OREGON
STATE
TREASURY

Oregon Investment Council

September 4, 2024

Cara Samples
Chair

Tobias Read
State Treasurer

Rex Kim
Chief Investment Officer

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Oregon State Treasury
Investment Division
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Agenda

September 4, 2024
9:00 AM

Time	Tab		Presenter
9:00 – 9:05	1	**Review & Approval of Minutes** May 29, 2024	Cara Samples *OIC Chair*
9:05 – 9:10	2	**Committee Reports**	Rex Kim *Chief Investment Officer*
9:10 – 10:00	3	**OPERF Q2 Performance Review**	Mika Malone *Managing Principal, Meketa* Allan Emkin *Managing Principal, Meketa*
10:00 – 10:30	4	**CSF Performance Review**	Michael Langdon *Director of Private Markets* Louise Howard *Director of Capital Markets* Jamie McCreary *Service Model Program Manager*

--- BREAK ---

10:40 – 11:10	5	**Policy Changes** (Action Item: Approval of Policy Changes)	Jamie McCreary *Service Model Program Manager*
11:10 – 11:40	6	**OSGP Consultant** (Action Item: Approval of Consultant Recommendation)	Jamie McCreary *Service Model Program Manager* Claire Illo *Investment Officer, Public Equity*
--- BREAK ---			
11:40 – 12:00	7	**Open Discussion**	OIC Members, Staff, Consultants
12:00	8	**Public Comments**	

TAB 1

REVIEW & APPROVAL OF MINUTES

State of Oregon
Office of the State Treasurer

16290 SW Upper Boones Ferry Road

Tigard, Oregon 97224

OREGON INVESTMENT COUNCIL

May 29, 2024

Meeting Minutes

Members Present:	Treasurer Tobias Read, Cara Samples, Lorraine Arvin (virtual), Pia Wilson-Body (virtually), Alline Akintore (virtually)
Staff Present:	Rex Kim, Dmitri Palmateer, David Randall, Michael Langdon, Karl Cheng, Louise Howard, Gloria Gil, Mike Mueller, Claire Illo, Kenny Bao, Ahman Dirks, Chris Ebersole, Eric Engelson, Tim Sayre, Dan McNally, Sebrina Gridley, Bryson Pate, Jennifer Kersgaard
Staff Participating Virtually:	Aaron Schaffer, Aliese Jacobsen, Alli Gordon, Alli Sorenson, Amanda Kingsbury, Andrew Coutu, Andrey Voloshinov, Angela Schaffers, Asia Slaughter, Austin Carmichael, Ben Mahon, Bradley Curran, Bri Naber, Byron Williams, Carmen Lieva, Christine Wilson, Dana Millican, Debra Day, Eric Messer, Faith Sedberry, George Naughton, Gloria Gil, Ian Huculak, Jamie McCreary, Jen Plett, Jeremy Knowles, Jo Recht, Josh Jones, Kiara Cruz, Kristi Jenkins, Lisa Pettinati, Loren Terry, Mark Selfridge, Mary Kriehbiel, Melissa Sloan, Mohammed Quraishi, Paul Koch, Perrin Lim, Peter Rector, Roy Jackson, Ryan Auclair, Scott Robertson, Sommer May, Tan Cao, Taylor Bowman, Tiffany Zahas, Tim Miller, Tyler Bernstein, Wendi Nelson, Wil Hiles, Young Kim
Consultants Present:	Mika Malone, Tom Martin, Raneen Jalajel, Daniel Ingram, Christy Fields, Ashley Woeste (virtually), Jacob Trujillo, Taylor Anderson, Sarah Bernstein, Kevin White (virtually)
PERS Present:	Kevin Olineck, John Scanlan
Legal Counsel Present:	Steve Marlowe (Department of Justice)

The May 29th , 2024, OIC meeting was called to order at 9:05am by Cara Samples, Chair

Time	**Tab**		**Presenter**
9:00 – 9:05	1	**Review & Approval of Minutes** April 17, 2024 Chair Samples asked for approval of the April 17, 2024, OIC regular meeting minutes. Treasurer Read moved approval at 9:08 am, member Arvin seconded the motion which then passed by a 4/0 vote.	Cara Samples *OIC Chair*

9:05 – 9:10 | 2 | **Committee Reports** | Rex Kim
Chief Investment Officer

OST Investment Committee
None

Staff Discretion
OPERF:
May 24th Caxton Global Investments $50M USD

May 15th CIO approved cash raise sourced from Public Equity and Fixed Income $1B USD

Common School Fund:
May 24th Caxton Global Investments $7.5M USD

9:10 – 10:00 | 3 | **Real Estate Market Update** | Kevin White
Global Head of Real Estate Research & Strategy, DWS
Taylor Anderson
Americas Head of Sustainable Portfolio Solutions, DWS
Laura Gaylord
Head of Core Institutional Coverage Americas, DWS

Gloria Gil, Senior Investment Officer, Real Estate, introduced Kevin White, Global Head of Real Estate Research & Strategy with DWS, Taylor Anderson, Americas Head of Sustainable Portfolio Solutions with DWS, and Jacob Trujillo, Relationship Manager with DWS. The presentation included a discussion of U.S. Real estate outlook and strategy, interest rates and long-term perspectives, allocation and regional targets, and sustainability themes.

--- BREAK ---

Member Pia-Wilson joined virtually at 10:00am

10:15 – 10:38 | 4 | **OPERF Q1 Performance Review** | Mika Malone
Managing Principal, Meketa

Mika Malone, Managing Principal with Meketa, presented the OPERF Q1 Performance Review. The presentation included an economic and market update and discussion of interest rates and inflation.

OPERF's Q1 returns trailed indices -1.9% in the short-term, outperformed the 3-year benchmark by 1.2%, but trailed the 5-year benchmark by -0.4%.

10:40 – 11:40 | 5 | **Treasurer Read Net Zero Plan Review** | Sarah Bernstein
Managing Principal, Meketa
Daniel Ingram
Partner, Aon

Sarah Bernstein, Managing Principal with Meketa, along with Daniel Ingram, Partner with Aon, Tom Martin, Head of Private Equity and Real Assets with Aksia, and Christy Fields, Managing Principal with Meketa, presented the Treasurer Read Net Zero Review. The presentation discussed the initial review by Meketa and Aon of Treasurer Read's Net Zero policy and its implementation within OPERF's existing Investment Policy. They presented background information on climate and decarbonization, OPERF's approach as a fiduciary, plan recommendations and their consistency with Policy, and a discussion of next steps.

11:40 – 12:00 6 **OPERF Guidelines**

Raneen Jalajel
Partner, Aon
Mika Malone
Managing Principal, Meketa

Mika Malone, Managing Principal with Meketa, along with Raneen Jalajel, Associate Partner with Aon, presented the OIC Investment Guidelines Project Plan. The presentation included an update on completed steps and project plan timeline. The project is on track; the next step is an SIO review of new asset class guidelines and an evaluation of existing guidelines.

12:00 7 **Forward Calendar**

Rex Kim
Chief Investment Officer

Rex Kim, Chief Investment Officer, presented the forward calendar. Upcoming events include a discussion on pacing, and asset allocation review.

12:00 8 **Open Discussion** OIC Members, Staff, Consultants

--- BREAK ---

12:00 – 12:30 9 **Public Comments**

Oregon Investment Council

OREGON STATE TREASURY

TAB 2

COMMITTEE REPORTS

TAB 3

OPERF Q2

PERFORMANCE REVIEW

MEKETA

Oregon Investment Council

September 4, 2024

Q2 Performance Update
As of June 30, 2024

Table of Contents

Introduction

OPERF Executive Summary – Notable Items

→ Most major asset classes delivered positive returns in the second quarter. US Large Cap equities continued to drive returns for risk assets on the back of continued AI enthusiasm. Real Estate assets continue to underperform other asset classes as the higher rate environment combined with shifting sector and regional performance has been a headwind.

→ OPERF returned 1.0% which lagged most peers and its benchmark in part due to its lower exposure to public equity markets.

→ The persistent overweight to Private Equity has been a headwind for the portfolio. Recent underperformance from the asset class has resulted in trailing 1-, 5-, and 10-year returns falling below the OPERF Policy benchmark, though outperformance persists over the 3-year period.

→ Despite benchmark relative challenges, performance versus peers remains strong over the longer 3-, 5-, and 10-year periods.

Economic and Market Update

As of June 30, 2024

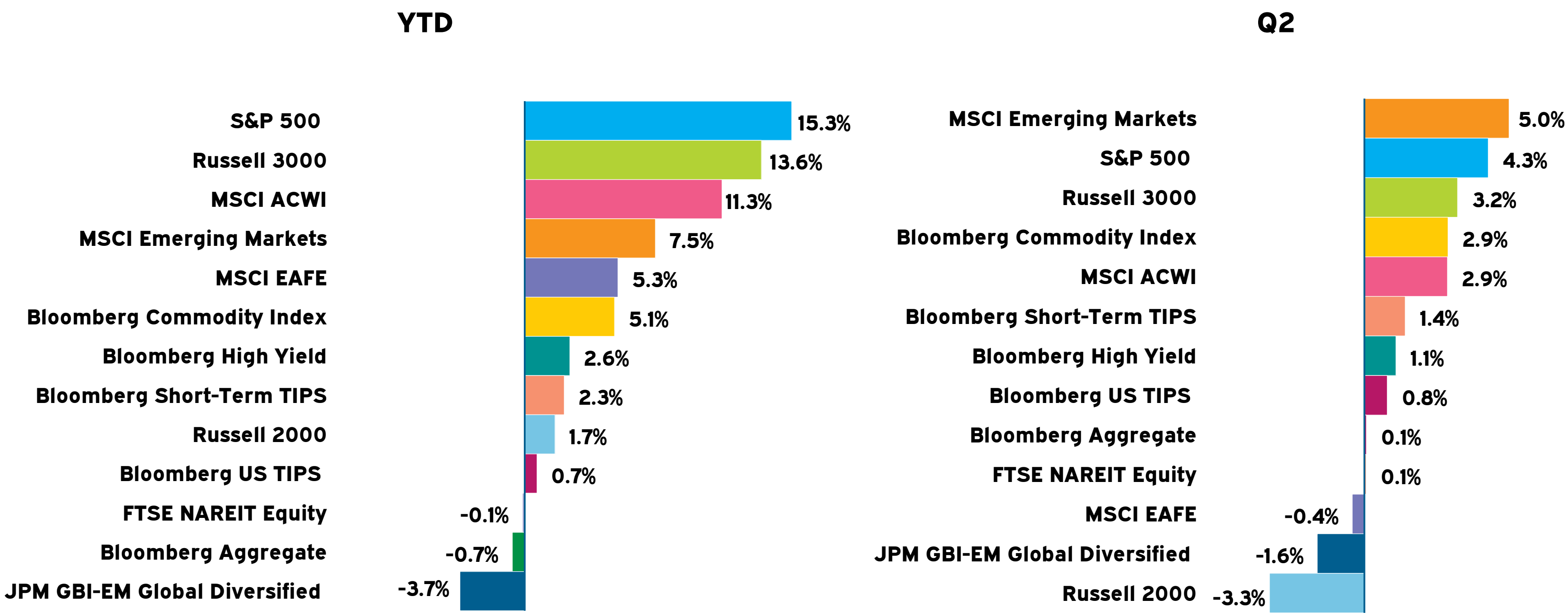
Commentary

→ Softening economic data, increased hopes of interest rate cuts, and ongoing AI optimism drove most asset classes higher in the second quarter.

- While the Fed remains data dependent, improvements in inflation and a cooling labor market may clear the way for several rate cuts this year.
- Inflation pressures have eased in most countries from their pandemic peaks, but some uncertainty remains and levels are still above most central bank targets. In the second quarter, headline and core inflation measures in the US both fell, with most readings coming in below expectations.
- The US equity markets (Russell 3000 index) added to its gains in the second quarter, rising 3.2%. Technology continued to drive results in the quarter due to AI demand and investment.
- Non-US developed equity markets fell in the second quarter (-0.4%) on continued strength in the US dollar and political uncertainty in Europe.
- Emerging market equities rallied (5.0%), for the quarter. Chinese stocks were up 7.1% as coordinated buying of Chinese exchange traded funds (ETFs) by state-backed financial services companies helped boost stock prices.
- US interest rates rose over the quarter but finished off their highs. Income offset capital losses though, leading to the broad US bond market rising 0.1% in the second quarter.

→ Looking to the rest of this year, the paths of inflation and monetary policy, China's economic disorder and slowing economic growth, and the many looming elections will be key factors.

Index Returns[1]



→ Declining inflation, resilient growth, and strong corporate earnings supported most asset classes in the second quarter.

→ Mid-way through 2024, US stocks have significantly outperformed other asset classes on a year-to-date basis.

1 Source: Bloomberg. Data is as of June 30, 2024.

Domestic Equity Returns[1]

Domestic Equity	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	3.6	4.3	15.3	24.6	10.0	15.1	12.9
Russell 3000	3.1	3.2	13.6	23.1	8.1	14.2	12.1
Russell 1000	3.3	3.6	14.2	23.9	8.8	14.6	12.5
Russell 1000 Growth	6.7	8.3	20.7	33.5	11.3	19.4	16.3
Russell 1000 Value	-0.9	-2.2	6.6	13.1	5.5	9.0	8.2
Russell MidCap	-0.7	-3.3	5.0	12.9	2.4	9.5	9.0
Russell MidCap Growth	1.7	-3.2	6.0	15.1	-0.1	9.9	10.5
Russell MidCap Value	-1.6	-3.4	4.5	12.0	3.7	8.5	7.6
Russell 2000	-0.9	-3.3	1.7	10.1	-2.6	6.9	7.0
Russell 2000 Growth	-0.2	-2.9	4.4	9.1	-4.9	6.2	7.4
Russell 2000 Value	-1.7	-3.6	-0.8	10.9	-0.5	7.1	6.2

US Equities: The Russell 3000 rose 3.2% in the second quarter, bringing the year-to-date results to 13.6%.

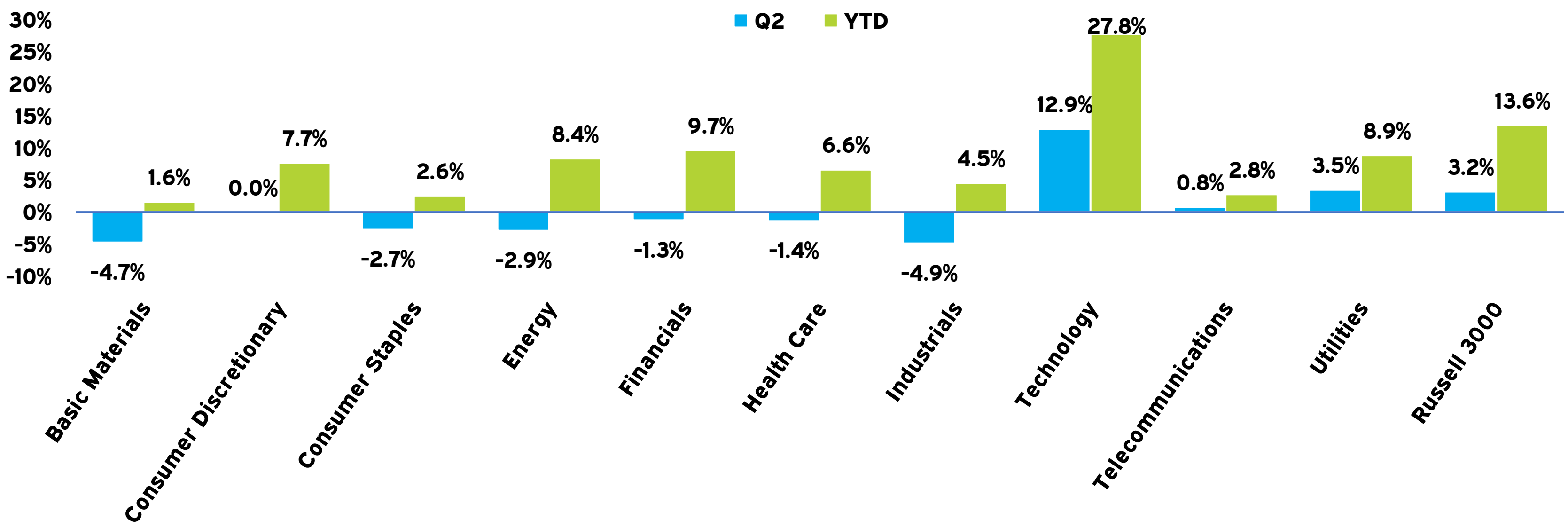
→ US stocks continued their rise in June driven by on-going AI optimism. Nearly all the quarterly market gains in the S&P 500 were driven by large cap technology stocks, with the S&P 500 equal weighted index down 3.1% for the quarter.

→ US large cap stocks continue to outperform small cap stocks. This dynamic is driven by the large technology stocks like NVIDIA, Apple, and Alphabet and the underperformance of small cap biopharma companies and banks.

→ Growth outperformed value for the quarter, with the most pronounced outperformance in the large cap space (8.3% versus -2.2%).

1 Source: Bloomberg. Data is as of June 30, 2024.

Russell 3000 Sector Returns[1]



→ Unlike first quarter performance, where all sectors gained, the second quarter saw mixed results across the major sectors.

→ Technology (+12.9%) continued to drive results fueled by on-going AI optimism. Utilities where a distant second increasing 3.5%, on expectations of increased demand from AI-related companies.

→ Many other sectors fell, including financials (-1.3%), health care (-1.4%), consumer staples (-2.7%), energy (-2.9%), materials (-4.7%), and industrials (-4.9%).

→ All sectors have positive returns for the year-to-date period. Technology stocks (+27.8%) continue to lead the broader market, followed by financials (9.7%).

[1] Source: Bloomberg. Data is as of June 30, 2024.

Foreign Equity Returns[1]

Foreign Equity	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	-0.1	1.0	5.7	11.6	0.5	5.6	3.8
MSCI EAFE	-1.6	-0.4	5.3	11.5	2.9	6.5	4.3
MSCI EAFE (Local Currency)	-0.6	1.0	11.1	15.1	8.1	9.0	7.4
MSCI EAFE Small Cap	-3.0	-1.8	0.5	7.8	-3.4	4.2	4.3
MSCI Emerging Markets	3.9	5.0	7.5	12.5	-5.1	3.1	2.8
MSCI Emerging Markets (Local Currency)	4.3	6.2	11.0	15.5	-1.6	5.6	5.8
MSCI EM ex. China	6.1	4.2	8.4	18.5	1.4	6.7	3.9
MSCI China	-1.9	7.1	4.7	-1.6	-17.7	-4.3	1.4

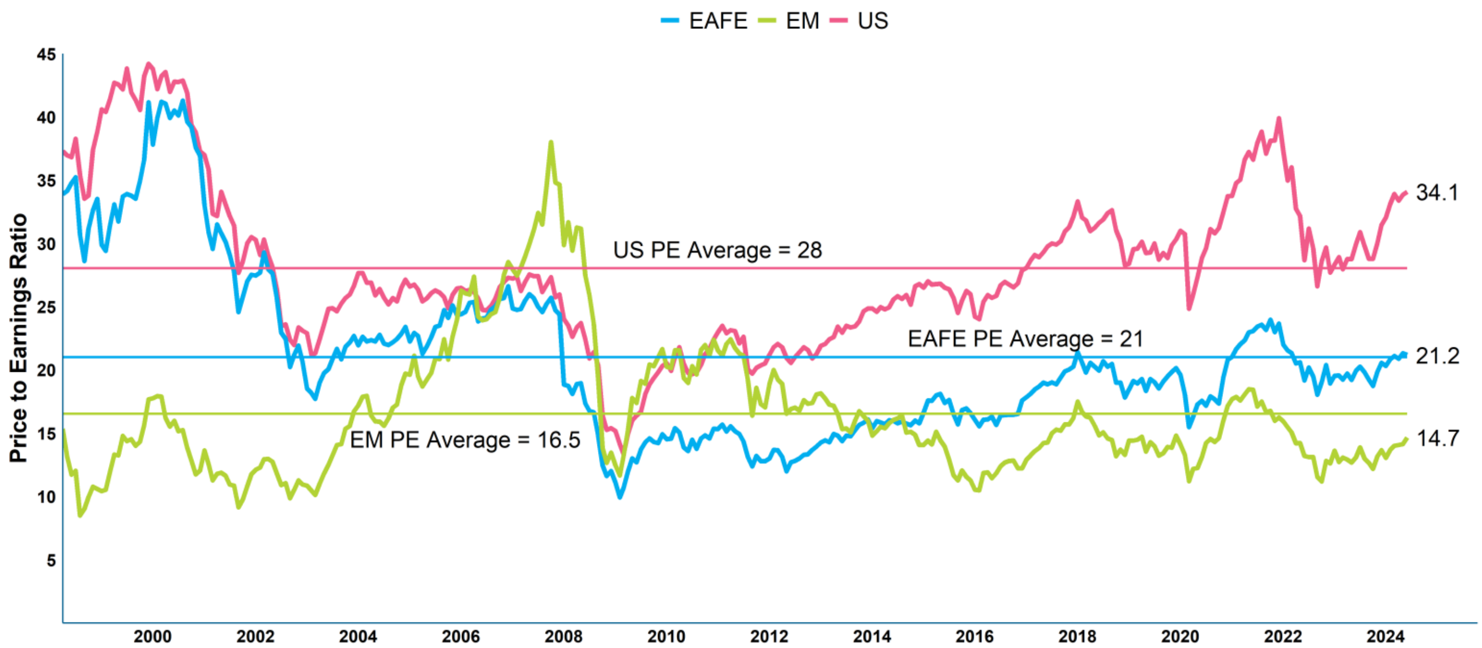
Foreign Equity: Developed international equities (MSCI EAFE) fell 0.4% in the second quarter, while emerging market equities (MSCI Emerging Markets) gained 5.0%.

→ For the second quarter, developed market equities declined driven by continued strength in the US dollar and regional political risks particularly in France. UK and Japanese equities made new all-time highs during the quarter, but this was not enough to offset losses in Europe.

→ Emerging market equities outpaced developed market equities during the quarter given strong results in China (7.1%). China equities moved into positive territory for the year (4.7%) due to government purchases of shares, improving economic data, and returning foreign investors.

[1] Source: Bloomberg. Data is as of June 30, 2024.

Equity Cyclically Adjusted P/E Ratios[1]



→ At the end of the second quarter, the US equity price-to-earnings ratio remained elevated and above its 21st century average.

→ International equity market valuations remain well below the US. International developed market valuations have increased to slightly above their long-term average, while emerging market equities remain below their long-term average despite recent gains.

[1] US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of June 2024. The average line is the long-term average of the US, EM, and EAFE PE values from April 1998 to the recent month-end respectively.

Fixed Income Returns[1]

Fixed Income	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	0.9	0.2	-0.3	3.5	-2.7	0.1	1.6	5.3	6.0
Bloomberg Aggregate	0.9	0.1	-0.7	2.6	-3.0	-0.2	1.3	5.0	6.2
Bloomberg US TIPS	0.8	0.8	0.7	2.7	-1.3	2.1	1.9	4.8	6.6
Bloomberg Short-term TIPS	0.6	1.4	2.3	5.4	2.2	3.2	2.0	5.1	2.4
Bloomberg High Yield	0.9	1.1	2.6	10.4	1.6	3.9	4.3	7.9	3.7
JPM GBI-EM Global Diversified (USD)	-1.1	-1.6	-3.7	0.7	-3.3	-1.3	-0.9	--	--

Fixed Income: The Bloomberg Universal index rose 0.2% in the second quarter, reducing the year-to-date decline to -0.3%.

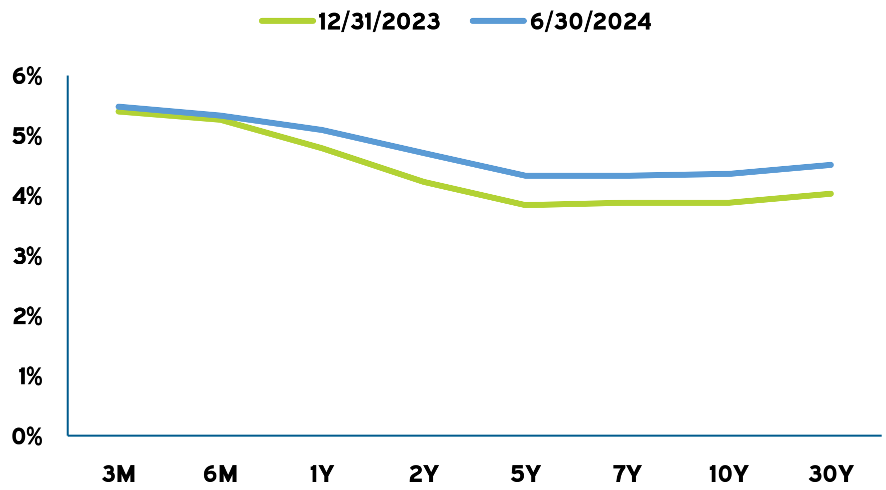
→ Bonds finished the quarter slightly up as May and June gains offset the April declines.

→ The broad US bond market (Bloomberg Aggregate) rose 0.1% in the second quarter, with the broad TIPS market gaining 0.8%. The less interest rate sensitive short-term TIPS index increased 1.4% for the quarter, leading to the best results.

→ High yield bonds (1.1%) also rose, as risk appetite remains strong.

[1] Source: Bloomberg. Data is as of June 30, 2024. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively. JPM GBI-EM data is from J.P. Morgan. Current yield and duration data is not available.

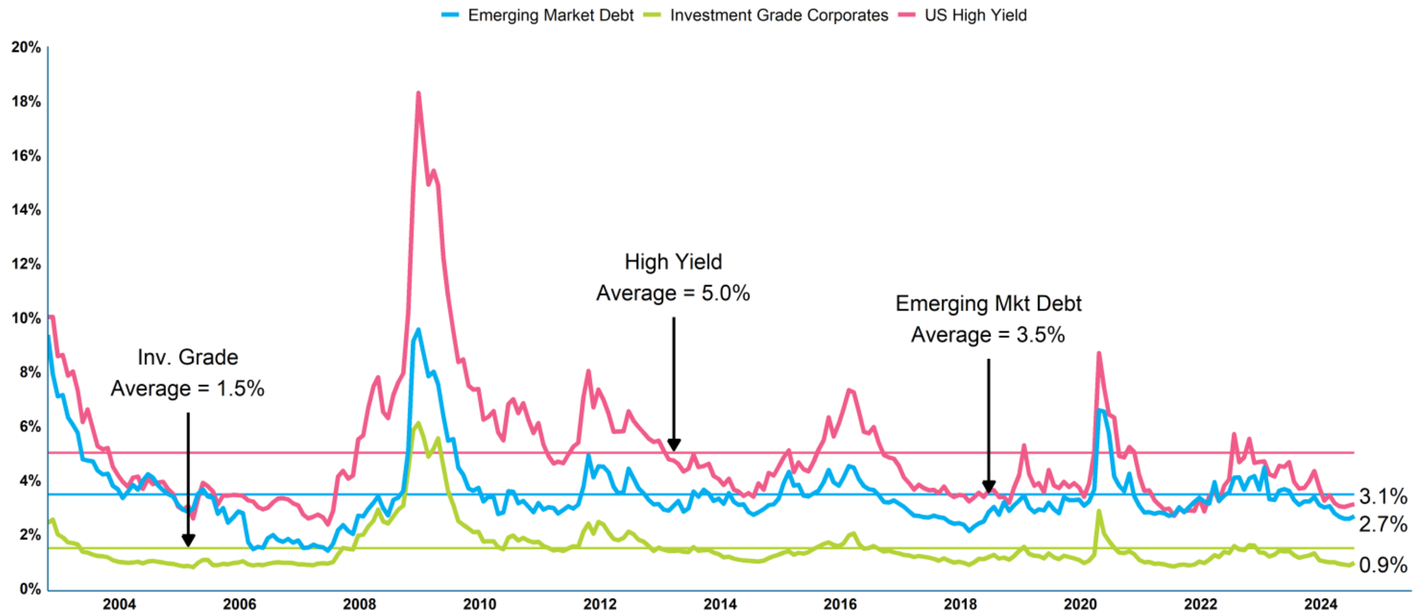
US Yield Curve[1]



- → After rates significantly increased in April on strong inflation data, they then declined in May and June. Chair Powell confirming that the FOMC would not raise rates again this year as economic data appears to be returning to long-run trends led to rates declining from the April highs.
- → The more policy sensitive 2-year Treasury yield finished the quarter roughly 0.2% higher at 4.76% but well off its peak of over 5.0%. The 10-year Treasury rose by a similar amount during the quarter finishing at 4.39%; also, off its April peak of 4.68%.
- → The yield curve remained inverted at month-end, with the spread between the 2-year and 10-year Treasury at roughly -35 basis points.

[1] Source: Bloomberg. Data is as of June 30, 2024.

Credit Spreads vs. US Treasury Bonds[1]



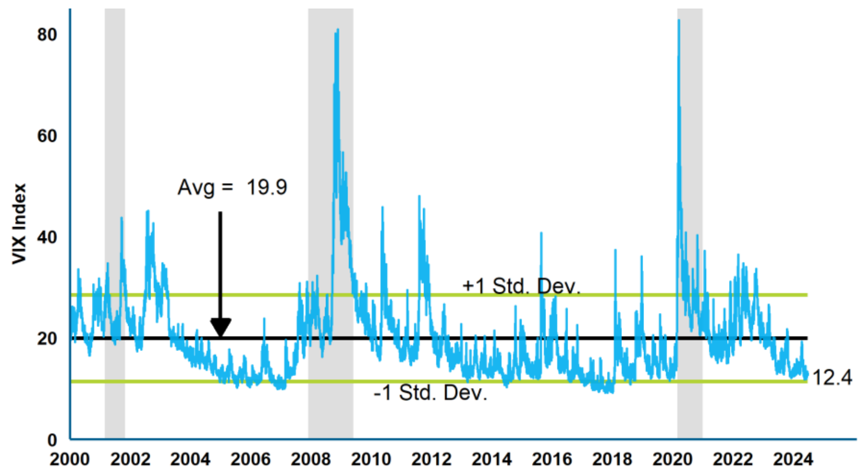
→ Despite rising rates, investor demand for risk exposure in credit markets remained strong in Q2 given measured weakness in the economic outlook and expectations of lower interest rates by year-end.

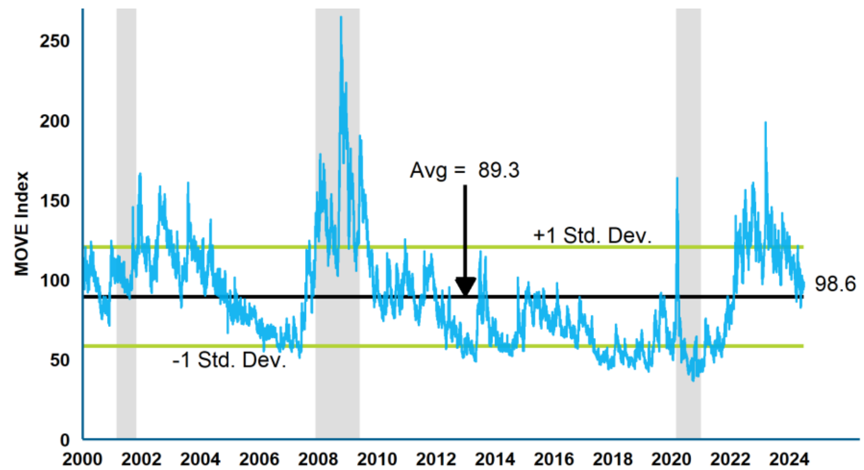
→ Spreads (the yield above a comparable maturity Treasury) stayed relatively steady over the quarter, near post-pandemic lows. All spreads remained below their respective long-run averages, particularly high yield.

→ Although spreads are relatively tight, yields remain at above-average levels compared to the last two decades, particularly for short-term issues.

[1] Source: Bloomberg. Data is as of June 30, 2024. Average lines denote the average of the investment grade, high yield, and emerging market spread values from September 2002 to the recent month-end, respectively.

Equity and Fixed Income Volatility[1]



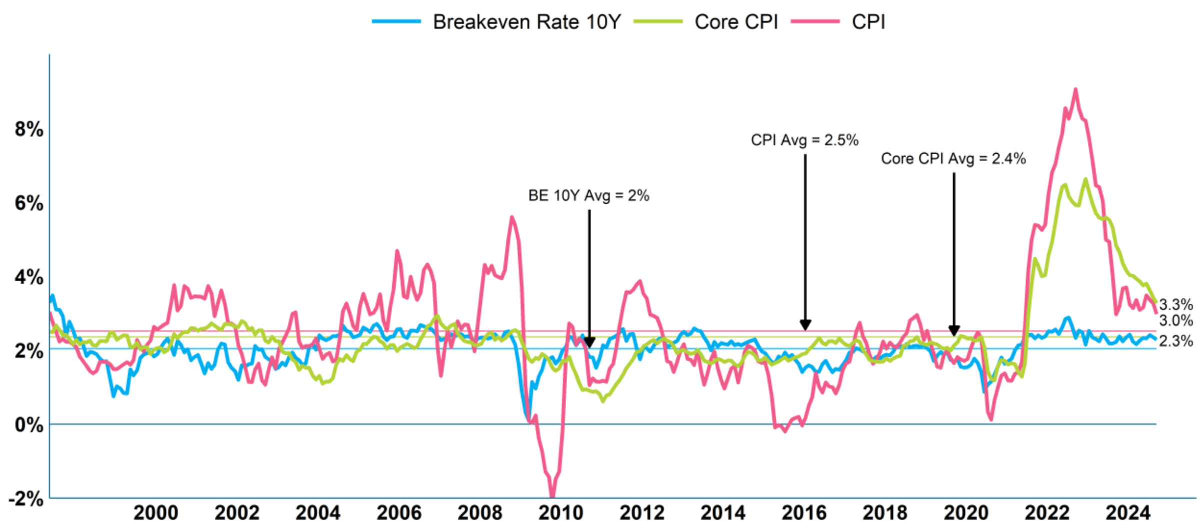


→ Volatility in equities was around one standard deviation below its long-term average at the end of the quarter as continued strength in technology stocks and weakening economic data has moderated fear in the markets.

→ Volatility in bonds (MOVE) ended June higher than where it started the quarter (98.6 versus 86.4) and above its long-run average.

[1] Equity Volatility – Source: FRED. Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of June 2024. The average line indicated is the average of the VIX and MOVE values between January 2000 and June 2024.

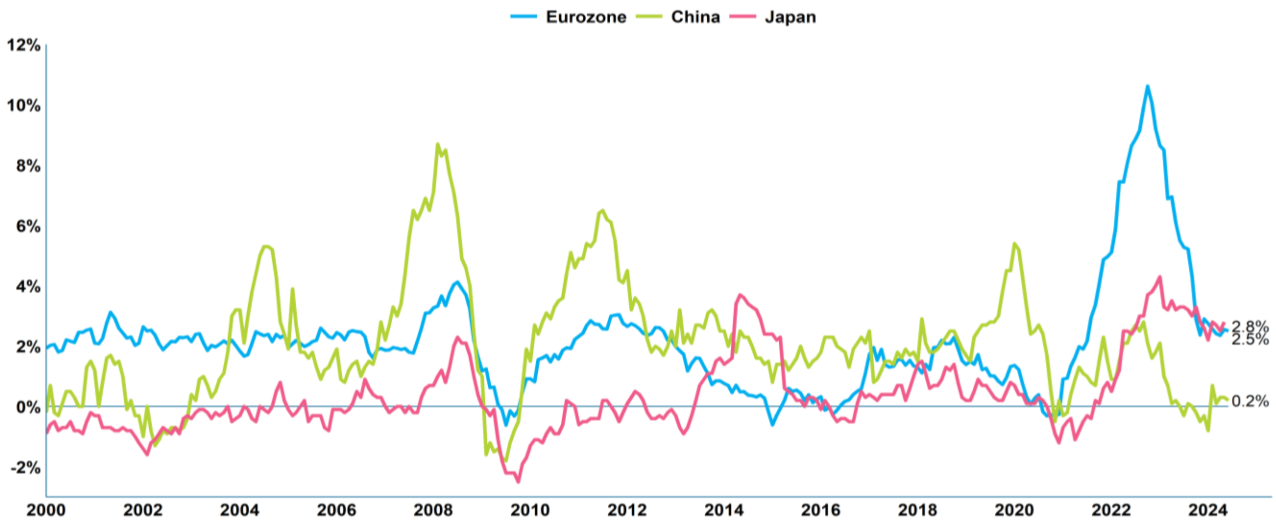
US Ten-Year Breakeven Inflation and CPI[1]



- → Year-over-year headline inflation continued to fall in June (3.3% to 3.0%) and again came in below expectations. Over the quarter, inflation fell by a total of 0.5%.
- → Month-over-month inflation was negative for the first time since March 2020, largely because of price declines in energy and core goods.
- → Core inflation (excluding food and energy) also declined in June (3.4% to 3.3%) and came in below expectations. A drop in used car prices, transportation services, and a slowing of the pace of shelter price increases all contributed to the decline.
- → Inflation expectations (breakevens) have been volatile, but they finished the quarter largely where they started.

[1] Source: FRED. Data is as June 2024. The CPI and 10 Year Breakeven average lines denote the average values from February 1997 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

Global Inflation (CPI Trailing Twelve Months)[1]



→ Outside the US, inflation is also easing from the recent peaks.

