

# City of Ft. Lauderdale OPEB Trust and OPEB Post Retirement Pay Steps Plan

## Investment Performance Review For the Quarter Ended September 30, 2023

Client Management Team PFM Asset Management LLC

Richard Pengelly, CFA, CIMA, CTP, Managing Director Khalid Yasin, CIMA, CHP, Director Scott Sweeten, BCM, CFS, Senior Managing Consultant Sean Gannon, Senior Managing Consultant Melissa Lindman, Senior Associate 225 E. Robinson St. Suite 250 Orlando, FL 32801 407-406-5766 1735 Market Street 43rd Floor Philadelphia, PA 19103

## **Table of Contents**

- Executive Summary
- ► Financial Markets Review
- Combined OPEB

## **Executive Summary**

The City of Fort Lauderdale (the "City") OPEB Trust returned -3.37% (net of mutual fund fees) in the 3<sup>rd</sup> quarter of 2023, outperforming its policy benchmark return of -3.42% by 0.05%. In the trailing 12 months, the portfolio returned 11.67%, underperforming its 11.88% benchmark return by 0.21%. In dollar terms, the portfolio had a loss of \$1,330,280 in return on investment over the quarter and gained \$4,215,482 in the trailing 12 months.

The City's OPEB Post Retirement Pay Steps Plan returned -3.35% (net of mutual fund fees) in the 3<sup>rd</sup> quarter of 2023, outperforming its policy benchmark return of -3.42% by 0.07%. In the trailing 12 months, the portfolio returned 11.87%, underperforming its 11.88% benchmark return by 0.01%. In dollar terms, the portfolio had a loss of \$199,713 in return on investment over the quarter and gained \$625,329 in the trailing 12 months.

Domestic equity as measured by the Russell 3000 Index posted a return of -3.25% for the quarter. International equity as measured by the MSCI ACWI ex-U.S. Index underperformed their U.S. counterparts, returning -3.77% for the quarter. While the U.S. bond market, represented by the Bloomberg U.S. Aggregate Index, lost -3.23% as interest rates continued rising.

Inflation pressures remained visible in the third quarter, with headline inflation (CPI) increasing 3.7% year-over-year (YoY) in September, up from 3.0% at the end of the second quarter. However, the less volatile core reading (which excludes food and energy) shows continued cooling at 4.1% YoY in September, its slowest pace since 2021. The U.S. labor market continues to cool as the unemployment rate has risen to 3.8% in September.

As we expect uncertainty to persist into the upcoming quarters, diversification is as important as ever for long term investors who should remain focused on their strategic goals, objectives and liquidity needs. Portfolio allocations are nearly consistent with policy targets. Given that the City's goals and objectives are long-term in nature, the portfolio continues to be in line with its investment policy guidelines.



## **Multi-Asset Class Management Allocation**

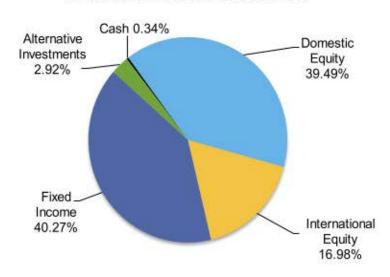
### **Current Asset Allocation**

Asset Class	Market Value	Pct (%)
Cash	\$150,668	0.34%
Domestic Equity	17,375,077	39.49%
International Equity	7,470,546	16.98%
Fixed Income	17,717,887	40.27%
Alternative Investments	1,284,583	2.92%
Total	\$43,998,759	100.0%

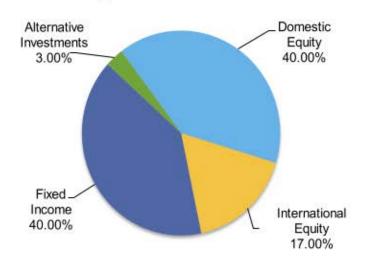
## Target Asset Allocation\*

Asset Class	Market Value	Pct (%)
Cash		0.00%
Domestic Equity	17,599,504	40.00%
International Equity	7,479,789	17.00%
Fixed Income	17,599,504	40.00%
Alternative Investments	1,319,963	3.00%
Total	43,998,759	100%

