

MONTANA

BOARD OF INVESTMENTS

REGULAR BOARD MEETING
October 11, 2023

COMMITTEE MEETINGS

A. Audit Committee – Mark Barry, Chair

Committee Members – Peterson, Bennett, Trost, Iverson

9:30 AM

1. Public Comment – *Public Comment on issues with Committee Jurisdiction*
2. Approval of August 23, 2023, Committee Minutes
3. Executive Director Comments
4. SOC 1, Type 2 Audit Report – Wipfli - **Decision**
5. Audit Checklist

B. Loan Committee – Jeff Meredith, Chair

Committee Members – Barry, Kober, Bennett, Younkin

10:30 AM

1. Public Comment – *Public Comment on issues with Committee Jurisdiction*
2. Approval of August 23, 2023, Committee Meeting Minutes
3. Executive Director Comments
4. INTERCAP Loan Request – **Decision**

C. Human Resource Committee – Maggie Peterson, Chair

Committee Members – Meredith, Kober, Trost, Younkin

11:00 AM

1. Public Comment – *Public Comment on issues with Committee Jurisdiction*
2. Executive Director Comments
3. Exempt Staff Performance Review – **Closed Session***

* **CLOSED SESSION** – This portion of the meeting relates to matters of individual privacy. The Committee Chair may determine that the demand of individual privacy clearly exceeds the merit of public disclosure. As such, this portion of the meeting may be closed.

BREAK FOR LUNCH

12:00 PM

Tab 1 CALL TO ORDER – Jack Prothero, Board Chair

1:00 PM

- A. Notice of Video Recording of Meeting
- B. Roll Call
- C. Public Comment – *Public Comment on issues with Board Jurisdiction*
- D. Approval of the August 23, 2023, Meeting Minutes
- E. Administrative Business
 1. Audit Committee Report– **Decision**
 2. Loan Committee Report
 3. Human Resource Committee Report
- F. Comments from Pension Board Members
- G. Comments from Board Legislative Liaisons

Tab 2 EXECUTIVE DIRECTOR REPORTS – Dan Villa	1:15 PM
<ul style="list-style-type: none"> A. Member Requests from Prior Meeting B. Monthly Snapshot C. 2024 Board Meeting Calendar – Decision D. 2024-2025 Work Plan – Decision E. Securities Lending F. Montana Property Acquisition – Decision G. 2025 Legislative Executive Planning Process – Decision 	
Tab 3 INVESTMENT POLICY STATEMENTS	1:30 PM
<ul style="list-style-type: none"> A. Proposed New Debt and Liability Free Account & Separately Managed Accounts Investment Policy Statements - Decision 	
Tab 4 ASSET ALLOCATION RANGE RECOMMENDATION, FIRST READING – Jon Putnam	2:00 PM
Tab 5 PRIVATE INVESTMENTS ASSET CLASS REVIEW – Thomas Winkler & Ian Horwood	2:30 PM
RECAP OF STAFF TO DO LIST AND ADJOURNMENT – Jack Prothero, Board Chair	3:45 PM
 Appendix	
<ul style="list-style-type: none"> A. Annual Board Meeting Schedule B. 2022/2023 Work Plan C. Acronym Index/Terminology List 	

MONTANA

BOARD OF INVESTMENTS

REGULAR BOARD MEETING MINUTES

August 23, 2023

Meeting recordings are posted at: <https://leg.mt.gov/lsd/>
(timestamps may differ)

Call to Order

The Board of Investment's meeting was called to order by Board Chairman Jack Prothero at 10:15 p.m. on Wednesday, August 23, 2023.

Attendance

Board Members Present: Jack Prothero, Jeff Meredith, Tim Kober, Mark Barry, Daniel Trost, Cindy Younkin, Maggie Peterson, Dwaine Iverson

Board Members Absent: Porter Bennett

Legislative Liaisons Present: Senator Jeremy Trebas

Legislative Liaisons Absent: N/A

Board Staff Present: Brenda Thomas, Dan Villa, Dan Whyte, Dan Zarling, Doug Hill, Eron Krpan, Ethan Hurley, Jason Brent, John Carpenter, John Romasko, Jon Putnam, Julie Feldman, Ian Horwood, Kirsten Haswell, Louise Welsh, Matt Hoffman, Peggy MacEwen, Peggy Saarela, Polly Boutin, Roberta Diaz, Rob Samson, Sam Holman, Savannah Morgan, Steve Strong, Thomas Winkler, Tim House, Willie Gross

Interested Parties Present: Kevin Balaod – With Intelligence, Jim Voytko – RVK, Natascha Robinson – Strategies360, Melissa Shannon – Strategies360

Tab 1 CALL TO ORDER (00:05)

Due to the meeting proceeding earlier than anticipated, some items on the agenda were moved to comply with requirements.

A. Roll Call (00:38)

Roll was taken. Eight Board members were present, forming a quorum.

Tab 2 EXECUTIVE DIRECTOR REPORTS (01:24)

A. Member Requests from Prior Meeting

There were no Board member requests from the prior meeting.

B. Monthly Snapshot

Executive Director Villa briefed the Board.

C. Budget Status Prior FY

Executive Director Villa briefed the Board.

D. 2024/2025 Draft Work Plan & 2024 Draft Meeting Calendar

Executive Director Villa briefed the Board.

Tab 3 MONTANA LOAN PROGRAM (10:37)

A. Commercial and Residential Portfolios Report

Doug Hill briefed the Board and answered questions.

Tab 4 BOND PROGRAM (18:04)

A. INTERCAP

Louise Welsh briefed the Board and answered questions.

Tab 5 TRUST FUNDS INVESTMENT REVIEW (32:30); (01:13:50)

John Romasko, Kirsten Haswell, Sam Holman, and Willie Gross briefed the Board and answered questions.

Tab 1 (cont.) (51:20)

A. Notice of Video Recording (52:41)

Chairman Prothero advised of audio and video recording of the meeting.

B. Approval of Minutes (52:48)

May 25-25, 2023, Regular Board Meeting Minutes & June 22, 2023, Special Board Meeting Minutes.

Member Trost motioned to approve. Member Peterson seconded the motion, which passed unanimously.

C. Administrative Business

1. Audit Committee Report (53:40)

Committee Chair Barry briefed the Board.

2. Loan Committee Report (55:15)

Committee Chair Meredith briefed the Board.

Chairman Prothero asked for a motion to approve the participation loan request from Eagle Enterprises, LLC for \$4,100,000. Member Younkin motioned to approve. Member Iverson seconded the motion, which passed unanimously.

Chairman Prothero asked for a motion to approve the two participation loan requests from M2DT Holdings, LLC, for \$3,246,795 and \$1,039,163. Member Barry motioned to approve. Member Younkin seconded the motion, which pass unanimously.

D. Comments from Pension Board Members

Member Peterson briefed the Board. (01:01:45)

Member Trost briefed the Board. (01:05:43)

E. Comments from Board Legislative Liaisons

Senator Jeremy Trebas briefed the Board. (01:09:16)

F. Introduction of New Board Member and Staff (01:10:19)

Chairman Prothero introduced Dwaine Iverson and welcomed him to the Board.

Executive Director Villa introduced Jessilynn Salois, Investment Accountant.

G. Public Comment (01:12:38)

Chairman Prothero asked for public comment. None was given.

Tab 6 NON-CORE FIXED INCOME ASSET CLASS REVIEW (01:50:01)

Jason Brent briefed the Board and answered questions.

Tab 7 RVK INVESTMENT UPDATE (02:41:38)

Jim Voytko with RVK briefed the Board and answered questions.

Tab 8 INVESTMENT UPDATE (03:23:46)

CIO Update (03:23:48)

Jon Putnam briefed the Board.

Macro Attribution (04:10:29)

Eron Krpan briefed the Board.

Non-Core Fixed Income, Domestic Equity, and International Equity (04:16:42)

Jason Brent briefed the Board.

Real Estate (04:28:29)

Ethan Hurley and Rob Samson briefed the Board.

Real Assets (04:39:55)

Ethan Hurley briefed the Board.

Private Investments (04:47:17)

Thomas Winkler briefed the Board.

Core Fixed Income (04:52:43)

John Romasko briefed the Board.

RECAP OF STAFF TO DO LIST AND ADJOURNMENT (04:58:30)

Chairman Prothero adjourned the meeting at 4:17 p.m.

MONTANA BOARD OF INVESTMENTS

APPROVE: _____
Jack Prothero, Chair

ATTEST: _____
Dan Villa, Executive Director

DATE: _____

MONTANA

BOARD OF INVESTMENTS

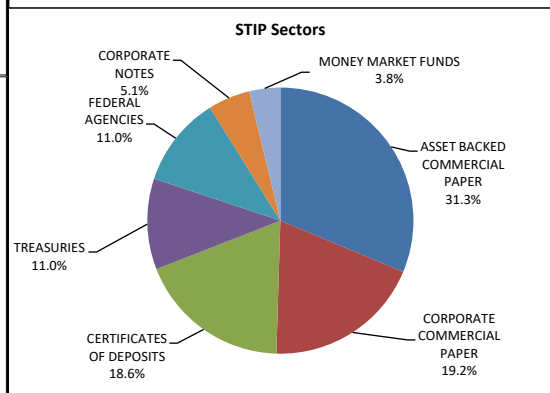
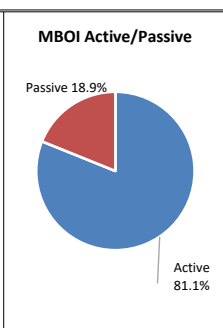
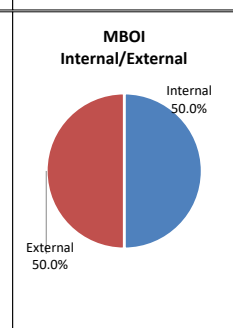
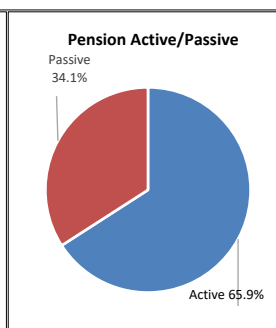
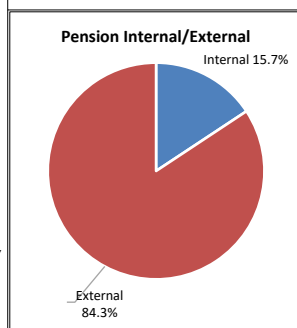
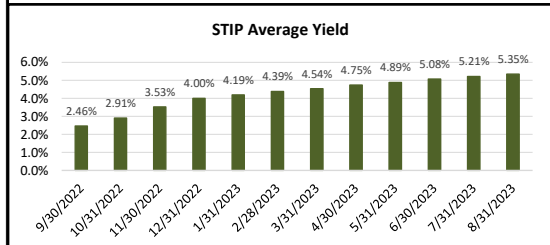
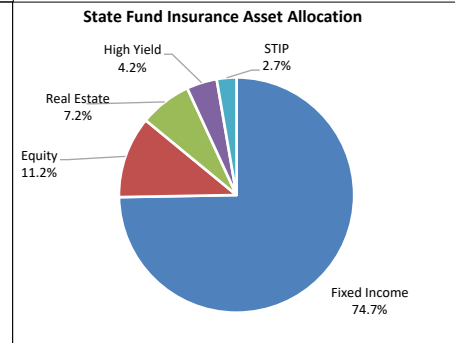
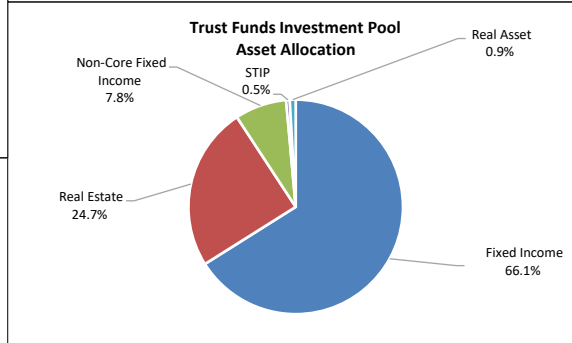
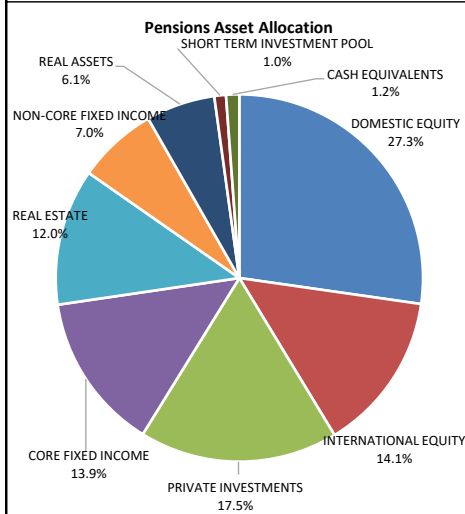
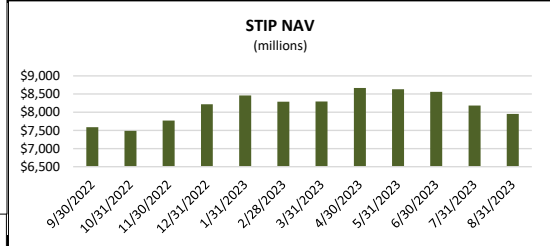
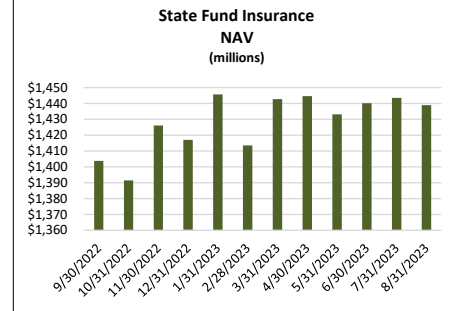
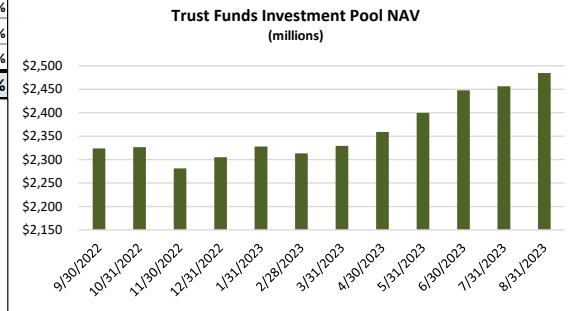
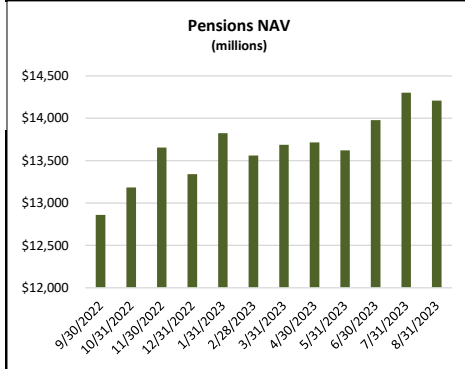
To: Members of the Board
From: Dan Villa, Executive Director
Date: October 11, 2023
Re: Executive Director Report

- A. Member Requests from Prior Meeting
- B. Monthly Snapshot – *attached*
- C. 2024 Board Meeting Calendar – **Decision**
- D. 2024-2025 Work Plan – **Decision**
- E. Securities Lending – *attached*

MBOI Snapshot
Asset Management View
8/31/2023 Unaudited
Assets Under Management \$26,401,951,388



Pensions	NAV	%	TFIP	NAV	%	State Fund	NAV	%	Other Fixed Income & Pending	\$ (172,681,114)	
DOMESTIC EQUITY	\$3,873,753,550	27.26%	Fixed Income	\$ 1,949,382,493	66.06%	Fixed Income	\$ 1,075,202,375	74.72%			
INTERNATIONAL EQUITY	\$1,998,473,310	14.06%	Real Estate	\$ 728,920,292	24.70%	Equity	\$ 161,645,569	11.23%	STIP*	NAV	
PRIVATE INVESTMENTS	\$2,484,548,160	17.49%	Non-Core Fixed Income	\$ 230,305,380	7.80%	Real Estate	\$ 103,116,935	7.17%	ASSET BACKED COMMERCIAL PAPER	\$2,495,326,429	31.29%
CORE FIXED INCOME	\$1,969,599,799	13.86%	Real Asset	\$ 26,252,163	0.89%	High Yield	\$ 60,033,750	4.17%	CORPORATE COMMERCIAL PAPER	\$1,530,521,164	19.19%
REAL ESTATE	\$1,708,480,402	12.02%	STIP	\$ 16,018,955	0.54%	STIP	\$ 38,978,305	2.71%	CERTIFICATES OF DEPOSITS	\$1,482,938,989	18.59%
NON-CORE FIXED INCOME	\$998,677,778	7.03%	Total	\$ 2,950,879,283	100.00%	State Fund Total	\$ 1,438,976,934	100.00%	TREASURIES	\$880,337,456	11.04%
REAL ASSETS	\$865,032,629	6.09%						FEDERAL AGENCIES	\$879,614,598	11.03%	
SHORT TERM INVESTMENT POOL	\$145,316,139	1.02%						CORPORATE NOTES	\$406,321,353	5.09%	
CASH EQUIVALENTS	\$164,980,345	1.16%						MONEY MARKET FUNDS	\$300,854,184	3.77%	
Pensions Total	\$14,208,862,111	100.00%						STIP Total	\$7,975,914,173	100.00%	



Definition of NAV: Net Asset Value is the total value of the account including assets held, adjusted for payables, receivables and liabilities

(1) Other Holdings column on page two represents the value of securities, receivables, payables and liabilities that comprise the Net Asset Value for the asset owner.

*Difference of \$305,144,741 is attributable the portion of STIP held within CAPP (\$161,532,391) and TFIP (\$15,940,471) as a cash investment and distributions held over month end (\$127,671,879). Such value is represented in the NAV for the CAPP and STIP columns.