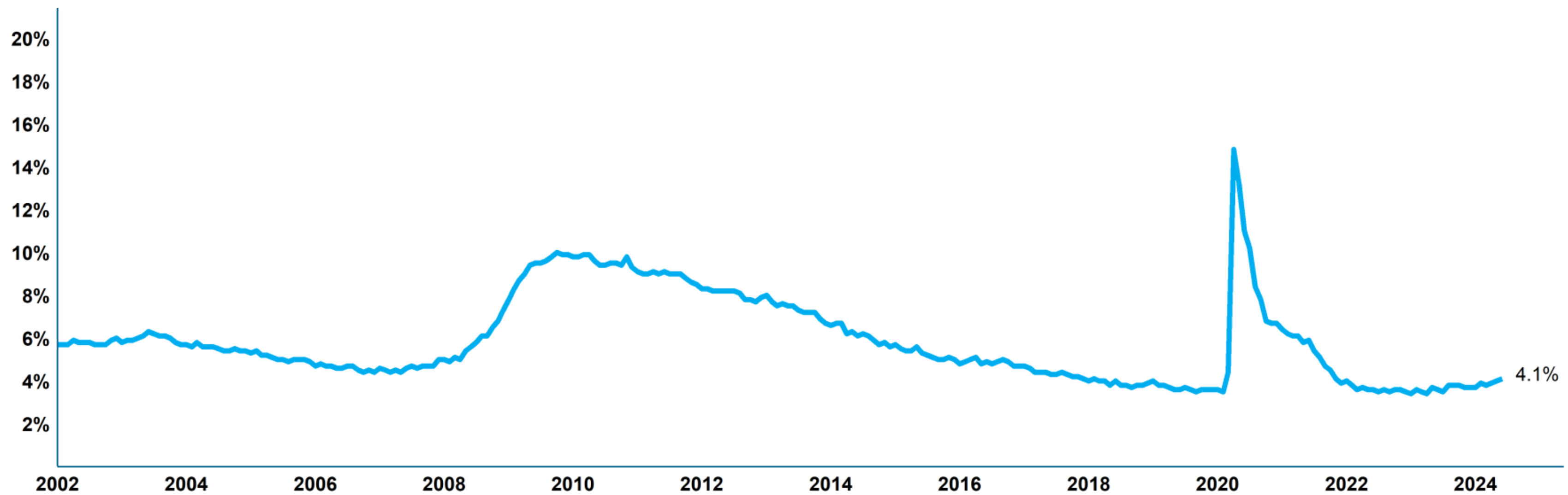
→ In the eurozone, inflation experienced a dramatic decline last year but remains above the central bank's 2% target. In June, inflation fell slightly from 2.6% to 2.5% year-over-year.

→ Inflation in Japan has slowly dropped from the early 2023 peak of 4.3%, but it remains near levels not seen in a decade. In the most recent reading (May), inflation rose modestly from 2.5% to 2.8% as fuel and utility prices increased.

→ China appears to have emerged from deflationary pressures, but inflation levels remain well below other major economies due to slowing economic growth. Annual inflation levels have been positive for the last five readings signaling improvement in domestic demand. The June year-over-year number came in at 0.2%, slightly lower than the prior reading of 0.3%.

[1] Source: Bloomberg. Data is June 30, 2024, except Japan which is as of May 31, 2024.

US Unemployment[1]

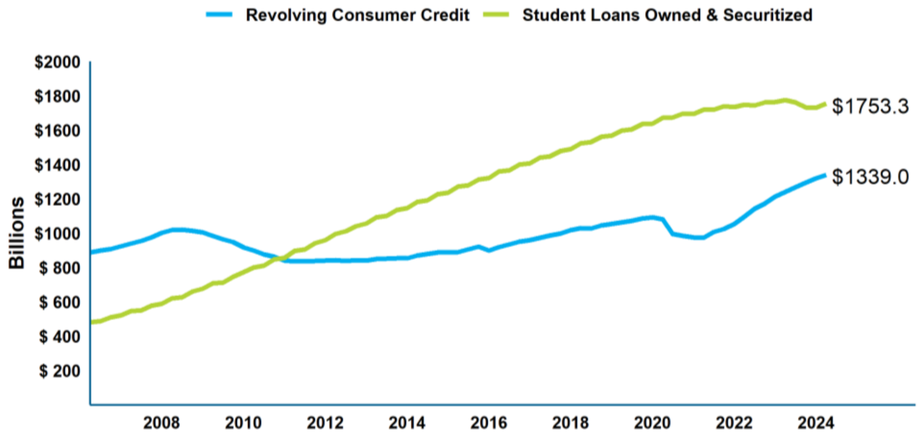


- → Overall, the US labor market remains healthy, but there have been some recent signs of softening.
- → The unemployment rate came in above expectations in June reaching 4.1%, a level not seen since early 2022. Over the second quarter unemployment increased 0.3%.
- → Wage growth remains strong though (around 3.9% annually), and initial claims for unemployment are still subdued.
- → Despite significant downward revisions to job gains in April and May, in June the economy added 206,000 jobs (above expectations). The government added the most jobs (70,000), followed by the healthcare sector (49,000).

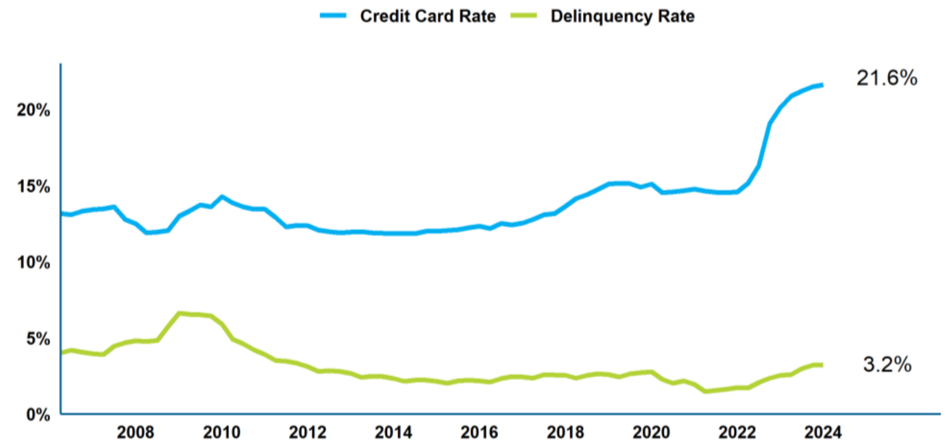
[1] Source: FRED. Data is as June 30, 2024.

US Consumer Under Stress?[1]

Revolving Consumer Credit & Student Loans ($B)



Consumer Credit Card Interest Rates (%)



→ Despite the strong labor market and higher wages, pressures are building on the US consumer. This is an important consideration as consumer spending has been a key driver of economic growth.

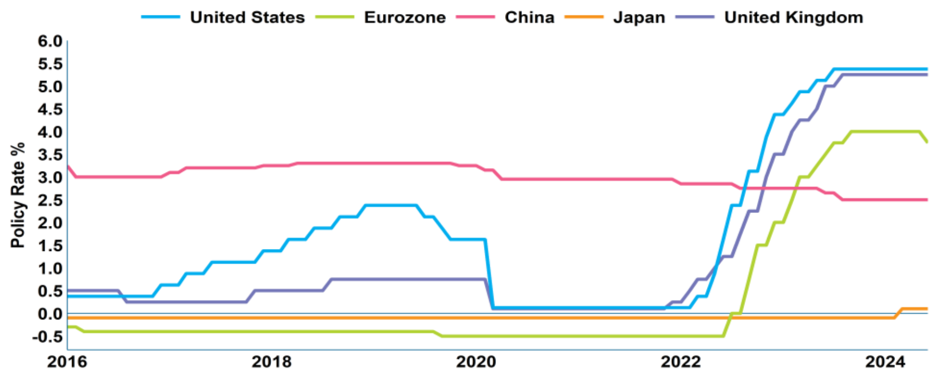
→ Revolving consumer credit surged to new highs in 2023 even as credit card interest rates hit levels not seen before (the prior peak was around 19% in the 1980s). Recently, we have also seen payment delinquencies on credit cards and auto loans start to increase, particularly for younger people.

→ The return of student loan repayments after a three-year pandemic-related reprieve could add to pressures on consumers' budgets. This might be partially mitigated by recently initiated repayment and forgiveness programs.

→ It is worth noting though that many people locked in low-rate fixed mortgages before rates increased and many corporations issued debt at extremely low levels, reducing the sensitivity to higher rates.

[1] Source: FRED. Data is as of March 31, 2024. Revolving Consumer Credit data is seasonally adjusted to remove distortions during the holiday season.

Policy Rates[1]



→ In the US interest rates have remained at current levels (5.25%-5.50%) for a year now. The most recent "dot plot" (the Fed's expectation on the path of rates) showed a median expectation of roughly one rate cut this year. Markets are now pricing in two to three rate cuts in 2024 given the improving inflation data with the probability of a cut around 100% in September and slightly over 90% for December.

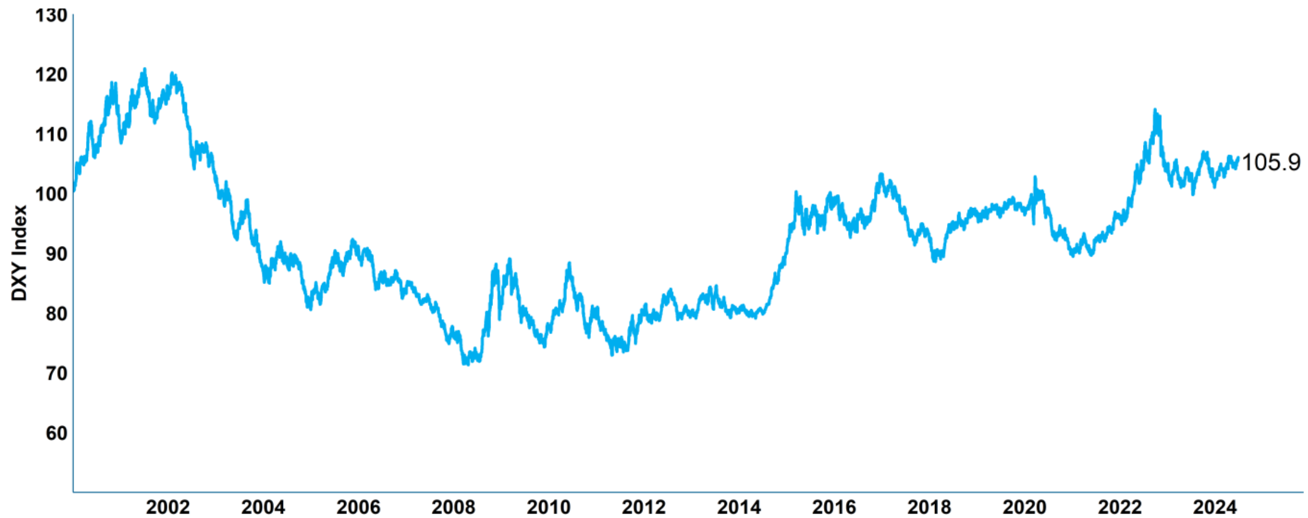
→ The European Central Bank (ECB) cut its policy rate by 25 basis points at the beginning of June, as expected. Like the US, cuts are also anticipated at the September and December meetings.

→ After ending the last negative interest rate policy given higher inflation levels, the Bank of Japan (BOJ) has since kept rates at slightly above 0%. Policy is expected to tighten going forward with the BOJ announcing at their recent meeting they would also start reducing their bond purchases. Interest rate futures markets are pricing in roughly two rate hikes (of 10 basis points) through the end of the year.

→ The central bank in China has maintained interest rates at record low levels and continues to inject liquidity into the banking system, to support economic growth.

[1] Source: Bloomberg. Data is as of June 30, 2024. United States rate is the mid-point of the Federal Funds Target Rate range. Eurozone rate is the ECB Deposit Facility Announcement Rate. Japan rate is the Bank of Japan Unsecured Overnight Call Rate Expected. China rate is the China Central Bank 1-Year Medium Term Interest Rate. UK rate is the UK Bank of England Official Bank Rate.

US Dollar vs. Broad Currencies[1]



→ Overall, the dollar rose in the second quarter (104.5 to 105.9) versus a basket of currencies of major trading partners.

→ China and the ECB cutting policy rates, stronger relative growth, and the weakening of the Japanese yen, have all collectively helped strengthen the dollar.

[1] Source: Bloomberg. Data as of June 30, 2024.

Summary

Key Trends:

→ According to the International Monetary Fund's (IMF) April report, global growth this year is expected to match the 2023 estimate at around 3.2% with most major economies predicted to avoid a recession. Continued strong economic growth does run the risk of inflation and interest rates staying higher for longer.

→ Key economic data in the US has largely weakened and come in below expectations, causing markets to expect between two and three rate cuts this year. Uncertainty remains though regarding the timing and pace of interest rate cuts in the coming year.

→ We have started to see some divergences in monetary policy with other central banks, such as the European Central Bank (ECB), starting to cut interest rates while the Fed remains on hold. This disparity will likely influence investment flows and currencies.

→ US consumers could feel pressure as certain components of inflation (e.g., shelter) remain high, borrowing costs are elevated, and the job market may weaken.

→ A focus for US equities going forward will be whether earnings can remain resilient if growth slows. Also, the future paths of the large technology companies that have driven market gains will be important.

→ Equity valuations remain lower in emerging and developed markets, but risks remain, including China's economic uncertainty and ongoing weakness in the real estate sector. Japan's recent tightening of monetary policy along with changes in corporate governance in the country could influence relative results.

Executive Summary

Q2 2024

Performance Review Summary

Category	QTD Results	5 Year Results
Performance vs. OPERF Policy Benchmark	Underperform 1.0% vs. 2.5%	Underperform 8.0% vs. 8.3%
Performance vs. 6.9% Actuarial Rate	NA	Outperform 8.0% vs. 6.9%
Performance vs. InvMetrics All DB > $5B Net Median	Underperform 1.0% vs. 1.2%	Outperform 8.0% vs. 7.3%
Actively Managed Public Markets[1] vs. Benchmarks	15 of the 26 actively managed stock and bond portfolios outperformed their respective benchmarks (after fees)	16 of the 17 actively managed stock and bond portfolios outperformed their respective benchmarks (after fees)

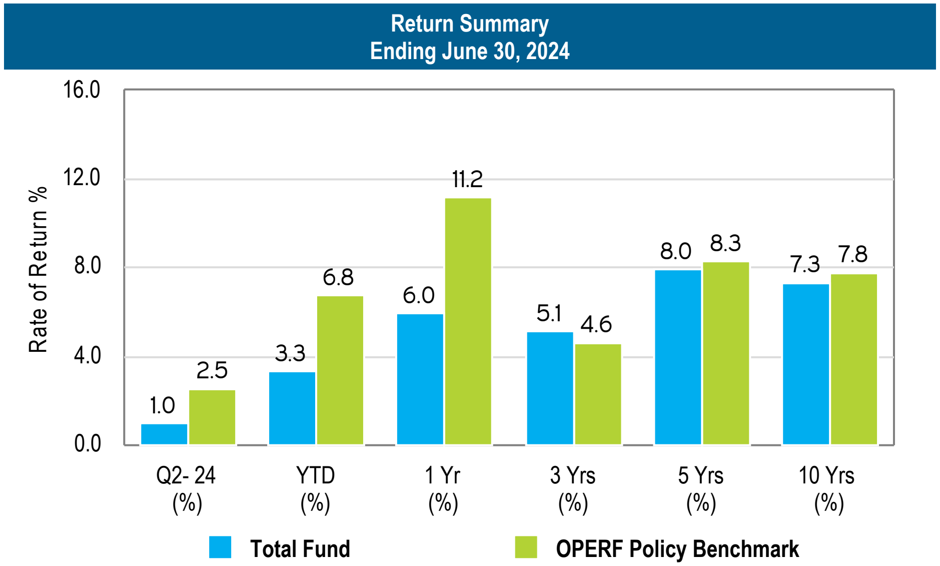
Category	Quarter-End	Notes
Compliance with Targets[2]	Out of Compliance	Private Equity remains well above target, while public equity and fixed income are underweight. Real Assets are also overweight.

→ Per the Russell Overlay Report dated June 28, 2024 allocations including synthetic positions were as follows.

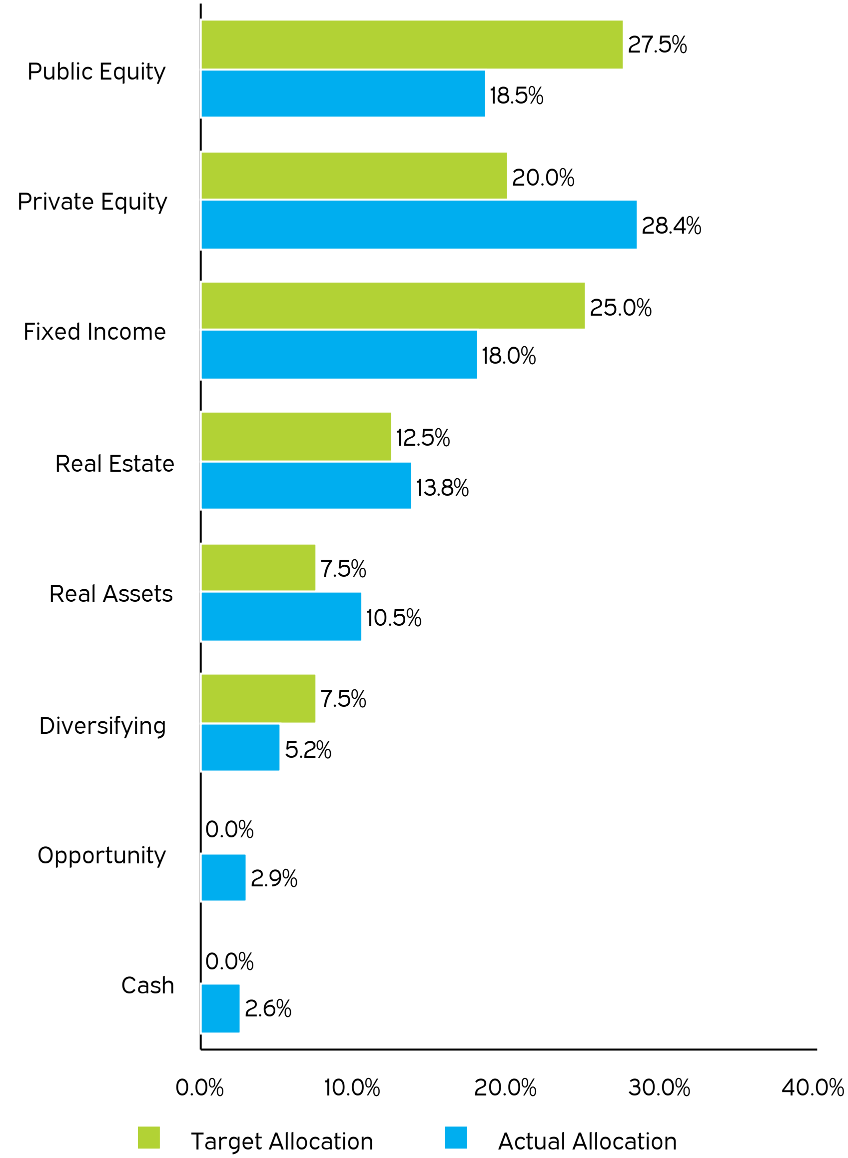
	Physical	Synthetic	Net	Target	Range
Public Equity	18.4%	-2.7%	15.7%	27.5%	22.5% - 32.5%
Private Equity	28.4%	0.0%	28.4%	20.0%	17.5% - 27.5%
Fixed Income	18.1%	5.2%	23.2%	25.0%	20.0% - 30.0%
Cash	2.5%	-2.5%	0.0%	0.0%	--

[1] Actively Managed Public Markets includes managers with at least one quarter of performance. Managers currently being liquidated are excluded.

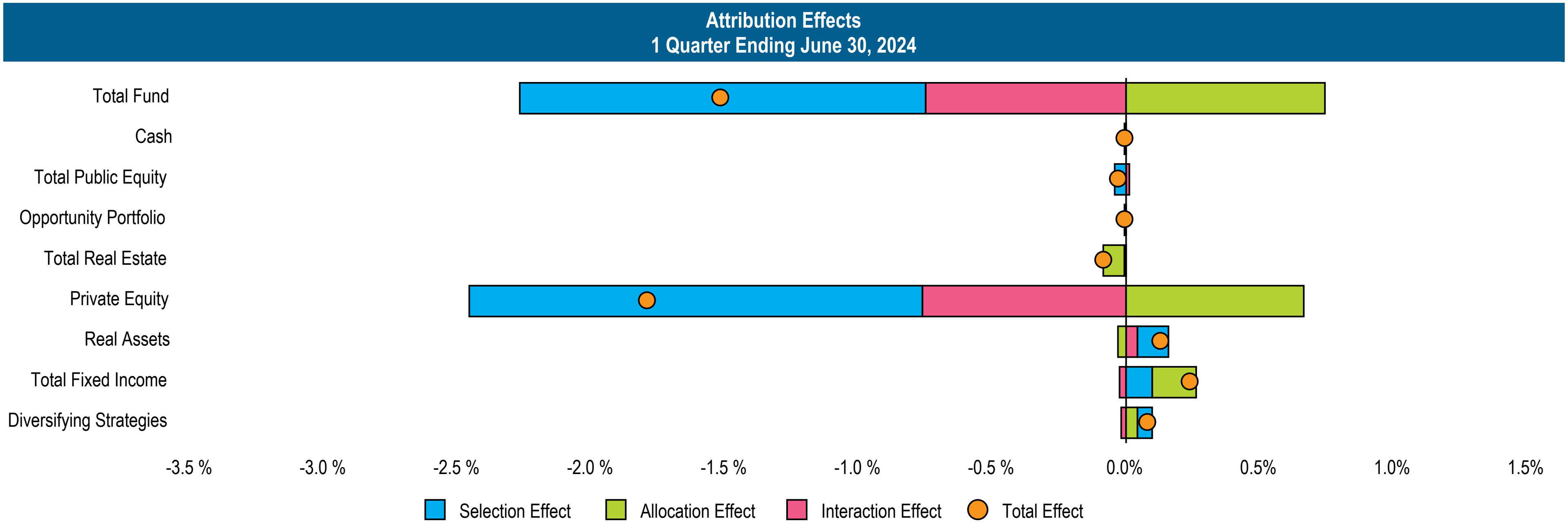
[2] Compliance with Targets reflects physical allocation not inclusive of overlay positions.



	Q2- 24 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	**1.0**	**3.3**	**6.0**	**5.1**	**8.0**	**7.3**
OPERF Policy Benchmark	*2.5*	*6.8*	*11.2*	*4.6*	*8.3*	*7.8*
Excess Return	-1.5	-3.5	-5.2	0.5	-0.3	-0.5
InvMetrics All DB > $5B Median	*1.2*	*4.8*	*9.2*	*3.6*	*7.3*	*6.6*
Total Fund Rank	67	85	89	15	34	18



Quarterly Commentary



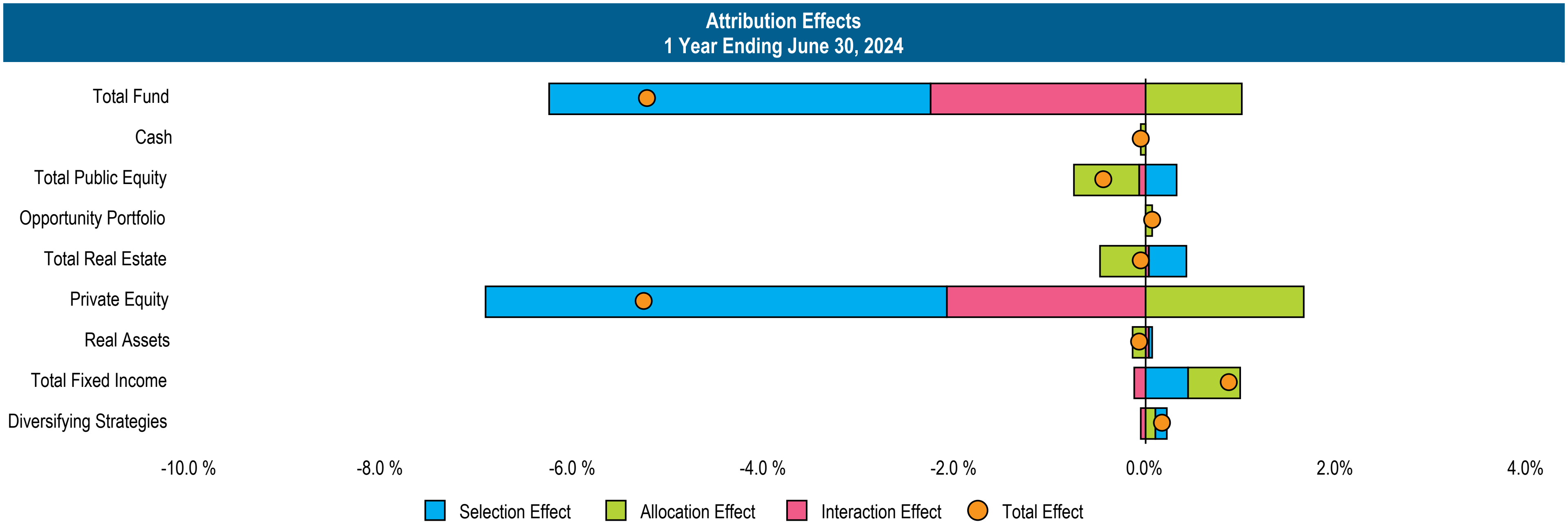
→ Key Contributors

- Fixed Income – Underweight to Policy and performance within the credit sleeves (Non-Core Fixed Income, Emerging Markets Debt, and Structured Credit Products) contributed to benchmark relative returns.
- Real Assets – Manager selection (performance) relative to benchmark contributed to returns.

→ Key Detractors

- Private Equity – Manager selection (performance) was primary detractor. Benchmark is a public market equivalent lagged one quarter which can lead to short-term volatility versus the index. This is especially prevalent during a period of strong public equity market returns.
- Private Equity – The persistent overweight to Private Equity assets and resulting underweight to Public Equities has been a headwind on the portfolio as Private Equity returns have underperformed their Public Equity counterparts over recent periods.

One Year Commentary



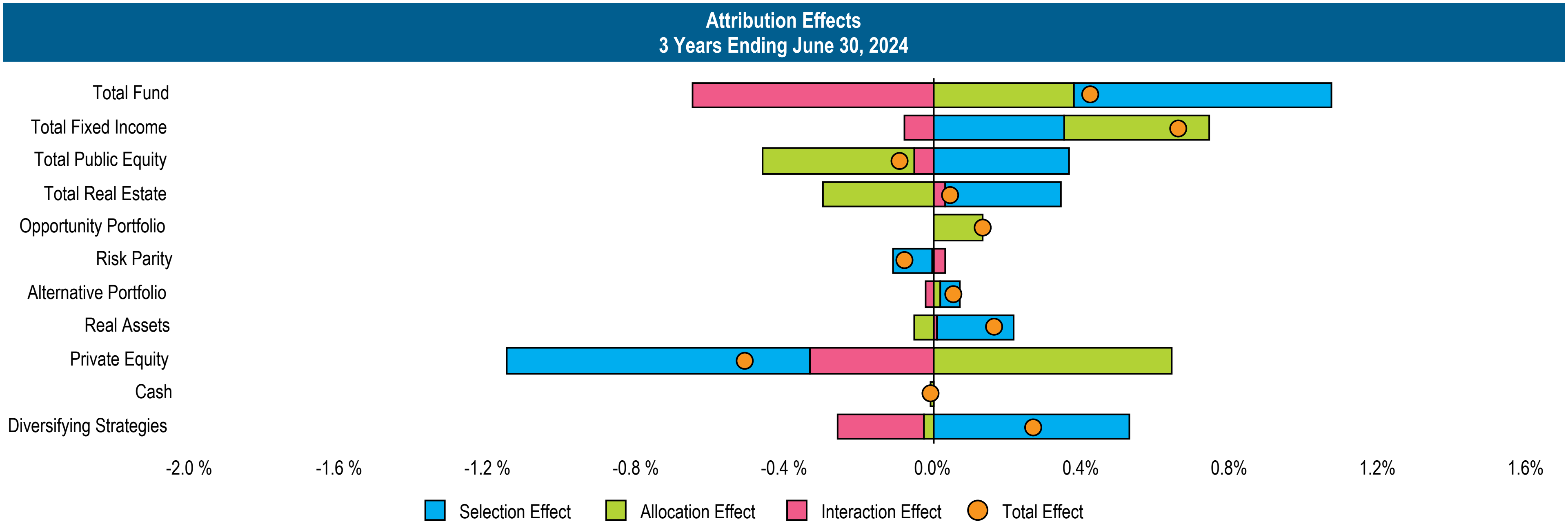
→ Key Contributors

- Total Fixed Income – Strongest contributor relative to the benchmark. Underweight relative to Policy and outperformance in Core and Non-Core Fixed Income, along with Investment Grade Credit, were primary drivers of benchmark relative performance.

→ Key Detractors

- Private Equity – Largest detractor from benchmark relative returns due to manager selection (performance). Benchmark is a public market equivalent lagged one quarter.
- Total Public Equity – Positive absolute and benchmark relative returns. Underweight vs. Policy (due to Private Equity overweight) detracted from benchmark relative returns.

Three Year Commentary



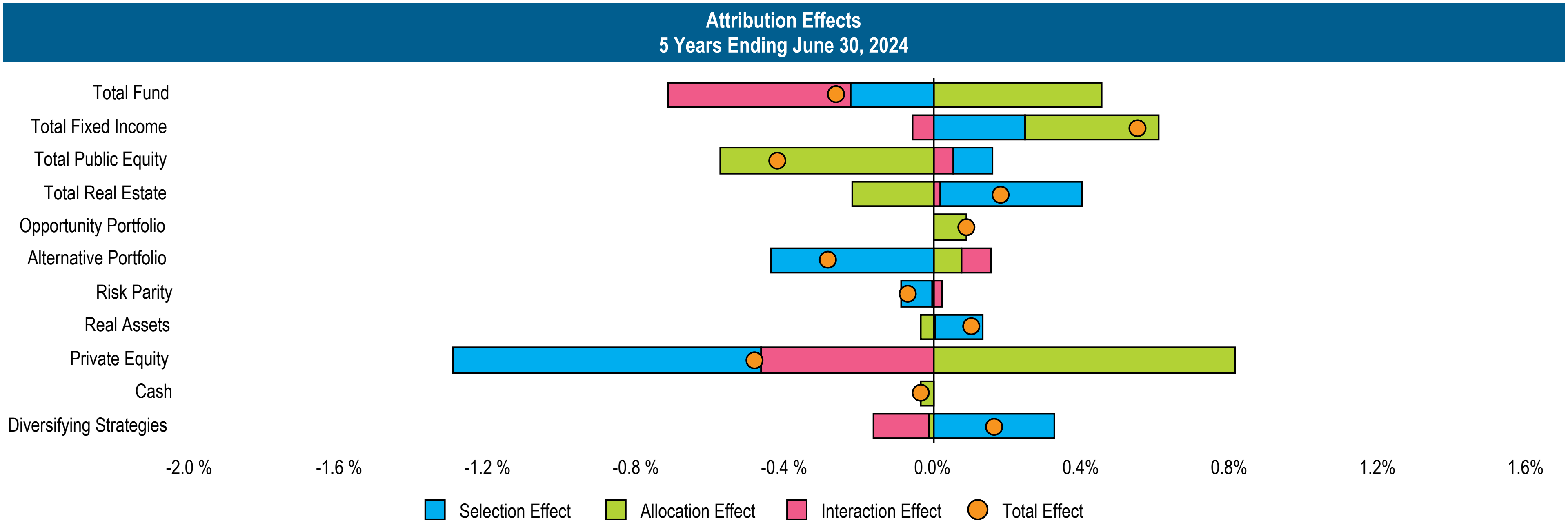
→ Key Contributors

- Total Fixed Income - Strongest contributor relative to the benchmark. Both the asset class underweight (allocation) and manager selection (performance) contributed meaningfully, with Core and Non-Core Fixed Income primarily driving relative outperformance.
- Diversifying Strategies – Strong performance through manager selection has positively impacted Total Fund returns on an absolute and relative basis.

→ Key Detractors

- Private Equity – The portfolio's largest detractor was primarily driven through manager selection (performance), resulting in negative relative returns. Overweight (allocation) to target partially offset poor performance as the asset class still exceeded the portfolio's Policy Benchmark.

Five Year Commentary



→ Key Contributors

- Total Fixed Income – The portfolio underweight was a contributor to benchmark relative returns. Additionally, selection (performance) within the Core and Non-Core Fixed Income portfolios provided additional contribution.
- Total Real Estate - Outperformance relative to the benchmark due to manager selection. Overweight vs. Policy was a meaningful detractor.

→ Key Detractors

- Private Equity – Weakest performance relative to benchmark. Benchmark is a public market equivalent lagged one quarter. The negative selection attribution was partially offset by the overweight allocation vs target.
- Public Equity - Positive absolute returns. Underweight vs. Policy detracted from benchmark relative returns. Manager selection (performance) provided marginal relief.

1 Year Ending June 30, 2024						
	Return	Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Fund	6.0	3.2	-1.9	0.6	0.2	2.5
OPERF Policy Benchmark	11.2	5.3	-	1.0	1.0	0.0

3 Years Ending June 30, 2024						
	Return	Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Fund	5.1	4.7	0.1	0.6	0.4	3.3
OPERF Policy Benchmark	4.6	6.8	-	1.0	0.3	0.0

5 Years Ending June 30, 2024						
	Return	Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Fund	8.0	5.8	-0.1	0.8	1.0	2.9
OPERF Policy Benchmark	8.3	6.9	-	1.0	0.9	0.0

10 Years Ending June 30, 2024						
	Return	Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Fund	7.3	5.2	-0.2	0.8	1.1	2.3
OPERF Policy Benchmark	7.8	6.0	-	1.0	1.0	0.0

Performance Update

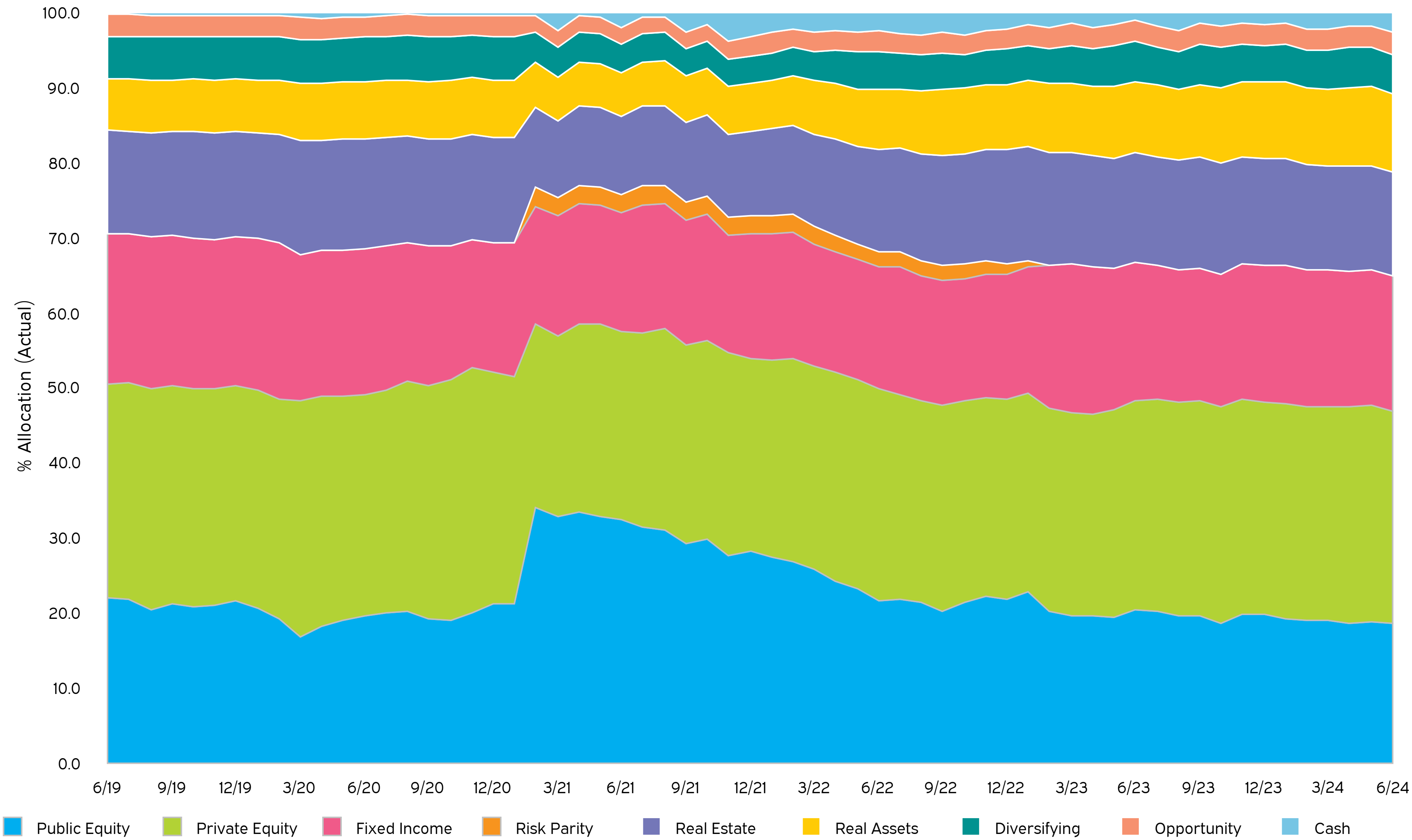
As of June 30, 2024

Asset Allocation vs Target As of June 30, 2024						
	Current Balance ($)	Current Allocation (%)	Policy (%)	Difference (%)	Policy Range (%)	Within IPS Range?
Public Equity	17,529,590,840	18.5	27.5	-9.0	22.5 - 32.5	No
Private Equity	26,834,824,034	28.4	20.0	8.4	17.5 - 27.5	No
Fixed Income	17,031,931,170	18.0	25.0	-7.0	20.0 - 30.0	No
Real Estate	13,001,169,948	13.8	12.5	1.3	9.0 - 16.5	Yes
Real Assets	9,888,284,650	10.5	7.5	3.0	2.5 - 10.0	No
Diversifying	4,958,134,897	5.2	7.5	-2.3	2.5 - 10.0	Yes
Opportunity	2,783,207,550	2.9	0.0	2.9	0.0 - 5.0	Yes
Cash	2,494,686,678	2.6	0.0	2.6	0.0 - 100.0	Yes
Total	**94,521,829,767**	**100.0**	**100.0**	**0.0**		

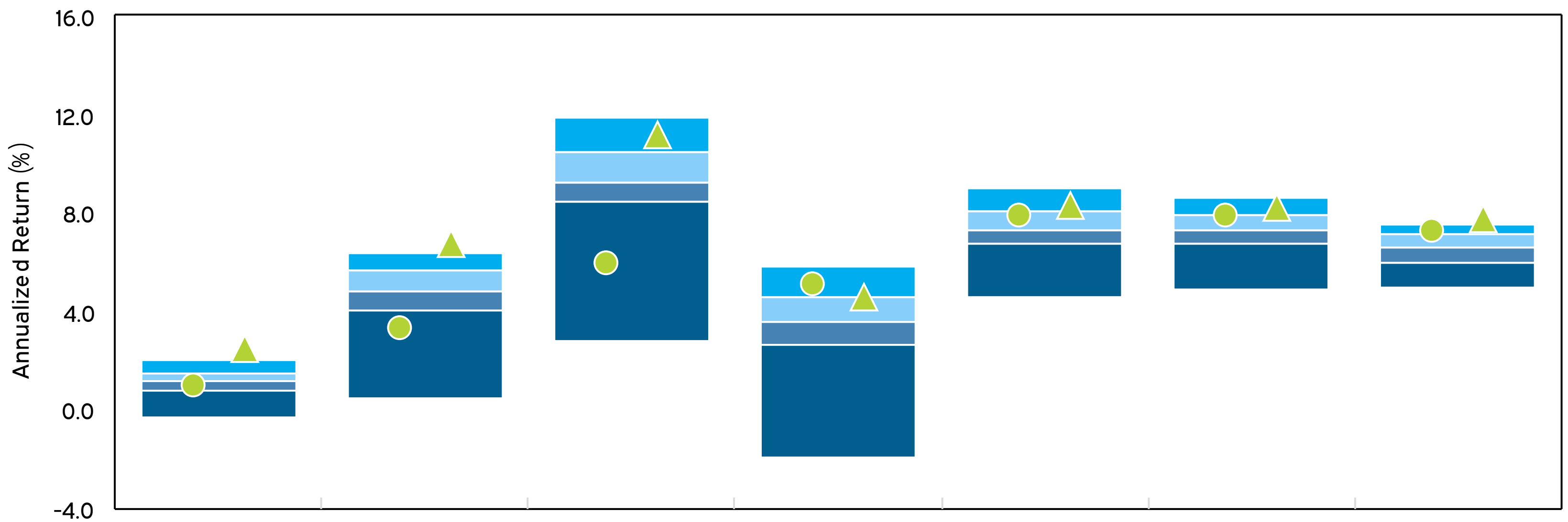
The table above reflects physical asset allocation and excludes Overlay impact.
Total Public Equity includes Other Equity and Cash includes Russell Overlay Cash Balance for allocation purposes.
The target allocation was revised effective April 1, 2023. Plan rebalancing is currently underway.

