# PUBLIC SCHOOL FUND INVESTMENT BOARD MEETING AGENDA, MAY 12, 2025

## **VIDEO CONFERENCE VIA ZOOM LINK:**

Join Zoom Meeting

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Meeting ID: 883 4924 7434 Passcode: Yp7VaJ

## **Public School Fund Investment Board Members:**

Dave Young - Colorado State Treasurer – Board Chair Jerome DeHerrera, Esq. - Achieve Law Group Wendy Dominguez - Innovest Portfolio Solutions Deb Froeb - State Land Board Commissioners Lupe Gutierrez-Vasquez

X. Public Comment 1:20 (5 min)

XI. Board Adjournment

I. Call to Order	D. Young	Noon
II. Roll Call	D. Young	
III. Approval of Minutes from Feb 10, 2025 Board Meeting	D. Young	12:03
V. Asset Allocation transition and rebalancing recommendation	Callan	12:05 (10 min)
VI. 2025 Q1 Market Update and Performance Review	Callan	12:15 (15 min)
VII. OML education and review of CORA	AG's Office	12:30 (15 min)
VIII. Fund Manager Presentation: Janus – Short Duration	Janus	12:45 (20 min)
IX. Other Business  a. Legislative update  b. Upcoming meetings  c. IPS	L.Marvin-Riley	/ 1:05 (15 min)



## Public School Fund Investment Board Special Board Meeting Meeting Minutes March 4, 2024 Held Via Zoom

## **Board Members in Attendance:**

Dave Young Wendy Dominguez Deborah Froeb Lupe Gutierrez-Vasquez

## 2:02 - 2:04 PM Welcome, Roll call

## 2:04 - 2:07 PM Meeting minutes from the February 10, 2025, Board Meeting

Ms. Dominguez moved to approve the February 10, 2025, meeting minutes. Ms. Gutierrez-Vasquez seconded the motion.

• The motion passed without objection.

## 12:07 - 12:09 PM Senate Bill 25 -167

Mr. Rothaus gave an overview of the bill. This bill initially responded to some issues the Board has raised over the past year for a portion of the portfolio, which would involve investments in a new space for educators and affordable housing. The beginning of the bill addresses and sets requirements for what the Board has discussed. The later parts of the bill will go further and create further investments for the Board and the Treasury Pool. Many of these investments have never been made by the Board or the State. The Board has always believed that, under section 2 of the State constitution, such investments would be unconstitutional.

The Treasury opposes the bill and would like the Board to discuss its concerns and decide whether it would like to make a formal response or take action on it. There is a chance that this legislation will lead to litigation. Deb is concerned that this bill changes the role of the Board.

## 2:20 - 2:24 PM Motion for Executive Session

Treasurer Young made a motion for the executive session. I move, pursuant to section 24-6-402(3)(a)(II) of the Colorado Revised Statutes, to adjourn the public portion of this meeting and to reconvene in executive session, together with our attorney and staff, for the purpose of receiving legal advice relating to the proposed legislation currently known as SB25-167, invest State Funds to Benefit Communities. Wendy Seconded the motion.

- Dave Young Yes
- Jerome DeHerrera Excused
- Wendy Dominguez Yes
- Deborah Froeb Yes
- Lupe Gutierrez-Vasquez Yes

## 2:24 – 2:54 PM Executive Session

## 2:54 3:02 PM Resume Regular Meeting

Ms. Dominguez suggested that the Board formally oppose the bill. It would be better if it came from the Board than from individuals. Ms. Froeb supports opposing the bill and wonders if the Board should articulate other aspects of the bill that expand beyond concerns that the Treasurer's office has, which caused the Board to reject the bill. Some examples that would be included in the letter were discussed.

Mrs. Marvin-Riley offered to work with the Board to draft a letter for the Board to approve. She will work with the Board members directly and not as a group.

Ms. Dominguez motioned for Leah to draft an opposition letter based on the broad discussion during this meeting and send it to the Board members individually for their comments. Ms. Froeb seconded the motion.

- Dave Young Yes
- Jerome DeHerrera Excused
- Wendy Dominguez Yes
- Deborah Froeb Yes
- Lupe Gutierrez-Vasquez Yes

## 3:02 - 3:04 PM Public comments

·Written Comments

There were no written comments

· Verbal Comments

There were no verbal comments

## 3:04 Meeting adjourned

# Callan

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May 12, 2025

# Colorado Public School Permanent Fund

Rebalancing Update

**Alex Browning** 

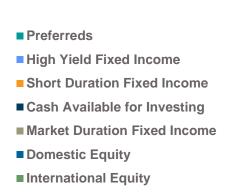
Senior Vice President

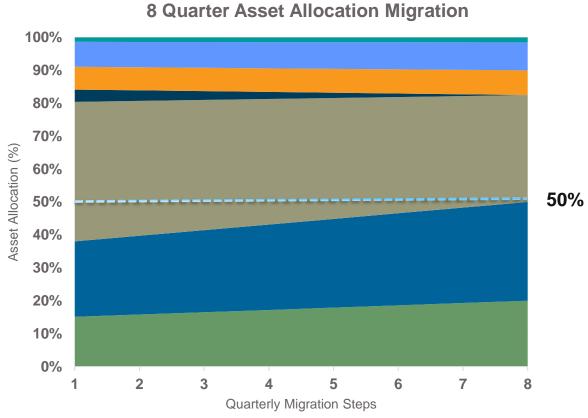
Perry Hopper, CFA, CAIA

Senior Vice President

## **Asset Allocation Migration**

## Calendar Years 2025 and 2026







## **Funding Plan**

			Reba	lancing Transact	ions <mark>2025 ( \$</mark> mill			
	Market Value	% Mkt Val		August	November	February	Market Value	% Mkt Val
Asset Classes	12/31/2024	Allocation	May Rebalance	Rebalance	Rebalance	Rebalance	03/31/2026	Allocation
Total Equity	\$601.5	35.1%	\$28.6	\$28.6	\$28.6	\$28.6	\$715.8	41.8%
Market Duration Fixed Income	\$750.0	43.8%	\$0.0	\$0.0	(\$26.5)	(\$32.5)	\$691.0	40.3%
Short Duration Fixed Income	\$115.7	6.7%	\$1.4	\$1.4	\$1.4	\$1.4	\$121.2	7.1%
High Income Strategies	\$148.9	8.7%	\$2.5	\$2.5	\$2.5	\$2.5	\$159.1	9.3%
Cash Available for Investing	\$97.8	5.7%	(\$32.5)	(\$32.5)	(\$6.0)	\$0.0	\$26.8	1.6%
Total	\$1,713.9	100.00%	\$0.0	\$0.0	\$0.0	\$0.0	\$1,713.9	100.00%

- Rebalancing transactions and ending market values are estimates.
- Cash available for investing is utilized as the initial funding source for increasing equity exposure.
- Model does not include DNR forecasted cash flows over the year. In practice, those flows will be used for August
  and November rebalancings and reduce the reliance on the bond portfolio as a source of funds.
- The model also does not include forecasted changes in market values due to market movements.
- Model will be updated quarterly to account for additional cash flows and market value changes.

# Callan

**Disclosures** 

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# Callan Corporate Headquarters Regional Offices One Bush Street Suite 800 Chicago San Francisco, CA 94104 Denver New Jersey www.callan.com Portland Corporate Headquarters Regional Offices Callan Callan

# Callan

March 31, 2025
CO Public School Permanent Fund
Investment Measurement Service
Quarterly Review

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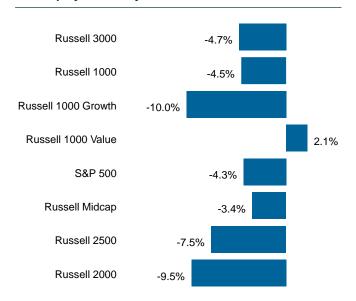
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#### **U.S. EQUITIES**

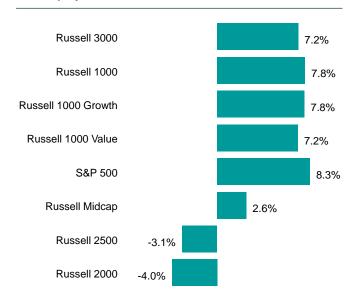
## Choppy start to the New Year

- The U.S. equity market gave back some of its 2024 gains in 1Q25. The S&P 500 Index fell by 4.3%, partially driven by escalating trade tensions and the potential negative impact from the emergence of China-based AI company DeepSeek as a rival to U.S.-based AI leaders.
- Mega-cap growth stocks, particularly the Magnificent 7, lagged the broad index. Market leadership broadened out during the quarter.
- From a sector perspective, Consumer Discretionary and Technology were the two worst-performing sectors, while Energy and Health Care performed the best.
- During 1Q, mid cap stocks performed the best followed by large cap stocks. Small cap stocks continued to underperform as elevated interest rates and fear of tariffs weighed on smaller, more leveraged business models.
- Value outperformed growth across the market cap spectrum, reversing the long-term trend of growth outperformance.
- Given the macroeconomic uncertainty, volatility has spiked to levels last seen in the early months of the pandemic.
- Investors were focused on tariff impacts as some of the better-performing sectors (e.g., Financials, Health Care, and Utilities) are more insulated.
- Factors that performed well during the quarter included return on equity, dividend yield, and low beta.
- Despite their outperformance, value stocks remain cheap versus growth stocks based on forward P/E ratios.
- The Russell 2000 Index has a trailing four-year annualized return of -1% due in part to rising rates, lower sales growth, and fiscal stimulus skewing in favor of larger companies.
   Long-term periods of small cap underperformance have been followed by periods of outperformance historically.
- Small caps, on both an absolute and relative (to large caps) basis, continue to trade at historic lows.

## **U.S. Equity: Quarterly Returns**

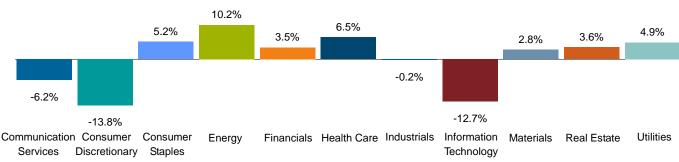


## U.S. Equity: One-Year Returns



Sources: FTSE Russell, S&P Dow Jones Indices

## S&P Sector Returns, Quarter Ended 3/31/25



Source: S&P Dow Jones Indices



#### **GLOBAL EQUITIES**

## **Broad market**

 Following a challenging 4Q24, global equity markets rebounded, with broad indices posting their best one-quarter period compared to the S&P 500 in a decade.

## **Emerging markets**

- Emerging markets ended the quarter in positive territory, although trailing their developed market peers.
- India, which accounted for nearly 20% of the index, had another negative quarter.
- China, which struggled in 4Q, saw strong gains and ended with the highest trailing 12-month return in five years.

## Growth vs. value

 Value was the decisive winner in both emerging and developed markets. This had multiple causes, including European stimulus, higher expected interest rates, and persistent inflation driving investors to defensive, dividendpaying stocks.

#### U.S. dollar

 The U.S. dollar experienced a significant decline, dropping 4% relative to a broad basket of developed currencies, which provided additional support to developed ex-U.S. markets but was less supportive in emerging markets.

## Seven states propose legislation to remove China

- Indiana, Florida, Missouri, Oklahoma, Kansas, Texas, and North Dakota proposed legislation to divest from Chinese/Hong Kong investments in the last 18 months; all but one passed.
- The divestment initiatives reflect national security concerns, economic considerations, and political factors.

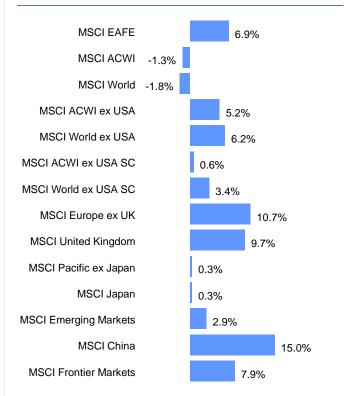
## **Ex-China universe**

- According to Morningstar, the number of ex-China emerging market funds has nearly doubled to approximately 70 globally over the past two years.
- These funds have attracted substantial investor interest, with assets under management increasing by 75% in 2024 (through October) to over \$26 billion.

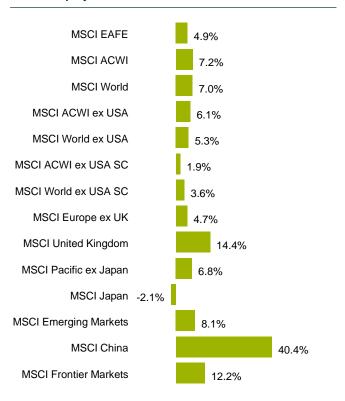
## Reversing the trend with currency

- The U.S. dollar depreciated against the euro, yen, pound, and most emerging market currencies. After a strong performance throughout 2024, the U.S. Dollar Index declined approximately 4% in 1Q25, driven by increased investor allocations to non-U.S. assets.
- Concerns about fading U.S. exceptionalism and reduced confidence in the dollar's safe-haven status—amid rising geopolitical and economic isolation—contributed to last quarter's market shifts.

## **Global Equity: Quarterly Returns**



## **Global Equity: One-Year Returns**



Source: MSCI



#### **U.S. FIXED INCOME**

#### **Macro environment**

- U.S. interest rates and corporate credit spreads held steady for most of the quarter until policy signals from the Trump administration—including deficit reduction and tariff rumors prompted investors to reprice risk assets.
- In March, the Fed kept rates unchanged despite rising volatility from softer economic data and White House uncertainty, while other major central banks shifted to a more accommodative stance.

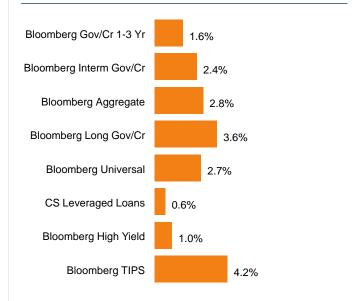
## Performance and drivers

- The Bloomberg US Aggregate Bond Index rose 2.8% as falling rates drove gains, making it the top contributor to the quarter's positive returns. Although investors demanded higher premiums for credit risk, these concerns did not offset overall gains.
- Nonetheless, credit spreads across public markets generally widened in March.

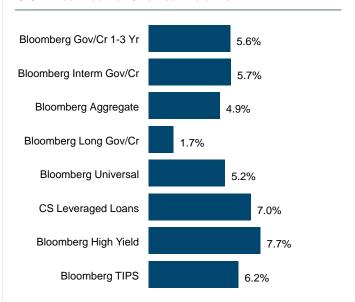
## **Valuations**

- Corporate credit spreads across both investment grade and leveraged finance were "priced to perfection" before the new administration induced uncertainties that caused spreads to widen.
- New issuance across IG and HY were also on pace to match 2024 YTD supply, but issuers delayed offerings as demand softened.
- Credit remains in high demand, driven by attractive absolute yields. New issuance remains healthy in response to the demand for credit, with issuance on par with the YTD 2024 page.
- Spreads tightened for both investment grade and high yield during the quarter. April's bout of volatility cheapened BBs vs BBBs, thus giving more opportunities for sector rotation and security selection.
- Liability management exercises (LMEs), including distressed exchanges, have become increasingly common in leveraged finance. In these cases, borrowers restructure stressed or distressed debt outside of bankruptcy court, spurring lenderon-lender aggression. Including LMEs in default calculations materially elevates default metrics.
- Rising interest costs and weak covenant structures spur the rise in LMEs. Borrowers are transferring previously collateralized assets to new unrestricted subsidiaries and issuing new debt that becomes senior to existing debt.
- Loan issuer downgrades remain elevated relative to upgrades.

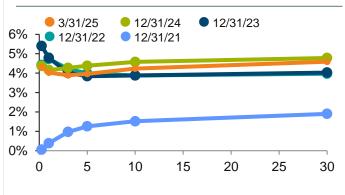
## U.S. Fixed Income: Quarterly Returns



#### U.S. Fixed Income: One-Year Returns



## **U.S. Treasury Yield Curves**



Sources: Bloomberg, Credit Suisse



#### **MUNICIPAL BONDS**

## Flat in 1Q

- The municipal bond AAA-rated curve steepened notably, with short yields falling but long-end yields rising 30–40 bps.
- The spread between AAA 2-year bonds and 10-year bonds widened 30 bps over the quarter, while Muni/Treasury ratios rose sharply across the curve.

## Strong issuance met with mixed demand

- New issuance totaled \$119 billion, up 15% YOY, supported by March's \$41.4 billion in volume.
- Demand softened, with funds experiencing outflows in March, weighted toward ETFs.

## Muni valuations cheapened, still rich vs 10-year average

- 10-year AAA Muni/10-year Treasury yield ratio climbed to 77.25%, from 66.96% in 4Q.
- Longer maturities saw the biggest move: 30-year ratio surged to 92.4%, up 10.8 percentage points.

#### **GLOBAL FIXED INCOME**

#### Macro environment

- Forecasts for global economic growth in 2025 were revised slightly downward by 0.1 percentage points to 3.1%, citing weakening business and consumer sentiment.
- Global central banks maintained a cautious tone, balancing disinflationary pressures with ongoing political and traderelated uncertainties.
- The ECB and BOE both cut rates, while the BOJ raised its short-term policy rate by 25 bps to 0.5%, reaching its highest level since 2008.

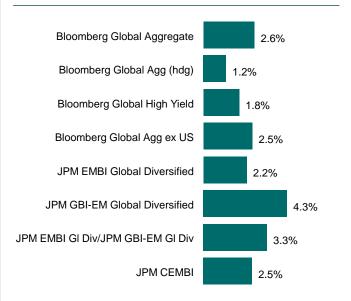
## U.S. dollar weakened

- The U.S. dollar declined after reaching a two-year high in early January; the heaviest decline occurred in early March when tariffs on Mexican and Canadian goods went into effect.
- The Bloomberg Global Aggregate ex US Hedged Index traded down 0.2% for the quarter, while the Unhedged Index rose by 2.5% due to U.S. dollar weakness.

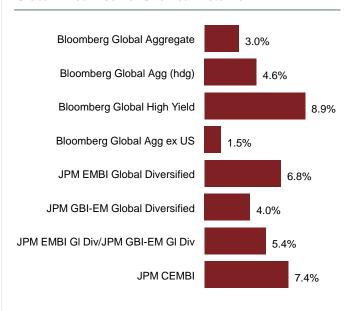
## Emerging market debt was a bright spot

 Local currency sovereign bonds (JPM GBI-EM GD) led the strength in EM debt, while hard currency sovereigns (JPM EMBI GD) also had a solid quarter as investors repriced the U.S. for slower growth and a weaker dollar. This was a reversal of performance from the prior quarter.

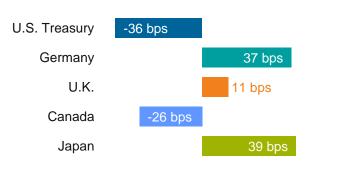
## **Global Fixed Income: Quarterly Returns**



#### Global Fixed Income: One-Year Returns



## Change in 10-Year Global Government Bond Yields



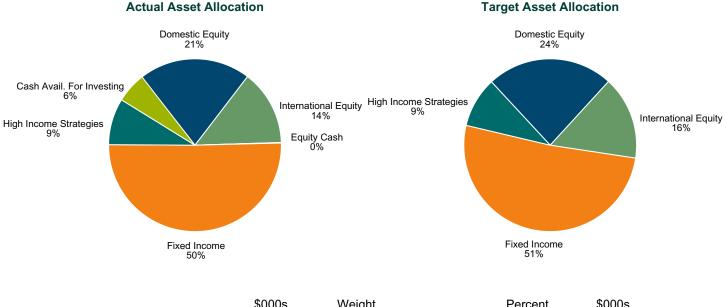
Sources: Bloomberg, JP Morgan



## **Actual vs Target Asset Allocation** As of March 31, 2025

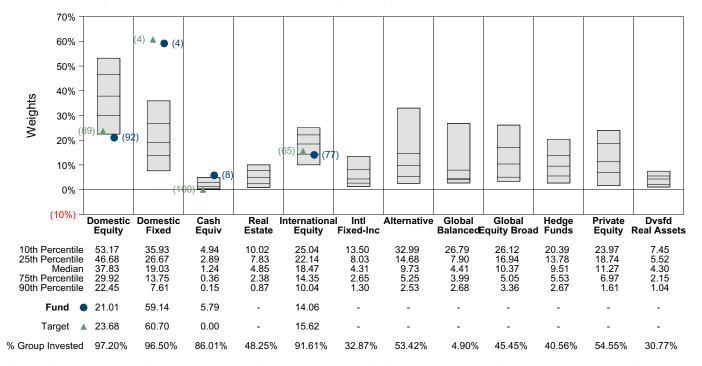
**Actual Asset Allocation** 

The top left chart shows the Fund's asset allocation as of March 31, 2025. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Endow/Foundation - Mid (100M-1B).



	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equity	360,360	21.0%	23.7%	(2.7%)	(45,869)
International Equity	241,183	14.1%	15.6%	(1.6%)	(26,777)
Equity Cash	1,560	0.1%	0.0%	0.1%	1,560
Fixed Income	865,637	50.5%	51.3%	(0.9%)	(14,926)
High Income Strategies	148,939	8.7%	9.4%	(0.7%)	(11,803)
Cash Avail. For Investing	97,814	5.7%	0.0%	5.7%	97,814
Total	1.715.494	100.0%	100.0%		

## Asset Class Weights vs Callan Endow/Foundation - Mid (100M-1B)



<sup>\*</sup> Current Quarter Target = 44.1% Blmbg:Aggregate, 23.7% Russell 3000 Index, 15.6% MSCI ACWI xUS (Net), 8.0% Blmbg HY Corp, 7.2% Blmbg Gov/Cred 1-3 Yr and 1.4% ICE All US Cap Secs.



## **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2025, with the distribution as of December 31, 2024. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

## **Asset Distribution Across Investment Managers**

	March 31, 2025					December 31, 2024		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight		
Total Equity (1)	\$603,103,576	35.16%	\$(1,046,374)	\$(2,886,221)	\$607,036,172	36.13%		
Domestic Equity	\$360,360,439	21.01%	\$12,855,357	\$(18,234,248)	\$365,739,330	21.77%		
iShares Core S&P Total US Market ETF	360,360,439	21.01%	12,855,357	(18,234,248)	365,739,330	21.77%		
International Equity	\$241,183,430	14.06%	\$(13,833,302)	\$14,303,436	\$240,713,296	14.33%		
iShares MSCI Emerging ETF	70,236,558	4.09%	(3,191,086)	2,418,313	71,009,330	4.23%		
iShares MSCI Canada ETF	18,827,356	1.10%	(1,080,053)	224,607	19,682,802	1.17%		
iShares Core MSCI EAFE ETF	152,119,516	8.87%	(9,562,163)	11,660,516	150,021,164	8.93%		
Equity Cash	1,559,707	0.09%	(68,429)	1,044,590	583,545	0.03%		
Total Fixed Income	\$865,637,404	50.46%	\$(8,425,508)	\$21,090,293	\$852,972,619	50.76%		
Market Duration	\$749,973,496	43.72%	\$(7,057,279)	\$19,165,637	\$737,865,139	43.91%		
Colorado Treasurer's Portfolio	749,973,496	43.72%	(7,057,279)	19,165,637	737,865,139	43.91%		
Short Duration	\$115,663,908	6.74%	\$(1,368,229)	\$1,924,656	\$115,107,481	6.85%		
Janus Henderson (2)	115,663,908	6.74%	(1,368,229)	1,924,656	115,107,481	6.85%		
High Income Strategies	\$148,939,231	8.68%	\$(2,934,197)	\$2,510,147	\$149,363,281	8.89%		
High Yield Fixed Income	\$126,634,435	7.38%	\$(2,655,202)	\$2,206,864	\$127,082,773	7.56%		
Mackay Shield US High Yield (3)	126,634,435	7.38%	(2,655,202)	2,206,864	127,082,773	7.56%		
Preferred Securities	\$22,304,796	1.30%	\$(278,995)	\$303,283	\$22,280,509	1.33%		
Principal Preferred Securities (3)	22,304,796	1.30%	(278,995)	303,283	22,280,509	1.33%		
Cash Available For Investing	\$97,813,733	5.70%	\$24,116,207	\$2,708,910	\$70,988,615	4.22%		
Total Fund	\$1,715,493,944	100.0%	\$11,710,128	\$23,423,128	\$1,680,360,688	100.0%		

<sup>(3)</sup> Funded in July 2020.



