion in future projections from large companies likely sent equity volatility higher.
- The Consumer Staples sector (+2.6%) was the only sector of the 11 S&P 500 (-8.7%) GICS sectors to post a positive return. The broad index was led lower by the Communications Services (-15.6%), Consumer Discretionary (-13.0%) and Information Technology (-11.3%) sectors.
- The Communication Services sector sold off -15.6% and has declined -25.7% year-to-date. Google (-18.0%) saw a repricing after quarterly results showed slowing revenue growth. Netflix (-49.2%) also sold off after results showed a substantial decline in subscribers and pointed towards poor future subscriber growth.

S&P 500 PRICE INDEX



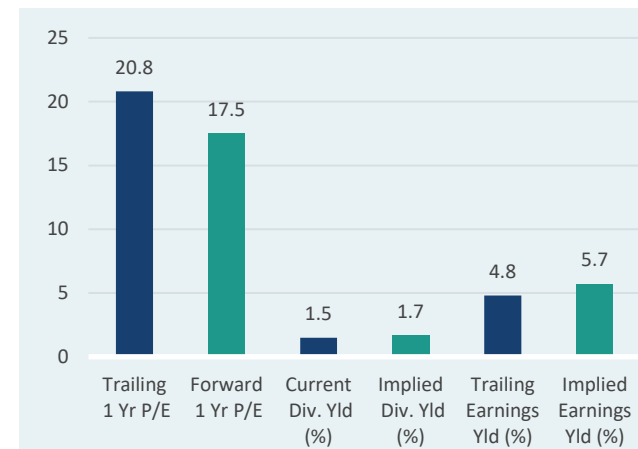
Source: Bloomberg, as of 4/30/22

IMPLIED VOLATILITY (VIX INDEX)



Source: Cboe, as of 4/30/22

S&P 500 VALUATION SNAPSHOT



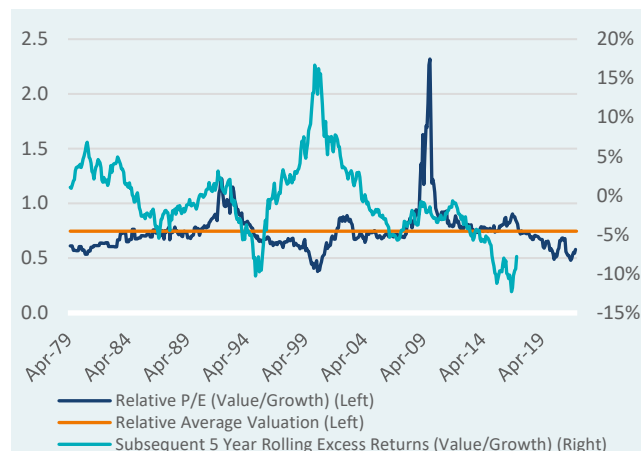
Source: Bloomberg, as of 4/30/22

Domestic equity size and style

- The Russell 3000 Value Index (-5.8%) was down less than the Russell 3000 Growth Index (-12.1%). Value focused sectors such as Healthcare, Consumer Staples, Industrials and Financials held up better within the value space, these sectors also hold a greater weight within the value style index.
- The MSCI USA Cyclical - Defensives Total Return Spread Index fell -8.9% over the month as defensive style stocks outperformed. Defensive style stocks tend to be less affected by economic data than cyclical stocks. Defensive stocks historically outperform the market when economic growth slows.

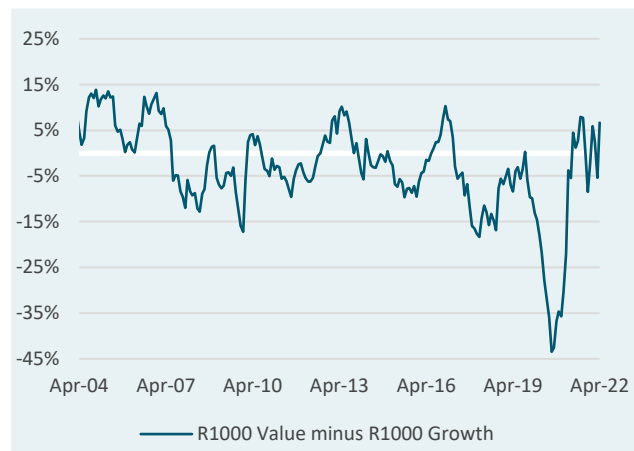
- Large-cap equities (Russell 1000 -8.9%) sold off to a lesser extent than their small-cap peers (Russell 2000 -9.9%). Within the healthcare sector the larger companies in the Russell 1000 fell by 11.8% less than small-cap counterparts in the Russell 2000. The Consumer Staples sector also helped relative large-cap performance; large-caps posted a +3.1% return and small-caps posted a -1.9% return.
- The S&P 500 High Dividend Index (-2.8%) – an equal-weighted index of 80 companies within the S&P 500 that have a high dividend yield – outperformed the broader S&P 500 Index by 5.9%.

VALUE VS. GROWTH RELATIVE VALUATIONS



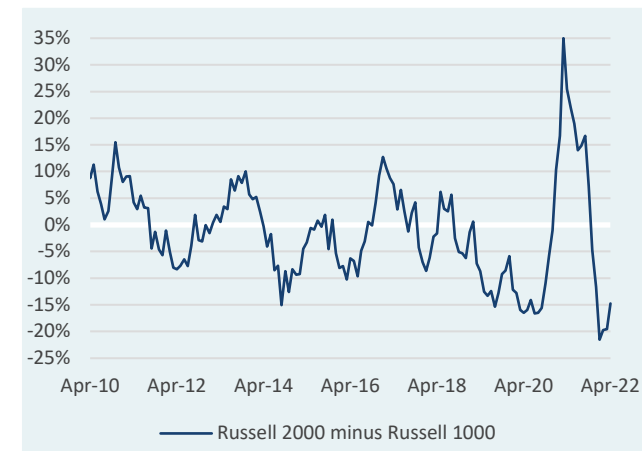
Source: FTSE, Bloomberg, as of 4/30/22

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 4/30/22

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

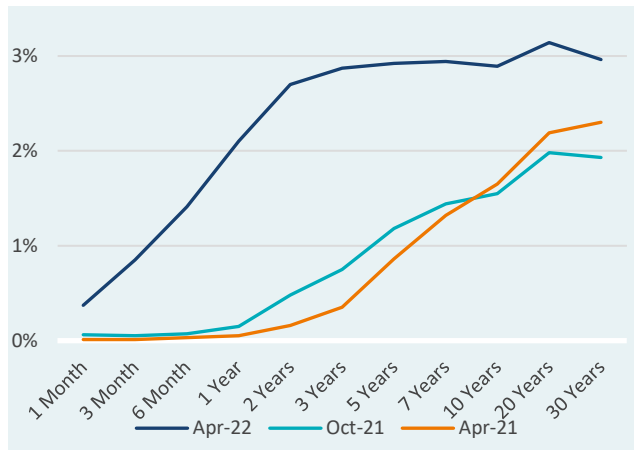


Source: FTSE, Bloomberg, as of 4/30/22

Fixed income

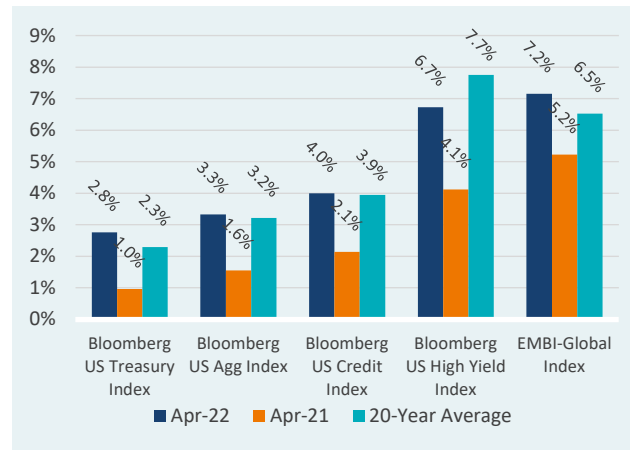
- The U.S. Dollar reached its strongest level in nearly a decade as investors fled riskier global currencies. While USD strength was broad, pain was felt by those holding USD counterparts that are tied closely to the slowing growth in China, such as the New Zealand Dollar (-6.7%) and the Australian Dollar (-5.4%).
- In April, the spread between 2- and 10-year U.S. Treasury yields widened to 19 basis points from just 4 basis points the month before. While the 2-10 spread widened in April, the spread has declined 60 basis points year-to-date as expectations built for continued Fed rate hikes.
- The S&P/LSTA Leveraged Loan Index continued to outperform and gained +0.2% in what was generally a poor month for fixed income. Leveraged loans benefited from a floating rate structure that leaves the index less exposed to rising rate environments.
- Central banks in emerging markets have tightened monetary policy more proactively than many developed market central banks. Global sovereign debt declined over the month and hard currency debt (JPM EMBI -5.6%) outpaced local currency denominated emerging market debt (JPM GBI-EM -6.0%).

U.S. TREASURY YIELD CURVE



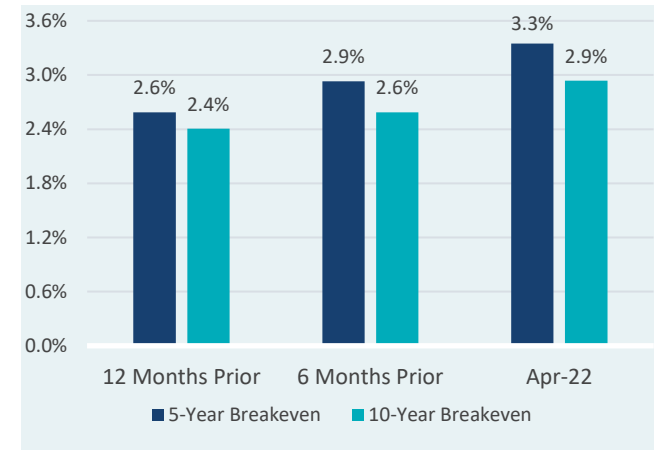
Source: Bloomberg, as of 4/30/22

NOMINAL YIELDS



Source: Morningstar, as of 4/30/22

BREAKEVEN INFLATION RATES

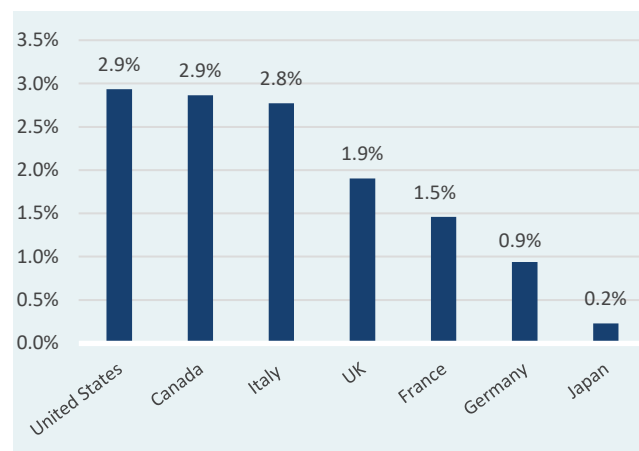


Source: Bloomberg, as of 4/30/22

Global markets

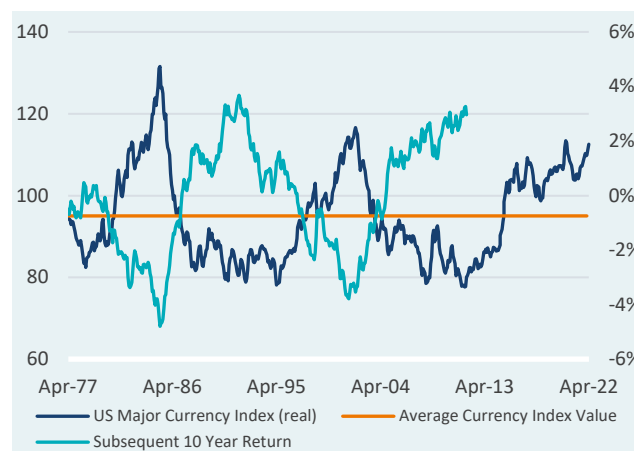
- Losses were broad across regions within the MSCI ACWI ex US Index (-6.3%). Emerging market equities (MSCI EM -5.6%) fared better than those in developed markets (MSCI EAFE -6.5%). Developed markets were led lower by European (MSCI Euro -7.3%) and Japanese equities (MSCI Japan -8.8%).
- The Bank of Japan reiterated its commitment to maintain low interest rates and signaled that it would continue with unlimited government bond purchases through May. Japan's easy monetary policy has weighed on the Yen (-6.3%) and has materially detracted from returns in U.S. Dollar terms.
- MSCI EM Latin America (-13.0%) retraced prior month gains and weighed on the broader MSCI EM Index (-5.6%). Net exporters of industrial metals including Peru (-17.1%) and Brazil (-9.5%) were negatively impacted by declines in industrial metal prices as Chinese demand outlook weakened.
- Equities in the United Kingdom (MSCI UK -3.7%) were down less than other developed markets in USD terms. A weakening Pound (-7.3%) has weighed on U.S. Dollar returns, many UK companies have a high degree of USD denominated revenue and likely have seen positive tailwinds.