Historical Asset Allocation | 5 Years Ending June 30, 2024

Asset Allocation History
5 Years Ending June 30, 2024



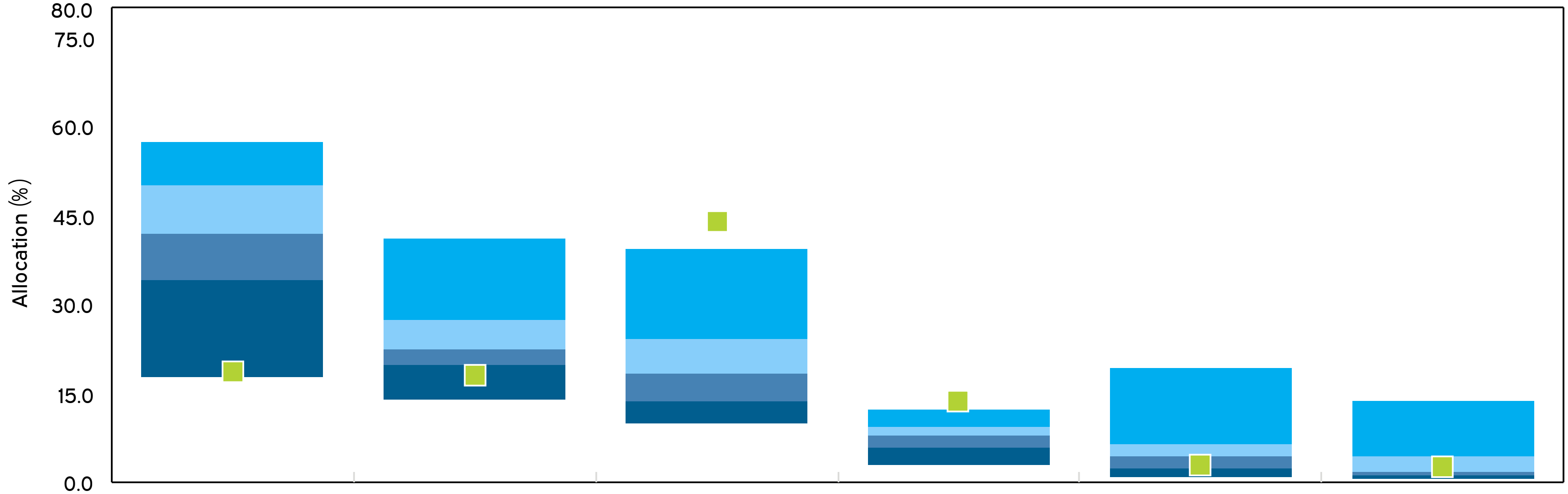
InvMetrics All DB > $5B Net Return Comparison
Ending June 30, 2024



	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
● Total Fund	1.0 (67)	3.3 (85)	6.0 (89)	5.1 (15)	8.0 (34)	8.0 (25)	7.3 (18)
▲ OPERF Policy Benchmark	2.5 (1)	6.8 (1)	11.2 (14)	4.6 (25)	8.3 (18)	8.3 (16)	7.8 (2)
5th Percentile	2.1	6.4	11.9	5.8	9.0	8.6	7.6
1st Quartile	1.5	5.7	10.5	4.6	8.1	7.9	7.2
Median	1.2	4.8	9.2	3.6	7.3	7.3	6.6
3rd Quartile	0.8	4.0	8.5	2.7	6.8	6.7	6.0
95th Percentile	-0.3	0.5	2.8	-1.9	4.6	4.9	5.0
Population	45	45	45	41	39	38	38

Parentheses contain percentile rankings.

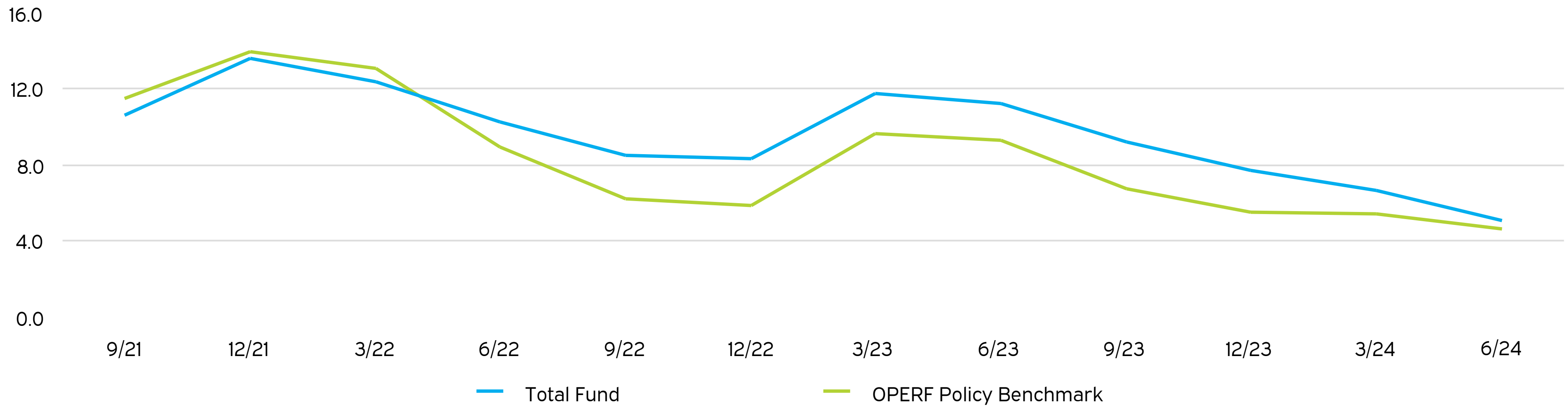
Total Plan Allocation vs. InvMetrics All DB > $5B



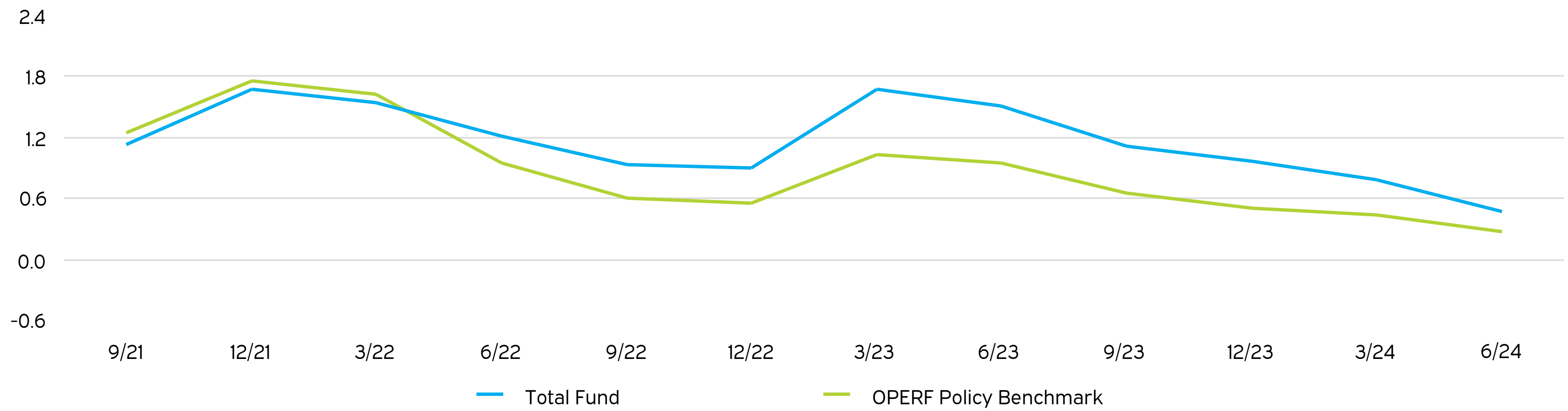
	Total Equity	Total Fixed Income	Alternatives	Total Real Estate	Multi-Asset	Cash & Equivalents
Total Fund	18.5 (95)	18.0 (83)	44.1 (2)	13.8 (2)	2.8 (63)	2.7 (45)
5th Percentile	57.5	41.1	39.4	12.4	19.2	13.8
1st Quartile	50.3	27.3	24.3	9.3	6.3	4.2
Median	42.0	22.5	18.5	8.0	4.3	1.9
3rd Quartile	34.3	19.9	13.7	5.9	2.3	1.1
95th Percentile	17.8	14.0	10.0	3.1	0.9	0.6

Parentheses contain percentile rankings.
Alternatives is classified to contain the following sub-asset classes: Hedge Funds, Venture Capital, Private Equity, Real Assets, and Commodities.
Multi-Asset is classified to contain the following sub-asset classes: Balanced, Tactical Asset Allocation, and Other.

Rolling 3 Year Annualized Return (%)
Total Fund vs OPERF Policy Benchmark



Rolling 3 Year Sharpe Ratio
Total Fund vs OPERF Policy Benchmark



Asset Class Performance Summary	Market Value ($)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	**94,521,829,767**	**100.0**	**1.0**	**3.3**	**6.0**	**5.1**	**8.0**	**7.3**
OPERF Policy Benchmark			*2.5*	*6.8*	*11.2*	*4.6*	*8.3*	*7.8*
InvMetrics All DB > $5B Median			*1.2*	*4.8*	*9.2*	*3.6*	*7.3*	*6.6*
InvMetrics All DB > $5B Rank			*67*	*85*	*89*	*15*	*34*	*18*
Total Fixed Income	**17,031,931,170**	**18.0**	**0.5**	**0.5**	**4.4**	**-1.5**	**0.8**	**1.8**
Oregon Custom FI Benchmark			*0.1*	*-0.7*	*2.6*	*-3.0*	*-0.2*	*1.2*
Core Fixed Income	**5,543,318,612**	**5.9**	**0.1**	**-0.3**	**3.2**	**-2.8**	**0.2**	**1.8**
Oregon Custom External FI BM			*0.1*	*-0.7*	*2.6*	*-3.0*	*-0.2*	*1.3*
U.S. Government	**7,389,286,957**	**7.8**	**0.1**	**-0.7**	**1.6**	**-3.2**	**-0.6**	**0.5**
Government Blended Index			*0.1*	*-0.9*	*1.5*	*-3.3*	*-0.7*	*0.4*
Non-Core Fixed Income	**1,516,744,172**	**1.6**	**2.1**	**4.7**	**12.4**	**6.8**	**6.6**	**5.3**
Custom Non-Core Fixed Income Index			*1.7*	*4.0*	*11.0*	*5.1*	*5.1*	*4.5*
Emerging Markets Debt	**247,182,334**	**0.3**	**0.5**	**2.9**	**9.6**	**-3.4**	**--**	**--**
JPM EMBI Global Diversified			*0.3*	*2.3*	*9.2*	*-2.6*	*0.0*	*2.6*
Structured Credit Products	**1,493,605,123**	**1.6**	**1.6**	**2.8**	**6.1**	**--**	**--**	**--**
Oregon Structured Credit Products FI BM			*1.0*	*2.0*	*6.3*	*--*	*--*	*--*
Investment Grade Credit	**822,483,483**	**0.9**	**-0.2**	**-0.3**	**6.8**	**--**	**--**	**--**
Bloomberg US Credit			*0.0*	*-0.5*	*4.4*	*-2.9*	*0.5*	*2.2*

See appendix for custom Policy Benchmark descriptions.

Total Fund | As of June 30, 2024

	Market Value ($)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Public Equity	17,529,590,840	18.5	2.2	11.0	19.8	6.1	10.8	8.5
MSCI ACWI IMI Net (Daily)			*2.4*	*10.3*	*18.4*	*4.7*	*10.4*	*8.2*
U.S. Equity	9,573,271,987	10.1	2.8	12.9	22.0	7.3	12.7	10.9
Russell 3000 Index			*3.2*	*13.6*	*23.1*	*8.1*	*14.1*	*12.1*
Small Cap Growth	261,363,594	0.3	-1.7	10.9	9.0	-3.9	9.7	9.5
Russell 2000 Growth Index			*-2.9*	*4.4*	*9.1*	*-4.9*	*6.2*	*7.4*
Market Oriented (CORE)	9,311,908,393	9.9	2.9	13.1	22.6	7.6	13.1	11.3
Russell 3000 Index			*3.2*	*13.6*	*23.1*	*8.1*	*14.1*	*12.1*
Non-U.S. Equity	5,464,706,861	5.8	1.7	7.6	15.4	3.5	8.7	6.0
Oregon MSCI ACWI Ex US IMI (Net)			*0.9*	*5.3*	*11.6*	*0.2*	*5.6*	*3.9*
Total International Overlay Accounts	56,695,063	0.1						
International Market Oriented (Core)	2,549,924,880	2.7	1.1	9.1	16.1	4.2	8.6	6.2
MSCI World ex U.S. IMI Index (Net)			*-0.7*	*4.4*	*10.8*	*2.0*	*6.3*	*4.2*
International Value	1,086,849,442	1.1	1.8	6.4	17.5	5.6	9.2	5.7
Oregon MSCI ACWI Ex US Value IMI (Net)			*1.2*	*4.5*	*13.5*	*3.2*	*5.4*	*3.0*
International Growth	853,289,404	0.9	-0.2	4.2	6.9	1.0	7.7	6.9
Oregon MSCI WORLD Ex US (Net)			*-0.6*	*5.0*	*11.2*	*2.8*	*6.6*	*4.3*
International Small Cap	317,433,501	0.3	-0.4	3.5	11.9	2.2	8.5	5.0
MSCI World ex U.S. Small Value (Net)			*-1.8*	*1.0*	*10.0*	*0.2*	*5.2*	*3.5*
Emerging Markets	600,514,571	0.6	7.4	9.5	20.6	1.7	9.7	5.8
ORE MSCI Emerging Markets IMI (Net)			*5.1*	*7.4*	*13.6*	*-4.1*	*3.9*	*3.1*

See appendix for custom Policy Benchmark descriptions.

	Market Value ($)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Global Equity	**2,477,667,987**	**2.6**	**1.4**	**11.7**	**21.7**	**7.8**	**9.7**	**7.9**
MSCI ACWI IMI Net (Daily)			*2.4*	*10.3*	*18.4*	*4.7*	*10.4*	*8.2*
Global Equity Low Volatility	**1,093,563,882**	**1.2**	**2.1**	**11.1**	**20.2**	**7.4**	**9.4**	**--**
MSCI AC World (Daily Const)			*2.9*	*11.3*	*19.4*	*5.4*	*10.8*	*8.4*
Other Equity	**13,944,005**	**0.0**						
Total Real Estate	**13,001,169,948**	**13.8**	**-2.6**	**-4.7**	**-9.5**	**5.0**	**5.5**	**7.3**
NCREIF ODCE (Custom) (Adj.)			*-2.6*	*-7.4*	*-12.0*	*2.5*	*2.6*	*5.7*
Real Estate excluding REITS	**12,715,304,933**	**13.5**	**-2.7**	**-4.8**	**-9.8**	**5.2**	**5.7**	**8.0**
Total REITS	**285,865,014**	**0.3**	**1.9**	**1.1**	**8.4**	**2.4**	**4.3**	**4.6**
Opportunity Portfolio	**2,783,207,550**	**2.9**	**2.3**	**6.4**	**13.4**	**9.8**	**11.6**	**8.0**
Opportunity Custom Benchmark			*2.5*	*6.8*	*11.2*	*11.4*	*10.1*	*8.3*
Alternative Portfolio	**14,846,419,547**	**15.7**	**2.5**	**5.8**	**7.8**	**12.0**	**7.1**	**4.5**
CPI +4%			*1.6*	*4.4*	*7.1*	*9.0*	*8.3*	*6.9*
Diversifying Strategies	**4,958,134,897**	**5.2**	**1.4**	**7.7**	**8.2**	**10.3**	**4.5**	**3.2**
HFRI FOF Conservative Index			*0.6*	*3.2*	*6.8*	*3.5*	*4.9*	*3.5*
Real Assets	**9,888,284,650**	**10.5**	**3.1**	**4.9**	**7.4**	**13.2**	**9.2**	**5.8**
CPI +4%			*1.6*	*4.4*	*7.1*	*9.0*	*8.3*	*6.9*
Private Equity	**26,834,824,034**	**28.4**	**1.5**	**3.5**	**6.5**	**9.1**	**13.6**	**12.6**
Russell 3000 + 300 BPS QTR LAG (Adj.)			*10.2*	*24.4*	*32.4*	*12.8*	*17.6*	*15.6*
Cash	**1,889,544,223**	**2.0**	**1.4**	**2.8**	**5.9**	**2.9**	**2.3**	**1.9**
ICE BofA 3 Month U.S. T-Bill			*1.3*	*2.6*	*5.4*	*3.0*	*2.2*	*1.5*

See appendix for custom Policy Benchmark descriptions.

Trailing Net Performance

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	**94,521,829,767**	**100.0**	**1.0**	**3.3**	**6.0**	**5.1**	**8.0**	**7.3**
OPERF Policy Benchmark			*2.5*	*6.8*	*11.2*	*4.6*	*8.3*	*7.8*
60% MSCI ACWI / 40% Bloomberg Aggregate			*1.7*	*6.4*	*12.5*	*2.1*	*6.5*	*5.8*
70% MSCI ACWI/30% Barclays Agg			*2.0*	*7.6*	*14.2*	*3.0*	*7.6*	*6.5*
InvMetrics All DB > $5B Median			*1.2*	*4.8*	*9.2*	*3.6*	*7.3*	*6.6*
InvMetrics All DB > $5B Rank			*67*	*85*	*89*	*15*	*34*	*18*
Total Fixed Income	**17,031,931,170**	**18.0**	**0.5**	**0.5**	**4.4**	**-1.5**	**0.8**	**1.8**
Oregon Custom FI Benchmark			*0.1*	*-0.7*	*2.6*	*-3.0*	*-0.2*	*1.2*
Blmbg. U.S. Aggregate Index			*0.1*	*-0.7*	*2.6*	*-3.0*	*-0.2*	*1.3*
Fixed Income Weighted BM			*0.2*	*-0.2*	*3.3*	*-2.2*	*0.2*	*1.6*
Core Fixed Income	**5,543,318,612**	**5.9**	**0.1**	**-0.3**	**3.2**	**-2.8**	**0.2**	**1.8**
Oregon Custom External FI BM			*0.1*	*-0.7*	*2.6*	*-3.0*	*-0.2*	*1.3*
Blackrock	1,813,216,290	1.9	0.2	-0.2	3.3	-2.8	0.3	1.7
Oregon Custom External FI BM			*0.1*	*-0.7*	*2.6*	*-3.0*	*-0.2*	*1.3*
Wellington	1,880,886,047	2.0	0.4	0.4	4.0	-2.6	0.5	2.0
Oregon Custom External FI BM			*0.1*	*-0.7*	*2.6*	*-3.0*	*-0.2*	*1.3*
Western Asset	1,849,216,275	2.0	-0.4	-1.1	2.4	-3.3	0.2	1.9
Oregon Custom External FI BM			*0.1*	*-0.7*	*2.6*	*-3.0*	*-0.2*	*1.3*
U.S. Government	**7,389,286,957**	**7.8**	**0.1**	**-0.7**	**1.6**	**-3.2**	**-0.6**	**0.5**
Government Blended Index			*0.1*	*-0.9*	*1.5*	*-3.3*	*-0.7*	*0.4*
Government Portfolio	7,389,286,957	7.8	0.1	-0.7	1.6	-3.2	-0.6	--
Government Blended Index			*0.1*	*-0.9*	*1.5*	*-3.3*	*-0.7*	*0.4*
Non-Core Fixed Income	**1,516,744,172**	**1.6**	**2.1**	**4.7**	**12.4**	**6.8**	**6.6**	**5.3**
Custom Non-Core Fixed Income Index			*1.7*	*4.0*	*11.0*	*5.1*	*5.1*	*4.5*
Oak Hill	1,119,522,865	1.2	2.4	5.6	13.4	7.6	7.2	6.0
Oak Hill Custom Lev Loan & Bond Index			*1.8*	*4.1*	*11.0*	*5.5*	*5.3*	*4.6*
Beach Point	397,221,307	0.4	0.8	2.5	9.9	--	--	--
Beachpoint Custom FI Benchmark			*1.5*	*3.5*	*10.8*	*--*	*--*	*--*

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Emerging Markets Debt	**247,182,334**	**0.3**	**0.5**	**2.9**	**9.6**	**-3.4**	**--**	**--**
JPM EMBI Global Diversified			*0.3*	*2.3*	*9.2*	*-2.6*	*0.0*	*2.6*
Global Evolution EMD	124,929,040	0.1	0.4	2.9	10.1	-1.9	--	--
JPM EMBI Global Diversified			*0.3*	*2.3*	*9.2*	*-2.6*	*0.0*	*2.6*
PGIM EMD	122,253,294	0.1	0.5	2.8	9.5	-2.6	--	--
JPM EMBI Global Diversified			*0.3*	*2.3*	*9.2*	*-2.6*	*0.0*	*2.6*
Structured Credit Products	**1,493,605,123**	**1.6**	**1.6**	**2.8**	**6.1**	**--**	**--**	**--**
Oregon Structured Credit Products FI BM			*1.0*	*2.0*	*6.3*	*--*	*--*	*--*
Schroders SCP	874,998,991	0.9	1.4	2.5	7.1	--	--	--
ICE BofA AA-BBB US Asset Backed Sec Idx			*1.4*	*3.5*	*8.4*	*1.1*	*2.2*	*2.8*
Guggenheim SCP	618,606,132	0.7	1.8	3.2	8.4	--	--	--
ICE BofA AA-BBB US Asset Backed Sec Idx			*1.4*	*3.5*	*8.4*	*1.1*	*2.2*	*2.8*
Investment Grade Credit	**822,483,483**	**0.9**	**-0.2**	**-0.3**	**6.8**	**--**	**--**	**--**
Bloomberg US Credit			*0.0*	*-0.5*	*4.4*	*-2.9*	*0.5*	*2.2*
Fidelity	822,483,483	0.9	-0.2	-0.3	6.8	--	--	--
Bloomberg US Credit			*0.0*	*-0.5*	*4.4*	*-2.9*	*0.5*	*2.2*

Asset Allocation & Performance | As of June 30, 2024

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Public Equity	**17,529,590,840**	**18.5**	**2.2**	**11.0**	**19.8**	**6.1**	**10.8**	**8.5**
MSCI ACWI IMI Net (Daily)			*2.4*	*10.3*	*18.4*	*4.7*	*10.4*	*8.2*
U.S. Equity	**9,573,271,987**	**10.1**	**2.8**	**12.9**	**22.0**	**7.3**	**12.7**	**10.9**
Russell 3000 Index			*3.2*	*13.6*	*23.1*	*8.1*	*14.1*	*12.1*
Small Cap Growth	**261,363,594**	**0.3**	**-1.7**	**10.9**	**9.0**	**-3.9**	**9.7**	**9.5**
Russell 2000 Growth Index			*-2.9*	*4.4*	*9.1*	*-4.9*	*6.2*	*7.4*
EAM MicroCap Growth	261,363,594	0.3	-1.7	10.9	9.0	-3.9	9.7	9.8
Russell Microcap Growth Index (Daily)			*-5.6*	*0.7*	*2.5*	*-13.6*	*2.9*	*3.6*
Market Oriented (CORE)	**9,311,908,393**	**9.9**	**2.9**	**13.1**	**22.6**	**7.6**	**13.1**	**11.3**
Russell 3000 Index			*3.2*	*13.6*	*23.1*	*8.1*	*14.1*	*12.1*
Russell 2000 Synthetic - OST managed	291,311,191	0.3	-3.1	-0.6	8.8	-0.2	8.2	7.6
S&P 600 Custom			*-3.1*	*-0.7*	*8.7*	*-0.3*	*8.1*	*7.3*
S&P 500 - OST managed	3,941,761,479	4.2	4.3	15.2	24.5	10.0	15.1	12.9
S&P 500 Index (Daily)			*4.3*	*15.3*	*24.6*	*10.0*	*15.1*	*12.9*
S&P 400 - OST managed	554,683,380	0.6	-3.4	6.2	13.6	4.5	10.3	9.3
S&P 400 Midcap Index (Daily)			*-3.4*	*6.2*	*13.6*	*4.5*	*10.3*	*9.1*
OST Risk Premia Strategy	-93	0.0	0.0	0.5	10.4	2.0	9.6	10.8
MSCI USA Index			*4.0*	*14.9*	*--*	*--*	*--*	*--*
BR Russell 3000	3,122,929,286	3.3	3.2	13.5	--	--	--	--
Russell 3000 Index			*3.2*	*13.6*	*23.1*	*8.1*	*14.1*	*12.1*
DFA All Cap Core	1,401,223,056	1.5	2.8	13.4	22.9	--	--	--
Russell 3000 Index			*3.2*	*13.6*	*23.1*	*8.1*	*14.1*	*12.1*

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Non-U.S. Equity	**5,464,706,861**	**5.8**	**1.7**	**7.6**	**15.4**	**3.5**	**8.7**	**6.0**
Oregon MSCI ACWI Ex US IMI (Net)			*0.9*	*5.3*	*11.6*	*0.2*	*5.6*	*3.9*
Total International Overlay Accounts	**56,695,063**	**0.1**						
PERS-Adrian Lee Active Currency	28,066,646	0.0						
PERS-P/E Global Active Currency	28,628,416	0.0						
International Market Oriented (Core)	**2,549,924,880**	**2.7**	**1.1**	**9.1**	**16.1**	**4.2**	**8.6**	**6.2**
MSCI World ex U.S. IMI Index (Net)			*-0.7*	*4.4*	*10.8*	*2.0*	*6.3*	*4.2*
Arrowstreet Capital	766,180,498	0.8	3.8	14.8	23.1	12.1	13.9	10.2
Oregon MSCI ACWI Ex US IMI (Net)			*0.9*	*5.3*	*11.6*	*0.2*	*5.6*	*3.9*
Lazard International CEF	478,963,382	0.5	2.8	6.7	11.2	-4.9	5.6	5.7
Oregon MSCI ACWI Ex US (Net)			*1.0*	*5.7*	*11.6*	*0.5*	*5.5*	*3.9*
OST Int'l Risk Premia	1,304,780,999	1.4	-1.1	7.2	14.9	5.2	8.4	--
MSCI World x US Custom Div Multiple-Factor			*-1.4*	*7.1*	*14.6*	*4.9*	*8.0*	*--*
MSCI World ex USA Net Index			*-0.6*	*5.0*	*11.2*	*2.8*	*6.5*	*4.3*
International Value	**1,086,849,442**	**1.1**	**1.8**	**6.4**	**17.5**	**5.6**	**9.2**	**5.7**
Oregon MSCI ACWI Ex US Value IMI (Net)			*1.2*	*4.5*	*13.5*	*3.2*	*5.4*	*3.0*
Acadian Asset Management	714,860,496	0.8	3.0	9.8	19.5	4.2	9.7	6.4
Oregon MSCI ACWI Ex US Value IMI (Net)			*1.2*	*4.5*	*13.5*	*3.2*	*5.4*	*3.0*
Brandes Investment Partners	371,988,946	0.4	-0.5	0.7	13.7	6.8	8.6	4.9
Oregon MSCI ACWI Ex US Value (Net)			*1.3*	*4.7*	*13.5*	*3.6*	*5.3*	*2.8*

MEKETA

Asset Allocation & Performance | As of June 30, 2024

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
International Growth	**853,289,404**	**0.9**	**-0.2**	**4.2**	**6.9**	**1.0**	**7.7**	**6.9**
Oregon MSCI WORLD Ex US (Net)			*-0.6*	*5.0*	*11.2*	*2.8*	*6.6*	*4.3*
Walter Scott Management	853,289,404	0.9	-0.2	4.2	6.9	1.0	7.7	7.5
Oregon MSCI WORLD Ex US (Net)			*-0.6*	*5.0*	*11.2*	*2.8*	*6.6*	*4.3*
International Small Cap	**317,433,501**	**0.3**	**-0.4**	**3.5**	**11.9**	**2.2**	**8.5**	**5.0**
MSCI World ex U.S. Small Value (Net)			*-1.8*	*1.0*	*10.0*	*0.2*	*5.2*	*3.5*
Harris Associates	148,756,981	0.2	-2.9	-2.0	6.1	0.4	7.5	4.7
MSCI AC World ex USA Small Value (Net)			*0.6*	*3.1*	*13.8*	*1.5*	*6.5*	*4.2*
EAM International Micro Cap	168,676,520	0.2	1.9	9.9	18.6	-0.4	11.0	7.9
Oregon FTSE Global Ex US Micro Cap			*2.9*	*4.8*	*12.5*	*-1.8*	*8.8*	*5.5*
Emerging Markets	**600,514,571**	**0.6**	**7.4**	**9.5**	**20.6**	**1.7**	**9.7**	**5.8**
ORE MSCI Emerging Markets IMI (Net)			*5.1*	*7.4*	*13.6*	*-4.1*	*3.9*	*3.1*
Arrowstreet Emerging Markets	265,580,069	0.3	9.5	11.8	24.2	4.1	14.2	7.9
ORE MSCI Emerging Markets IMI (Net)			*5.1*	*7.4*	*13.6*	*-4.1*	*3.9*	*3.1*
Westwood Global Investment	149,932,749	0.2	1.6	0.4	13.3	3.8	7.7	5.0
MSCI Emerging Markets IMI (Net)			*5.1*	*7.4*	*13.6*	*-4.1*	*3.9*	*3.1*
William Blair and Company	185,001,754	0.2	8.8	13.7	19.7	-7.6	6.6	4.8
MSCI Emerging Markets Growth (Net)			*4.9*	*8.5*	*11.1*	*-8.7*	*3.2*	*3.5*

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Global Equity	**2,477,667,987**	**2.6**	**1.4**	**11.7**	**21.7**	**7.8**	**9.7**	**7.9**
MSCI ACWI IMI Net (Daily)			*2.4*	*10.3*	*18.4*	*4.7*	*10.4*	*8.2*
Cantillion	923,856,724	1.0	-0.5	7.3	16.9	--	--	--
MSCI ACWI IMI Net (Daily)			*2.4*	*10.3*	*18.4*	*4.7*	*10.4*	*8.2*
GQG Global Equity	460,247,381	0.5	3.6	23.9	--	--	--	--
Oregon MSCI ACWI Ex US (Net)			*1.0*	*5.7*	*11.6*	*0.5*	*5.5*	*3.9*
Global Equity Low Volatility	**1,093,563,882**	**1.2**	**2.1**	**11.1**	**20.2**	**7.4**	**9.4**	**--**
MSCI AC World (Daily Const)			*2.9*	*11.3*	*19.4*	*5.4*	*10.8*	*8.4*
LACM Global Equity Low Volatility	544,728,813	0.6	2.1	10.4	17.7	4.6	8.9	--
MSCI AC World (Daily Const)			*2.9*	*11.3*	*19.4*	*5.4*	*10.8*	*8.4*
Arrowstreet Global Low Volatility	548,835,069	0.6	2.2	11.8	22.6	9.6	12.7	--
MSCI ACWI IMI Net (Daily)			*2.4*	*10.3*	*18.4*	*4.7*	*10.4*	*8.2*
Other Equity	**13,944,005**	**0.0**						
Transitional & Closed Accounts	13,831,006	0.0						
Transition & Closed Accounts II - International Equity	112,999	0.0						

Asset Allocation & Performance | As of June 30, 2024

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Real Estate	**13,001,169,948**	**13.8**	**-2.6**	**-4.7**	**-9.5**	**5.0**	**5.5**	**7.3**
NCREIF ODCE (Custom) (Adj.)			*-2.6*	*-7.4*	*-12.0*	*2.5*	*2.6*	*5.7*
Real Estate excluding REITS	**12,715,304,933**	**13.5**	**-2.7**	**-4.8**	**-9.8**	**5.2**	**5.7**	**8.0**
NCREIF ODCE (Custom) (Adj.)			*-2.6*	*-7.4*	*-12.0*	*2.5*	*2.6*	*5.7*
Total REITS	**285,865,014**	**0.3**	**1.9**	**1.1**	**8.4**	**2.4**	**4.3**	**4.6**
ABKB - LaSalle Advisors	285,865,014	0.3	1.9	0.9	8.1	2.7	7.3	8.8
FTSE NAREIT All Equity REITs			*-0.9*	*-2.2*	*5.8*	*-1.6*	*3.4*	*6.1*
Opportunity Portfolio	**2,783,207,550**	**2.9**	**2.3**	**6.4**	**13.4**	**9.8**	**11.6**	**8.0**
Opportunity Custom Benchmark			*2.5*	*6.8*	*11.2*	*11.4*	*10.1*	*8.3*
OPERF Policy Benchmark			*2.5*	*6.8*	*11.2*	*4.6*	*8.3*	*7.8*
Portfolio Holdings - Opportunity	115,996,529	0.1	4.2	11.3	28.6	--	--	--
Alternative Portfolio	**14,846,419,547**	**15.7**	**2.5**	**5.8**	**7.8**	**12.0**	**7.1**	**4.5**
CPI +4%			*1.6*	*4.4*	*7.1*	*9.0*	*8.3*	*6.9*
Diversifying Strategies	**4,958,134,897**	**5.2**	**1.4**	**7.7**	**8.2**	**10.3**	**4.5**	**3.2**
HFRI FOF Conservative Index			*0.6*	*3.2*	*6.8*	*3.5*	*4.9*	*3.5*
Diversifiying Strategies	4,958,134,897	5.2	1.4	7.7	8.2	10.3	4.5	--
HFRI FOF Conservative Index			*0.6*	*3.2*	*6.8*	*3.5*	*4.9*	*3.5*
Real Assets	**9,888,284,650**	**10.5**	**3.1**	**4.9**	**7.4**	**13.2**	**9.2**	**5.8**
CPI +4%			*1.6*	*4.4*	*7.1*	*9.0*	*8.3*	*6.9*
Infrastructure	6,876,972,585	7.3	2.2	4.5	7.3	10.7	10.8	--
CPI +4%			*1.6*	*4.4*	*7.1*	*9.0*	*8.3*	*6.9*
Natural Resources	3,011,312,065	3.2	5.2	5.7	7.8	18.3	7.4	--
CPI +4%			*1.6*	*4.4*	*7.1*	*9.0*	*8.3*	*6.9*
Private Equity	**26,834,824,034**	**28.4**	**1.5**	**3.5**	**6.5**	**9.1**	**13.6**	**12.6**
Russell 3000 + 300 BPS QTR LAG (Adj.)			*10.2*	*24.4*	*32.4*	*12.8*	*17.6*	*15.6*
MSCI ACWI+3% (1 quarter lagged)			*9.0*	*21.9*	*26.9*	*10.2*	*14.2*	*11.9*

The Opportunity Portfolio benchmark changed from CPI +5% to OPERF Policy Benchmark beginning April 1, 2023.