## **Current Asset Allocation**



## **Target Asset Allocation**



**Markets & Economy** 

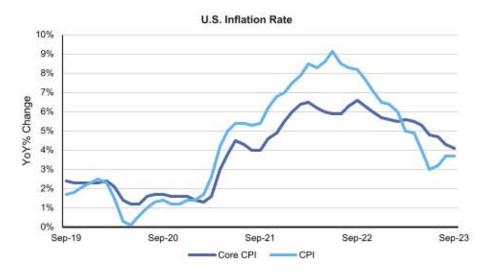
Multi-Asset Class Management

	QTD	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
DOMESTIC EQUITY							
S&P 500	-3.27%	13.07%	21.62%	10.15%	9.92%	12.24%	11.91%
Russell 3000 Index	-3.25%	12.39%	20.46%	9.38%	9.14%	11.64%	11.28%
Russell 1000 Value Index	-3.16%	1.79%	14.44%	11.05%	6.23%	7.92%	8.45%
Russell 1000 Growth Index	-3.13%	24.98%	27.72%	7.97%	12.42%	15.64%	14.48%
Russell Midcap Index	-4.68%	3.91%	13.45%	8.09%	6.38%	8.68%	8.98%
Russell 2500 Index	-4.78%	3.59%	11.28%	8.39%	4.55%	7.96%	7.90%
Russell 2000 Index	-5.13%	2.54%	8.93%	7.16%	2.40%	6.62%	6.65%
Russell 2000 Value Index	-2.96%	-0.53%	7.84%	13.32%	2.59%	5.94%	6.19%
Russell 2000 Growth Index	-7.32%	5.24%	9.59%	1.09%	1.55%	6.77%	6.72%
INTERNATIONAL EQUITY	11012-31199-01					Salalasalis	
MSCI EAFE (Net)	-4.11%	7.08%	25.65%	5.75%	3.24%	5.29%	3.82%
MSCI AC World Index (Net)	-3.40%	10.06%	20.80%	6.89%	6.46%	8.60%	7.56%
MSCI AC World ex USA (Net)	-3.77%	5.34%	20.39%	3.74%	2.58%	4.73%	3.35%
MSCI AC World ex USA Small Cap (Net)	-1.70%	5.03%	19.01%	4.01%	2.58%	4.70%	4.35%
MSCI EM (Net)	-2.93%	1.82%	11.70%	-1.73%	0.55%	3.22%	2.07%
ALTERNATIVES							
FTSE NAREIT Equity REIT Index	-7.13%	-2.14%	2.99%	5.76%	2.77%	2.61%	5.96%
FTSE EPRA/NAREIT Developed Index	-5.59%	-4.10%	2.72%	1.54%	-0.29%	0.65%	2.97%
Bloomberg Commodity Index Total Return	4.71%	-3.44%	-1.30%	16.23%	6.13%	4.68%	-0.75%
FIXED INCOME							
Blmbg. U.S. Aggregate	-3.23%	-1.21%	0.64%	-5.21%	0.10%	-0.09%	1.13%
Blmbg. U.S. Government/Credit	-3.00%	-0.86%	0.93%	-5.32%	0.41%	0.09%	1.31%
Blmbg. Intermed. U.S. Government/Credit	-0.83%	0.65%	2.20%	-2.93%	1.02%	0.62%	1.27%
Blmbg. U.S. Treasury: 1-3 Year	0.71%	1.69%	2.44%	-0.92%	1.03%	0.77%	0.79%
Blmbg. U.S. Corp: High Yield	0.46%	5.86%	10.28%	1.76%	2.96%	3.80%	4.24%
Credit Suisse Leveraged Loan index	3.37%	9.91%	12.47%	5.91%	4.31%	4.64%	4.33%
ICE BofAML Global High Yield Constrained (USD)	0.08%	5.37%	12.71%	-0.14%	1.81%	2.84%	3.29%
Blmbg. Global Aggregate Ex USD	-4.00%	-3.20%	3.39%	-8.39%	-3.10%	-2.77%	-1.73%
JPM EMBI Global Diversified	-2.23%	1.76%	10.01%	-4.56%	-0.35%	0.11%	2.47%
CASH EQUIVALENT							
90 Day U.S. Treasury Bill	1.31%	3.60%	4.47%	1.70%	1.72%	1.54%	1.10%

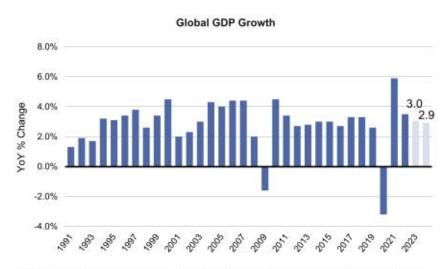
Source: Investment Metrics. Returns are expressed as percentages, Please refer to the last page of this document for important disclosures relating to this material.

#### THE ECONOMY

- ▶ In the second quarter, U.S. gross domestic product (GDP) grew at an annualized rate of 2.1%, in line with 2023 growth estimates by the Federal Reserve (Fed) despite persistent inflation and continued rate hikes. This GDP growth rate is below global GDP growth estimates of 3.0%, which have been buoyed by emerging markets (EM) and developing economies.
- ▶ The U.S. labor market continues to cool as the unemployment rate has risen to 3.8% in September. The number of job openings to unemployed ratio fell to 1.51, down from its high of 2.0 in 2022 but not yet closing in on the goal of 1.00.
- ▶ Inflation pressures remained visible in the third quarter, with headline inflation (CPI) increasing 3.7% year-over-year (YoY) in September, up from 3.0% at the end of the second quarter. However, the less volatile core reading (which excludes food and energy) shows continued cooling at 4.1% YoY in September, its slowest pace since 2021.
- ▶ Through the strong labor market and continued growth, consumer confidence saw relative improvement. The Michigan Consumer Sentiment survey ended the quarter at 68.1, up 8.4 year-to-date, though below the long-term average of 85. Consumers savings and incomes remain strong, but debt levels and defaults are increasing.

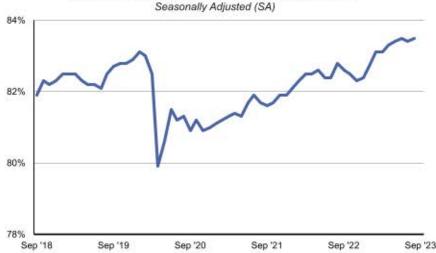


Source: Bureau of Labor Statistics.



Source: IMF. Dark blue bars indicate actual numbers; light blue bars indicate forecasted estimates.

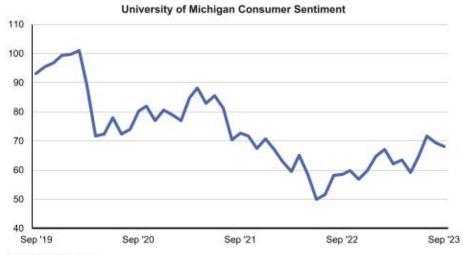
## U.S. Prime Age Labor Force Participation Rate 25-54 Yrs.



Source: Bureau of Labor Statistics.

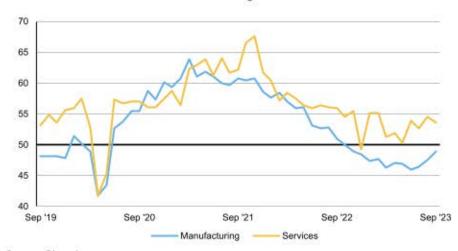
#### WHAT WE'RE WATCHING

- ▶ After a pause in June, the third quarter brought one more rate hike as the resiliency of economic activity in the U.S. prompted the Fed to raise the target for the federal funds rate by 25 basis points (bps). Looking forward, the median dot for 2024 and 2025 were raised to 5.125% and 3.875%, with increased expectations of a 'higher-for-longer' policy. The European Central Bank (ECB) diverged from Fed policy slightly with two hikes during the quarter, marking a full year of consecutive rate hikes, as they continue to rein in inflation.
- ▶ The U.S. saw some recovery in manufacturing during the quarter as S&P Global U.S. Manufacturing rose to 49.8, just fractionally contractionary, as supply conditions improved and employment rose. Services weakened over the quarter, but remain expansionary at 50.1. The HCOB Eurozone manufacturing PMI, by comparison, ended the quarter in sharply contractionary territory for the fifteenth consecutive month, at 43.4. The services PMI also turned contractionary ending at 48.7.
- ► China's manufacturing and services sectors saw continued growth but with slowing momentum through the quarter as the S&P Global China Manufacturing and Services readings dipped to 50.9 and 50.2, respectively. Looking forward, the expected increased domestic tourism for "golden week" may provide a short-term boost to demand, though whether that can be sustained remains to be seen.