GLOBAL SOVEREIGN 10-YEAR YIELDS



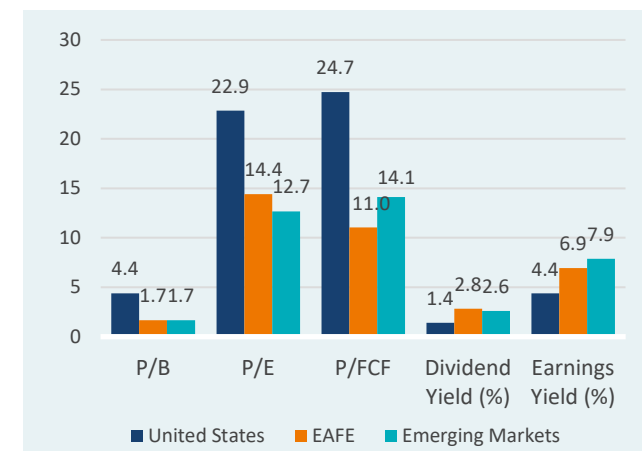
Source: Bloomberg, as of 4/30/22

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 4/30/22

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 4/30/22

Commodities

- The Bloomberg Commodity Index climbed +4.1% in April and has now rallied +30.7% year-to-date. Continued increases in the Energy (+13.5%), Grains (+6.7%), and Agriculture (+5.7%) Sub-Indices helped to lift the overall index higher. The Industrial Metals (-6.3%) and Livestock (-6.8%) Sub-Indices reversed course over the month.
- Natural gas prices rallied +26.2% as supply disruptions related to the Russian invasion of Ukraine persisted and helped drive the Energy Sub-Index (+13.5%) higher. Concerns of increased supply disruptions were amplified as Russia halted exports to both Poland and Bulgaria due to the countries' refusal to pay for gas flows in Rubles.

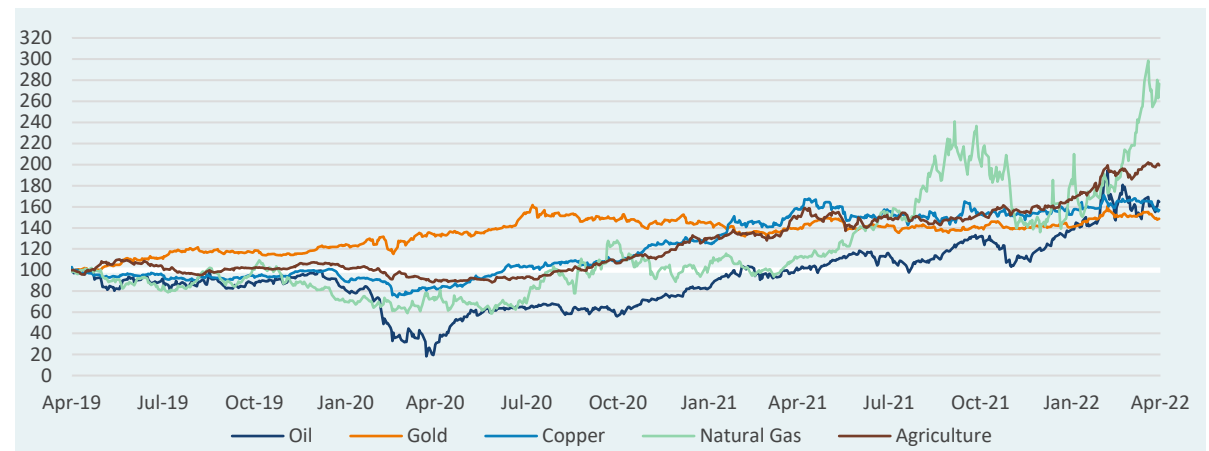
- The Bloomberg Industrial Metals Sub-Index sold off -6.3% and lagged the broader commodity basket (+4.1%). China accounts for more than half of global demand for iron ore and copper. Continued zero-covid policies in China have reduced demand for industrial metals and weighed on prices globally.
- The price of Brent Crude Oil (+2.9%) remained elevated in April, closing below \$100 per barrel only two times, and ended the month relatively flat. Supply concerns surrounding a potential EU ban on Russian oil – which currently makes up nearly a third of EU's supply – could send the price of the commodity even higher.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	4.1	4.1	30.7	43.5	17.9	10.2	(0.3)
Bloomberg Agriculture	5.7	5.7	26.7	31.8	26.7	9.5	0.2
Bloomberg Energy	13.5	13.5	67.9	103.3	10.6	9.7	(5.0)
Bloomberg Grains	6.7	6.7	33.4	28.5	28.1	10.3	(0.0)
Bloomberg Industrial Metals	(6.3)	(6.3)	15.0	28.1	19.6	13.3	2.7
Bloomberg Livestock	(6.8)	(6.8)	(1.4)	(1.5)	(9.0)	(5.6)	(3.5)
Bloomberg Petroleum	7.5	7.5	54.6	91.7	14.3	15.5	(3.5)
Bloomberg Precious Metals	(3.7)	(3.7)	3.0	2.9	12.7	6.6	(0.7)
Bloomberg Softs	0.9	0.9	8.8	41.5	19.8	3.9	(3.2)

Source: Morningstar, as of 4/30/22

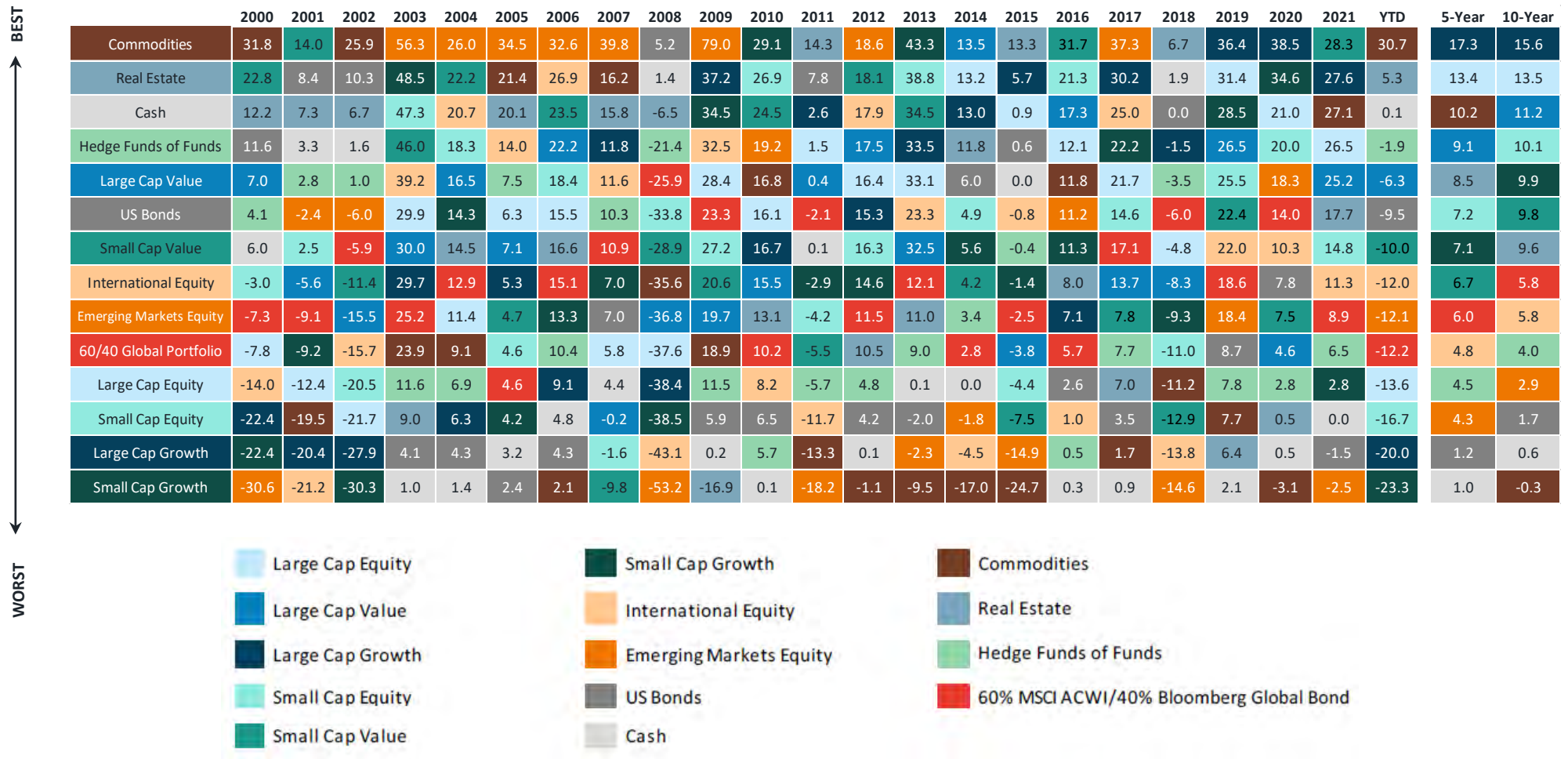
COMMODITY PERFORMANCE



Source: Bloomberg, as of 4/30/22

Appendix

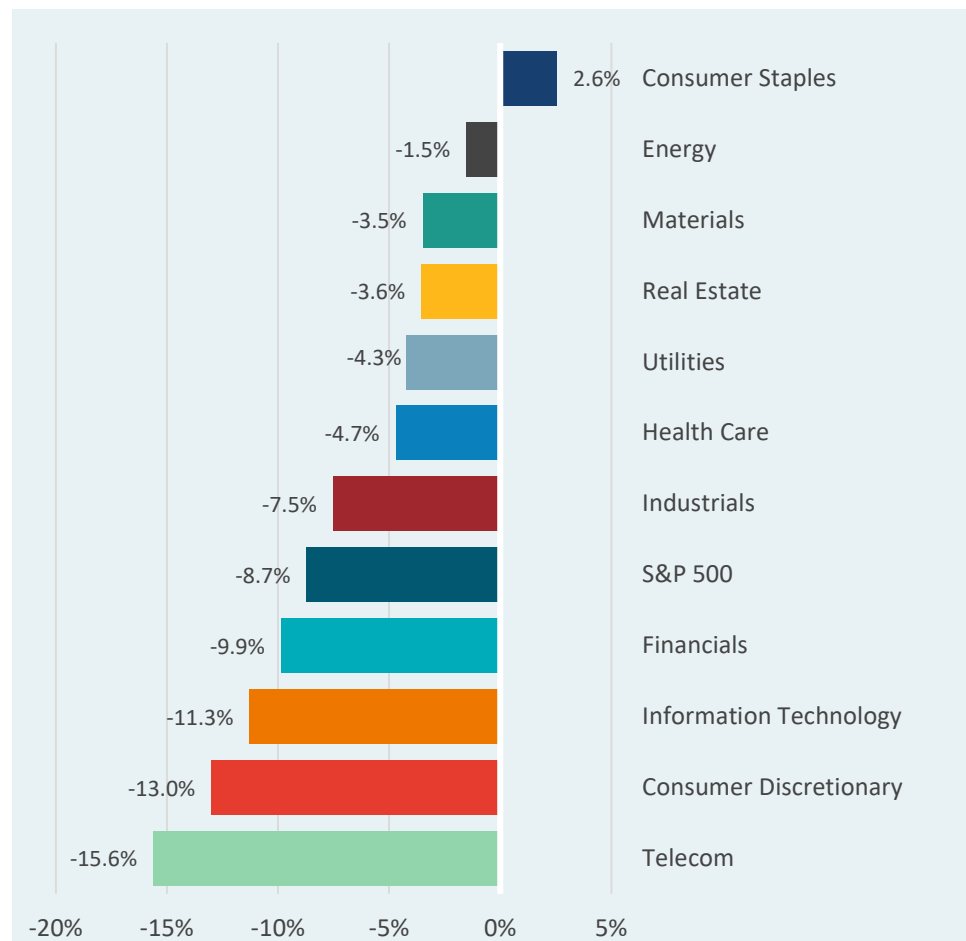
Periodic table of returns



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, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 3/31/22.