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Cash	**1,889,544,223**	**2.0**	**1.4**	**2.8**	**5.9**	**2.9**	**2.3**	**1.9**
ICE BofA 3 Month U.S. T-Bill			*1.3*	*2.6*	*5.4*	*3.0*	*2.2*	*1.5*
PERS-Russell Overlay Cash Balance	605,142,455	0.6						

Calendar Year Performance	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)
Total Fund	**6.0**	**-1.5**	**20.0**	**7.7**	**13.6**	**0.5**	**15.4**	**7.1**	**2.0**	**7.3**
OPERF Policy Benchmark	*11.4*	*-8.6*	*15.6*	*12.4*	*14.0*	*1.2*	*15.6*	*9.0*	*1.6*	*8.2*
60% MSCI ACWI / 40% Bloomberg Aggregate	*15.4*	*-16.0*	*10.2*	*13.5*	*19.4*	*-5.5*	*15.4*	*5.9*	*-1.0*	*5.0*
70% MSCI ACWI/30% Barclays Agg	*17.1*	*-16.6*	*12.2*	*14.3*	*21.2*	*-6.5*	*17.5*	*6.4*	*-1.3*	*4.8*
InvMetrics All DB > $5B Median	*10.6*	*-10.2*	*15.0*	*12.3*	*17.0*	*-2.7*	*16.0*	*7.8*	*0.3*	*6.5*
InvMetrics All DB > $5B Rank	*97*	*1*	*9*	*95*	*91*	*10*	*64*	*85*	*12*	*31*
Total Fixed Income	**7.0**	**-11.3**	**-0.9**	**7.7**	**8.8**	**0.3**	**3.7**	**2.8**	**0.6**	**3.5**
Oregon Custom FI Benchmark	*5.5*	*-13.0*	*-0.9*	*7.3*	*8.3*	*0.3*	*3.3*	*2.5*	*0.2*	*3.0*
Core Fixed Income	**6.7**	**-13.9**	**-1.1**	**8.7**	**9.8**	**-0.2**	**4.6**	**3.4**	**0.6**	**6.9**
Oregon Custom External FI BM	*5.5*	*-13.0*	*-1.5*	*7.5*	*8.7*	*0.0*	*3.5*	*2.7*	*0.6*	*6.0*
Blackrock	6.2	-13.2	-1.4	9.1	8.9	0.1	3.8	2.8	0.9	6.7
Oregon Custom External FI BM	*5.5*	*-13.0*	*-1.5*	*7.5*	*8.7*	*0.0*	*3.5*	*2.7*	*0.6*	*6.0*
Wellington	6.7	-14.3	-0.9	9.6	9.8	-0.4	4.6	4.0	0.8	6.5
Oregon Custom External FI BM	*5.5*	*-13.0*	*-1.5*	*7.5*	*8.7*	*0.0*	*3.5*	*2.7*	*0.6*	*6.0*
Western Asset	6.9	-14.9	-1.2	9.4	11.6	-0.7	5.6	3.7	0.4	7.0
Oregon Custom External FI BM	*5.5*	*-13.0*	*-1.5*	*7.5*	*8.7*	*0.0*	*3.5*	*2.7*	*0.6*	*6.0*
U.S. Government	**4.1**	**-12.5**	**-2.3**	**8.1**	**6.9**	**0.9**	**2.3**	**-1.6**	**0.9**	**1.0**
Government Blended Index	*4.1*	*-12.5*	*-2.3*	*8.0*	*6.9*	*0.9*	*2.3*	*-1.3*	*0.7*	*0.8*
Government Portfolio	4.1	-12.5	-2.3	8.1	6.9	0.9	--	--	--	--
Government Blended Index	*4.1*	*-12.5*	*-2.3*	*8.0*	*6.9*	*0.9*	*2.3*	*-1.3*	*0.7*	*0.8*
Non-Core Fixed Income	**14.7**	**0.3**	**6.4**	**3.7**	**10.5**	**0.1**	**4.9**	**10.1**	**0.2**	**2.4**
Custom Non-Core Fixed Income Index	*13.4*	*-3.3*	*5.3*	*3.9*	*10.1*	*-0.2*	*5.0*	*12.0*	*-1.7*	*1.8*

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)
Oak Hill	14.8	1.3	5.7	4.9	10.5	0.5	6.3	11.2	0.9	2.2
Oak Hill Custom Lev Loan & Bond Index	*13.4*	*-2.2*	*5.2*	*3.6*	*9.5*	*0.0*	*4.6*	*11.2*	*-1.3*	*1.7*
Beach Point	--	--	--	--	--	--	--	--	--	--
Beachpoint Custom FI Benchmark	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Emerging Markets Debt	**10.5**	**-18.4**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
JPM EMBI Global Diversified	*11.1*	*-17.8*	*-1.8*	*5.3*	*15.0*	*-4.3*	*10.3*	*10.2*	*1.2*	*7.4*
Global Evolution EMD	11.8	-16.6	--	--	--	--	--	--	--	--
JPM EMBI Global Diversified	*11.1*	*-17.8*	*-1.8*	*5.3*	*15.0*	*-4.3*	*10.3*	*10.2*	*1.2*	*7.4*
PGIM EMD	10.5	-17.6	--	--	--	--	--	--	--	--
JPM EMBI Global Diversified	*11.1*	*-17.8*	*-1.8*	*5.3*	*15.0*	*-4.3*	*10.3*	*10.2*	*1.2*	*7.4*
Structured Credit Products	**7.0**	**-9.3**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Oregon Structured Credit Products FI BM	*7.3*	*-9.0*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
Schroders SCP	8.1	-6.5	--	--	--	--	--	--	--	--
ICE BofA AA-BBB US Asset Backed Sec Idx	*8.3*	*-7.6*	*1.7*	*4.2*	*5.2*	*3.0*	*4.2*	*3.4*	*2.0*	*3.2*
Putnam SCP	-2.0	-14.9	--	--	--	--	--	--	--	--
Blmbg. U.S. Mortgage Backed Securities	*5.0*	*-11.8*	*-1.0*	*3.9*	*6.4*	*1.0*	*2.5*	*1.7*	*1.5*	*6.1*
Guggenheim SCP	9.2	-5.9	--	--	--	--	--	--	--	--
ICE BofA AA-BBB US Asset Backed Sec Idx	*8.3*	*-7.6*	*1.7*	*4.2*	*5.2*	*3.0*	*4.2*	*3.4*	*2.0*	*3.2*
Investment Grade Credit	**10.6**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Bloomberg US Credit	*8.2*	*-15.3*	*-1.1*	*9.4*	*13.8*	*-2.1*	*6.2*	*5.6*	*-0.8*	*7.5*
Fidelity	10.6	--	--	--	--	--	--	--	--	--
Bloomberg US Credit	*8.2*	*-15.3*	*-1.1*	*9.4*	*13.8*	*-2.1*	*6.2*	*5.6*	*-0.8*	*7.5*

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)
Total Public Equity	**19.8**	**-14.3**	**20.0**	**12.7**	**25.3**	**-10.5**	**24.5**	**9.8**	**-1.7**	**3.3**
MSCI ACWI IMI Net (Daily)	*21.6*	*-18.4*	*18.2*	*16.3*	*26.4*	*-10.1*	*24.0*	*8.3*	*-2.1*	*3.8*
U.S. Equity	**20.4**	**-16.0**	**27.2**	**13.6**	**29.0**	**-7.9**	**20.3**	**14.9**	**-0.8**	**9.8**
Russell 3000 Index	*26.0*	*-19.2*	*25.7*	*20.9*	*31.0*	*-5.2*	*21.1*	*12.7*	*0.5*	*12.6*
Small Cap Growth	**3.6**	**-23.9**	**19.6**	**38.9**	**33.9**	**-4.7**	**26.8**	**6.3**	**-5.0**	**-3.6**
Russell 2000 Growth Index	*18.7*	*-26.4*	*2.8*	*34.6*	*28.5*	*-9.3*	*22.2*	*11.3*	*-1.4*	*5.6*
EAM MicroCap Growth	3.6	-23.9	19.6	38.9	33.9	-4.7	26.8	6.3	-5.7	1.8
Russell Microcap Growth Index (Daily)	*9.1*	*-29.8*	*0.9*	*40.1*	*23.3*	*-14.2*	*16.7*	*6.9*	*-3.9*	*4.3*
Market Oriented (CORE)	**21.2**	**-16.3**	**26.6**	**15.2**	**30.1**	**-7.1**	**22.0**	**14.8**	**-1.7**	**11.1**
Russell 3000 Index	*26.0*	*-19.2*	*25.7*	*20.9*	*31.0*	*-5.2*	*21.1*	*12.7*	*0.5*	*12.6*
Russell 2000 Synthetic - OST managed	16.2	-16.2	27.1	11.8	23.4	-11.3	14.5	23.4	-3.6	5.8
S&P 600 Custom	*16.1*	*-16.1*	*26.8*	*11.3*	*22.8*	*-11.0*	*14.7*	*21.3*	*-4.4*	*4.9*
S&P 500 - OST managed	26.3	-18.2	28.7	18.4	31.7	-4.4	21.8	12.0	1.5	13.7
S&P 500 Index (Daily)	*26.3*	*-18.1*	*28.7*	*18.4*	*31.5*	*-4.4*	*21.8*	*12.0*	*1.4*	*13.7*
S&P 400 - OST managed	16.5	-13.0	24.6	13.5	26.6	-10.9	16.7	21.1	-2.0	10.0
S&P 400 Midcap Index (Daily)	*16.4*	*-13.1*	*24.8*	*13.7*	*26.2*	*-11.1*	*16.3*	*20.7*	*-2.2*	*9.8*
OST Risk Premia Strategy	19.5	-17.6	24.3	15.8	31.3	-5.5	27.1	10.8	4.5	13.0
MSCI USA Index	*--*	*--*	*--*	*21.4*	*31.6*	*-4.5*	*22.0*	*11.6*	*1.3*	*13.4*
BR Russell 3000	--	--	--	--	--	--	--	--	--	--
Russell 3000 Index	*26.0*	*-19.2*	*25.7*	*20.9*	*31.0*	*-5.2*	*21.1*	*12.7*	*0.5*	*12.6*
DFA All Cap Core	--	--	--	--	--	--	--	--	--	--
Russell 3000 Index	*26.0*	*-19.2*	*25.7*	*20.9*	*31.0*	*-5.2*	*21.1*	*12.7*	*0.5*	*12.6*
Non-U.S. Equity	**19.5**	**-14.3**	**12.7**	**13.5**	**22.6**	**-14.9**	**30.4**	**4.6**	**-2.6**	**-2.9**
Oregon MSCI ACWI Ex US IMI (Net)	*15.6*	*-16.6*	*8.5*	*11.1*	*21.6*	*-14.8*	*27.8*	*4.4*	*-4.6*	*-3.9*

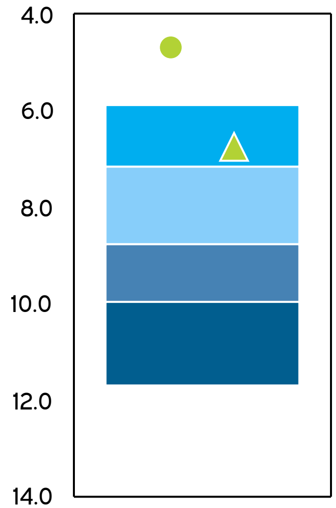
	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)
Total International Overlay Accounts										
PERS-Adrian Lee Active Currency										
PERS-P/E Global Active Currency										
International Market Oriented (Core)	**17.5**	**-13.5**	**13.1**	**12.5**	**23.2**	**-14.3**	**31.0**	**2.5**	**-1.2**	**-2.6**
MSCI World ex U.S. IMI Index (Net)	*17.2*	*-15.3*	*12.4*	*8.3*	*22.9*	*-14.7*	*25.2*	*3.0*	*-2.0*	*-4.5*
Arrowstreet Capital	21.7	-5.5	24.5	9.1	23.2	-10.3	35.4	4.7	0.4	0.8
Oregon MSCI ACWI Ex US IMI (Net)	*15.6*	*-16.6*	*8.5*	*11.1*	*21.6*	*-14.8*	*27.8*	*4.4*	*-4.6*	*-3.9*
Lazard International CEF	10.5	-25.7	4.5	30.2	29.0	-17.2	39.8	0.1	-0.2	0.6
Oregon MSCI ACWI Ex US (Net)	*15.6*	*-16.0*	*7.8*	*10.7*	*21.5*	*-14.2*	*27.2*	*4.5*	*-5.5*	*-3.9*
OST Int'l Risk Premia	19.8	-11.5	15.6	7.7	22.8	-12.0	--	--	--	--
MSCI World x US Custom Div Multiple-Factor	*19.3*	*-11.8*	*15.0*	*7.3*	*22.4*	*-12.3*	*--*	*--*	*--*	*--*
MSCI World ex USA Net Index	*17.9*	*-14.3*	*12.6*	*7.6*	*22.5*	*-14.1*	*24.2*	*2.8*	*-3.0*	*-4.3*
International Value	**23.2**	**-10.9**	**18.0**	**4.9**	**17.8**	**-12.4**	**25.7**	**9.8**	**-4.5**	**-4.3**
Oregon MSCI ACWI Ex US Value IMI (Net)	*17.3*	*-9.3*	*11.0*	*-0.1*	*16.3*	*-14.6*	*23.6*	*8.8*	*-8.9*	*-5.0*
Acadian Asset Management	16.5	-13.9	21.7	11.5	19.4	-15.4	35.1	11.8	-7.2	-3.7
Oregon MSCI ACWI Ex US Value IMI (Net)	*17.3*	*-9.3*	*11.0*	*-0.1*	*16.3*	*-14.6*	*23.6*	*8.8*	*-8.9*	*-5.0*
Brandes Investment Partners	32.3	-7.4	14.1	-1.3	16.4	-9.4	16.3	7.9	-1.6	-5.0
Oregon MSCI ACWI Ex US Value (Net)	*17.3*	*-8.6*	*10.5*	*-0.8*	*15.7*	*-14.0*	*22.7*	*8.9*	*-10.1*	*-5.1*
International Growth	**19.2**	**-21.0**	**12.4**	**19.9**	**28.1**	**-6.4**	**27.5**	**1.3**	**1.9**	**-4.3**
Oregon MSCI WORLD Ex US (Net)	*17.9*	*-14.3*	*12.6*	*7.6*	*22.5*	*-14.1*	*24.2*	*2.8*	*-3.0*	*-4.3*
Walter Scott Management	19.2	-21.0	12.4	19.9	28.0	-6.3	27.5	6.4	1.2	-3.1
Oregon MSCI WORLD Ex US (Net)	*17.9*	*-14.3*	*12.6*	*7.6*	*22.5*	*-14.1*	*24.2*	*2.8*	*-3.0*	*-4.3*
International Small Cap	**19.8**	**-15.0**	**18.1**	**9.3**	**24.1**	**-24.3**	**30.2**	**4.9**	**6.1**	**-6.5**
MSCI World ex U.S. Small Value (Net)	*14.7*	*-14.0*	*13.3*	*2.6*	*22.8*	*-18.4*	*27.9*	*7.9*	*1.1*	*-5.9*
Harris Associates	20.7	-13.8	20.1	5.0	33.4	-24.1	27.2	7.1	1.0	-6.7
MSCI AC World ex USA Small Value (Net)	*17.2*	*-13.6*	*14.2*	*4.7*	*20.3*	*-18.2*	*29.7*	*8.2*	*-1.3*	*-4.5*

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)
EAM International Micro Cap	17.5	-25.2	17.8	38.4	20.3	-33.6	45.3	2.2	23.5	--
Oregon FTSE Global Ex US Micro Cap	*14.5*	*-21.1*	*18.0*	*27.9*	*16.6*	*-20.0*	*31.4*	*6.0*	*2.9*	*--*
Emerging Markets	**24.3**	**-16.9**	**4.3**	**23.5**	**22.1**	**-17.4**	**35.7**	**10.3**	**-14.5**	**1.2**
ORE MSCI Emerging Markets IMI (Net)	*11.7*	*-19.8*	*-0.3*	*18.4*	*17.6*	*-15.0*	*37.0*	*9.9*	*-13.9*	*-1.8*
Arrowstreet Emerging Markets	21.3	-10.5	9.6	32.1	23.7	-19.5	35.4	11.2	-15.8	1.1
ORE MSCI Emerging Markets IMI (Net)	*11.7*	*-19.8*	*-0.3*	*18.4*	*17.6*	*-15.0*	*37.0*	*9.9*	*-13.9*	*-1.8*
Westwood Global Investment	22.8	-4.1	3.6	10.1	9.8	-9.3	29.5	19.0	-16.1	0.2
MSCI Emerging Markets IMI (Net)	*11.7*	*-19.8*	*-0.3*	*18.4*	*17.7*	*-15.0*	*36.8*	*9.9*	*-13.9*	*-1.8*
William Blair and Company	10.7	-33.3	4.4	41.4	29.1	-21.6	50.2	1.9	-14.1	5.7
MSCI Emerging Markets Growth (Net)	*5.8*	*-24.0*	*-8.4*	*31.3*	*25.1*	*-18.3*	*46.8*	*7.6*	*-11.3*	*-0.3*
Global Equity	**19.3**	**-9.8**	**15.5**	**7.4**	**21.6**	**-7.9**	**22.3**	**9.4**	**-3.3**	**6.9**
MSCI ACWI IMI Net (Daily)	*21.6*	*-18.4*	*18.2*	*16.3*	*26.4*	*-10.1*	*24.0*	*8.3*	*-2.1*	*3.8*
Cantillion	--	--	--	--	--	--	--	--	--	--
MSCI ACWI IMI Net (Daily)	*21.6*	*-18.4*	*18.2*	*16.3*	*26.4*	*-10.1*	*24.0*	*8.3*	*-2.1*	*3.8*
GQG Global Equity	--	--	--	--	--	--	--	--	--	--
Oregon MSCI ACWI Ex US (Net)	*15.6*	*-16.0*	*7.8*	*10.7*	*21.5*	*-14.2*	*27.2*	*4.5*	*-5.5*	*-3.9*
Global Equity Low Volatility	**17.2**	**-9.2**	**15.2**	**7.9**	**21.7**	**-5.5**	**22.5**	**--**	**--**	**--**
MSCI AC World (Daily Const)	*22.2*	*-18.4*	*18.5*	*16.3*	*26.6*	*-9.4*	*24.0*	*7.9*	*-2.4*	*4.2*
LACM Global Equity Low Volatility	15.8	-14.9	15.4	15.0	23.1	-6.6	22.7	--	--	--
MSCI AC World (Daily Const)	*22.2*	*-18.4*	*18.5*	*16.3*	*26.6*	*-9.4*	*24.0*	*7.9*	*-2.4*	*4.2*
Arrowstreet Global Low Volatility	20.0	-2.7	15.1	12.6	22.3	-2.7	--	--	--	--
MSCI ACWI IMI Net (Daily)	*21.6*	*-18.4*	*18.2*	*16.3*	*26.4*	*-10.1*	*24.0*	*8.3*	*-2.1*	*3.8*
Other Equity										
Transitional & Closed Accounts										
Transition & Closed Accounts II - International Equity										

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)
Total Real Estate	**-10.2**	**20.0**	**19.0**	**2.7**	**7.2**	**8.0**	**10.0**	**7.9**	**9.9**	**14.2**
NCREIF ODCE (Custom) (Adj.)	*-12.9*	*21.0*	*13.6*	*0.6*	*4.7*	*7.7*	*6.7*	*8.9*	*13.5*	*11.3*
Real Estate excluding REITS	**-10.7**	**21.6**	**18.6**	**3.0**	**7.3**	**8.9**	**11.2**	**10.0**	**12.7**	**12.0**
NCREIF ODCE (Custom) (Adj.)	*-12.9*	*21.0*	*13.6*	*0.6*	*4.7*	*7.7*	*6.7*	*8.9*	*13.5*	*11.3*
Total REITS	**14.4**	**-16.4**	**28.2**	**-0.9**	**7.2**	**-2.0**	**9.8**	**1.1**	**2.0**	**22.2**
ABKB - LaSalle Advisors	15.6	-18.6	36.2	3.0	29.9	3.2	7.4	5.4	2.9	32.1
FTSE NAREIT All Equity REITs	*11.4*	*-24.9*	*41.3*	*-5.1*	*28.7*	*-4.0*	*8.7*	*8.6*	*2.8*	*28.0*
Opportunity Portfolio	**13.9**	**1.3**	**22.7**	**10.2**	**6.2**	**5.8**	**10.5**	**6.1**	**2.1**	**8.8**
Opportunity Custom Benchmark	*10.1*	*11.7*	*12.4*	*6.4*	*7.4*	*7.0*	*7.2*	*7.2*	*5.8*	*5.8*
OPERF Policy Benchmark	*11.4*	*-8.6*	*15.6*	*12.4*	*14.0*	*1.2*	*15.6*	*9.0*	*1.6*	*8.2*
Portfolio Holdings - Opportunity	37.8	-15.5	--	--	--	--	--	--	--	--
Alternative Portfolio	**5.3**	**19.1**	**14.8**	**-6.6**	**-1.3**	**-2.4**	**8.3**	**6.6**	**-4.3**	**4.4**
CPI +4%	*7.5*	*10.4*	*11.3*	*5.4*	*6.4*	*6.0*	*6.2*	*6.2*	*4.8*	*4.8*
Diversifying Strategies	**0.8**	**21.4**	**8.7**	**-12.1**	**-1.0**	**-11.5**	**8.0**	**0.5**	**6.4**	**9.0**
HFRI FOF Conservative Index	*5.5*	*0.1*	*7.6*	*6.5*	*6.3*	*-0.9*	*4.1*	*1.9*	*0.4*	*3.1*
Diversifiying Strategies	0.8	21.4	8.7	-12.1	-1.0	-11.5	8.0	--	--	--
HFRI FOF Conservative Index	*5.5*	*0.1*	*7.6*	*6.5*	*6.3*	*-0.9*	*4.1*	*1.9*	*0.4*	*3.1*

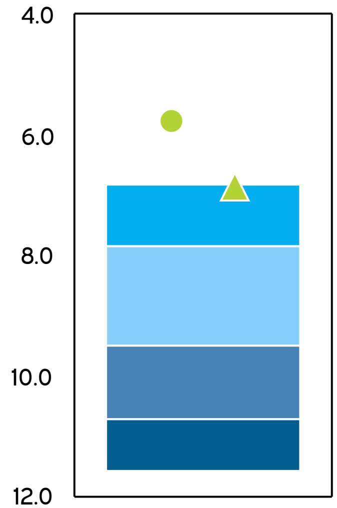
	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)
Real Assets	**7.8**	**18.2**	**19.0**	**-2.0**	**-1.6**	**4.9**	**8.4**	**9.0**	**-7.9**	**3.1**
CPI +4%	*7.5*	*10.4*	*11.3*	*5.4*	*6.4*	*6.0*	*6.2*	*6.2*	*4.8*	*4.8*
Infrastructure	8.6	13.9	16.6	5.6	8.9	--	--	--	--	--
CPI +4%	*7.5*	*10.4*	*11.3*	*5.4*	*6.4*	*6.0*	*6.2*	*6.2*	*4.8*	*4.8*
Natural Resources	5.9	27.7	23.9	-12.8	-12.5	--	--	--	--	--
CPI +4%	*7.5*	*10.4*	*11.3*	*5.4*	*6.4*	*6.0*	*6.2*	*6.2*	*4.8*	*4.8*
Private Equity	**6.4**	**1.2**	**41.8**	**12.7**	**11.1**	**18.1**	**17.3**	**6.3**	**7.3**	**15.9**
Russell 3000 + 300 BPS QTR LAG (Adj.)	*24.0*	*-15.1*	*35.7*	*18.4*	*6.0*	*21.1*	*22.2*	*18.4*	*2.5*	*21.2*
MSCI ACWI+3% (1 quarter lagged)	*24.4*	*-18.3*	*31.3*	*13.8*	*4.4*	*13.1*	*22.2*	*15.3*	*-3.9*	*14.7*
Cash	**5.5**	**0.5**	**0.1**	**1.6**	**3.3**	**2.0**	**1.3**	**1.2**	**0.5**	**0.5**
ICE BofA 3 Month U.S. T-Bill	*5.0*	*1.5*	*0.0*	*0.7*	*2.3*	*1.9*	*0.9*	*0.3*	*0.1*	*0.0*
PERS-Russell Overlay Cash Balance										

Annualized Standard Deivation
3 Years Ending June 30, 2024



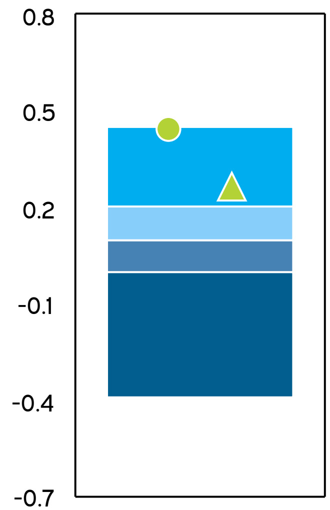
Total Fund	4.7	(1)
OPERF Policy Benchmark	6.8	(16)
5th Percentile	5.9	
1st Quartile	7.2	
Median	8.8	
3rd Quartile	10.0	
95th Percentile	11.7	
Population	41	

Annualized Standard Deviation
5 Years Ending June 30, 2024



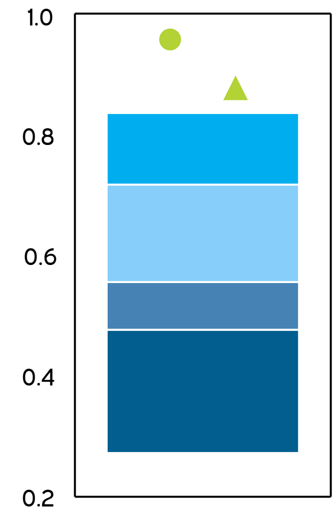
Total Fund	5.8	(1)
OPERF Policy Benchmark	6.9	(5)
5th Percentile	6.8	
1st Quartile	7.9	
Median	9.5	
3rd Quartile	10.7	
95th Percentile	11.6	
Population	39	

Sharpe Ratio
3 Years Ending June 30, 2024



Total Fund	0.4	(6)
OPERF Policy Benchmark	0.3	(22)
5th Percentile	0.5	
1st Quartile	0.2	
Median	0.1	
3rd Quartile	0.0	
95th Percentile	-0.4	
Population	41	

Sharpe Ratio
5 Years Ending June 30, 2024



Total Fund	1.0	(1)
OPERF Policy Benchmark	0.9	(2)
5th Percentile	0.8	
1st Quartile	0.7	
Median	0.6	
3rd Quartile	0.5	
95th Percentile	0.3	
Population	39	

Parentheses contain percentile rankings.

Benchmark History

Total Fixed Income		
10/01/2021	Present	100.0% Blmbg. U.S. Aggregate Index
03/01/2016	10/01/2021	46.0% Blmbg. U.S. Aggregate Index, 37.0% Blmbg. U.S. Treasury Index, 4.0% ICE BofA U.S. High Yield Index, 13.0% Morningstar LSTA U.S. Leveraged Loan
Total Public Equity		
07/01/1997	Present	MSCI ACWI IMI Net (Daily)
Total Real Estate		
07/01/1997	Present	NCREIF ODCE (Custom) (Adj.)
Opportunity Portfolio		
04/01/2023	Present	100.0% OPERF Policy Benchmark
09/01/2006	04/01/2023	100.0% CPI + 5%
Diversifying Strategies		
12/31/2010	Present	100.0% HFRI FOF: Conservative Index
Real Assets		
07/01/2011	Present	CPI +4%
Private Equity		
07/01/1997	Present	Russell 3000 + 300 BPS QTR LAG (Adj.)
Cash		
12/01/1989	Present	ICE BofA 3 Month U.S. T-Bill

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PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security).

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- [Risk Free Rate+Beta*(market return-Risk Free Rate)].

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about is future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a 5% bond pays $5 a year interest on each $100 par value. To figure its current yield, divide $5 by $95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay $100 for the bond that can be bought now for $95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = \begin{array}{l} 1\% \text{ pro rata, plus} \\ 5.26\% \text{ (current yield)} \end{array} = 6.26\% \text{ (yield to maturity)}$$

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.
The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

OREGON STATE TREASURY

Tobias Read
Oregon State Treasurer

Michael Kaplan
Deputy State Treasurer

To: The Oregon Investment Council

From: Karl Cheng, Senior Investment Officer, Portfolio Risk & Research

Re: Second Quarter 2024 Risk Report for the Oregon Public Employees Retirement Fund

Executive Summary

This memo summarizes OPERF's predicted volatility, as estimated by Aladdin, Treasury's end-to-end investment analytics platform built by BlackRock. As of June 30, 2024, OPERF has an estimated return volatility of 14.3%, higher than that for the OIC-approved target allocation, last presented by Meketa Investment Group ("Meketa") at the December 2022 meeting. This elevated volatility is primarily driven by the overallocations versus the OIC-approved targets to private market asset classes.

The predicted active risks for the Public Equity and Fixed Income Portfolios are within the respective OIC-approved guideline limit. Predicted risks for both Portfolios have declined from where they were approximately 18 months ago due to a combination of staff-directed portfolio rebalancing and decline in factor – such as interest rates, equity value & size – volatilities.

OPERF Asset Allocation

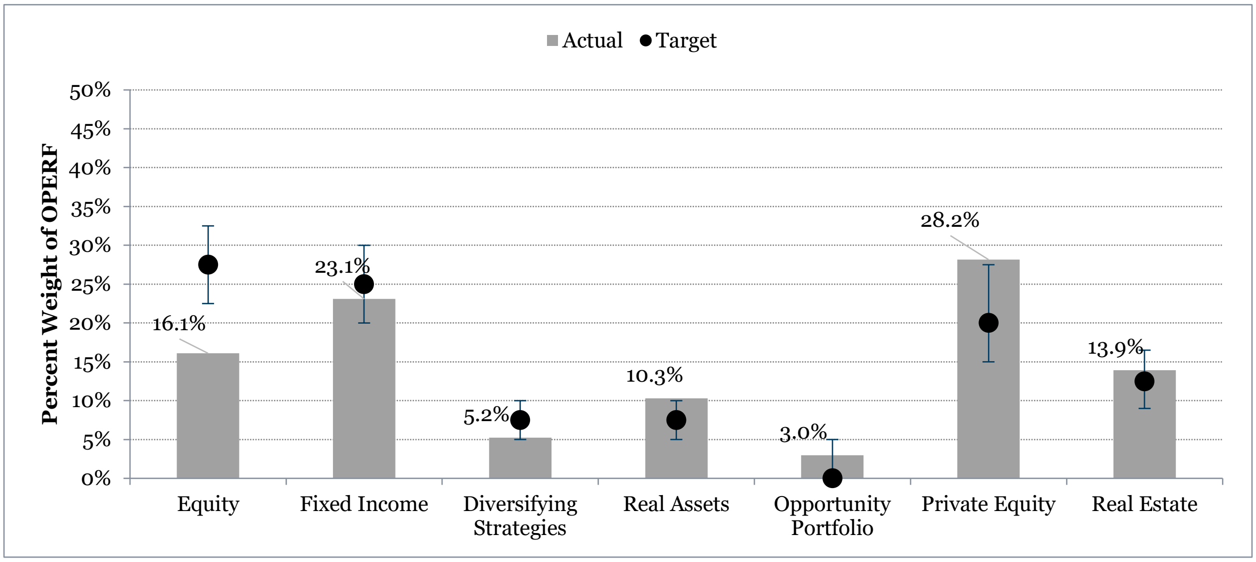
One of the Council's Investment Beliefs is "*Asset Allocation Drives Risk and Return*". Shown in the table below are OPERF's target allocations approved by the Council at the December 2022 meeting.

Table 1. OPERF Target Asset Allocation

Asset Class	Target Allocation (%)	Rebalancing Range (%)
Public Equity	27.5	22.5 – 32.5
Private Equity	20.0	15.0 – 27.5
Fixed Income	25.0	20.0 – 30.0
Real Estate	12.5	9.0 – 16.5
Real Assets	7.5	5.0 – 10.0
Diversifying Strategies	7.5	5.0 – 10.0
Total Fund	**100.0**	

Including the synthetic overlays exposures managed by Russell Investments, Figure **1** below shows OPERF's allocation.

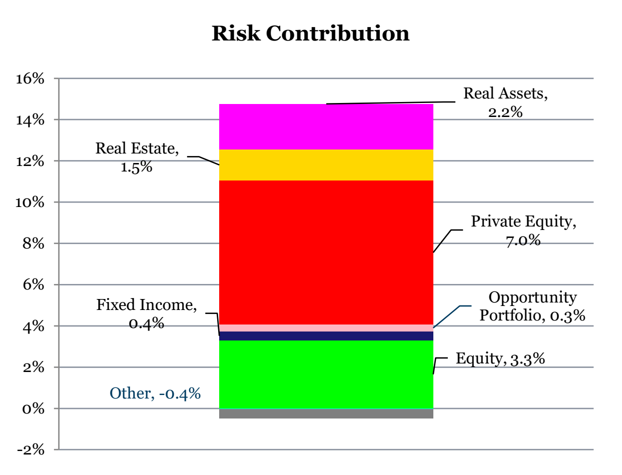
Figure 1. OPERF Actual Allocation versus Target

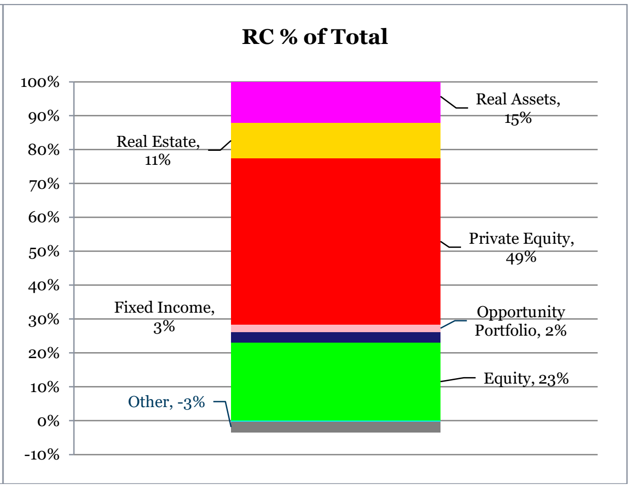


OPERF Predicted Risk

The risk estimates are shown in the charts below.

Figure 2. OPERF Risk Contribution by Asset Class and Risk Contribution as a percent of total OPERF predicted risk





In Figure 2 above, the negative risk contribution of “Other” are mainly due to the Synthetic and Currency Overlay Programs, with Risk Contributions of -0.4% and -0.1% respectively. OPERF has a persistent overallocation to “Equity” (the total of Public and Private) and under allocation to Fixed Income in actual “physical” values. The Synthetic Overlay Program overlays the Fund’s “free” cash and systematically rebalances OPERF back to the target allocations using liquid exchange-traded futures. As of the end of the quarter, the Synthetic Overlay Program was long $4.9 billion of Fixed Income and short $2.5 billion of Public Equity, which in aggregate results in a large negative correlation to “Equity”. By design, the Currency Overlay Program is long U.S. dollar and short foreign currencies, which Aladdin also estimates a negative correlation to “Equity”.

Another item of note from Figure 2 is that “equity” risk, that is the predicted risk contributions from the Public Equity and Private Equity Portfolios, is estimated to be 72% of OPERF’s predicted risk, the largest risk contributor to OPERF. This is consistent with one of the OIC’s Investment Beliefs: “*Over the long-term, equity-oriented investments provide return premiums relative to risk-free investments*.”

The total predicted **standard deviation**, or **volatility**, for OPERF is 14.3% as of June 30, 2024. To put that in context, Meketa, the OIC’s investment consultant, estimated OPERF’s long-term volatility to be 11.4% using their 2022 Capital Market Assumptions, which are a blend of 10- to 20-year assumptions from staff, Meketa, and Aon Investments, the Council’s secondary investment consultant. Aladdin’s model uses a medium-term, five-year lookback period so there will almost always be some difference between the two estimates. OPERF’s current “excess” volatility relative to the Capital Market Assumptions can be attributed to two sources: elevated estimated market volatilities relative to the long-term assumptions; and the Fund's overallocation to private market asset classes. Modeling a “what if” portfolio using the Strategic Asset Allocation and the June 2024 risk estimates produces a predicted risk of 12.2%. A <u>very</u> rough interpretation is that, relative to the Capital Market Assumptions, the current market environment added 0.8% (12.2% minus 11.4%) to the estimated risk while the Fund’s misweights added another 2.1% (14.3% minus 12.2%).

The OIC-approved changes to asset allocation, mainly lowering the allocation to Public Equity and raising those of Real Assets and Diversifying Strategies, have reduced OPERF’s realized volatility. Figure 3 below plots OPERF’s rolling 20-quarter realized beta to MSCI ACWI IMI, a global public equity index, as well as that of the “Reference Portfolio”, which is a blend of 67.5% MSCI ACWI IMI & 32.5% Bloomberg U.S. Aggregate Index, a U.S. fixed income index. OPERF’s realized beta hovered around +0.60 in the earlier portion of the analysis period before starting a steady decline. A significant contributor to that decline is the increasing allocation to illiquid investments, which have performance smoothing, but also provide diversification.

It is worth noting that the 20-quarter beta of the Reference Portfolio increased over the past few years due to increasing correlation between the two component indices.

Figure 3. OPERF's Beta to MSCI ACWI IMI

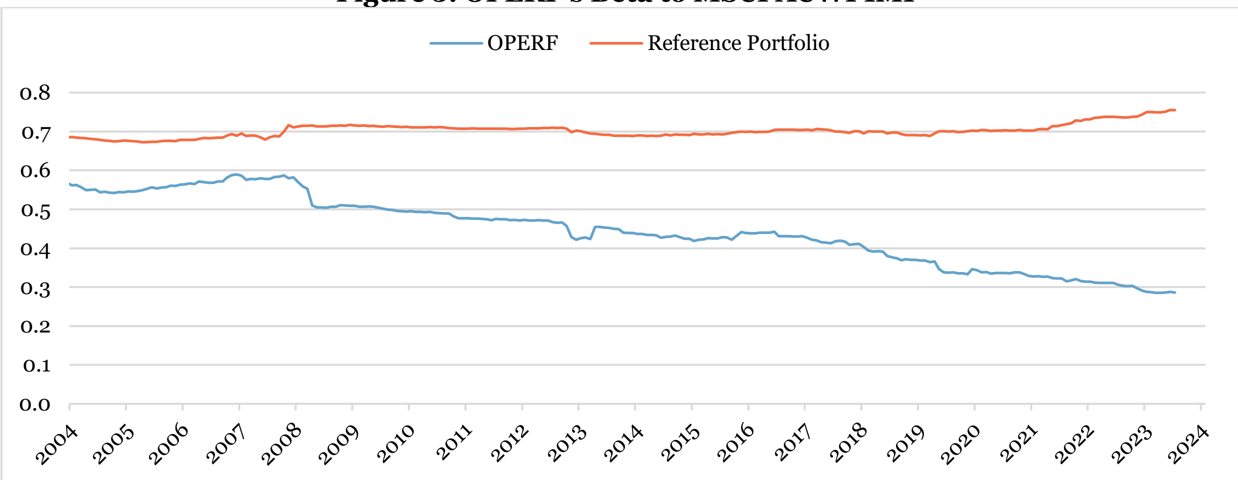
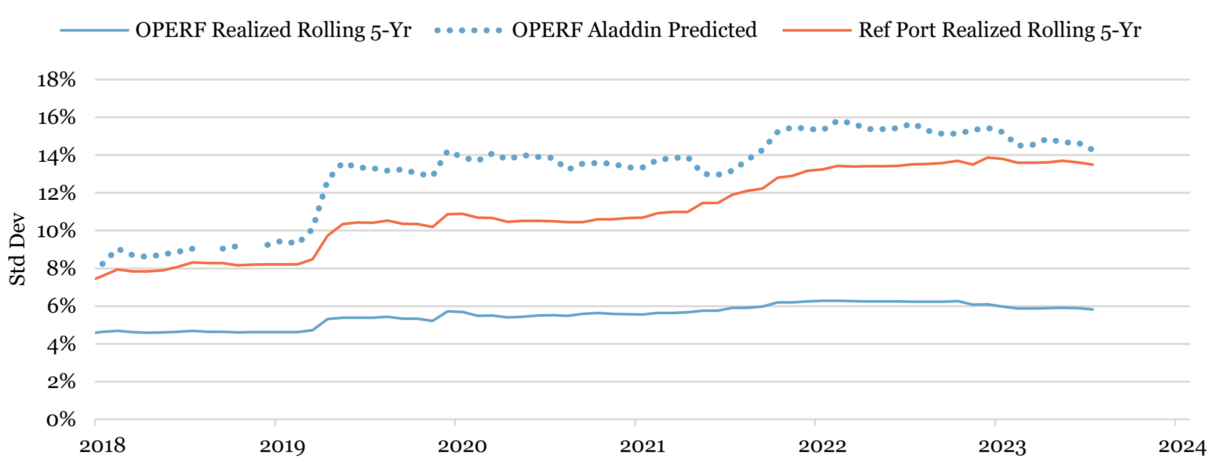


Figure 4 below plots OPERF's predicted volatility from Aladdin over the past six years. The recent estimates are much higher than where they were five years ago for similar reasons described above; OPERF's overweights to private markets and a marked change in the market environment. For comparison, the realized rolling five-year volatility for the Reference Portfolio also increased over the same period.