MBOI Snapshot
Asset Ownership View
8/31/2023 Unaudited



	CAPP Holdings	CAPP %	STIP Holdings*	STIP %	TFIP Holdings	TFIP%	Other Holdings ¹	Other %	Total Net Asset Value
Total Funds \$(000)	\$14,063,546	53.27%	\$7,670,769	29.05%	\$2,950,886	11.18%	\$1,716,750	6.50%	\$26,401,951
Pensions	CAPP	%	STIP	%	TFIP	%	Other	%	Total
FIREFIGHTERS RETIREMENT	\$ 614,646	98.97%	\$ 6,409	1.03%	\$ -	0.00%	\$ -	0.00%	\$ 621,055
GAME WARDENS RETIREMENT	\$ 319,541	99.00%	\$ 3,228	1.00%	\$ -	0.00%	\$ -	0.00%	\$ 322,769
HIGHWAY PATROL RETIREMENT	\$ 211,140	98.94%	\$ 2,270	1.06%	\$ -	0.00%	\$ -	0.00%	\$ 213,411
JUDGES RETIREMENT	\$ 129,232	99.01%	\$ 1,295	0.99%	\$ -	0.00%	\$ -	0.00%	\$ 130,527
POLICE OFFICERS RETIREMENT	\$ 558,249	98.95%	\$ 5,899	1.05%	\$ -	0.00%	\$ -	0.00%	\$ 564,147
PUBLIC EMPLOYEES RETIREMENT	\$ 6,818,358	98.98%	\$ 70,169	1.02%	\$ -	0.00%	\$ -	0.00%	\$ 6,888,527
SHERIFFS RETIREMENT	\$ 516,245	98.92%	\$ 5,647	1.08%	\$ -	0.00%	\$ -	0.00%	\$ 521,892
TEACHERS RETIREMENT	\$ 4,846,500	98.98%	\$ 49,902	1.02%	\$ -	0.00%	\$ -	0.00%	\$ 4,896,402
VOL FIREFIGHTERS RETIREMENT	\$ 49,635	99.01%	\$ 498	0.99%	\$ -	0.00%	\$ -	0.00%	\$ 50,132
Total	\$ 14,063,546	98.98%	\$ 145,316	1.02%	\$ -	0.00%	\$ -	0.00%	\$ 14,208,862
Trust Funds	CAPP	%	STIP	%	TFIP	%	Other	%	Total
ABANDONED MINE RECLAMATION	\$ -	0.00%	\$ 7,581	99.55%	\$ -	0.00%	\$ 34	0.45%	\$ 7,616
BARKER HUGHESVILLE ST RESPONSE	\$ -	0.00%	\$ 1,291	14.28%	\$ 7,722	85.44%	\$ 26	0.29%	\$ 9,039
BELT WATER TREATMENT PLANT	\$ -	0.00%	\$ 4,456	16.64%	\$ 22,244	83.07%	\$ 78	0.29%	\$ 26,778
BUTTE AREA ONE REST	\$ -	0.00%	\$ 1,032	17.03%	\$ 5,011	82.68%	\$ 18	0.29%	\$ 6,061
BUTTE AREA REDEVELOP AUTHORITY	\$ -	0.00%	\$ 1,174	9.12%	\$ 11,662	90.60%	\$ 35	0.28%	\$ 12,872
CLARK FORK REST	\$ -	0.00%	\$ 3,612	14.35%	\$ 21,491	85.37%	\$ 72	0.29%	\$ 25,176
CLARK FORK SITE RESP ACTION	\$ -	0.00%	\$ 3,300	6.49%	\$ 47,376	93.23%	\$ 140	0.28%	\$ 50,816
COAL TAX PARK TRUST FUND	\$ -	0.00%	\$ 1,429	4.76%	\$ 28,488	94.97%	\$ 81	0.27%	\$ 29,998
CULTURAL TRUST FUND	\$ -	0.00%	\$ 915	5.60%	\$ 15,392	94.14%	\$ 44	0.27%	\$ 16,350
E HELENA GREENWAY TRAIL MAINT	\$ -	0.00%	\$ 270	28.22%	\$ 684	71.47%	\$ 3	0.31%	\$ 957
EAST HELENA COMPENSATION FUND	\$ -	0.00%	\$ 1,433	63.67%	\$ 809	35.95%	\$ 9	0.38%	\$ 2,251
ENDOWMENT FOR CHILDREN	\$ -	0.00%	\$ 74	5.26%	\$ 1,324	94.47%	\$ 4	0.27%	\$ 1,401
FLYING J CECRA FACILITIES FUND	\$ -	0.00%	\$ 384	14.62%	\$ 2,232	85.09%	\$ 7	0.29%	\$ 2,623
FWP MITIGATION TRUST	\$ -	0.00%	\$ 3,106	29.69%	\$ 6,857	65.55%	\$ 498	4.76%	\$ 10,461
HAROLD HAMM ENDOWMENT	\$ -	0.00%	\$ 7	13.12%	\$ 43	86.59%	\$ 0	0.28%	\$ 50
INVASIVE SPECIES TRUST FUND	\$ -	0.00%	\$ 46	1.56%	\$ 2,863	98.18%	\$ 8	0.26%	\$ 2,916
LIBBY ASBESTOS SITE STATE COST	\$ -	0.00%	\$ 863	17.46%	\$ 4,064	82.25%	\$ 14	0.29%	\$ 4,941
LUTTRELL PIT - OPER & MAINT	\$ -	0.00%	\$ 325	16.03%	\$ 1,698	83.69%	\$ 6	0.29%	\$ 2,030
MONTANA HISTORICAL SOCIETY	\$ -	0.00%	\$ 893	21.98%	\$ 3,159	77.72%	\$ 12	0.30%	\$ 4,064
MT POLE SUPERFUND SETTLEMENT	\$ -	0.00%	\$ 3,956	20.57%	\$ 15,214	79.13%	\$ 57	0.30%	\$ 19,227
NOXIOUS WEED MGMT TRUST FUND	\$ -	0.00%	\$ -	0.00%	\$ 10,275	99.74%	\$ 27	0.26%	\$ 10,302
OLDER MONTANANS TRUST FUND	\$ -	0.00%	\$ 17	5.25%	\$ 300	94.48%	\$ 1	0.27%	\$ 318
POTTER TRUST FUND	\$ -	0.00%	\$ 32	12.91%	\$ 214	86.81%	\$ 1	0.28%	\$ 247
PUBLIC SCHOOL TRUST	\$ -	0.00%	\$ 22,373	2.52%	\$ 862,951	97.22%	\$ 2,309	0.26%	\$ 887,633
REAL PROPERTY TRUST FUND	\$ -	0.00%	\$ 139	1.97%	\$ 6,873	97.75%	\$ 19	0.27%	\$ 7,031
RESOURCE INDEMNITY TRUST FUND	\$ -	0.00%	\$ 23	0.02%	\$ 105,474	99.72%	\$ 272	0.26%	\$ 105,769
SMELTER HILL UPLANDS REST FUND	\$ -	0.00%	\$ 1,309	15.29%	\$ 7,228	84.43%	\$ 25	0.29%	\$ 8,561
STREAMSIDE TAILINGS OU FUND	\$ -	0.00%	\$ 2,018	12.23%	\$ 14,435	87.49%	\$ 47	0.28%	\$ 16,500
TOBACCO TRUST FUND	\$ -	0.00%	\$ 3,395	1.15%	\$ 291,355	98.59%	\$ 767	0.26%	\$ 295,517
UPPER BLACKFT RESP ACT & REST	\$ -	0.00%	\$ 977	91.71%	\$ 84	7.85%	\$ 5	0.44%	\$ 1,066
UPPER CLRK FK RIVER BASIN RES	\$ -	0.00%	\$ 425	1.97%	\$ 21,128	97.77%	\$ 56	0.26%	\$ 21,609
UPPER CLRK FK RIVER BASIN REST	\$ -	0.00%	\$ 2,328	3.43%	\$ 65,433	96.31%	\$ 179	0.26%	\$ 67,941
WILDLIFE HABITAT TRUST FUND	\$ -	0.00%	\$ 817	5.12%	\$ 15,093	94.61%	\$ 43	0.27%	\$ 15,953
YELLOWSTONE PIPELINE CLEANUPFD	\$ -	0.00%	\$ 1,842	31.09%	\$ 4,065	68.60%	\$ 19	0.32%	\$ 5,925
ZORTMAN/LANDUSKY LT WATER	\$ -	0.00%	\$ 16,348	99.55%	\$ -	0.00%	\$ 74	0.45%	\$ 16,422
ZORTMANLANDUSKY LT WATER TRUST	\$ -	0.00%	\$ 21,262	99.55%	\$ -	0.00%	\$ 97	0.45%	\$ 21,358
Total	\$ -	0.00%	\$ 109,450	6.37%	\$ 1,603,242	93.33%	\$ 5,086	0.30%	\$ 1,717,778
Coal Severance	CAPP	%	STIP	%	TFIP	%	Other	%	Total
BIG SKY ECONOMIC DEV FUND	\$ -	0.00%	\$ 4,344	3.14%	\$ 133,463	96.60%	\$ 355	0.26%	\$ 138,163
COAL SEVERANCE TAX PERM FUND	\$ -	0.00%	\$ 17,306	3.14%	\$ 349,972	63.51%	\$ 183,765	33.35%	\$ 551,042
MONTANA COAL ENDOWMENT FUND	\$ -	0.00%	\$ 3,069	1.13%	\$ 266,708	98.61%	\$ 702	0.26%	\$ 270,480
SCHOOL FACILITIES FUND	\$ -	0.00%	\$ 87,147	42.27%	\$ 118,520	57.49%	\$ 505	0.24%	\$ 206,172
MT COAL ENDOWMENT REGIONAL WAT	\$ -	0.00%	\$ 1,192	1.27%	\$ 92,309	98.47%	\$ 244	0.26%	\$ 93,745
Total	\$ -	0.00%	\$ 113,058	8.98%	\$ 960,972	76.29%	\$ 185,571	14.73%	\$ 1,259,601
Operating Funds	CAPP	%	STIP	%	TFIP	%	Other	%	Total
FWP GENERAL LICENSE ACCOUNT	\$ -	0.00%	\$ 52,729	61.48%	\$ 29,717	34.65%	\$ 3,317	3.87%	\$ 85,762
MONTANA LOCAL GOVERNMENTS	\$ -	0.00%	\$ 1,719,795	99.55%	\$ -	0.00%	\$ 7,845	0.45%	\$ 1,727,640
MONTANA STATE AGENCIES	\$ -	0.00%	\$ 2,827,499	99.56%	\$ -	0.00%	\$ 12,494	0.44%	\$ 2,839,993
MONTANA STATE UNIVERSITY	\$ -	0.00%	\$ 299,715	83.73%	\$ 56,866	15.89%	\$ 1,363	0.38%	\$ 357,944
MONTANA TECH	\$ -	0.00%	\$ 8,219	94.41%	\$ 448	5.15%	\$ 39	0.44%	\$ 8,706
STATE TREASURER'S FUND	\$ -	0.00%	\$ 2,099,707	87.59%	\$ 214,786	8.96%	\$ 82,765	3.45%	\$ 2,397,258
UNIVERSITY OF MONTANA	\$ -	0.00%	\$ 62,046	64.58%	\$ 28,948	30.13%	\$ 5,085	5.29%	\$ 96,079
Total	\$ -	0.00%	\$ 7,069,710	94.09%	\$ 330,765	4.40%	\$ 112,908	1.50%	\$ 7,513,383
Insurance Reserves	CAPP	%	STIP	%	TFIP	%	Other	%	Total
HAIL INSURANCE INVESTMENTS	\$ -	0.00%	\$ 2,992	50.40%	\$ 2,923	49.24%	\$ 21	0.36%	\$ 5,936
MONTANA STATE FUND	\$ -	0.00%	\$ 38,826	2.70%	\$ -	0.00%	\$ 1,400,151	97.30%	\$ 1,438,977
MUS GROUP INSURANCE	\$ -	0.00%	\$ 88,211	85.61%	\$ 12,566	12.20%	\$ 2,260	2.19%	\$ 103,038
MUS WORKERS COMPENSATION	\$ -	0.00%	\$ 9,852	71.17%	\$ 3,935	28.43%	\$ 55	0.40%	\$ 13,842
PERS-DCRP LT DISABILITY PLAN	\$ -	0.00%	\$ 820	9.41%	\$ -	0.00%	\$ 7,900	90.59%	\$ 8,720
STATE EMPLOYEE GROUP BENEFITS	\$ -	0.00%	\$ 91,536	69.98%	\$ 36,482	27.89%	\$ 2,794	2.14%	\$ 130,812
SUBSEQUENT INJURY TRUST FUND	\$ -	0.00%	\$ 998	99.52%	\$ -	0.00%	\$ 5	0.48%	\$ 1,003
Total	\$ -	0.00%	\$ 233,235	13.70%	\$ 55,907	3.28%	\$ 1,413,186	83.01%	\$ 1,702,327

Short Term Investment Pool

Account	# Accounts	Total Market Value	%
Total State	354	6,250,347,775	78.4%
Total Local	187	1,725,566,398	21.6%
Total STIP	541	\$ 7,975,914,173	100.0%
STIP Reserve		\$ 71,485,427	
Prior month average STIP Yield		5.3522%	

Intercap Statistics

Loans Outstanding	\$ 67,904,422
Bonds Outstanding	\$ 68,706,869
Number of Borrowers	130
Loan Rate	5.75%

2024 Board of Investments Meetings

JANUARY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

FEBRUARY

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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

MARCH

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24	25	26	27	28	29	30
31						

APRIL

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28	29	30				

MAY

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26	27	28	29	30	31	

JUNE

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23	24	25	26	27	28	29
30						

JULY

S	M	T	W	T	F	S
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21	22	23	24	25	26	27
28	29	30	31			

AUGUST

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18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

S	M	T	W	T	F	S
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER

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NOVEMBER

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24	25	26	27	28	29	30

DECEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Board Materials Due
 Board Packet Mailing
 Board Meeting Dates

BOI WORK AND EDUCATION PLAN

2024

2025 (dates TBD)

February 28-29

Education:

Outreach Efforts for the Board - In-State Loan and INTERCAP Programs
Short Term Investment Pool

Reports:

Ethics Policy
Disaster Recovery and Emergency Preparedness
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Financial Audit Report

April 10

Education:

Domestic Equity Asset Class Review
RVK Annual Capital Market Assumptions

Reports:

Benchmarks Used by the Board

May 22-23

Education:

MT Buildings (Board as Landlord/Tenant Holdings)
Investment Policy Statement Review
Real Estate Asset Class Review

Reports:

Budget Status FYTD
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

HR: Staffing Level Review
HR: Exempt Staff Compensation Review

August 28-29

Education:

Core Fixed Income Asset Class Review
Budget Proposal for FY24-25

Reports:

Proxy Voting
Budget Status Prior FY
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

October 9

Education:

Separate Accounts Investment Review
First Reading - Asset Allocation Range Recommendation

Reports:

CEM, Inc Cost Reporting Analysis

Committee Meetings:

HR: Exempt Staff Performance Review
Audit: SOC I, Type 2 Report

November 20-21

Education:

2025 Legislative Session
Adoption - Asset Allocation Range Approval

Reports:

Policy 217
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Annual Report and Financial Statements

February

Education:

Cash Management of State Monies
Custodial Banking Relationship and Continuity

Reports:

Ethics Policy
Disaster Recovery and Emergency Preparedness
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Financial Compliance Audit Report

April

Education:

International Equities Asset Class Review
RVK Annual Capital Market Assumptions

Reports:

Benchmarks Used by the Board

May

Education:

State Government Customer Relationships
Investment Policy Statement Review
Real Assets Asset Class Review

Reports:

Budget Status FYTD
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

HR: Staffing Level Review
HR: Exempt Staff Performance and Compensation Review

August

Education:

Trust Funds Investment Review
Non-Core Fixed Income Asset Class Review

Reports:

Budget Status Prior FY
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

October

Education:

Private Investments Asset Class Review
First Reading - Asset Allocation Range Recommendation

Reports:

Securities Lending

Committee Meetings:

HR: Exempt Staff Performance Review
Audit: SOC I, Type 2 Report

November

Education:

MPERA and TRS Relationship
Adoption - Asset Allocation Range Approval

Reports:

Policy 217
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Annual Report and Financial Statements

MONTANA

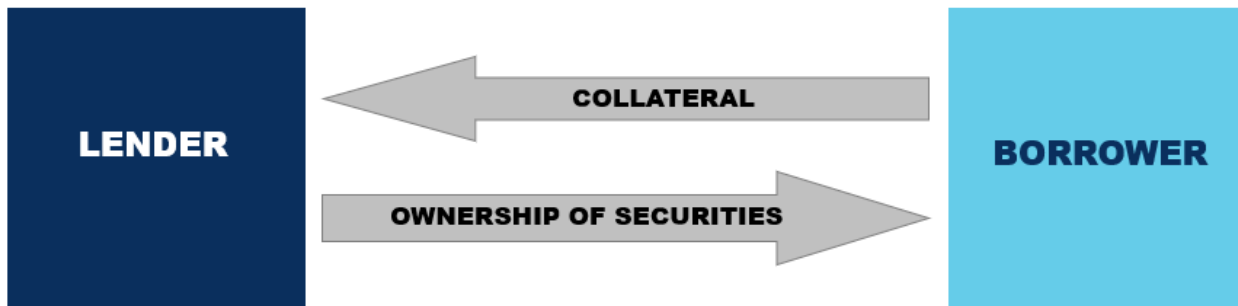
BOARD OF INVESTMENTS

TO: Members of the Board
FROM: Eron Krpan, Director of Investment Operations
DATE: October 11, 2023
RE: Securities Lending Update

The securities lending program employed by the Board generates additional income by temporarily transferring idle securities, in a collateralized transaction, to a borrower. The securities lending relationship we have with State Street Bank has generated a gross revenue of \$68.5 million from 2001 – July 2023 across pension and non-pension related funds.

Sec Lending Defined

The borrower becomes the legal owner of securities while the lender retains rights of beneficial ownership entitling it to all distributions and corporate actions. The borrower is contractually obligated to return the securities upon recall by the lender. The lender can manage the collateral portfolios without limitation.



Separately Managed Account

Cash collateral related to BOI securities lending was invested via pooled funds administrated by State Street Global Markets (SSGM) (specifically the Navigator Securities Lending Government Money Market Portfolio), prior to FY2024. As of July, BOI cash collateral is invested in a separate account where the cash collateral guidelines are set forth by BOI and managed by SSGM. This allows us to more closely manage the risks. There is no explicit fee associated with the management of this account outside of the fee split.

Approved Collateral

Cash and Non-Cash assets are approved as collateral per the Securities Lending Authorization Agreement (SLAA). Non-Cash collateral includes U.S. Treasuries and Agencies, Sovereign Debt, Mortgage and Asset Backed Securities, Corporate Debt, and Equity Securities. The margin requirement for Non-Cash collateral varies from 102% to 115% depending on quality.

Fee Split

85% Revenue - BOI / 15% Revenue – State Street

Securities Finance – Major Risks and Mitigating Factors

Credit Risk: Borrower defaults on loan.

Mitigated by: Borrower indemnification provided by State Street Bank. Borrowers are continually reviewed by both Enterprise Risk Management (ERM) and Securities Finance Credit Risk for credit worthiness.

Market Risk: Collateral falls in value.

Mitigated by: Borrower indemnification provided by State Street Bank. Daily mark to market on all loans and collateral.

Legal Risk: The Securities Lending Authorization Agreement (SLAA) should properly reflect MBOI's risk/reward tolerance.

Mitigated by: Periodically reviewed by BOI to ensure terms are amended as BOI's risk/reward objectives evolve.

Investment Risk: Cash collateral is not covered by State Street's borrower default indemnity.

Mitigated by: Separate account established with cash collateral investment guidelines established and monitored by BOI staff.

Sec Lending Performance

	2019	2020	2021	2022	Jan-Jul 2023
Average Lendable Assets (\$)	9,023,361,970	10,374,860,098	11,935,736,854	11,120,444,976	12,486,465,755
Average On Loan (\$)	739,344,395	752,797,501	731,126,576	815,692,830	1,291,680,417
Utilization (%)	8.2%	7.3%	6.5%	7.3%	10.3%
Earnings by Program (\$)					
US Equity	183,779	238,622	350,503	1,388,361	1,043,308
US Corporate Bond	142,726	108,665	216,264	540,880	662,092
US Government	755,079	537,032	361,196	458,859	651,917
Non-US Equity	210,206	212,661	203,163	314,813	259,419
Non-US Fixed Income	0	0	120	2,531	1,814
Total Earnings (\$)	1,291,789	1,096,979	1,131,246	2,705,444	2,618,548
Components of Spread (bps)					
Demand Spread	58.3	41.5	37	74.6	142.8
Collateral Spread	-4.7	-10.9	-3.5	-2.6	-3.4
Total Spread	53.6	30.6	33.5	72	139.4
Non-Cash Spread (bps)					
	16.8	14.6	13	22.6	21.0
Return to Lendable Assets (bps)					
	1.4	1.0	0.9	2.4	3.6

Notes:

1. Risk-Free rate for spread calculations is the Overnight Bank Funding Rate (OBFR)
2. Components of Spread encompass only "cash collateral" backed loans
3. Data represents past performance and is not a guarantee of future results
4. Data Source: Securities Finance Business Intelligence

MONTANA

BOARD OF INVESTMENTS

TO: Members of the Board
FROM: Dan Villa, Executive Director
John Romasko, Director of Fixed Income
DATE: October 11, 2023
RE: Proposed New Debt and Liability Free Account and Revised Separately Managed Accounts Investment Policy Statement

A summary of the proposed new Investment Policy Statement is below. The new Investment Policy Statement is included behind this memo, as well as Policy 40.900: Separately Managed Accounts Investment Policy Statement.

[Debt and Liability Free Account](#)

New Separately Managed Account

- The 2023 Montana Legislature created the Debt and Liability Free Account through passage of HB 251.
- The fund had approximately \$140 million, in STIP, in mid-September.
- Earnings of the State Treasury Cash account will be credited to the fund.
- BOI will be the primary administrator of the fund.
- HB 251 allows for the redemption or defeasance of outstanding bonds or obligations and pay, in whole or in part, non-pension financial liabilities.
- Earnings of the fund are retained in the fund through June 30, 2025; after which they go to the general fund.
- On June 30, 2027, unobligated funds in the account will be transferred 50%/50% to the General Fund and the Capital Developments Long-Range Building Program.

We envision a large portion of funds will be invested in the STIP account to fund the cash requirements for the callable portion of outstanding State bonds. A significant portion of funds will be invested in individual securities with maturities matching the interest and principal payments of the noncallable portion of State bonds. A portion of funds will be invested in securities of the type and maturity to allow for currently unknown liability amounts and due dates. At the request of the Office of Budget and Program Planning, individual loans may be made from the account for no more than 24 months to leverage affordable housing investments already authorized by law and Board Policy 40.950 – Montana Housing Infrastructure Revolving Loan Fund.

Board Policy 40.950 – Montana Housing Infrastructure Revolving Loan Fund is included to reflect the inclusion of credit unions.

POLICY NUMBER: 40.952

EFFECTIVE DATE: TBD

TITLE: Debt and Liability Free Account
Investment Policy Statement

SUPERSEDES: NEW

BOARD ADOPTION: TBD

REVIEWED: October 11, 2023

I. Introduction

- A. The purpose of this policy is to provide a framework for the Debt and Liability Free Account under the guidance of the Board.
- B. All Separately Managed Accounts are governed by the Separately Managed Accounts Investment Policy Statement, Policy 40.900.
- C. The Debt and Liability Free Account was established by the 2023 Legislature in HB 251 to pay off debts and liabilities of the State of Montana.
- D. Earnings of the Treasury Cash Account will be placed in the Account for fiscal years July 1, 2022, through June 30, 2025.
- E. Unobligated funds will be transferred from the account by June 30, 2027.
- F. The Account is expendable. Funds in the Account are statutorily appropriated to the Governor's Office.
- G. The Board will have full discretion to manage the Debt and Liability Free Account portfolio consistent with this policy. Compliance with the following guidelines for permitted investments and other restrictions is the sole responsibility of the Staff. Any exceptions or compliance violations are to be reported to the Board at the next scheduled quarterly Board meeting.
- H. If at any time, due to market fluctuations or any other circumstances, any of the guidelines are not maintained, Staff will use its best efforts to conform to these limits in a timely manner, while considering current market conditions and the associated costs of rebalancing. At the Board's next regularly scheduled quarterly meeting, the CIO shall inform the Board of any situations where the allocations were outside the limits and either inform the Board of the actions that were taken to return the portfolio back within guidelines or a plan to do so.