<sup>(1)</sup> Funded in December 2017.

<sup>(2)</sup> Funded in November 2018.

## **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2025. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

## Returns for Periods Ended March 31, 2025

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Total Equity	(0.48%)	7.24%	6.95%	15.53%	-
Total Equity Benchmark (7)	(0.76%)	7.05%	6.87%	15.35%	9.11%
Domestic Equity	(4.85%)	7.26%	8.18%	18.15%	-
Russell 3000 Index	(4.72%)	7.22%	8.22%	18.18%	11.80%
International Equity	5.80%	6.63%	4.74%	11.51%	-
MSCI ACWI ex US	5.23%	6.09%	4.48%	10.92%	4.98%
Total Fixed Income	2.50%	5.34%	1.20%	0.16%	1.78%
Total Fixed Income Benchmark (1)	2.62%	5.01%	0.84%	(0.15%)	1.51%
Market Duration	2.62%	5.15%	0.75%	(0.27%)	1.65%
Colorado Treasurer's Portfolio (2)	2.62%	5.15%	0.75%	(0.27%)	1.65%
PSPF Custom Benchmark (3)	2.78%	4.88%	0.52%	(0.40%)	1.44%
Short Duration	1.79%	6.54%	4.09%	3.20%	-
Janus Henderson Short Duration	1.79%	6.54%	4.09%	3.20%	-
Blmbg Gov/Cred 1-3 Yr	1.63%	5.61%	3.10%	1.56%	1.73%
85% 1-3YR G/C; 15% 1-3YR BB (4)	1.59%	5.77%	3.45%	2.25%	2.14%
High Income Strategies	1.71%	7.71%	5.45%	-	-
High Income Strategies Benchmark (5)	0.94%	7.36%	4.70%	6.99%	4.91%
High Yield Fixed Income	1.74%	7.61%	5.59%	-	-
Mackay Shield US High Yield	1.74%	7.61%	5.59%	-	-
Blmbg High Yield	1.00%	7.69%	4.98%	7.29%	5.01%
Preferred Securities	1.56%	8.30%	4.58%	-	-
Principal Preferred Securities	1.56%	8.30%	4.58%	-	-
ICE BofA US All Cap Secs	0.58%	5.46%	3.08%	5.22%	4.25%
Total Fund w/o CAI (6)	1.29%	6.19%	3.56%	4.21%	
Total Fund Benchmark*	1.13%	5.50%	2.81%	3.62%	3.08%
Total Fully Delicilillark	1.13%	5.50%	2.01%	3.02%	3.00%

See pg. 11 for full benchmark history.

All composites and manager returns are shown gross-of-fees.

- (1) Current quarter's Total Fixed Income Benchmark consists of 87.5% Bloomberg U.S. Aggregate and
- 12.5% Bloomberg Gov/Credit 1-3 Yrs.
- (2) Includes cash returns starting July 2017.
- (3) The PSPF Fixed Income Portfolio Custom Benchmark consisted of 37% U.S. Treasury 1-10 Year Index, 34% Mortgages
- 0-10 Year WAL Index, 19% AAA U.S. Agencies 1-10 Year Index and 10% U.S. Corporates AAA Rated 1-10

Years Index through March 31, 2017, 100% Bloomberg U.S. Aggregate, thereafter.

- (4) Benchmark consists of 85% Bloomberg 1-3 Year Government/Credit Index and 15% BofAML
- 1-3 Year BB US Cash Pay High Yield Index.
- (5) Benchmark consists of 85% Blmbg High Yield Index and 15% ICE BofA US All Cap Secs Index.
- (6) The Total Fund return calculations do not include Cash Available for Investing.
- (7) Equity Benchmark is 60% Russell 3000/40% ACWI ex US.



<sup>\*</sup> Current Quarter Target = 44.1% Blmbg:Aggregate, 23.7% Russell 3000 Index, 15.6% MSCI ACWI xUS (Net), 8.0% Blmbg HY Corp, 7.2% Blmbg Gov/Cred 1-3 Yr and 1.4% ICE All US Cap Secs.

## **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	6/2024- 3/2025	FY 2024	FY 2023	FY 2022	FY 2021
Total Equity	4.76%	18.33%	16.33%	(15.85%)	41.59%
Total Equity Benchmark (7)	4.63%	18.44%	16.57%	(16.06%)	40.77%
Domestic Equity	3.81%	23.24%	18.83%	(13.95%)	44.30%
Russell 3000 Index	3.88%	23.13%	18.95%	(13.87%)	44.16%
International Equity	5.63%	11.26%	12.28%	(18.97%)	37.78%
MSCI ACWI ex US	5.08%	11.62%	12.72%	(19.42%)	35.72%
Total Fixed Income	4.95%	3.47%	(0.04%)	(9.76%)	(0.27%)
Total Fixed Income Benchmark (1)	4.83%	2.91%	(0.76%)	(9.52%)	(0.26%)
Market Duration	4.91%	3.06%	(0.53%)	(10.55%)	(0.55%)
Colorado Treasurer's Portfolio (2)	4.91%	3.06%	(0.53%)	(10.55%)	(0.55%)
PSPF Custom Benchmark (3)	4.81%	2.63%	(0.94%)	(10.29%)	(0.33%)
Short Duration	5.21%	6.13%	2.92%	(4.33%)	2.33%
Janus Henderson Short Duration	5.21%	6.13%	2.92%	(4.33%)	2.33%
Blmbg Gov/Cred 1-3 Yr	4.61%	4.87%	0.52%	(3.56%)	0.44%
85% 1-3YR G/C; 15% 1-3YR BB (4)	4.70%	5.35%	1.49%	(3.83%)	1.70%
High Income Strategies	6.14%	10.47%	8.18%	(9.38%)	_
High Income Strategies Benchmark (5)	6.29%	10.62%	7.93%	(12.89%)	15.13%
High Yield Fixed Income	6.07%	10.00%	9.23%	(9.09%)	-
Mackay Shield US High Yield	6.07%	10.00%	9.23%	(9.09%)	-
Blmbg High Yield	6.53%	10.44%	9.06%	(12.81%)	15.37%
Preferred Securities	6.53%	13.18%	2.29%	(11.11%)	-
Principal Preferred Securities	6.53%	13.18%	2.29%	(11.11%)	-
ICE BofA US All Cap Secs	4.95%	11.63%	1.66%	(13.33%)	13.67%
Total Fund w/o CAI (6)	4.93%	9.09%	5.66%	(11.58%)	8.30%
Total Fund Benchmark *	4.64%	7.67%	4.54%	(11.46%)	7.98%

See pg. 11 for full benchmark history.

All composites and manager returns are shown gross-of-fees.

- (1) Current quarter's Total Fixed Income Benchmark consists of 87.5% Bloomberg U.S. Aggregate and
- 12.5% Bloomberg Gov/Credit 1-3 Yrs.
- (2) Includes cash returns starting July 2017.
- (3) The PSPF Fixed Income Portfolio Custom Benchmark consisted of 37% U.S. Treasury 1-10 Year Index, 34% Mortgages
- 0-10 Year WAL Index, 19% AAA U.S. Agencies 1-10 Year Index and 10% U.S. Corporates AAA Rated 1-10

Years Index through March 31, 2017, 100% Bloomberg U.S. Aggregate, thereafter.

- (4) Benchmark consists of 85% Bloomberg 1-3 Year Government/Credit Index and 15% BofAML
- 1-3 Year BB US Cash Pay High Yield Index.
- (5) Benchmark consists of 85% Blmbg High Yield Index and 15% ICE BofA US All Cap Secs Index.
- (6) The Total Fund return calculations do not include Cash Available for Investing.
- (7) Equity Benchmark is 60% Russell 3000/40% ACWI ex US.



<sup>\*</sup> Current Quarter Target = 44.1% Blmbg:Aggregate, 23.7% Russell 3000 Index, 15.6% MSCI ACWI xUS (Net), 8.0% Blmbg HY Corp, 7.2% Blmbg Gov/Cred 1-3 Yr and 1.4% ICE All US Cap Secs.

## **Total Fund Benchmark Definition**

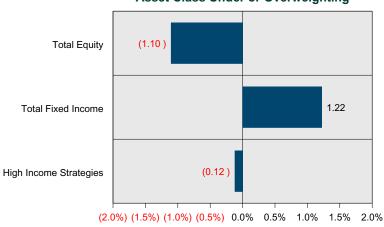
Inception to Dec 31, 2017		
Market Duration	PFSF Fixed Income Benchmark	100%
January 1st, 2018 - December :	21th 2012	
US Equity	Russell 3000 Index	12.009
International Equity	MSCI ACWI ex US	8.009
Market Duration	Bloomberg Barclays Aggregate	72.009
Short Duration	Bloomberg Barclays Gov/Cred 1-3 Yr	8.00
January 1st, 2019 - September	30th, 2020	
US Equity	Russell 3000 Index	12.00
International Equity	MSCI ACWI ex US	8.00
Market Duration	Bloomberg Barclays Aggregate	72.00
Short Duration	Bloomberg Barclays Gov/Cred 1-3 Yr	8.00
October 1st, 2020 - March 31st	. 2021	
US Equity	Russell 3000 Index	12.009
International Equity	MSCI ACWI ex US	8.00
Market Duration	Bloomberg Barclays Aggregate	67.50
Short Duration	Bloomberg Barclays Gov/Cred 1-3 Yr	7.50
High Yield	Bloomberg Barclays US High Yield	4.25
Preferred Securities	ICE BofA U.S. All Capital Securities Index	0.75
April 1st, 2021 - June 30th, 202	1	
US Equity	Russell 3000 Index	14.70
International Equity	MSCI ACWI ex US	9.80
Market Duration	Bloomberg Barclays Aggregate	61.50
Short Duration	Bloomberg Barclays Gov/Cred 1-3 Yr	7.50
High Yield	Bloomberg Barclays US High Yield	5.50
Preferred Securities	ICE BofA U.S. All Capital Securities Index	1.00
July 1st, 2021 - September 30, 2	021	
US Equity	Russell 3000 Index	16.35
International Equity	MSCI ACWI ex US	10.90
Market Duration	Bloomberg Barclays Aggregate	57.00
Short Duration	Bloomberg Barclays Gov/Cred 1-3 Yr	7.50
High Yield	Bloomberg Barclays US High Yield	7.00
Preferred Securities	ICE BofA U.S. All Capital Securities Index	1.25
	·	
October 1st, 2021 - Current	Purcall 2000 Indov	49.00
US Equity	Russell 3000 Index	18.00
International Equity	MSCI ACWI ex US	12.00
	Bloomberg Barclays Aggregate	52.50
	Disamban Band O /O 14 0 V	7.50
Short Duration	Bloomberg Barclays Gov/Cred 1-3 Yr	
Market Duration Short Duration High Yield Preferred Securities	Bloomberg Barclays Gov/Cred 1-3 Yr Bloomberg Barclays US High Yield ICE BofA U.S. All Capital Securities Index	7.50° 8.50° 1.50°



## Quarterly Total Fund Relative Attribution - March 31, 2025

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

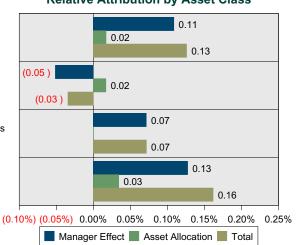
## **Asset Class Under or Overweighting**



## **Actual vs Target Returns**

## (0.48) **Total Equity** (0.76)2.50 Total Fixed Income 2.62 1.71 High Income Strategies 0.94 1.29 Total 1.13 (2%)(1%)0% 1% 2% 3% 4% Actual Target

## **Relative Attribution by Asset Class**



## Relative Attribution Effects for Quarter ended March 31, 2025

Total			1.29% =	1.13%	+ 0.13% +	0.03%	0.16%
Total Equity Total Fixed Income High Income Strategie	38% 53% s 9%	39% 51% 9%	(0.48%) 2.50% 1.71%	(0.76%) 2.62% 0.94%	0.11% ( <mark>0.05%)</mark> 0.07%	0.02% 0.02% 0.00%	0.13% (0.03%) 0.07%
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative <u>Return</u>

<sup>\*</sup> Current Quarter Target = 44.1% Blmbg:Aggregate, 23.7% Russell 3000 Index, 15.6% MSCI ACWI xUS (Net), 8.0% Blmbg HY Corp, 7.2% Blmbg Gov/Cred 1-3 Yr and 1.4% ICE All US Cap Secs.

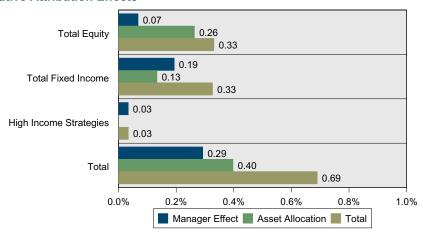


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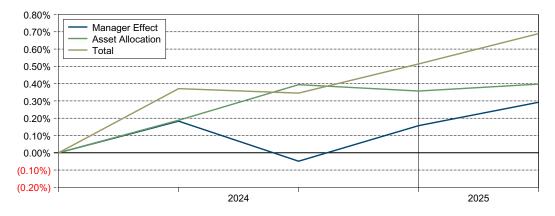
## **Cumulative Total Fund Relative Attribution - March 31, 2025**

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

## **One Year Relative Attribution Effects**



## **Cumulative Relative Attribution Effects**



## One Year Relative Attribution Effects

Asset Class Total Equity Total Fixed Income High Income Strategie	Effective Actual Weight 37% 54% s 9%	Effective Target Weight 33% 58% 9%	Actual Return 7.24% 5.34% 7.71%	Target Return 7.05% 5.01% 7.36%	Manager Effect 0.07% 0.19% 0.03%	Asset Allocation 0.26% 0.13% 0.00%	Total Relative Return 0.33% 0.33% 0.03%
Total			6.19% =	5.50%	+ 0.29%	+ 0.40%	0.69%

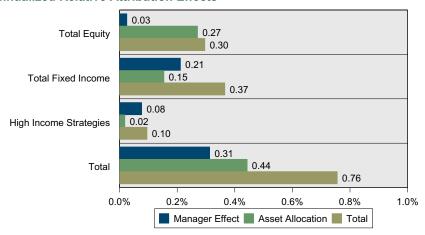
<sup>\*</sup> Current Quarter Target = 44.1% Blmbg:Aggregate, 23.7% Russell 3000 Index, 15.6% MSCI ACWI xUS (Net), 8.0% Blmbg HY Corp, 7.2% Blmbg Gov/Cred 1-3 Yr and 1.4% ICE All US Cap Secs.



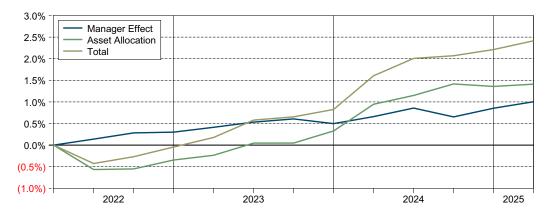
## **Cumulative Total Fund Relative Attribution - March 31, 2025**

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

## **Three Year Annualized Relative Attribution Effects**



## **Cumulative Relative Attribution Effects**



## Three Year Annualized Relative Attribution Effects

Asset Class Total Equity Total Fixed Income High Income Strategie	Effective Actual Weight 33% 57% s 10%	Effective Target Weight 29% 62% 8%	Actual Return 6.95% 1.20% 5.45%	Target Return 6.87% 0.84% 4.70%	Manag Effec 0.03 0.21 0.08	t Allocation 8% 0.27% % 0.15%	Total Relative Return 0.30% 0.37% 0.10%
Total			3.56% =	2.81%	+ 0.31	% + 0.44%	0.76%

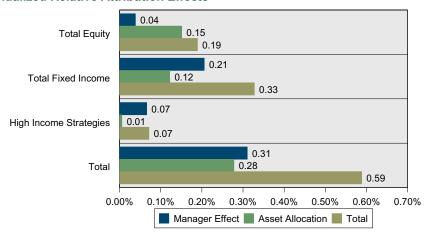
<sup>\*</sup> Current Quarter Target = 44.1% Blmbg:Aggregate, 23.7% Russell 3000 Index, 15.6% MSCI ACWI xUS (Net), 8.0% Blmbg HY Corp, 7.2% Blmbg Gov/Cred 1-3 Yr and 1.4% ICE All US Cap Secs.



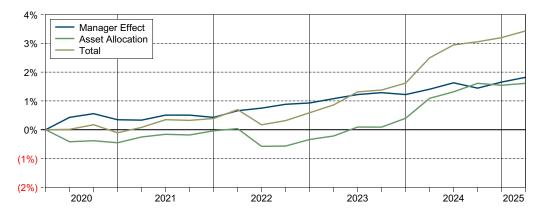
## **Cumulative Total Fund Relative Attribution - March 31, 2025**

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

## **Five Year Annualized Relative Attribution Effects**



## **Cumulative Relative Attribution Effects**



## **Five Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity Total Fixed Income High Income Strategie	30% 62% es 8%	27% 66% 7%	15.53% 0.16% -	15.35% (0.15%) -	0.04% 0.21% 0.07%	0.15% 0.12% 0.01%	0.19% 0.33% 0.07%
Total			4.21% =	3.62% +	0.31% +	0.28%	0.59%

<sup>\*</sup> Current Quarter Target = 44.1% Blmbg:Aggregate, 23.7% Russell 3000 Index, 15.6% MSCI ACWI xUS (Net), 8.0% Blmbg HY Corp, 7.2% Blmbg Gov/Cred 1-3 Yr and 1.4% ICE All US Cap Secs.



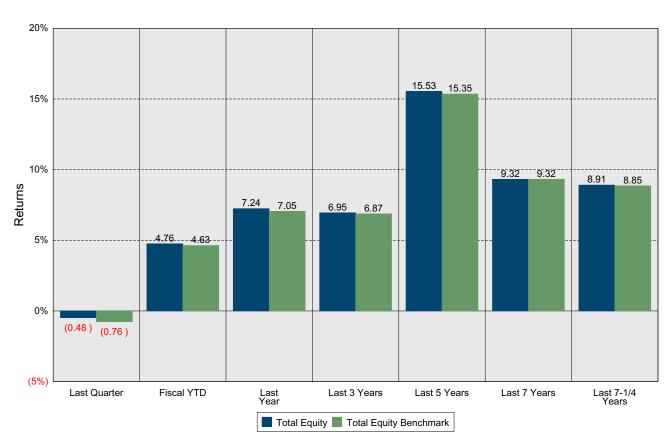
## Total Equity Period Ended March 31, 2025

## **Inception Date**

Parametric was funded December 12th, 2017.

## **Quarterly Summary and Highlights**

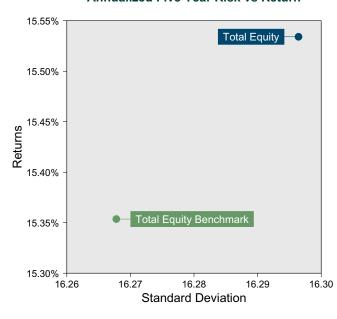
• Total Equity's portfolio outperformed the Total Equity Benchmark by 0.29% for the quarter and outperformed the Total Equity Benchmark for the year by 0.19%.



## **Relative Return vs Total Equity Benchmark**

## 0.8% 0.6% 0.4% Relative Returns 0.2% 0.0% (0.2%)(0.4%)(0.6%)2020 2021 2022 2023 2024 25 Total Equity

## Annualized Five Year Risk vs Return



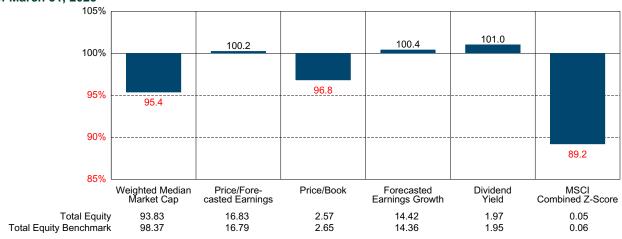


# Total Equity Equity Characteristics Analysis Summary

## **Portfolio Characteristics**

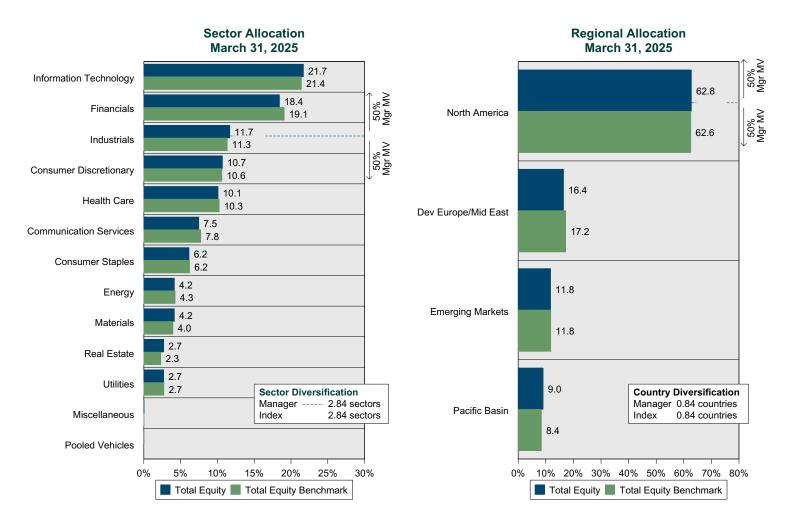
This graph compares the manager's portfolio characteristics relative to the benchmark's portfolio characteristics.

# Portfolio Characteristics Relative to Total Equity Benchmark as of March 31, 2025



## **Sector Weights**

The graph below contrasts the manager's sector weights for the most recent quarter with those of the benchmark. The regional allocation chart also compares the manager's geographical region weights with those of the benchmark.





## Domestic Equity Period Ended March 31, 2025

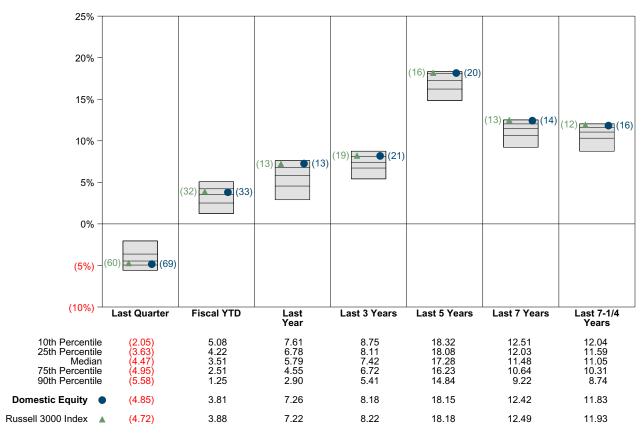
## **Inception Date**

Parametric was funded December 12th, 2017.

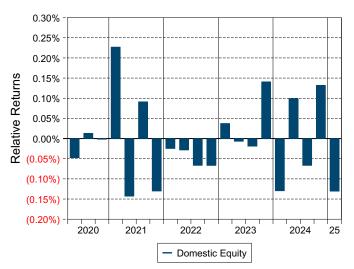
## **Quarterly Summary and Highlights**

- Domestic Equity's portfolio posted a (4.85)% return for the quarter placing it in the 69 percentile of the EF- Domestic Equity group for the quarter and in the 13 percentile for the last year.
- Domestic Equity's portfolio underperformed the Russell 3000 Index by 0.12% for the quarter and outperformed the Russell 3000 Index for the year by 0.04%.