Figure 4. OPERF's Predicted versus Realized Volatility

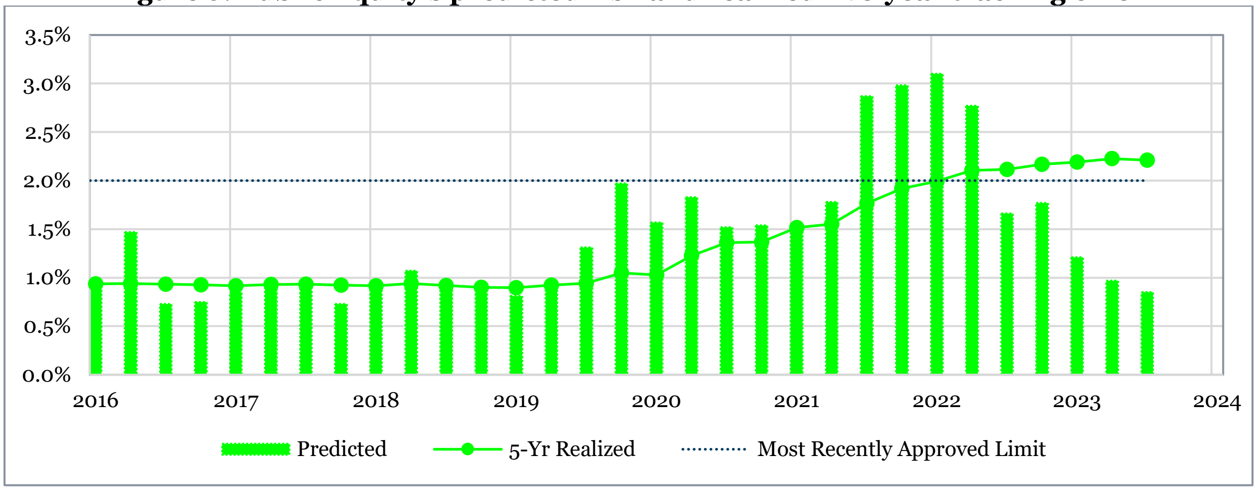


Capital Markets

Public Equity

The Public Equity Portfolio has an OIC-approved **tracking error** range of 0.75% to 2.00%. Using monthly performance data from State Street, the custodian bank, the five-year *ex post* tracking error for the Portfolio through June, 30 2024 is 2.2%, slightly above the upper end of the approved range. However, Aladdin estimates an *ex ante* active risk of 0.9%, substantially lower than the peak of 3.1% reached in December 31, 2022. The Public Equity team's rebalancing activities in conjunction with the moderation of factor correlations lowered the predicted active risk of the Portfolio.

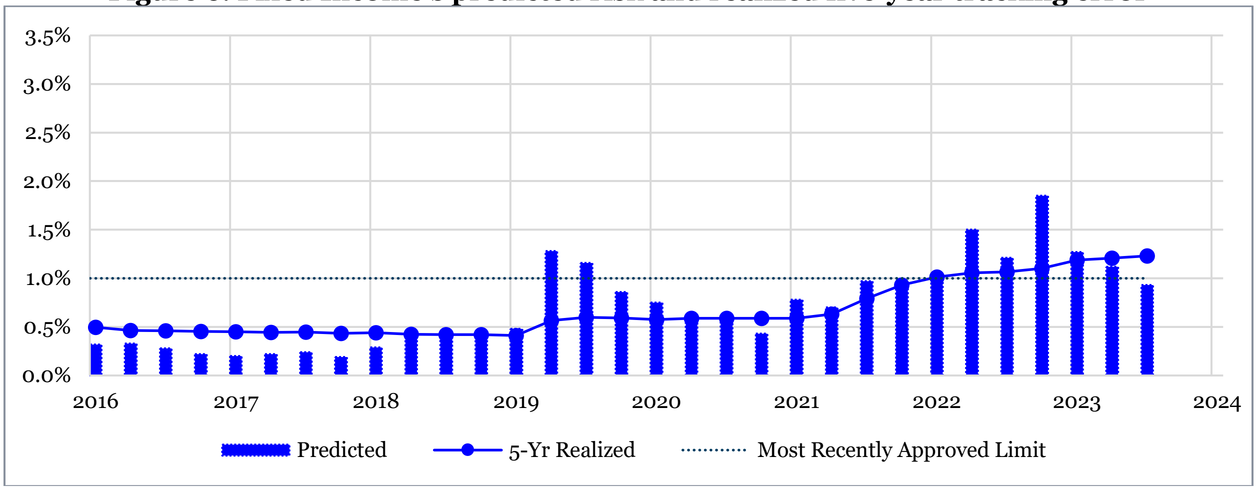
Figure 5. Public Equity's predicted risk and realized five-year tracking error



Fixed Income

The Fixed Income Portfolio has an OIC-approved **tracking error** of up to 1.0%. Using monthly performance data from State Street, the five-year tracking error for the Portfolio through June 30, 2024 is 1.2%, slightly above the upper end of the approved range. However, the predicted active risk of 0.9% is below the approved range and the peak of 1.9% reached in September 30, 2023. The Fixed Income team's rebalancing activity has reduced the Portfolio's short duration exposure from -0.8 in the previous quarter to -0.6 relative to its benchmark.

Figure 6. Fixed Income's predicted risk and realized five-year tracking error



OPERF Cash Flow

Table 2 below summarizes approximate net investment cash flow and pension cash flow for Year-to-Date 2024 and for the past five years.

Table 2. OPERF Net Cash Flow by Portfolio by Time Period

	Net Cash Flow ($M)					
Asset Class	YTD (2024)	2023	2022	2021	2020	2019
Public Equity	1,177	4,536	3,327	4,047	3,436	2,813
Fixed Income	273	-1,384	-1,544	-2,653	3,154	327
Diversifying Strategies	33	-3	-11	381	-621	-490
Other*	-327	961	663	-227	-2,249	283
Capital Markets	*1,155*	*4,110*	*2,434*	*1,548*	*3,720*	*2,933*
Private Equity	530	-542	464	2,503	50	285
Real Estate	-380	-930	-883	-396	15	-48
Real Assets	58	-804	-706	-572	-509	-578
Opportunity	-8	122	-165	-248	86	26
Private Markets	*200*	*-2,154*	*-1,290*	*1,288*	*-358*	*-316*
Total Fund	**1,356**	**1,956**	**1,144**	**2,836**	**3,362**	**2,617**
Net Pension	*-1,481*	*-2,742*	*-2,605*	*-1,743*	*-3,041*	*-2,659*

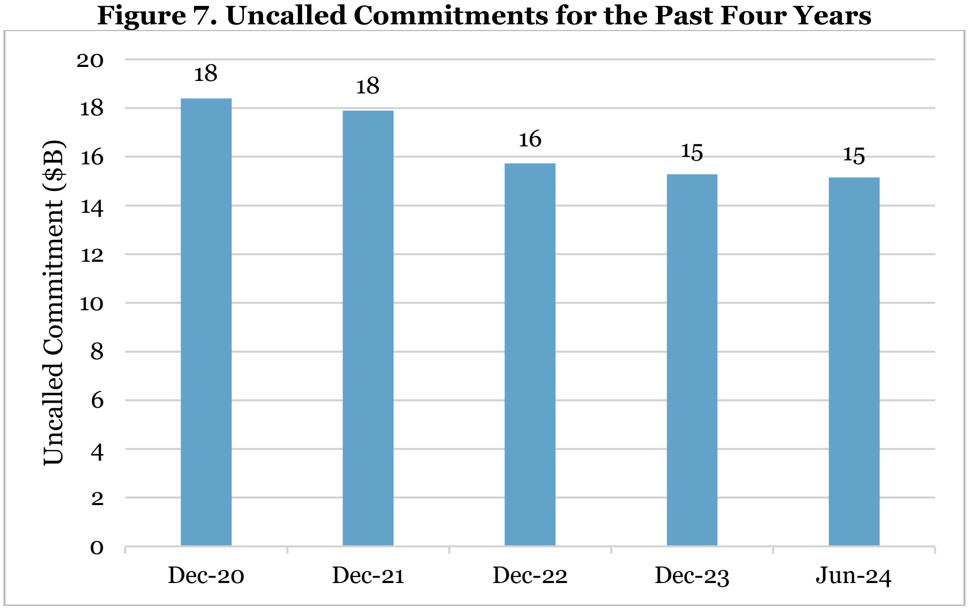
**Includes cash flows from the Synthetic Overlay Program, the Currency Overlay Program, and the terminated OPERF Risk Parity Portfolio.*

The estimated uncalled commitments for the private market portfolios are tabulated below.

Table 3. OPERF Uncalled Commitments

Asset Class Portfolio	**Uncalled Commitment ($B)**
Private Equity	$6.6
Real Assets	$4.4
Real Estate	$2.8
Opportunity	$1.3
Total	**$15.1**

Figure 7. Uncalled Commitments for the Past Four Years



TAB 4

CSF PERFORMANCE

REVIEW

September 4, 2024

Common School Fund Q2 2024 Review

Michael Langdon
Director of Private Markets

Louise Howard
Director of Capital Markets

Jamie McCreary
Service Model Program Manager

Wil Hiles
Investment Officer, Public Equity

OREGON STATE TREASURY

Agenda

Section	Pages	OIC Investment and Management Beliefs Mapping																	
		1A	1B	1C	1D	2A	2B	3A	4A	4B	5A	5B	6A	6B	7A	7B	8A	8B	9A
Fund Objectives	3					X	X	X	X	X	X	X	X	X					
Fund Evolution	4					X	X	X	X	X	X	X	X	X					
Asset Allocation	5					X	X												
Total Fund Performance	6-7						X	X	X	X	X	X	X	X					
Strategic Priorities	8					X	X	X	X	X	X	X	X	X					
Appendix	11-16						X	X	X	X	X	X	X	X					

LEGEND: OIC INVESTMENT AND MANAGEMENT BELIEFS

1 **THE OIC SETS POLICY AND IS ULTIMATELY RESPONSIBLE FOR THE INVESTMENT PROGRAM**

A. Investment management is dichotomous -- part art and part science.
B. The OIC is a policy-setting council that largely delegates investment management activities to the OST and qualified external fiduciaries.
C. The OIC is vested with the authority to set and monitor portfolio risk. Both short-term and long-term risks are critical.
D. To exploit market inefficiencies, the OIC should be long term, contrarian, innovative, and opportunistic in its investment approach.

2 **ASSET ALLOCATION DRIVES RISK AND RETURN**

A. Asset allocation is the OIC's primary policy tool for managing the investment program's long-term risk/return profile.
B. Portfolio construction, including diversification and correlation considerations, is essential to maximizing risk-adjusted returns.

3 **THE EQUITY RISK PREMIUM WILL BE REWARDED**

A. Over the long-term, equity-oriented investments provide reliable return premiums relative to risk-free investments.

4 **PRIVATE MARKET INVESTMENTS CAN ADD SIGNIFICANT VALUE AND REPRESENT A CORE OIC/OST COMPETENCY**

A. The OIC can capitalize on its status as a true, long-term investor by making meaningful allocations to illiquid, private market investments.
B. Dispersion in private market investment returns is wide; accordingly, top-quartile manager selection, diversification across vintage year, strategy type, and geography, and careful attention to costs are paramount.

5 **CAPITAL MARKETS HAVE INEFFICIENCIES THAT CAN BE EXPLOITED**

A. Inefficiencies that can be exploited by active management may exist in certain segments of the capital markets.
B. Passive investment management in public markets will outperform the median active manager in those markets over time.

6 **COSTS DIRECTLY IMPACT INVESTMENT RETURNS AND SHOULD BE MONITORED AND MANAGED CAREFULLY**

A. All fees, expenses, commissions, and transaction costs should be diligently monitored and managed in order to maximize net investment returns.
B. External incentive structures should be carefully evaluated to ensure proper alignment with investment program objectives.

7 **FAIR AND EFFICIENT CAPITAL MARKETS ARE ESSENTIAL FOR THE LONG-TERM INVESTMENT SUCCESS**

A. The OIC recognizes that the quality of regulation and corporate governance can affect the long-term value of its investments.
B. The OIC also recognizes that voting rights have economic value.

8 **THE INTEGRATION OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) FACTORS, SIMILAR TO OTHER INVESTMENT FACTORS, MAY HAVE A BENEFICIAL IMPACT ON THE ECONOMIC OUTCOME OF AN INVESTMENT AND AID IN THE ASSESSMENT OF RISKS ASSOCIATED WITH THAT INVESTMENT**

A. The consideration of ESG factors within the investment decision-making framework is important in understanding the near-term and long-term impacts of investment decisions.
B. Over time, there has been an evolution of multi-factor, or more holistic approaches, to identify opportunities and remediate risks, in a large globally-diversified investment portfolio.

9 **DIVERSITY, IN ALL ASPECTS, IS ACCRETIVE TO MEETING OIC OBJECTIVES**

A. By embracing and enhancing diversity and inclusion efforts, the OIC ensures that the investment program will be exposed to and informed by a wide range of perspectives, ideas and opinions.

Fund Objectives

Investment Policy

- The Oregon Investment Council (OIC) formulates policies for the investment of funds under the control and administration of the Department of State Lands, known as the Common School Fund (the Fund)
- Investment policy provides guidance to Oregon State Treasury staff and investment consultants regarding approved asset classes, asset allocation, and reporting requirements
- The primary objective of the Common School Fund is to generate a real (inflation-adjusted) rate of return that is sufficient to support the mission of the Fund and its spending needs into perpetuity

Distribution Policy

- On an annual basis, the Common School Fund distributes 3.5% of the Fund's trailing three-year average market value to the Department of Education to support the State's K-12 education programs
- In addition, with the passage of SB 1566, certain funds (subject to a formula) are distributed to the School Districts Unfunded Liability Fund to help pay down some of the PERS unfunded liability for those local school districts

Fund Evolution

2017 2018 2019 2020 2021 2022 2023 2024 2025

Updated Strategic Asset Allocation: Added Real Estate & Alternatives (solely Diversifying Strategies) Asset Classes

Initial Build out of Real Estate & Alternatives (solely Diversifying Strategies) Portfolios

Reviewed Asset Allocation in response to passing of SB 1566

Reviewed Investment Policy Statement

Conducted Distribution Study & Reviewed Asset Allocation

Updated Strategic Asset Allocation: Bifurcated Alternatives into Diversifying Strategies & Real Assets
Increased Private Equity Allocation

Updated Investment Policy Statement

Implemented Asset Allocation Changes

Built out Alternative Asset Classes

Enhanced Manager Composition within Asset Class Portfolios

Implement remainder of Asset Allocation changes

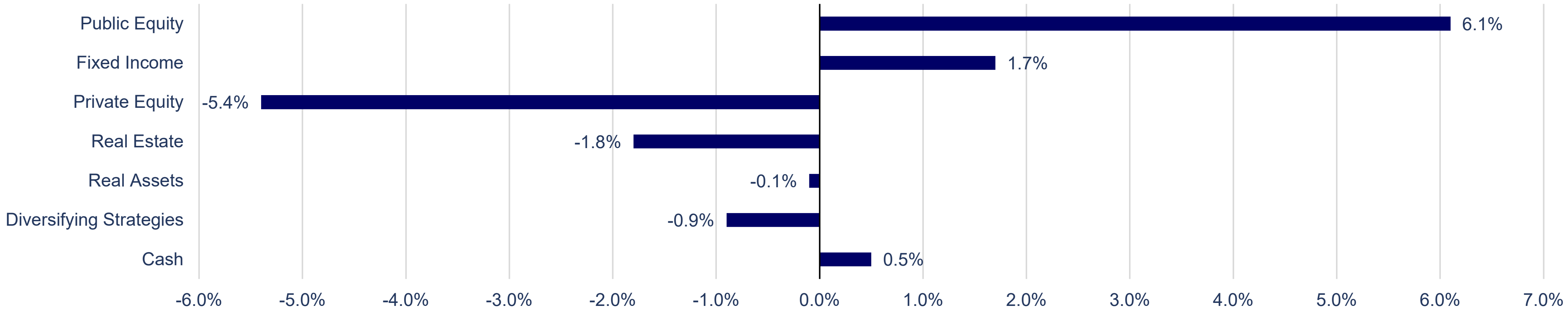
Build out Alternative Asset Classes

Enhance Underlying Asset Class Portfolios

Conduct Distribution Study & Review Asset Allocation

OREGON STATE TREASURY

Total Fund Asset Allocation



Asset Class	Market Value	Current Allocation	Interim Target	Long-Term Target	Active Weight	Approved Range
Public Equity	$1.3B	53.6%	47.5%	45.0%	6.1%	40%- 50%
Fixed Income	$572M	24.2%	22.5%	20.0%	1.7%	15%- 25%
Private Equity	$167.9M	7.1%	12.5%	15.0%	-5.4%	10%- 20%
Real Estate	$193.7M	8.2%	10.0%	10.0%	-1.8%	5%- 15%
Real Assets	$57.9M	2.4%	2.5%	5.0%	-0.1%	0%- 10%
Diversifying Strategies	$96.4M	4.1%	5.0%	5.0%	-0.9%	0%- 10%
Cash	$11.1M	0.5%	0.0%	0.0%	0.5%	0%- 3%
Total Fund	**$2.4B**	**100%**				

OREGON STATE TREASURY

See Endnotes for source information. Active Weights shown are vs. Interim Targets.

Performance – Total Fund

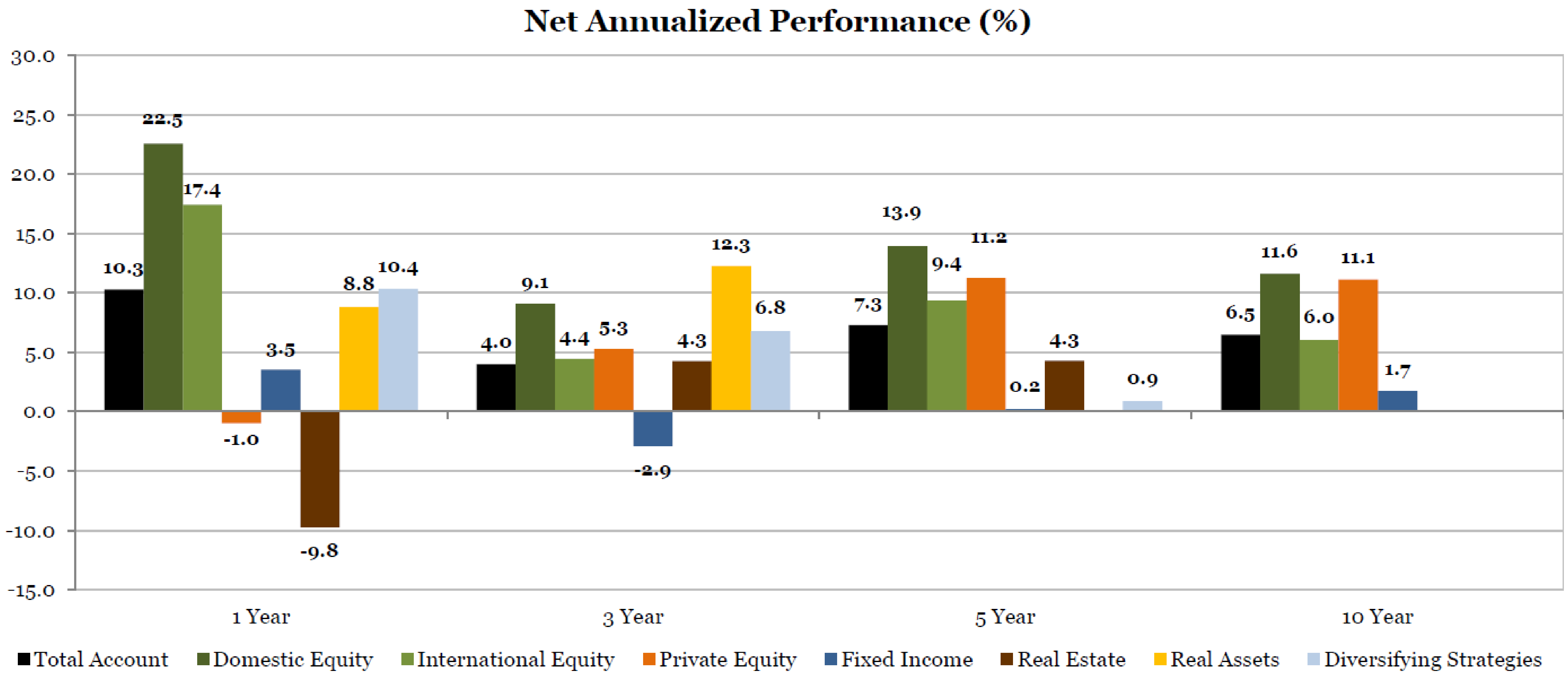
- For the quarter, the Common School Fund (Total Fund) returned 1.1%, trailing its policy benchmark, while providing mixed to flat results, over longer trailing time periods
- Majority of the asset classes (aside from real estate) generated positive absolute returns during the quarter
- The U.S. stock market (represented by the S&P 500) gained 4.3%, while developed international countries (MSCI World Ex US Index) fell -0.6%, and emerging markets (MSCI EM Index) returned 5.0%. U.S. equities continued to reach new highs which was largely driven by gains in the tech sector. U.S. economy has remained resilient (GDP increased at an annual rate of 2.8% in 2Q), primarily supported by consumer spending. US inflation continued to ease and labor market showed gradual softening over the recent months. As expected, the Federal Open Market Committee (FOMC) kept the fed funds target unchanged at 5.25%- 5.50%.

	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years
Total Fund	$2.4B	1.1%	10.3%	4.0%	7.3%	6.5%
Policy Benchmark		2.2%	12.3%	3.8%	7.5%	6.8%
Excess Return		**-1.1%**	**-2.1%**	**0.2%**	**-0.2%**	**-0.3%**

Total Fund	Long-Term Target
10-Year Expected Nominal Return	7.1%
10-Year Expected Standard Deviation	12.5%

Expected Return and Risk provided by Aon.

See Endnotes for source information



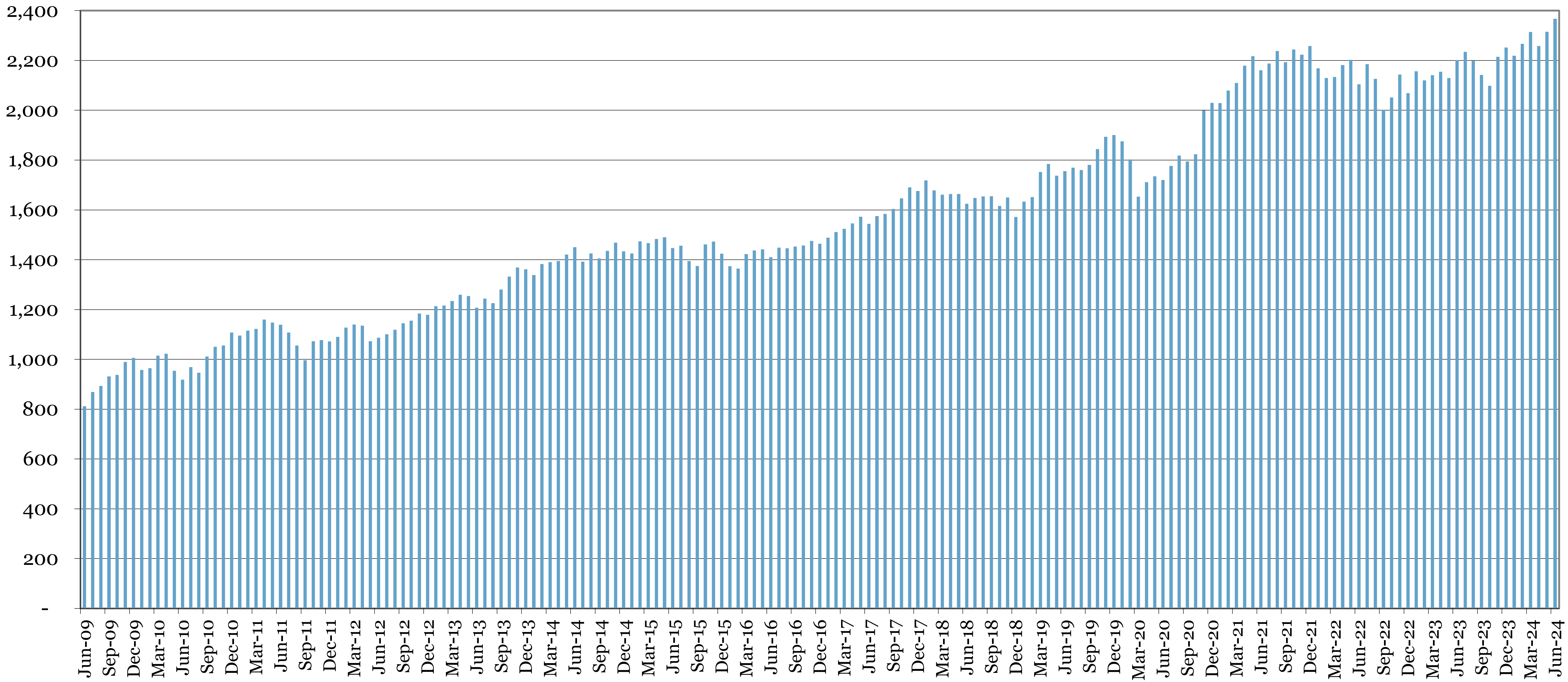
OREGON STATE TREASURY

See Endnotes for source information
International Equity returns exclude Global Equity

Accomplishments and Strategic Priorities

- State Land Board annual presentation will take place 4Q 2024
- Cash raise for Department of Education distribution on 6/1/2024, expected distribution on 12/1/2024
- Contribution in May from unclaimed property
- Asset Allocation study in 2025
- Continue Implementing new asset allocation (approved by the OIC in 2022) – notably funding up Real Assets and Private Equity, while reducing Public Equity and Fixed Income
- Working with asset class teams and committees to review portfolio construction and refine investment manager composition
    - Public Equity restructure approved and underway, with aim to increase manager diversification and decrease active risk
- Previously finalized Investment Policy Statement with intent to consolidate asset class guidelines in 2024

CSF NAV
15 years ending June 30, 2024
($ in Millions)



Appendix:
Asset Class Performance

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Performance – Public Equity

- For the quarter, the Public Equity portfolio modestly underperformed its benchmark, while continuing to outperform over longer, trailing time periods
- Global equity markets continued their march higher in Q2, propelled by monetary policy actions (outside the U.S.) and positive economic indicators across major regions
- The U.S. stock market (represented by the S&P 500) gained 4.3%, while developed international countries (MSCI World Ex US Index) fell -0.6%, and emerging markets (MSCI EM Index) returned 5.0%
- Strength in the U.S. was once again fueled but the Technology sector, specifically the continued rally in AI-related names and their associated supply chains
- Growth outperformed Value across developed markets (U.S. and Non-U.S.), while emerging markets experienced little divergence between the two styles
- Large cap stocks outperformed in developed markets, while small caps found their footing and slightly outperformed in emerging markets

Status Update:

- Two International Equity managers were funded during the second quarter, as a part of the Public Equity portfolio's restructuring plan
- Further, OST Staff intends to finalize the restructure with one additional (emerging markets) manager over the coming months

	Market Value	Current Allocation	3 Months	1 Year	3 Years	5 Years	10 Years
Public Equity	$1.3B	53.6%	2.0%	20.3%	6.9%	11.8%	8.9%
MSCI ACWI IMI (Net)			2.4%	18.4%	4.7%	10.4%	8.2%
Excess Return			**-0.4%**	**1.9%**	**2.2%**	**1.4%**	**0.7%**

Performance – Fixed Income

- For the quarter, the Fixed Income portfolio was in line with benchmark and outperformed the composite benchmark across all time periods
- The Fixed Income portfolio is comprised of 2 Core bond managers at roughly equal weight
- Stronger than expected economic data during the quarter, including a healthy US labor market and persistent inflation, shifted market expectations of Fed rate cuts in 2024 to 0.25%-0.50%, down from 1.00%-1.25% at the beginning of the year
- 10-year Treasury yields are higher for the quarter, starting at 4.20% and ending at 4.40% (peaking at 4.70% on April 25)
- Credit spreads are below the 10-year average with the Option Adjusted Spread (OAS) on the Bloomberg US Corporate Index at 94 bps, tighter from the 123 bps a year ago and 4 bps wider from the beginning of the quarter
- Portfolio contributors came broadly from sector and security selection, which was offset by duration positioning and an allocation to emerging markets debt

	Market Value	Current Allocation	3 Months	1 Year	3 Years	5 Years	10 Years
Fixed Income	$572M	24.2%	0.1%	3.5%	-2.9%	0.2%	1.8%
BBG US Aggregate			0.1%	2.6%	-3.0%	-0.2%	1.3%
Excess Return			**0.0%**	**0.9%**	**0.1%**	**0.5%**	**0.5%**

Performance – Private Equity

- For the quarter, the Private Equity (PE) portfolio is underperforming its benchmark across all time periods.
- Over short timeframes and in volatile markets, we would expect large divergence between the public and private markets
- During the quarter CSF received just under $4M of distributions and made just over $4M in capital calls
- Selling pressure is beginning to mount for GPs as their COVID-forced extended hold periods begin to age out and liquidity needs of LPs continue to grow
- While exits have been slow the market saw Q1 distributions in the private equity market far surpassed the first two quarters of ’23 combined
- PE portfolio estimated unfunded commitment is $147M

	Market Value	Current Allocation	3 Months	1 Year	3 Years	5 Years	10 Years
Private Equity	$167.9M	7.1%	0.9%	-1.0%	5.3%	11.2%	11.1%
Russell 3000 +300bps (Qtr Lag)			10.2%	32.4%	12.9%	17.6%	15.6%
Excess Return			**-9.3%**	**-33.3%**	**-7.6%**	**-6.4%**	**-4.5%**

Performance – Real Estate

- For the quarter, the Real Estate portfolio is outperforming its benchmark across all time periods
- The Real Estate portfolio is currently comprised of 6 managers – anchored by 3 managers in the Core/Core-plus space, with another 3 in the Non-Core space, with a substantial amount of committed non-core capital yet to be called
- In the Core portfolio:
  - We saw positive income returns (~1.0%) that were offset by negative appreciation, as was the case in prior quarters. The funds maintain high allocations to residential and industrial sectors which generated positive overall returns. Cumulative quarterly distributions for both funds totaled $1.8 million
- Non-core managers remain early in their respective investment periods. As such, the managers are not expected to report meaningful results until the bulk of committed capital is substantially deployed (over $18M uncalled)
- Transaction volume is still down almost 20% year over year, at its lowest level in over a decade. At the same time, valuations have corrected globally by about 20% on average, across all sectors

	Market Value	Current Allocation	3 Months	1 Year	3 Years	5 Years	10 Years
Real Estate	$193.7M	8.2%	-0.7%	-9.8%	4.3%	4.3%	N/A
NCREIF ODCE (Custom) (Adj.)			-2.6%	-12.0%	2.5%	2.6%	N/A
Excess Return			**1.9%**	**2.3%**	**1.8%**	**1.7%**	**N/A**

Performance – Real Assets

- For the quarter, the Real Assets portfolio outperformed its benchmark for the quarter and outperformed for the 1 and 3 year
- The Real Assets portfolio, added another infrastructure manager to portfolio therefore; currently comprised of 7 Infrastructure managers and 3 Natural Resources managers
- The Real Assets portfolio is still early in its lifecycle (initial funding in 2018), with approved managers still calling capital, resulting in an underweight to its long-term target allocation (currently 2.4% vs. 5.0% target)
- Real Assets fundraising has slowed over the last 2 years, with fewer but larger funds coming to market, though the asset class continues to demonstrate resilient characteristics in the face of a higher inflationary environment.
- Infrastructure valuation multiples typically have a negative relationship with interest rates and a positive relationship with inflation. As higher-for-longer interest rates have settled in, multiples have been subdued.
- Both the Energy Transition and AI related infrastructure sectors have seen tailwinds as well as the majority share of headlines across the asset class. These themes will continue to require substantial private capital and supportive regulatory policy.

	Market Value	Current Allocation	3 Months	1 Year	3 Years	5 Years	10 Years
Real Assets	$57.9M	2.4%	2.7%	8.8%	12.3%	N/A	N/A
CPI +4%			1.6%	7.1%	9.1%	N/A	N/A
Excess Return			**1.1%**	**1.7%**	**3.2%**	**N/A**	**N/A**

Performance – Diversifying Strategies

- For the quarter, the Diversifying Strategies portfolio outperformed its benchmark, while outperforming in 1 and 3 year and underperforming for the 5 year
- The Diversifying Strategies portfolio is still relatively early in its lifecycle (initial funding in 2018, completed restructure 1/2023) and is nearing its long-term target allocation of 5.0% (4.1% as of quarter end)
- Medium-term (5 year) performance can almost entirely be attributed to pronounced long/short Value style factor exposures; all legacy managers have been liquidated
- The Diversifying Strategies portfolio now consists of 9 managers, with one new approval which was funded on 7/1
- Complex market environment continues to foster a rich environment for Global Macro managers. Robust returns through May were supported by high cash rates and healthy beta
- Some managers remain defensively positioned with high equity valuations, geo-political risks and uncertainty surrounding the interest rate cuts

	Market Value	Current Allocation	3 Months	1 Year	3 Years	5 Years	10 Years
Diversifying Strategies	$96.4M	4.1%	2.5%	10.4%	6.8%	0.9%	N/A
HFRI FOF- Conservative Index			0.9%	7.1%	3.6%	4.9%	N/A
Excess Return			**1.6%**	**3.3%**	**3.2%**	**-4.0%**	**N/A**

Oregon State Treasury Team

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Michael Langdon
Director of Private Markets
Tenure: 2015

As the Director of Private Markets, Mike manages teams with oversight of OPERF's private equity, real estate, real asset and opportunities portfolios with current net asset value of nearly $50 billion. Mike also Co-Leads the Oregon Common School Fund.

- Oversee $5-7 billion per annum of commitment pacing
- Chair OST's internal investment committee for private market portfolio
- Day to day portfolio manager for OPERF's ~$24 billion private equity portfolio
- Manage select, strategic external manager relationships

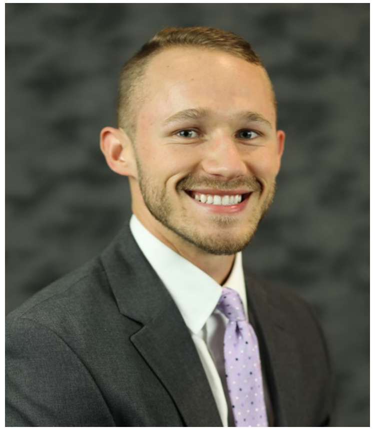
Education: BS Clemson University, CFA Charterholder

Wil Hiles
Investment Officer
Tenure: 2016

As Investment Officer, Wil supports the Public Equity team's day-to-day activities surrounding OPERF. Wil also Co-Leads the Oregon Common School Fund and assists in overseeing the Oregon Savings Growth Plan.

- Monitors and evaluates current and prospective investment managers
- Evaluates portfolio structure and makes recommendations to improve risk-adjusted returns
- Coordinates new account fundings, terminations, portfolio transitions, and cash raise activity
- Serves as internal equity portfolio manager and trader
- Conducts market research and analysis

Education: BA in Finance from Linfield College; Master of Science in Finance (MSF) from Pacific University



Louise Howard
Director of Capital Markets
Tenure: 2022

As the Director of Capital Markets, Louise oversees multiple asset class teams and their respective OPERF portfolios, including Public Equity, Fixed Income, and Diversifying Strategies. She also Co-leads the Common School Fund, SAIF and Oregon Savings Growth Plan.

- Chairs Capital Markets Leadership Committee
- Leads monitoring and evaluation efforts for external investment managers
- Evaluates portfolio structure and makes recommendations to improve risk-adjusted returns
- Responsible for managing and coordinating the liquidity needs of OPERF
- Participates in private market Committee Meetings (Real Estate, Private Equity, Alternative, and Opportunistic)
- Leads the oversight of Public Equity programs, including internal and external investment strategies

Education & Certifications: BA University of New Orleans, MBA University of New Orleans, CFA Charterholder, CAIA Charterholder

Jamie McCreary
Service Model Program Manager
Tenure: 2023

As the Service Model Program manager, Jamie is responsible for creating and/or maintaining centralized services model standards and manages all aspects of client account relationships with various state managed programs.