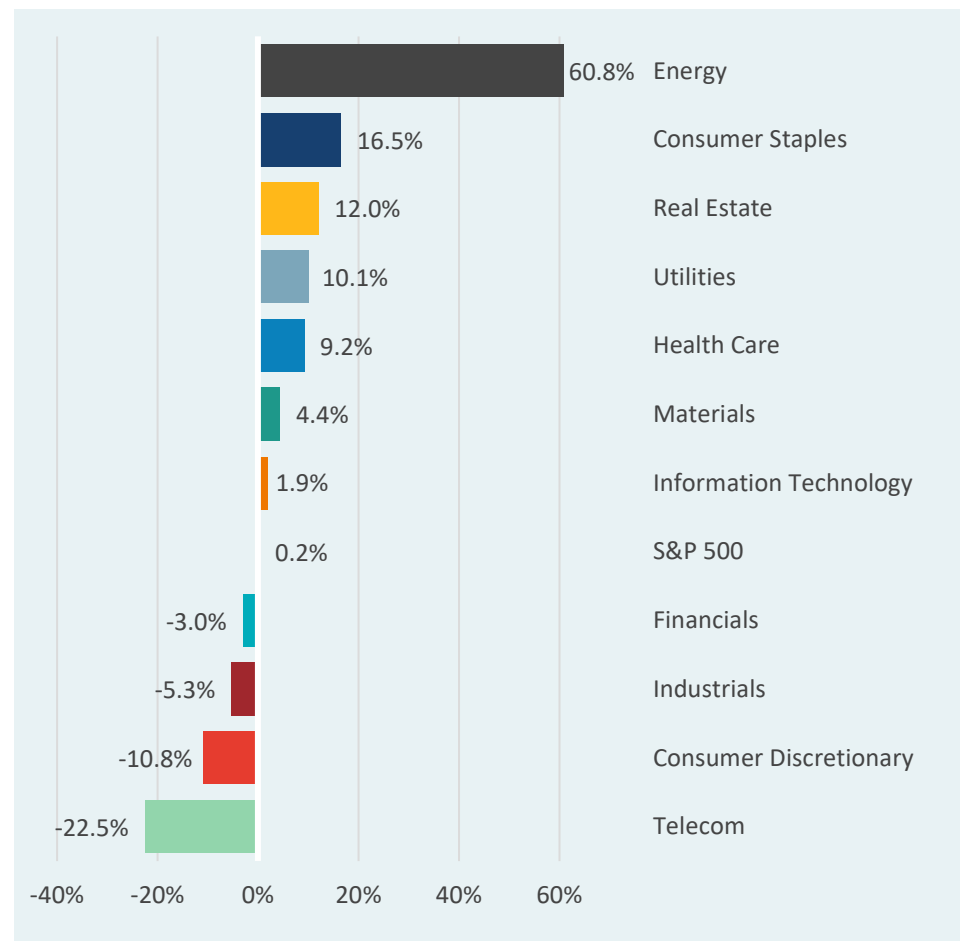
S&P 500 sector returns

QTD



Source: Morningstar, as of 4/30/22

ONE YEAR ENDING APRIL



Source: Morningstar, as of 4/30/22

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	(8.7)	(8.7)	(12.9)	0.2	13.8	13.7	13.7
S&P 500 Equal Weighted	(6.4)	(6.4)	(8.9)	1.1	13.1	12.2	13.3
DJ Industrial Average	(4.8)	(4.8)	(8.7)	(0.8)	9.8	12.0	12.2
Russell Top 200	(9.3)	(9.3)	(13.8)	(0.6)	14.7	14.5	14.1
Russell 1000	(8.9)	(8.9)	(13.6)	(2.1)	13.6	13.4	13.5
Russell 2000	(9.9)	(9.9)	(16.7)	(16.9)	6.7	7.2	10.1
Russell 3000	(9.0)	(9.0)	(13.8)	(3.1)	13.1	13.0	13.3
Russell Mid Cap	(7.7)	(7.7)	(12.9)	(6.1)	10.5	10.7	12.0
Style Index							
Russell 1000 Growth	(12.1)	(12.1)	(20.0)	(5.3)	16.7	17.3	15.6
Russell 1000 Value	(5.6)	(5.6)	(6.3)	1.3	9.6	9.1	11.2
Russell 2000 Growth	(12.3)	(12.3)	(23.3)	(26.4)	4.1	7.1	9.9
Russell 2000 Value	(7.8)	(7.8)	(10.0)	(6.6)	8.4	6.7	9.8

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	(8.0)	(8.0)	(12.9)	(5.4)	9.4	9.5	9.2
MSCI ACWI ex US	(6.3)	(6.3)	(11.4)	(10.3)	4.3	4.9	5.0
MSCI EAFE	(6.5)	(6.5)	(12.0)	(8.1)	4.4	4.8	5.8
MSCI EM	(5.6)	(5.6)	(12.1)	(18.3)	2.2	4.3	2.9
MSCI EAFE Small Cap	(6.9)	(6.9)	(14.8)	(13.7)	4.9	5.0	7.6
Style Index							
MSCI EAFE Growth	(8.0)	(8.0)	(19.0)	(13.0)	5.6	6.5	6.7
MSCI EAFE Value	(5.1)	(5.1)	(4.7)	(3.5)	2.6	2.7	4.7
Regional Index							
MSCI UK	(3.7)	(3.7)	(1.9)	4.8	3.3	4.3	4.0
MSCI Japan	(8.8)	(8.8)	(14.8)	(13.4)	3.1	3.9	5.8
MSCI Euro	(7.3)	(7.3)	(17.6)	(14.4)	2.4	3.1	5.8
MSCI EM Asia	(5.1)	(5.1)	(13.3)	(21.4)	3.6	5.6	5.2
MSCI EM Latin American	(13.0)	(13.0)	10.7	3.7	(1.6)	1.2	(2.1)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	(2.0)	(2.0)	(5.0)	0.7	5.4	3.9	2.3
Bloomberg US Treasury Bills	0.0	0.0	(0.0)	(0.0)	0.7	1.1	0.6
Bloomberg US Agg Bond	(3.8)	(3.8)	(9.5)	(8.5)	0.4	1.2	1.7
Bloomberg US Universal	(3.7)	(3.7)	(9.6)	(8.6)	0.5	1.4	2.1
Duration							
Bloomberg US Treasury 1-3 Yr	(0.5)	(0.5)	(3.0)	(3.5)	0.6	0.9	0.8
Bloomberg US Treasury Long	(8.9)	(8.9)	(18.5)	(12.2)	0.7	1.7	2.6
Bloomberg US Treasury	(3.1)	(3.1)	(8.5)	(7.4)	0.4	1.0	1.2
Issuer							
Bloomberg US MBS	(3.5)	(3.5)	(8.3)	(8.8)	(0.6)	0.5	1.3
Bloomberg US Corp. High Yield	(3.6)	(3.6)	(8.2)	(5.2)	2.8	3.7	5.3
Bloomberg US Agency Interm	(1.2)	(1.2)	(4.9)	(5.4)	0.2	0.8	1.0
Bloomberg US Credit	(5.2)	(5.2)	(12.3)	(10.1)	0.8	1.9	2.7

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	4.1	4.1	30.7	43.5	17.9	10.2	(0.3)
Wilshire US REIT	(4.5)	(4.5)	(8.2)	14.1	10.3	9.0	9.1
CS Leveraged Loans	0.2	0.2	0.1	2.9	3.6	4.0	4.4
S&P Global Infrastructure	(3.3)	(3.3)	4.0	9.1	6.4	6.6	7.4
Alerian MLP	(0.1)	(0.1)	18.8	27.8	1.8	(0.8)	1.0
Regional Index							
JPM EMBI Global Div	(5.6)	(5.6)	(15.1)	(14.5)	(2.0)	0.2	3.0
JPM GBI-EM Global Div	(6.0)	(6.0)	(12.1)	(15.9)	(3.1)	(1.3)	(1.4)
Hedge Funds							
HFRI Composite	0.1	0.1	(2.6)	(0.8)	5.6	4.5	4.0
HFRI FOF Composite	(0.9)	(0.9)	(1.9)	0.0	7.7	6.0	5.1
Currency (Spot)							
Euro	(5.2)	(5.2)	(7.2)	(12.4)	(2.0)	(0.6)	(2.2)
Pound Sterling	(4.6)	(4.6)	(7.3)	(9.3)	(1.2)	(0.6)	(2.5)
Yen	(6.3)	(6.3)	(11.1)	(15.6)	(4.9)	(3.0)	(4.7)

Source: Morningstar, HFRI, as of 4/30/22.

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	58.6	23.9	19.8	14.2
Global Private Equity Direct Funds *	52.3	26.6	22.7	17.4
U.S. Private Equity Direct Funds *	58.4	29.2	24.2	18.9
Europe Private Equity Direct Funds *	52.1	26.2	23.7	15.4
Asia Private Equity Direct Funds *	31.4	19.0	17.6	15.5

Public Index Time-weighted Returns				
MSCI World	28.8	13.1	13.7	12.7
S&P 500	30.0	16.0	16.9	16.6
MSCI Europe	27.3	7.8	8.8	8.2
MSCI AC Asia Pacific	18.3	8.5	9.6	8.3

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	25.3	10.7	10.6	12.6

Public Index Time-weighted Returns				
FTSE NAREIT Equity REIT	37.4	10.0	6.8	11.3

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	33.5	13.7	13.0	12.6

Public Index Time-weighted Returns				
S&P / LSTA U.S. Leveraged Loan 100 Index	6.7	3.9	4.3	4.7

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources ***	30.6	(2.4)	2.7	2.1
Global Infrastructure	14.8	10.4	11.2	10.4

Public Index Time-weighted Returns				
S&P Global Natural Resources	42.2	4.6	9.5	4.6
S&P Global Infrastructure	23.0	6.7	6.0	7.8

Source: Pooled IRRs are from Thompson Reuters C/A and Time-weighted Returns are from Investment Metrics, as of September 30th, 2021. 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.

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Board of Trustees

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Date: May 23, 2022

To: Board of Trustees

From: Carl Nelson – Executive Director
Amy Burke – Deputy Director
Scott Whalen - Verus

Agenda Item 20: Core Infrastructure Fund

Recommendation:

Verus as investment consultant and Staff recommend that the Board of Trustees approve –

1. The selection of **Brookfield Asset Management** for an initial investment of \$30 million in the Brookfield Super-Core Infrastructure Partners (BSIP) Core Infrastructure Open-End fund.
2. Such approval to be contingent on the satisfactory completion of Investment and Operational Due Diligence analysis by Staff.
3. Such approval to be contingent on satisfactory contractual terms to be assessed by General Counsel, Investment Counsel and the Executive Director.

Accompanying this recommendation memo are -

- Verus presentation on Infrastructure core fund search

Background:

Asset Allocation Policy: The 2020 revision to the Strategic Asset Allocation (SAA) targets for the SLOCPT included the new addition of a 5% allocation to Infrastructure.

Infrastructure: Infrastructure investments are in assets that provide essential infrastructure and stable cashflows. Examples include electric generation and transmission, pipelines, renewable energy, airports, toll roads, railroads and rail equipment, shipping ports, fiber optic systems, cell towers, etc. Infrastructure investments are global in scope, but with a tendency to find stable, operating Infrastructure assets in the developed countries of the OECD.

Infrastructure Investment's Structure: Infrastructure for pension funds is typically accessed through open-end commingled funds or closed-end Limited Partnerships much like real estate or private equity. Open-end funds have a continuous lifecycle of - formation, bringing in investors, acquiring assets, buying and selling assets, distribution of cashflows, re-investing in other assets and so forth with no specified end date. In contrast, closed-end LP funds have a set lifecycle of - formation, bringing in investors, acquiring assets and then eventually selling those assets and distributing out the proceeds to investors as the LP terminates. Both approaches have their own merits for Infrastructure investments.

The SLOCPT allocation to Infrastructure was planned to be a mix of an open-end core Infrastructure fund and more specialized closed-end Infrastructure funds.

Private Markets Discretionary Advisor – HarbourVest: The implementation of the significant increase in private equity, private credit and infrastructure allocation in the revised SAA is a ~5 year process. The SLOCPT has hired HarbourVest to manage a large Fund-of-One LP fund for these assets. The "HarbourVest SLO Fund". The anticipated total of private market commitments in the HarbourVest SLO Fund is \$800 million.

Core Infrastructure Open End Fund "carve-out" from initial HarbourVest SLO Fund Allocation: As part of the tactical implementation of the HarbourVest SLO Fund, HarbourVest recommended carving-out \$30 million from the initial plan to hold for a possible Infrastructure core open-end fund commitment. HarbourVest recommended the core Infrastructure commitment to be intended for a HarbourVest managed fund – the HarbourVest Infrastructure Income Partners (HIIP) fund. However, the HIIP fund – which has been in operation for several years investing "seed investors" funds – was not available for other investors until mid-2022 for the normal regulatory and legal processes to be complete.