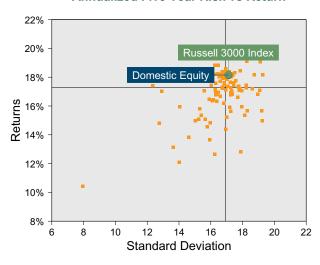
## Performance vs EF- Domestic Equity (Gross)



## Relative Return vs Russell 3000 Index



EF- Domestic Equity (Gross)
Annualized Five Year Risk vs Return



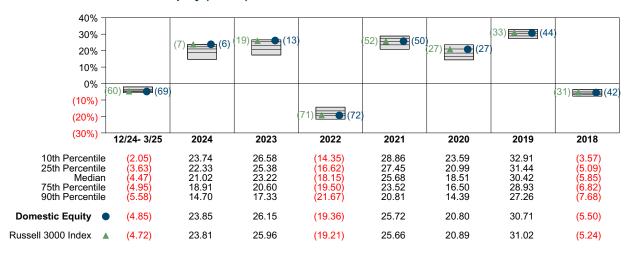


## Domestic Equity Return Analysis Summary

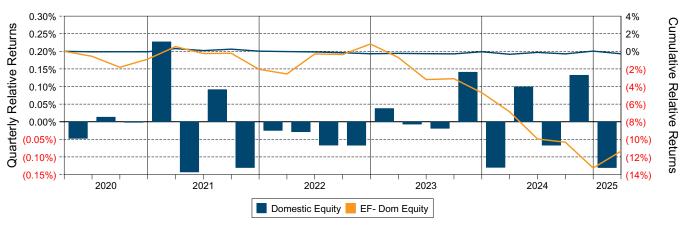
## **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

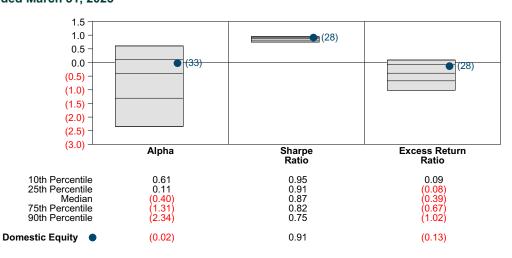
## Performance vs EF- Domestic Equity (Gross)



## **Cumulative and Quarterly Relative Returns vs Russell 3000 Index**



Risk Adjusted Return Measures vs Russell 3000 Index Rankings Against EF- Domestic Equity (Gross) Five Years Ended March 31, 2025



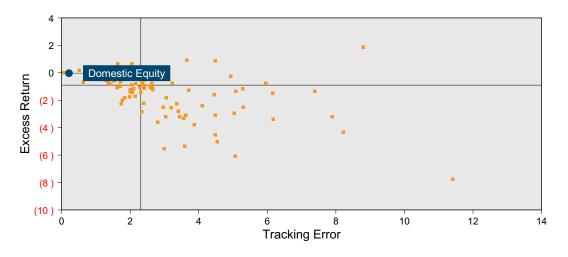


## Domestic Equity Risk Analysis Summary

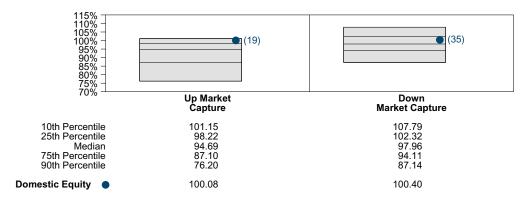
### **Risk Analysis**

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

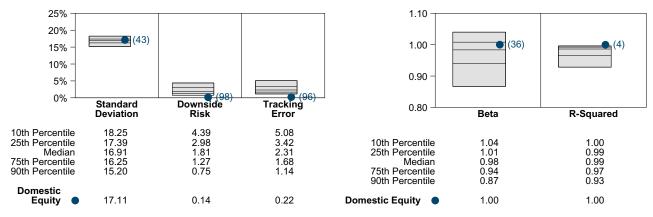
# Risk Analysis vs EF- Domestic Equity (Gross) Five Years Ended March 31, 2025



Market Capture vs Russell 3000 Index Rankings Against EF- Domestic Equity (Gross) Five Years Ended March 31, 2025



Risk Statistics Rankings vs Russell 3000 Index Rankings Against EF- Domestic Equity (Gross) Five Years Ended March 31, 2025



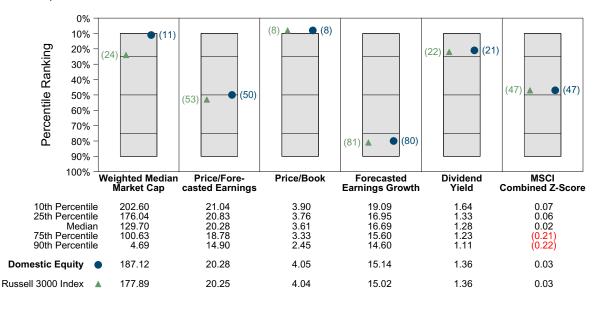


# Domestic Equity Equity Characteristics Analysis Summary

## **Portfolio Characteristics**

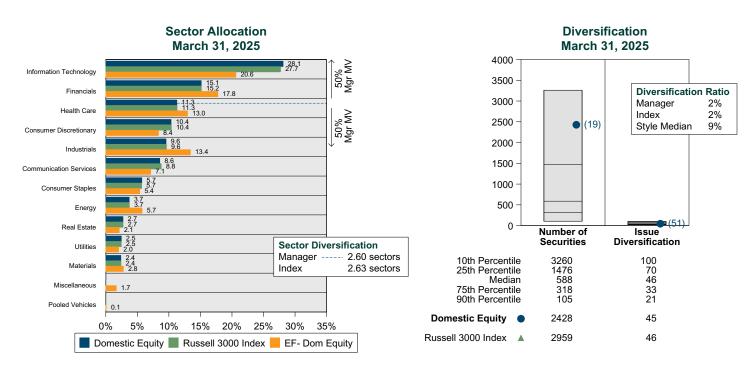
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against EF- Domestic Equity as of March 31, 2025



## **Sector Weights**

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.





# International Equity Period Ended March 31, 2025

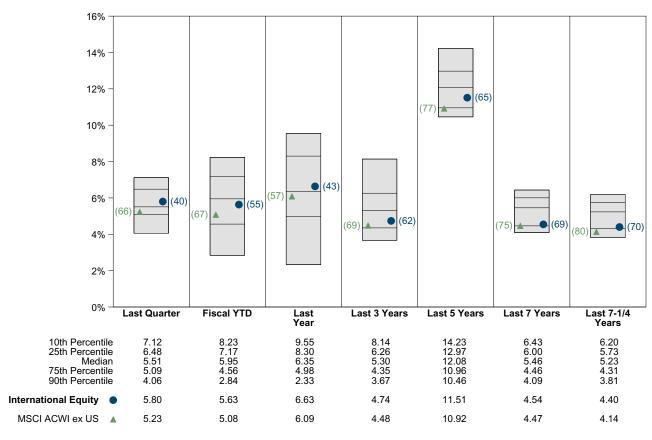
## **Inception Date**

Parametric was funded December 12th, 2017.

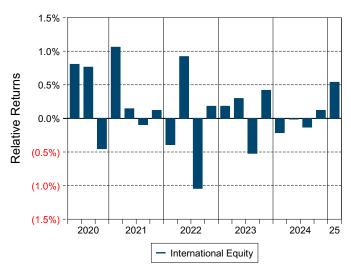
## **Quarterly Summary and Highlights**

- International Equity's portfolio posted a 5.80% return for the quarter placing it in the 40 percentile of the EF-International Equity group for the quarter and in the 43 percentile for the last year.
- International Equity's portfolio outperformed the MSCI ACWI ex US by 0.57% for the quarter and outperformed the MSCI ACWI ex US for the year by 0.55%.

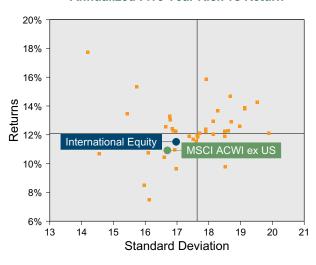
## Performance vs EF- International Equity (Gross)



## Relative Return vs MSCI ACWI ex US



# EF- International Equity (Gross) Annualized Five Year Risk vs Return



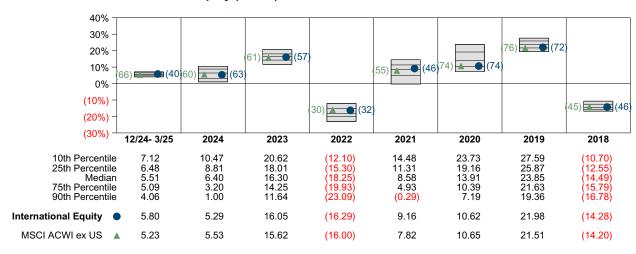


# International Equity Return Analysis Summary

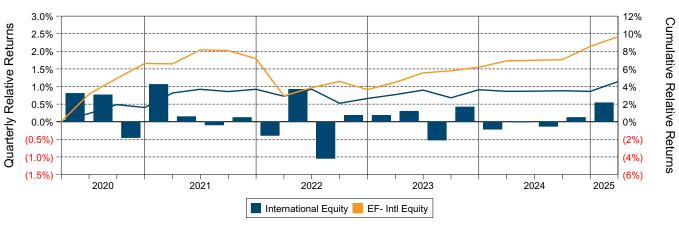
## **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

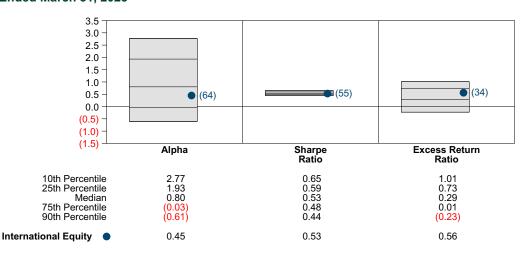
## Performance vs EF- International Equity (Gross)



## Cumulative and Quarterly Relative Returns vs MSCI ACWI ex US



Risk Adjusted Return Measures vs MSCI ACWI ex US Rankings Against EF- International Equity (Gross) Five Years Ended March 31, 2025



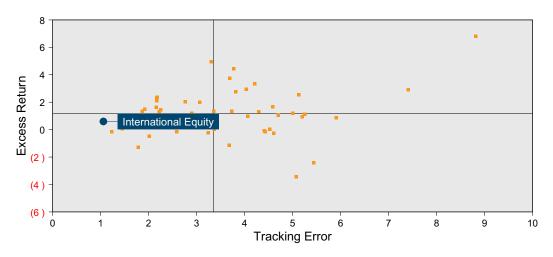


# International Equity Risk Analysis Summary

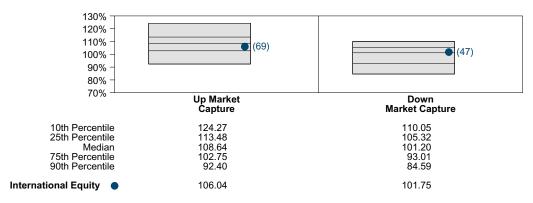
#### **Risk Analysis**

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

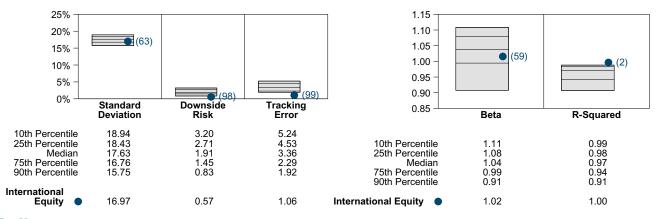
## Risk Analysis vs EF- International Equity (Gross) Five Years Ended March 31, 2025



## Market Capture vs MSCI ACWI ex US Rankings Against EF- International Equity (Gross) Five Years Ended March 31, 2025



## Risk Statistics Rankings vs MSCI ACWI ex US Rankings Against EF- International Equity (Gross) Five Years Ended March 31, 2025



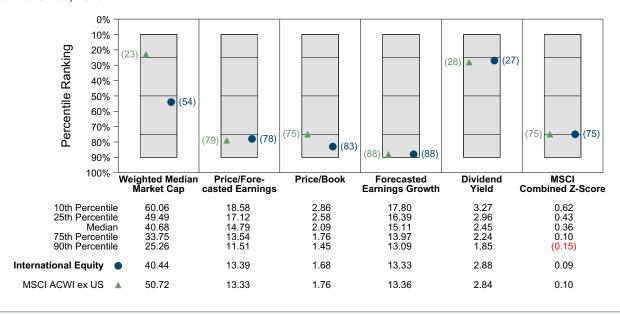


# International Equity Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

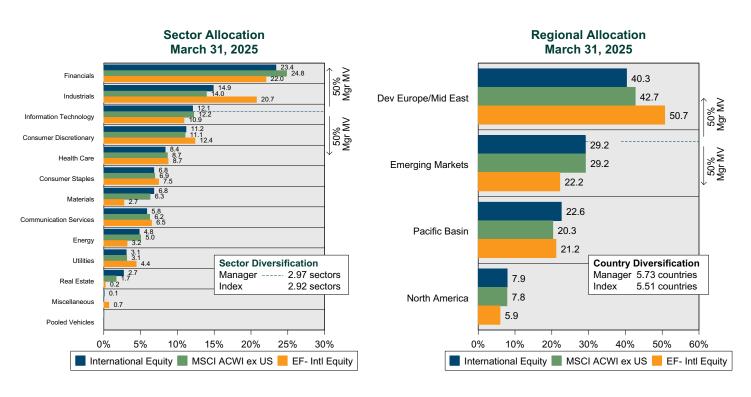
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against EF- International Equity as of March 31, 2025



#### **Sector Weights**

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.





## Total Fixed Income Period Ended March 31, 2025

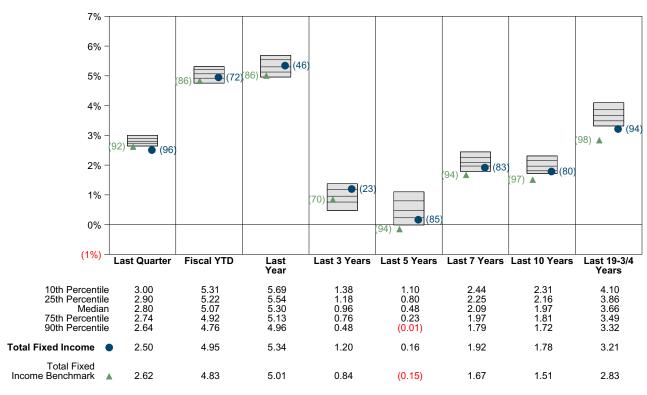
#### **Benchmark Definition**

Total Fixed Income Benchmark consists of 100% PFSF Fixed Income Benchmark through December 31, 2018, 90% Bloomberg U.S. Aggregate and 10% Bloomberg Gov/Credit 1-3 Yrs through March 31, 2021, 89% Bloomberg U.S. Aggregate and 11% Bloomberg Gov/Credit 1-3 Yrs through June 30, 2021 and 87.5% Bloomberg U.S. Aggregate and 12.5% Bloomberg Gov/Credit 1-3 Yrs, thereafter.

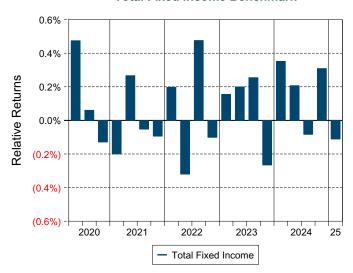
## **Quarterly Summary and Highlights**

- Total Fixed Income's portfolio posted a 2.50% return for the quarter placing it in the 96 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 46 percentile for the last year.
- Total Fixed Income's portfolio underperformed the Total Fixed Income Benchmark by 0.11% for the quarter and outperformed the Total Fixed Income Benchmark for the year by 0.34%.

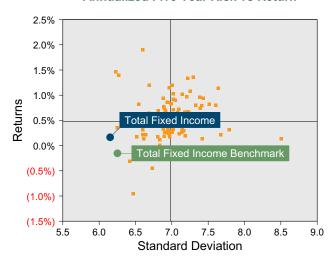
## Performance vs Callan Core Bond Fixed Income (Gross)



## Relative Returns vs Total Fixed Income Benchmark



## Callan Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return



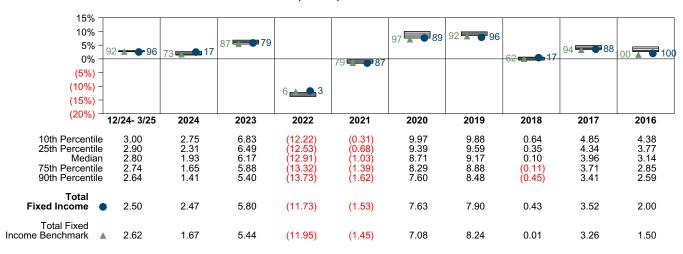


## Total Fixed Income Return Analysis Summary

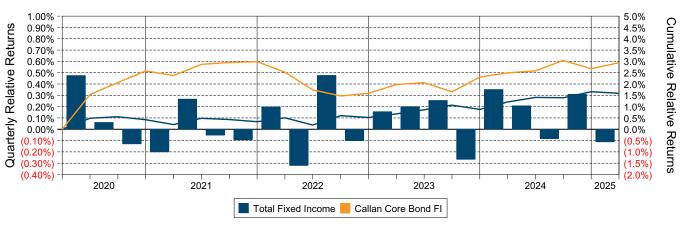
## **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

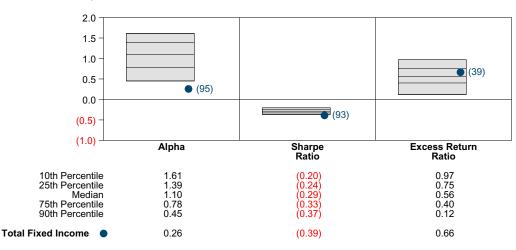
## Performance vs Callan Core Bond Fixed Income (Gross)



## Cumulative and Quarterly Relative Returns vs Total Fixed Income Benchmark



Risk Adjusted Return Measures vs Total Fixed Income Benchmark Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2025



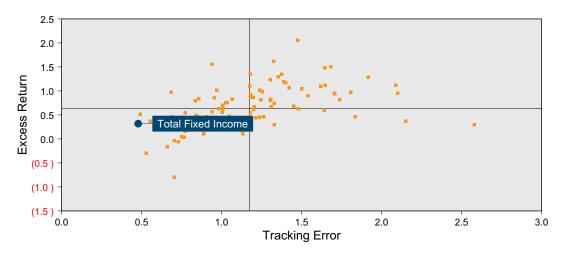


## Total Fixed Income Risk Analysis Summary

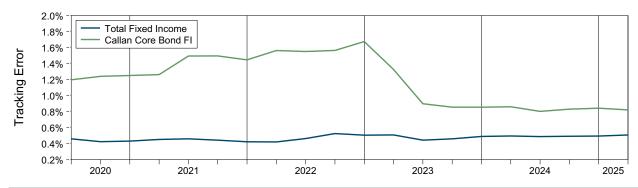
#### **Risk Analysis**

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

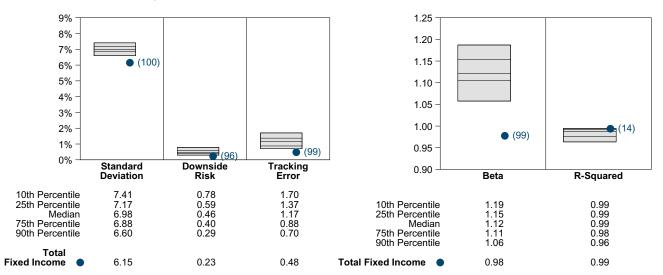
## Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2025



Rolling 12 Quarter Tracking Error vs Total Fixed Income Benchmark



Risk Statistics Rankings vs Total Fixed Income Benchmark Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2025



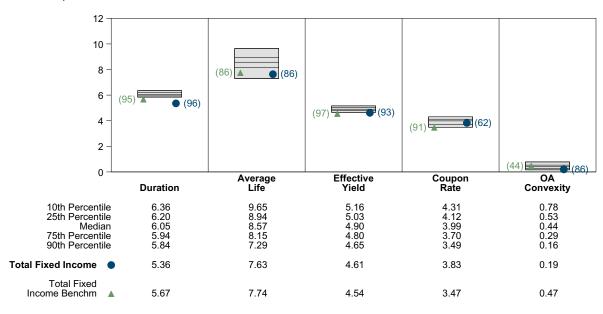


# **Total Fixed Income Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

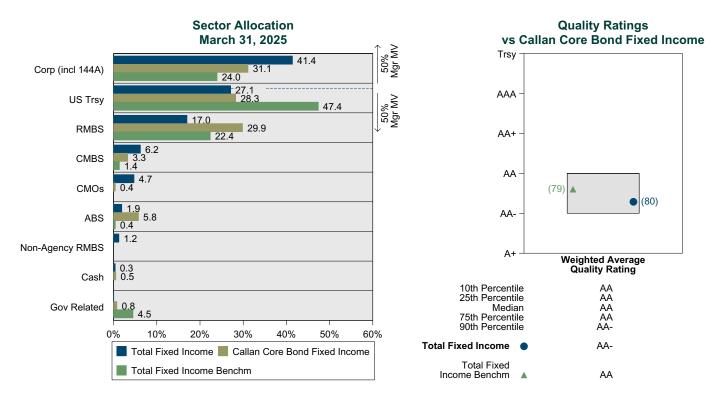
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of March 31, 2025



## **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

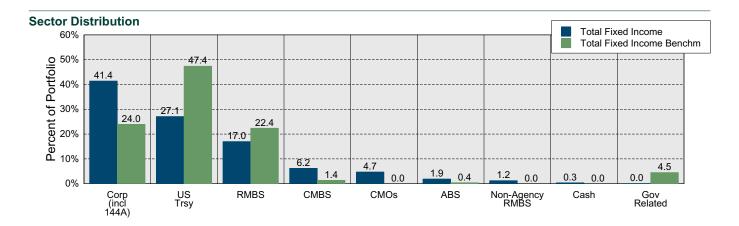


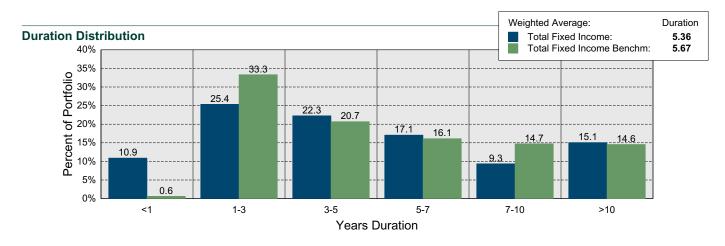


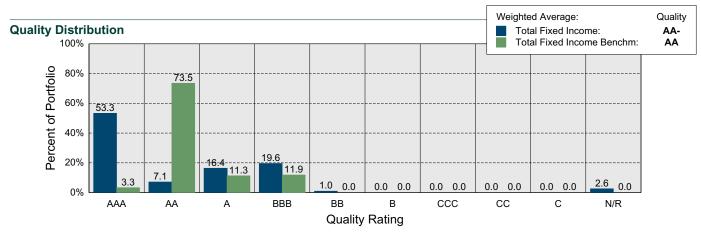
## Total Fixed Income Portfolio Characteristics Summary As of March 31, 2025

## **Portfolio Structure Comparison**

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.