- Ongoing monitoring and oversight of state managed programs and investment portfolios
- Supports the application of industry and fiduciary best practice standards across all areas of the Investment Program
- Investment Policy Statement Review

Education: BS Southern Oregon University, CERTIFIED FINANCIAL PLANNER™ professional

Endnotes

- Source: State Street. Performance is net of investment management fees and annualized for periods longer than one year. Reminder alternative data is typically lagging 1-3 months.
- Oregon CSF Policy Index:
  - From February 1, 2012 to June 30, 2016, policy benchmark was 30% Russell 3000, 30% MSCI ACWI ex US Net, 30% BC Universal Index, and 10% Russell 3000+300 bps QTR lag. From July 1, 2016 to December 31, 2017, policy benchmark was 30% Russell 3000, 30% MSCI ACWI ex US Net, 30% BC US Aggregate, and 10% Russell 3000+300 bps QTR lag. From January 1, 2018 to December 31, 2022 policy benchmark was dynamically weighted and uses each asset class' value relative to the total market value as its percentage of the total policy benchmark.
  - From January 1, 2023 to present, policy benchmark is 47.5% MSCI ACWI IMI Net (Daily), 12.5% Russell 3000+300 bps quarter lag, 22.5% BBG US Agg, 10% NCREIF ODCE (Custom) (Adj.), 2.5% CPI +4%, and 5% HFRI FOF: Conservative Index.
- Oregon CSF FI Index:
  - Prior to November 1, 2005, index is BC Aggregate. From November 1,2015 to June 30,2016 the benchmark was BC Universal Index.
  - From July 1, 2016 to present the benchmark is BBG Aggregate
- Real Estate policy index- NCREIF ODCE (Custom) (Adj.):
  - From January 1, 1990 to March 31, 2016, the NCREIF ODCE (Custom) was weighted 100% NCREIF Property Index QTR Lag. From April 1, 2016 to present, the benchmark is weighted 100% - NFI-ODCE QTR LAG Net of Fees. Starting July 1, 2017, methodology for monthly return is calculated by geometrically linking prior months returns and then deriving the monthly returns by calculating the geometric average. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.
- Private Equity policy index- Russell 3000 + BPS QRT LAG (Adj.)
  - Prior to May 1, 2005, index is R3000+500 bps, Qtr Lag. Until June 30, 2017 the index is R3000+300 bps, Qtr Lag. From July 1, 2017, the monthly return is calculated as the geometrically linked monthly portion of the quarterly return. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.
- Any information provided herein has been prepared from sources believed to be reliable but is not guaranteed and is for informational purposes only. The information provided herein should not be regarded as an offer to sell or as a solicitation of an offer to buy the products mentioned. No representation is made that any returns will be achieved. Past performance is not indicative of future results. Opinions expressed herein are subject to change without notice.

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Tobias Read
Oregon State Treasurer

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Tigard, OR 97224

oregon.gov/treasury

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Tobias Read
Oregon State Treasurer

Michael Kaplan
Deputy State Treasurer

To: The Oregon Investment Council

From: Jen Plett, Investment Officer, Portfolio Risk & Research

Re: Second Quarter 2024 Risk Report for the Common School Fund (CSF)

Executive Summary

This memo summarizes CSF's predicted volatility, as estimated by Aladdin, Treasury's end-to-end investment analytics platform built by BlackRock. As of June 28, 2024, Aladdin estimated a return volatility of 11.9% for CSF, in-line with staff's expectation. Therefore, staff recommends no additional action at this point.

CSF Asset Allocation

INV 901: Common School Fund states: *"Given the perpetual nature of the CSF, asset allocation will be the most important determinant of long-term success. The target allocation balances the need to satisfy the long-term return objective and to minimize total investment risk."* CSF's current Target Strategic Asset Allocation (SAA) was approved at the OIC meeting on July 20, 2022, shown in the table below.

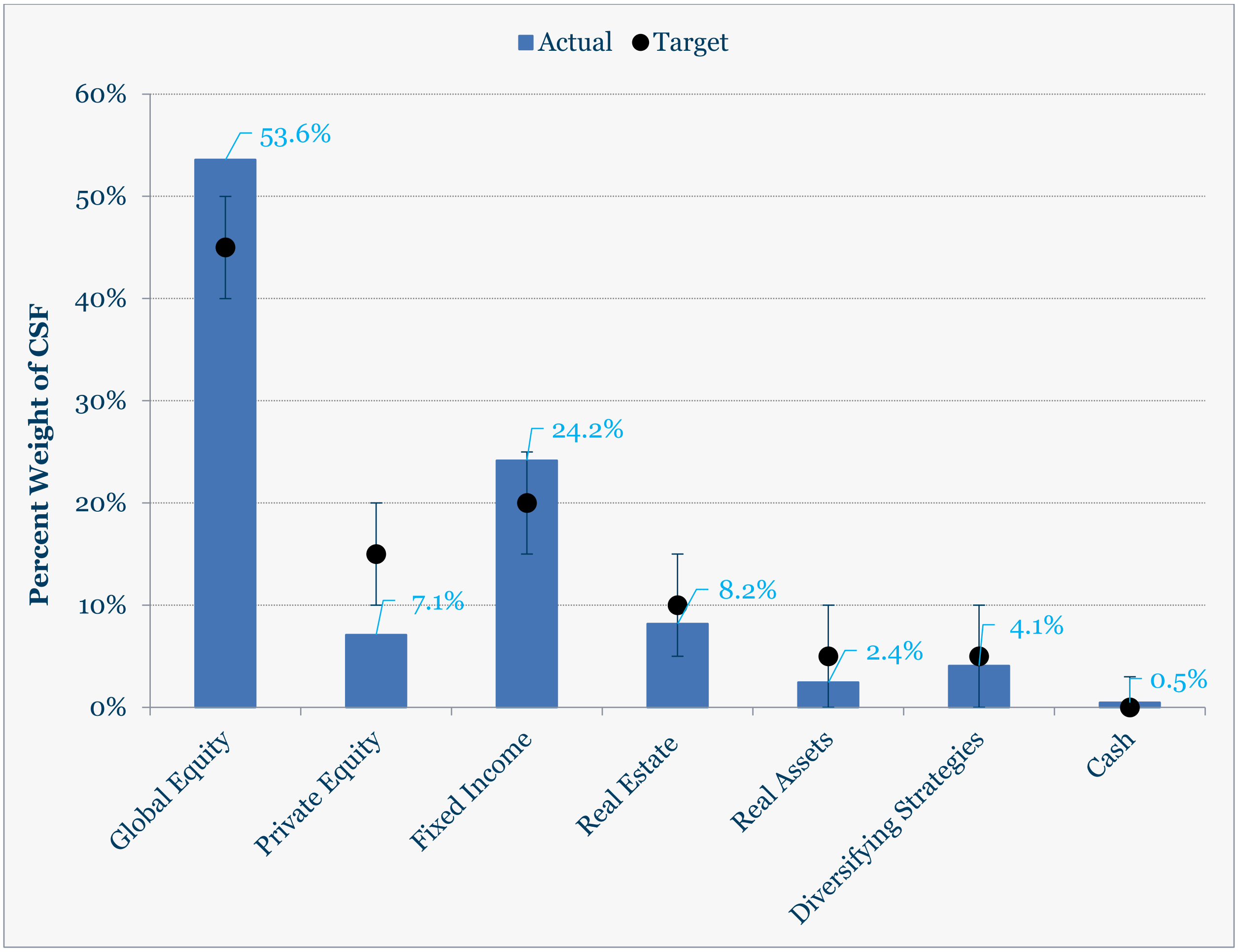
Applying AON's 10-Year Capital Market Assumptions to CSF's current target allocations produces an estimated return volatility of 12.5%. A "Reference Portfolio" can be constructed with 70% in the MSCI ACWI IMI and 30% in the Bloomberg U.S. Aggregate Bond Index that would reach a similar level of estimated volatility.

Table 1. CSF Target Asset Allocation

Asset Class	Target Allocation (%)	Interim Target (%)	Rebalancing Range (%)
Global Equity	45	47.5	40 - 50
Private Equity	15	12.5	10 - 20
Fixed Income	20	22.5	15 - 25
Real Estate	10	10.0	5 - 15
Real Assets	5	2.5	0 - 10
Diversifying Strategies	5	5.0	0 - 10
Cash	0	0	0 - 3
Total Fund	**100**	**100.0**	

Figure 1 below shows CSF's actual allocation as of June 28, 2024.

Figure 1. CSF Actual Allocation versus Target as of June 30, 2024



As of June 30, 2024, actual CSF asset allocations were within the policy tolerances relative to the established targets, except for Global Equity and Private Equity. Table 2 shows little progress has been made to the Target Allocation for Private Equity increased by the OIC in July 2022 as it has been a slow deal market.

Table 2. CSF Current Actual Asset Allocation vs. the Allocation as of July 2022

	Market Value in $mil		**Actual Allocation %**		**Target**
Asset Class	**7/31/22**	**6/30/24**	**7/31/22**	**6/30/24**	**Allocation (%)**
Global Equity	1,055	1,269	48%	54%	45%
Private Equity	202	168	9%	7%	15%
Fixed Income	565	572	26%	24%	20%

Real Estate	213	194	10%	8%	10%
Real Assets	30	58	1%	2%	5%
Diversifying Strategies	97	96	4%	4%	5%
Cash	24	11	1%	0%	0%
Total Fund	**2,185**	**2,368**	**100%**	**100%**	**100%**

As of 6/30/2024

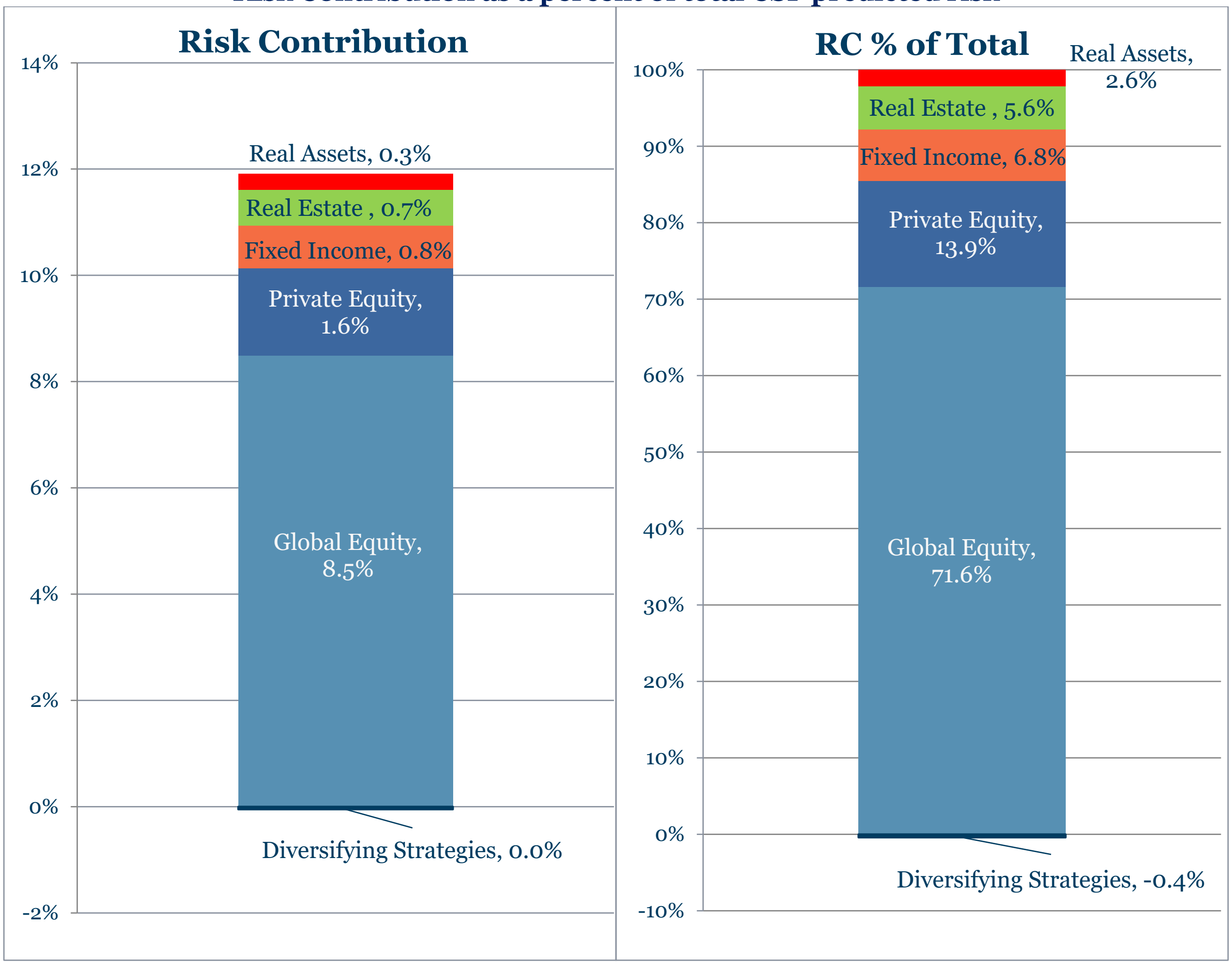
Asset Class Portfolio	**Uncalled Commitment ($M)**
Private Equity	$56.0
Real Assets	$55.0
Real Estate	$21.7
Total	**$132.7**

Source: eFront Insight

CSF Predicted Risk

The risk estimates are shown in the charts below.

Figure 2. CSF Risk Contribution by Asset Class and Risk Contribution as a percent of total CSF predicted risk



The total predicted **standard deviation**, or **volatility**, for CSF is 11.9% as of June 28, 2024. Aladdin's risk model uses a medium-term, five-year lookback.

Another item of note from Figure 2 is that "equity" risk, that is the predicted risk contributions from Global Equity and Private Equity, is estimated to be 85% of CSF's predicted risk. Equity risk has always been the largest risk contributor to CSF. INV 901: Common School Fund outlines: *"The strategic role of publicly traded equity securities is to serve as the Fund's primary return-seeking investments to generate long-term asset growth… The strategic role of private equity investments is to enhance return and diversification opportunities for the Fund."* However, equity investments are much more volatile than investment grade fixed income and U.S. Treasuries.

Over time the OIC-approved asset allocation changes have reduced CSF's volatility. Figure 3 below plots CSF's rolling 20-quarter realized beta to MSCI ACWI IMI as well as that of the Reference Portfolio of 70% MSCI ACWI IMI and 30% Bloomberg U.S. Aggregate Bond Index. CSF's realized beta was elevated during the Great Financial Crisis from 2007 to 2009 before steadily trending down. Part of that decline is due to an increasing allocation to illiquid investments, which have smoothed performances, but the other cause is the improved diversification.

Figure 3. CSF's Beta to MSCI ACWI IMI

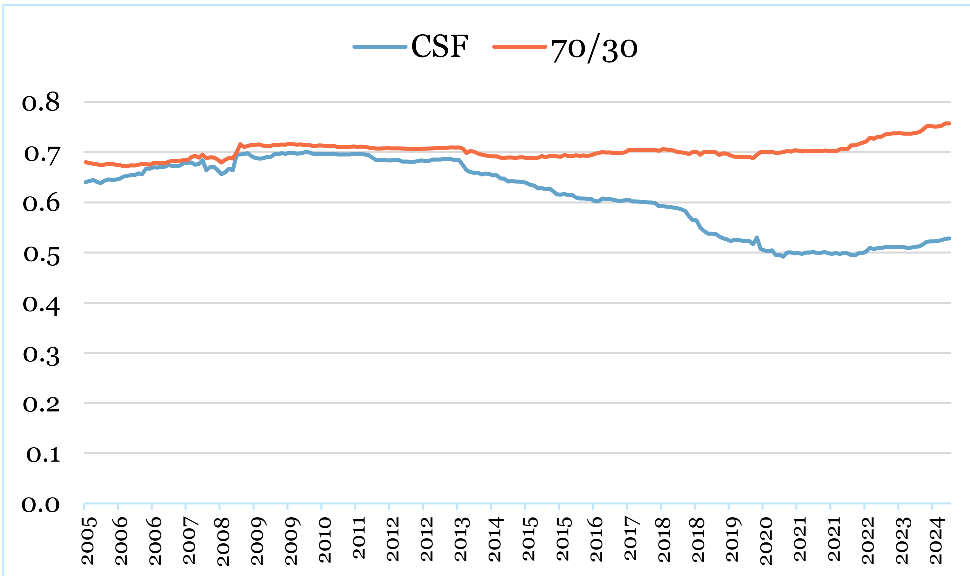
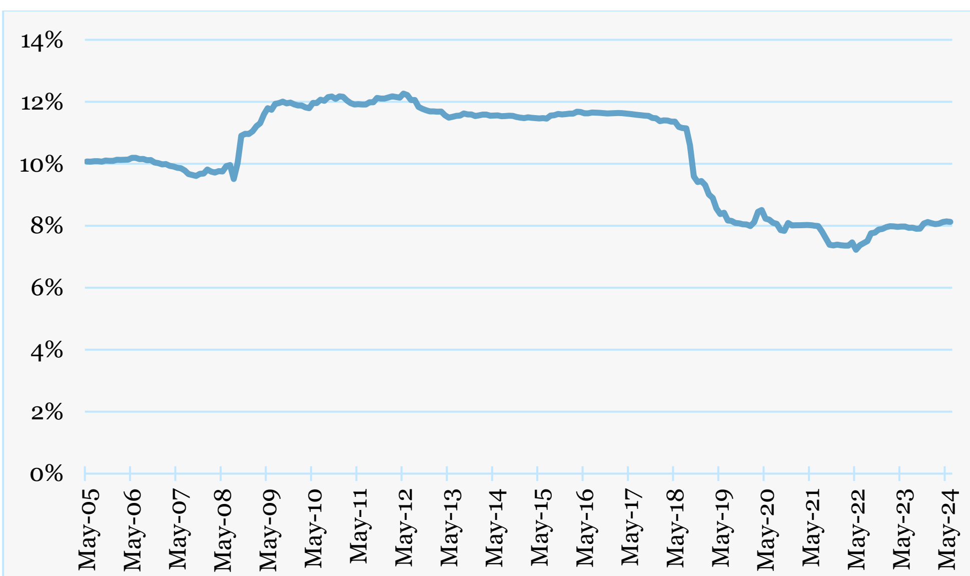


Figure 4. CSF's Rolling 10-Year Realized Volatility



TAB 5

POLICY CHANGES

September 4, 2024

2024 Investment Policy Updates

Jamie McCreary, CFP®
Service Model Program Manager

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Policy update

- Maintain fiduciary best practices
- Consolidate policies
- Streamline language/remove redundancies
- Clarify ambiguous language

- Seeking OIC approval on multiple policy updates

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Public Universities- INV 407

- OPERF INV 1203
  - Fixed income
  - Public Equity
  - Private Equity
  - Real Estate
  - Real Assets
  - Diversifying Strategies
  - Opportunity Portfolio
- CSF INV 901
  - Fixed income
  - Public Equity
  - Private Equity
  - Real Estate
  - Real Assets
  - Diversifying Strategies
- SAIF INV 1001-1008
  - Fixed income
  - Public Equity
  - Real Estate
- OSTF INV 303
  - Fixed Income
- OITP INV 404
  - Fixed Income
- OLGIF INV 406
  - Fixed Income
- OPUF INV 407A
  - Fixed Income
- SOUE INV 407B
  - Fixed Income
  - Public Equity
- WOUE INV 407C
  - Fixed Income
  - Public Equity

IAP INV 218

OSGP INV 801 & 802

Oregon State Agency Accounts

- DCBS INV 402A&B
  - Fixed Income OSTF & OITP
- DAS INV 402C
  - Fixed Income OSTF & OITP
- ODOT INV 402D
  - Fixed Income OSTF & OITP
- OR Vets INV 402E
  - Fixed Income OSTF & OITP
- Elderly Housing INV 402F
  - Fixed Income
- Housing INV 402F
  - Fixed Income
- Oregon Lottery INV 402G
  - Fixed Income

OREGON STATE TREASURY

INV 303 and INV 302: Short Term Investments

Time Certificates of Deposit Program (TCD)

One way that Treasury helps to invest in Oregon communities is through voluntary Time Certificate of Deposits, also known as TCDs. Through the OSTF, Treasury will buy short term TCDs from qualified institutions* that make orders. The funds can then be used by the requesting institutions to make more loans within their communities. Maximum available through the program is $200 million.

The program is authorized under ORS 295.081. The transaction occurs each quarter on the "order date." On that order date, Treasury will identify the rates and durations for CDs, which can be for 3-, 6- or 12-month maturities.

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* Banks and credit unions that want to provide deposit services for governments must first be approved as "qualified depositories" via the Public Funds Collateralization Program. The list of these institutions is a public record.

Updates

INV 303:

- Update TCD language within policy and attachment TCD guidelines to policy
  - Current language: Permitted Time Certificates of Deposit (TCDs) will be limited to qualified depositories as defined in ORS Chapter 295. Maximum TCD exposure per depository must be no more than 5% of the issuing bank's total deposits, or $250,000, whichever is greater. Maximum credit union exposure per depository shall be $250,000.
  - **Recommended:** Permitted Time Certificates of Deposit (TCDs) will be limited to qualified depositories as defined in ORS Chapter 295. See Attachment A: General Guidelines for TCD Program

INV 302 guidelines update:

- Clarifying language around qualified depositories
- Added a cap per institution
- Added overall program cap language
- Move policy from standalone policy to an attachment of INV 303

OREGON STATE TREASURY

INV 407A: Public Universities- Core Bond Fund

- INV 407A:
  - Current policy is Universities policy which reflects language around OSTF and OPUF
  - Update language to reflect solely the guidelines of the OPUF- Core Bond Fund
    - To note- this has no impact on Universities OSTF accounts

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INV 402: Internal Fixed Income
attached IPS guidelines for state agency Funds

- C: DAS- Add clarifying language around OITP to IPS
- E: VETS- Move policy into new state agency IPS format and add in clarifying language around OITP to IPS
- F: Housing- Move policy into new state agency IPS format and add into PolicyStat
- G: Lottery- Add clarifying language around risk and “win for life,” and add policy into PolicyStat

INV 801 and 802: OSGP

- Combine INV 801 and 802 into one policy for best practice standards

- Benchmark updates
    - Active Fixed Income Option
        - Strike Barclays from Bloomberg ~~Barclays~~ U.S. Aggregate Bond Index
    - Socially Responsible Investment Option
        - Update from Russell 3000 Index to S&P 500 Index

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INV 218: IAP

- Add member choice language:
  - Added language: The default IAP Fund is automatically chosen based on birth year. Participants also can choose a different IAP Fund, based on their own risk tolerance.

OREGON STATE TREASURY

Vote to approve:

- **Recommendation: Approve policy revisions and format changes as outlined in attached documents.**

INV 1001-1008: SAIF

- Consolidate all into one- CSF/OPERF as template.
  - Will seek approval at October OIC meeting

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STATE
TREASURY

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OIC Policy Updates
September 4, 2024

Purpose

To update several OIC policies to conform with Treasury's PolicyStat application, maintain fiduciary best practice standards, clarify ambiguous language, and consolidate policies to streamline and remove redundancies.

Discussion

This memo provides a summary of revisions to the attached policies. Due to significance or quantity of revisions in two instances (INV 407A, INV 402E), Staff is including both the revised and previous policy versions for side-by-side comparison purposes. The remaining policies are provided in their revised form as changes relative to previous versions were modest.

<u>INV 303 and INV 302: Short Term Investments</u>

- The Oregon Short Term Fund Board reviewed the proposed changes at the April 2024 meeting and has supported their advancement for OIC approval without further comment.
- INV 302- General Guidelines to TCD Program
    - <u>Recommendation:</u> Turn INV 302 into an attachment to INV 303 as this is a program within the Short Term Investments. Also further build out the guidelines by adding clarifying language around qualified depositories, further define the cap per institution and add over cap language of the program.
- INV 303- Short Term Investments
    - Update language to reference Guidelines for TCD Program
        - <u>Current language</u>:
            - Permitted Time Certificates of Deposit (TCDs) will be limited to qualified depositories as defined in ORS Chapter 295. Maximum TCD exposure per depository must be no more than 5% of the issuing bank's total deposits, or $250,000, whichever is greater. Maximum credit union exposure per depository shall be $250,000.
        - <u>Recommended language</u>:
            - Permitted Time Certificates of Deposit (TCDs) will be limited to qualified depositories as defined in ORS Chapter 295. See Attachment A: General Guidelines for TCD Program

<u>INV 407A: Public Universities- Core Bond Fund</u>

- INV 407: Public Universities Common Policy references Appendix A as the Public University Core Bond Fund (OPUF). Currently, the attached appendix is the Universities IPS which incorporates language that encompasses their allocation between OSTF (Oregon Short Term Fund) and OPUF (which was more internal to the Universities). The current policy has the OPUF guidelines within it.
    - <u>Recommendation:</u> Update INV 407A to reflect only the investment guidelines of OPUF- core bond fund, which creates clarification.
        - Current and redline attached for reference.

<u>INV 402: Internal Fixed Income- attached IPS guidelines for state agency funds</u>

- INV 402C: Department of Administrative Services:
    - <u>Recommendation:</u> Add clarifying language around OITP (Oregon Intermediate Term Pool) to IPS.

- Recommendation: Update return language to reflect state agency IPS template language as follows:

  - The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration the safety and liquidity needs of the portfolio. Although return consists of both principal return (gains and losses due to market value fluctuations) and income return (yield), this policy discourages active trading and turnover of investments. Investments should generally be held to maturity.

- INV 402E: Department of Veterans Affairs:
  - Recommendation: Move policy into new state agency IPS format and add in clarifying language around OITP to IPS.
    - No portfolio construction changes were made.
    - The previous policy and new policy are included for comparative purposes.

- INV 402F: Oregon Housing and Community Services Department:
  - Add policy into PolicyStat
  - Recommendation: Move policy into new state agency IPS format by adding in return and investment compliance and reporting language as listed below. No portfolio construction changes were made.

    - Recommendation: Return language added to reflect state agency IPS template language as follows:

      - Although return consists of both principal return (gains and losses due to market value fluctuations) and income return (yield), this policy discourages active trading and turnover of investments. Investments should generally be held to maturity.

    - Recommendation: Investment Compliance and Reporting language added to reflect state agency IPS template language as follows:

      - Securities that are downgraded below the minimum credit rating do not have to be liquidated unless warranted by OST staff credit research analysis.
      - Exposure limitations should be enforced at the time of purchase. Investment exposures that go over maximum limits as a result of maturities or sales should not be liquidated.
      - The agency will communicate the desired minimum cash balance at least annually.
      - OST investment staff will present an update on the portfolio at least annually (at the request of the agency).
- INV 402G: Oregon Lottery:
  - Add policy into PolicyStat.
    - Recommendation: Add risk language as follows:
      - To mitigate interest rate risk, the investment portfolio shall be structured so that securities mature to meet cash requirements, limiting the need to sell securities on the open market before maturity.
    - Recommendation: add "Win for Life" language as follows:

- The "Win For Life" game has created liability streams beyond 30 years. Lottery currently requests UST strip investments that mature on/near expected lottery obligations up to 30 years. The balance or remaining tail obligation is funded with 30 year strips. All obligations are fully funded with UST Strips on the date obligations are created (i.e. date that Win For Life Lottery is claimed). Consequently, UST Strip investments funding tail liabilities have a significant maturity mismatch with actual liability maturities beyond 30 years.

INV 801: Deferred Compensation Investment Program: Statement of Objectives

AND

INV 802: Deferred Compensation Investment Program: Selecting, Managing, Reporting, and Terminating Program Firms

- Recommendation: Consolidate policies to keep with consistency of work we are doing with other OIC policies; Staff recommends combining INV 801 and INV 802. Currently section 6 of INV 801 references INV 802; therefore, Staff recommends moving INV 802 language into section 6 of INV 801. INV 801 will become the OSGP IPS and INV 802 will be retired and removed from PolicyStat.
- Benchmark Updates:
  - Recommendation: Active Fixed Income- update the benchmark name - strike Barclays from Bloomberg ~~Barclays~~ U.S. Aggregate Bond Index
    - Removing Barclays from the Bloomberg U.S. Aggregate Bond Index as Bloomberg has removed Barclays from all their index branding.
  - Recommendation: Socially Responsible Investment Option- update the benchmark from the Russell 3000 Index to S&P 500 Index.
    - The underlying fund recently updated their benchmark and in review of this change, along with discussions with the manager and the current OSGP Consultant (Callan), Staff recommends updating policy benchmark. Moving to the S&P 500 Index (a large-cap index), is a strategic repositioning of the Fund and best aligns it relative to other large-cap blend peers. Being previously benchmarked to the Russell 3000 Index presented a mismatch of the all-cap strategy relative to broader large-cap peers. The Russell 3000 Index is made up of large, mid and small cap companies, and the fund's allocation to mid and small cap was minimal to begin with (less than 1% of the portfolio); therefore, this was a small allocation change moving to the S&P 500. In addition, there's considerable brand recognition and affinity for the S&P 500 amongst investors. Staff will continue to monitor and may look to do a manager search, but for the time being, consistency is needed between policy and current reporting.

INV 218: Individual Account Program (IAP)

- Within the IAP program, a default target date fund is chosen for participants based on their birth year, but members can choose a different target date fund if they so choose. Staff recommends adding in language regarding "member choice" as this is something Staff monitors and could have an impact on the target date demographics review that is completed every couple years.
  - Recommendation: add language as follows:
    - The default IAP Fund is automatically chosen based on birth year. Participants also can choose a different IAP Fund, based on their own risk tolerance.

Staff Recommendation:

Approve policy revisions and format changes as outline in attached documents.

INTRODUCTION & OVERVIEW

Summary Policy Statement

The Oregon Investment Council (the "OIC") and the Oregon State Treasury ("OST") maintain a program for the investment of moneys in the Individual Account Program ("IAP") that provides an array of investment funds with varying levels of risk and return for eligible participating employees.

Purpose and Goals

To describe policy provisions for identifying and meeting the need for varying levels of investment risk across the heterogeneous universe of IAP participants.

Applicability

Classified represented, management service, unclassified executive service

Authority

ORS 238A.025 established IAP as a separate account from the pension program. ORS 238A.050(3) provides discretion to the OIC to invest IAP assets differently than the other assets of the Public Employees Retirement System ("PERS").

POLICY PROVISIONS

Definitions

Defined Benefit Retirement Plan: A retirement plan in which an employer or sponsor provides a specified pension payment upon retirement based on a predefined formula. The vast majority of IAP participants are also eligible for a defined benefit plan through PERS.

Defined Contribution Retirement Plan: A retirement plan in which regular periodic contributions are made into an investment account, which can be distributed upon retirement. The value of such an investment account depends on the contributions and their timing, as well as the performances of the account's investments. Defined contribution plans include retirement plans offered by private companies, such as 401(k) plans, as well as 457 plans and 414(k) plans, such as IAP.

Glide Path: The asset allocation for a Target-Date Fund that varies based on the number of years to the target retirement date, as proxied by the level of equity (public or private) exposure. Typically, the further away from the target date, the more of the Target-Date Fund's asset allocation will be comprised of more equity risk on the expectation that prudent equity risk is rewarded over the long-term. Conversely, the closer to retirement date, the more the Target-Date Fund's asset allocation will consist of fixed income and/or capital preservation type investments.

Target-Date Funds ("TDFs"): A suite of funds, each with a targeted retirement horizon, that systematically rebalances to a time-varying asset allocation. In the context of IAP, these target dates are the approximate calendar year a participant expects to retire. For example, a participant planning to retire in 2050 would invest in the 2050 target-date fund.

Policy Statements

The IAP participant pool is comprised of employees at all phases of their working lives. To adapt the IAP to these varied participants, OST staff and the OIC established a set of TDFs available for PERS to assign to each IAP participant (collectively, such TDFs are referred to as the "IAP Funds"). IAP participants approaching retirement are assigned to less-risky IAP Funds, while younger IAP participants are assigned to IAP Funds with a longer time horizon with the requisite risk/return profile for greater return potential. The objective is to make IAP Funds appropriate for the broad and diverse population of IAP participants. The default IAP Fund is automatically chosen based on birth year. As of 2020, participants also can choose a different IAP Fund, based on their own risk tolerance. Participants seeking further retirement planning customization are expected to make arrangements outside of the IAP, such as utilization of the Oregon Savings Growth Plan which is accessible to many participants.

1. **Target-Date Fund Manager.** The Target-Date Fund Manager (the "Manager") works under a contract with the OIC (the "Management Agreement"), and assists OST staff ("Staff") in implementing and monitoring the IAP. The OIC may delegate authority for policy implementation to the State Treasurer and OST's Chief Investment Officer.
2. **Asset Allocation for the IAP Funds.** Working with Staff, the Manager developed a Glide Path for the IAP Funds, which includes the Oregon Public Employees Retirement Fund and capital market investment vehicles. To the extent that PERS can provide readily available data, the Glide Path is customized, and will be adjusted over time, to the demographic profile and circumstances of the pool of IAP participants. Factors that influence this customization process include access to a defined benefit retirement plan or social security.
3. **General Oversight of Target-Date Fund Manager and the IAP Funds.** All performance calculations shall be provided by an independent third party, such as the custodian or recordkeeper. Staff shall review each Manager, IAP Funds, and IAP and report to the OIC every two years, or more frequently as needed.
4. **Termination of Target-Date Fund Manager.** The OIC, in its discretion, may terminate "at will" according to the terms of the Management Agreement. Staff shall evaluate the Manager on several attributes, including contract compliance, adherence to IAP objectives and fund volatility and performance. If Staff believes after diligent analysis that the Manager has not met IAP standards on one or more attributes, Staff may recommend to the OIC termination of such Manager and the concurrent selection of a new manager.
5. **IAP fund that invests solely in the Oregon Short Term Fund**. The OIC directs staff to maintain a fund that invests only in the Oregon Short Term Fund. The purpose of this option is to offer a low-risk investment vehicle available for IAP participants.

Exceptions

None

Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

PROCEDURES and FORMS

None

ADMINISTRATION

Review

Annually.

Feedback

Your comments are extremely important to improving the effectiveness of this policy. If you would like to comment on the provisions of this policy, you may do so by e-mailing the Service Desk from the Self-

Service Portal.. To ensure your comments are received without delay, *please list the policy number and name in your e-mail's subject*. Your comments will be reviewed during the policy revisions process and may result in changes to the policy.

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INV 303 Attachment A:
GENERAL GUIDELINES FOR TCD PROGRAM

Consistent with Oregon Revised Statute 295, the Office of the State Treasurer (OST), Finance Division, shall ensure that the institutions, in which it places demand deposits and time certificates of deposit, have posted acceptable collateral to secure those deposits. The Public Funds Collateralization Program (PFCP) is an application created by the Office of the State Treasurer to facilitate bank/credit union depository, custodian, and public official compliance with ORS 295.

1. All quantitative guidelines regarding investments of the Oregon Short Term Fund will apply to the TCD program. These include:

    a. Qualified depositories* with total deposits of less than $2,000,000 will be allowed a maximum of the current amount of FDIC insurance in TCDs OR,

    b. Qualified depositories with total deposits of $2,000,000 or more will be allowed a maximum of five percent (5%) of deposits in TCDs (Based on the most recent bank's Consolidated Statement of Condition as submitted to the Director of Consumer and Business Services OR,

    c. Maximum set-rate order is $15,000,000 per quarter per maturity, with a cap of $45,000,000 outstanding in the TCD program per institution

    d. No order may be submitted which would, if accepted, exceed the total provided for in a, b, or c above.

        i. TCD program has a maximum $200,000,000 available through the program. Orders fulfilled on a prorated basis relative to demand.

    e. Collateral as required under ORS Chapter 295 for the Public Funds Collateralization Program (PFCP) must be pledged. Information on collateral may be obtained by calling PFCP staff at 503-378-3400 or public.funds@ost.state.or.us.

2. All TCD interest will be paid on a 360-day basis (dollars invested x rate x number of days+ 360).

3. All qualified depositories will be notified of Treasury TCD policy changes in writing.

* Qualified depositories per Oregon Public Funds Collateralization Program (PFPC).
List of Qualified Depositories: https://www.oregon.gov/treasury/public-financial-services/public-depository-information/pages/list-of-qualified-depositories.aspx

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    c. Maximum set-rate order ~~for large institutions~~ is $15,000,000 per quarter~~month~~ per maturity, with a cap of $45,000,000 outstanding in the TCD program per institution~~.~~

    ~~d. Maximum of FDIC Insurance in each qualified depository not posting collateral (only if they are covered by FDIC Insurance).~~

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INV 303: Short Term Investments: Portfolio Rules

INTRODUCTION & OVERVIEW

Summary Policy Statement

The Oregon Investment Council has, with advice from the State Treasurer, from OST investment staff, and from the Oregon Short Term Fund Board, adopted specific rules for investing the Oregon Short Term Fund.

Applicability

Classified represented, management service, unclassified executive service.