The stated intent of the SLOCPT at the time of adoption of the HarbourVest SLO Fund was to evaluate the HIIP fund as a potential \$30 million core infrastructure investment along with the consideration of other, competing and more established Infrastructure funds. Verus as the SLOCPT's general investment consultant, was planned to do such an evaluation.

Verus evaluation of alternative funds: Now that the HIIP fund is available for offering to other investors, Verus has been able to perform their investment due-diligence and evaluation of the fund. Verus also evaluates the relatively small number of core open-end Infrastructure funds that compete in this area. The attached presentation is Verus' report on this evaluation.

Verus' evaluation of the HIIP fund finds it to have many strengths, but it has a different approach to accessing Infrastructure than other core funds. The HIIP fund is designed to access infrastructure investments by providing "structured liquidity solutions" to existing infrastructure asset owners. While this approach has its own merits, it leads to the HIIP fund being in a minority ownership position for most of its investments.

The recommendation of Verus and Staff is to instead target the core open-end infrastructure allocation to a broader Infrastructure strategy where the fund has more control over the various assets it invests in. To that end, Verus evaluated four core infrastructure funds that they recommend on their own merits. The investment firms offering these funds are Brookfield, IFM, JP Morgan, and KKR.

The specific fund recommended by Verus and Staff is the Brookfield Super-Core Infrastructure Partners (BSIP) open-end fund. The Verus evaluation is contained in the attached presentation.

Implementation:

Should the Board of Trustees approve the recommendation to hire Brookfield, the following summarizes the expected implementation steps.

- Due Diligence meetings and assessment by SLOCPT staff. Staff has already reviewed the Brookfield BSIP investor presentation materials.
- Contractual arrangements
 - General Counsel and Investment Counsel (Nossaman) review and approval
- Implementation of custody bank arrangements initial funding plan

Respectfully Submitted,

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PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



May 2022
Infrastructure Search
San Luis Obispo County Pension Trust

I. Manager overview

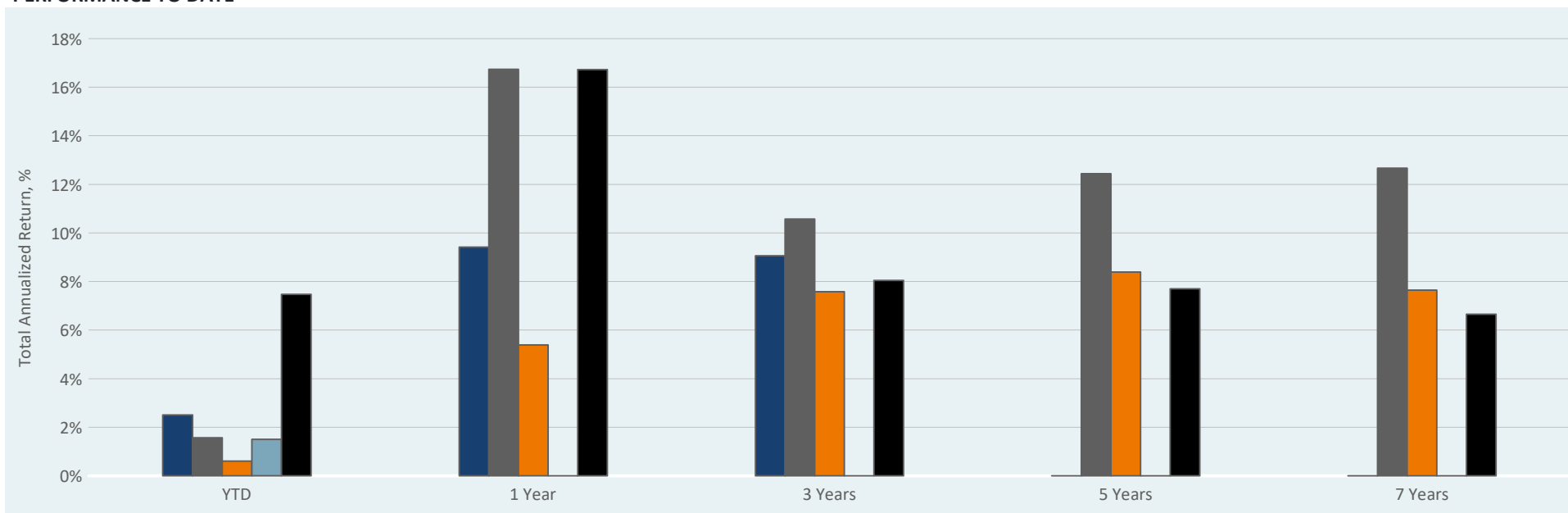
Manager comparison

	Brookfield	HarbourVest	IFM	JP Morgan	KKR
FIRM OWNERSHIP	Publicly traded (NYSE: BAM)	100% employee owned	Subsidiary of Industry Super Holdings	Wholly owned subsidiary of JPMorgan Chase & Co (NYSE: JPM)	Publicly traded (NYSE: KKR)
LOCATION	Toronto, CA	Boston, MA	Melbourne, AU	New York, NY	New York, NY
FIRM NAME	Brookfield	HarbourVest	IFM Investors	JP Morgan Investment Management Inc.	KKR
FOUNDED	1997	1982	1990	2000	1976
PRODUCT NAME	Brookfield Super-Core Infrastructure Partners	HarbourVest Infrastructure Income Partners	IFM Global Infrastructure Fund	Infrastructure Investments Fund	Diversified Core Infrastructure Fund
FIRM AUM (\$MM)	\$688,000	\$92,919	\$135,656	\$2,510,669	\$479,032
CURRENT FUND NAV (\$MM)	\$7,100	\$366	\$41,056	\$24,410	\$2,729
INCEPTION DATE	Oct-18	Feb-22	Mar-13	Jul-07	Dec-20
INVESTMENT STYLE	Core	Core / Core +	Discretionary	Open-end core	Core
TARGET GEO LOCATION	OCED countries	OCED countries	---	High income developed mkts	OECD countries
TIMEFRAME TO INVEST NEW CAPITAL	6-12 months	0-6 months	12-18 months	~6 months	6-9 months
PREFERRED RETURN	---	---	10% excess of 8% threshold	15% over 7% hurdle	4% hurdle
TARGET RETURN	~9%	8%-10%	8%-12%	8%-9%	8%-10%
TARGET YIELD	~5%-6%	4%-6%	---	5%-7%	4%-6%
CURRENT LEVERAGE	65%	---	35.1%	50%	36%
MAX LEVERAGE	---	30%	30%-70%	75%	70%

Performance comparison - as of March 2022

● Brookfield ● IFM ● JP Morgan ● KKR ● S&P Global Infrastructure TR USD

PERFORMANCE TO DATE



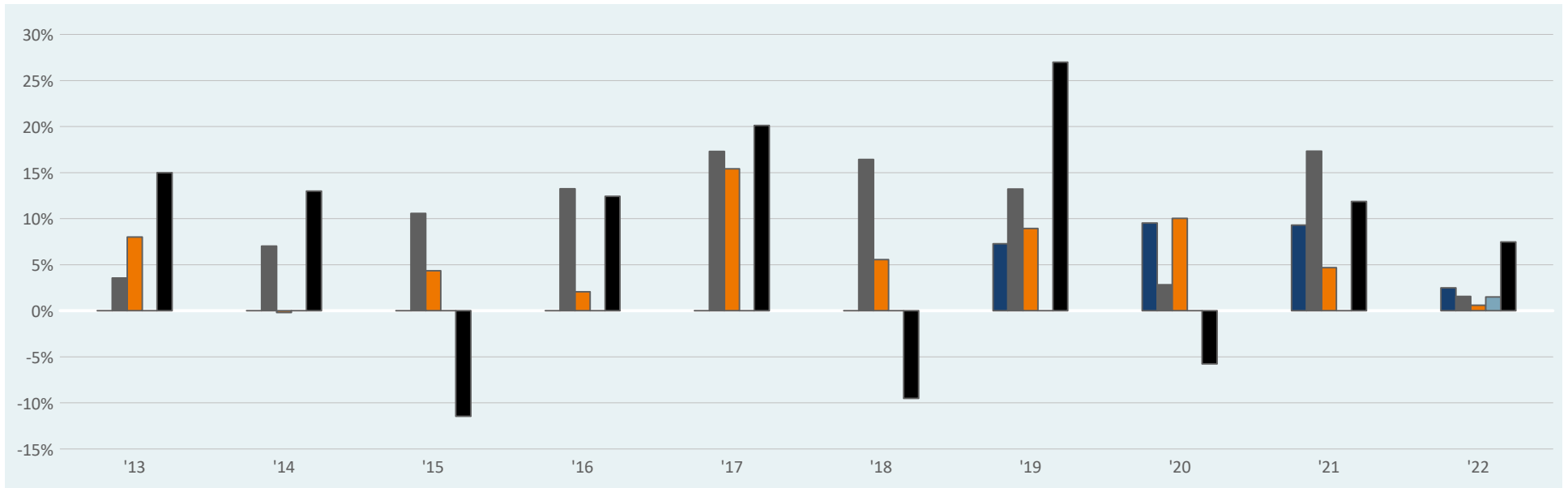
TOTAL ANNUALIZED RETURN TO DATE, %	YTD	1 Year	3 Years	5 Years	7 Years
Brookfield	2.5	9.4	9.1	---	---
IFM	1.6	16.7	10.6	12.4	12.7
JP Morgan	0.6	5.4	7.6	8.4	7.6
KKR	1.5	---	---	---	---
S&P Global Infrastructure TR USD	7.5	16.7	8.0	7.7	6.7

* Note : HarbourVest returns are unavailable as of 3/31/22.

Calendar year performance

● Brookfield ● IFM ● JP Morgan ● KKR + S&P Global Infrastructure TR USD

ANNUAL PERFORMANCE



ANNUAL PERFORMANCE	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 (YTD)
Brookfield							7.3	9.5	9.3	2.5
IFM	3.5	7.0	10.6	13.2	17.3	16.4	13.2	2.8	17.3	1.6
JP Morgan	8.0	-0.2	4.3	2.1	15.4	5.6	8.9	10.0	4.7	0.6
KKR										1.5
S&P Global Infrastructure TR USD	15.0	13.0	-11.5	12.4	20.1	-9.5	27.0	-5.8	11.9	7.5

* Note : HarbourVest returns are unavailable as of 3/31/22.

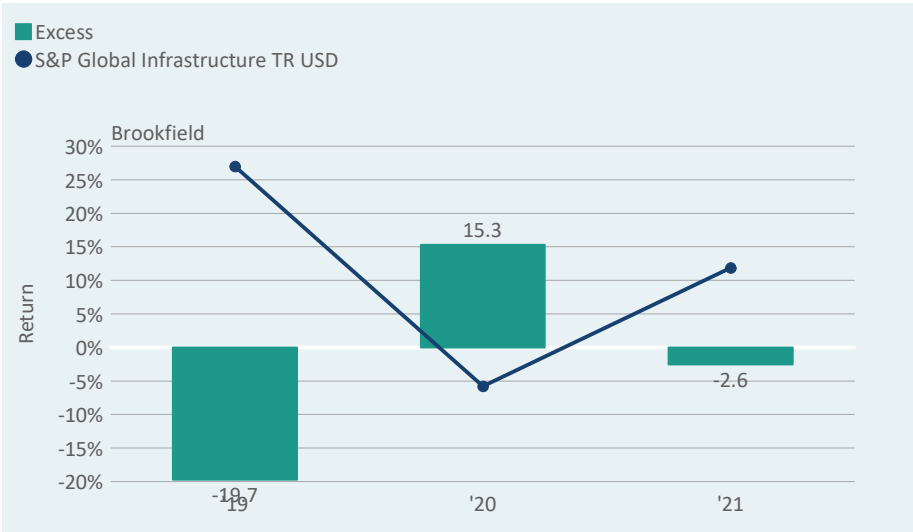
Investment vehicle information

	INVESTMENT VEHICLES	MINIMUM INVESTMENT	INCENTIVE FEE	PREFERRED RETURN	CATCH-UP PROVISION	EXPENSE RATIO	FEE SCHEDULE	LOCKUP PERIOD
Brookfield	Open-end L.P.	\$5,000,000	5% of distributions	N/A	N/A	0.75% 0.69% 0.64%	Under \$100,000,000 Under \$300,000,000 Over \$300,000,000	3 Years
HarbourVest	Open-end L.P.	\$5,000,000	5% of distributions	4%	N/A	0.85% 0.70% 0.60% 0.50% 0.40%	Under \$5,000,000 Under \$50,000,000 Under \$100,000,000 Under \$300,000,000 Over \$300,000,000	3 Years
IFM	Open-end L.P.	\$10,000,000	10%	8%	33.3%	0.77% 0.65%	<\$300,000,000 >=\$300,000,000	None
JP Morgan	USD Hedged USD Unhedged	\$10,000,000 \$10,000,000	15% 15%	7% 7%	N/A N/A	0.86% 0.86%	Assumed \$30,000,000 Assumed \$30,000,000	4 Years
KKR	Open-end L.P.	\$10,000,000	5% asset-level cash yield	4%	N/A	0.85% 0.80% 0.725% 0.65% 0.575%	Under \$50,000,000 Under \$200,000,000 Under \$500,000,000 Under \$1,000,000,000 Over \$1,000,000,000	3 Years