## Colorado Treasurer's Portfolio Period Ended March 31, 2025

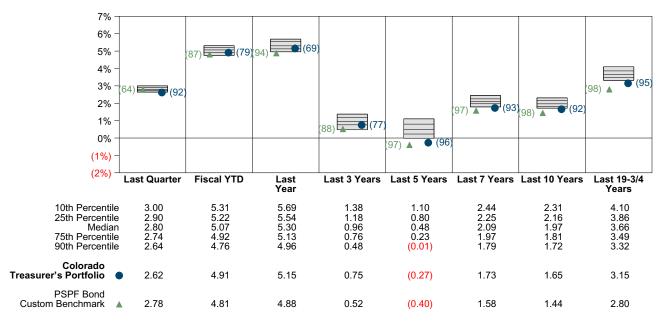
### **Investment Philosophy**

The Fixed Income Portfolio is managed by the Colorado State Treasury and was initially funded in 3Q 2005. The PSPF Custom Benchmark consisted of 37% U.S. Treasury 1-10 Year Index, 34% Mortgages 0-10 Year WAL Index, 19% AAA U.S. Agencies 1-10 Year Index and 10% U.S. Corporates AAA Rated 1-10 Years Index through March 31, 2017 and the Bloomberg U.S. Aggregate thereafter. It is important to note that the Fixed Income Portfolio has historically been managed under a buy and hold mandate for investment yield. The Callan Core Bond Fixed Income Manager Universe used to construct the floating bar chart exhibit below, representing 77 core fixed income managers and products, is largely composed of products following a total return mandate. The School Fund bond portfolio is subject to statutorily imposed net loss restrictions. As such, relative performance comparison of the Fixed Income Portfolio to this universe may not be entirely representative of relative performance.

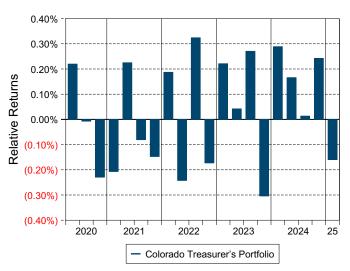
### **Quarterly Summary and Highlights**

- Colorado Treasurer's Portfolio's portfolio posted a 2.62% return for the quarter placing it in the 92 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 69 percentile for the last year.
- Colorado Treasurer's Portfolio's portfolio underperformed the PSPF Bond Custom Benchmark by 0.16% for the quarter and outperformed the PSPF Bond Custom Benchmark for the year by 0.27%.

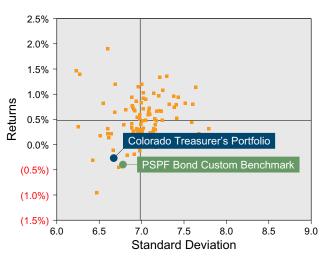
## Performance vs Callan Core Bond Fixed Income (Gross)



## Relative Returns vs PSPF Bond Custom Benchmark



Callan Core Bond Fixed Income (Gross)
Annualized Five Year Risk vs Return



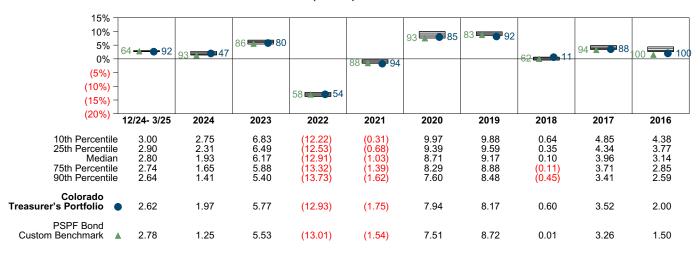


# Colorado Treasurer's Portfolio Return Analysis Summary

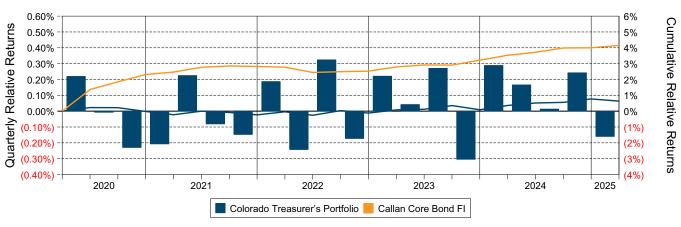
## **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

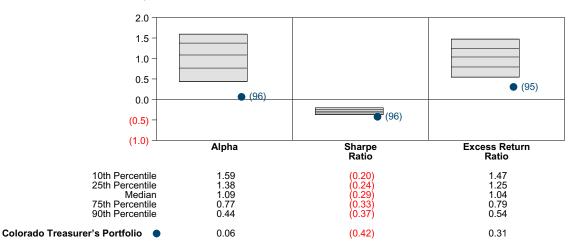
## Performance vs Callan Core Bond Fixed Income (Gross)



## Cumulative and Quarterly Relative Returns vs PSPF Bond Custom Benchmark



Risk Adjusted Return Measures vs PSPF Bond Custom Benchmark Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2025



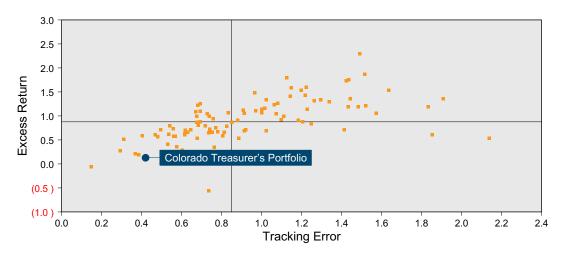


# Colorado Treasurer's Portfolio Risk Analysis Summary

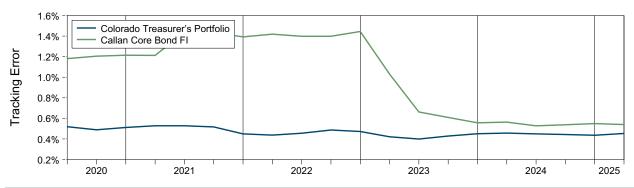
#### **Risk Analysis**

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

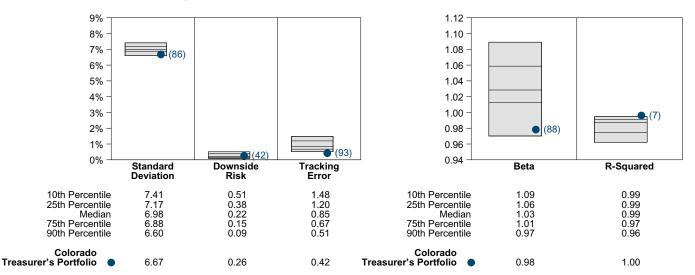
## Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2025



Rolling 12 Quarter Tracking Error vs PSPF Bond Custom Benchmark



Risk Statistics Rankings vs PSPF Bond Custom Benchmark Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2025



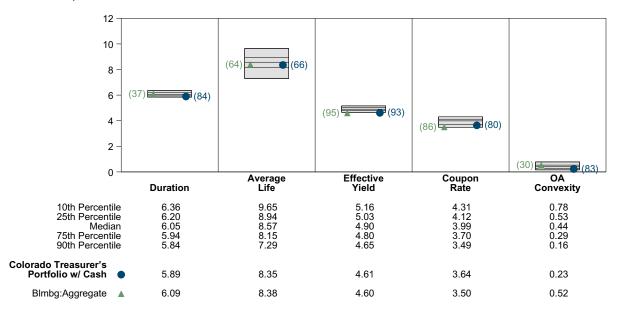


## Colorado Treasurer's Portfolio w/ Cash Bond Characteristics Analysis Summary

#### **Portfolio Characteristics**

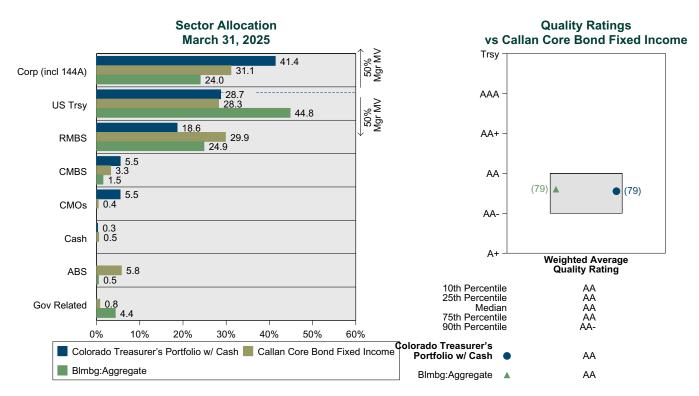
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style. Fixed Income Portfolio characteristics includes Cash Pool allocation.

## Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of March 31, 2025



## **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

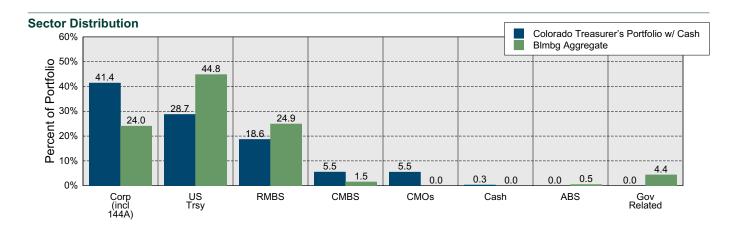


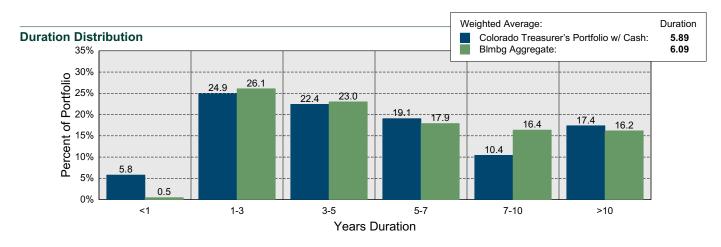


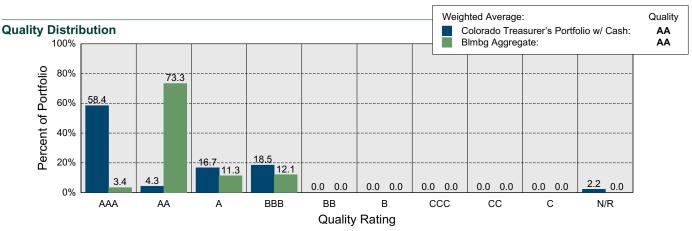
## Colorado Treasurer's Portfolio w/ Cash Portfolio Characteristics Summary As of March 31, 2025

## **Portfolio Structure Comparison**

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.









# Janus Henderson Short Duration Period Ended March 31, 2025

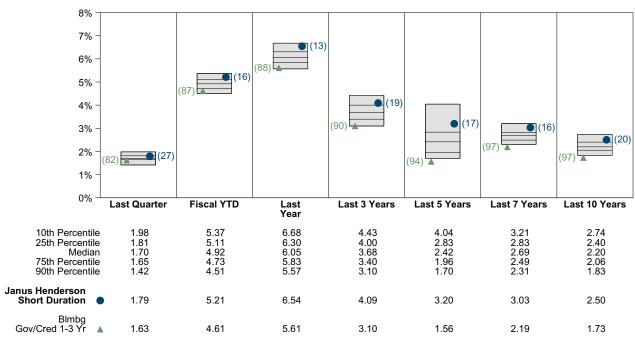
#### **Investment Philosophy**

Janus Henderson believes a bottom-up, fundamentally driven investment process that focuses on credit-oriented investments can generate risk-adjusted outperformance over time. A comprehensive bottom-up view drives decision-making at a macro level, enabling them to make informed decisions about allocations to all sectors of the fixed income universe. The Short Duration Fixed Income strategy emphasizes risk-adjusted performance and capital preservation with value generated principally from prudent credit selection and credit sector positioning. The Janus Henderson short duration portfolio was funded November 9th, 2018. Prior returns represent the manager's composite returns.

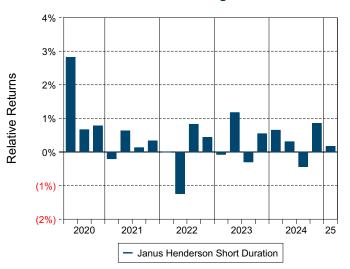
### **Quarterly Summary and Highlights**

- Janus Henderson Short Duration's portfolio posted a 1.79% return for the quarter placing it in the 27 percentile of the Callan Short Term Fixed Income group for the quarter and in the 13 percentile for the last year.
- Janus Henderson Short Duration's portfolio outperformed the Blmbg Gov/Cred 1-3 Yr by 0.17% for the quarter and outperformed the Blmbg Gov/Cred 1-3 Yr for the year by 0.94%.

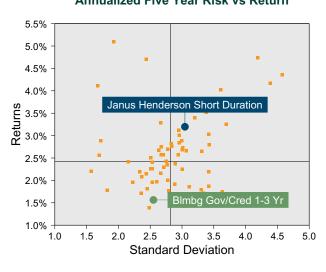
### Performance vs Callan Short Term Fixed Income (Gross)



#### Relative Return vs Blmbg Gov/Cred 1-3 Yr



# Callan Short Term Fixed Income (Gross) Annualized Five Year Risk vs Return



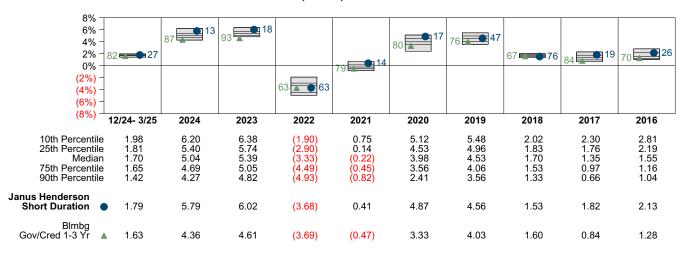


# Janus Henderson Short Duration Return Analysis Summary

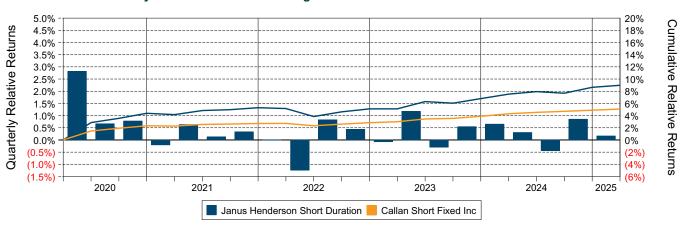
## **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

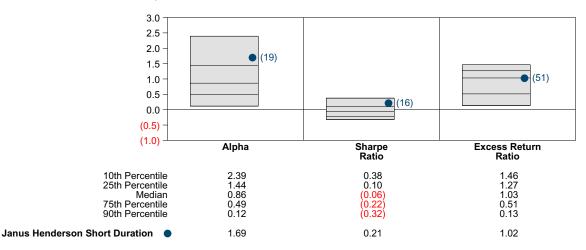
## Performance vs Callan Short Term Fixed Income (Gross)



## Cumulative and Quarterly Relative Returns vs Blmbg Gov/Cred 1-3 Yr



Risk Adjusted Return Measures vs Blmbg Gov/Cred 1-3 Yr Rankings Against Callan Short Term Fixed Income (Gross) Five Years Ended March 31, 2025



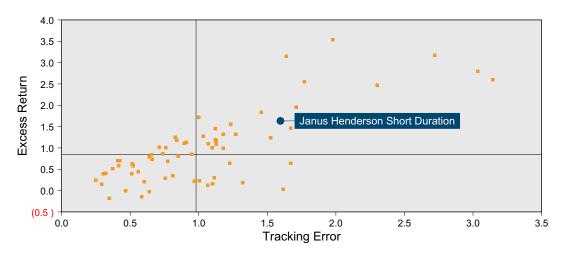


# Janus Henderson Short Duration Risk Analysis Summary

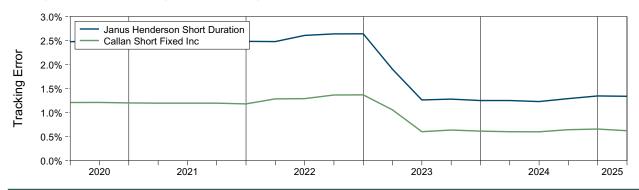
#### **Risk Analysis**

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

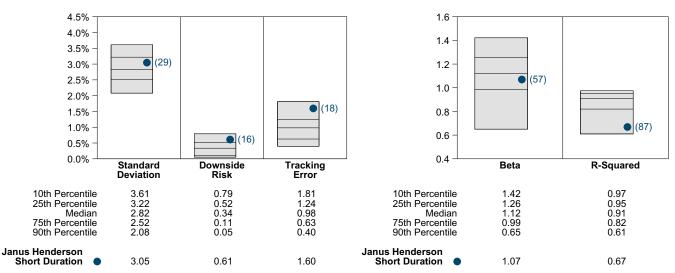
## Risk Analysis vs Callan Short Term Fixed Income (Gross) Five Years Ended March 31, 2025



Rolling 12 Quarter Tracking Error vs Blmbg Gov/Cred 1-3 Yr



Risk Statistics Rankings vs Blmbg Gov/Cred 1-3 Yr Rankings Against Callan Short Term Fixed Income (Gross) Five Years Ended March 31, 2025



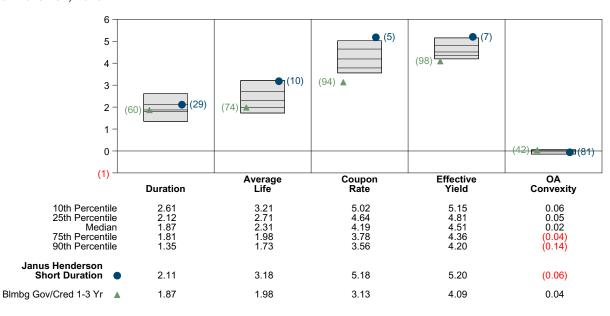


# Janus Henderson Short Duration Bond Characteristics Analysis Summary

#### **Portfolio Characteristics**

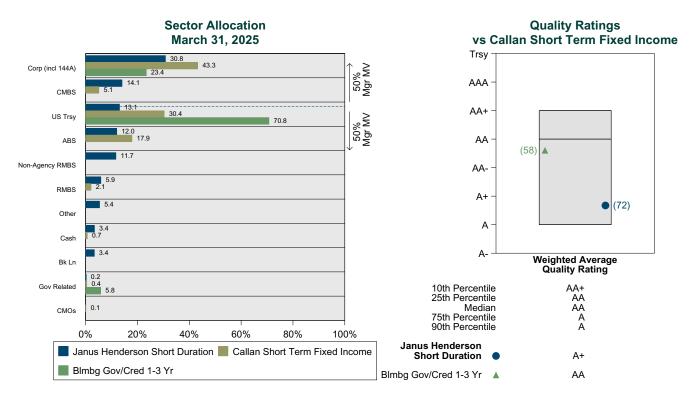
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style. Fixed Income Portfolio characteristics includes Cash Pool allocation.

## Fixed Income Portfolio Characteristics Rankings Against Callan Short Term Fixed Income as of March 31, 2025



## **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

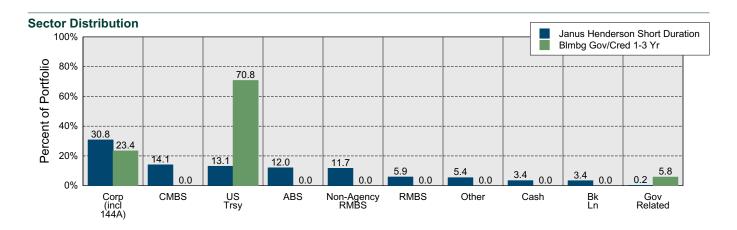


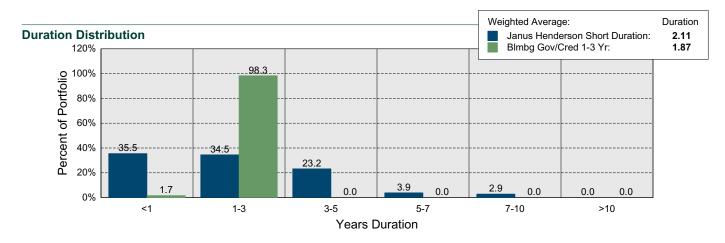


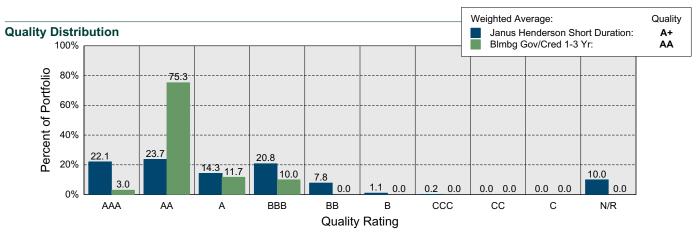
## Janus Henderson Short Duration Portfolio Characteristics Summary As of March 31, 2025

## **Portfolio Structure Comparison**

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.









## High Income Strategies Period Ended March 31, 2025

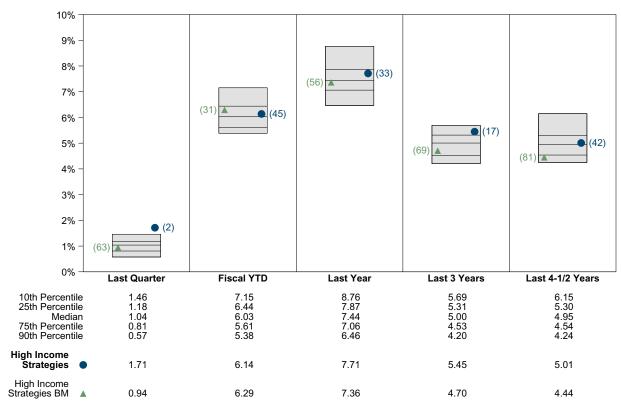
#### **Benchmark Definition**

The High Income Strategies Benchmark consists of 85% Blmbg High Yield Index and 15% ICE BofA US All Cap Secs Index.

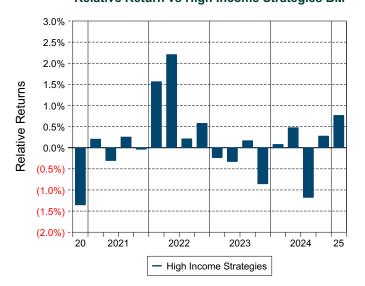
## **Quarterly Summary and Highlights**

- High Income Strategies's portfolio posted a 1.71% return for the quarter placing it in the 2 percentile of the Callan High Yield Fixed Income group for the quarter and in the 33 percentile for the last year.
- High Income Strategies's portfolio outperformed the High Income Strategies BM by 0.77% for the quarter and outperformed the High Income Strategies BM for the year by 0.35%.

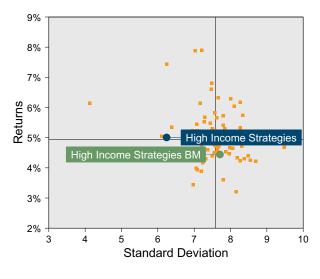
## Performance vs Callan High Yield Fixed Income (Gross)



## Relative Return vs High Income Strategies BM



## Callan High Yield Fixed Income (Gross) Annualized Four and One-Half Year Risk vs Return



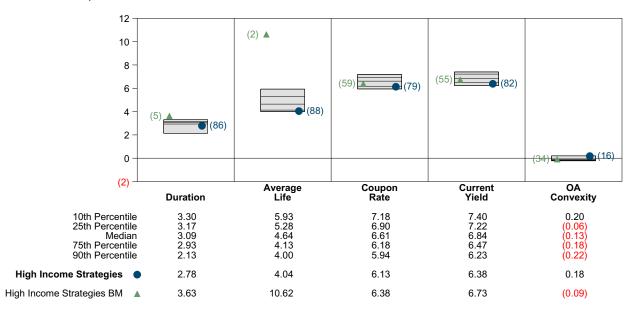


# High Income Strategies Bond Characteristics Analysis Summary

#### **Portfolio Characteristics**

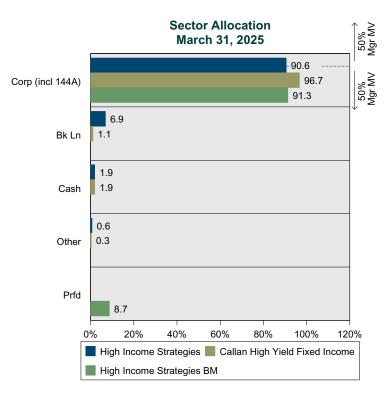
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style. Fixed Income Portfolio characteristics includes Cash Pool allocation.