Authority

ORS Chapter 293

POLICY PROVISIONS - Portfolio Rules for the Oregon Short Term Fund

I. **Scope**
   These rules apply to the investment of cash from all state and eligible local government participants in the Oregon Short Term Fund (OSTF). These rules are established under the authority of, and shall not supersede the requirements established under, ORS Chapter 293.
II. **Investment Objectives**
   The primary objectives of investment activities, in priority order, shall be preservation of principal, liquidity, and yield.
   A. **Preservation of Principal**: Capital preservation is the OSTF's foremost objective, and all OSTF investments shall be made in a manner consistent therewith. Credit and interest rate risks will be carefully managed and mitigated (see specific guidelines below).
   B. **Liquidity**: The OSTF shall remain sufficiently liquid to meet all state, agency and local government operating requirements as may be reasonably anticipated. The OSTF should consist largely of securities with active secondary or resale markets.
   C. **Yield:** The OSTF shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the aforementioned investment risk constraints and liquidity needs.
III. **Maturity Distribution of Portfolio**
   A. 50% of the OSTF must mature within 93 days.
   B. A maximum of 25% of the OSTF may mature over one year.
   C. No investment may mature later than 3 years from its settlement date.
   D. For purposes of this policy, maturity date will be calculated by using the following proxies, and if a security contains more than one of the following attributes, the shortest attribute will be used as the maturity date proxy:
      1. For securities that have been called by the issuer, the effective call date will be used as the maturity date proxy.
      2. For securities with a put option, the date upon which the put option is fully exercisable for a value of at least 100% of the investment's par or face amount will be used as the maturity date proxy.
      3. For variable rate securities, the period remaining to the next reset date will be used

as the maturity date proxy; and

4. For asset-backed securities, the weighted average life (WAL) will be used as the maturity date proxy.

IV. **Diversification and Portfolio Limitations**

A. Eligible Securities:

Issue Type	**Maximum Holdings % or $**	**Minimum Ratings S&P/Moody's/Fitch**
U.S. Treasury Obligations (1.)	100%	None
U.S. Agency Securities (1.) Per Issuer	100% 33%	None None
Foreign Government & Instrumentalities (1.) Per Issuer	25% 10%	AA-/Aa3/AA-
Corporate Securities (Total) Corporate Bonds Commercial Paper (2.) Per Issuer	50% 50% 50% 5%	A-/A3/A- A-1/P-1/F-1
Asset-Backed Securities Per Issuing Trust	25% 5%	AAA/Aaa/AAA A-1+/P-1/F-1+
Negotiable Certificates of Deposit Per Issuer	20% 5%	A-1/P-1/F-1
Bankers' Acceptances Per Issuer	20% 5%	A-1/P-1/F-1
Time Certificates of Deposit (3.) Per Issuer	20% 5%	None
Municipal Debt (Total)	25% 25%	AA-/Aa3/AA- A-1/P-1/F-1

Municipal Commercial Paper Short Term Municipal Obligations Per Issuer	25% 10%	SP-1/(V)MIG1/F-1
Repurchase Agreements (4.) Per Counterparty	100% 5%	None
Oregon Local Government Intermediate Fund ("OLGIF")	$250 Million	A-/A3/A-

1. Securities guaranteed by the U.S. Treasury, a U.S. Agency or a Foreign Government or its Instrumentality will be considered a U.S. Treasury, a U.S. Agency or a Foreign Government or its Instrumentality for the purposes of this policy.
2. Commercial Paper (CP) must have top-tier short term ratings by at least two of the nationally recognized statistical rating organizations (NRSROs) at the time of purchase.
3. Permitted Time Certificates of Deposit (TCDs) will be limited to qualified depositories as defined in ORS Chapter 295. See Attachment A: General Guidelines for TCD Program
4. Repurchase Agreements must meet the following criteria:
    1. Maximum maturity will be 93 days.
    2. Counterparties must be a Primary Dealer as recognized by the Federal Reserve Bank of New York.
    3. Counterparties must have a fully executed Master Repurchase Agreement with the Office of the State Treasurer ("Master Repurchase Agreement").
    4. Collateral must be delivered on a tri-party basis to a mutually agreed upon third party custodian; and
    5. Collateral securing Repurchase Agreements must be maintained at not less than 102% of the amount of the Repurchase Agreement.
    6. Represent an investment in the form of lending cash against securities collateral equivalently represented in this case by a purchase of securities (collateral) coupled with an agreement to sell the securities (collateral) at a specified price on a later date.

B. All OSTF investments must be denominated in U.S. dollar.

C. Total foreign exposure (government and corporate indebtedness) limited to 25% of OSTF.

D. Any one individual issuer of securities or support commitments limited to 10% of OSTF with the exception of the U.S. Treasury (100% maximum) and U.S. government agency securities (33% per issuer).

E. Securities that have been downgraded below the minimum ratings will be sold or held at the Fixed Income Senior Investment Officer's (SIO) or SIO designee's discretion.

F. A single rating will be determined for each investment based on the following methodology:

i. When three nationally recognized statistical rating organizations (NRSROs) rate an issue, a median rating is used to determine eligibility by dropping the highest and/or lowest rating.
ii. When a rating from only two NRSROs is available, the lower ("most conservative") of the two

ratings will be used; and

iii. When a rating from only one NRSRO is available, that rating will be used. To determine average rating for each security, a numeric value will be assigned to each NRSRO rating based on the following scheme:

Value	S&P Rating	Moody's Rating	Fitch Rating
29	U.S. Treasury & Agency (1)/ AAA/A-1+(2)	U.S. Treasury & Agency (1)/ Aaa/P-1(2)	U.S. Treasury & Agency (1)/ AAA/F-1+(2)
28	AA+	Aa1	AA+
27	AA/A-1+/SP-1+	Aa2	AA/F-1+
26	AA-	Aa3/P-1/ MIG1/VMIG1	AA-
25	A+	A1	A+
24	A/A-1/SP-1	A2	A/F-1
23	A-	A3	A-
22	BBB+/A-2/SP-2	Baa1/P-2/ MIG2/VMIG2	BBB+/F-2
21	BBB	Baa2	BBB
20	BBB-/A-3/SP-3	Baa3/P-3/ MIG3/VMIG3	BBB-/F-3

1. US Treasury & Agency securities shall have a numeric value of 29 for the purpose of calculating the weighted average portfolio credit score.
2. Limited to Asset-Backed Securities rated A-1+, P-1 and F-1+ by Standard & Poor's, Moody's and Fitch respectively.

G. The target weighted average credit quality of the OSTF shall be AA (or > 26.50), excluding repurchase agreements.

H. For newly issued securities, and absent assigned ratings, "expected ratings" may be used as a proxy for actual ratings for not more than 30 business days after the anticipated settlement date.

I. No commitments to buy or sell securities may be made more than 14 business days prior to the anticipated settlement date or receive a fee other than interest for future deliveries.

J. For purposes of compliance, eligible funds will be treated as a single investment and exempt from maturity or exposure restrictions except for maximum exposure and minimum ratings.

V. Reinvestment of Securities Lending Cash Collateral

A. Acceptable reinvestment vehicles include securities that may otherwise be purchased outright in accordance with the diversification and portfolio limitations described above in Section IV. Within the securities lending program only, cash collateral may also be reinvested in:
    1. Repurchase agreements collateralized by U.S. Treasury or U.S. Government Agency securities with a maximum original maturity of 30 years. No more than 25% of assets shall be placed with the same counterparty. Repurchase agreements may also be placed with the Federal Reserve Bank's Repo facility.
B. Net capital of lending counterparties must be over $100 million.
C. Securities will only be loaned on a fully collateralized basis.
D. Lending counterparties must be a Primary Dealer as recognized by the Federal Reserve Bank and have a signed master securities lending agreement.
E. The market value of the delivered collateral must be maintained at not less than 102% of the market value of the securities loaned.

PROCEDURES

I. Standards of Care

A. **Prudence**: Investment officers shall use the "prudent investor" standard to guide their OSTF management efforts. Pursuant to ORS 293.726:
    1. The investment funds shall be invested, and the investments of those funds managed as a prudent investor would do, under the circumstances then prevailing and in light of the purposes, terms, distribution requirements and laws governing each investment fund; and
    2. The standard in subsection (1) of this section requires the exercise of reasonable care, skill and caution, and is to be applied to investments not in isolation but in the context of the investment portfolio and as a part of an overall investment strategy, which should incorporate risk and return objectives reasonably suitable to the particular investment fund.
B. **Ethics and Conflicts of Interest**: Officer involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program or that could impair their ability to make impartial decisions. Officers and employees shall, at all times, comply with the State of Oregon Government Standards and Practices code of ethics set forth in ORS Chapter 244, as well as all policies of the OST.
C. **Delegation of Authority**: The Senior Investment Officer and Investment Officer(s) (or the Investment Analyst acting under the direction of the Investment Officers) of the Fixed Income team shall act in accordance with established written procedures and internal controls for the operation of the investment program consistent with these Portfolio Rules. No person may engage in an investment transaction except as provided under the terms of these Portfolio Rules and the procedures established by OST staff. The Senior Investment Officer and Investment Officer(s) are jointly responsible for all transactions undertaken and shall establish a reasonable system of controls to regulate the activities of subordinate employees.

II. Compliance

A. **Compliance Monitoring:** OST shall provide an investment compliance program to accomplish the following objectives: a) monitor and evaluate portfolios, asset classes, and other investment funds to determine compliance with OST policies and contractual obligations; b) identify instances of non-compliance and develop appropriate resolution strategies; c) provide relevant compliance information and reports to OST management and the Oregon Investment Council, as appropriate; and d) verify resolution by the appropriate individual or manager within the appropriate time frame.
B. **Correction of Non-compliance:** If the OSTF is found to be out of compliance with one or more adopted investment guidelines or is being managed inconsistently with its policy and objectives, investment staff shall bring the OSTF portfolio into compliance as soon as is prudently feasible.

Actions to bring the portfolio back into compliance and justification for such actions, including documentation of proposed and actual resolution strategies shall be coordinated with the OST investment compliance program.

III. Safekeeping and Custody

A. **Authorized Financial Dealers and Institutions:** All financial institutions and broker/dealers who desire to become qualified for investment transactions must supply, as appropriate:
    1. Audited financial statements,
    2. Licensing Representation form provided to OST, and
    3. Understanding and acknowledgment of OSTF Portfolio Rules.

B. **Internal Controls:** The Senior Investment Officer and Investment Officer(s) jointly collaborate to establish and maintain an adequate internal control structure designed to reasonably protect the assets of the OSTF from loss, theft or misuse.

C. **Delivery vs. Payment**: All trades where applicable will be executed by delivery vs. payment (DVP) to ensure that securities are deposited in an eligible financial institution prior to the release of funds.

D. **Safekeeping:** Securities will be held by a third-party custodian as evidenced by safekeeping receipts.

Exceptions

None.

Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

PROCEDURES AND FORMS

Attachment A: General Guidelines for TCD Program

1. Upon approval of changes to this policy, the policy owner shall contact the Banking Operations Manager to update the Oregon Short Term Fund Finance and Investment pages on the external OST website (OSTF, LGIP).

ADMINISTRATION

Feedback

Your comments are extremely important to improving the effectiveness of this policy. If you would like to comment on the provisions of this policy, you may do so by e-mailing the Policy Owner. To ensure your comments are received without delay, *please list the policy number and name in your e-mail's subject*. Your comments will be reviewed during the policy revisions process and may result in changes to the policy.

INV 303: Short Term Investments: Portfolio Rules

INTRODUCTION & OVERVIEW

Summary Policy Statement

The Oregon Investment Council has, with advice from the State Treasurer, from OST investment staff, and from the Oregon Short Term Fund Board, adopted specific rules for investing the Oregon Short Term Fund.

Applicability

Classified represented, management service, unclassified executive service.

Authority

ORS Chapter 293

POLICY PROVISIONS - Portfolio Rules for the Oregon Short Term Fund

I. **Scope**
   These rules apply to the investment of cash from all state and eligible local government participants in the Oregon Short Term Fund (OSTF). These rules are established under the authority of, and shall not supersede the requirements established under, ORS Chapter 293.
II. **Investment Objectives**
   The primary objectives of investment activities, in priority order, shall be preservation of principal, liquidity, and yield.
   A. **Preservation of Principal**: Capital preservation is the OSTF's foremost objective, and all OSTF investments shall be made in a manner consistent therewith. Credit and interest rate risks will be carefully managed and mitigated (see specific guidelines below).
   B. **Liquidity**: The OSTF shall remain sufficiently liquid to meet all state, agency and local government operating requirements as may be reasonably anticipated. The OSTF should consist largely of securities with active secondary or resale markets.
   C. **Yield:** The OSTF shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the aforementioned investment risk constraints and liquidity needs.
III. **Maturity Distribution of Portfolio**
   A. 50% of the OSTF must mature within 93 days.
   B. A maximum of 25% of the OSTF may mature over one year.
   C. No investment may mature later than 3 years from its settlement date.
   D. For purposes of this policy, maturity date will be calculated by using the following proxies, and if a security contains more than one of the following attributes, the shortest attribute will be used as the maturity date proxy:
      1. For securities that have been called by the issuer, the effective call date will be used as the maturity date proxy.
      2. For securities with a put option, the date upon which the put option is fully exercisable for a value of at least 100% of the investment's par or face amount will be used as the maturity date proxy.
      3. For variable rate securities, the period remaining to the next reset date will be used

as the maturity date proxy; and

4. For asset-backed securities, the weighted average life (WAL) will be used as the maturity date proxy.

IV. **Diversification and Portfolio Limitations**

A. Eligible Securities:

Issue Type	**Maximum Holdings % or $**	**Minimum Ratings S&P/Moody's/Fitch**
U.S. Treasury Obligations (1.)	100%	None
U.S. Agency Securities (1.) Per Issuer	100% 33%	None None
Foreign Government & Instrumentalities (1.) Per Issuer	25% 10%	AA-/Aa3/AA-
Corporate Securities (Total) Corporate Bonds Commercial Paper (2.) Per Issuer	50% 50% 50% 5%	A-/A3/A- A-1/P-1/F-1
Asset-Backed Securities Per Issuing Trust	25% 5%	AAA/Aaa/AAA A-1+/P-1/F-1+
Negotiable Certificates of Deposit Per Issuer	20% 5%	A-1/P-1/F-1
Bankers' Acceptances Per Issuer	20% 5%	A-1/P-1/F-1
Time Certificates of Deposit (3.) Per Issuer	20% 5%	None
Municipal Debt (Total)	25% 25%	AA-/Aa3/AA- A-1/P-1/F-1

Municipal Commercial Paper Short Term Municipal Obligations Per Issuer	25% 10%	SP-1/(V)MIG1/F-1
Repurchase Agreements (4.) Per Counterparty	100% 5%	None
Oregon Local Government Intermediate Fund ("OLGIF")	$250 Million	A-/A3/A-

1. Securities guaranteed by the U.S. Treasury, a U.S. Agency or a Foreign Government or its Instrumentality will be considered a U.S. Treasury, a U.S. Agency or a Foreign Government or its Instrumentality for the purposes of this policy.
2. Commercial Paper (CP) must have top-tier short term ratings by at least two of the nationally recognized statistical rating organizations (NRSROs) at the time of purchase.
3. Permitted Time Certificates of Deposit (TCDs) will be limited to qualified depositories as defined in ORS Chapter 295. ~~Maximum TCD exposure per depository must be no more than 5% of the issuing bank's total deposits, or $250,000, whichever is greater. Maximum credit union exposure per depository shall be $250,000.~~ See Attachment A: General Guidelines for TCD Program
4. Repurchase Agreements must meet the following criteria:
    1. Maximum maturity will be 93 days.
    2. Counterparties must be a Primary Dealer as recognized by the Federal Reserve Bank of New York.
    3. Counterparties must have a fully executed Master Repurchase Agreement with the Office of the State Treasurer ("Master Repurchase Agreement").
    4. Collateral must be delivered on a tri-party basis to a mutually agreed upon third party custodian; and
    5. Collateral securing Repurchase Agreements must be maintained at not less than 102% of the amount of the Repurchase Agreement.
    6. Represent an investment in the form of lending cash against securities collateral equivalently represented in this case by a purchase of securities (collateral) coupled with an agreement to sell the securities (collateral) at a specified price on a later date.

B. All OSTF investments must be denominated in U.S. dollar.

C. Total foreign exposure (government and corporate indebtedness) limited to 25% of OSTF.

D. Any one individual issuer of securities or support commitments limited to 10% of OSTF with the exception of the U.S. Treasury (100% maximum) and U.S. government agency securities (33% per issuer).

E. Securities that have been downgraded below the minimum ratings will be sold or held at the Fixed Income Senior Investment Officer's (SIO) or SIO designee's discretion.

F. A single rating will be determined for each investment based on the following methodology:

i. When three nationally recognized statistical rating organizations (NRSROs) rate an issue, a median rating is used to determine eligibility by dropping the highest and/or lowest rating.

ii. When a rating from only two NRSROs is available, the lower ("most conservative") of the two ratings will be used; and

iii. When a rating from only one NRSRO is available, that rating will be used. To determine average rating for each security, a numeric value will be assigned to each NRSRO rating based on the following scheme:

Value	S&P Rating	Moody's Rating	Fitch Rating
29	U.S. Treasury & Agency (1)/ AAA/A-1+(2)	U.S. Treasury & Agency (1)/ Aaa/P-1(2)	U.S. Treasury & Agency (1)/ AAA/F-1+(2)
28	AA+	Aa1	AA+
27	AA/A-1+/SP-1+	Aa2	AA/F-1+
26	AA-	Aa3/P-1/ MIG1/VMIG1	AA-
25	A+	A1	A+
24	A/A-1/SP-1	A2	A/F-1
23	A-	A3	A-
22	BBB+/A-2/SP-2	Baa1/P-2/ MIG2/VMIG2	BBB+/F-2
21	BBB	Baa2	BBB
20	BBB-/A-3/SP-3	Baa3/P-3/ MIG3/VMIG3	BBB-/F-3

1. US Treasury & Agency securities shall have a numeric value of 29 for the purpose of calculating the weighted average portfolio credit score.
2. Limited to Asset-Backed Securities rated A-1+, P-1 and F-1+ by Standard & Poor's, Moody's and Fitch respectively.

G. The target weighted average credit quality of the OSTF shall be AA (or > 26.50), excluding repurchase agreements.

H. For newly issued securities, and absent assigned ratings, "expected ratings" may be used as a proxy for actual ratings for not more than 30 business days after the anticipated settlement date.

I. No commitments to buy or sell securities may be made more than 14 business days prior to the anticipated settlement date or receive a fee other than interest for future deliveries.

J. For purposes of compliance, eligible funds will be treated as a single investment and exempt from maturity or exposure restrictions except for maximum exposure and minimum ratings.

V. Reinvestment of Securities Lending Cash Collateral

A. Acceptable reinvestment vehicles include securities that may otherwise be purchased outright in accordance with the diversification and portfolio limitations described above in Section IV. Within the securities lending program only, cash collateral may also be reinvested in:
   1. Repurchase agreements collateralized by U.S. Treasury or U.S. Government Agency securities with a maximum original maturity of 30 years. No more than 25% of assets shall be placed with the same counterparty. Repurchase agreements may also be placed with the Federal Reserve Bank's Repo facility.

B. Net capital of lending counterparties must be over $100 million.

C. Securities will only be loaned on a fully collateralized basis.

D. Lending counterparties must be a Primary Dealer as recognized by the Federal Reserve Bank and have a signed master securities lending agreement.

E. The market value of the delivered collateral must be maintained at not less than 102% of the market value of the securities loaned.

PROCEDURES

I. Standards of Care

A. **Prudence**: Investment officers shall use the "prudent investor" standard to guide their OSTF management efforts. Pursuant to ORS 293.726:
   1. The investment funds shall be invested, and the investments of those funds managed as a prudent investor would do, under the circumstances then prevailing and in light of the purposes, terms, distribution requirements and laws governing each investment fund; and
   2. The standard in subsection (1) of this section requires the exercise of reasonable care, skill and caution, and is to be applied to investments not in isolation but in the context of the investment portfolio and as a part of an overall investment strategy, which should incorporate risk and return objectives reasonably suitable to the particular investment fund.

B. **Ethics and Conflicts of Interest**: Officer involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program or that could impair their ability to make impartial decisions. Officers and employees shall, at all times, comply with the State of Oregon Government Standards and Practices code of ethics set forth in ORS Chapter 244, as well as all policies of the OST.

C. **Delegation of Authority**: The Senior Investment Officer and Investment Officer(s) (or the Investment Analyst acting under the direction of the Investment Officers) of the Fixed Income team shall act in accordance with established written procedures and internal controls for the operation of the investment program consistent with these Portfolio Rules. No person may engage in an investment transaction except as provided under the terms of these Portfolio Rules and the procedures established by OST staff. The Senior Investment Officer and Investment Officer(s) are jointly responsible for all transactions undertaken and shall establish a reasonable system of controls to regulate the activities of subordinate employees.

II. Compliance

A. **Compliance Monitoring:** OST shall provide an investment compliance program to accomplish the following objectives: a) monitor and evaluate portfolios, asset classes, and other investment funds to determine compliance with OST policies and contractual obligations; b) identify instances of non-compliance and develop appropriate resolution strategies; c) provide relevant compliance information and reports to OST management and the Oregon Investment Council, as appropriate; and d) verify resolution by the appropriate individual or manager within the appropriate time frame.

B. **Correction of Non-compliance:** If the OSTF is found to be out of compliance with one or more adopted investment guidelines or is being managed inconsistently with its policy and objectives, investment staff shall bring the OSTF portfolio into compliance as soon as is prudently feasible. Actions to bring the portfolio back into compliance and justification for such actions, including documentation of proposed and actual resolution strategies shall be coordinated with the OST investment compliance program.

III. Safekeeping and Custody

A. **Authorized Financial Dealers and Institutions:** All financial institutions and broker/dealers who desire to become qualified for investment transactions must supply, as appropriate:
   1. Audited financial statements,
   2. Licensing Representation form provided to OST, and
   3. Understanding and acknowledgment of OSTF Portfolio Rules.

B. **Internal Controls:** The Senior Investment Officer and Investment Officer(s) jointly collaborate to establish and maintain an adequate internal control structure designed to reasonably protect the assets of the OSTF from loss, theft or misuse.

C. **Delivery vs. Payment**: All trades where applicable will be executed by delivery vs. payment (DVP) to ensure that securities are deposited in an eligible financial institution prior to the release of funds.

D. **Safekeeping:** Securities will be held by a third-party custodian as evidenced by safekeeping receipts.

Exceptions

None.

Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

PROCEDURES AND FORMS

Attachment A: General Guidelines for TCD Program

1. Upon approval of changes to this policy, the policy owner shall contact the Banking Operations Manager to update the Oregon Short Term Fund Finance and Investment pages on the external OST website (OSTF, LGIP).

ADMINISTRATION

Feedback

Your comments are extremely important to improving the effectiveness of this policy. If you would like to comment on the provisions of this policy, you may do so by e-mailing the Policy Owner. To ensure your comments are received without delay, *please list the policy number and name in your e-mail's subject*. Your comments will be reviewed during the policy revisions process and may result in changes to the policy.

INV 402C
OREGON INVESTMENT COUNCIL POLICY
Department of Administrative Services Insurance Fund
Investment Policy Statement
Adopted 2024

A. Investment Objectives

The primary objectives, in priority order, of investment activities shall be:

1. Preservation of Invested Capital

Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The goal is to mitigate credit and interest rate risks.

2. Liquidity

The investment portfolio shall remain sufficiently liquid to meet all reasonably anticipated cash needs of the fund. The portfolio should consist of securities with active secondary or resale markets.

3. Return

The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration the safety and liquidity needs of the portfolio. Although return consists of both principal return (gains and losses due to market value fluctuations) and income return (yield), this policy discourages active trading and turnover of investments. Investments should generally be held to maturity.

B. Investment Constraints

1. Permitted Investments

- **i.** The Oregon Short Term Fund (OSTF).
- **ii.** Oregon Intermediate Term Pool (OITP).
- **iii.** U.S. Treasury debt.
- **iv.** Government agency debt.
- **v.** Municipal debt with long term ratings of A3 or A-, or better, or rated in the two highest categories for short-term debt by Standard & Poor's, Moody's Investors Services, or Fitch Ratings, respectively, at the time of purchase.
- **vi.** Corporate debt with long term investment grade ratings or rated in the two highest categories for short-term debt by Standard & Poor's, Moody's Investors Services, or Fitch Ratings, respectively, at the time of purchase.
- **vii.** U.S. agency mortgage-backed securities (MBS) which include both pass-through securities and collateralized mortgage obligations (CMOs).
- **viii.** Senior tranches of commercial mortgage-backed securities (CMBS) rated AAA.
- **ix.** Senior tranches of asset-backed securities (ABS) rated AAA and collateralized by:
    1. Autos;
    2. Equipment; or

3. Credit card debt.

2. **Credit Quality**

   i. Maintain average credit quality of AA/Aa2.

3. **Maturity**

   i. Limit the average maturity of the portfolio to 5 years or less.
   ii. Use weighted average life (WAL) to measure maturity for MBS, CMBS and ABS.
   iii. The maximum maturity of any U.S. Treasury, agency, municipal, or corporate bond investment should be 10 years or less based upon stated maturity.
   iv. The maximum WAL of any MBS, CMBS, or ABS should be 5 years or less.

4. **Diversification**

   i. Limit the market value of any one issuer to 3 percent of the portfolio, excluding investments in OSTF, OITP, U.S. Treasury and agency securities unless approved by the agency.
   ii. Limit the market value of all MBS investments to 20% of the portfolio.
   iii. Limit the market value of all ABS investment to 15% of the portfolio.
   iv. Limit the market value of all CMBS investments to 15% of the portfolio.

5. **Exclude the following types of investments:**

   i. Zero coupons;
   ii. Interest-only securities;
   iii. Principal-only securities;
   iv. Structured notes such as index-amortizing notes, dual-index notes, deleveraged bonds, range bonds and inverse floaters;
   v. Securities tied to foreign currencies or indices based on foreign currencies;
   vi. Alt-A, non-agency, sub-prime, limited documentation, or other "sub-prime" residential mortgage pools or related securities; and
   vii. Collateralized Debt Obligations (CDOs), Collateralized Loan Obligations (CLOs), and Z-tranche ABS investments.

6. **Currency**

   i. Investments should be restricted to U.S. dollar denominated securities only.

C. Investment Compliance and Reporting

i. Notify the department at any time that an investment has a market value < 10% of its amortized accounting value.
ii. Securities that are downgraded below the minimum credit rating do not have to be liquidated unless warranted by OST staff credit research analysis.

iii. Exposure limitations should be enforced at the time of purchase. Investment exposures that go over maximum limits as a result of maturities or sales should not be liquidated.
iv. OST investment staff will present an update on the portfolio at least annually (at the request of the agency).

INV 402C

OREGON INVESTMENT COUNCIL POLICY

Department of Administrative Services Insurance Fund

Investment Policy Statement

Adopted 2024

A. Investment Objectives

The primary objectives, in priority order, of investment activities shall be:

1. Preservation of Invested Capital

Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The goal is to mitigate credit and interest rate risks.

2. Liquidity

The investment portfolio shall remain sufficiently liquid to meet all reasonably anticipated cash needs of the fund. The portfolio should consist of securities with active secondary or resale markets.

3. Return

~~The investment portfolio shall be designed with the objective of maximizing yield based on amortized cost ("book yield") and not total return, taking into consideration the safety and liquidity needs of the portfolio. Investments should generally be held to maturity.~~

The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration the safety and liquidity needs of the portfolio. Although return consists of both principal return (gains and losses due to market value fluctuations) and income return (yield), this policy discourages active trading and turnover of investments. Investments should generally be held to maturity.

B. Investment Constraints

1. Permitted Investments

i. The Oregon Short Term Fund (OSTF).
~~i.~~ii. Oregon Intermediate Term Pool (OITP).
~~ii.~~iii. U.S. Treasury debt.
~~iii.~~iv. Government agency debt.
~~iv.~~v. Municipal debt with long term ratings of A3 or A-, or better, or rated in the two highest categories for short-term debt by Standard & Poor's, Moody's Investors Services, or Fitch Ratings, respectively, at the time of purchase.
~~v.~~vi. Corporate debt with long term investment grade ratings or rated in the two highest categories for short-term debt by Standard & Poor's, Moody's Investors Services, or Fitch Ratings, respectively, at the time of purchase.
~~vi.~~vii. U.S. agency mortgage-backed securities (MBS) which include both pass-through securities and collateralized mortgage obligations (CMOs).

~~vii.~~ viii. Senior tranches of commercial mortgage-backed securities (CMBS) rated AAA.
~~viii.~~ ix. Senior tranches of asset-backed securities (ABS) rated AAA and collateralized by:
1. Autos;
2. Equipment; or
3. Credit card debt.

2. **Credit Quality**

   i. Maintain average credit quality of AA/Aa2.

3. **Maturity**

   i. Limit the average maturity of the portfolio to 5 years or less.
   ii. Use weighted average life (WAL) to measure maturity for MBS, CMBS and ABS.
   iii. The maximum maturity of any U.S. Treasury, agency, municipal, or corporate bond investment should be 10 years or less based upon stated maturity.
   iv. The maximum WAL of any MBS, CMBS, or ABS should be 5 years or less.

4. **Diversification**

   i. Limit the market value of any one issuer to 3 percent of the portfolio, excluding investments in OSTF, OITP, U.S. Treasury and agency securities unless approved by the agency.
   ii. Limit the market value of all MBS investments to 20% of the portfolio.
   iii. Limit the market value of all ABS investment to 15% of the portfolio.
   iv. Limit the market value of all CMBS investments to 15% of the portfolio.

5. **Exclude the following types of investments:**

   i. Zero coupons;
   ii. Interest-only securities;
   iii. Principal-only securities;
   iv. Structured notes such as index-amortizing notes, dual-index notes, deleveraged bonds, range bonds and inverse floaters;
   v. Securities tied to foreign currencies or indices based on foreign currencies;
   vi. Alt-A, non-agency, sub-prime, limited documentation, or other "sub-prime" residential mortgage pools or related securities; and
   vii. Collateralized Debt Obligations (CDOs), Collateralized Loan Obligations (CLOs), and Z-tranche ABS investments.

6. **Currency**

   i. Investments should be restricted to U.S. dollar denominated securities only.

C. Investment Compliance and Reporting

i. Notify the department at any time that an investment has a market value < 10% of its amortized accounting value.
ii. Securities that are downgraded below the minimum credit rating do not have to be liquidated unless warranted by OST staff credit research analysis.
iii. Exposure limitations should be enforced at the time of purchase. Investment exposures that go over maximum limits as a result of maturities or sales should not be liquidated.
iv. OST investment staff will present an update on the portfolio at least annually (at the request of the agency).

INV 402E
OREGON INVESTMENT COUNCIL POLICY
Department of Veterans Affairs Fund
Adopted 2024

A. Investment Objectives

The primary objectives, in priority order, of investment activities shall be:

1. Preservation of Invested Capital

Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The goal is to mitigate credit and interest rate risks.

2. Liquidity

The investment portfolio shall remain sufficiently liquid to meet all reasonably anticipated cash needs of the fund. The portfolio should consist of securities with active secondary or resale markets.

3. Return

The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration the safety and liquidity needs of the portfolio. Although return consists of both principal return (gains and losses due to market value fluctuations) and income return (yield), this policy discourages active trading and turnover of investments. Investments should generally be held to maturity.

B. Investment Constraints

1. Unique Circumstances

i. From ODVA's perspective the fund is a commingled fund of proceeds from different municipal bond issues.

ii. As such, ODVA has matched certain investments in the fund against specific ODVA municipal liabilities.

iii. Under unique market circumstances, e.g. very low interest rate environments, frequent communication with ODVA is a necessity to monitor ODVA's asset/liability match (or mismatch) and fixed/floating interest rate risk.

2. Permitted Investments

i. The Oregon Short Term Fund (OSTF).

ii. Oregon Intermediate Term Pool (OITP).

iii. U.S. Treasury debt.

iv. Government agency debt.

v. Municipal debt with long term ratings of A3 or A-, or better, or rated in the two highest categories for short-term debt by Standard & Poor's, Moody's Investors Services, or Fitch Ratings, respectively, at the time of purchase.

vi. Corporate debt with long-term investment grade ratings or rated in the two highest categories for short-term debt by Standard & Poor's, Moody's Investors Services, or Fitch Ratings, respectively, at the time of purchase.

vii. U.S. agency mortgage-backed securities (MBS) which include both pass-through securities and collateralized mortgage obligations (CMOs).

viii. Senior tranches of commercial mortgage-backed securities (CMBS) rated AAA.

ix. Senior tranches of asset-backed securities (ABS) rated AAA and collateralized by:

1. Autos;
2. Equipment; or
3. Credit card debt.

2. Credit Quality

- **i.** Maintain an average portfolio investment quality of AA/Aa2.

3. Maturity

- **i.** Limit the average maturity of the portfolio to 5 years or less.
- **ii.** Use weighted average life (WAL) to measure maturity for MBS, CMBS and ABS.
- **iii.** The maximum maturity of any U.S. Treasury, agency, municipal, or corporate bond investment should be 10 years or less based upon stated maturity.
- **iv.** The maximum WAL of any MBS, CMBS, or ABS should be 5 years or less.

4. Diversification

- **i.** Limit the market value of any one issuer to 3 percent of the portfolio, excluding investments in OSTF, OITP, U.S. Treasury and agency securities.
- **ii.** Limit the market value of all MBS investments to 20% of the portfolio.
- **iii.** Limit the market value of all ABS investment to 15% of the portfolio.
- **iv.** Limit the market value of all CMBS investments to 15% of the portfolio.

5. Exclude the following types of investments from the portfolio:

- **i.** Zero coupons;
- **ii.** Interest only securities;
- **iii.** Principal only securities;
- **iv.** Structured notes such as index-amortizing notes, dual-index notes, deleveraged bonds, range bonds and inverse floaters;
- **v.** Securities tied to foreign currencies or indices based on foreign currencies;
- **vi.** Alt-A, non-agency, sub-prime, limited documentation, or other “sub-prime” residential mortgage pools or related securities; and
- **vii.** Collateralized Debt Obligations (CDOs), Collateralized Loan Obligations (CLOs), and Z-tranche ABS investments.

6. Currency

- **i.** Investments should be restricted to U.S. dollar denominated securities only.

C. Investment Compliance and Reporting

- **i.** Securities that are downgraded below the minimum credit rating do not have to be liquidated unless warranted by OST staff credit research analysis.
- **ii.** Exposure limitations should be enforced at the time of purchase. Investment exposures that go over maximum limits as a result of maturities or sales should not be liquidated.
- **iii.** The agency will communicate the desired minimum cash balance at least annually.
- **iv.** OST investment staff will present an update on the portfolio at least annually (as scheduled by the agency).

ATTACHMENT E

Investment Policy Statement
Department of Veterans Affairs Fund

A. Objectives:

1. Return Requirements: Current Income
   i. Maximization of yield in a well-diversified fixed income portfolio with moderate total-return style.
2. Risk Tolerance: The Oregon Department of Veterans Affairs (ODVA) fund has a very low tolerance for interest rate risk and a low tolerance for credit risk
3. Maintain communication with the agency as it pertains to ***any*** purchases or sales of securities; document discussion in the IPS.
4. Meet with the agency quarterly (as scheduled by the agency).

B. Constraints:

1. Unique Circumstances
   i. From ODVA's perspective the fund is a commingled fund of proceeds from different municipal bond issues.
   ii. As such, ODVA has matched certain investments in the fund against specific ODVA municipal liabilities.
   iii. All purchases and/or sales must be discussed with the agency prior to execution to determine the value of the transaction versus ODVA liabilities. The exception would be for a sale of a rapidly deteriorating corporate bond where timely execution might be of utmost importance.
   iv. Under unique market circumstances, e.g. very low interest rate environments, frequent communication with ODVA is a necessity to monitor ODVA's asset/liability match (or mismatch) and fixed/floating interest rate risk.
2. Liquidity
   i. Cash flows are determined by the agency on a quarterly basis and are subject to revision.
   ii. Maintain sufficient liquidity to meet the cash needs of the department.
3. Time Horizon
   i. Limit the average maturity of the portfolio to 0-5 years.
   ii. The maximum maturity of any single fixed income security purchase will be 10 years, unless approved by the agency.
4. Eligible Security Types
   i. Acceptable securities are US Treasury and government agency bonds, notes and bills, state and municipal bonds, corporate bonds, MBS, ABS, and the Oregon Short Term Fund (OSTF), including securities eligible for the OSTF.
   ii. Securities denominated in US dollars only.
5. Credit Quality
   i. Maintain average credit quality of AA, including the average credit quality of ODVA's balance in the OSTF.
      - Cash balance includes aggregate of all ODVA sub-accounts.
   ii. Limit corporate issuer exposure to 5% of total portfolio market value unless approved by the agency.

   iii. Minimum credit rating of investment grade **by one of the nationally recognized credit ratings agencies at the time of purchase**.

6. Securities that are downgraded below the minimum credit rating do not have to be liquidated unless warranted by staff credit research analysis.

C. Guidelines:

See Objectives and Constraints listed above.

Notes:

INV 402: Appendix F
Oregon Housing and Community Services Department
Investment Policy Statement
Adopted 2024

A. Investment Objectives

The primary objectives, in priority order, of investment activities shall be:

1. Preservation of Invested Capital

Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The goal is to mitigate credit risk and interest rate risk.

2. Liquidity

The investment portfolio shall remain sufficiently liquid to meet all reasonably anticipated cash needs of the fund. The portfolio should consist of securities with active secondary or resale markets. Minimum cash needs are determined by the agency on an annual basis.

3. Return

The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration the safety and liquidity needs of the portfolio. Although return consists of both principal return (gains and losses due to market value fluctuations) and income return (yield), this policy discourages active trading and turnover of investments. Investments should generally be held to maturity.

B. Investment Constraints

1. Permitted Investments

- **i.** The Oregon Short Term Fund (OSTF)
- **ii.** US Treasury Debt
- **iii.** U.S. Federal Government Guaranteed Debt

C. Investment Compliance and Reporting

- **i.** Securities that are downgraded below the minimum credit rating do not have to be liquidated unless warranted by OST staff credit research analysis.
- **ii.** Exposure limitations should be enforced at the time of purchase. Investment exposures that go over maximum limits as a result of maturities or sales should not be liquidated.
- **iii.** The agency will communicate the desired minimum cash balance at least annually.
- **iv.** OST investment staff will present an update on the portfolio at least annually (at the request of the agency).

INV 402: Appendix F
~~Community Housing Trust Funds~~ Oregon Housing and Community Services Department
Investment Policy Statement
Adopted 2024

A. Investment Objectives

The primary objectives, in priority order, of investment activities shall be:

1. Preservation of Invested Capital

Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The goal is to mitigate credit risk and interest rate risk.

2. Liquidity

The investment portfolio shall remain sufficiently liquid to meet all reasonably anticipated cash needs of the fund. The portfolio should consist of securities with active secondary or resale markets. Minimum cash needs are determined by the agency on an annual basis.

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The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration the safety and liquidity needs of the portfolio. Although return consists of both principal return (gains and losses due to market value fluctuations) and income return (yield), this policy discourages active trading and turnover of investments. Investments should generally be held to maturity.

B. Investment Constraints

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- **i.** The Oregon Short Term Fund (OSTF)
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- **iii.** U.S. Federal Government Guaranteed Debt

C. Investment Compliance and Reporting

- **i.** Securities that are downgraded below the minimum credit rating do not have to be liquidated unless warranted by OST staff credit research analysis.
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- **iii.** The agency will communicate the desired minimum cash balance at least annually.
- **iv.** OST investment staff will present an update on the portfolio at least annually (at the request of the agency).

INV 402: ATTACHMENT G

Oregon Lottery

Investment Policy Statement

Adopted 2024

A. Objectives:

1. Match liability stream for lottery winners, using annuities.
2. Risk Tolerance: The Lottery fund has a zero tolerance for credit risk and interest rate risk. To mitigate interest rate risk, the investment portfolio shall be structured so that securities mature to meet cash requirements, limiting the need to sell securities on the open market before maturity. All investments will be in securities backed by the full faith and credit of the U.S. Government.
3. Return Requirements: Not a factor beyond Objective #1.
4. Meet with the agency as needed.