II. Purpose

- A. The purpose of this policy statement is to:
 - 1. Establish the investment objectives and performance standards of the Debt and Liability Free Account; and
 - 2. Provide diversified investment exposure within the guidelines in a prudent and cost-effective manner.

III. Investment Objectives

- A. Strategic - The objective of the Debt and Liability Free Account fund portfolio is to attain above benchmark total return within the parameters of this policy with an emphasis on investment income and preservation of principal.
- B. Performance - Success in achieving this objective will be measured by comparing the risk and return of the fund to the securities owned, weighted proportionately to the portfolio's holdings, over a five (5)

year rolling average.

- C. Time Horizon - The Debt and Liability Free Account is an expendable account. The Board expects to meet or exceed all objectives over the long-term investment horizon. Over shorter periods, the anticipated market volatility, and specific actions, including risk mitigation efforts by the Board may lead to unfavorable, but expected deviation from these objectives.

IV. Permitted Investments

- A. The Debt and Liability Free Account may only invest in the following:

1. STIP or any cash vehicle at the Custodial Bank;
2. U.S. Treasury obligations;
3. Direct obligations of the U.S. Agencies;
4. Short-term tri-party repurchase obligations (repo) with an approved primary dealer, the Custodial Bank, or the depository bank that are collateralized at one-hundred two percent (102%) of value with U.S. Treasury and U.S. Agency securities;
5. Fully collateralized, interest-bearing Demand Deposit Accounts at Montana domiciled banks and credit unions; or
6. Any legislatively approved program loan, bond, note, or guarantee.

- B. Direct obligations of U.S. agencies shall consist of only the discount notes, notes and debentures of the agencies and does not include mortgage pass-through obligations. Coupons may be fixed or floating rate.

- C. Approved primary dealers of short-term tri-party repurchase obligations will be the same as those dealers approved for repo investments made in STIP.

Authority: Montana Constitution, Article VIII, Section 13
Section 2-15-1808, MCA
Section 17-1-113, MCA
Sections 17-6-201 through 17-6-205, MCA
Chapter 48, Laws of 2023 (House Bill No. 251)

MONTANA

BOARD OF INVESTMENTS

BOARD ADOPTED POLICY

POLICY NUMBER: 40.900

EFFECTIVE DATE: ~~June 22, 2023~~TBD

TITLE: Separately Managed Accounts
Investment Policy Statement

SUPERSEDES: ~~May 24, 2023~~June 22, 2023

BOARD ADOPTION: November 30, 2021
2023

REVIEWED: ~~June 22, 2023~~October 11,

I. Introduction

- A. This policy is effective upon adoption and supersedes all previous Investment Policy Statements (IPS) related to the investment management of the Separately Managed Accounts.
- B. Montana has more than forty (40) Separately Managed Accounts. These Separately Managed Accounts consist of trust, insurance and operating accounts which have been created by the state Constitution, statutorily by the legislature or as part of settlements between the state and outside entities.
- C. Each Separately Managed Account has unique investment needs. The strategic investment objective for each Separately Managed Account will be addressed in the individual policies.
- D. Many Separately Managed Accounts participate in the Short-term Investment Pool (STIP) and the Trust Funds Investment Pool (TFIP). The pools are commingled funds which operate similar to mutual funds. STIP and TFIP each have their own IPS.

II. Purpose

- A. The purpose of this policy statement is to provide a broad strategic framework for separately managed accounts under the guidance of the Board.

III. Legal and Constitutional Authority

- A. Article VIII Section 13 of the Montana Constitution requires that the Legislature provide for a Unified Investment Program for public funds.
 1. Section 17-6-201, MCA:
 - a) Established the Unified Investment Program;
 - b) Created the Board; and
 - c) Gave the Board sole authority to invest state funds, in accordance with state law and the state constitution.
- B. Section 17-6-201(1), MCA, requires the Board to operate under the “prudent expert principle,” defined as:
 1. Discharging its duties with the care, skill, prudence, and diligence, under the same circumstances then prevailing that a prudent person acting in a like capacity with the same resources and familiar with like matters exercises in the conduct of an enterprise of like character with like aims;
 2. Diversifying the holdings of each fund to minimize the risk of loss and maximize the rate of return,

Adopted: November 30, 2021

Revised: ~~June 22, 2023~~TBD

Reviewed: ~~June 22, 2023~~October 11, 2023

unless under the circumstances it is clearly prudent not to do so; and

3. Discharging its duties solely in the interest of and for the beneficiaries of the funds managed.

C. The Board, as the investment fiduciary of the Separately Managed Accounts, is responsible for establishing the investment parameters for all Separately Managed Accounts.

IV. Strategic Investment Objectives

A. The strategic investment objective is unique for each Separately Managed Account. The strategic investment objective for each Separately Managed Account will be addressed in the individual policies.

B. However, the Board's overall objective is to achieve the highest level of investment performance compatible with each Separately Managed Account's risk tolerance and prudent investment practices. The Board seeks to maintain a long-term perspective in formulating and implementing investment policies and evaluating investment performance subject to the specific objectives and constraints of each Separately Managed Account.

V. Time Horizon

A. The time horizon is unique for each Separately Managed Account. The time horizon for each Separately Managed Account will be addressed in the individual policies.

VI. Performance Measurement

A. The IPS benchmark is unique for each Separately Managed Account. The IPS benchmark for each Separately Managed Account will be addressed in the individual policies.

B. The IPS benchmark approximates the return that would be achieved if the Separately Managed Account implemented a passively managed portfolio. Deviations from the policy benchmark measure the contribution of active investment management in the Separately Managed Account, rebalancing policy and its execution, fees, and investment implementation generally.

VII. Roles and Responsibilities

A. Board of Investments

1. The Board is responsible for approving the IPS for any Separately Managed Account and has the authority to manage all separately managed accounts as it considers prudent, subject to such limitations as contained in law and the Constitution.

2. The Board reviews this document periodically and approves any changes to the policy as needed.

3. As described in the Board of Investments Governance Manual, the Board delegates authority to the Executive Director, Chief Investment Officer (CIO), and other Staff to execute the day-to-day duties required to carry out the Board's mission.

B. Executive Director

1. The Executive Director is empowered by the Board to sign any and all documents required to conduct Board business, unless there are specific written policies or instructions from the Board to the contrary.

2. The Executive Director and the CIO are authorized jointly to contract for investment manager services and if deemed appropriate, terminate them.

3. The Executive Director is responsible for establishing the financial reporting procedures as well as collection and reporting of all income.

C. Chief Investment Officer

1. The CIO is empowered by the Board to serve as the principal staff person responsible for overseeing the investment activities under the Board's jurisdiction in compliance with the Board's policies.

2. The CIO, with the support of other staff, is responsible for recommending investment policy changes for Board approval.

D. Investment Staff

1. The investment staff is responsible for, but not limited to:
 - a) Managing day-to-day investment operations;
 - b) Investing separately managed account assets and monitoring compliance in accordance with this IPS;
 - c) Reporting to the Board the Separately Managed Account results and investment characteristics at least annually; and
 - d) Reporting any deviations from the IPS to the Board.

E. Investment Consultant

1. The investment consultant assists the CIO and Staff with policy recommendations and provides advice to the Board.
2. The investment consultant shall provide assistance to staff as requested in conjunction with the management of all Separately Managed Accounts.

VIII. Strategic Asset Allocation

- A. The strategic asset allocation is unique for each Separately Managed Account.
- B. The strategic asset allocation for each Separately Managed Account will be addressed in the individual policies.

IX. Rebalancing

- A. The actual asset allocation mix may deviate from time to time from the approved asset allocation ranges due to financial market performance, cash flows, and manager performance.
- B. Material deviations from the asset allocation ranges can alter the expected return and risk of the accounts.
- C. Rebalancing Separately Managed Account assets to remain within the Board-approved allocation ranges is delegated to staff in consultation with the CIO and the Executive Director.
- D. Any necessary rebalancing will be made in a timely manner and will take into consideration associated costs and current market conditions.

X. Risk Management

A. Liquidity

1. The liquidity requirements are unique for each separately managed account.
2. Staff works closely with the representatives for each account to determine their needs.
3. The liquidity requirements are addressed by the permitted investments and corresponding restrictions within the policy for each Separately Managed Account.

B. Monitoring/Reporting - Transparency

1. Staff shall provide annual reporting to the Board regarding the asset allocation and performance of the Separately Managed Accounts to confirm these items are known and adhere to all IPS requirements and expectations.

C. Leverage

1. Leverage is a significant risk factor.
2. Assets in separately managed accounts managed directly by Board staff are not allowed to employ leverage.

3. The use of derivative securities can generate additional leverage even if the derivative is being used to reduce the risk in other investments.
4. Individual assets in Separately Managed Accounts managed directly by Board staff are not allowed to use derivatives.
5. STIP is not allowed to employ leverage or use derivatives.
6. The use of leverage and derivatives within TFIP is addressed within the TFIP IPS.

D. Cash Investments

1. Cash investments held in any Separately Managed Account, in the TFIP or any managed account within it, entail an element of credit risk.
2. Only approved cash investment vehicles are permitted. These include:
 - a) Short-Term Investment Pool (STIP);
 - b) Any cash vehicle at the Custodial Bank; and
 - c) Any SEC registered money market funds approved by the CIO for internally managed funds or employed by an external asset manager which specifically address credit risk in their respective investment guidelines.

XI. Investment Pools

A. Trust Fund Investment Pool

1. TFIP will provide accounts with exposure to a broad and diverse spectrum of investment grade and non-investment grade fixed income as well as real estate assets.
2. Investment grade fixed income will be primarily managed internally.
3. Non-investment grade fixed income will be primarily managed by external asset managers.
4. Real estate will be managed by external asset managers.
5. The specific strategic objectives, performance criteria, and investment guidelines for TFIP are detailed in the TFIP IPS.

B. Short-Term Investment Pool

1. STIP will provide managed accounts with exposure to Cash related investments.
2. STIP will be managed internally utilizing an active investment strategy.
3. The specific strategic objectives, performance criteria, and investment guidelines for STIP are detailed in the STIP IPS.

XII. Securities Lending

A. Section 17-1-113, MCA, authorizes the Board to lend securities held by the state.

1. The Board may lend its publicly traded securities through an agent to other market participants in return for compensation.
2. Currently, through an explicit contract, the state's Custodial Bank manages the state's securities lending program.
 - a) The Board seeks to assess the risks, such as counterparty and reinvestment risk, associated with each aspect of its securities lending program.
 - b) The Board requires borrowers to maintain acceptable and adequate collateral per the terms of the securities lending authorization agreement.
 - c) To ensure that the collateral ratio is maintained, securities on loan are marked to market daily and the borrower must provide additional collateral if the value of the securities on loan increases.

- d) In addition to the strict collateral requirements imposed by the Board, the credit quality of approved borrowers is monitored continuously by the contractor.
- e) Staff or the investment manager may restrict a security from the loan program upon notification to the Custodial Bank.
- f) Staff will monitor the securities lending program and will periodically report to the Board on the status of the program.
- g) The Board's participation in securities lending may change over time given account activity, market conditions, and the agent agreement.

XIII. Exercise of Shareholder Rights

A. Proxy Voting

- 1. Per the Montana Constitution, Article VIII, Section 13 "no public funds shall be invested in private corporate capital stock" with the exception of public retirement system and state compensation insurance fund assets.
- 2. Separately Managed Accounts do not participate in proxy voting.

B. Class Action Litigation

- 1. Claims under state and federal securities laws arising out of losses on securities under the Board's management are assets subject to the Board's fiduciary duty of prudent management.
 - a) The Board shall take reasonable, cost-effective steps to identify, pursue and collect upon claims under securities laws for losses suffered by the Board on its investment.
 - b) Accordingly, the Board maintains a litigation policy, including steps outlined in Policy 10.250 of the Governance Manual.

XIV. Investment Policy Statement Review

- A. Investment Policy Statements are established and reviewed as authorized by Policy 40.100.

XV. List of Trust Fund Accounts in this policy series

A. Department of Agriculture

- 1. Policy 40.901: Noxious Weed Management Trust Fund
- 2. Policy 40.947: Hail Insurance Fund

B. Department of Environmental Quality

- 1. Policy 40.902: Belt Water Treatment Plant Fund
- 2. Policy 40.903: Abandoned Mine Land Reclamation Trust
- 3. Policy 40.904: Clark Fork Site Response Action Fund
- 4. Policy 40.905: Montana Pole Superfund Site Settlement Fund
- 5. Policy 40.906: Streamside Tailings Operable Settlement Fund
- 6. Policy 40.907: Upper Blackfoot Response Action and Restoration Fund
- 7. Policy 40.908: Zortman/Landusky Long Term Water Fund
- 8. Policy 40.909: Zortman/Landusky Long Term Water Trust

C. Department of Fish, Wildlife and Parks

- 1. Policy 40.910: Coal Tax Park Trust Fund
- 2. Policy 40.911: Fish, Wildlife & Parks Mitigation Trust Fund
- 3. Policy 40.912: Real Property Trust Fund

4. Policy 40.913: Wildlife Habitat Trust Fund
 5. Policy 40.944: Fish, Wildlife & Parks General License Account
- D. Department of Health and Human Services
1. Policy 40.914: Endowment for Children
 2. Policy 40.915: Older Montanans Trust Fund
 3. Policy 40.916: Tobacco Trust Fund
- E. Department of Justice
1. Policy 40.917: Butte Area One Restoration Fund
 2. Policy 40.918: Clark Fork Restoration Fund
 3. Policy 40.919: East Helena Compensation Fund
 4. Policy 40.920: Smelter Hill Uplands Restoration Fund
 5. Policy 40.921: Upper Clark Fork River Basin Reserve Fund
 6. Policy 40.922: Upper Clark Fork River Basin Restoration Fund
 7. Policy 40.935: Greenway Project Trail Maintenance Fund
 8. Policy 40.936: 2011 Yellowstone Exxon Settlement Fund
 9. Policy 40.948: End of Watch Trust
- F. Department of Natural Resources and Conservation
1. Policy 40.923: Public School Trust
 2. Policy 40.934: Invasive Species Trust Fund
- G. Department of Revenue
1. Policy 40.924: Resource Indemnity Trust Fund
- H. Montana Arts Council
1. Policy 40.925: Cultural Trust Fund
- I. Montana Historical Society
1. Policy 40.926: Montana Historical Society Trust Funds
- J. University System
1. Policy 40.937: Montana University System Group Insurance
 2. Policy 40.938: Montana University System Workers Compensation
 3. Policy 40.940: Montana State University – Bozeman
 4. Policy 40.941: Montana Tech
 5. Policy 40.942: University of Montana – Missoula
 6. Policy 40.945: Lubrecht Experimental Forest
 7. Policy 40.946: Kyiyo Pow Wow
- K. University Endowments
1. Policy 40.927: Harold Hamm Endowment
 2. Policy 40.928: Potter Trust Fund
- L. City and County of Butte-Silver Bow
1. Policy 40.929: Butte Area Redevelopment Trust Authority

Adopted: November 30, 2021

Revised: ~~June 22, 2023~~TBD

Reviewed: ~~June 22, 2023~~October 11, 2023

M. Department of Environmental Quality (Additional DEQ)

1. Policy 40.930: Barker Hughesville St Response
2. Policy 40.931: Flying J CECRA Facilities Fund
3. Policy 40.932: Libby Asbestos Site State Cost
4. Policy 40.933: Luttrill Pit – Oper & Maint

N. Department of Administration

1. Policy 40.939: State Employee Group Benefits
2. Policy 40.943: State Treasurer's Fund

O. Montana State Library

1. Policy 40.949: Montana State Library Trust

P. Montana Board of Investments Primary

1. Policy 40.950: Montana Housing Infrastructure Revolving Loan Fund
2. Policy 40.951: State of Montana Workforce Housing Fund

Q. Montana Governor's Office

1. Policy 40.952: Debt and Liability Free Account

Authority: Montana Constitution, Article VIII, Section 13
Section 2-15-1808, MCA
Section 17-1-113, MCA
Sections 17-6-201 through 17-6-205, MCA
Chapter 774, Laws of 2023 (House Bill No. 819)

Adopted: November 30, 2021

Revised: ~~June 22, 2023~~ TBD

Reviewed: ~~June 22, 2023~~ October 11, 2023

MONTANA

BOARD OF INVESTMENTS

BOARD ADOPTED POLICY

POLICY NUMBER: 40.950

EFFECTIVE DATE: ~~TBD~~ June 22, 2023

TITLE: Investment Objectives and Guidelines
Montana Housing Infrastructure Revolving
Loan Fund

SUPERSEDES: June 22, 2023 ~~NEW~~

BOARD ADOPTION: June 22, 2023
2023

REVIEWED: October 11, 2023 ~~June 22,~~

I. Introduction

- A. The purpose of this policy is to provide a framework for the Montana Housing Infrastructure Revolving Loan Fund under the guidance of the Board.
- B. All Separately Managed Accounts are governed by the Separately Managed Accounts Investment Policy Statement, Policy 40.900.
- C. The Montana Housing Infrastructure Revolving Loan Fund was established by the 2023 Montana Legislature. HB 819, Section 10 states “increase home ownership and provide more long-term rental opportunity; increase housing supply and offer diverse housing types to meet the needs of population growth; and to create partnerships between the state, local governments, private sector developers, and applicants for residential development to finance necessary infrastructure for housing.”
- D. The Board will have full discretion to manage the Montana Housing Infrastructure Revolving Loan Fund consistent with this policy. Compliance with the following guidelines for permitted investments and other restrictions is the sole responsibility of the Staff. Any exceptions or compliance violations are to be reported to the Board at the next scheduled quarterly Board meeting.
- E. If at any time, due to market fluctuations or any other circumstances, any of the guidelines are not maintained, Staff will use its best efforts to conform to these limits in a timely manner, while considering current market conditions and the associated costs of rebalancing. At the Board’s next regularly scheduled quarterly meeting, the CIO shall inform the Board of any situations where the allocations were outside the limits and either inform the Board of the actions that were taken to return the portfolio back within guidelines or a plan to do so.

II. Statement of Purpose

- A. The purpose of these objectives and guidelines are to:
 1. Establish the investment objectives and performance standards of the Montana Housing Infrastructure Revolving Loan Fund; and
 2. Provide diversified investment exposure within the guidelines in a prudent and cost-effective manner.

III. Investment Objectives

- A. Strategic - Meet the statutory objectives of increasing homeownership, provide more long-term rental opportunities, increase housing supply and attain sufficient total return for all investments within the parameters established in this policy.
- B. Performance - Success in achieving this objective will not be measured relative to an investment performance benchmark.

Adopted: June 22, 2023

Revised: TBD

Reviewed: October 11, 2023 ~~June 22, 2023~~

IV. Permitted Investments

1. The Montana Housing Infrastructure Revolving Loan Fund may only invest in:
 1. STIP;
 2. Loans to local governments or residential developers for infrastructure or the demolition thereof as allowed in HB 819 section 14(1) (substitute MCA reference once available);
 3. Securities issued by local governments for infrastructure as allowed in HB 819 section 14(2) (substitute MCA reference once available);
 4. Fully collateralized, interest-bearing Demand Deposit Accounts at Montana domiciled banks and credit unions; and
 5. United States Treasury Securities.

V. Other Restrictions

- A. Loans may not exceed \$1 million or 50% of the projected project cost.
- B. Securities purchased may be no more than 50% of the amount issued.
- C. The term of a loan may not exceed 20 years.

Authority: Montana Constitution, Article VIII, Section 13
Montana Constitution, Article IX, Section 5
Section 2-15-1808, MCA
Section 17-1-113, MCA
Sections 17-6-201 through 17-6-205, MCA
Section 17-6-308, MCA
Chapter 774, Laws of 2023 (House Bill No. 819)

Adopted: June 22, 2023

Revised: TBD

Reviewed: October 11, 2023 ~~June 22, 2023~~

Asset Allocation

Jon Putnam – Chief Investment Officer

Date: October 11, 2023

Key Considerations

- Asset Allocation is critical to the long-term success of the portfolios managed by BOI. Annual approval of the asset allocation is an essential task of the Board.
- Diversification of the portfolio protects against extreme outcomes. Investing is about taking risks but managing those risks.
- There is no asset allocation that is “right” for every plan. The expected return and potential risk changes over time.
- The recommended asset allocation should consider the funding objectives, the characteristics of the plan/account, and the opportunity set of investments.
- Actual results measured over shorter time frames will deviate from the long-term assumptions. This does not mean the long-term assumptions are wrong.