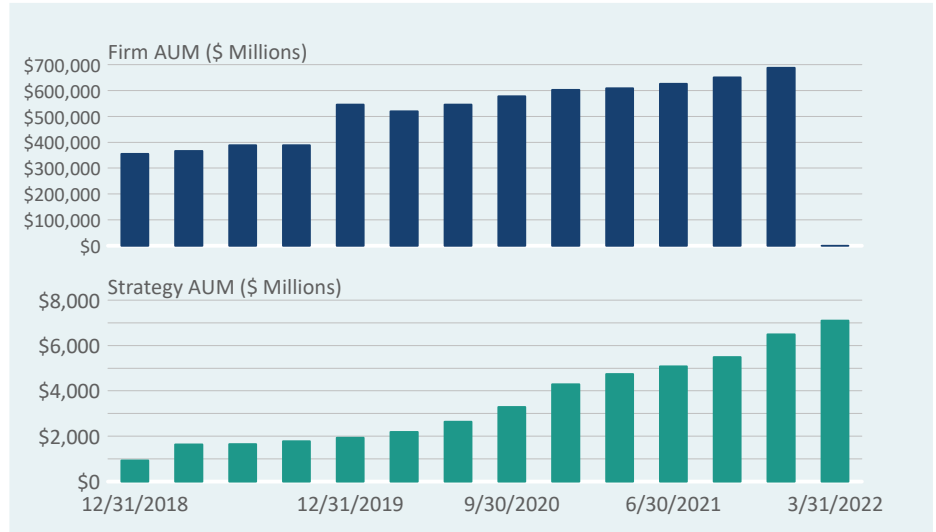
II. Strategy detail

Strategy overview - Brookfield

ANNUAL PERFORMANCE



AUM GROWTH



INVESTMENT PHILOSOPHY

- Target a diversified portfolio core infrastructure asset within the utilities, energy, power, and transportation sector.
- Focus on diversification and downside protection by investing in assets with a proven track record of operating success and long-term visibility to future cash flows.

PORTFOLIO CONSTRUCTION

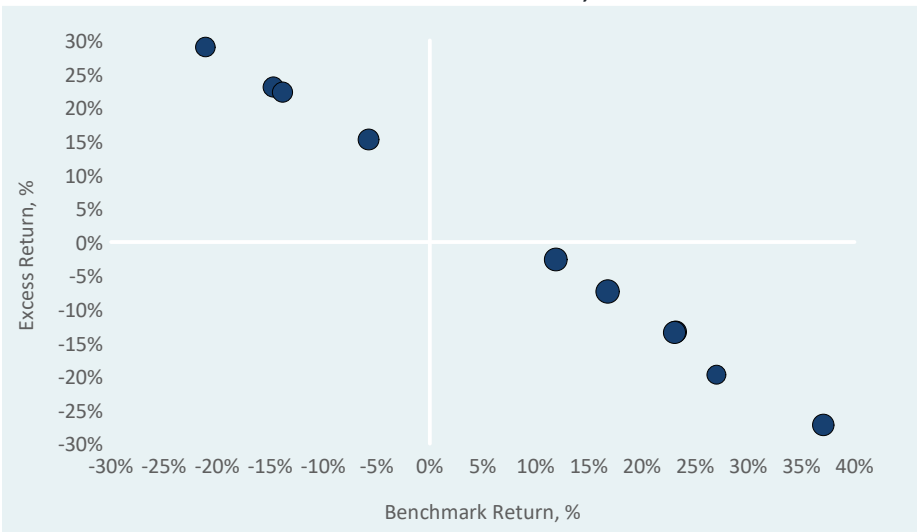
- Target portfolio return of 9%, consisting of 5-6% cash yield.
- Relatively new fund with 5 investments currently in the portfolio along with 4 investments that are committed but have not closed as of 12/31/2021.
- Portfolio includes investments in utilities, transportation, telecommunication, and midstream across North America and Europe.

TEAM DESCRIPTION

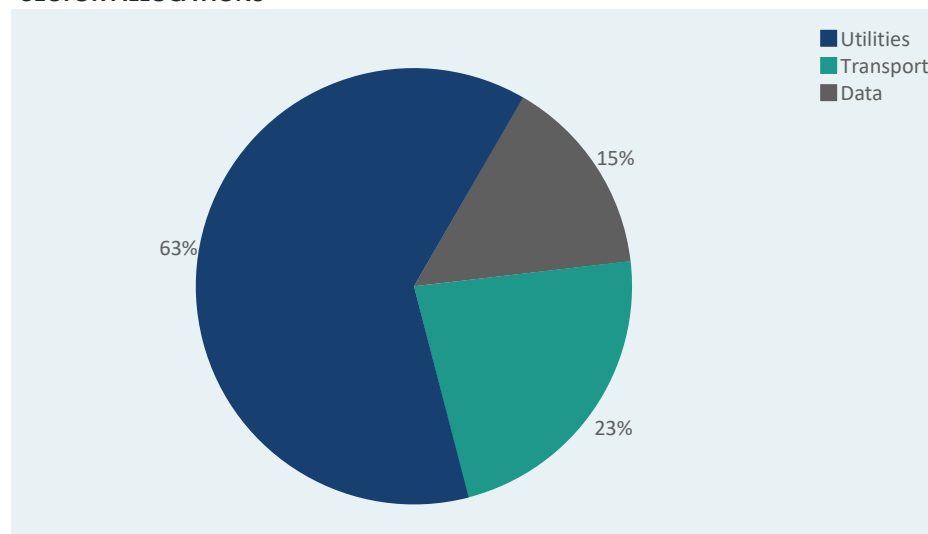
- Five person team that is dedicated solely to the fund, supported by Brookfield's Infrastructure platform consisting of 220 investment professionals.
- The senior executive team that will oversee BSIP day-to-day activities will consist of Eduardo Salgado, Michael Botha and Felipe Ortiz, with Harry Goldgut in an advisory role.
- Working with the senior executive team will be a group of sector CIOs within Brookfield Infrastructure platform that cover utilities, energy, renewables and transportation.
- As BSIP grows, Brookfield plans to add additional members to the executive team and dedicated investment personnel.

Strategy overview - Brookfield

12 MONTH EXCESS PERFORMANCE VS. BENCHMARK, JUN-12 TO MAR-22



SECTOR ALLOCATIONS



LIQUIDITY

- Three year initial lockup, then quarterly.

DIFFERENTIATING CHARACTERISTICS

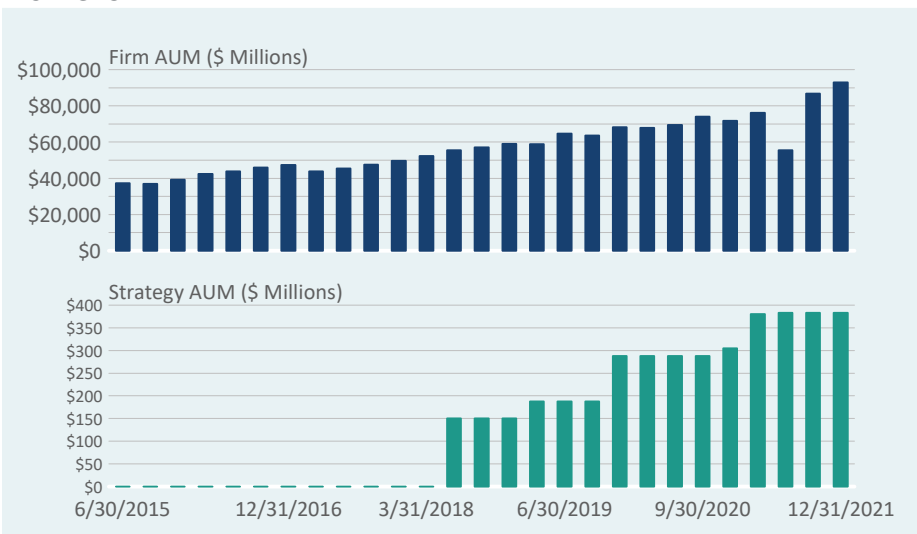
- Strict focus on core assets with stabilized cash flows, no development or value add risk.
- Inflation protection built in to investments through contracted revenue escalators linked to CPI.
- Emphasis on cash yield as primary driver of return, as evidenced by the incentive fee being based on distributions.

POTENTIAL CONCERNS

- New fund with short track record and only 5 portfolio companies. Less diversified than some of its peers, although several new investments have recently been announced that are expected to close in 2022.
- Low growth potential in the investments. Capital appreciation will not be significant.
- Relatively small team solely dedicated to the fund, although it is backed by the broader infrastructure platform.

Strategy overview - HarbourVest

AUM GROWTH



INVESTMENT PHILOSOPHY

- Target a portfolio of minority positions in infrastructure assets sourced through structured liquidity solutions including whole-fund restructurings and single asset secondaries.
- Primary focus on OECD markets in North America, Western Europe, and Australia in sectors such as utilities, transportation, renewable and conventional power, and telecommunications.
- Will invest in stabilized core assets as well as core-plus assets with opportunities for operational improvement or development.

PORTFOLIO CONSTRUCTION

- Target a net return of 8-10% with a target yield of 4-6%.
- Seed portfolio consists of 5 assets in the transportation and renewables sectors.

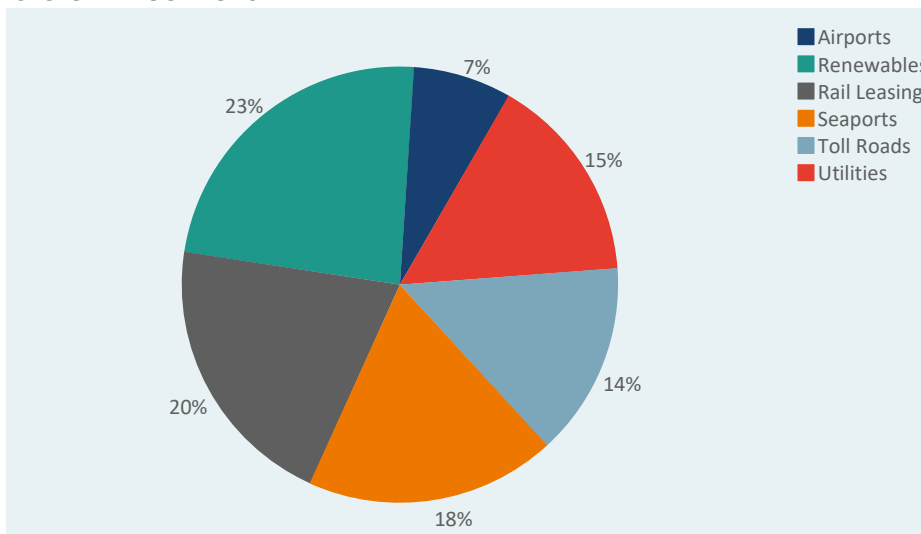
TEAM DESCRIPTION

- 20 person real asset team that share responsibility for the closed-end value add strategy as well as the core infrastructure fund.
- The team is lead by Kevin Warn-Schindel who joined HarbourVest in 2015.

* Note : HarbourVest returns are unavailable as of 3/31/22.

Strategy overview - HarbourVest

SECTOR ALLOCATIONS



LIQUIDITY

- Three year initial lock-up, then quarterly.

DIFFERENTIATING CHARACTERISTICS

- Sourcing investments through GP-led secondary transactions and co-investments.
- Passive investment approach with minority stakes.

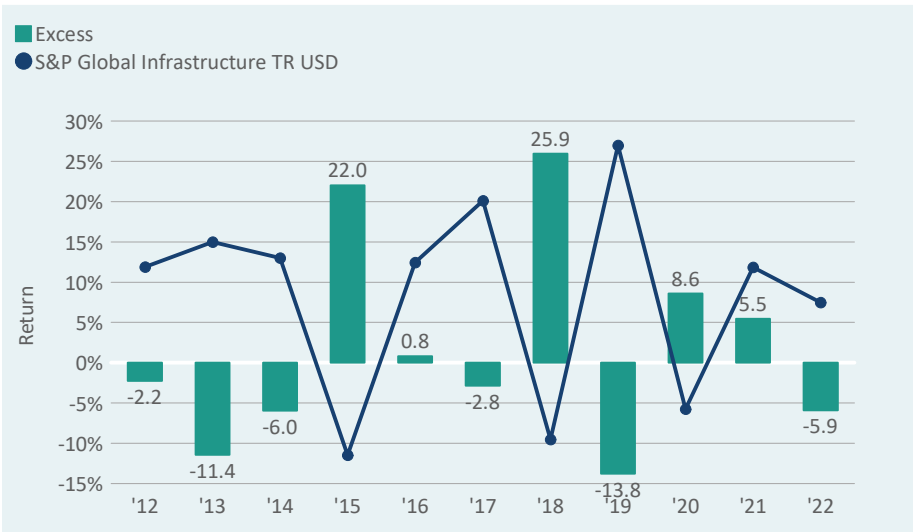
POTENTIAL CONCERNS

- Lack of control or influence on the operations of the assets.
- Double layer of fees due to the fund paying the GPs who control the assets management and incentive fees.
- Relatively small fund with current NAV under \$500m. Less diversified than peers.