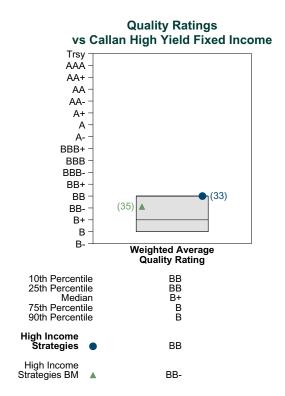
## Fixed Income Portfolio Characteristics Rankings Against Callan High Yield Fixed Income as of March 31, 2025



## **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



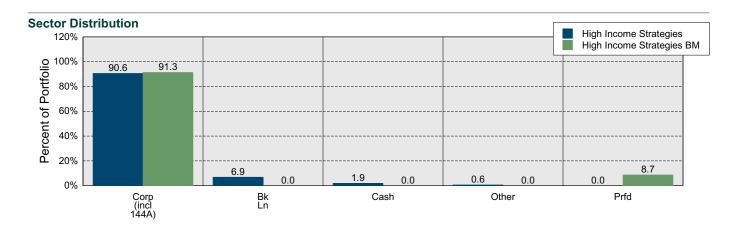


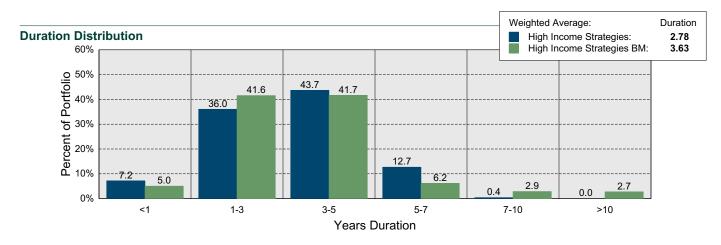


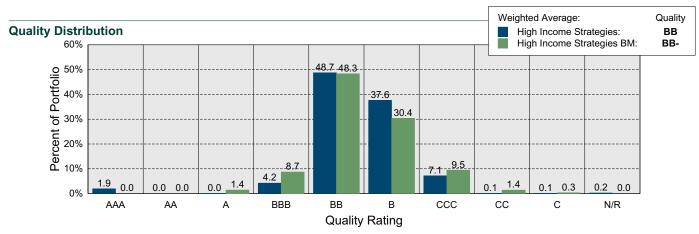
## High Income Strategies Portfolio Characteristics Summary As of March 31, 2025

## **Portfolio Structure Comparison**

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.









## Mackay Shield US High Yield Period Ended March 31, 2025

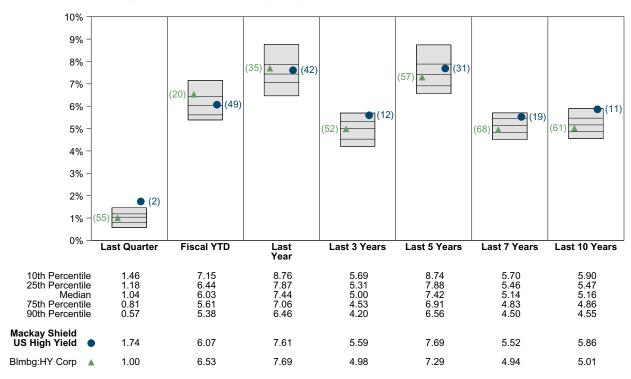
#### **Investment Philosophy**

MacKay relies on rigorous fundamental analysis to select companies with strong free cash flow and asset coverage in its quest to maximize yield, adjusted for default risk. The strategy is well diversified with sector and quality weights a residual of the security selection process. MacKay believes that long-term value is best created by avoiding downside risk (i.e. defaults) while selecting companies with attractive valuations and a catalyst for spread compression. Mackay Shield US High Yield was funded July 24, 2020. Returns prior to inception reflect the manager's high yield composite returns.

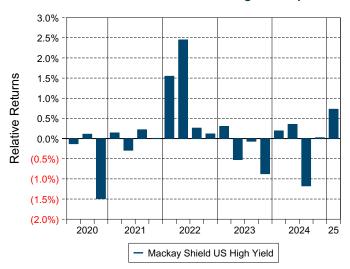
## **Quarterly Summary and Highlights**

- Mackay Shield US High Yield's portfolio posted a 1.74% return for the quarter placing it in the 2 percentile of the Callan High Yield Fixed Income group for the quarter and in the 42 percentile for the last year.
- Mackay Shield US High Yield's portfolio outperformed the Blmbg:HY Corp by 0.74% for the quarter and underperformed the Blmbg:HY Corp for the year by 0.08%.

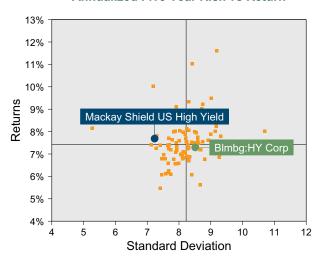
## Performance vs Callan High Yield Fixed Income (Gross)



#### Relative Return vs Blmbg:HY Corp



## Callan High Yield Fixed Income (Gross) Annualized Five Year Risk vs Return



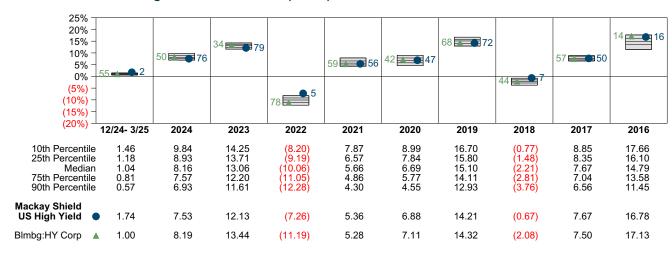


# Mackay Shield US High Yield Return Analysis Summary

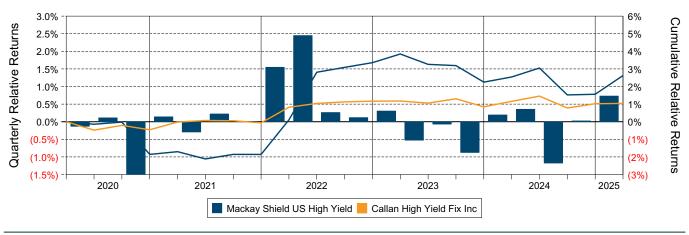
## **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

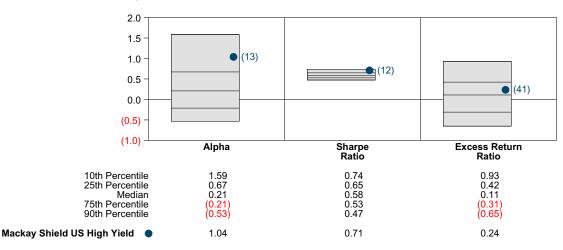
## Performance vs Callan High Yield Fixed Income (Gross)



## Cumulative and Quarterly Relative Returns vs Blmbg:HY Corp



Risk Adjusted Return Measures vs Blmbg:HY Corp Rankings Against Callan High Yield Fixed Income (Gross) Five Years Ended March 31, 2025



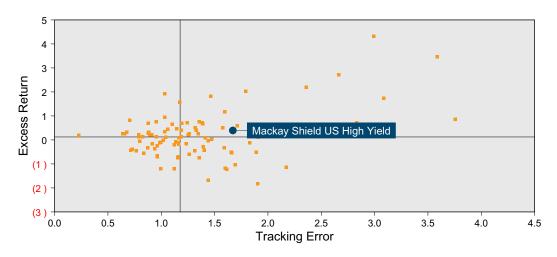


# Mackay Shield US High Yield Risk Analysis Summary

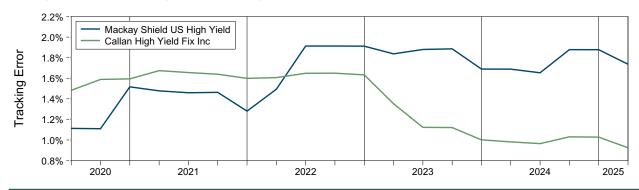
#### **Risk Analysis**

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

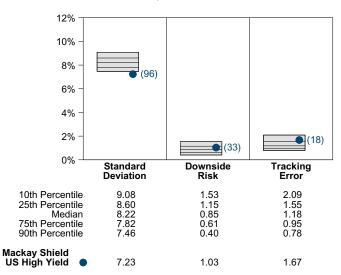
## Risk Analysis vs Callan High Yield Fixed Income (Gross) Five Years Ended March 31, 2025

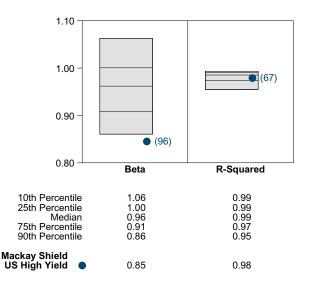


## Rolling 12 Quarter Tracking Error vs Blmbg:HY Corp



Risk Statistics Rankings vs Blmbg:HY Corp Rankings Against Callan High Yield Fixed Income (Gross) Five Years Ended March 31, 2025





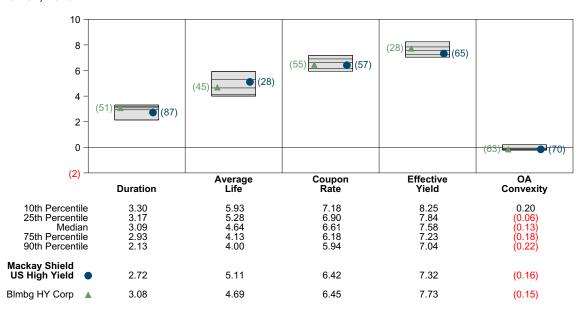


## Mackay Shield US High Yield Bond Characteristics Analysis Summary

#### **Portfolio Characteristics**

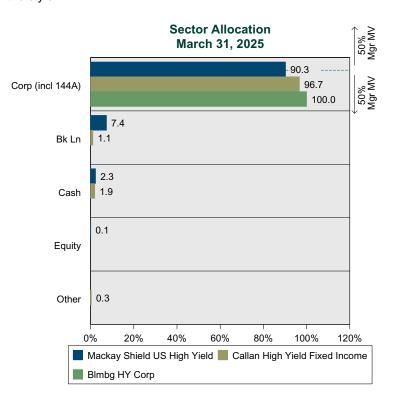
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style. Fixed Income Portfolio characteristics includes Cash Pool allocation.

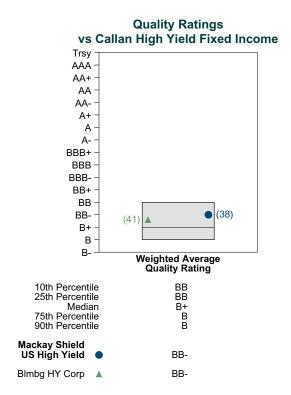
## Fixed Income Portfolio Characteristics Rankings Against Callan High Yield Fixed Income as of March 31, 2025



## **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



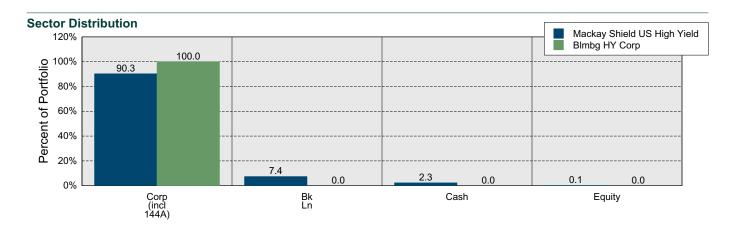


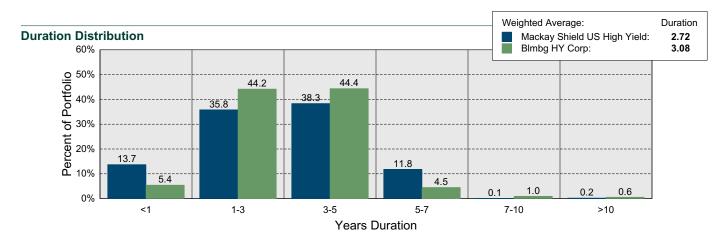


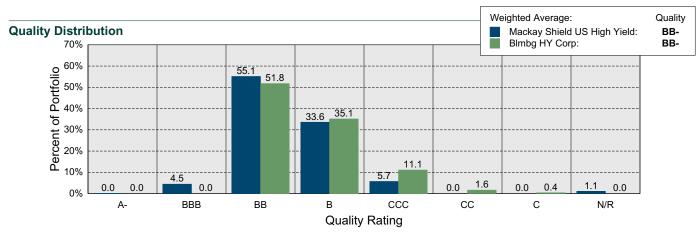
## Mackay Shield US High Yield Portfolio Characteristics Summary As of March 31, 2025

## **Portfolio Structure Comparison**

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.









## Principal Preferred Securities Period Ended March 31, 2025

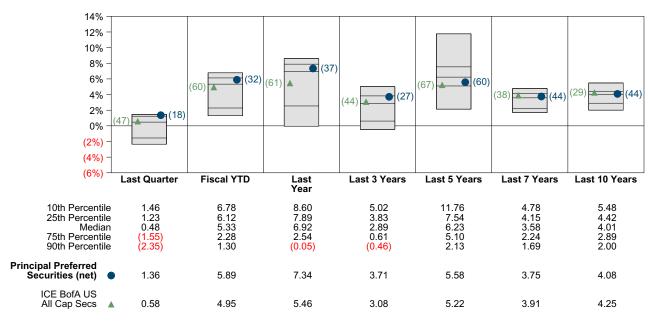
#### **Investment Philosophy**

Spectrum is a wholly owned subsidiary of Principal Global Investors. The firm has an exclusive focus on preferred securities globally. The firm employs an active approach to managing this sector with an emphasis on income as well as total return. Preferred securities are structurally subordinated fixed income investments that come in many flavors, each with unique structures and with many different labels. Common characteristics, however, are that they are subordinate to senior investment grade debt, pay a specified coupon, and are callable by the issuer. Credit quality typically ranges from BBB+ to BB. Coupon payments can be deferrable, non-deferrable and cumulative or non-cumulative. These attributes make the instruments complex and active management requires skill and experience in this sector. Principal Preferred Securities was funded July 30, 2020. Returns prior to inception reflect the Principal Preferred Securities mutual fund historical returns. Calculated returns may include the impact of cash movements.

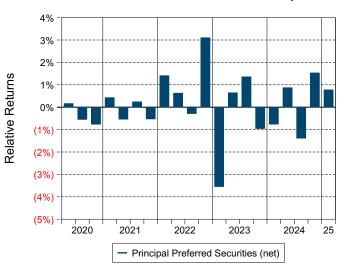
#### **Quarterly Summary and Highlights**

- Principal Preferred Securities (net)'s portfolio posted a 1.36% return for the quarter placing it in the 18 percentile of the Morningstar Preferred Stock Funds group for the quarter and in the 37 percentile for the last year.
- Principal Preferred Securities (net)'s portfolio outperformed the ICE BofA US All Cap Secs by 0.78% for the quarter and outperformed the ICE BofA US All Cap Secs for the year by 1.88%.

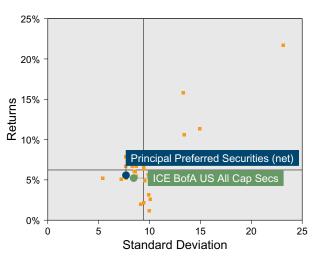
## Performance vs Morningstar Preferred Stock Funds (Net)



#### Relative Return vs ICE BofA US All Cap Secs



## Morningstar Preferred Stock Funds (Net) Annualized Five Year Risk vs Return



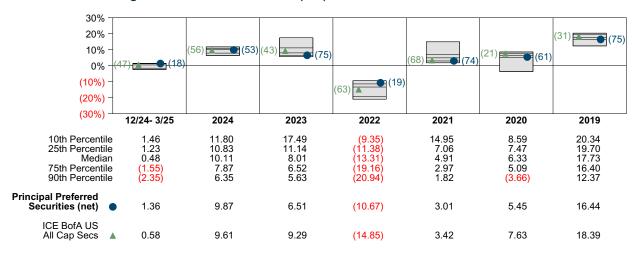


# Principal Preferred Securities Return Analysis Summary

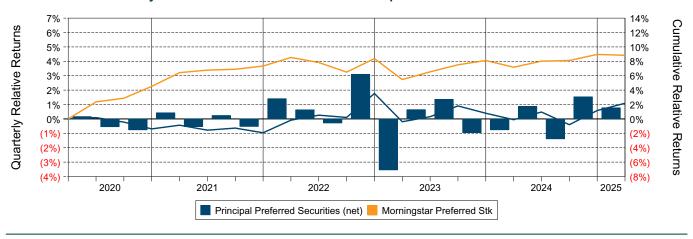
## **Return Analysis**

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

## Performance vs Morningstar Preferred Stock Funds (Net)



## Cumulative and Quarterly Relative Returns vs ICE BofA US All Cap Secs



Risk Adjusted Return Measures vs ICE BofA US All Cap Secs Rankings Against Morningstar Preferred Stock Funds (Net) Five Years Ended March 31, 2025



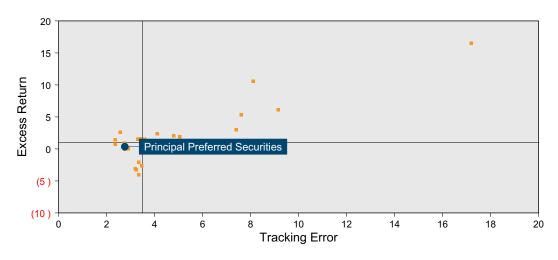


# Principal Preferred Securities Risk Analysis Summary

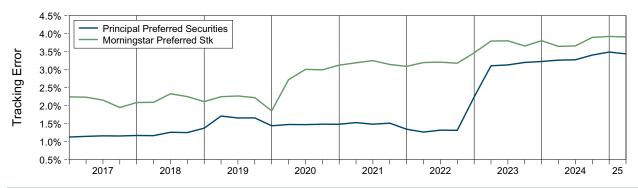
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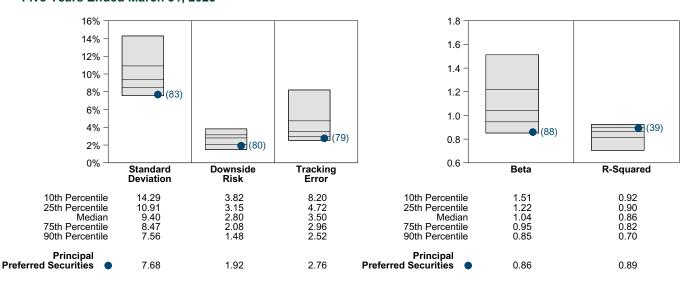
## Risk Analysis vs Morningstar Preferred Stock Funds (Net) Five Years Ended March 31, 2025



Rolling 12 Quarter Tracking Error vs ICE BofA US All Cap Secs



Risk Statistics Rankings vs ICE BofA US All Cap Secs Rankings Against Morningstar Preferred Stock Funds (Net) Five Years Ended March 31, 2025



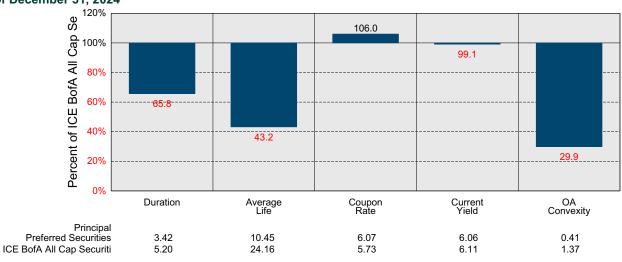


# Principal Preferred Securities Bond Characteristics Analysis Summary

#### **Portfolio Characteristics**

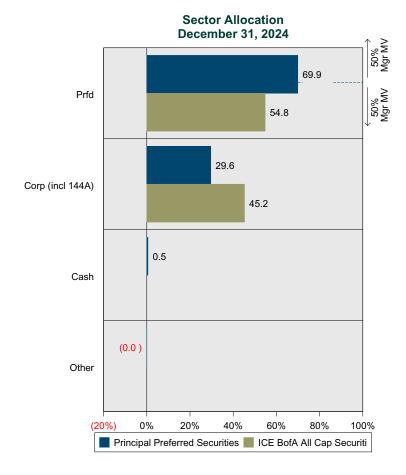
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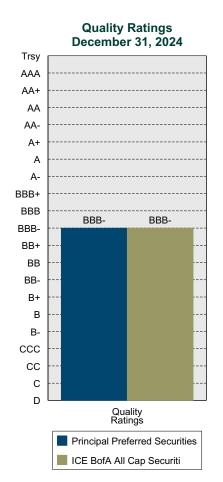
## Portfolio Characteristics Relative to ICE BofA All Cap Securiti as of December 31, 2024



## **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector weights for the most recent quarter with those of the benchmark. The second graph compares the manager's weighted average quality rating with those of the benchmark.



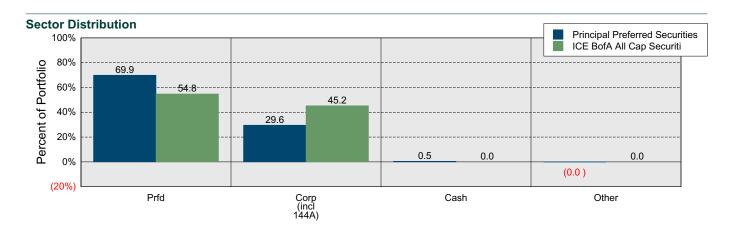


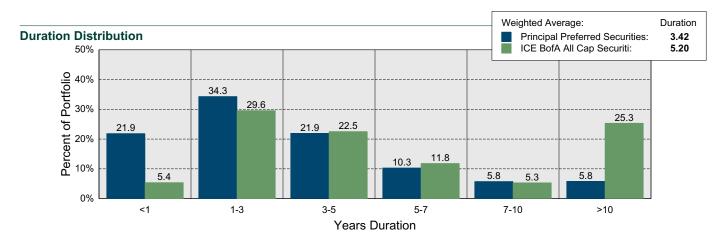


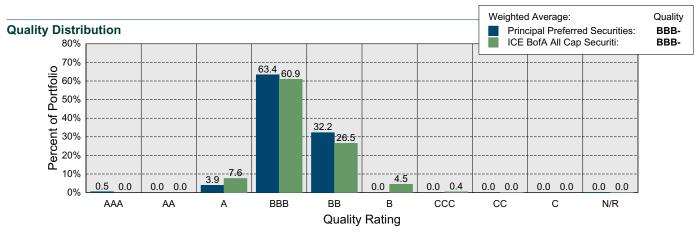
## Principal Preferred Securities Portfolio Characteristics Summary As of December 31, 2024

## **Portfolio Structure Comparison**

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.









## List of Callan's Investment Manager Clients

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Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

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Manager Name
Aberdeen Investments
Acadian Asset Management LLC
Adams Street Partners, LLC
Aegon Asset Management
AEW Capital Management, L.P.
AFL-CIO Housing Investment Trust
AllianceBernstein
Allspring Global Investments, LLC
Altrinsic Global Advisors, LLC
American Century Investments
Antares Capital LP
Apollo Global Management, Inc.
AQR Capital Management
Ares Management LLC
ARGA Investment Management, LP
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC

Manager Name
Baillie Gifford International, LLC
Baird Advisors
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
Black Creek Investment Management Inc.
BlackRock
Blackstone Group (The)
Blue Owl Capital, Inc.
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brookfield Asset Management Inc.
Brookfield Public Securities Group LLC
Brown Brothers Harriman & Company
Brown Investment Advisory & Trust Company
Capital Group

**Manager Name** 

CastleArk Management, LLC

Centerbridge Partners, L.P.

Cercano Management LLC

Champlain Investment Partners, LLC

**CIBC Asset Management** 

CIM Group, LP

ClearBridge Investments, LLC

Cohen & Steers Capital Management, Inc.

Columbia Threadneedle Investments

Comgest

Comvest Partners

Crescent Capital Group LP

Dana Investment Advisors. Inc.

DePrince, Race & Zollo, Inc.

Diamond Hill Capital Management, Inc.

Dimensional Fund Advisors L.P.

DoubleLine

**DWS** 

EARNEST Partners, LLC

Equus Capital Partners, Ltd.