Asset Allocation Process

- Determine if there have been any changes in client objectives and constraints.
- Evaluate any long-term shifts in the global economic environment.
 - Review Capital Market Assumptions produced by RVK and other market participants.
- All senior investment staff submit proposed asset allocations.
- RVK calculates multiple scenarios using the Mean Variance Optimization (MVO) model.
 - Process of weighing risk versus return to determine the most efficient portfolio.
 - Limitations of MVO include:
 - Sensitive to changes in expected return, variance, and correlation of assets.
 - Constraints must be applied to avoid concentrated portfolios.
 - Assumes an efficient market with rational participants; tends to underestimate large, negative events.
- Qualitative judgment must be applied to the process.
- Asset allocation meeting in Portland with RVK to discuss views.

Net Cash Need

- Consideration of liquidity needs is a critical component of asset allocation. Avoid being a forced seller.

Public Employees' Retirement System (PERS)					
<i>Year End</i>	<i>Market Value of Assets (MVA)</i>			<i>Net Cash Flow as a Percent of MVA</i>	
	<i>Assets (MVA)</i>	<i>Contributions</i>	<i>Benefit Payments</i>	<i>Net Cash Flow</i>	<i>Percent of MVA</i>
6/30/2015	\$5,061,058	\$230,067	\$336,885	-\$106,818	-2.11%
6/30/2016	\$5,032,807	\$230,471	\$359,842	-\$129,371	-2.57%
6/30/2017	\$5,472,519	\$233,063	\$384,700	-\$151,637	-2.77%
6/30/2018	\$5,779,994	\$243,385	\$415,158	-\$171,773	-2.97%
6/30/2019	\$5,903,306	\$243,613	\$441,225	-\$197,612	-3.35%
6/30/2020	\$5,845,474	\$252,009	\$468,018	-\$216,009	-3.70%
6/30/2021	\$7,210,027	\$267,771	\$496,392	-\$228,621	-3.17%
6/30/2022	\$6,648,899	\$266,891	\$532,117	-\$265,226	-3.99%
* PERS 2022 Actuarial Valuation Study					
Teachers' Retirement System (TRS)					
<i>Year End</i>	<i>Market Value of Assets (MVA)</i>			<i>Net Cash Flow as a Percent of MVA</i>	
	<i>Assets (MVA)</i>	<i>Contributions</i>	<i>Benefit Payments</i>	<i>Net Cash Flow</i>	<i>Percent of MVA</i>
6/30/2015	\$3,708,386	\$202,896	\$311,079	-\$108,183	-2.92%
6/30/2016	\$3,656,831	\$205,287	\$328,216	-\$122,929	-3.36%
6/30/2017	\$3,950,705	\$210,521	\$343,449	-\$132,928	-3.36%
6/30/2018	\$4,148,324	\$214,833	\$361,026	-\$146,193	-3.52%
6/30/2019	\$4,220,286	\$220,949	\$376,738	-\$155,789	-3.69%
6/30/2020	\$4,167,840	\$228,563	\$393,336	-\$164,773	-3.95%
6/30/2021	\$5,116,849	\$231,360	\$412,724	-\$181,364	-3.54%
6/30/2022	\$4,724,449	\$243,409	\$428,240	-\$184,831	-3.91%
* TRS 2022 Actuarial Valuation Study					

Asset Allocation History (Pension)

	2019 Asset Allocation
Asset Classes	
Domestic Equity Range	(24% - 36%)
Approved Midpoint	30.0%
International Equity Range	(11% - 21%)
Approved Midpoint	16.0%
Private Investments Range	(11% - 17%)
Approved Midpoint	14.0%
Real Estate Range	(5% - 13%)
Approved Midpoint	9.0%
Real Assets Range	(1% - 7%)
Approved Midpoint	4.0%
Core Fixed Income Range	(15% - 25%)
Approved Midpoint	20.0%
Non-Core Fixed Income Range	(3% - 7%)
Approved Midpoint	5.0%
Cash Equivalents Range	(0% - 4%)
Approved Midpoint	2.0%
Total of Midpoints	100.0%

- Fixed Income asset classes were consolidated.
- High Yield asset class was renamed Non-Core Fixed Income. EMD, Preferred and Convertible strategies were added.
- Diversifying Strategies asset class was eliminated.
- The range for the Cash asset class was applied to the total pension.
- Midpoints were adopted for each asset class to improve transparency of staff decisions.

	2018 Asset Allocation
Asset Classes	
Domestic Equity Range	(24% - 38%)
Midpoint	31.0%
International Equity Range	(12% - 24%)
Midpoint	18.0%
Private Equity Range	(9% - 15%)
Midpoint	12.0%
Real Estate Range	(4% - 12%)
Midpoint	8.0%
Natural Resources Range	(0% - 6%)
Midpoint	3.0%
TIPS Range	(2% - 6%)
Midpoint	4.0%
Broad Fixed Income Range	(0% - 3%)
Midpoint	1.5%
US Treasury/Agency Fixed Income Range	(6% - 15%)
Midpoint	10.5%
Investment Grade Credit Range	(2% - 6%)
Midpoint	4.0%
Agency Mortgage-Backed Securities Range	(2% - 8%)
Midpoint	5.0%
High Yield Range	(2% - 6%)
Midpoint	4.0%
Diversifying Strategies Range	(0% - 4%)
Midpoint	2.0%
Cash Range	(0% - 5%)
Midpoint	2.5%
Total of Midpoints	105.5%

Asset Allocation History

(Pension)

	2022 Asset Allocation	2021 Asset Allocation	2020 Asset Allocation	2019 Asset Allocation
Asset Classes				
Domestic Equity Range	(23% -35%)	(24% - 36%)	(24% - 36%)	(24% - 36%)
Approved Midpoint	29.0%	30.0%	30.0%	30.0%
International Equity Range	(10% - 20%)	(12% - 22%)	(12% - 22%)	(11% - 21%)
Approved Midpoint	15.0%	17.0%	17.0%	16.0%
Private Investments Range	(12% - 20%)	(11% - 19%)	(11% - 19%)	(11% - 17%)
Approved Midpoint	16.0%	15.0%	15.0%	14.0%
Real Estate Range	(7% - 15%)	(6% - 14%)	(5% - 13%)	(5% - 13%)
Approved Midpoint	11.0%	10.0%	9.0%	9.0%
Real Assets Range	(3% - 9%)	(2% - 8%)	(2% - 8%)	(1% - 7%)
Approved Midpoint	6.0%	5.0%	5.0%	4.0%
Core Fixed Income Range	(9% - 19%)	(9% - 19%)	(10% - 20%)	(15% - 25%)
Approved Midpoint	14.0%	14.0%	15.0%	20.0%
Non-Core Fixed Income Range	(5% - 9%)	(5% - 9%)	(4% - 8%)	(3% - 7%)
Approved Midpoint	7.0%	7.0%	6.0%	5.0%
Cash Equivalents Range	(0% - 5%)	(0% - 5%)	(0% - 6%)	(0% - 4%)
Approved Midpoint	2.0%	2.0%	3.0%	2.0%
Total of Midpoints	100.0%	100.0%	100.0%	100.0%

* In 2020, renamed the Natural Resources Asset Class to Real Assets (Commodities, Infrastructure, TIPS)

Asset Allocation History

(TFIP and SFIP)

Trust Funds Investment Pool (TFIP)

	2022 Asset Allocation	2018 Asset Allocation
Asset Classes		
Real Estate Range	(0% - 30%)	(0% - 8%)
Non-Core Fixed Income Range	(0% - 10%)	(0% - 10%)
Real Assets Range	(0% - 6%)	N/A
Investment Grade Fixed Income Range	(60% - 100%)	(0% - 100%)

- Increased the Real Estate Range in February 2020. Added Real Assets in May 2022.

State Fund Investment Pool (SFIP)

	2022 Asset Allocation	2018 Asset Allocation
Asset Classes		
Public Equity Range	(0% - 15%)	(0% - 15%)
Real Estate Range	(0% - 8%)	(0% - 8%)
Non-Core Fixed Income Range	(0% - 7%)	N/A
Real Assets Range	(0% - 6%)	N/A
Investment Grade Fixed Income Range	(70% - 100%)	(75% - 100%)

- Added Non-Core Fixed Income in February 2020. Added Real Assets in April 2023.
- Changed the Investment Grade Fixed Income Benchmark from the Barclays Intermediate Aggregate to the Barclays Aggregate in April 2023.

Asset Allocation Recommendations

No proposed changes to the current asset allocation for CAPP, TFIP or SFIP.

- *There have been no changes to client objectives or constraints. Funding for the public safety plans improved in 2023 with the legislative contribution.*
- *Mean Variance Optimization (MVO) analysis suggested minimal risk/return improvement to current asset class weights.*
- *Recent changes to TFIP and SFIP are still being implemented.*
- *Sufficient flexibility within the current ranges to implement current tactical views.*

Summary

- Review and approval of the asset allocation is a critical task for the Board.
- Selection of an asset allocation is an imperfect process but is a valuable exercise.
- Consideration of liquidity is important to meet participant needs and avoid forced selling.
- Staff constantly evaluates and adjusts portfolios within the approved asset allocation ranges.
- No proposed changes to current asset allocations.

PRIVATE INVESTMENTS ASSET CLASS REVIEW

Presented by:
Thomas Winkler – Director of Private Investments
Ian Horwood – Senior Investment Analyst

Date: October 11, 2023

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Private Investments

Role, Allocation and Constraints

- Provide the Consolidated Asset Pension Plan (CAPP) with exposure to a spectrum of private investment opportunities across different industries and sub asset classes, both within and outside the United States.
- Diversify across several funds, vintage years, investment opportunities, and geographies.
- Benchmark
 - Portfolio weighted index comprised of the MSCI USA Small Cap Index and the S&P LSTA US Leverage Loan 100 Index (since January 2021).
- Approved Allocation Range - 12% to 20% of CAPP
 - 17.5% as of 6/30/23 ✓
- Investment Policy Statement Constraints
 - No single Direct Limited Partnership > 2% of CAAP (OCP Asia III; <1%) ✓
 - No more than 30% of the Asset Class can be Non-U.S. Limited Partnerships (18%) ✓
 - No more than 10% of the Private Investments Asset Class can be invested in direct co-investments. (None) ✓
 - Cash held at asset class level is < 5% of the Private Investments Asset Class market value. (1.4% as of 6/30/23) ✓

Strategies of Private Investments

Buyout

- Large-Size Buyout
- Mid-Size Buyout
- Small-Size Buyout
- Growth Equity
- Distressed for Control
- Co-Investments

Private Credit

- Direct Lending
- Distressed for Non-Control
- Mezzanine

Venture Capital

- Early Stage
- Late Stage
- All Stage

Opportunistic

- Insurance Related

Opportunity Set & Investment Approach

Public

Publicly listed
and traded frequently

Private

Privately held
and infrequently traded

	Public	Private
Equity	A	B
Debt	C	D

Equity

Owns a residual interest in the
asset/project/company

Debt

Lends funds to an owner of an
asset/project/company or
purchase of asset-backed
bonds

(A) Public Equity

- Separately Managed Account holds common stock of publicly traded companies(active).

(B) Private Equity

- Limited Partnerships - Open or Closed-End Funds (active).

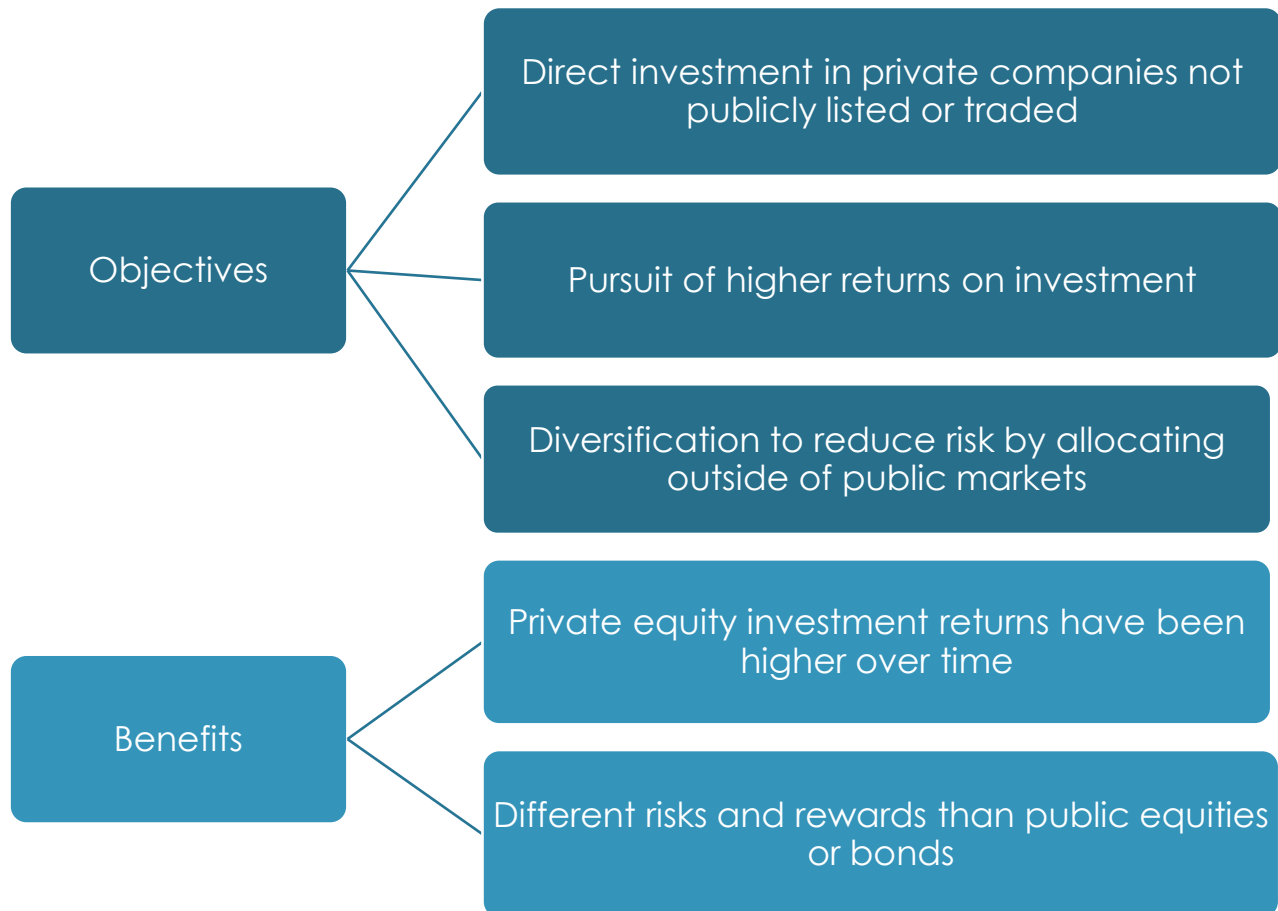
(C) Public Debt

- Open or Closed-End Funds, Mutual Funds (active).

(D) Private Debt

- Limited Partnerships - Open or Closed-End Funds (active).

Objectives and Benefits



Private Investments - Risks

What?

- Strategy, Sector, and Country exposure
- Vintage Year
- Manager, Operations, Business
- Cash flows, liquidity, and timing



How managed?

- Monitor concentration (p. 9-12)
- Serial commitments & diversification (p. 13)
- Due diligence, onsite visits, monitor concentration (p. 9-13 & Appendix)
- Monitor approved IPS range (p. 3), Pacing study (p. 14-19)

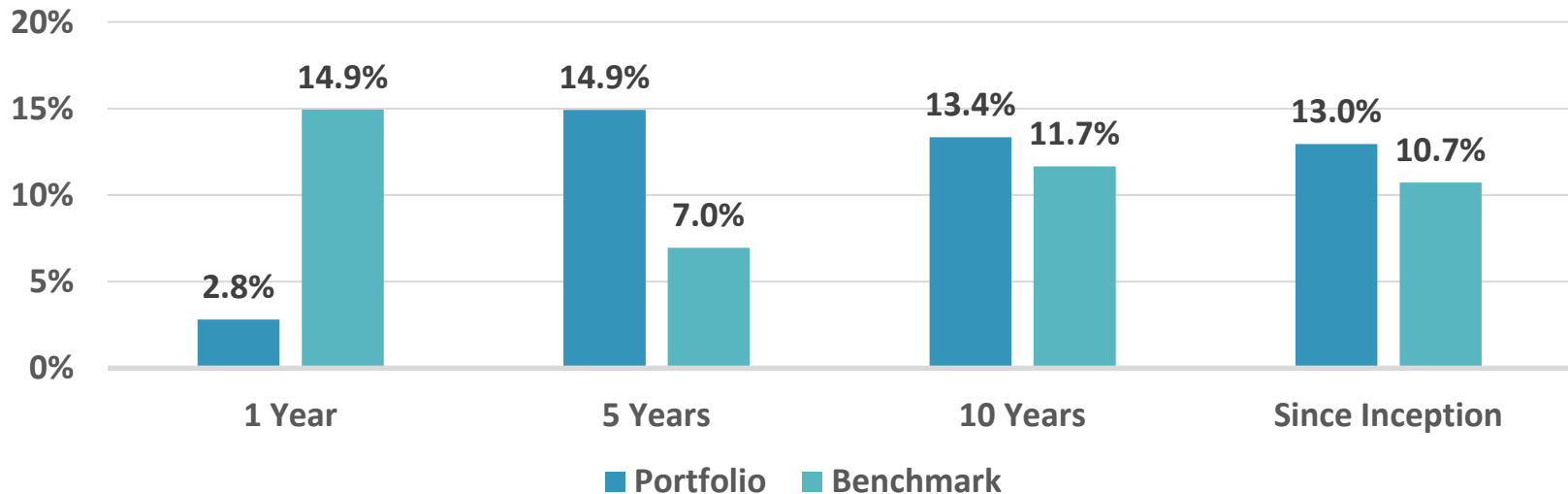


Portfolio Overview

Net Asset Value as of 6/30/23

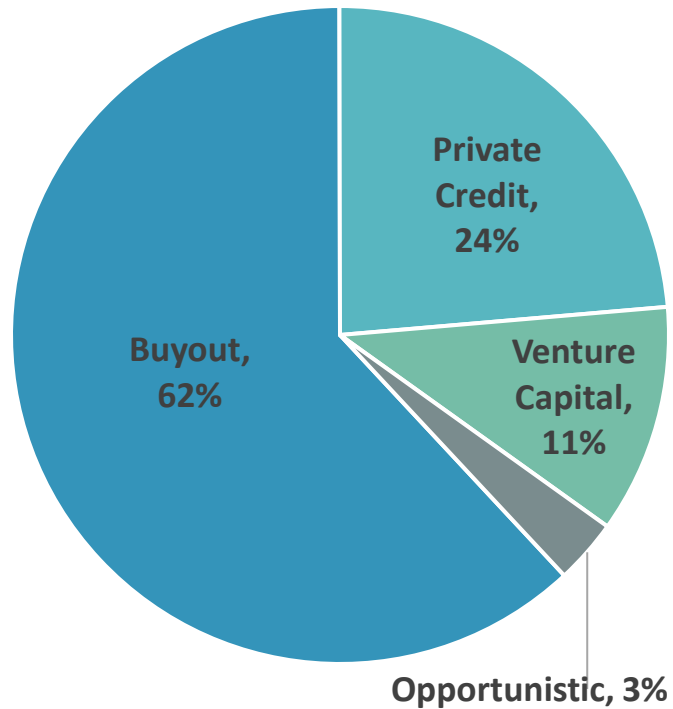
- \$2.4 billion
- 17.5% of CAPP

Time-Weighted Return (TWR) Performance, net of fees



As of 6/30/23. Performance is based on prior quarter's fair market value adjusted for cash flows during the most recent quarterly period. Time weighted rate of return net of all manager fees and expenses.