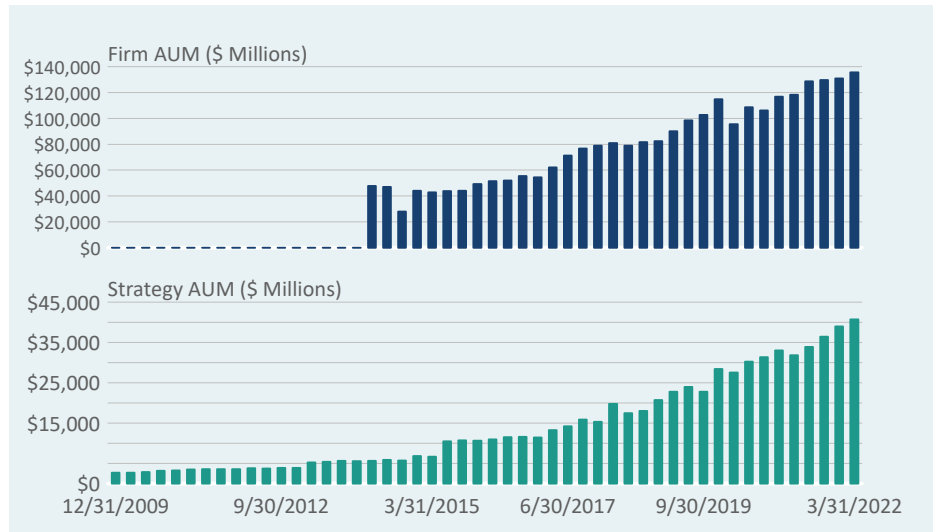
* Note : HarbourVest returns are unavailable as of 3/31/22.

Strategy overview - IFM

ANNUAL PERFORMANCE



AUM GROWTH



INVESTMENT PHILOSOPHY

- Target a diversified portfolio of core infrastructure investments with either controlling positions or minority positions with significant equity protections.
- Seek investment characteristics that are monopolistic, high barriers to entry, limited demand elasticity, long-dated assets, history of cash flow, and predictable regulatory environment.
- Focus on North America/Europe with primarily OECD countries, current focus on transportation, midstream energy and utilities.
- Buy and manage strategy with opportunistic exits.

PORTFOLIO CONSTRUCTION

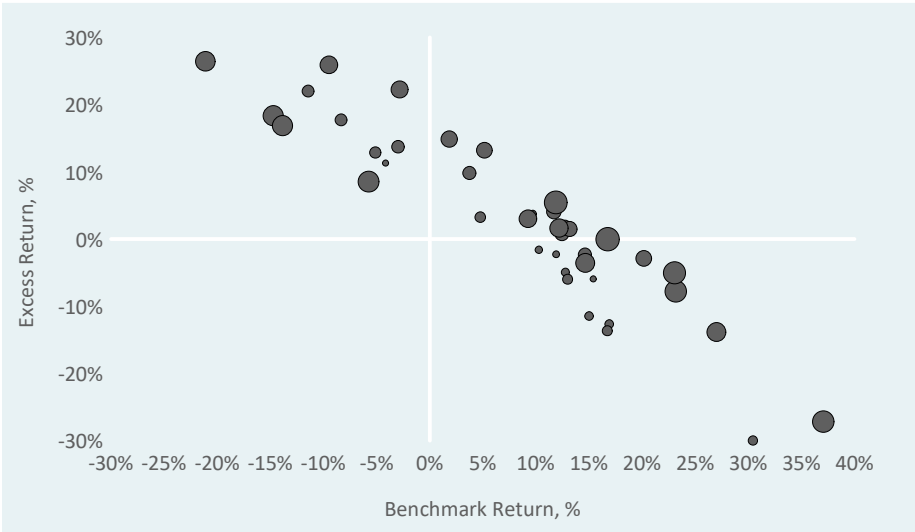
- Create a diversified portfolio of core infrastructure assets with a target portfolio return of 10%. The majority of the total return (6-8%) should come from cash flows.
- 21 portfolio companies across with assets in 45 countries, of which 93% are OECD.

TEAM DESCRIPTION

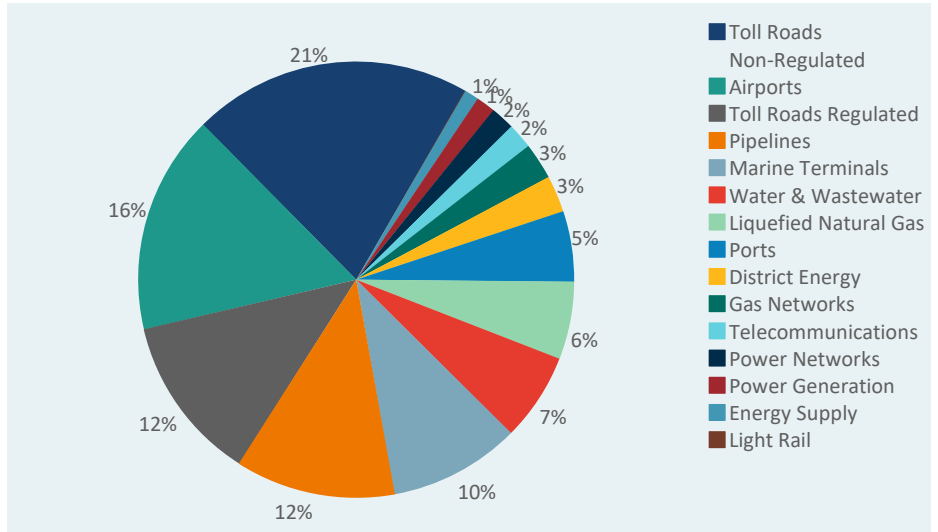
- IFM has global team of more than 90 infrastructure professionals in New York, London, Melbourne and Sydney.
- Kyle Mangini is the Global Head of Infrastructure, who joined in 2007 with 20 years of experience.
- The firm's investment committee averages 6 years firm tenure and 22 years experience.
- Coverage is structured by region with teams of 5-10 Directors and analysts per region.

Strategy overview - IFM

12 MONTH EXCESS PERFORMANCE VS. BENCHMARK, JUN-12 TO MAR-22



SECTOR ALLOCATIONS



*Sector allocations include committed capital

LIQUIDITY

- In general, the Fund only targets like-minded long term investors, but does have redemption provisions available. Investors may request to withdraw their interests at any time (no set lock up). The manager must use reasonable best efforts to enable the investor to withdraw or transfer within 36 months.
- Redemptions are serviced by cash at the fund level, or pre-emptive offering to existing investors. If 10% of the fund is subject to redemption all investors will be notified. At the 25% level, a meeting of all investors to agree on an orderly redemption process.

DIFFERENTIATING CHARACTERISTICS

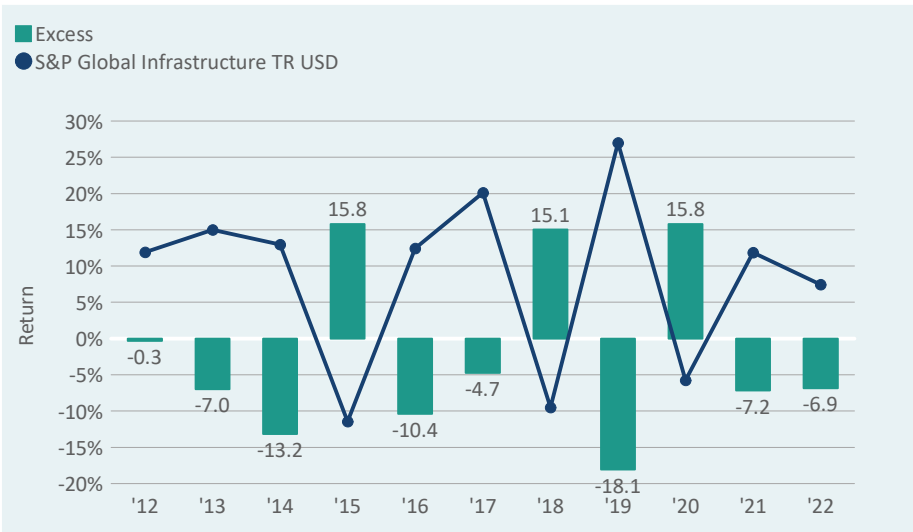
- Ownership structure provides good alignment of interests with like minded pension funds who are also investors owning the firm.
- 23 years of firm experience in private infrastructure.
- Established track record and highly diversified portfolio across sector and geography.

POTENTIAL CONCERNS

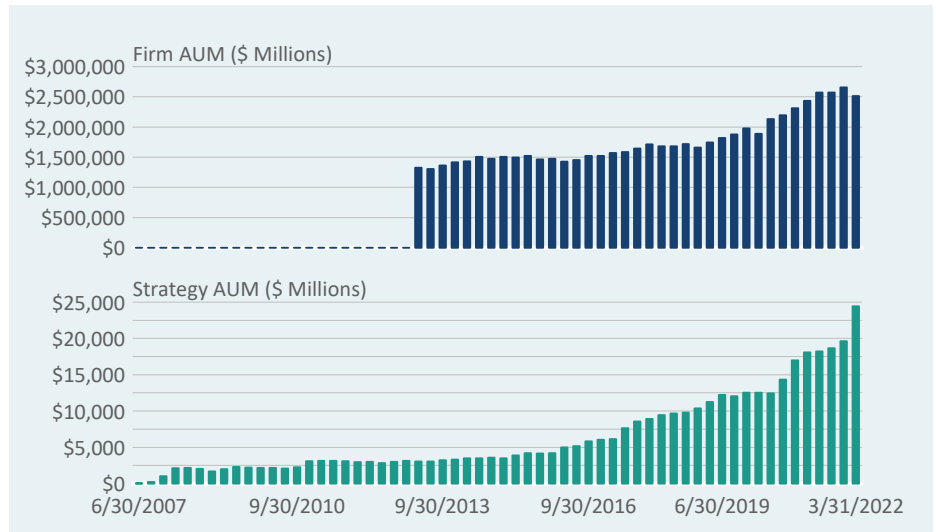
- The strategy takes higher risk than peers in both the sectors and geographies it invests in. Roughly half of the portfolio's revenues are contracted or regulated, with the remainder being market or volume based, resulting in a higher sensitivity to GDP.
- Fund has grown very large to over \$35 billion in AUM.

Strategy overview - JP Morgan

ANNUAL PERFORMANCE



AUM GROWTH



INVESTMENT PHILOSOPHY

- Target a diversified portfolio of core and core plus infrastructure investments with either controlling positions or minority positions with significant equity protections.
- Focus diversification, inflation-protection and yield within distribution/regulated, GDP-sensitive, and contracted power assets.

PORTFOLIO CONSTRUCTION

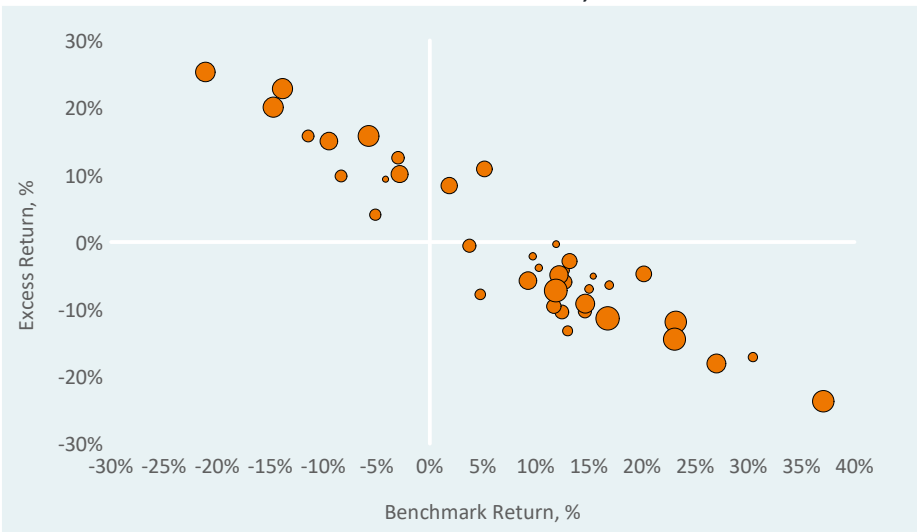
- Create a globally diversified portfolio of core infrastructure assets with a target portfolio return of 8-12%. The majority of the total return (5-7%) should come from cash flows.
- 18 portfolio companies (736 assets) in 28 countries and 13 subsectors.