Source: Bloomberg.

#### U.S. ISM Manufacturing & Services PMI



Source: Bloomberg.



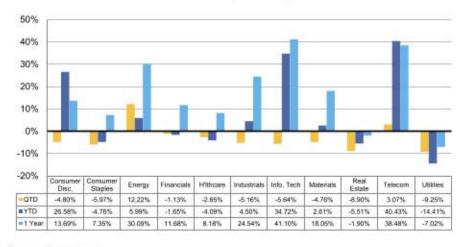
#### QUARTERLY MARKET SUMMARY

#### DOMESTIC EQUITY

- ► The S&P 500 Index (S&P) posted a return of -3.27% for the third quarter of 2023. As of September 30, 2023, the trailing 1-year return for the index was 21.59%.
- ▶ Over the quarter, extreme market concentration continued to play a factor for large-cap stocks, as evidenced by the underperformance of the S&P 500 Equal Weight Index versus the S&P 500 Market Cap-Weighted Index.
- ▶ Within the S&P, only two of the 11 Global Industry Classification Standard (GICS) sectors posted positive gains for the quarter: Energy (12.22%) and Communication Services (3.07%). The worst-performing sectors over the quarter were Utilities (-9.25%), Real Estate (-8.90%), and Consumer Staples (-5.97%).
- Small-caps, as represented by the Russell 2000 Index, returned -5.13% during the quarter, lagging mid- and large-caps. The Russell Mid Cap Index returned -4.68% for the quarter, while the Russell 1000 Index returned -3.16%.
- ▶ According to FactSet Earnings Insight (as of September 29, 2023), the expected YoY earnings growth rate for the S&P for the third quarter is -0.1%. If expectations become- a reality, it will be the fourth consecutive quarterly decline for the index.
- ▶ As of the end of the quarter, the S&P 500 P/E ratio was 20.96, below its 5-year average of 21.74. By comparison, the S&P 600, which represents small-cap stocks, had a P/E ratio of 14.52, well below its 5-year average of 17.22.

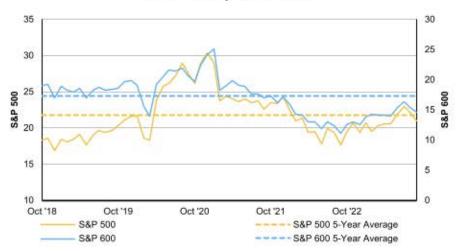
#### S&P 500 Index Performance by Sector

Periods Ended September 30, 2023



Source: Bloomberg.

#### P/E Ratios of Major Stock Indices\*



Source: Bloomberg.

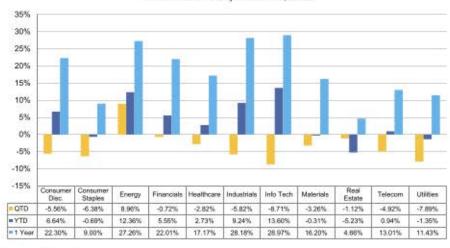
\*P/E ratios are calculated based on one-year forward estimates and adjusted to include only positive earnings results for consistency.

#### NON-U.S. EQUITY

- Markets outside of the U.S., as measured by the MSCI ACWI ex-U.S. Index, slightly underperformed their U.S. counterparts, returning -3.77% for the quarter.
- ▶ There were 10 out of the 11 sectors that posted negative returns for the quarter, with Information Technology (-8.71%), Utilities (-7.89%), and Consumer Staples (-6.38%) being the worst-performing sectors. Energy (+8.96%) was the best and only sector with a positive return for the quarter. The sector benefited from oil prices soaring on tighter supplies.
- ► Emerging markets (EM), as represented by MSCI Emerging Market Index, outperformed Developed ex-U.S. Markets, represented by the MSCI EAFE Index, returning -2.93% versus -4.11% for the guarter.
- ▶ MSCI Japan (-1.55%) outperformed the MSCI EAFE Index. Japanese equities continue to benefit from positive investor sentiment as better corporate governance practices and attractive valuation brighten earnings outlook. Of the five largest-weighted countries in the index, Germany (-7.62%) was the worst performer due to gloomy economic data and unfavorable demographics.
- ▶ Within EM, MSCI India (1.84%) was a strong performer. The country's economic growth remains strong despite higher rates. MSCI China (-2.41%) outperformed the index as the government reaffirmed stimulative policies, which fueled a sharp rebound in Chinese equities during the month of July.
- Small-caps, as represented by MSCI ACWI ex-U.S. Small Cap Index, outperformed within the international equity markets, returning -1.70% for the quarter.
- Non-U.S. equities remain undervalued relative to their long-term average across international equity markets. As of September 30, 2023, MSCI EAFE ended the quarter with a P/E ratio of 13.39, much lower than its 5-year average of 15.98. Similarly, MSCI EM's P/E stood at 12.99 versus a 5-year average of 13.12.

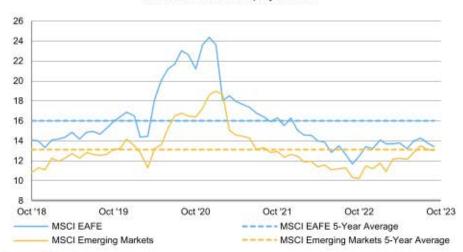
#### MSCI ACWI ex-U.S. Sectors

Periods Ended September 30, 2023



Source: Bloomberg.

#### P/E Ratios of MSCI Equity Indices\*



Source: Bloomberg.

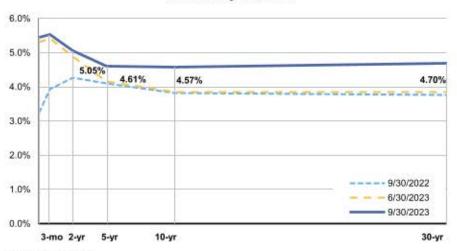
\*P/E ratios are calculated based on one-year forward estimates and adjusted to include only positive earnings results for consistency.