Composition by Strategy

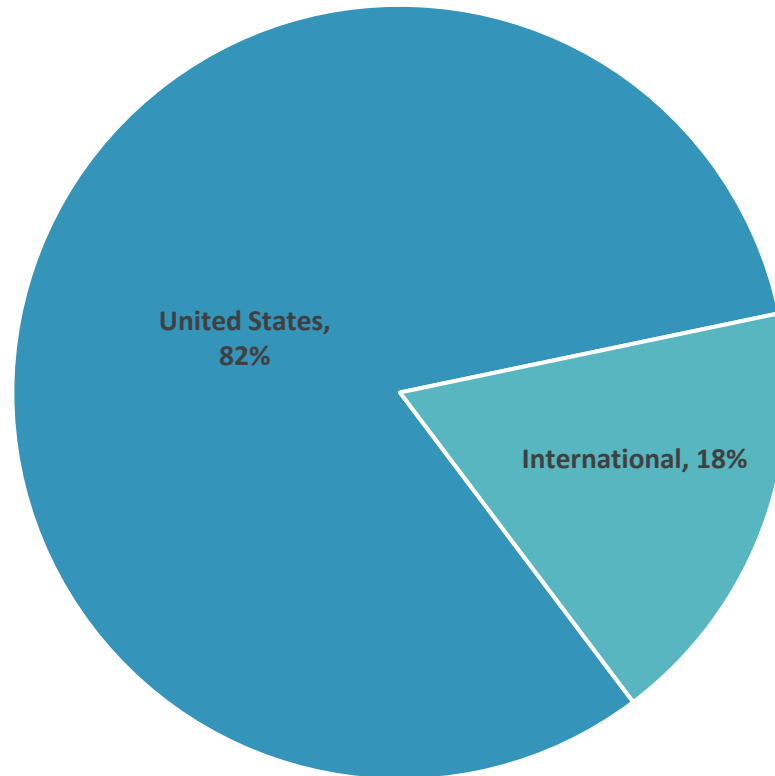


Buyout	\$1,504.1
Private Credit	\$574.8
Venture Capital	\$273.4
Opportunistic	\$76.9
Total Private Investments*	\$2,429.3

Source: State Street/Solovis. As of 6/30/23

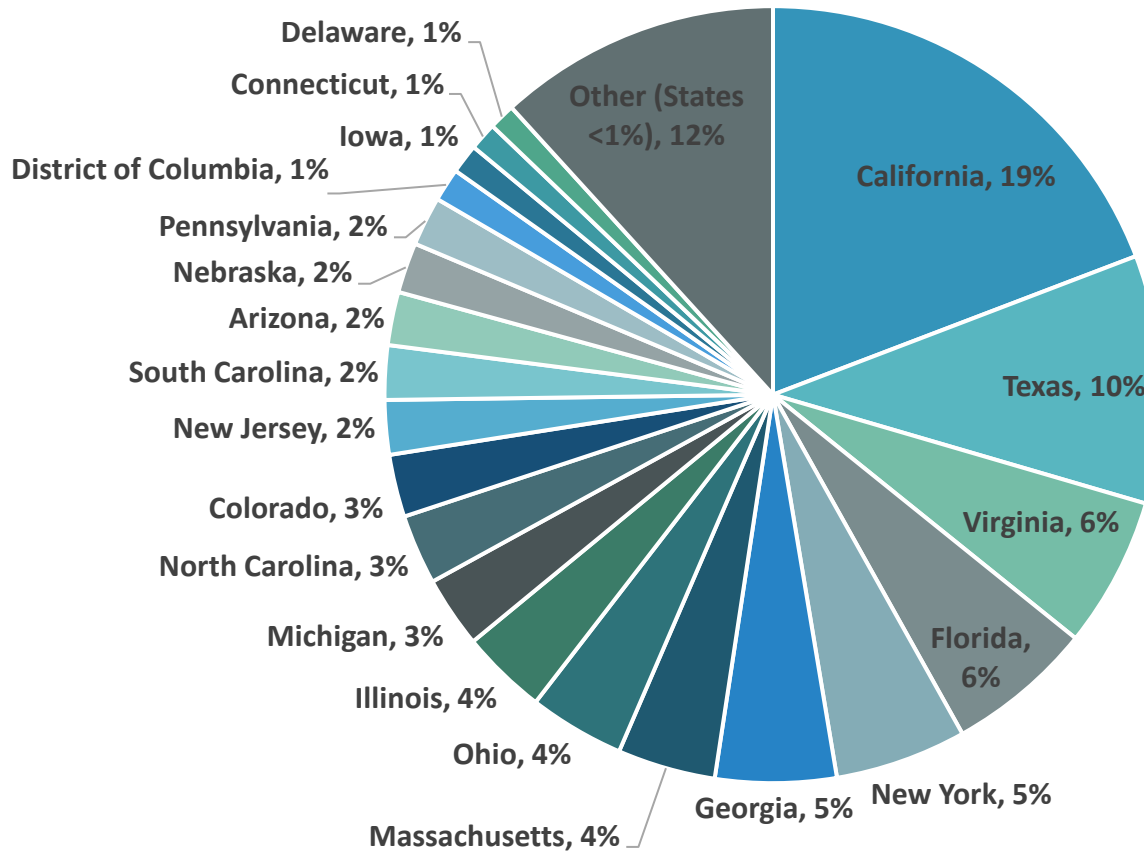
*Does not include cash held at the asset class level or any public equity (~\$35M).

Composition by Geography - Global



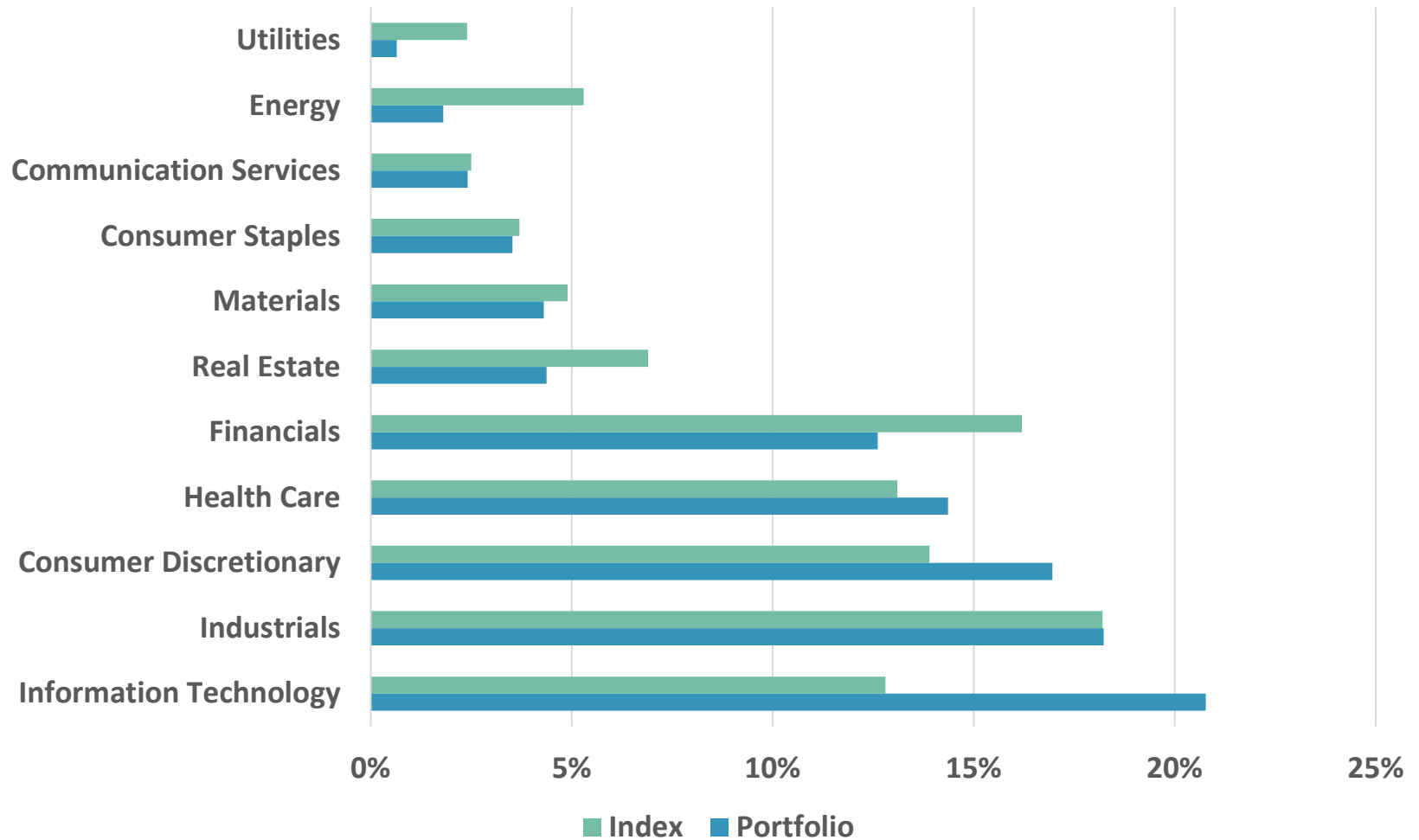
Source: State Street/Solovis. As of 6/30/23

Composition by Geography – U.S.



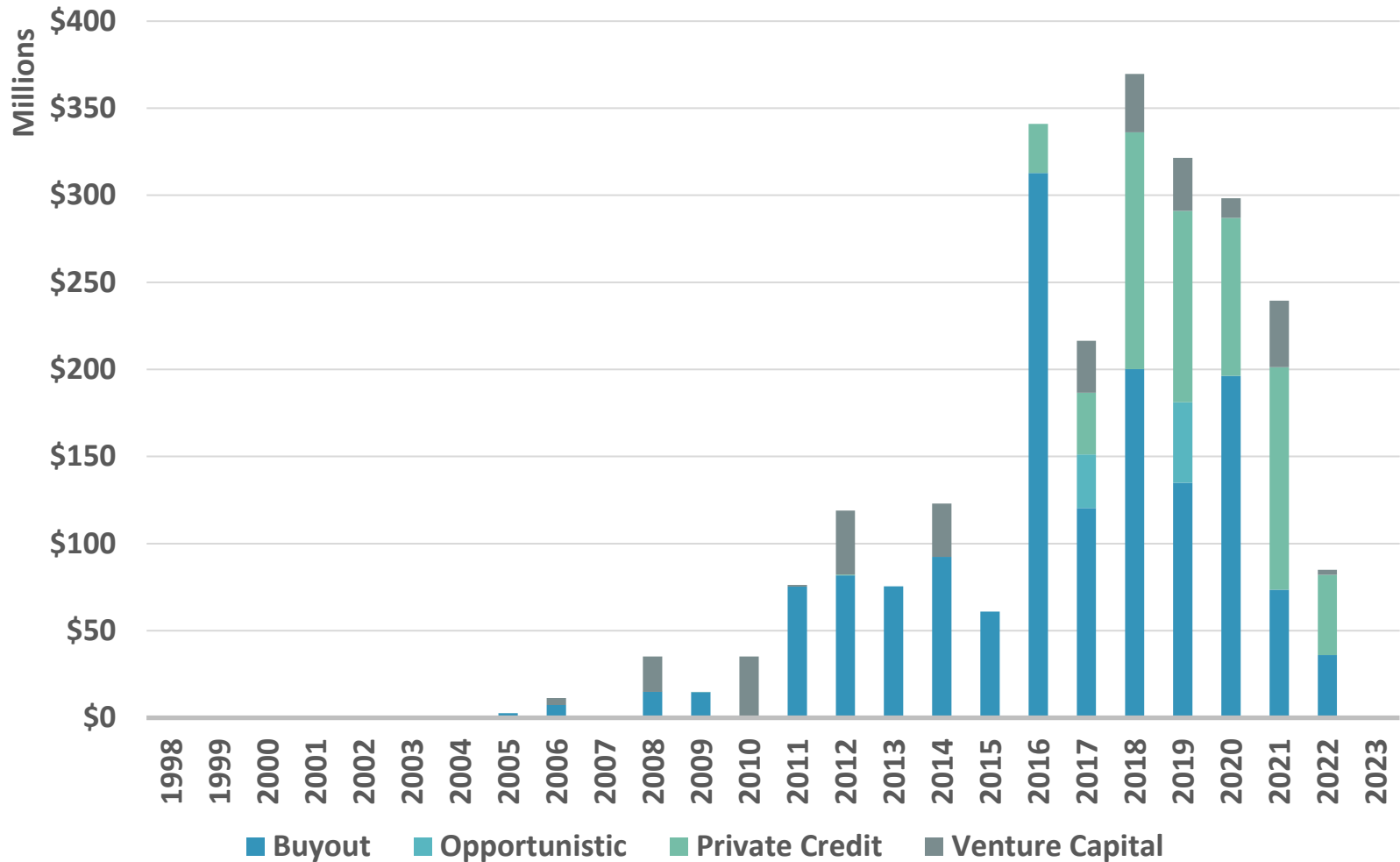
Source: State Street. As of 6/30/23

Composition by Sector



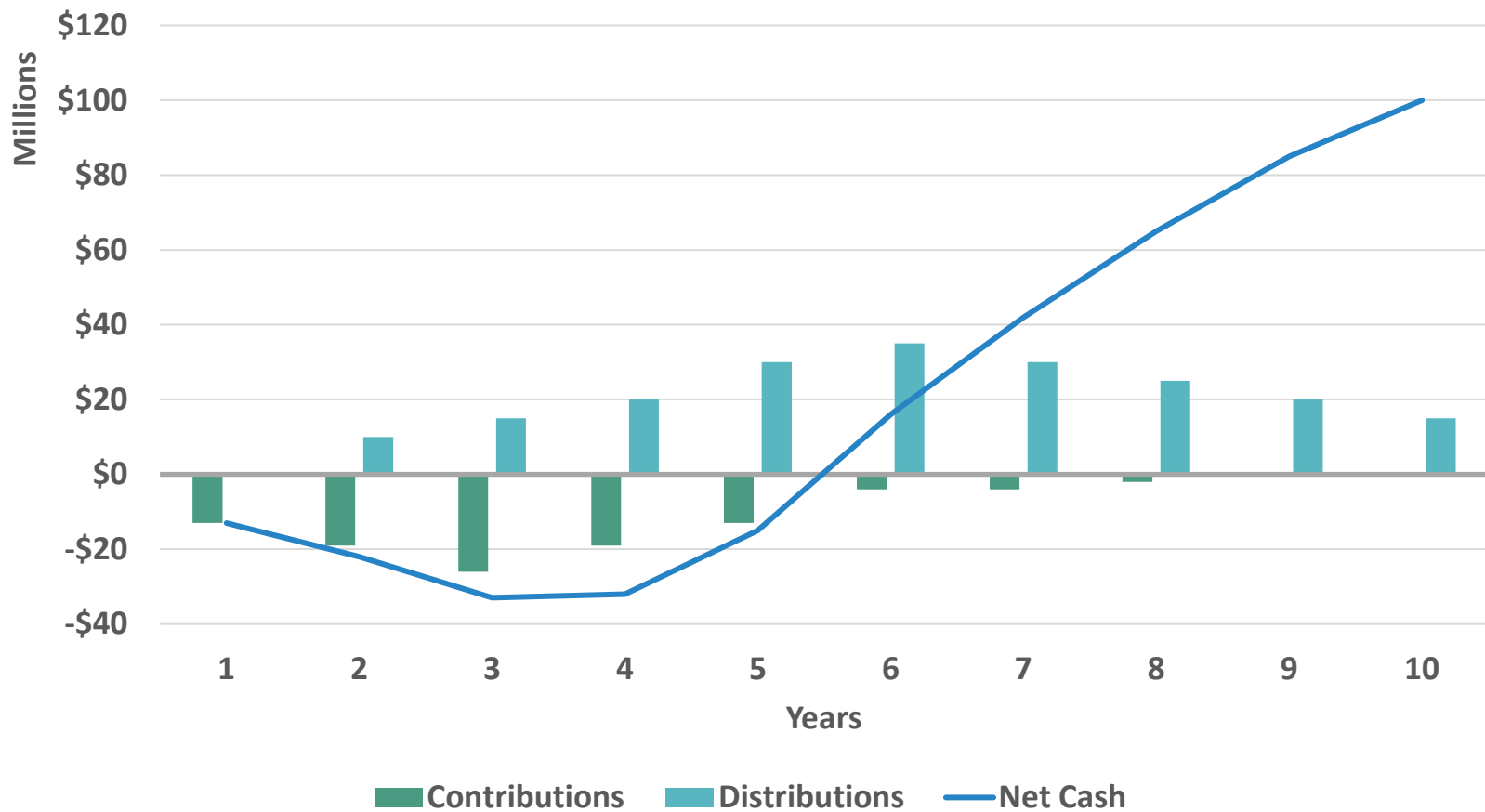
Source: State Street. As of 6/30/23. MSCI US Small Cap Index

Composition by Vintage Year



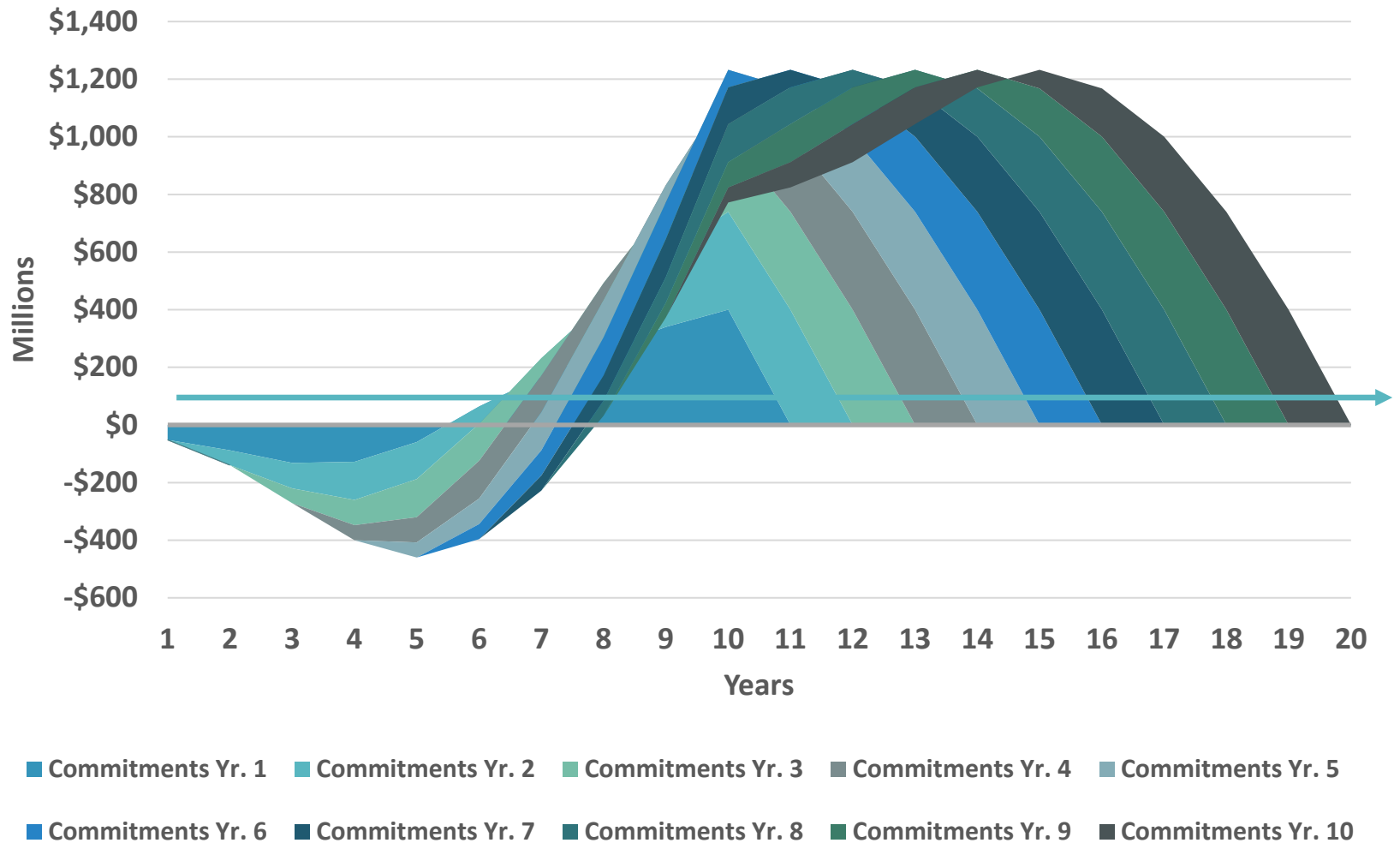
Source: State Street/Solovis. As of 6/30/23