Fayez Sarofim & Company

Federated Hermes, Inc.

Fengate Asset Management

Fidelity Institutional Asset Management

Fiera Capital Corporation

First Eagle Investment Management, LLC

First Hawaiian Bank Wealth Management Division

Fisher Investments

Fortress Investment Group

Franklin Templeton

Fred Alger Management, LLC

GAMCO Investors, Inc.

GlobeFlex Capital, L.P.

Goldman Sachs

Golub Capital

Great Lakes Advisors, LLC

**GW&K Investment Management** 

Harbor Capital Group Trust

Hardman Johnston Global Advisors LLC

Heitman LLC

**Manager Name** 

Hotchkis & Wiley Capital Management, LLC

HPS Investment Partners, LLC

**IFM Investors** 

Impax Asset Management LLC

Income Research + Management

Insight Investment

Invesco

I Squared Capital Advisors (US) LLC

J.P. Morgan

Janus

Jennison Associates LLC

J O Hambro Capital Management Limited

Jobs Peak Advisors

Kayne Anderson Capital Advisors LP

Kayne Anderson Rudnick Investment Management, LLC

King Street Capital Management, L.P.

Lazard Asset Management

LGIM America

Lincoln National Corporation

**Longview Partners** 

Loomis, Sayles & Company, L.P.

Lord, Abbett & Company

LSV Asset Management

MacKay Shields LLC

Mackenzie Investments

Macquarie Asset Management

Man Group

Manulife Investment Management

Marathon Asset Management, L.P.

Mawer Investment Management Ltd.

Merlin Asset Management

MetLife Investment Management

MFS Investment Management

Mondrian Investment Partners Limited

Montag & Caldwell, LLC

Morgan Stanley Investment Management

MUFG Bank, Ltd.

Natixis Investment Managers

Neuberger Berman

**Newton Investment Management** 



**Manager Name** 

New York Life Investment Management LLC (NYLIM)

Ninety One North America, Inc.

Nomura Capital Management, LLC

Northern Trust Asset Management

Nuveen

Oaktree Capital Management, L.P.

**ORIX Corporation USA** 

P/E Investments

Pacific Investment Management Company

Pantheon Ventures

Parametric Portfolio Associates LLC

Partners Group (USA) Inc.

Pathway Capital Management, LP

Peavine Capital

Peregrine Capital Management, LLC

**PGIM DC Solutions** 

**PGIM Fixed Income** 

PGIM Quantitative Solutions LLC

Pictet Asset Management

PineBridge Investments

Polen Capital Management, LLC

PPM America, Inc.

Pretium Partners, LLC

Principal Asset Management

Raymond James Investment Management

RBC Global Asset Management

Regions Financial Corporation

Robeco Institutional Asset Management, US Inc.

Sands Capital Management

**Manager Name** 

Schroder Investment Management North America Inc.

Segall Bryant & Hamill

Silver Point Capital, LP

**SLC Management** 

Star Mountain Capital, LLC

State Street Global Advisors

Strategic Global Advisors, LLC

TD Global Investment Solutions - TD Epoch

T. Rowe Price Associates, Inc.

The Carlyle Group

The D.E. Shaw Group

The TCW Group, Inc.

Thompson, Siegel & Walmsley LLC

TPG Angelo Gordon

VanEck

Vaughan Nelson Investment Management

Victory Capital Management Inc.

Virtus Investment Partners, Inc.

Vontobel Asset Management

Voya

Walter Scott & Partners Limited

Wasatch Global Investors

WCM Investment Management

Wellington Management Company LLP

Western Asset Management Company LLC

Westfield Capital Management Company, L.P.

William Blair & Company LLC

Xponance, Inc.



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Past performance is no guarantee of future results.

# Callan

May 12, 2025

# Colorado Public School Permanent Fund

First Quarter 2025 Economic and Market Review

**Alex Browning** 

Senior Vice President

Perry Hopper, CFA

Vice President

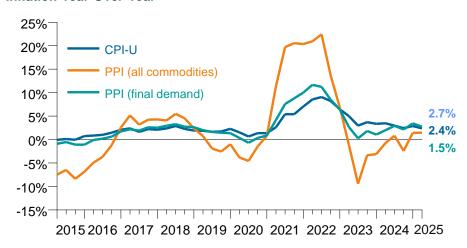
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# **U.S. Economy—Summary**

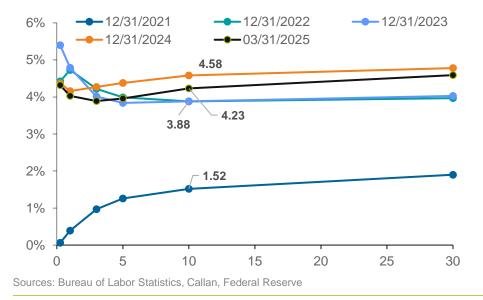
#### For periods ended 3/31/25

- The unemployment rate in March was 4.2%, up slightly from the February reading of 4.1% and January reading of 4.0%.
   Jobs added over the quarter increased month over month.
- GDP fell -0.3% in 1Q, driven by an increase in imports. GDP in 4Q was 2.4%.
- Headline CPI increased 2.4% year-over-year in March. The core CPI (ex-food and energy) increased 2.8% over the same period.
- The Fed held rates steady over the quarter at 4.25% 4.5%. In March, they lowered the U.S. growth forecast for 2025 and increased the inflation outlook.

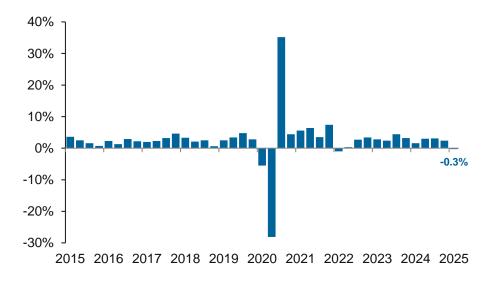
#### Inflation Year-Over-Year



#### **U.S. Treasury Yield Curves**



#### **Quarterly Real GDP Growth**

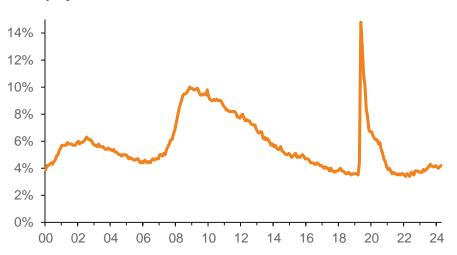




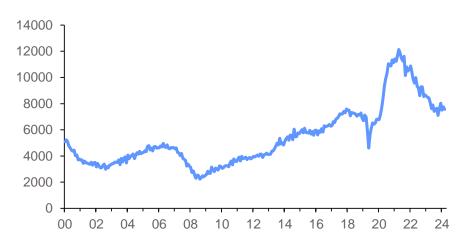
#### Labor

- The unemployment rate was 4.2% as of March.
- Job openings have declined from post-COVID peaks.
- Unemployment claims and layoffs remain low, but it remains to be seen how employers will react to the tariffs announced in April.

#### **Unemployment Rate**



#### **Job Openings (Level in Thousands)**



#### Job Losses (Level in Thousands) and Layoffs



Sources: FRED, U.S. Bureau of Labor Statistics (JOLTS and Unemployment), U.S. Employment and Training Administration (Initial Claims)



## U.S. Equity Markets Down Sharply in 1Q25

#### Non-U.S. markets are up for 1Q, showing diversification

#### S&P 500 fell 4.3% in 1Q25

 U.S. small cap fell further by 9.5% as markets were spooked by tariff policy uncertainty: timing, size, countries, sectors.

#### Stronger 1Q for core fixed income

- The Bloomberg Aggregate rose
   2.8%. Long duration saw an even greater increase in a nascent flight to quality.
- Interest rates remain volatile as the markets assess how the Fed will continue with easing.
- CPI-U came in at 2.4% (year-overyear) through March, down 50 bps from 4Q, although the core figure rose 3.8%. Energy pulled down the total headline number.

#### Solid economic growth in 2024

 The job market expanded and real incomes grew. 4Q GDP came in at 2.4%, and 2.8% for the year, but fell 0.3% in 1Q25. Returns for Periods ended 3/31/25

	Quarter	1 Year	3 Years	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	-4.72	7.22	8.22	18.18	11.80	7.44
S&P 500	-4.27	8.25	9.06	18.59	12.50	7.41
Russell 2000	-9.48	-4.01	0.52	13.27	6.30	6.83
Global ex-U.S. Equity						
MSCI World ex USA	6.20	5.30	5.70	12.16	5.50	4.01
MSCI Emerging Markets	2.93	8.09	1.44	7.94	3.71	
MSCI ACWI ex USA Small Cap	0.64	1.87	0.99	11.84	5.32	6.09
Fixed Income						
Bloomberg Aggregate	2.78	4.88	0.52	-0.40	1.46	3.96
90-day T-Bill	1.02	4.97	4.23	2.56	1.87	1.90
Bloomberg Long Gov/Credit	3.57	1.72	-4.51	-3.74	1.01	5.28
Bloomberg Global Agg ex-US	2.53	1.46	-3.47	-2.35	-0.18	2.62
Real Estate						
NCREIF Property Index	1.28	2.72	-2.11	3.25	5.42	7.54
FTSE Nareit Equity	0.91	9.94	-0.61	11.34	5.33	9.78
Alternatives						
Cambridge Private Equity*	2.68	7.93	2.75	14.27	13.40	12.39
Cambridge Senior Debt*	3.35	10.18	7.08	7.89	7.31	4.59
HFRI Fund Weighted	-0.49	4.57	4.56	9.53	4.97	5.23
Bloomberg Commodity	8.88	12.28	-0.77	14.51	2.77	2.17
Gold Spot Price	19.28	40.74	17.26	14.56	10.29	10.14
Inflation: CPI-U	1.33	2.39	3.61	4.38	3.08	2.53

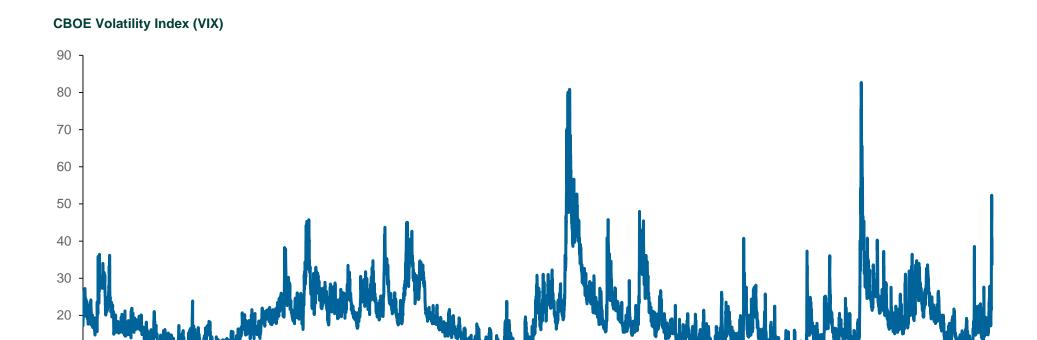
<sup>\*</sup>Cambridge Private Equity and Cambridge Senior Debt data as of 9/30/24. Returns greater than one year are annualized. Sources: Bloomberg, Callan, Cambridge, FTSE Russell, HFRI, MSCI, NCREIF, S&P Dow Jones Indices



# Callan

**April Reset** 

# **Market Volatility in Context**



Jan-90 Jan-92 Jan-94 Jan-96 Jan-98 Jan-00 Jan-02 Jan-04 Jan-06 Jan-08 Jan-10 Jan-12 Jan-14 Jan-16 Jan-18 Jan-20 Jan-22 Jan-24

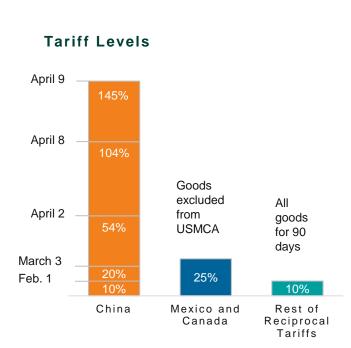
VIX measures the market expectation of near-term volatility conveyed by stock index option prices. Implied market volatility has spiked to high but not unprecedented levels.

Sources: Chicago Board Options Exchange, CBOE Volatility Index: VIX [VIXCLS], retrieved from FRED, Federal Reserve Bank of St. Louis.



10

#### **Current Tariff Levels and Historical Look**



# Duties collected / value of total goods imports for consumption Historical Maximum tariff estimate based on 2024 import levels as of April 10, 2025: 25% 20% 15% 10%

#### Most tariffs have been paused for 90 days, except for those on China

Even with the pause, tariff rates are the highest they've been since the early 1900s

Sources: USA Today; JP Morgan; Goldman Sachs Investment Research, United States International Trade Commission, J.P. Morgan Asset Management. For illustrative purposes only. Estimates about which goods are USMCA compliant come from Goldman Sachs Investment Research. Imports for consumption: goods brought into a country for direct use or sale in the domestic market. The estimate does not consider non-tariff barriers, such as value-added taxes. Figures are based on 2024 import levels and assume no change in demand due to tariff increases. Forecasts are based on current data and assumptions about future economic conditions. Actual results may differ materially due to changes in economic, market and other conditions. Data are as of April 10, 2025.

1 As of the time of this publication, the current tariffs in place include 25% on non-USMCA covered goods from Mexico and Canada (10% on potash and Canadian energy), 145% on China, 25% tariffs on steel, aluminum, and autos and 10% on everything else, excluding Russia. Also, countries that import oil from Venezuela could face a 25% tariff. Auto part tariffs are planned to be implemented on May 3rd.



# **Asset Classes Have Recovered Much of Their Early April Losses**

International developed stocks have fared the best

		<b>Cumulative Return</b>	<b>Cumulative Return</b>	<b>Cumulative Return</b>	<b>Cumulative Return</b>
Asset Class	Index Name	4/2 - 4/30	Year to Date	Since 12/31/2023	Since 12/31/2022
Global Stocks	MSCI ACWI	-0.2%	-0.4%	17.0%	43.0%
U.S. Large Cap	S&P 500	-1.7%	-4.9%	18.9%	50.1%
U.S. Small Cap	Russell 2000	-3.9%	-11.6%	-1.4%	15.3%
International Developed Stocks	MSCI EAFE	3.7%	11.8%	16.0%	37.2%
International Emerging Stocks	MSCI EM	0.4%	4.3%	12.1%	23.1%
U.S. Bonds	Bloomberg Aggregate	0.2%	3.2%	4.5%	10.3%
U.S. High Yield Bonds	Bloomberg High Yield Index	-0.3%	1.0%	9.3%	23.9%
U.S. Long Bonds	Bloomberg Long G/C	-1.8%	2.4%	-1.9%	5.1%
Total Return Moderate Risk	60%SP 500/40%Agg	-1.0%	-1.7%	13.1%	34.2%
Total Return Higher Risk	75%ACWI/25%Agg	-0.1%	0.5%	13.9%	34.8%





**Recent Activity and Plan Performance** 



## **Quarterly Total Fund Highlights**

As of March 31, 2025

- ►CO PSPF ended the quarter with \$1.7 billion in assets, up \$35.1 million from Q4 2024 including investment returns and net new investments.
  - Net investment gains were \$23.4 million while net cash inflows were \$11.7 million during the quarter.
- ► The Total Fund gained 1.29% for the quarter and rose 6.19% for the trailing year. The Total Equity Composite returned -0.48% for the quarter and gained 7.24% for the trailing year.
  - U.S. Equity underperformed International Equity for the quarter with a return of -4.85% vs 5.80%, respectively. Both had positive returns for the trailing year: US Equity, 7.26%; Non-US Equity, 6.63%.
  - For the year, the US equity portfolio ranks in the 13<sup>th</sup> percentile against Callan's Endowment and Foundation
     Domestic Equity peer group. International ranks in the 43<sup>rd</sup>.
- ▶ The Fixed Income Composite trailed its benchmark by 12 basis points with a return of 2.50%. For the trailing year, the portfolio was up 5.34%, ahead of the benchmark by 33 basis points.
  - The Market Duration bond portfolio trailed its benchmark with a return of 2.62% vs the benchmark return of 2.78% for the quarter. The portfolio rose 5.15% for the year. The portfolio ranks in the 77<sup>th</sup> percentile relative to Core Bond peers over three years.
  - The JanusHenderson Short Duration bond portfolio lead its benchmark by 16 basis points with a return of 1.79%. The portfolio gained 6.54% for the year.
- ► The High Income Strategies Composite lead its benchmark for the quarter by 0.77% with a return of 1.71%. For the year, the Composite returned 7.71%, 0.35% ahead of the benchmark.
  - The MacKay Shields' high yield bond portfolio lead its benchmark for the quarter but lagged the one year with returns of 1.74% and 7.61%, respectively.
  - The Principal Spectrum preferred securities portfolio lead its benchmark for the quarter and year with returns of 1.36% and 7.34%, respectively.



## **Asset Allocation Change Implementation Update**

As of March 31, 2025

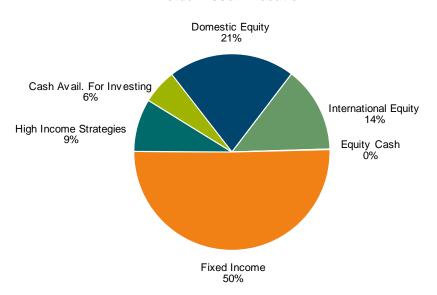
- ► The Board approved a new asset allocation at the September 25, 2024, meeting.
  - The new asset allocation is 50% equity (30% US/20% Non-US); 32% core bonds; 10% High Income Strategies; and 8% short duration fixed income.
- ► Implementation plan is to deploy roughly 12.5% of the total amount over eight quarters.
- Parametric implements with the following ETFs:
  - US Equity: iShares Core S&P Total US Stock Market
  - Non-US: iShares Core MSCI EAFE ETF; iShares MSCI Canada; iShares MSCI Emerging Markets
- ► The next trade amount will be determined based on March 31<sup>st</sup> fund market values and executed in the second quarter of 2025.
- Interim targets for performance are being implemented as the transition proceeds.



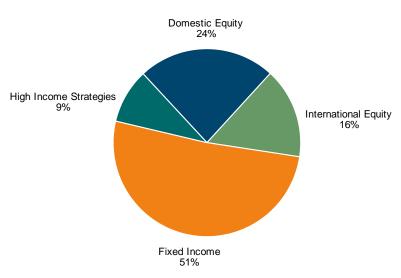
# **Total Fund Asset Allocation**

As of March 31, 2025

#### **Actual Asset Allocation**



#### **Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	360,360	21.0%	23.7%	(2.7%)	(45,869)
International Equity	241,183	14.1%	15.6%	(1.6%)	(26,777)
Equity Cash ' '	1,560	0.1%	0.0%	`0.1%´	1,560
Fixed Income	865,637	50.5%	51.3%	(0.9%)	(14,926)
High Income Strategies	148,939	8.7%	9.4%	(0.7%)	(11,803)
Cash Avail. For Investing	97,814	5.7%	0.0%	`5.7%´	97,814
Total	1.715.494	100.0%	100.0%		



# **Asset Distribution**

	March 31,	2025			December 3	1,2024
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Equity (1)	\$603,103,576	35.16%	\$(1,046,374)	\$(2,886,221)	\$607,036,172	36.13%
Domestic Equity	\$360,360,439	21.01%	\$12,855,357	\$(18,234,248)	\$365,739,330	21.77%
iShares S&P 1500 ETF	360,360,439	21.01%	12,855,357	(18,234,248)	365,739,330	21.77%
International Equity	\$241,183,430	14.06%	\$(13,833,302)	\$14,303,436	\$240,713,296	14.33%
iShares MSCI Emerging ETF	70,236,558	4.09%	(3,191,086)	2,418,313	71,009,330	4.23%
iShares MSCI Canada ETF	18,827,356	1.10%	(1,080,053)	224,607	19,682,802	1.17%
iShares Core MSCI EAFE ETF	152,119,516	8.87%	(9,562,163)	11,660,516	150,021,164	8.93%
Equity Cash	1,559,707	0.09%	(68,429)	1,044,590	583,545	0.03%
Total Fixed Income	\$865,637,404	50.46%	\$(8,425,508)	\$21,090,293	\$852,972,619	50.76%
Market Duration	\$749,973,496	43.72%	\$(7,057,279)	\$19,165,637	\$737,865,139	43.91%
Colorado Treasurer's Portfolio	749,973,496	43.72%	(7,057,279)	19,165,637	737,865,139	43.91%
Short Duration	\$115,663,908	6.74%	\$(1,368,229)	\$1,924,656	\$115,107,481	6.85%
Janus Henderson (2)	115,663,908	6.74%	(1,368,229)	1,924,656	115,107,481	6.85%
High Income Strategies	\$148,939,231	8.68%	\$(2,934,197)	\$2,510,147	\$149,363,281	8.89%
High Yield Fixed Income	\$126,634,435	7.38%	\$(2,655,202)	\$2,206,864	\$127,082,773	7.56%
Mackay Shield US High Yield (3)	126,634,435	7.38%	(2,655,202)	2,206,864	127,082,773	7.56%
Preferred Securities	\$22,304,796	1.30%	\$(278,995)	\$303,283	\$22,280,509	1.33%
Principal Preferred Securities (3)	22,304,796	1.30%	(278,995)	303,283	22,280,509	1.33%
Cash Available For Investing	\$97,813,733	5.70%	\$24,116,207	\$2,708,910	\$70,988,615	4.22%
Total Fund	\$1,715,493,944	100.0%	\$11,710,128	\$23,423,128	\$1,680,360,688	100.0%

<sup>(1)</sup> Funded in December 2017.



<sup>(2)</sup> Funded in November 2018.(3) Funded in July 2020.

# **Manager & Composite Cumulative Returns**

As of March 31, 2025

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Total Equity	(0.48%)	7.24%	6.95%	15.53%	_
Total Equity Benchmark (7)	(0.62%)	7.20%	6.92%	15.39%	9.13%
Domestic Equity	(4.85%)	7.26%	8.18%	18.15%	-
S&P 1500	(4.49%)	7.33%	8.60%	18.42%	12.12%
International Equity	5.80%	6.63%	4.74%	11.51%	-
MSCI ACWI ex US	5.23%	6.09%	4.48%	10.92%	4.98%
Total Fixed Income	2.50%	5.34%	1.20%	0.16%	1.78%
Total Fixed Income Benchmark (1)	2.62%	5.01%	0.84%	(0.15%)	1.51%
Market Duration	2.62%	5.15%	0.75%	(0.27%)	1.65%
Colorado Treasurer's Portfolio (2)	2.62%	5.15%	0.75%	(0.27%)	1.65%
PSPF Custom Benchmark (3)	2.78%	4.88%	0.52%	(0.40%)	1.44%
Short Duration	1.79%	6.54%	4.09%	3.20%	-
Janus Henderson Short Duration	1.79%	6.54%	4.09%	3.20%	-
Blmbg Gov/Cred 1-3 Yr	1.63%	5.61%	3.10%	1.56%	1.73%
85% 1-3YR G/C; 15% 1-3YR BB (4)	1.59%	5.77%	3.45%	2.25%	2.14%
High Income Strategies	1.71%	7.71%	5.45%	-	-
High Income Strategies Benchmark (5)	0.94%	7.36%	4.70%	6.99%	4.91%
High Yield Fixed Income	1.74%	7.61%	5.59%	-	-
Mackay Shield US High Yield	1.74%	7.61%	5.59%	-	-
Blmbg High Yield	1.00%	7.69%	4.98%	7.29%	5.01%
Preferred Securities	1.56%	8.30%	4.58%	-	-
Principal Preferred Securities	1.56%	8.30%	4.58%	-	-
ICE Bof A US All Cap Secs	0.58%	5.46%	3.08%	5.22%	4.25%
Total Fund w/o CAI (6)	1.29%	6.19%	3.56%	4.21%	
Total Fund W/o CA (6)  Total Fund Benchmark*	1.29% 1.19%	<b>6.19%</b> 5.55%	<b>3.56%</b> 2.83%	<b>4.21%</b> 3.64%	3.08%
rotar i una Denominara	1.10/0	J.JJ /0	2.00/0	J.U <del>T</del> /0	3.0076

Performance footnotes are detailed after the performance attribution exhibits.