## Multi-Asset Class Management

#### **FIXED INCOME**

- ► The U.S. bond market represented by the Bloomberg U.S. Aggregate (Aggregate) Index fell sharply during the third quarter to -3.23% as rates continued rising. The trailing 1-year period return is 0.64%.
- ▶ The Bloomberg U.S. Treasury Index closed the quarter with a loss of -3.06%. During the period, the Federal Open Market Committee (FOMC) raised interest rates by a quarter point in July, but paused at the September meeting. Long rates rose on several factors, including higher overall treasury issuance, less foreign demand, stickier energy-related inflation, and Federal debt and deficit size. The latter led to Fitch downgrading the U.S. Government rating. The curve remains inverted as the fed funds rate is now targeted at 5.5%. The 10-year climbed 78 bps in the quarter, ending at 4.59%.
- ▶ Corporate credit had mixed results for the quarter. The investment-grade Bloomberg U.S. Corporate (IG Corp) Index declined 3.09%, while high-yield bonds, as represented by the Bloomberg U.S. Corporate High-Yield (HY) Index, posted a gain of 0.46%. Although spreads didn't widen, IG Corp sold off from duration. HY saw very mild spread widening but was again led by the lowest quality Caa/CCC-rated cushioned by double-digit yields.
- ➤ The fixed-rate mortgage market, as measured by the Bloomberg U.S. Mortgage-Backed Securities (MBS) Index, lost 4.05%, hurt by continued duration extension on higher rates. On the commercial side, the Bloomberg U.S. Agency CMBS Index declined by 1.91%.
- ► EM USD sovereign bonds, as represented by the JP Morgan EMBI Global Diversified Index, lost 2.23%.

#### U.S. Treasury Yield Curve



Source: Bloomberg.

#### Returns for Fixed-Income Segments

Periods Ended September 30, 2023



Source: Bloomberg.

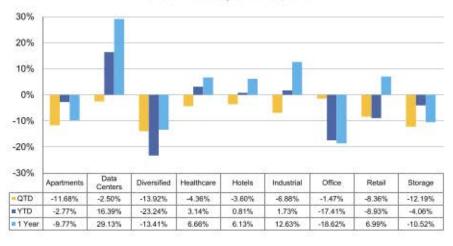
#### QUARTERLY MARKET SUMMARY

#### **ALTERNATIVES**

- ▶ REITs, as measured by the FTSE NAREIT Equity REITs Index, fell 7.13% in the third quarter of 2023, compared to a 2.62% increase in the prior quarter. All major sectors posted losses during the quarter as higher interest rates and broader economic concerns have spooked investors. The best performers were the Office and Data Center sectors, which posted returns of -1.47% and -2.50%, respectively. The worst performers during the quarter were the Diversified and Self-Storage sectors, which posted returns of -13.92% and -12.19%, respectively.
- ▶ Commodity futures, represented by the Bloomberg Commodity Total Return Index, gained 4.71% in the third quarter of 2023, compared to a 2.56% decline in the prior quarter. The U.S. Dollar Index (DXY) gained 3.17% during the same period. The price of gold fell 3.69% in Q3, marking the second consecutive quarter of declines for the precious metal. Gold finished the quarter at \$1,848.63 per ounce, down from \$1,919.35 at the end of the previous quarter. The West Texas Intermediate (WTI) Crude Oil spot price gained 28.53% from \$70.64 to \$90.79 per barrel as news of OPEC cuts and tighter supplies outweighed headwinds posed by a strengthening U.S. dollar and softening economic data.
- Private real estate, as measured by the NCREIF Property Index, fell -1.98% in the second quarter of 2023, resulting in a -6.60% return over the twelve-month period ended June 2023. This was the third consecutive quarter of negative returns for the index, underscoring the weakness in private property values. Hotel properties were again the top performers, with a total return of 4.00% in the second quarter, comprised of 1.94% in income return and 2.06% in appreciation return. Office properties were again the worst performers with a total return of -5.79%, comprised of 1.21% in income return and -7.00% in appreciation return.

#### **FTSE NAREIT Sectors**

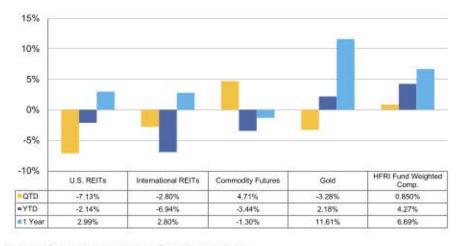
Periods Ended September 30, 2023



Source: Bloomberg.

#### Returns for Liquid and Semi-Liquid Alternative Assets

Periods Ended September 30, 2023



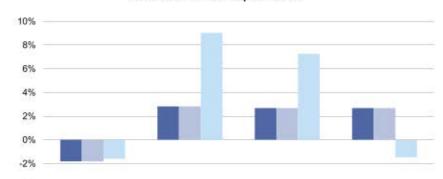
Sources: Bloomberg and Hedge Fund Research, Inc.

#### Multi-Asset Class Management

## **ALTERNATIVES** (continued)

- ▶ In the second quarter of 2023, infrastructure funds raised only \$3.72 billion, although this is higher than the amount raised during the prior quarter. Almost all of this capital was raised by opportunistic infrastructure funds. Real assets dry powder has also fallen from previous years and stands at \$254.85 billion as of Q4 2022. Despite macroeconomic headwinds, the asset class continues to remain attractive due to its ability to provide moderate but consistent returns during periods of volatility, inflation and recession. According to PitchBook, infrastructure funds posted a return of 2.83% in Q1 2023. The asset class has generated an annualized return of 10.49% for the five years ended Q1 2023.
- ▶ In the second quarter of 2023, private debt fundraising amounted to \$56.38 billion, up from the prior quarter. Private debt dry powder has fallen to \$434.39 billion, although it remains above the long-term average. The asset class has performed well relative to public fixed income and may see more opportunities emerge in the near term as tightening lending standards push banks out of the private lending space. According to the Cliffwater Direct Lending Index, U.S. middle market loans, a proxy for private debt, posted a return of 2.81% in Q2 2023. The asset class has also generated an annualized return of 8.47% for the five years ended Q2 2023.
- ▶ In the second quarter of 2023, private capital fundraising was led by private equity funds, which closed on \$114.01 billion. Global private equity dry powder, which accounts for the bulk of private capital dry powder, remains high at \$1.32 trillion as of December 2022. Recent private equity performance has weakened as a result of high interest rates and a slowing economy; however, longer-term performance relative to public equities remains strong. According to Cambridge Associates, U.S. private equity posted a return of 2.69% in Q1 2023. The asset class has generated an annualized return of 18.47% for the five years ended Q1 2023.
- ▶ Hedge fund returns were positive quarter-to-date through August 2023, with the HFRI Fund Weighted Composite Index returning 1.05%. During the same period, the HFRI Macro (Total) Index returned 0.11%. The HFRI Equity Hedge (Total) Index and the HFRI Fund of Funds Index returned 0.85% and 0.95%, respectively.