Life Cycle of a Private Equity Fund



Source: Montana BOI

Life Cycle of Private Equity Portfolio

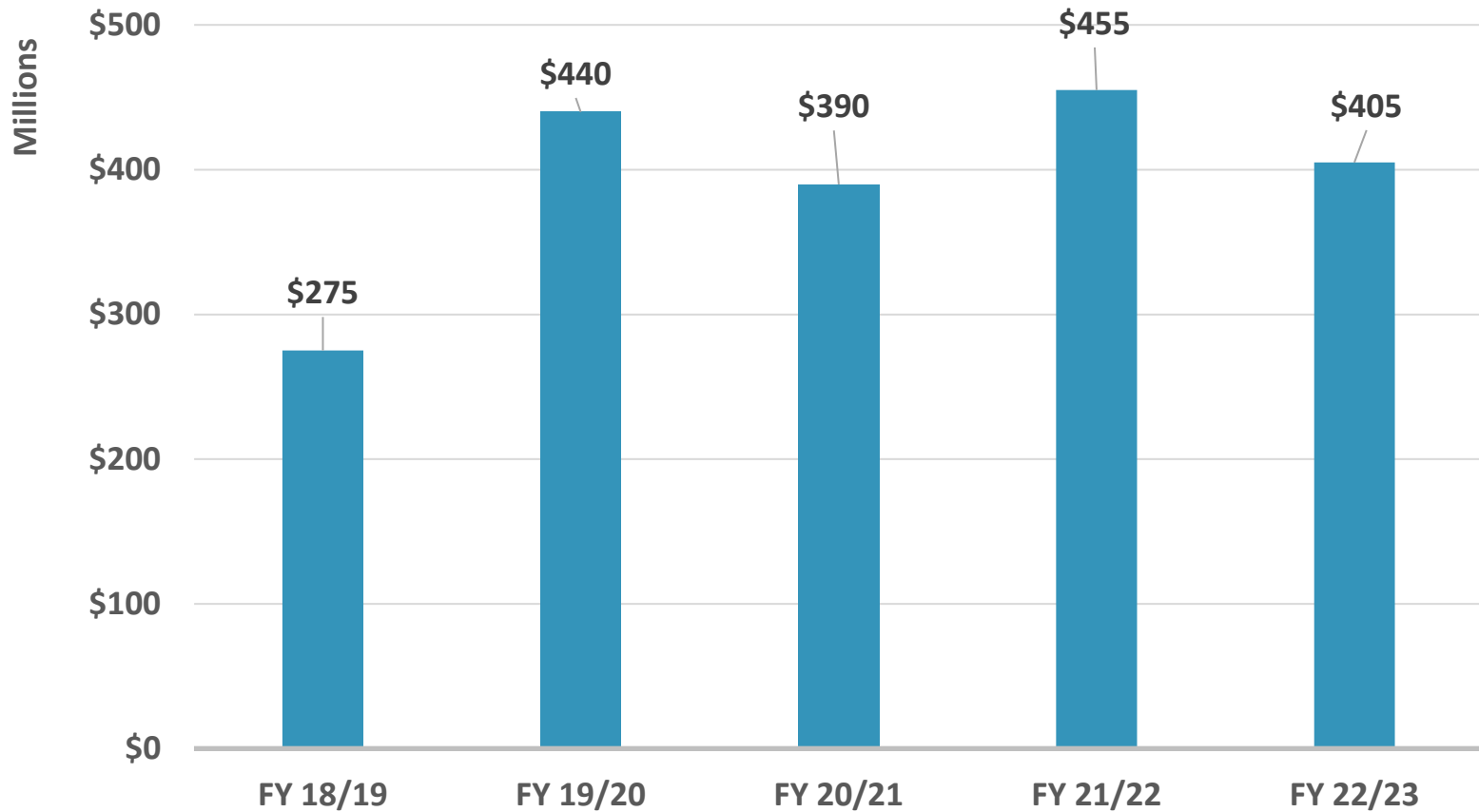


Source: Montana BOI

Pacing

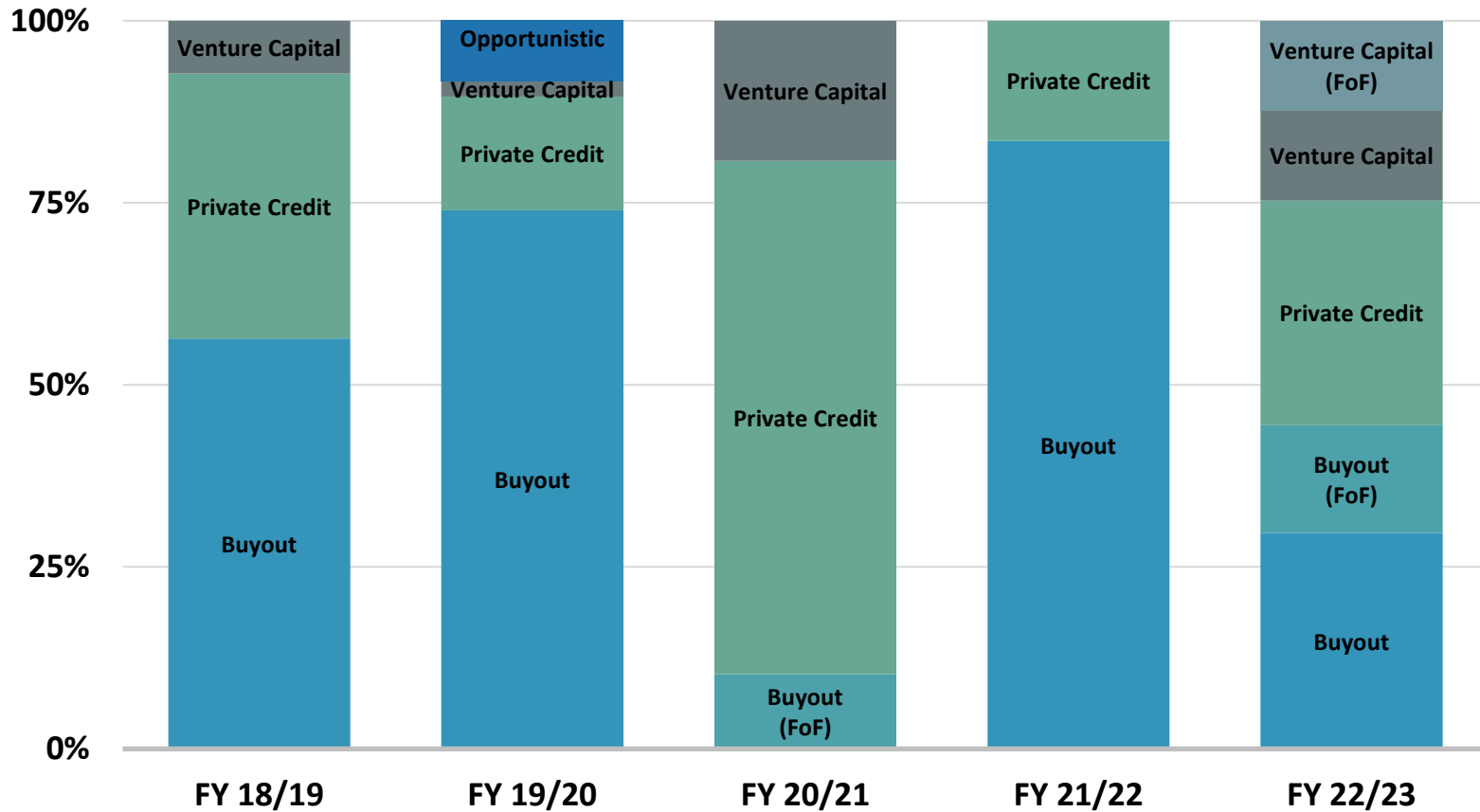
- Evaluates current private equity exposure and commitment plan relative to total plan assets.
- Considers the following factors:
 - Paid in Capital (Contributed Funds/Cash In)
 - Distributed Capital (Distributed Funds/Cash Out)
 - Valuations
 - Allocation within the range
- Considers the annualized growth rate for the total plan assets.
- Provides flexibility to explore various scenarios.
- Expected long-term average annual allocation of ~\$400-\$500 million through six to ten commitments.

Actual Pacing Commitments Past 5 Fiscal Years



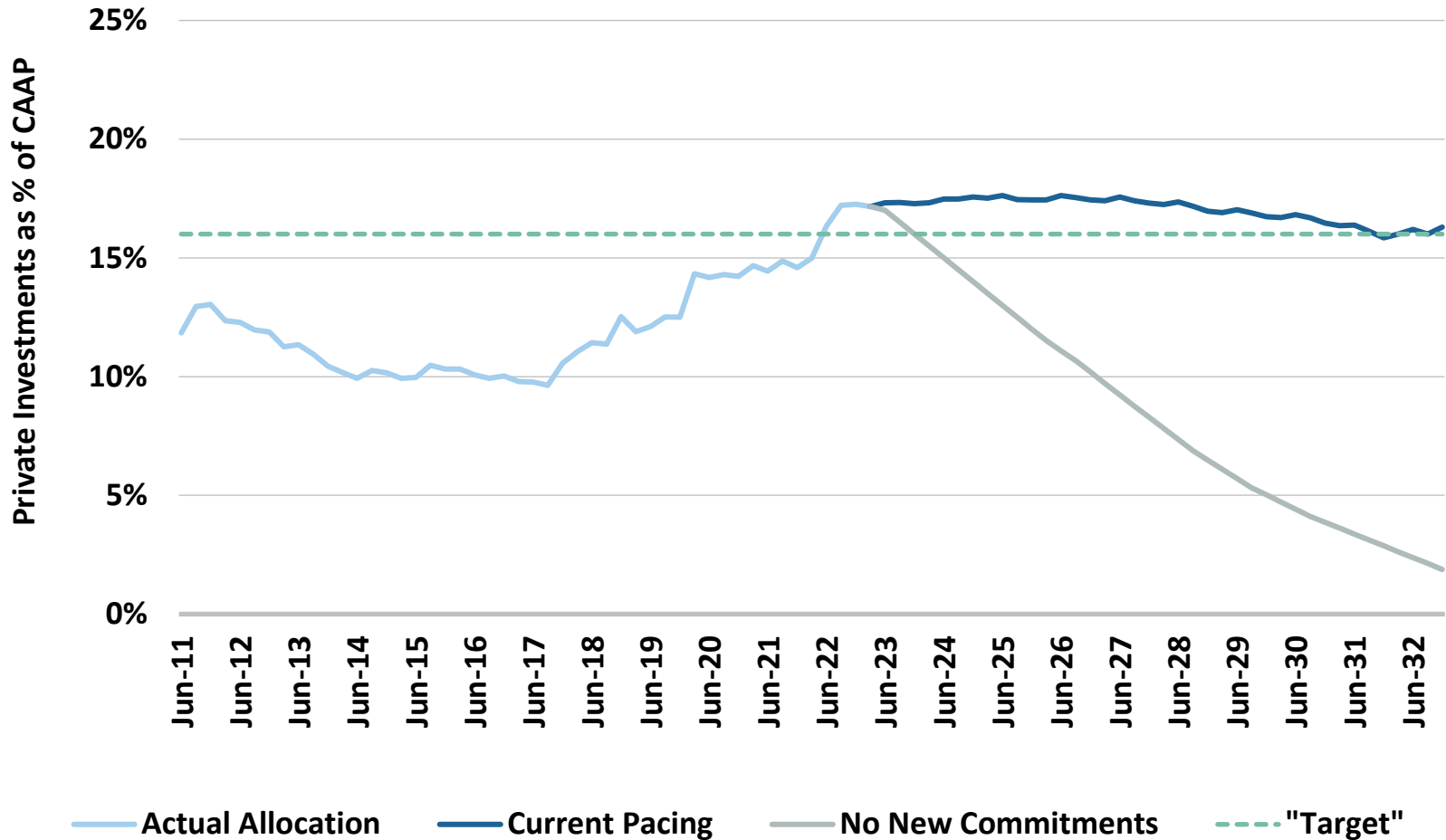
Source: Montana BOI. As of 6/30/23

Actual Pacing Commitments Past 5 Years by Strategy



Source: Montana BOI. As of 6/30/23. FoF – Fund of Fund

Pacing – 10 Year Actual/Forecast

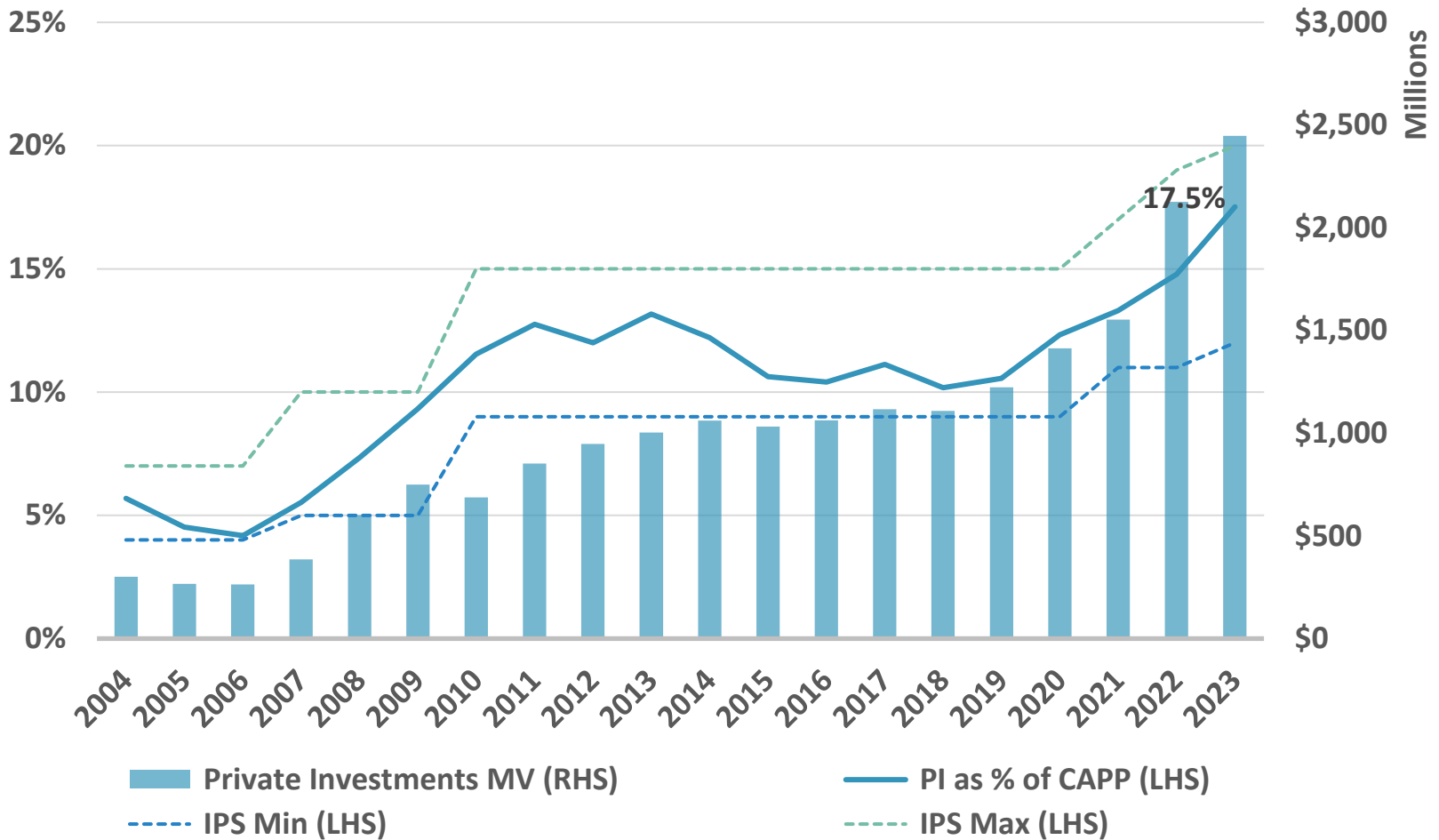


Source: RVK

Actual allocation: Montana BOI Private Equity as % of CAAP.

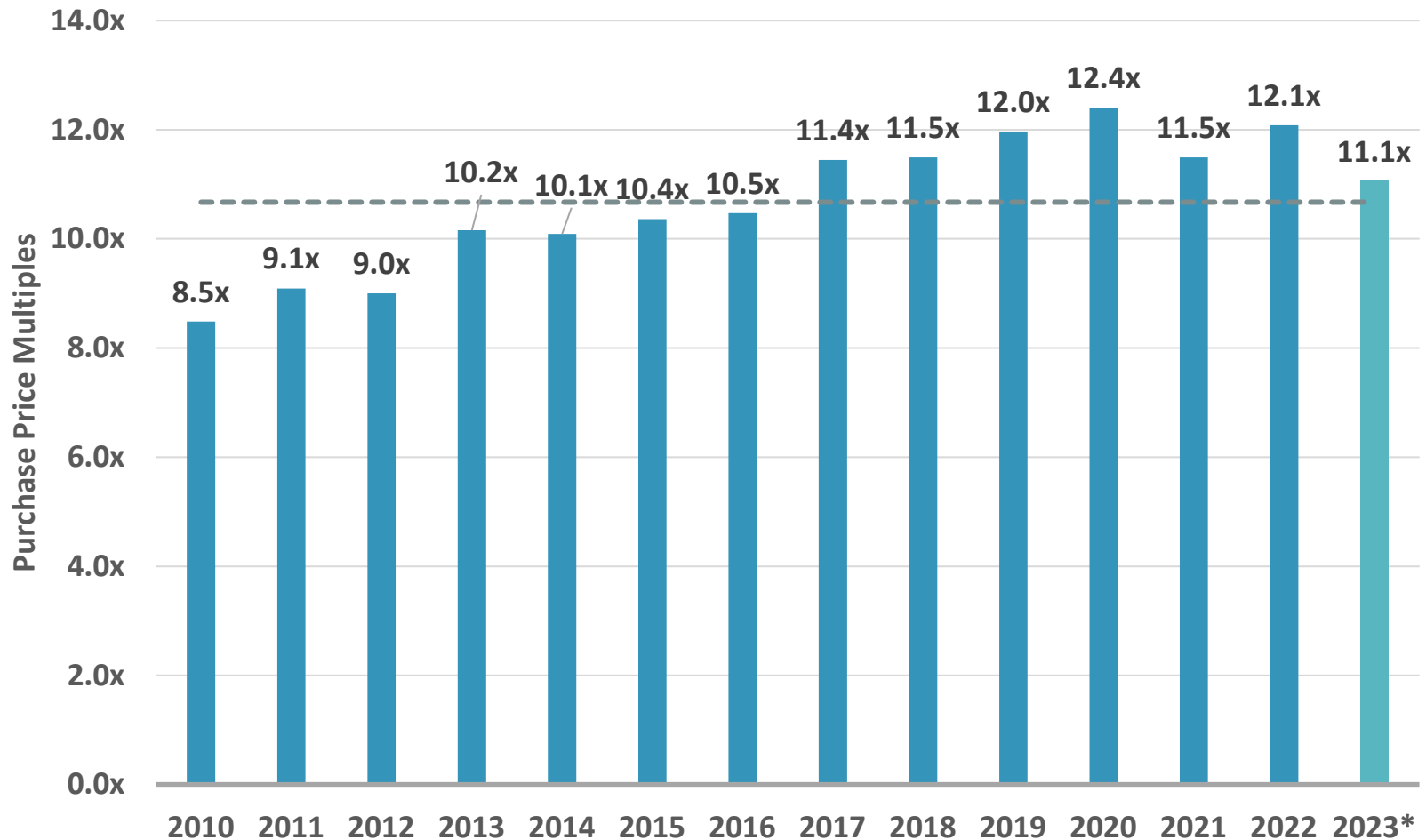
Current Pacing assumption average \$450M/Year. Midpoint of 16%, focus on approved range of 12-20% per IPS.