TEAM DESCRIPTION

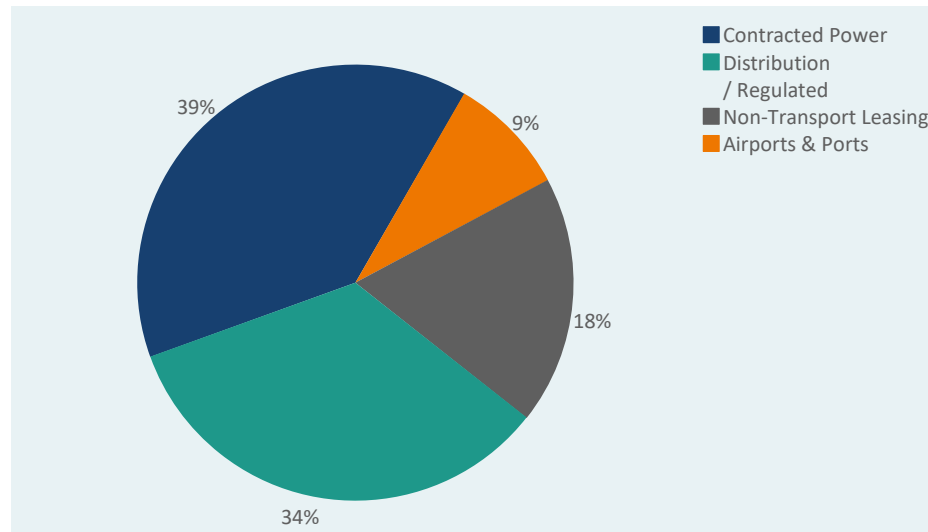
- Paul Ryan is the CEO of the Infrastructure team and the portfolio manager for the Infrastructure Investments Fund. Paul took over as CEO of the group in 2013 and was previously head of public finance within portfolio management.
- The Infrastructure Investments Group (IIG) has over 53 investment professionals.
- Supported by a large group of analysts in New York and London, with access to the firm's real estate, development, and engineering groups.

Strategy overview - JP Morgan

12 MONTH EXCESS PERFORMANCE VS. BENCHMARK, JUN-12 TO MAR-22



SECTOR ALLOCATIONS



LIQUIDITY

- 4-year initial lock up.

DIFFERENTIATING CHARACTERISTICS

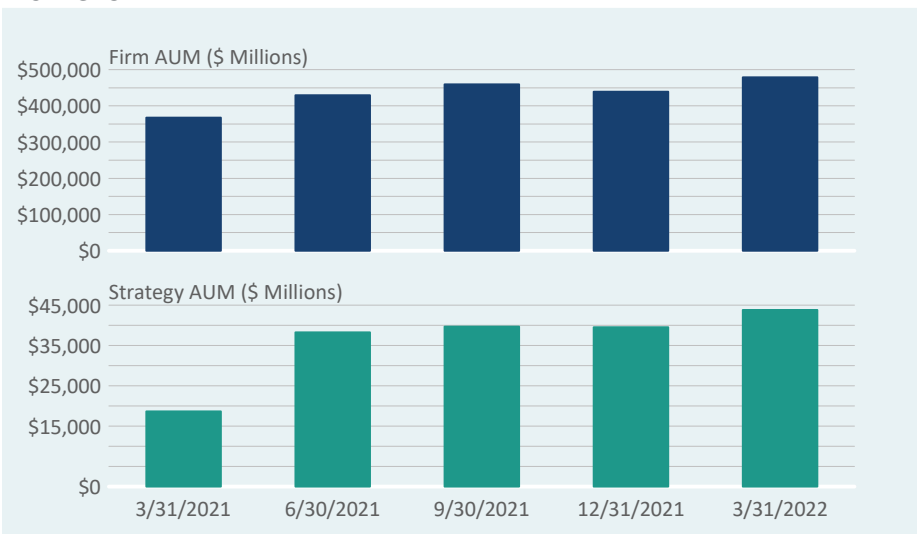
- More value-added strategy orientation. Will take on some development risks.
- Established track record with consistent operational cash yield of 5.5% over the last 10 years.
- Highly diversified by sector and geography.
- JP Morgan now offers USD-hedged and unhedged options for new investors.

POTENTIAL CONCERNS

- The team underwent significant personnel changes in 2013. The new leadership has significant industry experience however.
- Since inception of the Fund, performance has been negatively impacted by currency as the strength of the U.S. Dollar has been a significant headwind.

Strategy overview - KKR

AUM GROWTH



INVESTMENT PHILOSOPHY

- Seek to generate attractive risk adjusted returns by focusing on critical infrastructure investments with low volatility and strong downside protection.
- Target assets with a successful operating history track record that generate positive cash flow and have a high degree of visibility for future cash flows through regulated or long term-contracted revenues.

PORTFOLIO CONSTRUCTION

- Target returns of 7-9% net, roughly half of which is expected to come from yield.
- Relatively new fund with 6 portfolio companies representing 64 underlying assets in various sectors including utilities, energy transition, transportation, and telecommunication.

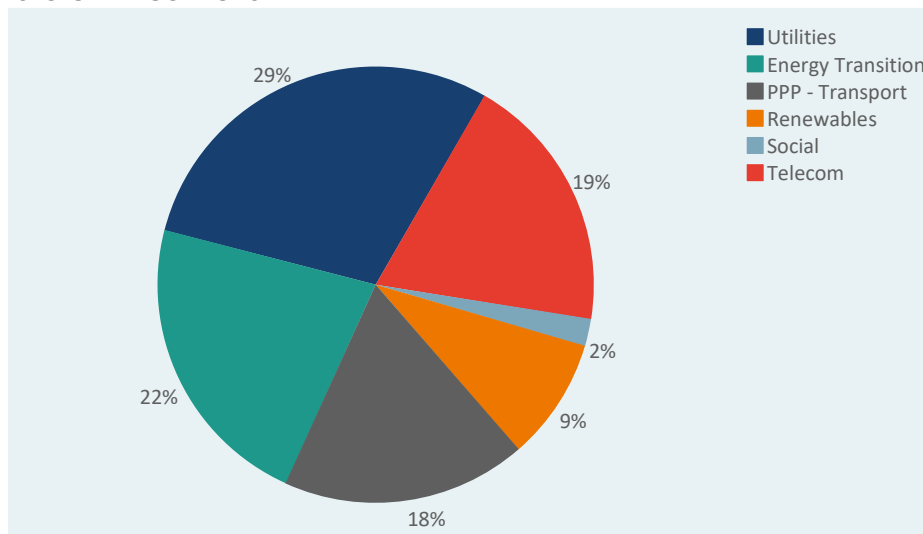
TEAM DESCRIPTION

- The Infrastructure group has 77 investment professionals across North America, Europe, and Australia.
- The fund is led by Tara Davies who joined KKR in 2016.
- In addition to Tara, there are 5 regional directors that are solely dedicated to the fund. The rest of the investment team share resources across the broader infrastructure platform.

* Note : KKR does not possess a long enough return stream to show annual performance comparisons.

Strategy overview - KKR

SECTOR ALLOCATIONS



LIQUIDITY

- Quarterly subject to an initial three-year lockup.

DIFFERENTIATING CHARACTERISTICS

- Focus on stabilized core assets with predictable cash flows and minimal operational risk. Limited exposure to assets with volume or market-based revenues.
- Strategy prioritizes yield over capital appreciation, as evidenced by the incentive fee being tied to distributions.
- Active ESG approach, particularly regarding environmental issues including excluding investments related to fossil fuels and committing to reducing emissions from its portfolio companies.

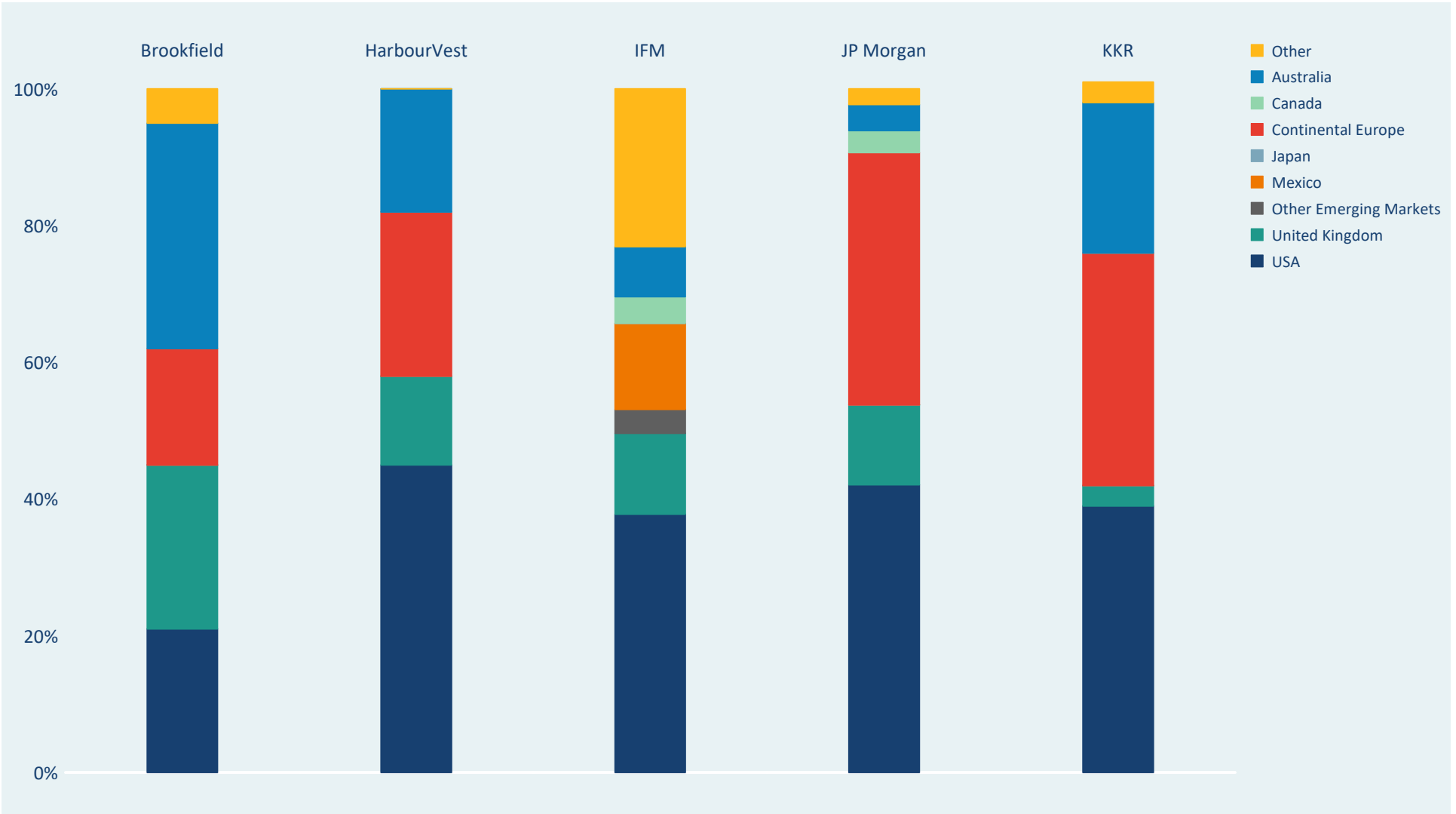
POTENTIAL CONCERNS

- New fund with a nascent track record that is less diversified than peers.
- Limited potential for upside through operational improvements.
- Small team solely dedicated to the Fund, although it is backed by the larger infrastructure platform.

* Note : KKR does not possess a long enough return stream to show annual performance comparisons.