# **Manager & Composite Fiscal Year Returns**

As of March 31, 2025

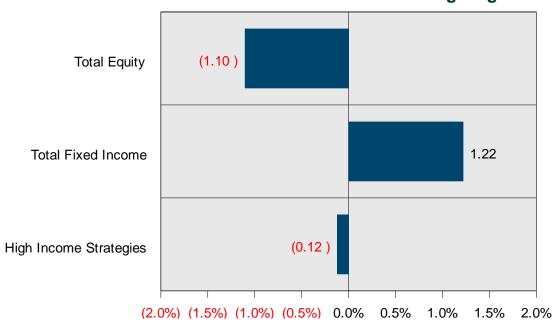
	6/2024-				
	3/2025	FY 2024	FY 2023	FY 2022	FY 2021
Total Equity	4.76%	18.33%	16.33%	(15.85%)	41.59%
Total Equity Benchmark (7)	4.78%	18.44%	16.57%	(16.06%)	40.77%
Domestic Equity	3.81%	23.24%	18.83%	(13.95%)	44.30%
S&P 1500	3.53%	23.52%	19.24%	(11.02%)	42.12%
International Equity	5.63%	11.26%	12.28%	(18.97%)	37.78%
MSCI ACWI ex US	5.08%	11.62%	12.72%	(19.42%)	35.72%
Total Fixed Income	4.95%	3.47%	(0.04%)	(9.76%)	(0.27%)
Total Fixed Income Benchmark (1)	4.83%	2.91%	(0.76%)	(9.52%)	(0.26%)
Market Duration	4.91%	3.06%	(0.53%)	(10.55%)	(0.55%)
Colorado Treasurer's Portfolio (2)	4.91%	3.06%	(0.53%)	(10.55%)	(0.55%)
PSPF Custom Benchmark (3)	4.81%	2.63%	(0.94%)	(10.29%)	(0.33%)
Short Duration	5.21%	6.13%	2.92%	(4.33%)	2.33%
Janus Henderson Short Duration	5.21%	6.13%	2.92%	(4.33%)	2.33%
Blmbg Gov/Cred 1-3 Yr	4.61%	4.87%	0.52%	(3.56%)	0.44%
85% 1-3YR G/C; 15% 1-3YR BB (4)	4.70%	5.35%	1.49%	(3.83%)	1.70%
High Income Strategies	6.14%	10.47%	8.18%	(9.38%)	<u>-</u>
High Income Strategies Benchmark (5)	6.29%	10.62%	7.93%	(12.89%)	15.13%
High Yield Fixed Income	6.07%	10.00%	9.23%	(9.09%)	-
Mackay Shield US High Yield	6.07%	10.00%	9.23%	(9.09%)	-
Blmbg High Yield	6.53%	10.44%	9.06%	(12.81%)	15.37%
Preferred Securities	6.53%	13.18%	2.29%	(11.11%)	-
Principal Preferred Securities	6.53%	13.18%	2.29%	(11.11%)	-
ICE Bof A US All Cap Secs	4.95%	11.63%	1.66%	(13.33%)	13.67%
Total Fund w/o CAI (6)	4.93%	9.09%	5.66%	(11.58%)	8.30%
Total Fund Benchmark *	4.69%	7.67%	4.54%	(11.46%)	7.98%
Performance footnotes are detailed after the				( 1070)	1.0070



## **One Quarter Performance Attribution**

As of March 31, 2025

## **Asset Class Under or Overweighting**



#### Relative Attribution Effects for Quarter ended March 31, 2025

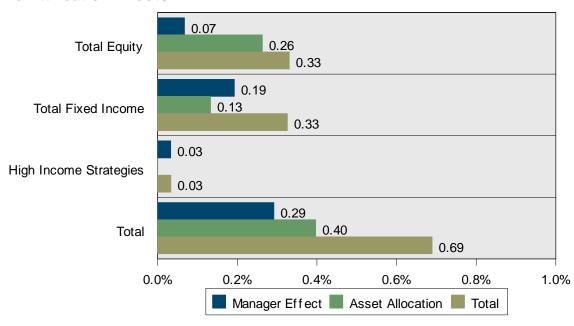
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity Total Fixed Income High Income Strategie	38% 53%	39% 51% 9%	(0.48%) 2.50% 1.71%	(0.76%) 2.62% 0.94%	0.11% ( <mark>0.05%)</mark> 0.07%	0.02% 0.02% 0.00%	0.13% (0.03%) 0.07%
Total			1.29% =		+ 0.13% +	0.03%	0.16%



## **One Year Performance Attribution**

As of March 31, 2025

#### **One Year Relative Attribution Effects**



#### **One Year Relative Attribution Effects**

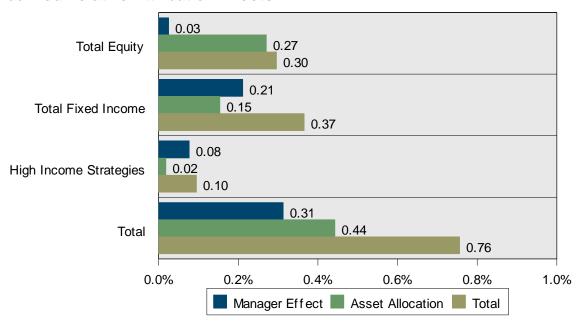
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity	37%	33%	7.24%	7.05%	0.07%	0.26%	0.33%
Total Fixed Income	54%	58%	5.34%	5.01%	0.19%	0.13%	0.33%
High Income Strategie	s 9%	9%	7.71%	7.36%	0.03%	0.00%	0.03%
Total			6.19% =	5.50%	+ 0.29% +	0.40%	0.69%



## **One Year Performance Attribution**

As of March 31, 2025

#### **Three Year Annualized Relative Attribution Effects**



#### **Three Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity	33%	29%	6.95%	6.87%	0.03%	0.27%	0.30%
Total Fixed Income High Income Strategie	57% es 10%	62% 8%	1.20% 5.45%	0.84% 4.70%	0.21% 0.08%	0.15% 0.02%	0.37% 0.10%
Total			3.56% =	2.81%	+ 0.31% +	0.44%	0.76%



#### **Performance Footnotes**

- (1) Current quarter's Total Fixed Income Benchmark consists of 87.5% Bloomberg U.S. Aggregate and 12.5% Bloomberg Gov/Credit 1-3 Yrs.
- (2) Includes cash returns starting July 2017.
- (3) The PSPF Fixed Income Portfolio Custom Benchmark consisted of 37% U.S. Treasury 1-10 Year Index, 34% Mortgages 0-10 Year WAL Index, 19% AAA U.S. Agencies 1-10 Year Index and 10% U.S. Corporates AAA Rated 1-10 Years Index through March 31, 2017, 100% Bloomberg U.S. Aggregate, thereafter.
- (4) Benchmark consists of 85% Bloomberg 1-3 Year Government/Credit Index and 15% BofAML 1-3 Year BB US Cash Pay High Yield Index.
- (5) Benchmark consists of 85% Blmbg High Yield Index and 15% ICE BofA US All Cap Secs Index.
- (6) Current quarter's Total Fund Benchmark consists of 18.0% Russell 3000, 12.0% MSCI ACWI ex US, 52.5% Bloomberg U.S. Aggregate, 7.5% Bloomberg Gov/Credit 1-3 Yrs, 8.5% Bloomberg US High Yield and 1.5% ICE BofA U.S. All Capital Securities Index.
- \*All composites and manager returns are shown gross-of-fees.



# Callan

Callan Updates

## **Published Research Highlights: 1Q25**

Private Equity Secondary Funds: Key Issues



NAV Loans: What Investors and Managers Should Know



Callan's 2025-2034 Capital Markets Assumptions



The Callan Periodic Table Collection: Year-End 2024



#### **Recent Blog Posts**

Five Major Trends Driving Hedge Funds in 2025

Joe McGuane

Digital Assets in Institutional Portfolios: Where Are We Now?

Ashley Kahn

What's Behind the Capping Changes to the Russell Indices?

Nicole Wubbena

#### **Additional Reading**

Active vs. Passive quarterly charts

Capital Markets Review quarterly newsletter

Monthly Updates to the Periodic Table

Market Pulse Flipbook quarterly markets update

Market Intelligence (clients-only)

Real Estate Indicators market outlook



#### **Callan Institute Events**

Upcoming conferences, workshops, and webinars

#### 2025 June Workshop

#### **Navigating the New Landscape for Real Assets Investing**

The landscape of institutional real assets investing is undergoing profound transformation. Join us this June for an exclusive workshop designed to provide consultant relations professionals and institutional investors with deep insights into this new environment. Led by experts from Callan's real assets and infrastructure teams, this session will explore how institutional investors structure their portfolios, navigate emerging trends, and identify key opportunities. This workshop will also equip you with the insights needed to better understand the evolving landscape, capitalize on emerging opportunities, and maintain a competitive edge in institutional investing.

#### **Workshop Dates**

- ▶ June 3, 2025 Denver
- ▶ June 5, 2025 New York

#### **Workshop Agenda**

- ▶ 8:00 9:00 AM | Continental Breakfast
- ▶ 9:00 10:15 AM | Workshop and Q&A
- ▶ 10:15 11:00 AM | Roundtable Discussions

#### **Mark Your Calendar**

#### 2025 October Workshops

October 28, 2025 - Chicago

October 30, 2025 - San Francisco

Watch your email for further details and an invitation.

#### **Upcoming Webinars**

June 26, 2025

Research Café: NAV Loans

July 25, 2025

Market Intelligence Report and Webinar



# **Introducing Callan On-Demand Education (CODE)**

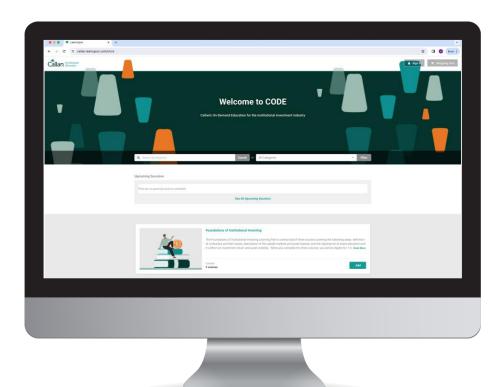


- ► Variety of educational courses
- ► Interactive and engaging
- ► Self-guided modules
- ► Eligible for continuing education credits
- ► Learning at your own pace

CODE courses are designed for investment professionals of all levels—and they're self-guided. Access them anytime, from anywhere, and get continuing education credits for each completed course.

CODE is for you, your colleagues, your new hires, and your interns. It's for anyone interested in learning about institutional investing.

callan.com/code



#### 3 Reasons to Take CODE Courses

- Become a better fiduciary
- Showcase your skills and knowledge
- Learn from Callan's investment experts



## **Callan Updates**

Firm updates by the numbers, as of March 31, 2025

Total Associates: ~200

**Company Ownership:** 

▶ 100% employee ownership

► ~70% of employees are equity owners

Well-diversified ownership

Total Investment Consultants: 50+

Total Specialty and Research Consultants: 65+

Total CFA/CAIA/FRMs: 60+

Total Institutional Investor Clients: 475+

Provides advisory services to institutional investor/asset owner

clients with \$4+ trillion

**NEW ON CODE:** Callan clients have free access to all CODE courses, all of which offer continuing education credits.

- ▶ The Framework of Alternative Investments: Take a deep dive into the private equity, private credit, real assets, and hedge fund asset classes.
- ► Framework for Defined Contribution Plans: Topics include DC plan fiduciary training, legal & regulatory history and trends, fund performance evaluation & monitoring, designing investment menus, and fee studies & monitoring

"As industry consolidation continues, I want to reaffirm our commitment to remaining an independent, employee-owned firm. This isn't just a point of pride; it's a competitive advantage. Every dollar of revenue goes back into strengthening our firm, supporting our clients, and investing in our people. No outside owners claiming their share, no conflicting priorities—just the freedom to shape our future, foster a strong culture, and maintain a long-term perspective that benefits everyone who relies on us."

— Greg Allen, CEO, Chief Research Officer





## **Important Disclosures**

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Callan was founded as an employee-owned investment consulting firm in 1973. Ever since, we have empowered institutional investor with creative, customized investment solutions backed by proprietary research, exclusive data, and ongoing education. Today, Callan provides advisory services to institutional investor clients with more than \$3 trillion in total assets, which makes it among the largest independently owned investment consulting firms in the U.S. Callan uses a client-focused consulting model to serve pension and defined contribution plan sponsors, endowments, foundations, independent investment advisers, investment managers, and other asset owners. Callan has six offices throughout the U.S. For more information, please visit <a href="https://www.callan.com">www.callan.com</a>.

Callan	Corporate Headquarters	Regional Offices	
	One Bush Street	Atlanta	_
	Suite 800	Chicago	<b>in</b> Callan
	San Francisco, CA 94104	Denver	
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# SHORT DURATION FIXED INCOME

Portfolio Review as of March 31, 2025

#### Presentation to:

State of Colorado
Public School Fund Investment Board





#### Presented by:

Greg Wilensky, CFA
Head of U.S. Fixed Income,
Head of Core Plus,
Portfolio Manager

Michael Keough Portfolio Manager

**Lindsey Camp**Director, Client Relations

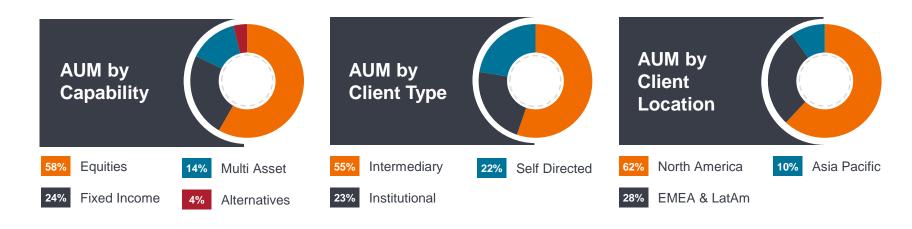
May 12, 2025

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# Janus Henderson Investors

Assets under management: \$373.2B | £289.1B | €345.5B



#### **KEY STATISTICS**



Employees worldwide

**2**5

Offices worldwide

14 years

average portfolio managers firm tenure

23 years

average portfolio managers industry experience

Source: Janus Henderson Investors, as of March 31, 2025.



# Fixed Income platform



Alex Veroude, CFA
Head of Fixed Income
Industry since 1997 | Firm since 2025



Jessica Leoncini
Head of Fixed Income CPM
Management
Industry since 2004 | Firm since 2014



History of fixed income investing



assets under management

# 8 locations

London, Denver, Chicago, Abu Dhabi, Copenhagen, Newport Beach, Sydney, Melbourne

Auctralian

125

Investment professionals

# AUM by capability



27%	Core Plus	\$28.9B
29%	Securitized Credit	\$31.5B
13%	Australian Fixed Interest	\$14.1B
10%	Corporate Credit	\$10.9B
5%	Global Bonds	\$5.6B
7%	Global Short Duration	\$7.1B
8%	Multi-Sector Credit	\$8.6B
2%	Emerging Markets	\$1.6B

Core Plus	Securitized Credit	Fixed Interest	Corporate Credit
Greg Wilensky, CFA	John Kerschner, CFA Colin Fleury	Jay Sivapalan, CFA	Tim Winstone, CFA Tom Ross, CFA

Global Bonds	Global Short Duration & Liquidity	Multi-Sector Credit	Emerging Markets Debt	Private Credit
Jenna Barnard, CFA	Daniel Siluk	John Lloyd	Bent Lystbaek Jacob Nielsen Thomas Haugaard Sorin Pirău, CFA	Emerging Markets Private Investments ^ Victory Park Capital

Source: Janus Henderson Investors, as of March 31, 2025. AUM includes <1% 'other managed assets' – Passive FI ETF managed by JHI affiliate, Tabula – not shown in by capability list. The fixed income sleeve of the Balanced strategy is included in the Core Plus capability and total AUM. Totals may not sum due to rounding. ^ Formerly NBK Capital Partners. Janus Henderson Emerging Markets Private Capital is a subsidiary of Janus Henderson Group plc. Victory Park Capital Advisors, LLC is an indirect subsidiary of Janus Henderson.

Janus Henderson

# Investment team

# Short Duration – \$1.3B assets under management





Greg Wilensky, CFA Head of U.S. Fixed Income, Head of Core Plus 32 years experience

**Corporate Credit** 



Michael Keough **Portfolio Manager** 19 years experience



Jessica Leoncini Head of Fixed Income CPM Management 21 years experience

**GLOBAL RESEARCH PLATFORMS**  22 analysts | 17 years average experience 12 analysts | 12 years average experience

Mike Talaga, CFA

John Kerschner, CFA Head of U.S. Securitized Products, Portfolio Manager

**Colin Fleury** Head of Secured Credit, Portfolio Manager Structured and Quantitative

Nick Childs, CFA

Head of Structured and Quantitative Fixed Income, Portfolio Manager

5 analysts | 15 years average experience

**KEY INVESTMENT PARTNERS** 

**Fixed Income Trading** 

Global Head of Credit Research

17 traders 23 years average experience

**Fixed Income Risk Management** 

Securitized

7 analysts 14 years average experience

**Equity** Central Research

37 analysts 18 years average experience **Responsibility Team** 

32 professionals 10 years average experience

Source: Janus Henderson Investors, as of March 31, 2025.

Global Securitized and Equity Research include individuals who are considered both analysts and portfolio managers. Years of experience refers to industry experience.

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# **Executive summary**

# State of Colorado Public School Fund Investment Board

Performance (%)	Q1 2025	1 Year	3 Year	5 Year	Since Inception
COS100 Account (Gross)	1.69	6.31	4.08	3.15	3.04
COS100 Account (Net)	1.66	6.16	3.90	2.96	2.85
BBG 1-3 Yr Gov't/Credit Index	1.63	5.61	3.10	1.56	2.30
BBG 1-3 Yr Gov't/Credit (85%) / ICE BofA Cash HY BB 1-3Yr (15%)	1.59	5.77	3.45	2.25	2.67
Difference (Gross vs. Primary Index)	+0.06	+0.70	+0.98	+1.59	+0.74
Difference (Net vs. Primary Index)	+0.03	+0.55	+0.80	+1.40	+0.55

#### **Interest Rate Management**

 Our yield curve positioning contributed as Treasury yields rallied during the quarter with the front end of the curve outperforming.

#### **Sector Allocation and Security Selection**

During the quarter, our spread risk overweight detracted as spreads generally widened. Our
overweight allocations to securitized credit sectors such as collateralized loan obligations (CLOs),
commercial mortgage-backed securities (CMBS), and asset-backed securities contributed to
performance on a relative basis. Allocations to high yield and agency MBS detracted.

#### **Positioning**

- We entered 2025 with a slight duration overweight. While rates rallied during the first quarter, we continue to like having some extra duration at the front of the yield curve as hedge for our spread risk overweight in case the economy deteriorates.
- As credit spreads widened, we took the opportunity to increase our allocation to the corporate sector at more favorable valuations. We focused our buying activity on the banking sector, which is likely to benefit from deregulation while being less impacted by tariffs. We maintained our overweight allocation to securitized sectors, where valuations have continued to look attractive on an absolute and relative basis.

#### **Summary Information**

Inception Date	Nov 9, 2018	
Strategy Assets	\$1.3B	
Yield-to-Worst	5.2%	
<b>Effective Duration</b>	1.9	
Duration Time Spread (DTS)*	2.6	
Tracking Error (3 year)	1.0	
Standard Deviation (3 year)	2.5	

Sector Allocation	Weight %
Treasuries	16.5
Investment Grade Corporate	34.3
High Yield Corporate	7.3
Inflation Linked	_
Agency MBS	6.3
Non-Agency MBS	11.0
ABS	7.9
CMBS	10.9
CLO	4.6
Government Related	0.4
Cash & Equivalents	0.9

Source: Janus Henderson Investors, as of March 31, 2025.

Inception date: November 9, 2018. Returns for one year or greater are annualized. \*Duration Times Spread (DTS) is a method for measuring spread risk. It is calculated by simply multiplying three readily available bond characteristics: the spread-duration, the weight and the credit spread.

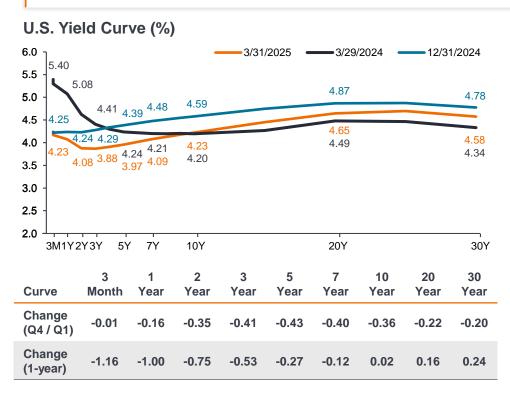
Past performance cannot guarantee future results.

# Year in review

#### **Key Takeaways**

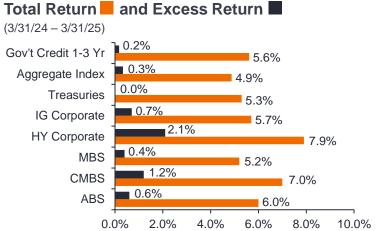
Note:

- In the first quarter of 2025, the Bloomberg 1-3 year Gov/Credit index rose by 1.63% bringing the trailing 12 month returns to 5.61%.
- For the quarter, the strong returns were driven by rallying treasury yields as concerns over the economic impact of tariffs on key trading partners increased. The tailwind of rallying treasury yields was partially offset as the concerns drove credit spread wider and spread sectors underperformed comparable maturity U.S. Treasuries.
- For the trailing 12 months, the strong returns were driven by positive contributions from rallying rates over the full period as expectations of Fed rate cuts increased and the outperformance of spread sectors during the last 9 months of 2024 as spreads compressed.



valuations (option Aujusted opieda)				1yr ∆
Index	3/31/24	12/31/24	3/31/25	(bps)
IG Corp Bond	90	80	94	4
HY Corp Bond	299	287	347	48
AAA CMBS	118	95	98	-20
ABS	98	81	97	-1

Valuations (Ontion Adjusted Spread)



Source: Bloomberg, ICE Bank of America, Janus Henderson Investors analysis as of March 31, 2025.

Total excess performance compares the excess return of a grouping in the portfolio to the excess return of that grouping in the benchmark and the excess return of that grouping in the benchmark to the benchmark overall, factoring in any difference in weight. Excess return is calculated by comparing the performance of a security to a hypothetical duration-matched security with no credit risk, and rolling up securities by grouping and is not a presentation of actual performance.

# Performance attribution – Overview

#### **Public School Fund Investment Board**

One year attribution (3/31/24 – 3/31/25)

#### **Attribution (bps)**

(-1)
-14
93
69
24
1
80

#### **Key Takeaways – Performance Drivers**

#### One Year Performance:

Public School Fund Investment Board (gross) 6.31% vs. Bloomberg 1-3 Year Gov't/Credit Index 5.61%

- Our overweight allocation to credit spread risk was the main contributor to performance.
- Our overweight to securitized credit (non-Agency MBS, CMBS, ABS, and CLOs) contributed.
- Security selection within investment grade corporate bonds was positive, and out of index allocations to high yield and loans also contributed.
- Allocation to Agency MBS detracted from relative performance.
- Our yield curve position detracted as 5 year and longer treasury yields underperformed shorter maturities.

Source: Janus Henderson Investors analysis, as of March 31, 2025.

Note: Performance attribution and contribution reflect returns gross of advisory fees and do not represent actual returns as they are based on end of day holdings.

Attribution is calculated by geometrically linking daily returns for the portfolio and index. Contribution represents the weighted contribution to overall performance for the time period held.