History of Montana BOI Private Investments Program



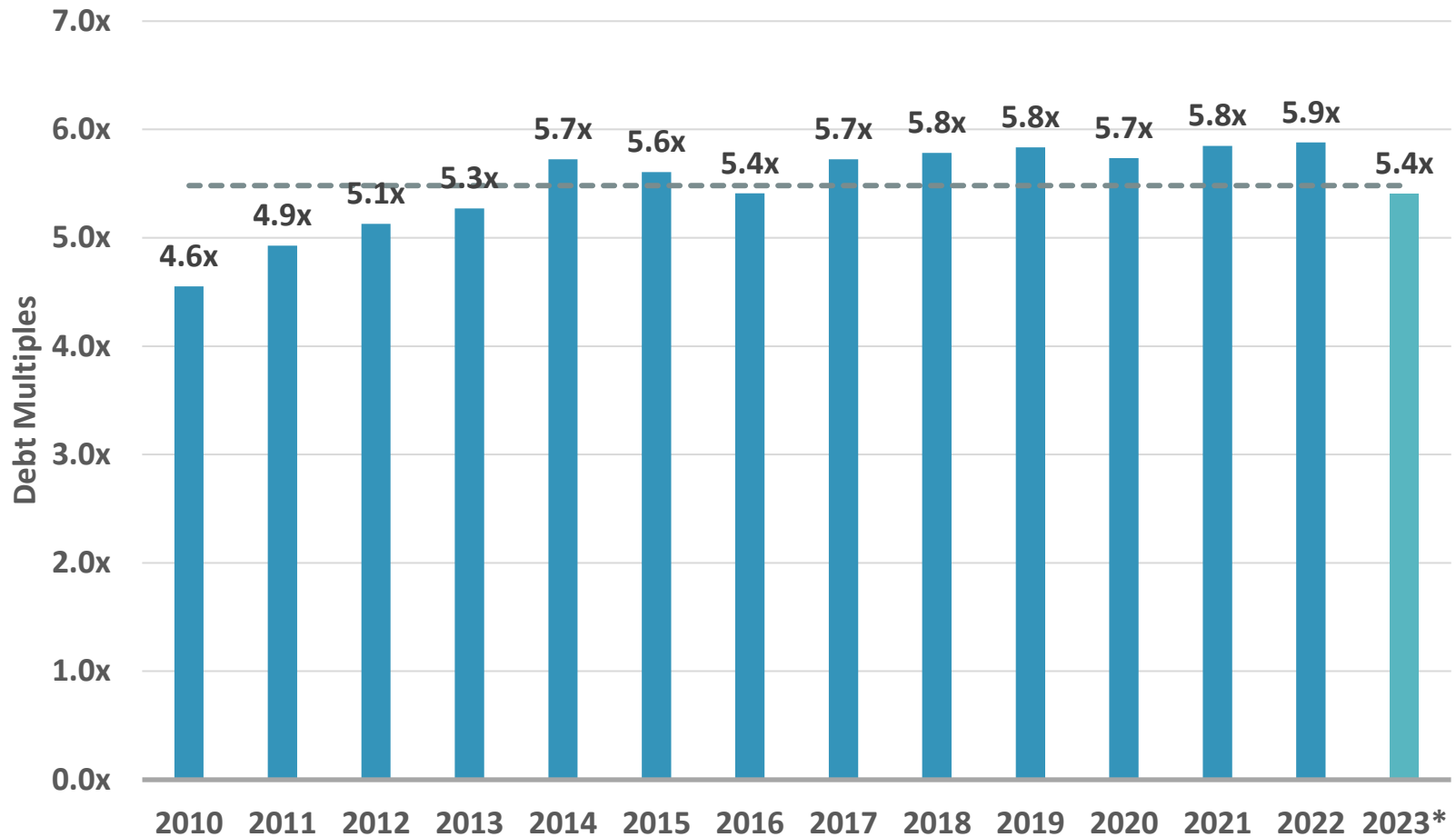
Source: Montana BOI, RVK. Values as of 6/30/2023. RHS – Right Hand Scale, LHS – Left Hand Scale

Purchase Price Multiples Leveraged Buyout



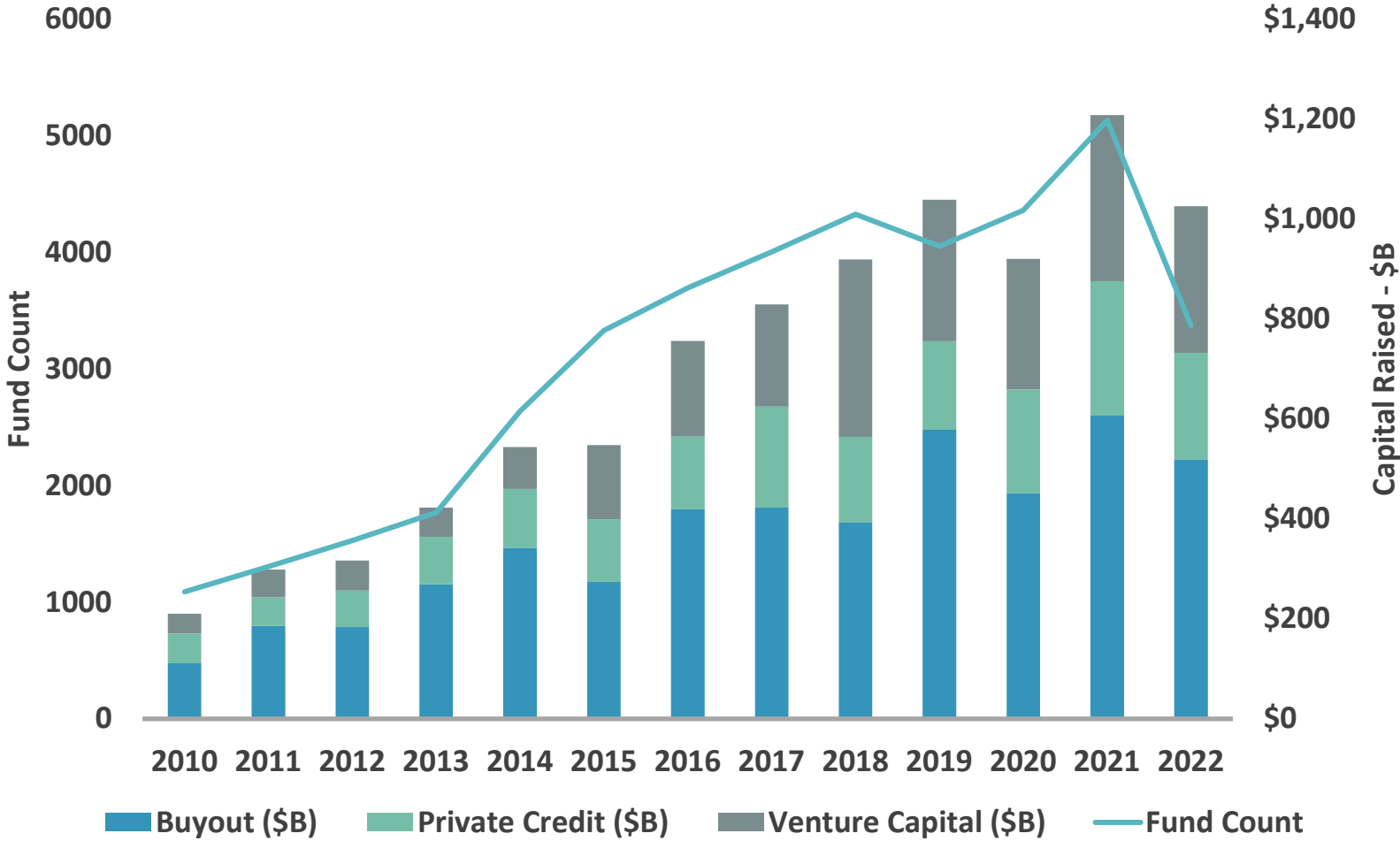
Source: Pitchbook. *As of 6/30/23. Median North America & Europe PE buyout EV/EBITDA multiples

Debt Multiples Leveraged Buyout



Source: Pitchbook. *As of 6/30/23. Median North America & Europe PE buyout Debt/EBITDA multiples

Private Capital Funds in the Market



Source: Pitchbook. *As of 6/30/23 Global Private Market Fundraising Q2 2023

Current Strategy and Rationale

What

- Continued focus on North America
- Selectively add international and emerging market managers, focus on Europe
- Focus on sector specialists
- Build out a strategic Co-Investment Program
- Private Credit
- May opportunistically evaluate secondary market transactions

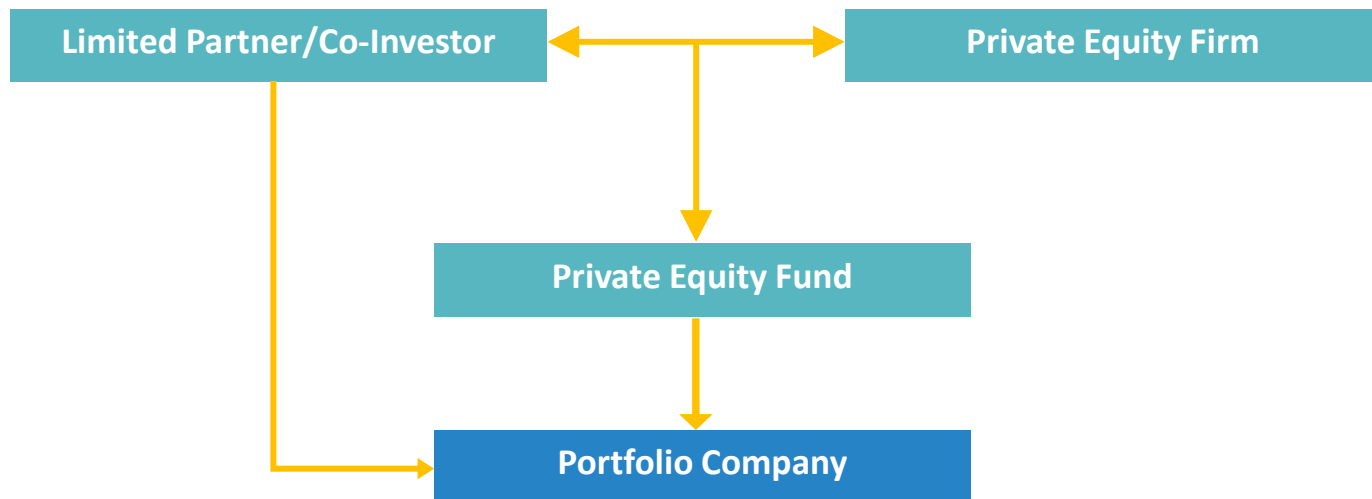


Why

- Well understood, resource constraints, deepest, most liquid, “rules of the game”
- Augment asset class exposure, allocate to best in class managers
- Deep expertise, focus on strategy, competitive advantage
- Reduce fees, deepen relationships with high conviction managers
- Focus on small to medium size enterprises with limited capital solutions, adds diversification and current yield
- Active portfolio management, divest of non-strategic relationships

Co-Investment

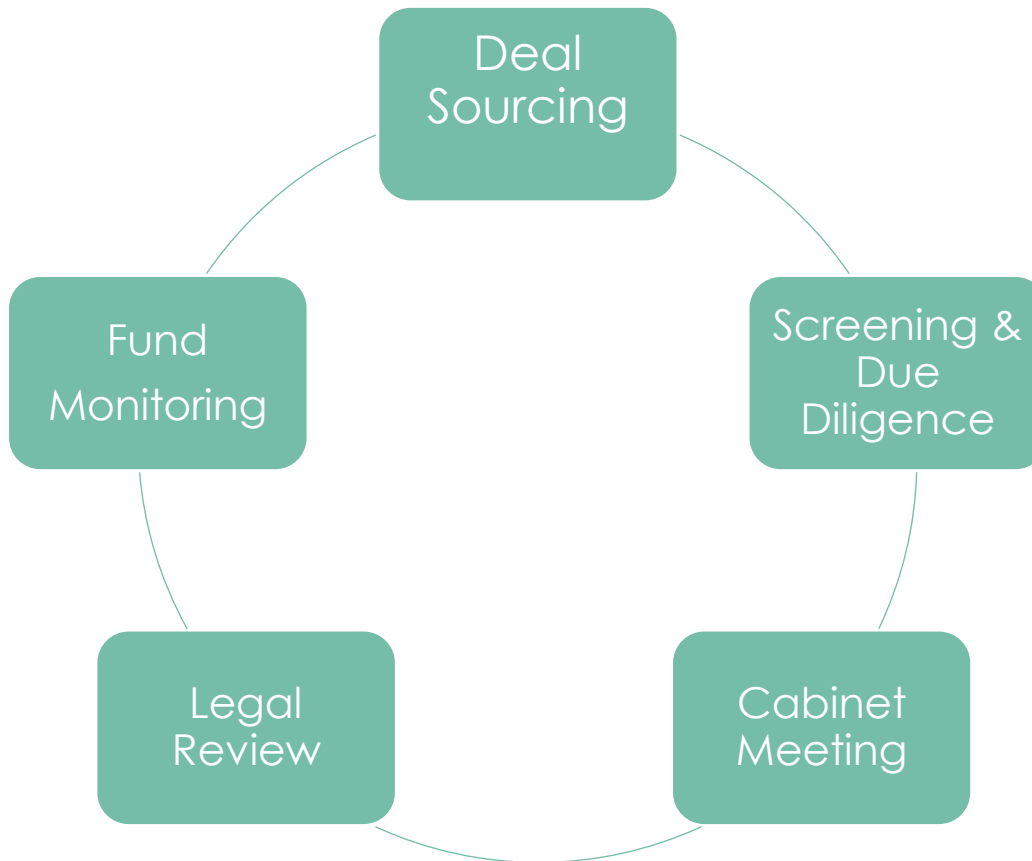
- An equity co-investment is a minority investment made in a portfolio company. The investment is made alongside a larger investment by a private equity fund.



Co-Investment – Key Takeaways

- Co-investors are typically charged a reduced fee, or no fee, for the investment, which boosts their returns.
- Institutional investors can gain access to more information and access to due diligence.
- They offer benefits to the larger funds in the form of increased capital and reduced risk while investors benefit by diversifying their portfolio and establishing relationships with senior private equity professionals.

Investment Process



Deal Sourcing

- Network of Contacts
 - Limited Partners
 - Plan Sponsors
 - General Partners
 - Placement Agents
 - Consultants
 - Service Providers
- Periodicals
- Preqin, Pitchbook (external online database providers)

Screening & Due Diligence

Initial Review

- Determine portfolio fit.
- Hold initial introductory call with GP.
- Submit Montana BOI Part A DDQ for completion by GP and ascertain critical due diligence points/deal killers.
- Introductory meeting with GP in Helena.
- Decision point to proceed to further diligence.

Continuing Diligence

- Submit much more comprehensive Montana BOI Part B DDQ for completion by GP (*modeled after ILPA DDQ/best practices*).
 - Analysis of firm, strategy, investment process, philosophy, ESG, risk, compliance.
- Review of historical track record, net cash flows, performance, other data points.
- Interviews and reference calls.
- Build out GP/Fund Profiles.
- Onsite due diligence at GP offices.
- Background checks on select personnel.

Cabinet Meeting

- Meeting with Cabinet – Executive Director, Chief Investment Officer, Investment Directors, Director of Operations, Director of Risk.
- Final commitment decision
 - Yes/No.
 - How much to commit, adherence to IPS, other risk parameters.
 - Chief Investment Officer in consultation with the Executive Director gives final approval for all commitments.

Legal Review

- Staff conducts initial review of Private Placement Memorandum (PPM) and Limited Partnership Agreement (LPA) and communicates any pre-identified and pre-negotiated terms with GP to external counsel.
- External counsel reviews legal documents and presents comments to staff for review.
 - Focuses on compliance with ILPA Principles/best practices.
 - Collaborative/iterative process with staff.
- Comments/changes negotiated with GP.
- Upon final negotiation/consensus and settlement on terms, legal counsel submits final copies of closing legal documents for execution by Montana BOI staff.
- Legal counsel will later review any Most Favored Nations provisions Montana BOI is eligible to elect for approval.

Fund Monitoring

- Set up fund internally with BOI accounting and externally with third-party administrator, State Street.
- Review Quarterly/Annual Reports & Financials.
 - Formal review of private investment managers done annually.
 - Participate in quarterly calls with managers.
- In-person fund update meetings, typically annually.
- Attend Annual General Meetings (AGMs).
- Limited Partnership Advisory Committee (LPAC) membership participation as applicable.
- Visit private investment GPs as travel plans allow.

2023 Board of Investments Meetings

JANUARY						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
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29	30	31				

FEBRUARY						
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MARCH						
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APRIL						
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MAY						
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JUNE						
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JULY						
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AUGUST						
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SEPTEMBER						
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OCTOBER						
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NOVEMBER						
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DECEMBER						
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31						

[Board Materials Due](#)
[Board Packet Mailing](#)
[Board Meeting Dates](#)

BOI WORK AND EDUCATION PLAN

2022

2023

February 16-17

Education:

Outreach Efforts for the Board - In-State Loan and INTERCAP Programs
Short Term Investment Pool

Reports:

Ethics Policy
Disaster Recovery and Emergency Preparedness
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Financial Audit Report

April 20

Education:

Domestic Equity Asset Class Review
RVK Annual Capital Market Assumptions

Reports:

Benchmarks Used by the Board

May 25-26

Education:

MT Buildings (Board as Landlord/Tenant Holdings)
Investment Policy Statement Review
Real Estate Asset Class Review

Reports:

Budget Status FYTD
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Accounting Staff Review
HR: Staffing Level Review
HR: Exempt Staff Compensation Review

August 3-4

Education:

Core Fixed Income Asset Class Review
Budget Proposal for FY24-25

Reports:

Proxy Voting
Budget Status Prior FY
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: SOC I, Type 2 Report

October 26-27

Education:

Separate Accounts Investment Review
First Reading - Asset Allocation Range Recommendation

Reports:

CEM, Inc Cost Reporting Analysis

Committee Meetings:

HR: Exempt Staff Performance Review

December 6-7

Education:

2023 Legislative Session
Policy 217 - Reauthorization of Investment Vendors
Adoption - Asset Allocation Range Approval

Reports:

Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Annual Report and Financial Statements

February 22-23

Education:

Cash Management of State Monies
Custodial Banking Relationship and Continuity

Reports:

Ethics Policy
Disaster Recovery and Emergency Preparedness
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Financial Compliance Audit Report

April 12

Education:

International Equities Asset Class Review
RVK Annual Capital Market Assumptions

Reports:

Benchmarks Used by the Board

May 24-25

Education:

State Government Customer Relationships
Investment Policy Statement Review
Real Assets Asset Class Review

Reports:

Budget Status FYTD
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Accounting Staff Review
HR: Staffing Level Review
HR: Exempt Staff Performance and Compensation Review

August 23-24

Education:

Trust Funds Investment Review
Non-Core Fixed Income Asset Class Review

Reports:

Budget Status Prior FY
Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: SOC I, Type 2 Report

October 11

Education:

Private Investments Asset Class Review
First Reading - Asset Allocation Range Recommendation

Reports:

Securities Lending

Committee Meetings:

HR: Exempt Staff Performance Review

December 13-14

Education:

MPERA and TRS Relationship
Policy 217 - Reauthorization of Investment Vendors
Adoption - Asset Allocation Range Approval

Reports:

Quarterly Reports
In-State Loan Reports
INTERCAP Reports

Committee Meetings:

Audit: Annual Report and Financial Statements

BOI TERMINOLOGY

ACTIVE MANAGEMENT (typically with respect to stocks)

Investment method which involves hiring a manager to research securities and actively make investment decisions to buy and sell securities in an effort to outperform an assigned index, rather than purchasing a portfolio of securities that would simply replicate the index holdings (*'passive'* investing).

ACTUARIAL ASSUMED RATE (pension concept)

The investment return rate used by actuaries that enables them to project the investment growth of retirement system assets into the future (typically perpetual).

ACTUARIAL FUNDING STATUS (pension concept)

A measurement made by actuaries to measure a pension system's financial soundness (ratio of actuarial liabilities to the actuarial value of the assets available to pay the liabilities).

ALPHA (investment term)

Return on an investment portfolio in excess of the market return or benchmark return; generally used in the context of *'active'* management (as passive management, by definition, does not seek excess returns, or *'alpha'*).

ALTERNATIVE INVESTMENTS

A wide range of investments, other than traditional assets such as publicly traded stocks and bonds. The most common nontraditional or alternative investments are private equity, real estate, commodities, and hedge funds.

ARBITRAGE (bond program)

A structural or systematic difference between investment types which may allow profiting from the *'difference,'* i.e., arbitrage. The most common context for the use of *'arbitrage'* at the BOI is the federal law that prevents *'arbitrage,'* i.e., the profiting of investing tax-exempt securities (e.g., INTERCAP) into taxable yields investments (such as U.S. Treasuries).

ASSET ALLOCATION AND ASSET ALLOCATION RANGE (general investment principle)

The Board's invested assets are divided or allocated into various asset classes such as stocks and bonds, each with its own characteristics, with the objective of attaining an optimal mix of risk and return. The total expected return of a portfolio is primarily determined by the mix or allocation to its underlying assets classes. Given the importance of *'asset allocation,'* the BOI Board sets the asset allocation *'range'* for each broad investment type or asset class.

ASSET-BACKED SECURITY

Bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other providers of credit. Not mortgages.

AVERAGE LIFE (fixed income, particularly bonds)

The average time period the debt is expected to be outstanding. This is typically the maturity date for a traditional bond structure; however, it will be shorter for bonds having a sinking fund or amortizing payment structure.

BANKER'S ACCEPTANCE

A short-term credit investment which is created by a non-financial firm and whose payment is guaranteed by a bank. Often used in importing and exporting, and as a discount money market fund investment.

BARCLAY'S AGGREGATE INDEX (fixed income)

A composite of outstanding bond issues, including corporate, structured, and government bonds whose overall investment features such as return and investment type are tracked over many years. This is the most common benchmark used for comparing the performance of a portfolio that invests in U.S. investment grade fixed income securities. Formerly known as the Lehman Aggregate bond index.

BASIS POINTS (investment jargon)

A basis point is 1/100th of a percentage. Ten basis points is one tenth of a percent, typically written as 10 bps.

BENCHMARK (standard investment concept)

The concept of employing a particular independent or market investment return as a measurement to judge an investment portfolio's return; typically chosen investment benchmarks have the following attributes: they are investible, quantifiable, chosen in advance, easily understandable, and have a long history; common examples are the S & P 500 Index and the Barclay's Aggregate Index.

BETA (investment jargon)

A measure of the risk (or volatility) of a security or a portfolio in comparison to the market as a whole. If the stock or portfolio moves identically to that market, its beta value is 1; if its price volatility (or movement) is greater than that market's price volatility, it is said to have beta greater than 1.

CAP, AS IN LARGE 'CAP' (generally for stocks, e.g., public equities)

'Cap' is short for capitalization, as a reference to the market value of a publicly-traded company. The current stock price times the total shares outstanding of the company equals its market capitalization or market 'cap'; often used contextually such as 'large-cap,' 'mid-cap,' and 'small-cap' for different sized public companies.

CERTIFICATE OF DEPOSIT (CD):

A short-or medium-term, interest-bearing deposit obligation offered by banks and savings and loans. These may include "Yankee CDs" which are CDs issued by foreign banks or their U.S. affiliates in the U.S. which are denominated in U.S. dollars

CLAWBACK (private equity)

A clause in the agreement between the general partner and the limited partners of a private equity fund. The clawback gives limited partners the right to reclaim a portion of distributions to a general partner for profitable investments based on significant losses from later investments in a portfolio which ultimately resulted in the general partner receiving more distributions than it was legally entitled to.