Country exposure

CURRENT COUNTRY POSITION, AS OF MAR-22

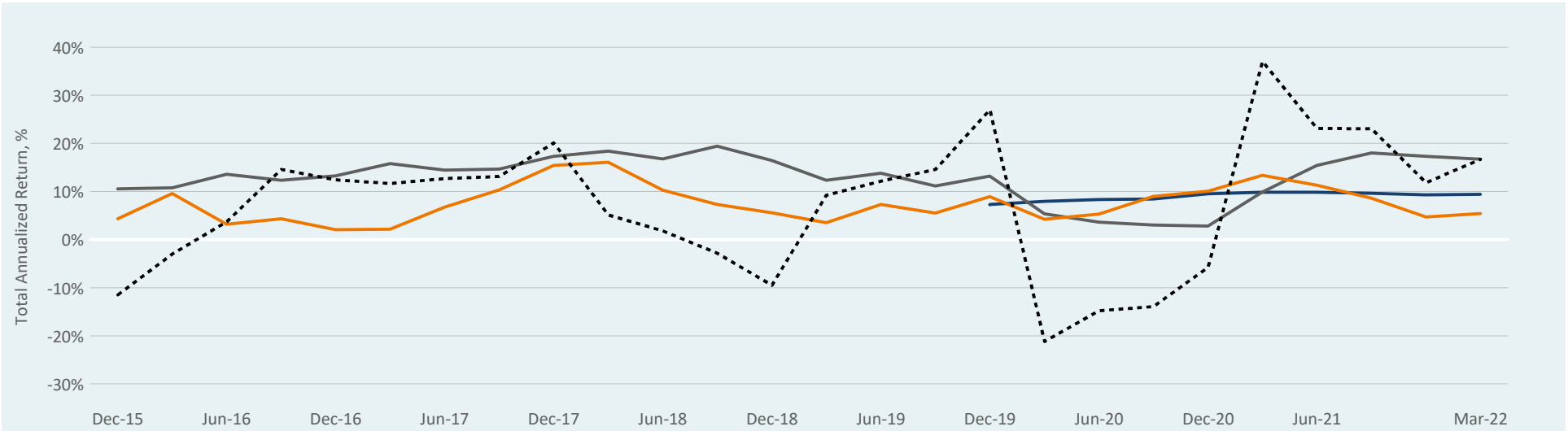


III. Appendix

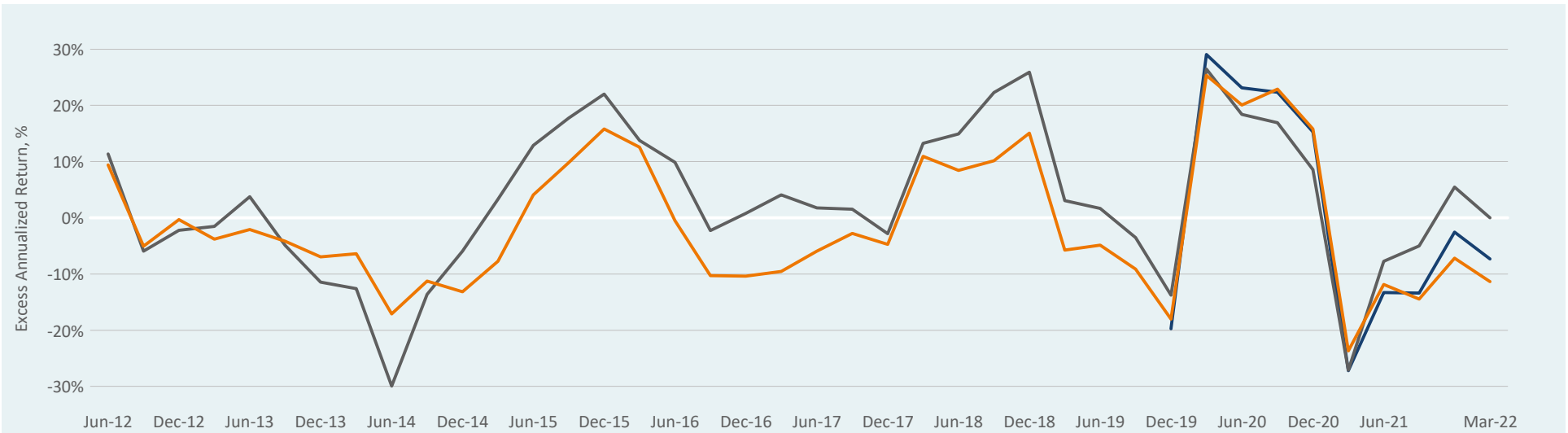
Rolling performance

● Brookfield ● IFM ● JP Morgan ● KKR ● S&P Global Infrastructure TR USD

12 MONTH ROLLING PERFORMANCE



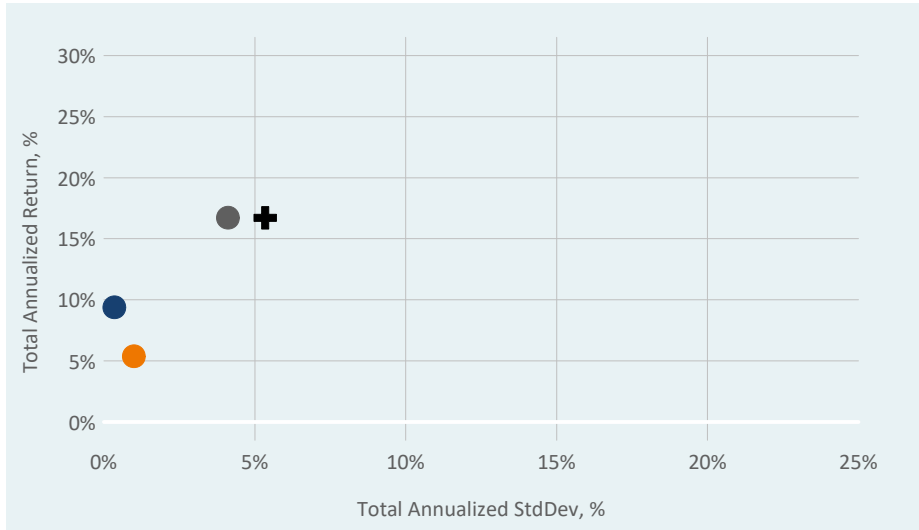
12 MONTH ROLLING EXCESS PERFORMANCE



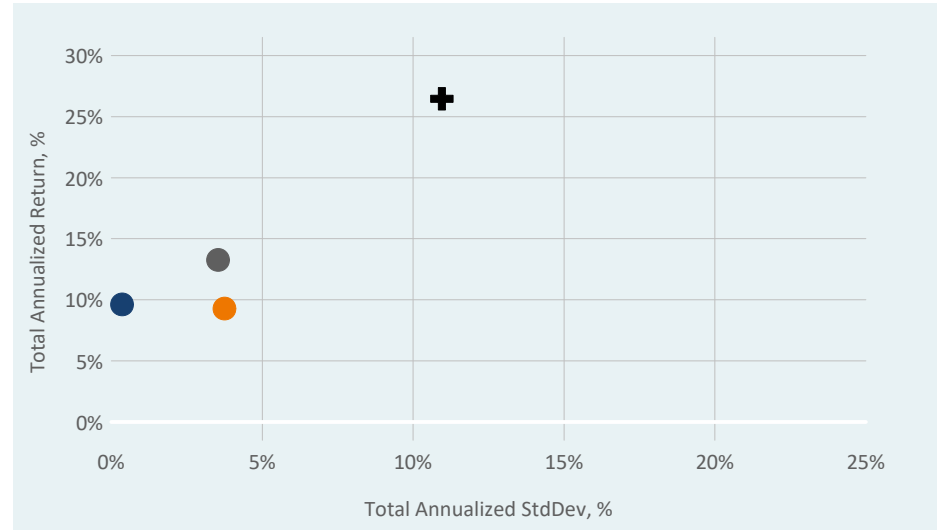
Risk vs. return

● Brookfield ● IFM ● JP Morgan ● KKR + S&P Global Infrastructure TR USD

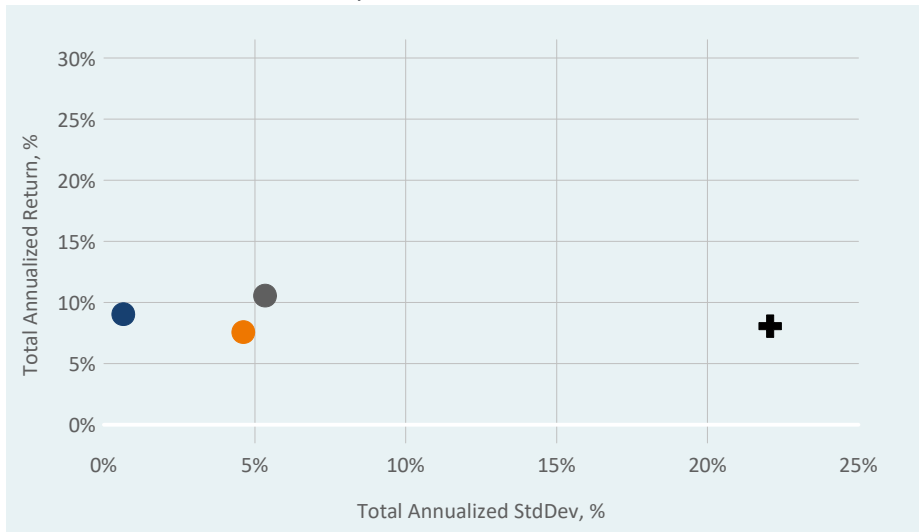
TOTAL PERFORMANCE VS. RISK, APR-21 TO MAR-22



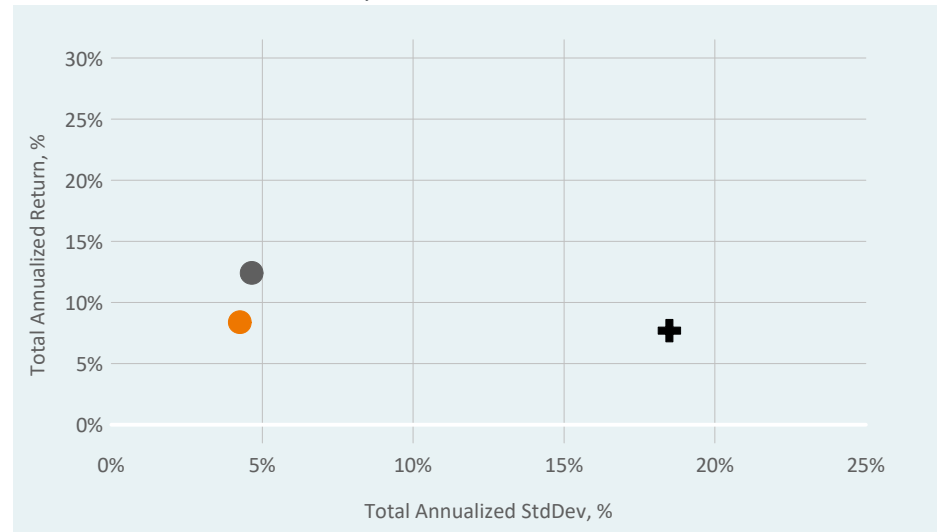
TOTAL PERFORMANCE VS. RISK, APR-20 TO MAR-22



TOTAL PERFORMANCE VS. RISK, APR-19 TO MAR-22



TOTAL PERFORMANCE VS. RISK, APR-17 TO MAR-22



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Date: Mary 23, 2022

To: Board of Trustees

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

Agenda Item 22: Asset Allocation – April 2022

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.

As a report on current asset allocation relative to the 2022 Interim SAA Target Allocation the following table provides details. Asset values may differ slightly from those shown in the Monthly Investment report due to when the report was run as various market values are finalized for month-end.

FFP Asset Mix	Est. Market Value (\$000s)	% Allocation	SAA Target Allocation	Variance
	04/29/22		2022 Interim	
Bank (operating)	1,245	0.1%	0.1%	0.0%
SLOC Treasury	31,547	1.9%	1.6%	0.3%
JPM short term	25,054	1.5%	1.3%	0.2%
Short Duration	33,645	2.0%	3.0%	-1.0%
LIQUIDITY	91,491	5.6%	6.0%	-0.4%
Equity- Public Mkt US	360,244	21.9%	21.0%	0.9%
Equity- Public Mkt Intl	261,361	15.9%	17.0%	-1.1%
Equity- Public Mkt Global	-	0.0%		0.0%
Bank Loans	79,086	4.8%	4.0%	0.8%
Bonds- Intl.	49,159	3.0%	3.0%	0.0%
Bonds- Emerging Mkts	57,445	3.5%	4.0%	-0.5%
Real Estate- Core	181,035	11.0%	7.0%	4.0%
Real Estate- Value Add	71,554	4.3%	4.0%	0.3%
Infrastructure	-	0.0%	2.0%	-2.0%
Private Equity	93,528	5.7%	10.0%	-4.3%
Private Credit	138,112	8.4%	7.0%	1.4%
Opportunistic	32,199	2.0%	0.0%	2.0%
GROWTH	1,323,723	80.5%	79.0%	1.5%
Bonds- Core	145,270	8.8%	8.0%	0.8%
Treasuries - Intermediate	41,199	2.5%	4.0%	-1.5%
TIPS	43,423	2.6%	3.0%	-0.4%
RISK DIVERSFYING	229,892	14.0%	15.0%	-1.0%
TOTAL	1,645,106	100.0%	100.0%	

Respectfully submitted,