Yield Curve reflects performance driven by changes in the yield curve and the effect of yield that comes from the yield curve, as opposed to yield derived from credit risk.

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### Performance attribution Excess return by asset class

#### **Public School Fund Investment Board**

One year attribution (3/31/24 - 3/31/25)

	Average	Weight (%)	Total Re	turn (bps)	Excess R	eturn (bps)		ribution urn (bps)		ive Perform	
Sectors	Portfolio	Benchmark	Portfolio	Benchmark	Portfolio	Benchmark	Portfolio	Benchmark	Allocation	Selection	Total
Corporates – IG	34.5	23.9	678	615	135	62	243	146	4	24	28
CMO	10.2		702		183		71		17		17
CMBS	9.3		680		165		63		13		13
ABS	8.8		710		156		63		13		13
Treasuries	19.5	69.1	470	543	0	0	93	376	8	0	8
CLO	4.0		673		203		26		8		8
Loan	3.1		593		174		19		5		5
Corporates – HY	2.8	0.0	619	47	69	-44	19	0	2		2
Gov't. Related	0.4	6.7	695	558	147	9	2	38	0	1	1
TBA Cash Adjust	-1.2								0		0
Emerging – IG		0.1		656		89		1	0		0
Emerging – HY	0.1		81		-26		0		0		0
Cash	2.3	0.1	513		0		12		0	0	0
Agency MBS	6.1		421		9		28		-1		-1
Exposure Mismatch and Transactions										-1	-1
Total	100.0	100.0							69	24	93

Source: Janus Henderson Investors, as of March 31, 2025.

Note: Performance attribution and contribution reflect returns gross of advisory fees and do not represent actual returns as they are based on end of day holdings. Attribution is calculated by geometrically linking daily returns for the portfolio and index. Contribution represents the weighted contribution to overall performance for the time period held.

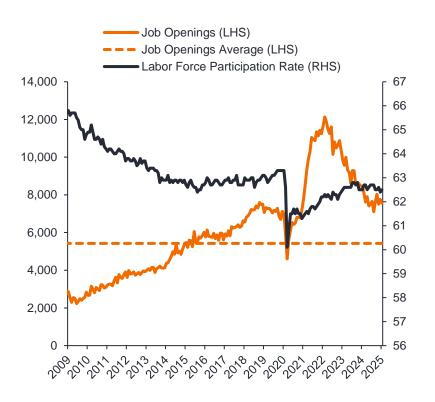
Total excess performance compares the excess return of a grouping in the portfolio to the excess return of that grouping in the benchmark and the excess return of that grouping in the benchmark to the benchmark overall, factoring in any difference in weight. Excess return is calculated by comparing the performance of a security to a hypothetical duration-matched security with no credit risk, and rolling up securities by grouping and is not a presentation of actual performance.

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### Outlook and positioning

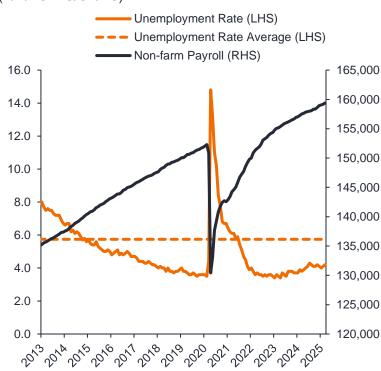
### Labor market is currently well balanced

### Labor force participation and Job openings (1/1/09 - 2/28/25)



### Unemployment rate and total US employees on nonfarm payrolls

(1/1/13 - 3/31/25)



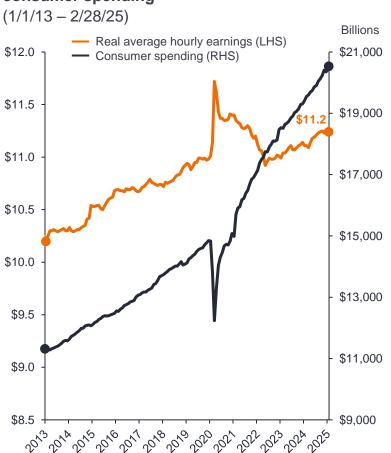
Source: JOLTS as of February 28, 2025.

Source: Bureau of Labor Statistics as of March 31, 2025.

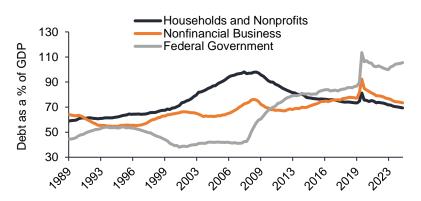


# Consumers and Corporations are starting from a place of strength

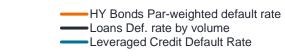
### Real average hourly earnings and consumer spending

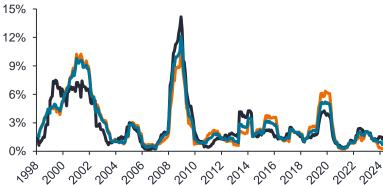


#### **Debt of Nonfinancial Sectors** (12/1/89 – 9/30/24)





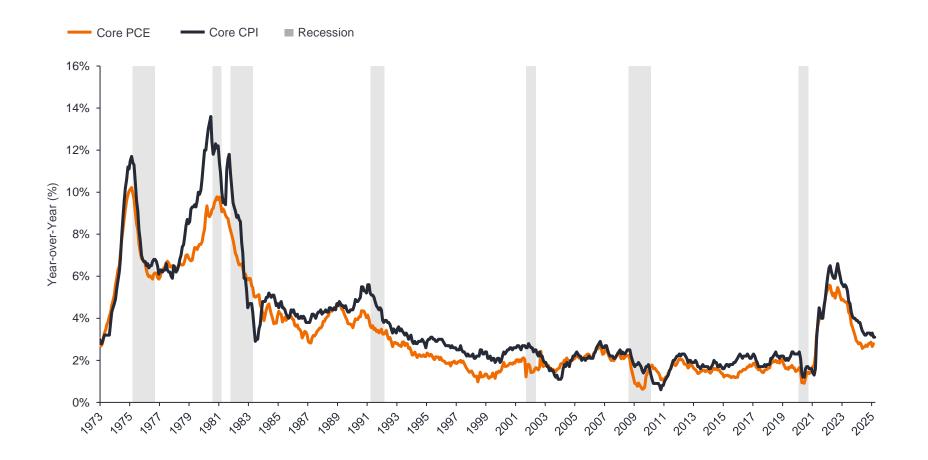




Source: LHS: Bloomberg, as of February 28, 2025. RHS (top): Federal Reserve, as of September 30, 2024. RHS (bottom): JPMorgan, as of March 31, 2025.

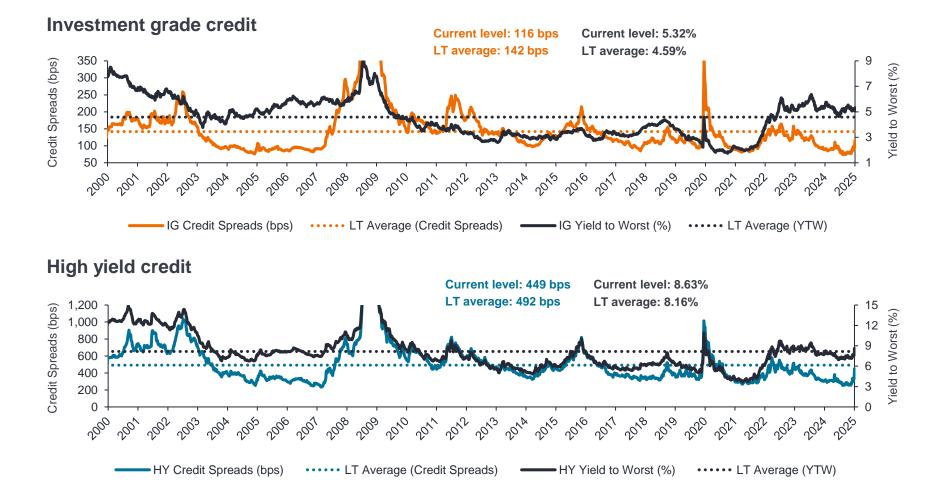


# While policies are creating uncertainty about its future, current inflation has moderated



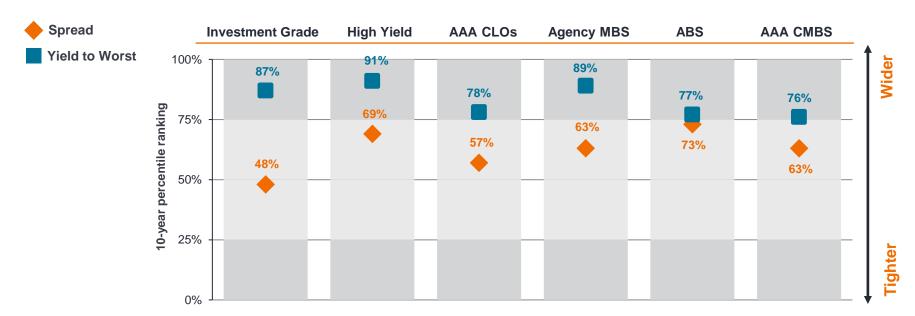
Source: Bureau of Labor Statistics, Core CPI as of March 31, 2025, Core PCE as of February 28, 2025.

# Corporate credit valuations are much more attractive after recent spread widening



Source: Bloomberg, as of April 7, 2025.

# Spreads are more attractive as they have widened to or beyond their 10-year averages

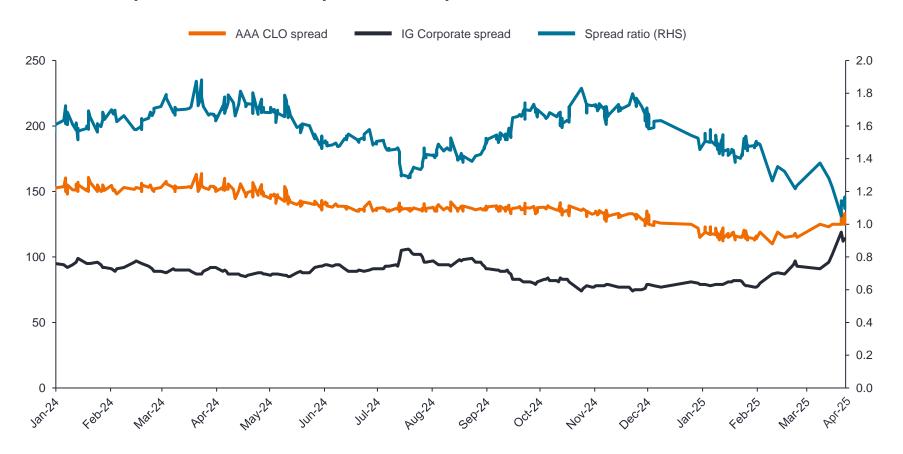


Metrics	Investment Grade	High Yield	AAA CLOs	Agency MBS	ABS	AAA CMBS
Spread	116	449	158	41	109	110
10yr Tights	78	261	110	7	56	53
10yr Wides	272	880	302	75	343	197
10yr Average	120	414	142	37	92	96
Yield to Worst	5.3%	8.6%	5.8%	5.0%	5.0%	5.0%

Source: Janus Henderson Investors, Morningstar and Bloomberg as of April 7, 2025. "Investment Grade" represents the Bloomberg US Corporate Bond Index, "High Yield" represents the Bloomberg US Corporate High Yield Index, "AAA CLOs" represents the JPM CLOIE Index, "Agency MBS" represents the Bloomberg MBS Index, "ABS" represents the ICE BofA US Fixed Rate Asset Backed Securities Index, and "CMBS" represents the ICE BofA CMBS Fixed Rate Index. There is no guarantee that past trends will continue, or forecasts will be realized. AAA CLO spreads (Discount Margin) experienced a one day spread widening of 26bps on June 28th 2023 when J.P. Morgan Transitioned the referenced rate from LIBOR to SOFR. Actual results may vary, and the information should not be considered or relied upon as a performance guarantee.

## IG corporate bonds now more attractive than AAA CLOs on relative basis

#### AAA CLO spreads relative to corporate bond spreads



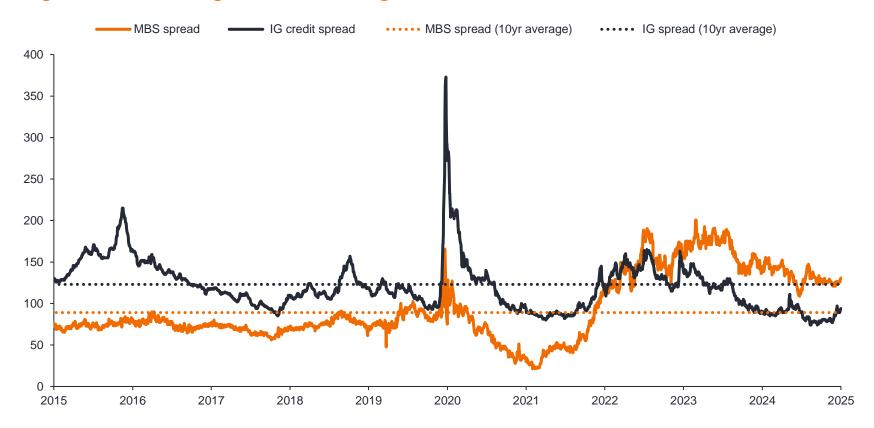
Source: Bank of America, Janus Henderson Investors analysis, as of April 10, 2025.

Note: New issue 5NC2 Tier 1 Manager CLO spreads



### We believe agency MBS are attractive

The spread pick up to corporates has remained significantly higher than long-term average



Source: Bloomberg, as of March 31, 2025.

### Fixed Income security selection themes

### Ideas spanning corporates and securitized assets

#### **UP IN QUALITY**



- Our securitized credit positions are overwhelmingly allocated to the AAA rated or most senior tranches
- Corporate allocation focused on investment grade and select cross over opportunities – identifying issuers improving balance sheets and ratings upgrade potential

#### **SECURITIZED**



- Own short duration securitized credit with attractive carry and limited downside risk
- Continue to find attractive opportunities in single asset single borrower (SASB) stories across a diversified array of property types; limited exposure to office sector

#### **RESIDENTIAL MBS**



- Residential mortgage credit is attractive with positive technicals
- Overweight 2nd lien loans, benefitting from attractive spread, better structure, home price appreciation and strong consumer

### CORPORATE SELECTION



- Overweight in Financial and Banking sectors. Expect to benefit from strong economy, deregulation and increased M&A volume.
- Healthcare overweight taking advantage of spread widening in sector volatility post election.
- Focusing on idiosyncratic security selection opportunities

Source: Janus Henderson Investors, as of March 31, 2025.

### Portfolio composition

Characteristics	3/31/24	3/31/25	Index
Effective Duration	2.0	1.9	1.8
DTS* (spread risk)	2.3	2.6	0.3
Yield to Worst (%)	5.8	5.2	4.1

Credit Quality	Public School Fund Investment Board	Bloomberg 1-3 Year Gov't/Credit Index
Aaa	20.2	3.1
Aa	25.7	75.4
A	14.8	11.8
Baa	26.9	9.7
Ва	7.3	_

#### **Public School Fund Investment Board**

#### Bloomberg 1-3 Year Gov't/Credit Index

		i abiic	ochoon i ani	a mivestine	iit Boara		bloomberg i o real Gov borealt in		
	Market \	Market Value (%)		% to DTS	Cont to DTS	% to DTS	Market Value (%)	Cont to DTS	% to DTS
	3/31/24	3/31/25	3/31	/24	3/31	1/25	3/31/25	3/3	1/25
Treasuries	28.2	16.5	_	_	_	_	70.8	_	_
Inflation Linked	_	_	_	_	_	_	_	_	_
Total Corporates	36.4	41.6	1.0	44%	1.3	50%	23.3	0.3	94%
Corporate – IG	34.6	34.3	0.9	41%	0.9	33%	23.3	0.3	94%
Corporate – HY	1.8	3.7	0.1	3%	0.1	5%	0.0	0.0	0%
Bank Loans	_	3.6	_	_	0.3	12%	_	_	_
Preferred and Converts	_	_	_	_	_	_	_	_	_
Total Securitized	34.5	40.7	1.3	55%	1.3	50%	_	_	_
MBS	6.2	6.3	0.2	8%	0.1	5%	_	_	_
CMO	9.8	11.0	0.5	22%	0.4	15%	_	_	_
ABS	8.0	7.9	0.2	9%	0.2	8%	_	_	_
CMBS	8.7	10.9	0.3	13%	0.3	12%	_	_	_
CLO	1.8	4.6	0.1	4%	0.2	9%	_	_	_
Government Related	0.4	0.4	0.0	1%	0.0	0%	5.9	0.0	6%
Cash & Equivalent	0.5	0.9	_	_	_	_	_	_	_
Total	100	100	2.3	100%	2.6	100%	100	0.3	100%

Source: Janus Henderson Investors, as of March 31, 2025.

Note:

Credit quality ratings reflect the middle rating received from Moody's, Standard & Poor's and Fitch, where all three agencies have provided a rating. If only two agencies rate a security, the lowest rating is used. If only one agency rates a security, that rating is used. Ratings are measured on a scale that ranges from Aaa (highest) to D (lowest). Equity equivalents may include common and preferred stock.

<sup>\*</sup>Duration Times Spread (DTS) is a method for measuring spread risk. It is calculated by simply multiplying three readily available bond characteristics: the spread-duration, the weight and the credit spread.

The portfolio includes 4.2% securities that are not rated by S&P, Moody's nor Fitch.

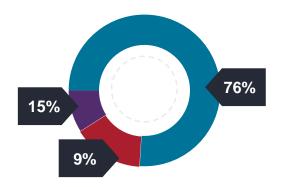
### **Appendix**

### **Short Duration overview**



Fixed income benchmarks are inefficient, exposing clients to an undesirable mix of risk factors. We believe diversifying risk factors, dynamically allocating capital, and active security selection results in better client outcomes. Our disciplined, transparent, risk-budgeting-based process is designed to deliver consistent performance.

#### EXPECTED SOURCES OF EXCESS RETURN



#### Structural foundation

#### Dynamic allocation

- Relative sector / Industry
- Duration / Country / Curve
- Tactical spread beta
- Security selection

#### STRATEGY OVERVIEW



Investment category
eVestment U.S. Short Duration Fixed Income

Benchmark
Bloomberg 1-3 Year U.S. Gov't/Credit Index

Expected excess return\*
165 bps (gross) over a full market cycle
143 bps (net) assumes 22 bps fee which is
the max rate on fee schedule

Expected tracking error\*\*

195 bps over a full market cycle

**Duration** 1.5 – 3.5 years

Below-investment grade allocation Typically 0% – 20%, max 35%

Note: Investing involves risk, including the possible loss of principal and fluctuation of value. There is no assurance the stated objectives will be met. Actual results may vary, and the information should not be considered or relied upon as a performance guarantee.

\*Target returns are hypothetical, are subject to inherent limitations, and should not be considered or relied upon as a performance guarantee.

\*\*Actual results may underperform the target and an investor may lose (or gain) money. Though aspirational, the criteria used to determine our target returns incorporates historical data along with forward-looking expectations with respect to both market returns and our aim to drive outperformance.

The Structural Foundation (SF) is designed to represent the management style of the strategy and is the starting point for sector allocation decisions. The SF aligns with the strategy's objectives and seeks to systematically maximize expected risk-adjusted returns by taking advantage of inefficiencies in the fixed income market and traditional benchmarks. The SF incorporates objective criteria and proprietary hedging assumptions. The SF is rebalanced to the neutral allocation monthly and may vary over time with prevailing market conditions.



### Performance attribution – Overview

#### **Public School Fund Investment Board**

Q1 2025 attribution (12/31/24 – 3/31/25)

#### **Attribution (bps)**

	, man (10 p c)
Yield Curve	13
Total Excess Return	-5
<ul> <li>Asset Allocation</li> </ul>	-2
<ul> <li>Security Selection</li> </ul>	-3
Other	0
Total	8

#### **Key Takeaways – Performance Drivers**

#### Q1 2025 Performance:

Public School Fund Investment Board (gross) 1.69% vs. Bloomberg 1-3 Year Gov't/Credit Index 1.63%

- Our yield curve positioning contributed as Treasury yields rallied with the front end of the curve outperforming.
- Our spread risk overweight detracted as spreads generally widened
- Our overweight allocations to securitized credit sectors such as collateralized loan obligations (CLOs), commercial mortgagebacked securities (CMBS), and asset-backed securities contributed to performance on a relative basis.
- Allocations to high yield and agency MBS detracted.

Source: Janus Henderson Investors analysis, as of March 31, 2025.

Note: Performance attribution and contribution reflect returns gross of advisory fees and do not represent actual returns as they are based on end of day holdings.

Attribution is calculated by geometrically linking daily returns for the portfolio and index. Contribution represents the weighted contribution to overall performance for the

time period held.

Yield Curve reflects performance driven by changes in the yield curve and the effect of yield that comes from the yield curve, as opposed to yield derived from credit risk.

### Performance attribution Excess return by asset class

#### **Public School Fund Investment Board**

Q1 2025 Attribution (12/31/24 – 3/31/25)

	Average	Weight (%)	Total Re	turn (bps)	Excess R	eturn (bps)		ribution urn (bps)		ive Perform ffects (bps	
Sectors	Portfolio	Benchmark	Portfolio	Benchmark	Portfolio	Benchmark	Portfolio	Benchmark	Allocation	Selection	Total
CLO	4.8		134		25		7		1		1
Treasuries	17.5	70.5	120	162	0	0	21	114	1	0	1
Loan	4.0		110		18		5		1		1
ABS	8.4		177		9		15		1		1
TBA Cash Adjust	-1.3								0		0
Cash	2.2	0.1	108		0		2		0	0	0
Emerging – IG		0.2		190		26		0	0		0
Emerging – HY	0.4		81		-26		0		0		0
Gov't. Related	0.4	6.0	247	169	32	11	1	10	-1	0	0
Corporates – HY	2.9	0.0	196	102	-4	19	5	0	-1		-1
CMO	10.4		167		-7		17		-1		-1
CMBS	9.8		112		-8		11		-1		-1
Agency MBS	6.3		301		-28		18		-2		-2
Corporates – IG	34.4	23.3	201	162	-5	4	69	38	0	-3	-3
Exposure Mismatch and Transactions										0	0
Total	100.0	100.0							-2	-3	-5

Source: Janus Henderson Investors, as of March 31, 2025.

Note: Performance attribution and contribution reflect returns gross of advisory fees and do not represent actual returns as they are based on end of day holdings. Attribution is calculated by geometrically linking daily returns for the portfolio and index. Contribution represents the weighted contribution to overall performance for the time period held.

Total excess performance compares the excess return of a grouping in the portfolio to the excess return of that grouping in the benchmark and the excess return of that grouping in the benchmark to the benchmark overall, factoring in any difference in weight. Excess return is calculated by comparing the performance of a security to a hypothetical duration-matched security with no credit risk, and rolling up securities by grouping and is not a presentation of actual performance.

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### Long-term macro drivers

#### Trends to watch

# GEOPOLITICAL REALIGNMENT

- Sector 'Best Ideas'
- Non-US Equities
- Smal, SMID, Mid Equities
- Risk Mitigation

#### **SHIFTING DEMOGRAPHICS**



- Charitable
- Retirement
- Sector 'Best Ideas'



- Securitized/CLOs
- Asset-Backed Lending
- Credit Quality Focus

Note: The opinions and views expressed are subject to change without notice. They are for information purposes only and should not be used or construed as an offer to sell, a solicitation of an offer to buy, or a recommendation to buy, sell or hold any security, investment strategy or market sector. No forecasts can be guaranteed. Opinions and examples are meant as an illustration of broader themes and are not an indication of trading intent. It is not intended to indicate or imply that any illustration/example mentioned is now or was ever held in any portfolio.

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janushenderson.com



#### **Important information**

There is no assurance that the investment process will consistently lead to successful investing.

Investing involves risk, including the possible loss of principal and fluctuation of value.

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