COMMERCIAL PAPER

An unsecured obligation issued by a corporation or bank to finance its short-term credit needs, such as accounts receivable and inventory. Maturities typically range from two (2) to two hundred seventy (270) days. Commercial paper is available in a wide range of denominations, can be either discounted or interest-bearing, and usually a limited or nonexistent secondary market. Commercial paper is usually issued by companies with high credit ratings, meaning that the investment is almost always relatively low risk.

CORE (context varies for equity, fixed income, real estate)

In equity and fixed income, 'core' refers to investments that are generally always found in the portfolio and normally expect to hold for a very long time e.g. 'core' holdings of the largest U.S. companies, or U.S. treasuries; in real estate, 'core' generally refers to the best quality of real estate holdings such as prime commercial property in major metropolitan cities that have low leverage and low levels of vacancy.

CORPORATE NOTE

A type of unsecured debt issued by a corporation that may be longer-term than Commercial Paper, but shorter-term than a typical Corporate Bond.

CORRELATION (common statistical concept)

A measure of how two or more investment values or two asset classes move relative to each other during the same time period. A central concept in portfolio construction is to seek investments whose values do not move *together* at the same time, i.e., are uncorrelated. A correlation of 1 means that two or more investments 'move' precisely together.

CREDIT ENHANCEMENT (bond program)

At BOI, the term generally refers to credit support or a bond or loan guarantee. For example, the Board's INTERCAP bonds are 'enhanced' by the BOI's performance guarantee bringing down the yearly interest rate.

CUSTOM BENCHMARK (or sometimes custom index)

A way to measure investment performance using a tailor-made measurement versus a generic industry-standard benchmark. At the BOI, total pension performance is measured against the Board's 'custom index' or 'custom benchmark' which is a weighted blend of all the underlying asset class benchmarks used to measure the asset class returns.

DERIVATIVES (investment jargon)

Investment securities whose performance itself depends (or is 'derived') from another underlying investment return. Examples include stock options, puts/calls, and forward currency contracts whose returns are based on the underlying stock or currency.

DEVELOPED MARKETS (equity)

Countries having a long period of stable industrialization; or are the most economically developed.

DISCOUNT (fixed income, generally)

Used most often with respect to bonds, the price paid that is less than face (or 'par') value. A \$1 million face-value of a bond purchased for less than a million is bought at a 'discount.' Described as the difference between a bond's current market price and its face or redemption value.

DIVERSIFICATION (standard investment concept)

The concept of spreading risk by putting assets in several investment categories, each having different attributes with respect to type, expected return, risk, and correlation, to best protect against the risk of loss.

DURATION (bonds)

Almost exclusively used when discussing fixed income bonds, a measurement of how sensitive a bond's change in price is to a change in general market interest rates, expressed in years (specifically calculated as a weighted average term to maturity of the bond's cash flows). The greater the duration of a bond, the greater the volatility of price for changes in market interest rates.

EFFICIENCY (usually when discussing various stock markets)

Used to describe markets where it is very difficult to achieve return in excess of that of the overall market from individual stock selection. When information is widely available on a company and its securities are traded regularly the market is considered 'efficient.'

EMERGING MARKETS (most often for public equities)

Certain international securities markets that are typically small, new, have low turnover, and are located in countries where below-average income prevails and is developing in response to the spread of capitalism.

ENHANCED (pertaining to stocks)

Generally linked with 'index' as in enhanced index, an indexed investment management style that has been modified to include the portfolio manager's idea of how to outperform the index by omitting some stocks in the index and overweighting others in a limited manner designed to enhance returns but at minimal risk.

EXCESS RETURNS (standard investment concept)

Returns are 'excess' if they are more than the market or more than the benchmark they are measured against.

EXEMPT STAFF VS. CLASSIFIED STAFF (specific to Montana state government)

"Exempt" refers to the Board's eleven employees who, under state law, do not fall under the state's standard employment rules (the 'classified' staff).

FIDUCIARY (from the Latin verb, *fidere*, to trust)

The concept of trust and watchfulness; a fiduciary is charged with the responsibility of investing the money wisely for the beneficiary's benefit. Board members are the ultimate 'fiduciaries' for the Board's assets and are obligated to be a good agent.

FTE (state government jargon)

An acronym in state government: "full time equivalent" as in full time employee. The concept is a slot or position, not the actual individuals. The BOI is currently authorized for 32 FTE's.

FUND OF FUNDS (private equity)

A concept used in alternative investments referring to using an investment manager to invest in **other** managers or funds, as opposed to making direct investments in funds.

GAAP/GASB (accounting terminology)

GAAP...Generally Accepted Accounting Principles; Montana state law uses GAAP accounting principles unless specifically allowed otherwise. GASB...Government Accounting Standards Board, the board that sets GAAP standards for U.S. governments (FASB...Financial Accounting Standards Board, the entity for commercial and business accounting standards).

GENERAL OBLIGATION (municipal finance term)

Used to describe the promise that a government makes to bond holders, backed by taxing and further borrowing power, it is generally considered the highest level of commitment to bondholders. At the local government level, general obligation bonds typically require a vote of the residents.

GENERAL PARTNER VS. LIMITED PARTNER (private equity)

In private equity, the general partner is responsible for the operations of the partnership and makes the actual underlying investment decisions; the limited partner is the investor, and therefore has limited liability for investment decisions; the BOI is the 'limited' partner in its private equity fund investments (and real estate funds as well).

GROWTH (as to style public equities)

An investment style that more heavily invests in companies whose earnings are expected to grow at an above average rate to the market. A growth stock usually does not pay a dividend, as the company would prefer to reinvest retained earnings in capital projects to grow the company (vs. 'value,' which considers buying established companies they feel are trading at bargain prices to the fundamental analysis of the company's financial statements and internal competitive factors).

INDENTURE (bond and loan programs)

The central document describing the contract between investors and the borrower or user of the proceeds. The Board's INTERCAP program is structured around a bond indenture.

HEDGE FUND (as defined by Investopedia)

An aggressively managed portfolio of investments that uses advanced investment strategies such as *leverage*, long, short and *derivative* positions in both domestic and international markets with the goal of generating high returns (either in an absolute sense or over a specified market *benchmark*).

HURDLE RATE (private equity)

a minimum return per annum that must be generated for limited partners of a private equity fund before the general partner can begin receiving a percentage of profits from investments.

INDEX (investment concept)

Typically, a single measure of a broadly-based group of investments that can be used to judge or be compared to the return performance of an individual investment or manager.

INDEXING (investment concept)

Typically refers to investing in a portfolio to match a broad range of investments that are set within a pre-determined grouping, such as the S&P 500, so as to match its performance; such investing is generally labeled 'passive' or indexed investing; or buying shares in an Index Fund.

IN-STATE LOAN PROGRAM (Montana-specific)

Programs that are funded by the state's coal severance tax monies.

INTERNAL SERVICE VS. ENTERPRISE FUND (state accounting concept)

Within Montana state government: a program whose funding is dependent on **mandatory participation** by another state government program is labeled an 'internal' service fund; a program whose funding is dependent on voluntary participation is labeled an enterprise fund. At BOI, the investment program is an internal service fund because participation is not voluntary; the Board's bond and loan programs, because their use is voluntary, are accounted for as an enterprise.

INVESTMENT GRADE (bonds)

Bond ratings from Moody's, Standard and Poor's, and Fitch high enough to be considered secure enough for most investors (bonds rated AAA – BBB). Below investment-grade bonds (below BBB) are generally considered to have a more speculative outlook and carry more risk of default.

IRR (private equity)

A measure of investment performance, short for 'internal rate of return,' expressed as a percentage (the 'internal rate of return' number, or discount rate) that mathematically will equalize the total future cash flows of an investment to the initial cash outflow of the investment, the concept accounts for the time value of money.

LEVERAGE (investment concept)

As an investment concept, a way to increase a return on an investment through a combination of one's own money and by borrowing additional money to enhance such an investment; high 'leverage' is also associated with high risk.

LINK DEPOSIT

The Link Deposit program can provide a financial institution a long-term fixed rate funding source "linked" to a specific loan. The State of Montana provides the financial institution funding in the form of a deposit through the Montana Board of Investments using coal tax funds.

MASTER LIMITED PARTNERSHIP

An investment structure that combines the tax benefits of a limited partnership with the liquidity of a common stock. While an MLP has a partnership structure, it issues shares that trade on an exchange like common stock. MLPs are often broadly associated with energy companies operating in midstream services.

MEAN VARIANCE OPTIMIZATION MODEL ('Modern Portfolio Theory')

A theory that it is possible to construct a portfolio to maximize the return for the least amount of risk or volatility. This theory is based on various asset types and their level of expected return, risk (volatility) and their correlation with each other or how the asset values move with each other. The central idea of the model is to blend investments so that in total, they provide both the best expected return and optimal amount of diversification to minimize deep performance swings (volatility); a central tenant is that long term historical returns are indicative of future returns.

MEZZANINE FINANCE (private equity)

Subordinated debt with an equity 'kicker' or ability to share in the equity value of the company. It is typically lower quality because it is generally subordinated to debt provided by senior lenders such as banks, thus is considered higher risk.

MULTIPLE (as in "multiple" of invested capital, private equity)

The ratio of total cash returned over the life of the investment plus the investment's residual value over the total cash expended in making the investment. A multiple of 2 means, regardless of the total investment time period, that total cash returned was twice the cash invested.

130/30 STRATEGY (public equities)

Also called 'partial long short,' this strategy involves the establishment of a short position in select stocks while taking the proceeds of those shorts and buying additional long positions in stocks. The net effect is an overall market position that is 100% long, but the active decisions on individual stock selections are amplified by this ability to short. If the stock selections are successful, the strategy enables the portfolio to profit more than if a stock had simply not been owned, as with traditional long-only portfolios.

OPPORTUNISTIC (real estate)

In real estate, a euphemism for the most risky real estate investments, typically distressed, raw land, newly developed buildings or other high risk investments in the real estate sector, (versus, 'core,' which are the best quality fully leased commercial properties).

OVERWEIGHT OR UNDERWEIGHT (investment concept)

Generally, the level of holdings of a certain type of investment that is above or below either a benchmark's weight (portion of total investment), or the percentage held of a particular asset class compared to the Board's asset allocation policy weight. Also used to describe an external investment manager's decision to have more (or less) of a particular investment than the percentage or weighting found in the benchmark.

P/E RATIO (equity)

The price of a publicly traded stock divided by its estimated or actual earnings is the price/earnings or P/E ratio. This can also be calculated for a stock index or portfolio of stocks. Over the last 100 years, the S&P 500 has had an overall P/E ratio of about 15, or a total index price of about 15 times the annual earnings of its underlying companies.

PACING STUDY (private equity)

An analysis of the likely timing and amount of the drawdown of committed but yet uninvested monies and the estimated distributions or returns from the funds held in an alternative investment portfolio, generally used to judge the future size of the portfolio and its potential liquidity needs, i.e., cash funding demands.

PAR (fixed income)

The initial principal amount designated by the issuer of the bond, or face value of a bond.

PASSIVE

For investments, generally not materially participating in an investment decision, meaning an investment portfolio whose returns follows that of a broad market index, such as an investable stock index, i.e. the S & P 500.

PASSIVE MANAGEMENT OR PASSIVE INVESTMENT (most often in public equities, but not exclusively)

An investment style where a fund's portfolio mirrors a market index, such as the S&P 500, with limited selection decisions by the manager, resulting in market returns. Passive management is the opposite of active management in which a fund's manager attempts to beat the market with various investment strategies and buy/sell decisions of a portfolio of securities to enhance returns.

PASSIVE WEIGHT (generally equities)

The percentage of a stock held in a particular index portfolio, or percentage of an overall asset class that is held in passive portfolios.

POLICY PORTFOLIO

A fixed-target asset allocation, as opposed to asset allocation ranges, which theoretically allows gauging whether deviations from the target portfolio had a positive or negative impact on overall performance.

PORTABLE ALPHA (public equities)

An investment strategy which involves the active selection of securities while neutralizing overall beta or market risk. This often involves the use of derivative investments such as futures to replicate the market return, either taking a short or long position, while then selecting securities which are expected to add return in an absolute sense or in addition to the market return. As an example, this strategy can be found with certain hedge funds where a market exposure is shorted while individual securities such as specific stocks are purchased that are expected to outperform the general market. The concept of portable applies when the ability to generate positive alpha can be overlaid or ported onto a portfolio. This is not a strategy employed by any of MBOI's existing managers.

PREMIUM (fixed income)

Most often the amount paid over the stated face amount (often called 'par') of a bond, but also used in other contexts, typically paying more (the premium) than a market price (as in a take-over bid for a company).

PRIVATE ANNUAL WAGE

The private annual wage is determined annually by the Montana Department of Labor & Industry using the average annual employment divided by the total wages.

PROXY (publicly traded companies)

An agent legally authorized to act on behalf of another party. Shareholders not attending a company's annual meeting may choose to vote their shares by proxy by allowing someone else to cast votes on their behalf, but the word 'proxy' is used more frequently colloquially as a 'close approximation.'

PRUDENT EXPERT, PRUDENT PERSON (a central fiduciary concept)

These legal terms have long histories of court-determined standards of care, deriving originally under English common law. The BOI is empowered to operate under the 'prudent expert rule,' which states that the Board shall manage a portfolio:

- a) *with the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims;*
- b) *diversify the holdings of each fund within the unified investment program to minimize the risk of loss and to maximize the rate of return unless, under the circumstances, it is clearly prudent not to do so; and*
- c) *discharge the duties solely in the interest of and for the benefit of the funds forming the unified investment program.*

At an 'expert' level; there is more room for accepting risk under the prudent expert rule than the prudent person rule.

REBALANCING (general investment term)

The process of realigning the weightings of the portfolio of assets. Rebalancing involves periodically buying or selling assets in the portfolio to maintain the original desired level of asset allocation and/or to stay within predetermined asset category range; it is part of a disciplined investment approach within modern portfolio theory.

REPURCHASE AGREEMENT

A contract in which the seller of securities, such as Treasury Bills, agrees to buy them back at a specified time and price. May also be called "Repo" or "Buyback." Typically used as a short-term form of collateralized borrowing by a bank or securities dealer.

RESOLUTION (government term)

Generally, a formal and written action by a governmental (or corporate) body that has long term significance and requiring a vote of the governing body. BOI uses 'resolutions' generally only for its most significant and long term actions and/or policies.

REVERSE REPURCHASE AGREEMENT

A purchase of securities with an agreement to resell them at a higher price at a specific future date. The investor essentially borrows money and allows its securities to be held as collateral. Reverse Repurchase Agreements occur most often in government securities or other securities that are highly valued and thus considered a good form of collateral.

SECURITIES LENDING (general investment)

Investments that are temporally borrowed by other investors for a fee; the BOI allows most of its publicly traded investments to be loaned for additional marginal income.

STANDARD DEVIATION (common statistical concept)

A specific statistic that measures the dispersion of returns from the mean over a specific time period to determine the "historical volatility" of returns for a stock, or portfolio, or asset class; more specifically a single unit (i.e., one standard deviation) of dispersion that accounts for approximately 66% of all data around a mean using a 'normal' (or 'uniform' or 'bell-shaped' curve; as opposed to a skewed or asymmetrical) distribution. The standard deviation is used as a gauge for the amount of expected future volatility.

SABHRS (accounting jargon)

Montana state government's State Accounting, Budgeting and Human Resource System; the State's central information management system. BOI investment and other financial data must tie and be reported on this system, which is the official book of record and includes the state's financial statements.

STYLE DRIFT (often in reference to public equity managers, but applicable to other managers, too)

As the name implies, a divergence from an investor's professed investment bias or style or objective.

TRANCHE

A division or portion of a pool or whole; specifically: an issue of bonds derived from a pooling of like obligations (such as securitized mortgage debt) that is differentiated from other issues especially by maturity or rate of return.

TRACKING ERROR (statistical concept in investments)

A measurement of the standard deviation of a portfolio's return versus the return of the benchmark it was attempting to outperform. The concept is often used when discussing investment managers. For example, some styles are expected to have high 'tracking errors,' (e.g., deep 'value' investors who buy companies that may be dogs for years), versus passive managers, whose stock volatility is expected to be very close to their benchmark. Tracking error can either be intentional or unintentional; it can also be regarded as an accepted deviation or contrary to the management agreement. High *unexpected* tracking error is generally a serious concern to be examined and understood.

UNDERWRITER (bond program)

In investments, the agent who buys investments to be resold to the public; at BOI, the investment firms that buy the Board's bonds to be resold to the public.

UNIFIED INVESTMENT PROGRAM (Montana Constitution)

The Program in the State's constitution requiring a central investment program which the legislature has assigned to the BOI.

VALUE (as to style when discussing public equities)

An investment style that focuses on buying established companies that investors believe are undervalued and trading at bargain prices to the fundamental analysis of the company's financial statements and internal competitive factors.

VENTURE CAPITAL (private equity)

A higher-risk/high-return type of investing in startup firms and small businesses with perceived long-term growth potential. Sometimes these are already existing business ventures with limited operating history that need additional management expertise and access to capital. (For start-ups, 'seed capital,' or 'angel investor' are terms differentiating this even higher risk type of investment.)

VOLATILITY (investment jargon)

A statistical measure of the dispersion of returns for a given security or market index. Volatility is typically measured by using the standard deviation of returns from the security or market index. Commonly, the higher the volatility, the riskier the security.

YIELD (general investment, but most often within fixed income)

The amount returned to the investor above the original investment generally expressed as a percentage. Yield can be thought of as the expected return from the combination of interest and price accrual or amortization to maturity (in the case of a bond trading at a discount or premium to par).

YIELD CURVE (fixed income)

A line that plots the prevailing interest rates at a given time for bonds ranging in maturity from as short as three months out to 30 years. When plotted across these various maturities (typically 2, 5, 7, 10 and 30 years), the resultant line is shaped like a curve with generally low interest rates (the yield) for shorter maturities and gradually higher interest rates for longer maturities, because generally investors demand higher interest rates for longer term investments. The yield curve for U.S. Treasury debt is the most common when referring to the prevailing level of interest rates.

MONTANA BOARD OF INVESTMENTS ACRONYM INDEX

ACH.....	Automated Clearing House
ADV.....	Uniform Application for Investment Adviser Registration and Report by Exempt Reporting Advisor
AUM.....	Assets Under Management
ADR.....	American Depository Receipts
AOF.....	All Other Funds
ARC.....	Actuarially Required Contribution
BOI.....	Board of Investments
CAPP.....	Consolidated Asset Pension Pool
CFA.....	Chartered Financial Analyst
EM.....	Emerging Market
FOIA.....	Freedom of Information Act
FWP.....	Fish Wildlife and Parks
FX.....	Foreign Exchange
IPS.....	Investment Policy Statement
IRP.....	Intermediary Relending Program
LDI.....	Liability-Driven Investing
MBOH.....	Montana Board of Housing
MBOI.....	Montana Board of Investments
MDEP.....	Montana Domestic Equity Pool
MLP.....	Master Limited Partnership
MFFA.....	Montana Facility Finance Authority
MPEP.....	Montana Private Equity Pool
MPT.....	Modern Portfolio Theory
MSTA.....	Montana Science and Technology Alliance
MTIP.....	Montana International Pool

MTRP Montana Real Estate Pool

MTSBA Montana School Boards Association

MVO Mean-Variance Optimization

NAV Net Asset Value

PERS Public Employees' Retirement System

PFL Partnership Focus List

QZAB Qualified Zone Academy Bonds

QSCB Qualified School Construction Bonds

RFBP Retirement Funds Bond Pool

RFP Request for Proposal

SABHRS Statewide Accounting Budgeting and Human Resource System

SLQT Securities Lending Quality Trust

SOC1 Service Organization Controls 1 (Audit)

SSBCI State Small Business Credit Initiative

STIP Short Term Investment Pool

TFBP Trust Funds Bond Pool

TFIP Trust Funds Investment Pool

TIF Tax Increment Financing

TIFD Tax Increment Financing District

TRS Teachers' Retirement System

TUCS Trust Universe Comparison Service

UIP Unified Investment Program

VIX Volatility Index

ASSET CLASS ACRONYMS

DEPAC	Domestic Equity Pension Asset Class
IEPAC	International Equity Pension Asset Class
PEPAC	Private Equity Pension Asset Class
NRPAC	National Resources Pension Asset Class
REPAC	Real Estate Pension Asset Class
TIPAC	TIPS Pension Asset Class
BFPAC.....	Broad Fixed Income Pension Asset Class
USPAC	UST/AGY Pension Asset Class
IGPAC	Investment Grade Corp Pension Asset Class
MBPAC.....	MBS Pension Asset Class
HYPAC	High Yield Pension Asset Class
DSPAC	Diversified Strategies Pension Asset Class
CPAC.....	Cash Pension Asset Class