#### Returns for Private Capital Assets

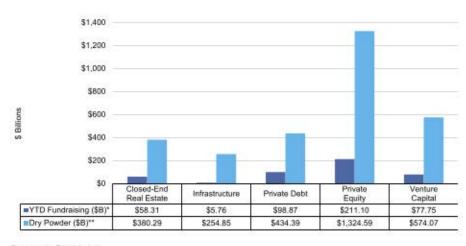


-4%	Private Real Estate	Infrastructure	Private Debt	Private Equity
■QTD	-1.81%	2.83%	2.69%	2.69%
■YTD	-1.81%	2.83%	2.69%	2.69%
1 Year	-1.60%	9.02%	7.26%	-1.46%

Source: NCREIF, PitchBook, Cliffwater, Cambridge Associates, manual inputs.

As of March 31, 2023 - most recent period for which all performance data is available.

#### Private Capital Fundraising & Dry Powder



Sources: Pitchbook

<sup>\*</sup> Total capital raised in 2023 as of June 30, 2023 - most recent period for which ALL fundraising data is available.

<sup>\*\*</sup> Cumulative dry powder as of most recent - December 31, 2022.

**Total Fund - OPEB Trust** 

## Asset Allocation & Performance

	Allocation	Allocation				Performanc	e(%)			
	Market Value (\$)	%	Current Quarter	Year To Date	Trailing 12-months	Fiscal Year To Date	3 Years	5 Years	Since Inception	Inception Date
Total Fund	38,284,499	100.00	-3.37	5.28	11.67	11.67	2.64	4.04	4.71	10/01/2017
Blended Benchmark			-3.42	5.26	11.88	11.88	2.57	4.63	5.32	10/01/2017
Domestic Equity	15,140,505	39.55	-3.26	12.26	20.28	20.28	9.16	9.11	9.88	06/01/2018
Vanguard Total Stock Mkt Index Fund	15,140,505	39.55	-3.29	12.35	20.38	20.38	9.24	N/A	10.66	10/01/2019
Russell 3000 Index			-3.25	12.39	20.46	20.46	9.38	9.14	10.76	10/01/2019
International Equity	6,528,891	17.05	-3.86	5.22	20.65	20.65	3.95	2.27	2.11	06/01/2018
Vanguard Total Intl Stock Index Fund	6,528,891	17.05	-4.02	5.05	20.46	20.46	3.86	N/A	3.84	10/01/2019
MSCI AC World ex USA (Net)			-3.77	5.34	20.39	20.39	3.74	2.58	3.55	10/01/2019
Real Estate	1,118,408	2.92	-8.75	-5.59	-1.51	-1.51	2.24	2.41	2.36	06/01/2018
Vanguard Real Estate Index Fund	1,118,408	2.92	-8.53	-5.35	-1.27	-1.27	2.33	2.44	2.38	06/01/2018
FTSE NAREIT Equity REIT Index			-7.13	-2.14	2.99	2.99	5.76	2.77	3.65	06/01/2018
Fixed Income	15,486,341	40.45	-3.10	-0.94	0.71	0.71	-5.21	-0.35	-0.15	06/01/2018
Vanguard Total Bond Mkt Index Fund	15,486,341	40.45	-3.08	-0.92	0.73	0.73	-5.21	N/A	-2.29	10/01/2019
Blmbg. U.S. Aggregate			-3.23	-1.21	0.64	0.64	-5.21	0.10	-2.30	10/01/2019
Cash Equivalent	10,352	0.03	1.19	3.38	4.22	4.22	1.63	1.59	1.57	06/01/2018
Allspring 100% Treasury Money Market	10,352	0.03	1.19	3.38	4.22	4.22	1.63	1.55	1.53	09/01/2018

## Financial Reconciliation

Current Quarter				
	Market Value As of 07/01/2023	Net Flows	Return On Investment	Market Value As of 09/30/2023
Total Fund	40,423,078	(808,300)	(1,330,280)	38,284,499

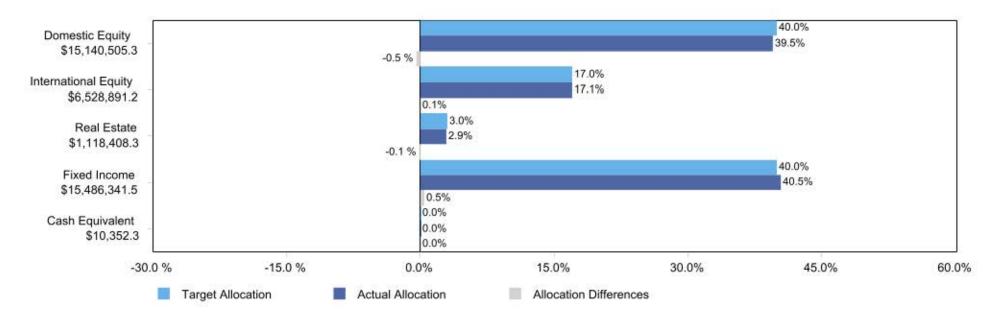
YTD				
	Market Value As of 01/01/2023	Net Flows	Return On Investment	Market Value As of 09/30/2023
Total Fund	38,041,275	(1,808,452)	2,051,675	38,284,499

Fiscal Year To Date				
	Market Value As of 10/01/2022	Net Flows	Return On Investment	Market Value As of 09/30/2023
Total Fund	35,480,439	(1,411,423)	4,215,482	38,284,499