B. Constraints:

1. Eligible Security Types
    i. All investments will be in securities backed by the full faith and credit of the U.S. Government.
2. Time Horizon
    i. Dependent on lottery winner payout option.
3. The "Win For Life" game has created liability streams beyond 30 years. Lottery currently requests UST strip investments that mature on/near expected lottery obligations up to 30 years. The balance or remaining tail obligation is funded with 30 year strips. All obligations are fully funded with UST Strips on the date obligations are created (i.e. date that Win For Life Lottery is claimed). Consequently, UST Strip investments funding tail liabilities have a significant maturity mismatch with actual liability maturities beyond 30 years.

C. Guidelines:

When a Lottery "winner" is identified, investments will comply with Objectives and Constraints listed above.

Notes:

INV 402: ATTACHMENT G
Oregon Lottery
Investment Policy Statement
~~Oregon Lottery~~Adopted 2024

A. Objectives:

1. Match liability stream for lottery winners, using annuities.
2. Risk Tolerance: The Lottery fund has a zero tolerance for credit risk and interest rate risk. To mitigate interest rate risk, the investment portfolio shall be structured so that securities mature to meet cash requirements, limiting the need to sell securities on the open market before maturity.- All investments will be in securities backed by the full faith and credit of the U.S. Government.
3. Return Requirements: Not a factor beyond Objective #1.
4. Meet with the agency as needed.

B. Constraints:

1. Eligible Security Types
   i. All investments will be in securities backed by the full faith and credit of the U.S. Government.
2. Time Horizon
   i. Dependent on lottery winner payout option.
3. The "Win For Life" game has created liability streams beyond 30 years. Lottery currently requests UST strip investments that mature on/near expected lottery obligations up to 30 years. The balance or remaining tail obligation is funded with 30 year strips. All obligations are fully funded with UST Strips on the date obligations are created (i.e. date that Win For Life Lottery is claimed). Consequently, UST Strip investments funding tail liabilities have a significant maturity mismatch with actual liability maturities beyond 30 years.

C. Guidelines:

When a Lottery "winner" is identified, investments will comply with Objectives and Constraints listed above.

Notes:

Oregon State University
Public University Fund Investment Policy

I. Purpose

The purpose of this document is to identify the policies for prudent investment of the Public University Fund assets by providing guidelines for suitable investments consistent with the objectives identified in Section III.

The investment policies and practices are based on state law and prudent money management. All funds will be deposited and invested in accordance with this Policy and all statutes and policies governing the Designated University, Public University Fund, Oregon State Treasury and the Oregon Investment Council.

II. Scope

These rules apply to the investment of funds from all eligible and approved Public University Fund (PUF) participants, and are established under the authority of, and shall not supersede, the requirements established under ORS Chapter 293, ORS 352.450 and the Oregon Investment Council Common University (OIC) Policy INV 407.

III. Objective

The primary objective of the PUF is capital preservation with a secondary objective to maximize total return over a long-term horizon within stipulated risk parameters.

The PUF should provide adequate liquidity for PUF participants' cash flow requirements based upon participant's annual cash flow forecast submissions for assets on deposit in the PUF. Cash balances in excess of forecast liquidity needs shall be invested into longer dated fixed income securities with the objective to maximize total return over the long term.

IV. Portfolio Allocation

Portfolio allocation parameters listed in the following table are intended as general guidelines and subject to review by the Designated University staff and their delegates including investment consultants and investment managers.

Portfolio	Objective	Allocation
Liquidity	Capital preservation to assure adequate cash for liquidity requirements.	<u>Short-Term</u> Funds invested in the Oregon Short Term Fund (OSTF). Target allocation of funds based upon aggregated university participant annual cash flow forecasts. Absent cash flow forecasts, the target allocation will be based upon a minimum of six months estimated operating expenses.
Core	Actively managed to achieve a diversified portfolio of investment grade bonds invested over longer horizons than permitted in OSTF. Based on historical market performance, total returns generated over extended periods are anticipated to be greater than returns realized in shorter-maturity strategies.	<u>Intermediate</u> Investments with a maturity or weighted average life from three years and above.

V. Permitted Holdings

1. Securities included in the designated performance benchmark(s) unless explicitly restricted in this policy.
2. The Oregon Short-Term Fund (OSTF). Underlying investments of the OSTF are excluded from restrictions in this policy. The OSTF is governed by the OIC and OST-adopted policies and guidelines as documented in OIC Policy INV 303.
3. Obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities, including inflation-indexed obligations.
4. Non-U.S. government securities and Instrumentalities with a minimum long-term rating of Aa2/AA/AA as rated by two or more of the following rating agencies: Moody's Investors Services, Standard & Poor's DBRS or Fitch Ratings (each a "Rating Agency", collectively "Rating Agencies"), at the time of purchase.
5. Municipal debt with a minimum rating of A3/A-/A- as rated by one or more of the Rating Agencies, at the time of purchase.

6. Corporate indebtedness with minimum investment grade ratings by one or more of the Rating Agencies. For avoidance of doubt, no rating from any of the Rating Agencies may be non-investment grade at the time of purchase.
7. Asset-backed securities with minimum investment grade ratings by one or more of the Rating Agencies (Baa3/BBB-/BBB-). For avoidance of doubt, no rating from any of the Rating Agencies may be non-investment grade at the time of purchase.
8. Commercial mortgage-backed securities (CMBS) with minimum investment grade ratings by one or more of the Rating Agencies (Baa3/BBB-/BBB-). For avoidance of doubt, no rating from any of the Rating Agencies may be non-investment grade at the time of purchase.
9. U.S. agency residential mortgage-backed securities (MBS), U.S. agency commercial mortgage-backed securities (ACMBS) and U.S. agency commercial mortgage-backed obligations (CMO).
10. Collateralized loan obligations (CLO) rated AAA (or equivalent rating by one or more of the Rating Agencies) at the time of purchase.

VI. Diversification

The portfolio should be adequately diversified consistent with the following parameters:

1. No more than 3% of portfolio par value may be invested in a single security except for obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities; and
2. No more than 5% of portfolio par value may be invested in the securities of a single issuer except for obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities.

Maximum market value exposures shall be limited as follows:

• U.S. Agency Obligations	50%
• U.S. Corporate Indebtedness	50%
• Municipal Indebtedness	30%
• Asset-backed Securities (ABS)	25%
• Mortgage-backed Securities (MBS)	25%
• U.S agency commercial mortgage-backed securities (ACMBS)	25%
• Commercial Mortgage-backed Securities (CMBS)	25%
• Collateralized loan obligations (CLOs)	15%
• Structured Securities (Combined ABS, MBS, ACMBS, CMBS, and CLOs)	50%

3. Issuer, security, and sector-level restrictions shall not apply to OSTF holdings.

VII. Counterparties

A list of all broker/dealer and custodian counterparties shall be provided upon request.

VIII. Risk

1. Maintain a minimum-weighted, average long-term portfolio credit quality no less than A3/A-.
2. Maintain an average modified duration level of +/-10% of the custom benchmark.

IX. Investment Restrictions

1. All investments will be in U.S. dollar denominated securities.
2. All investments will be non-convertible to equity.
3. Collateralized debt obligations (CDO) and Z-tranche investments are not permitted.
4. Investments in Alt-A, non-agency, sub-prime, limited documentation or other "sub-prime" residential mortgage pools are not permitted. No derivative securities are allowed. Structured securities such as ABS, MBS, CMBS, ACMBS and CLOs shall not be considered as using leverage.
5. Investments in issuers identified by the Carbon Underground 200 published by the Fossil Free Indexes LLC (FFI).
   - This restricted security list will be updated annually at calendar year-end and enforced for all new security purchases.
   - Exposures to issuers added to the Carbon Underground 200 subsequent to purchase may be held to maturity.

X. Policy Compliance

1. OST Investment Staff will submit a written action plan to the Designated University (as defined in ORS 352.450(3) (a)) regarding any investment downgraded by at least one rating agency to below investment grade within 10 business days of the downgrade. The plan may indicate why the investment should continue to be held and/or outline an exit strategy.
2. OST Staff will consult with the Designated University, on a pre-trade basis, if an investment trade or trades will result in a cumulative net loss greater than 1% over 3 months prior to trade settlement date.

XI. Safekeeping and Custody

The assets held in the PUF shall be secured through third-party custody and safekeeping procedures. Bearer instruments shall be held only through third-party institutions.

XII. Performance Expectations and Reviews

1. Excluding the short-term allocation, the Core allocation is expected to perform in-line with the following custom benchmark:
    - Bloomberg Barclays Intermediate Government/Credit Total Return Index.
2. OST will provide the Designated University with a monthly report of all non-passive compliance violations of this policy's guidelines.
3. Investment reviews between OST investment staff and the Designated University will occur quarterly and focus on the following elements:
    - Performance relative to objectives;
    - Adherence to this policy; and
    - Trading activity.

XIII. Exceptions

None.

XIV. Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

Document History

- Adopted by the Board of Trustees, October 17, 2014
- Amended October 16, 2015
- Amended January 20, 2017
- Amended October 18, 2019
- Amended January 29, 2021

INV 407A
Oregon Public University Core Bond Fund
Investment Program Guidelines

This statement governs the investment of the Public University Core Bond Fund (the "Fund") under the Oregon Investment Council ("OIC") Common University Policy, INV 407.

Portfolio Objective

Actively managed to achieve a diversified portfolio of investment grade bonds invested over longer horizons than permitted in OSTF. Based on historical market performance, total returns generated over extended periods are anticipated to be greater than returns realized in shorter-maturity strategies.

Allocation

Intermediate: Investments with a maturity or weighted average life from three years and above.

1. the Fund allocation is expected to perform in-line with the following custom benchmark:
    a. Bloomberg Barclays Intermediate Government/Credit Total Return Index.

Permitted Holdings

The term "Rating Agencies" is defined as any of the Securities and Exchange Commission (SEC) approved Nationally Recognized Statistical Rating Organizations (NRSROs). Each such Nationally Recognized Statistical Rating Organization (NRSRO) individually a "Rating Agency".

1. Securities included in the designated performance benchmark(s) unless explicitly restricted in this policy.
2. The Oregon Short-Term Fund (OSTF). Underlying investments of the OSTF are excluded from restrictions in this policy. The OSTF is governed by the OIC and OST-adopted policies and guidelines as documented in OIC Policy INV 303.
3. Obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities, including inflation-indexed obligations.
4. Non-U.S. government securities and Instrumentalities with a minimum long-term rating of Aa2/AA/AA as rated by two or more Rating Agencies at the time of purchase.
5. Municipal debt with a minimum rating of A3/A-/A- as rated by one or more of the Rating Agencies, at the time of purchase.
6. Corporate indebtedness with minimum investment grade ratings by one or more of the Rating Agencies. For avoidance of doubt, no rating from any of the Rating Agencies may be non-investment grade at the time of purchase.

7. Asset-backed securities with minimum investment grade ratings by one or more of the Rating Agencies (Baa3/BBB-/BBB-). For avoidance of doubt, no rating from any of the Rating Agencies may be non-investment grade at the time of purchase.
8. Commercial mortgage-backed securities (CMBS) with minimum investment grade ratings by one or more of the Rating Agencies (Baa3/BBB-/BBB-). For avoidance of doubt, no rating from any of the Rating Agencies may be non-investment grade at the time of purchase.
9. U.S. agency residential mortgage-backed securities (MBS), U.S. agency commercial mortgage-backed securities (ACMBS) and U.S. agency commercial mortgage-backed obligations (CMO).
10. Collateralized loan obligations (CLO) rated AAA (or equivalent rating by one or more of the Rating Agencies) at the time of purchase.

Diversification

The portfolio should be adequately diversified consistent with the following parameters:

1. No more than 3% of portfolio par value may be invested in a single security except for obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities; and
2. No more than 5% of portfolio par value may be invested in the securities of a single issuer except for obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities.

   Maximum market value exposures shall be limited as follows:

• U.S. Agency Obligations	50%
• U.S. Corporate Indebtedness	50%
• Municipal Indebtedness	30%
• Asset-backed Securities (ABS)	25%
• Mortgage-backed Securities (MBS)	25%
• U.S agency commercial mortgage-backed securities (ACMBS)	25%
• Commercial Mortgage-backed Securities (CMBS)	25%
• Collateralized loan obligations (CLOs)	15%
• Structured Securities (Combined ABS, MBS, ACMBS, CMBS, and CLOs)	50%

3. Issuer, security, and sector-level restrictions shall not apply to OSTF holdings.

Counterparties

A list of all broker/dealer and custodian counterparties shall be provided upon request.

Risk

1. Maintain a minimum-weighted, average long-term portfolio credit quality no less than A3/A-.
2. Maintain an average modified duration level of +/-10% of the custom benchmark.

Investment Restrictions

1. All investments will be in U.S. dollar denominated securities.
2. All investments will be non-convertible to equity.
3. Collateralized debt obligations (CDO) and Z-tranche investments are not permitted.
4. Investments in Alt-A, non-agency, sub-prime, limited documentation or other "sub-prime" residential mortgage pools are not permitted. No derivative securities are allowed. Structured securities such as ABS, MBS, CMBS, ACMBS and CLOs shall not be considered as using leverage.
5. Investments in issuers identified by the Carbon Underground 200 published by the Fossil Free Indexes LLC (FFI).
    a. This restricted security list will be updated annually at calendar year-end and enforced for all new security purchases.
    a. Exposures to issuers added to the Carbon Underground 200 subsequent to purchase may be held to maturity.

Policy Compliance

1. OST Investment Staff will submit a written action plan to the Designated University (as defined in ORS 352.450(3) (a)) regarding any investment downgraded by at least one rating agency to below investment grade within 10 business days of the downgrade. The plan may indicate why the investment should continue to be held and/or outline an exit strategy.

2. If the average credit quality of the investment portfolio falls below AA-, the investment manager shall have 60 days to bring the average credit quality back to AA- or above. However, should the average credit quality of the portfolio decline below AA- as a result of a downgrade of U.S. Treasury or federal government agency securities, the investment manager will contact the PUF Administrator to discuss strategies which may include a waiver of the average credit quality requirement. The PUF Administrator will determine the appropriate course of action and report this activity to the Finance & Administration Committee of the Board of Trustees.

3. OST Investment Staff will consult with the Designated University, on a pre-trade basis, if an investment trade or trades will result in a cumulative net loss greater than 1% over 3 months prior to trade settlement date.

Performance Expectations and Reviews

1. OST will provide the Designated University with a monthly report of all non-passive compliance violations of this policy's guidelines.
2. Investment reviews between OST investment staff and the Designated University will occur quarterly and focus on the following elements:
    a. Performance relative to objectives;
    b. Adherence to this policy; and
    c. Trading activity.
3. OST will provide the Designated University with timely notification of material changes in the fund and/or firm operations under consideration or about to be implemented, including organizational or strategy changes that may impact asset management.

Exceptions

None.

OREGON INVESTMENT COUNCIL POLICY

INTRODUCTION & OVERVIEW

Summary Policy Statement

The Oregon Investment Council (OIC) will maintain a program for the investment of moneys in the Deferred Compensation Fund (the "Deferred Compensation Investment Program" or "Program") providing an array of investment options with varying levels of risk and return for eligible participating employees.

Purpose and Goals

The goal of this policy is to describe in greater detail the manner of implementing and reporting applicable investment options for eligible participating employees by defining the roles and responsibilities of the OIC, Oregon State Treasury Staff ("Staff") and the Program's other service providers.

Applicability

Classified represented, management service, unclassified executive service

Authority

ORS Chapters 243 and 293.

POLICY PROVISIONS

Definitions

None.

Policy Statements

GENERAL POLICY STATEMENTS

1. **Investment Option Approval.** The OIC approves Program investment options consistent with ORS 293.721, "to make the moneys as productive as possible" consistent with the "standard of prudence" requirement in ORS 293.726 and other applicable fiduciary standards.
2. **Program Description and Review.** The OIC will provide a description of Program investment options to the Public Employees Retirement System Board ("PERSB") via Oregon Savings Growth Plan (OSGP) Staff, including the applicable benchmark for each option and a description of the characteristics of each benchmark. Staff will undertake a comprehensive review of Program options and managers no less frequently than once every four years.
3. **Changing Program Options.** The OIC may change Program investment options, including applicable benchmarks and investment managers at any time. Any change in Program options or investment managers will be reported to OSGP in advance, whenever practicable.
4. **Program Participation.** The Program is open to qualified public employees on a voluntary basis, and is offered as a means by which eligible participating employees may augment their retirement savings. Eligible employees choose their own level of participation based, *inter alia*, on their assessment of future retirement needs. The level of assets a participating employee accumulates through Program investment is a direct function of that participant's level of earnings deferral and the investment performance of the Program options selected.
5. **Selection of Program Options.** In selecting Program investment options and Program investment managers, the OIC may consider factors including, but not limited to, the population of potential participants and their varying needs, available investment products and strategies, and the qualifications, experience, performance, and cost of actual and potential investment managers. The OIC intends to provide a range of investment options considering participant interests and appropriate for this type of retirement savings program. The Council expects participants to make their own assessment of Program investment options relative to their unique risk tolerance and

return objectives, as well as their other sources of retirement funding. There is no guarantee of principal or earnings in the Program, and eligible employees participate at their own risk.

6. **Program Management.**
   a. **Program Investments.** In order to accommodate daily cash movements and participant option transfers, Program investments will generally be comprised of mutual funds and commingled trusts with daily pricing and liquidity features.
   b. Program options will be comprised of one or more investment funds, and the OIC will establish the percentage of each option that individual mutual funds and commingled trusts may comprise.
   c. Over time, the percentages of various Program options comprised by individual mutual funds and commingled trust funds may vary due to investment return differences. At least annually, and by direction to his or her staff ("Staff"), the State Treasurer (as the State's designated Investment Officer), will rebalance the individual mutual funds and commingled trusts back to Program targets as specified by the OIC or as otherwise allowed under the Program.
   d. **Selection of Investment Managers**. The selection of Program investment managers is reserved for the OIC, and will be based, *inter alia*, on the findings of appropriate due diligence as performed by Staff and related, qualified consultants. Staff, on behalf of the State Treasurer, will implement OIC selection decisions.
   e. **Compensation of Firms**. Where applicable, Staff may negotiate investment management or performance-based fees. Staff may also negotiate fees for any additional services. Although Staff will otherwise avoid funds with revenue sharing provisions, revenue sharing rebates (if necessary) will be credited to the net asset value of the applicable Program option.
   f. **General Oversight of Investment Managers and Investment Performance**. Staff will evaluate investment manager status, activity and performance. The OIC or State Treasurer may also engage independent consultants to assist in the investment manager oversight process.
   g. **Program Monitoring**. Staff will monitor plan participant activity in each Program investment option. Staff will prepare quarterly reports concerning the Program that will include the following information:
      i. **Program Profile** reports will list the value of assets held and the number of participants selecting each Program investment option. These reports will be based on information provided by the Plan Administrator; and
      ii. **Investment Performance** reports will list, relative to corresponding benchmark returns and net of all fees, costs, and administrative charges, performance for each Program investment option.
   h. Staff may delegate some or all of the reporting duties in this policy to a consultant or other, qualified contractor.
   i. These reports will be distributed to OIC members and to the Chief Investment Officer.
   j. If, after eight (8) consecutive quarters, a Program investment option comprises less than three (3) percent of total plan assets, Staff may evaluate that option for possible termination. For purposes of a termination evaluation, Staff may rely upon Plan Administrator research and share its recommendations with the State Treasurer and OIC.
   k. **Delegation.** Where Staff delegates to or otherwise engages subcontractors or other service providers to perform or assist with some or all of the foregoing Program monitoring responsibilities, such subcontractors or other service providers will act in a manner consistent with Program standards, including, but not limited to, the ability of Staff to terminate such delegation or engagement at its discretion.
   l. **Appointment and Termination of Investment Managers.** Staff will act promptly and prudently to effect decisions by the OIC to appoint or terminate Program investment managers.

7. **Participant Disclosure Requirements**. Staff will work with OSGP and the Plan Administrator to provide necessary information for compliance with participant disclosure requirements as

described in ORS 243.450.
8. **Program Information Requests.** Staff will work with the Plan Administrator to provide any other requested Program information.
9. **Program Population Characteristics.** Staff will periodically provide the OIC with Program population characteristics for use in their evaluation of Program options and investment managers. Staff will request such information from the Plan Administrator.
10. **Communication with OSGP and PERSB.** Staff will periodically present the OIC with information for consideration from OSGP and the OSGP Advisory Committee, via PERSB, regarding the expressed desires of participants related to Program investment options. The duties and powers of PERSB and the OIC concerning the Program, while separate and distinct, are also complementary. This dynamic creates a need for coordination and cooperation between the two bodies. At the OIC's request, Staff will facilitate information flow between the OIC and PERSB (via OSGP). Moreover, Staff will also report in advance, whenever practicable, any change in Program investment options or investment managers to PERSB (via OSGP) in a timely manner.
11. **Program Review.** Staff will periodically bring current and potential investment options to the OIC for review and consideration, including those requested by the OIC.

INVESTMENT PROGRAM

The Program is open to qualified public employees on a voluntary basis, and is offered as a means by which eligible participating employees may augment their retirement savings. Eligible employees choose their own level of participation based, inter alia, on their assessment of future retirement needs. The level of assets a participating employee accumulates through Program investment is a direct function of that participant's level of earnings deferral and the investment performance of the Program options selected. As such, the appropriate investment strategy for any individual participant to accumulate retirement savings or achieve other savings objectives is a function of multiple personal factors, including but not limited to age, income, time horizon, risk tolerance, return expectations, accumulation objectives, anticipated pension and social security benefits, and other assets held outside of the Program.

The Program intends to offer a broad range of investment options with materially different risk and return characteristics. By selecting among the investment options, participants have the opportunity to diversify their balances and construct portfolios consistent with their unique individual circumstances, goals, time horizons, and risk tolerance.

The Program currently offers the following investments options:

a. **Stable Value Option**
   i. **Benchmark:** 3-Year Constant Maturity U.S. Treasury and 3 Month U.S. Treasury Bill
b. **Active Fixed Income Option**
   i. **Benchmark:** Bloomberg U.S. Aggregate Bond Index
c. **Large Company Value Stock Option**
   i. **Benchmark:** Russell 1000 Value Index
d. **Stock Index Option**
   i. **Benchmark:** Russell 3000 Index
e. **Socially Responsible Investment Option**
   i. **Benchmark:** S&P 500 Index
f. **Large Company Growth Stock Option**
   i. **Benchmark:** Russell 1000 Growth Index
g. **Active International Stock Option**
   i. **Benchmark:** MSCI All Country World Excluding U.S. (ACWI ex-U.S.) Index
h. **Passive International Stock Option**
   i. **Benchmark:** MSCI All Country World Excluding U.S. (ACWI ex-U.S.) Index
i. **Small Company Stock Option**
   i. **Benchmark:** Russell 2000 Index
j. **Target Date Retirement Funds**
   i. **Benchmark:** Each target date fund has a separate, custom benchmark based on its asset

allocation.

    ii. **Rebalancing:** The fund manager is responsible for rebalancing each target date fund's asset allocation.

k. **Self-Directed Brokerage Option**
l. **Real Return Option**
    i. **Benchmark:** SSgA Real Assets Custom Blended Index and Consumer Price Index (CPI-U) + 4%

Exceptions

None.

Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

PROCEDURES and FORMS

None.

ADMINISTRATION

Feedback

Your comments are extremely important to improving the effectiveness of this policy. If you would like to comment on the provisions of this policy, you may do so by e-mailing the Service Desk from the Self-Service Portal. To ensure your comments are received without delay, *please list the policy number and name in your e-mail's subject*. Your comments will be reviewed during the policy revisions process and may result in changes to the policy.

OREGON INVESTMENT COUNCIL POLICY

INTRODUCTION & OVERVIEW

Summary Policy Statement

The Oregon Investment Council (OIC) will maintain a program for the investment of moneys in the Deferred Compensation Fund (the "Deferred Compensation Investment Program" or "Program") providing an array of investment options with varying levels of risk and return for eligible participating employees.

Purpose and Goals

The goal of this policy is to describe in greater detail the manner of implementing and reporting applicable investment options for eligible participating employees by defining the roles and responsibilities of the OIC, Oregon State Treasury Staff ("Staff") and the Program's other service providers.

Applicability

Classified represented, management service, unclassified executive service

Authority

ORS Chapters 243 and 293.

POLICY PROVISIONS

Definitions

None.

Policy Statements

GENERAL POLICY STATEMENTS

1. **Investment Option Approval.** The OIC approves Program investment options consistent with ORS 293.721, "to make the moneys as productive as possible" consistent with the "standard of prudence" requirement in ORS 293.726 and other applicable fiduciary standards.
2. **Program Description and Review.** The OIC will provide a description of Program investment options to the Public Employees Retirement System Board ("PERSB") via Oregon Savings Growth Plan (OSGP) Staff, including the applicable benchmark for each option and a description of the characteristics of each benchmark. Staff will undertake a comprehensive review of Program options and managers no less frequently than once every four years.
3. **Changing Program Options.** The OIC may change Program investment options, including applicable benchmarks and investment managers at any time. Any change in Program options or investment managers will be reported to OSGP in advance, whenever practicable.
4. **Program Participation.** The Program is open to qualified public employees on a voluntary basis, and is offered as a means by which eligible participating employees may augment their retirement savings. Eligible employees choose their own level of participation based, *inter alia*, on their assessment of future retirement needs. The level of assets a participating employee accumulates through Program investment is a direct function of that participant's level of earnings deferral and the investment performance of the Program options selected.
5. **Selection of Program Options.** In selecting Program investment options and Program investment managers, the OIC may consider factors including, but not limited to, the population of potential participants and their varying needs, available investment products and strategies, and the qualifications, experience, performance, and cost of actual and potential investment managers. The OIC intends to provide a range of investment options considering participant interests and appropriate for this type of retirement savings program. The Council expects participants to make their own assessment of Program investment options relative to their unique risk tolerance and

return objectives, as well as their other sources of retirement funding. There is no guarantee of principal or earnings in the Program, and eligible employees participate at their own risk.

6. **Program Management.** ~~The Program will be managed and monitored consistent with the OIC's policies and procedures regarding selecting, managing, and terminating Program managers as found in INV 802: Selecting, Managing, and Terminating Program Firms.~~

   a. **Program Investments.** In order to accommodate daily cash movements and participant option transfers, Program investments will generally be comprised of mutual funds and commingled trusts with daily pricing and liquidity features.
   b. Program options will be comprised of one or more investment funds, and the OIC will establish the percentage of each option that individual mutual funds and commingled trusts may comprise.
   c. Over time, the percentages of various Program options comprised by individual mutual funds and commingled trust funds may vary due to investment return differences. At least annually, and by direction to his or her staff ("Staff"), the State Treasurer (as the State's designated Investment Officer), will rebalance the individual mutual funds and commingled trusts back to Program targets as specified by the OIC or as otherwise allowed under the Program.
   d. **Selection of Investment Managers**. The selection of Program investment managers is reserved for the OIC, and will be based, *inter alia*, on the findings of appropriate due diligence as performed by Staff and related, qualified consultants. Staff, on behalf of the State Treasurer, will implement OIC selection decisions.
   e. **Compensation of Firms**. Where applicable, Staff may negotiate investment management or performance-based fees. Staff may also negotiate fees for any additional services. Although Staff will otherwise avoid funds with revenue sharing provisions, revenue sharing rebates (if necessary) will be credited to the net asset value of the applicable Program option.
   f. **General Oversight of Investment Managers and Investment Performance**. Staff will evaluate investment manager status, activity and performance. The OIC or State Treasurer may also engage independent consultants to assist in the investment manager oversight process.
   g. **Program Monitoring**. Staff will monitor plan participant activity in each Program investment option. Staff will prepare quarterly reports concerning the Program that will include the following information:
      i. **Program Profile** reports will list the value of assets held and the number of participants selecting each Program investment option. These reports will be based on information provided by the Plan Administrator; and
      ii. **Investment Performance** reports will list, relative to corresponding benchmark returns and net of all fees, costs, and administrative charges, performance for each Program investment option.
   h. Staff may delegate some or all of the reporting duties in this policy to a consultant or other, qualified contractor.
   i. These reports will be distributed to OIC members and to the Chief Investment Officer.
   j. If, after eight (8) consecutive quarters, a Program investment option comprises less than three (3) percent of total plan assets, Staff may evaluate that option for possible termination. For purposes of a termination evaluation, Staff may rely upon Plan Administrator research and share its recommendations with the State Treasurer and OIC.
   k. **Delegation.** Where Staff delegates to or otherwise engages subcontractors or other service providers to perform or assist with some or all of the foregoing Program monitoring responsibilities, such subcontractors or other service providers will act in a manner consistent with Program standards, including, but not limited to, the ability of Staff to terminate such delegation or engagement at its discretion.
   l. **Appointment and Termination of Investment Managers.** Staff will act promptly and prudently to effect decisions by the OIC to appoint or terminate Program investment managers.

~~6.~~7. **Participant Disclosure Requirements**. Staff will work with OSGP and the Plan Administrator to provide necessary information for compliance with participant disclosure requirements as described in ORS 243.450.

~~7.~~8. **Program Information Requests.** Staff will work with the Plan Administrator to provide any other requested Program information.

~~8.~~9. **Program Population Characteristics.** Staff will periodically provide the OIC with Program population characteristics for use in their evaluation of Program options and investment managers. Staff will request such information from the Plan Administrator.

~~9.~~10. **Communication with OSGP and PERSB.** Staff will periodically present the OIC with information for consideration from OSGP and the OSGP Advisory Committee, via PERSB, regarding the expressed desires of participants related to Program investment options. The duties and powers of PERSB and the OIC concerning the Program, while separate and distinct, are also complementary. This dynamic creates a need for coordination and cooperation between the two bodies. At the OIC's request, Staff will facilitate information flow between the OIC and PERSB (via OSGP). Moreover, Staff will also report in advance, whenever practicable, any change in Program investment options or investment managers to PERSB (via OSGP) in a timely manner.

~~10.~~11. **Program Review.** Staff will periodically bring current and potential investment options to the OIC for review and consideration, including those requested by the OIC.

INVESTMENT PROGRAM

The Program is open to qualified public employees on a voluntary basis, and is offered as a means by which eligible participating employees may augment their retirement savings. Eligible employees choose their own level of participation based, inter alia, on their assessment of future retirement needs. The level of assets a participating employee accumulates through Program investment is a direct function of that participant's level of earnings deferral and the investment performance of the Program options selected. As such, the appropriate investment strategy for any individual participant to accumulate retirement savings or achieve other savings objectives is a function of multiple personal factors, including but not limited to age, income, time horizon, risk tolerance, return expectations, accumulation objectives, anticipated pension and social security benefits, and other assets held outside of the Program.

The Program intends to offer a broad range of investment options with materially different risk and return characteristics. By selecting among the investment options, participants have the opportunity to diversify their balances and construct portfolios consistent with their unique individual circumstances, goals, time horizons, and risk tolerance.

The Program currently offers the following investments options:

a. **Stable Value Option**
   i. **Benchmark:** 3-Year Constant Maturity U.S. Treasury and 3 Month U.S. Treasury Bill
b. **Active Fixed Income Option**
   i. **Benchmark:** Bloomberg ~~Barclays~~ U.S. Aggregate Bond Index
c. **Large Company Value Stock Option**
   i. **Benchmark:** Russell 1000 Value Index
d. **Stock Index Option**
   i. **Benchmark:** Russell 3000 Index
e. **Socially Responsible Investment Option**
   i. **Benchmark:** ~~Russell 3000 Index~~S&P 500 Index
f. **Large Company Growth Stock Option**
   i. **Benchmark:** Russell 1000 Growth Index
g. **Active International Stock Option**
   i. **Benchmark:** MSCI All Country World Excluding U.S. (ACWI ex-U.S.) Index
h. **Passive International Stock Option**
   i. **Benchmark:** MSCI All Country World Excluding U.S. (ACWI ex-U.S.) Index
i. **Small Company Stock Option**
   i. **Benchmark:** Russell 2000 Index

j. **Target Date Retirement Funds**
    i. **Benchmark:** Each target date fund has a separate, custom benchmark based on its asset allocation.
    ii. **Rebalancing:** The fund manager is responsible for rebalancing each target date fund's asset allocation.

k. **Self-Directed Brokerage Option**

l. **Real Return Option**
    i. **Benchmark:** SSgA Real Assets Custom Blended Index and Consumer Price Index (CPI-U) + 4%

Exceptions

None.

Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

PROCEDURES and FORMS

None.

ADMINISTRATION

Feedback

Your comments are extremely important to improving the effectiveness of this policy. If you would like to comment on the provisions of this policy, you may do so by e-mailing the Service Desk from the Self-Service Portal~~Policy Analyst~~. To ensure your comments are received without delay, *please list the policy number and name in your e-mail's subject*. Your comments will be reviewed during the policy revisions process and may result in changes to the policy.

TAB 6

OSGP CONSULTANT

September 4, 2024

RFP for the OSGP Investment Consulting Services

Recommendation for approval

Jamie McCreary
Service Model Program Manager

Claire Illo
Investment Officer

OREGON STATE TREASURY

OSGP Investment Consulting Services

- Investment Policy Development/Review
- Investment Performance Monitoring
- Plan Design Consulting
- Review of Plan Services Offered
- Target Date Fund Suitability Study
- Committee Fiduciary Education
- Recordkeeper/Vendor Due Diligence
- Plan Investment Fee Benchmarking
- Quarterly Advisory Committee Meeting Attendance; Annual OIC meeting Attendance

Consultant Recommendation

Subject to the satisfactory negotiation of terms and conditions with Staff working in concert with legal counsel, the OSGP Investment Consultant search committee recommends that the OIC pursue a non-discretionary consulting contract with SageView Advisory Group beginning September 4, 2024. The Committee further recommends pursuing an initial three-year contract term with two pre-negotiated two-year extensions, available at the Council's discretion.

OREGON
STATE
TREASURY

Tobias Read
Oregon State Treasurer

16290 SW Upper Boones Ferry Road
Tigard, OR 97224

oregon.gov/treasury

Status Active PolicyStat ID 14616468

Origination	12/2010	Owner	Rex Kim: Chief Investment Officer
Last Approved	10/2023	Policy Area	Investments
Last Revised	10/2023		
Next Review	10/2024		

INV 210: Consulting Contracts

OREGON INVESTMENT COUNCIL POLICY

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INTRODUCTION & OVERVIEW

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Summary Policy Statement

This policy outlines the requirements and limitations of written contracts between the Oregon Investment Council (OIC) and external consultants.

Purpose and Goals

The goal of this policy is to establish the parameters within which the OIC may engage and enter into contractual agreements with external consultants.

Applicability

Classified represented, management service, unclassified executive service

POLICY PROVISIONS

Definitions

Placement Agent: includes any third party, affiliated or unaffiliated with an investment manager, investment advisory firm, or a general partnership, that is a party to an agreement or arrangement (whether oral or written) with an investment manager, investment advisory firm, or a general partnership for the direct or indirect payment of a Placement Fee in connection with an OIC investment.

Placement Fee: includes any compensation or payment, directly or indirectly, of a commission, finder's fee, or any other consideration or benefit paid to Placement Agent.

Policy Statements

1. The OIC shall engage consultants using written contracts. Consultants include, but are not limited to, full-service consultants and specific asset class advisors (e.g., real estate, private equity, etc.).
2. Consulting contracts shall have specified expiration dates, termination clauses and renewal/extension terms. Staff shall undertake a formal "request for proposal" (RFP) process before the end of the contract term (including any renewals or extensions) for the purpose of identifying new candidates, upgrading services, ensuring competitive pricing and acquiring any other information or benefits considered relevant to staff and the Council.
3. Consulting contracts shall be negotiated and executed in compliance with Council policy INV 207: Proposals, Solicitations, Contracts, and Agreements.
4. Consulting contracts shall expire on a date not to exceed three years from the effective date of the contract.
5. Consulting contracts shall include a "no-cause" termination clause with a maximum 90-day notice period.
6. The Council directs staff to regularly review and evaluate the work of all contractors on an annual basis.
7. Consulting contracts are limited to a) two renewals or extensions beyond the original expiration date, and b) a final expiration date no more than four years beyond the original expiration date.
8. Upon final expiration of the original contract, or whenever directed by the Council, staff shall undertake and complete an RFP process to include the following:
    a. Identification of potential consulting candidates qualified to provide the required services;
    b. Creation of an RFP which shall include, but not be limited to:
        1. Description of services requested;
        2. Description of the potential or preliminary standards required of the candidates; and
        3. Request for pricing or fee schedule information.
9. Consultants under contract with the Council shall disclose, in written recommendations delivered to the Council, any Placement Agent contact Consultants may have had in connection with such Council recommendations.

Exceptions

None.

Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

PROCEDURES and FORMS

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ADMINISTRATION

Feedback

Your comments are extremely important to improving the effectiveness of this policy. If you would like to comment on the provisions of this policy, you may do so by e-mailing the Policy Analyst. To ensure your comments are received without delay, *please list the policy number and name in your e-mail's subject*. Your comments will be reviewed during the policy revisions process and may result in changes to the policy.

Approval Signatures

Step Description	Approver	Date
Oregon Investment Council	Rex Kim: Chief Investment Officer	10/2023
	Deena Bothello: General Counsel	10/2023
	Rex Kim: Chief Investment Officer	10/2023

TAB 7

CALENDAR – FUTURE

AGENDA ITEMS

2024-25 OIC Forward Calendar and Planned Agenda Topics

October 23, 2024	Operations Annual Review OPERF, CSF Guidelines Changes OPERF Pacing Discussion SAIF Asset Allocation, Annual Review
December 4, 2024	Q3 OPERF Performance OSTF, OITP Annual Review
January 22, 2025	Public Equity Portfolio Review Private Equity Portfolio Review 2026 OIC Calendar Approval
March 5, 2025	2024 Performance Review: OPERF, CSF, SAIF Opportunity Portfolio Review
April 16, 2025	Individual Account Program (IAP) Review OSGP Annual Review Real Assets Portfolio Review Real Estate Portfolio Review
May 28, 2025	OIC-PERS Joint Session Q1 Performance Review: OPERF Fixed Income Portfolio Review: OPERF Diversifying Strategies Portfolio Review
July 16, 2025	TBD
September 3, 2025	Q2 Performance Review: OPERF, CSF

TAB 8

OPEN DISCUSSION

TAB 9

PUBLIC COMMENTS

Public comments can now be found at the OIC website at:

https://www.oregon.gov/treasury/invested-for-oregon/pages/oregon-investment-council.aspx