1 Year	Market Value As of 10/01/2022	Net Flows	Return On Investment	Market Value As of 09/30/2023
Total Fund	35,480,439	(1,411,423)	4,215,482	38,284,499

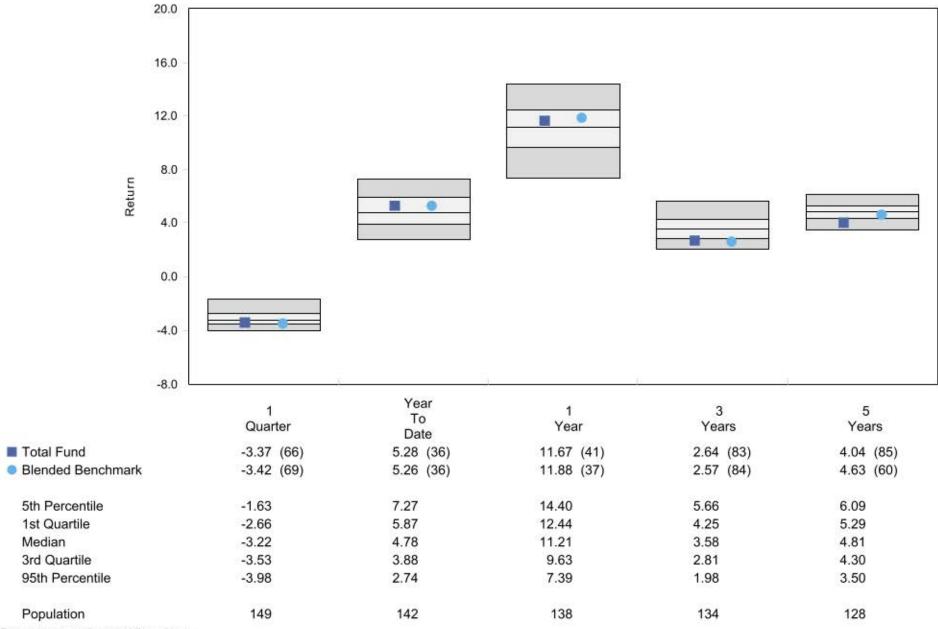
## Asset Allocation Compliance - Total Fund

	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Fund	100.0	100.0	0.0
Domestic Equity	39.5	40.0	-0.5
International Equity	17.1	17.0	0.1
Real Estate	2.9	3.0	-0.1
Fixed Income	40.5	40.0	0.5
Cash Equivalent	0.0	0.0	0.0



Plan Sponsor Peer Group Analysis

All Public Plans - 30% - 50% Fixed Income



Parentheses contain percentile rankings.
Calculation based on monthly periodicity.
Returns are net of fees and are expressed as percentages.

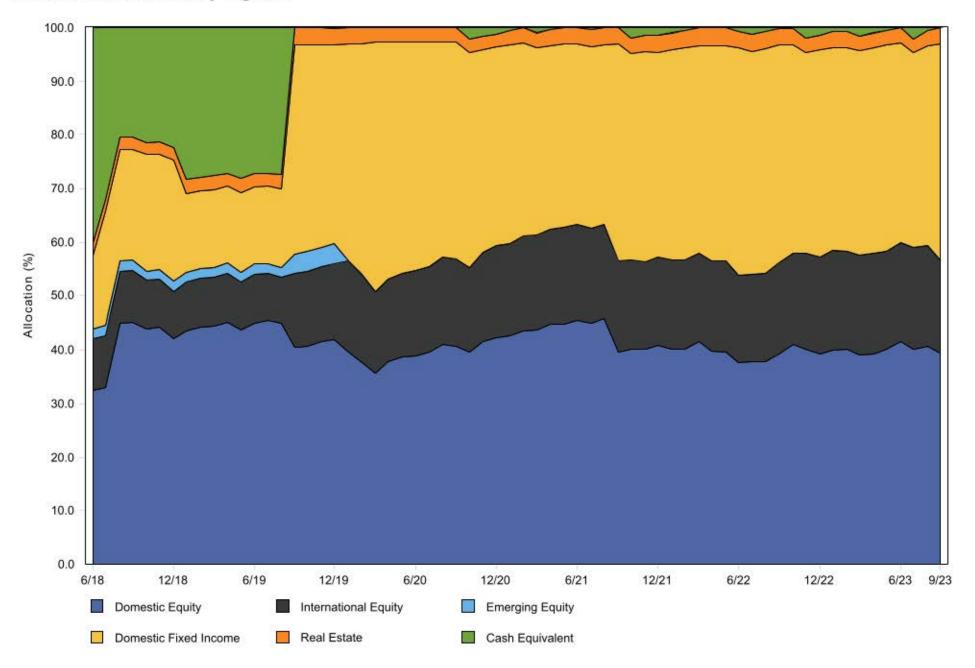
## Historical Hybrid Composition

Benchmark Allocation	Weight (%)
Oct-2017	
Russell 3000 Index	55.0
Blmbg. U.S. Aggregate	45.0
Jul-2019	
Russell 3000 Index	40.0
MSCI AC World ex USA (Net)	17.0
FTSE NAREIT Equity REIT Index	3.0
Blmbg. U.S. Aggregate	40.0

Investment Management Fee Review

	Fee Schedule	Market Value As of 09/30/2023 (\$)	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Vanguard Total Stock Mkt Index Fund	0.04 % of Assets	15,140,505	39.55	6,056	0.04
Vanguard Total Intl Stock Index Fund	0.11 % of Assets	6,528,891	17.05	7,182	0.11
Vanguard Real Estate Index Fund	0.12 % of Assets	1,118,408	2.92	1,342	0.12
Vanguard Total Bond Mkt Index Fund	0.05 % of Assets	15,486,341	40.45	7,743	0.05
Allspring 100% Treasury Money Market	0.20 % of Assets	10,352	0.03	21	0.20
Total Fund		38,284,499	100.00	22,344	0.06

## Historical Asset Allocation by Segment



## **Historical Statistics**

1 Year										
	Return	Standard Deviation	Sharpe Ratio	Alpha	Beta	Tracking Error	Information Ratio	Up Market Capture	Down Market Capture	Maximum Drawdown
Total Fund	11.67	11.33	0.64	-0.44	1.02	0.42	-0.37	101.15	103.57	-5.48
Blended Benchmark	11.88	11.06	0.67	0.00	1.00	0.00	N/A	100.00	100.00	-5.48
3 Years										
	Return	Standard Deviation	Sharpe Ratio	Alpha	Beta	Tracking Error	Information Ratio	Up Market Capture	Down Market Capture	Maximum Drawdown
Total Fund	2.64	12.07	0.14	0.08	1.00	0.50	0.13	101.08	100.88	-21.01
Blended Benchmark	2.57	12.10	0.13	0.00	1.00	0.00	N/A	100.00	100.00	-21.02
5 Years		1.00000				1 mm - 4		Acres Co		
	Return	Standard Deviation	Sharpe Ratio	Alpha	Beta	Tracking Error	Information Ratio	Up Market Capture	Down Market Capture	Maximum Drawdown
Total Fund	4.04	12.01	0.25	-0.51	0.99	0.72	-0.82	98.15	101.48	-21.01
Blended Benchmark	4.63	12.16	0.29	0.00	1.00	0.00	N/A	100.00	100.00	-21.02
Since Inception							- 414	1		
	Return	Standard Deviation	Sharpe Ratio	Alpha Be	ta Tracki Erro		Market	Down Market Capture	Maximum Drawdown	Inception Date
Total Fund	4.71	11.19	0.32	-0.52 0.9	99 1.0	00 -0	.59 97.81	101.43	-21.01	10/01/2017
Blended Benchmark	5.32	11.28	0.37	0.00 1.0	0.0	1 00	N/A 100.00	100.00	-21.02	10/01/2017

Total Fund - OPEB Post Retirement Pay Steps Plan

## Asset Allocation & Performance

	Allocati	on		Performance(%)						
	Market Value (\$)	%	Current Quarter	Year To Date	Trailing 12-months	Fiscal Year To Date	3 Years	5 Years	Since Inception	Inception Date
Total Fund	5,714,264	100.00	-3.35	5.47	11.87	11.87	1.91	N/A	3.66	10/01/2019
Blended Benchmark			-3.42	5.26	11.88	11.88	2.57	N/A	4.21	10/01/2019
Domestic Equity	2,234,572	39.11	-3.18	12.48	20.51	20.51	9.63	N/A	10.95	10/01/2019
Vanguard Total Stock Market Index	2,234,572	39.11	-3.29	12.35	20.37	20.37	9.24	N/A	10.65	10/01/2019
Russell 3000 Index			-3.25	12.39	20.46	20.46	9.38	9.14	10.76	10/01/2019
International Equity	941,655	16.48	-3.89	5.19	20.62	20.62	4.06	N/A	3.99	10/01/2019
Vanguard Total International Stock Index Fund	941,655	16.48	-4.02	5.05	20.46	20.46	3.87	N/A	3.85	10/01/2019
MSCI AC World ex USA (Net)			-3.77	5.34	20.39	20.39	3.74	2.58	3.55	10/01/2019
Real Estate	166,175	2.91	-8.53	-5.35	-1.27	-1.27	2.49	N/A	-1.39	10/01/2019
Vanguard Real Estate Index Fund	166,175	2.91	-8.53	-5.35	-1.27	-1.27	2.33	N/A	-1.51	10/01/2019
FTSE NAREIT Equity REIT Index			-7.13	-2.14	2.99	2.99	5.76	2.77	-0.81	10/01/2019
Fixed Income	2,231,546	39.05	-3.07	-0.90	0.72	0.72	-5.21	N/A	-2.29	10/01/2019
Vanguard Total Bond Market Index	2,231,546	39.05	-3.09	-0.93	0.72	0.72	-5.21	N/A	-2.29	10/01/2019
Blmbg. U.S. Aggregate			-3.23	-1.21	0.64	0.64	-5.21	0.10	-2.30	10/01/2019
Cash Equivalent	140,316	2.46	0.88	3.13	3.97	3.97	1.52	N/A	1.29	10/01/2019
Allspring 100% Treasury Money Market	140,316	2.46	0.88	3.13	3.97	3.97	1.52	N/A	1.29	10/01/2019
ICE BofA 3 Month U.S. T-Bill			1.31	3.60	4.47	4.47	1.70	1.72	1.55	10/01/2019

## Financial Reconciliation

Current Quarter				
	Market Value As of 07/01/2023	Net Flows	Return On Investment	Market Value As of 09/30/2023
Total Fund	6,039,314	(125,337)	(199,713)	5,714,264

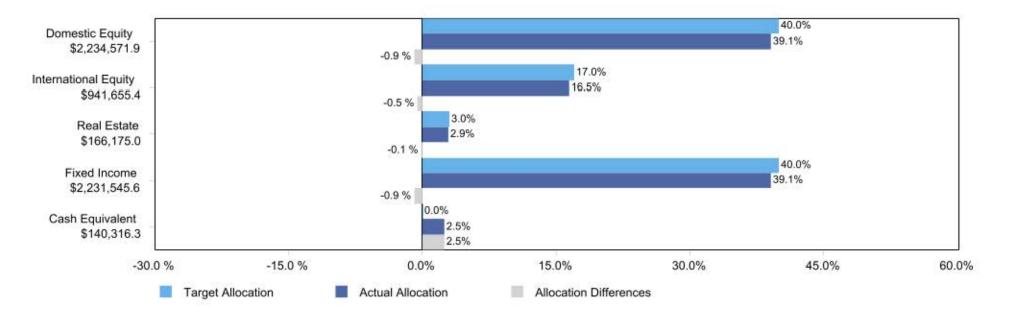
YTD				
	Market Value As of 01/01/2023	Net Flows	Return On Investment	Market Value As of 09/30/2023
Total Fund	5,534,179	(127,041)	307,127	5,714,264

Fiscal Year To Date				
	Market Value As of 10/01/2022	Net Flows	Return On Investment	Market Value As of 09/30/2023
Total Fund	5,216,771	(127,836)	625,329	5,714,264

1 Year				
	Market Value As of 10/01/2022	Net Flows	Return On Investment	Market Value As of 09/30/2023
Total Fund	5,216,771	(127,836)	625,329	5,714,264

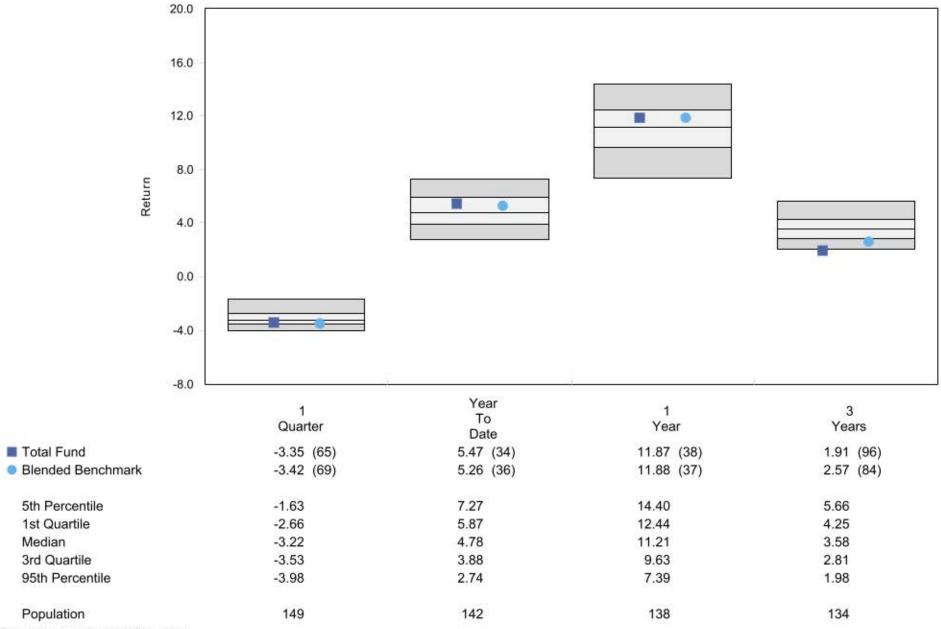
## Asset Allocation Compliance - Total Fund

	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Fund	100.0	100.0	0.0
Domestic Equity	39.1	40.0	-0.9
International Equity	16.5	17.0	-0.5
Real Estate	2.9	3.0	-0.1
Fixed Income	39.1	40.0	-0.9
Cash Equivalent	2.5	0.0	2.5



Plan Sponsor Peer Group Analysis

All Public Plans - 30% - 50% Fixed Income

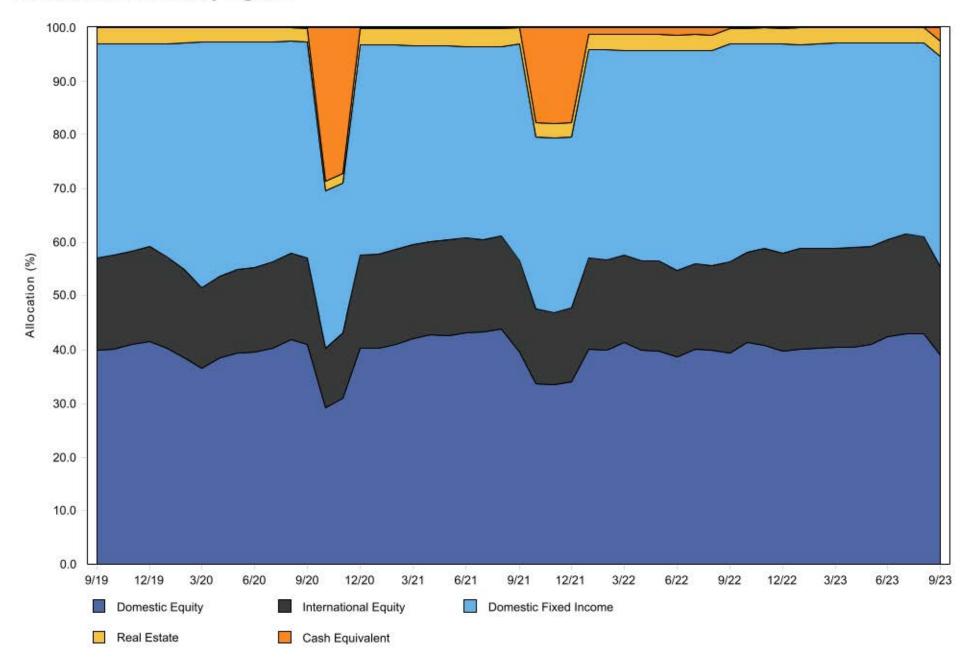


Parentheses contain percentile rankings. Calculation based on monthly periodicity. Returns are net of fees and are expressed as percentages. Historical Hybrid Composition

Benchmark Allocation	Weight (%)
Oct-2019	
Russell 3000 Index	40.0
MSCI AC World ex USA (Net)	17.0
FTSE NAREIT Equity REIT Index	3.0
Blmbg. U.S. Aggregate	40.0



Historical Asset Allocation by Segment



## **Historical Statistics**

1 Year	Return	Standard Deviation	Sharp Ratio		Alpha	Beta	Tracking Error	Information Ratio	Up Market Capture	Down Market Capture	Maximum Drawdown
Total Fund	11.87	11.44	0.65	5 .	-0.37	1.03	0.55	0.06	102.30	104.27	-5.48
Blended Benchmark	11.88	11.06	0.67	7	0.00	1.00	0.00	N/A	100.00	100.00	-5.48
3 Years	Return	Standard Deviation	The second secon		Alpha	Beta	Tracking Error	Information Ratio	Up Market	Down Market	Maximum Drawdown
Total Fund	1.91	11.59	0.08	2	-0.54	0.95	1.57	-0.45	Capture 95.48	Capture 99.04	-20.36
Blended Benchmark	2.57	12.10	0.13		0.00	1.00	0.00	N/A	100.00	100.00	-21.02
Since Inception											
	Return	Standard Deviation	Sharpe Ratio	Alpha	Beta	Tracking Error	g Informa Ratio	IVI STREAM	Down Market Capture	Maximum Drawdown	Inception Date
Total Fund	3.66	12.13	0.23	-0.37	0.96	1.40	-0.4	2 95.97	98.51	-20.36	10/01/201
Blended Benchmark	4.21	12.62	0.27	0.00	1.00	0.00	N/	A 100.00	100.00	-21.02	10/01/201

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