



Operating Engineers Local No. 77 Pension & Trust Funds

Master Consulting Services Report

**Period Ended
September 30, 2023**

TABLE OF CONTENTS

Page 03	Market Commentary
Page 27	Pension Fund – MCS Commentary, Recommendations, and Compliance Summary
Page 104	Trust Fund – MCS Commentary, Recommendations, and Compliance Summary
Page 137	Glossary of Investment Terminology

Market Discussion

3Q | 2023



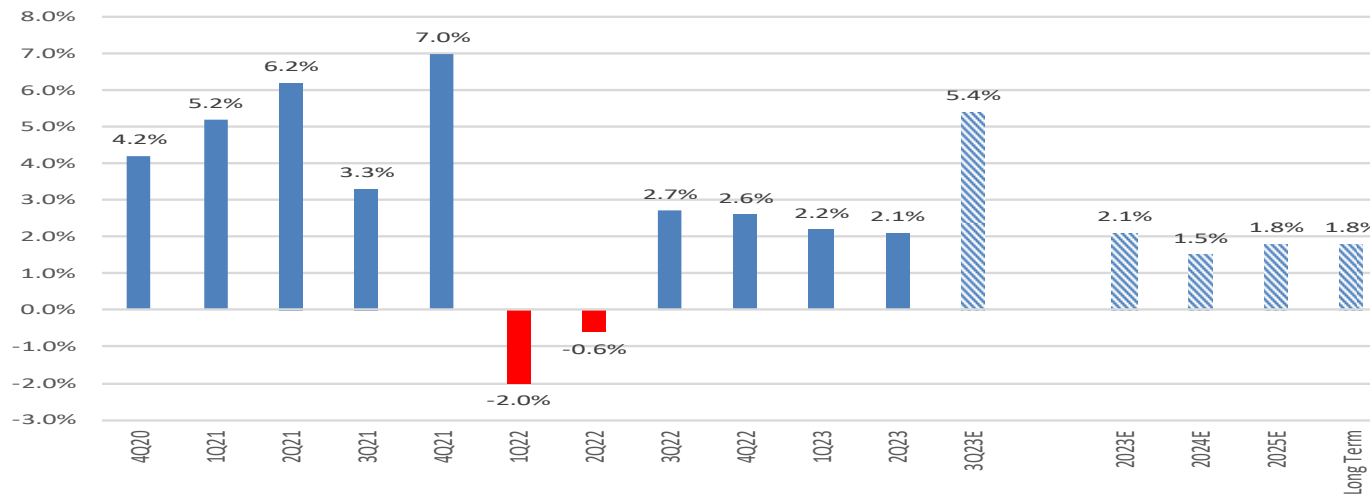
Financial Market Performance

Periods Ending September 30, 2023

Strategy	Sector	Index	QTR	YTD	2022	2021	2020	2019	2018	2017	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
Stocks	US Large Cap	S&P 500	-3.3%	13.1%	-18.1%	28.7%	18.4%	31.5%	-4.4%	21.8%	21.6%	10.1%	9.9%	11.9%	9.7%
	US Small Cap	Russell 2000	-5.1%	2.5%	-20.5%	14.8%	19.9%	25.5%	-11.0%	14.6%	8.9%	7.1%	2.4%	6.6%	8.1%
	All Country	MSCI All Country World (net)	-3.4%	10.1%	-18.4%	18.5%	16.3%	26.6%	-9.4%	24.0%	20.8%	6.9%	6.5%	7.6%	7.7%
	Non-US Developed	MSCI EAFE (net)	-4.1%	7.1%	-14.5%	11.3%	7.8%	22.0%	-13.8%	25.0%	25.6%	5.8%	3.2%	3.8%	5.9%
	Emerging Markets	MSCI EM (net)	-2.9%	1.8%	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.7%	-1.7%	0.6%	2.1%	7.3%
	Int'l Small Cap	MSCI EAFE Small Cap (net)	-3.5%	1.8%	-21.4%	10.1%	12.3%	25.0%	-17.9%	33.0%	17.9%	1.1%	0.8%	4.3%	7.2%
Bonds	Treasury	Bloomberg US Govt	-3.0%	-1.4%	-12.3%	-2.3%	7.9%	6.8%	0.9%	2.3%	-0.7%	-5.7%	-0.0%	0.7%	2.4%
	Broad Market	Bloomberg Aggregate	-3.2%	-1.2%	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	0.6%	-5.2%	0.1%	1.1%	2.8%
	Intermediate	Bloomberg Gov/Credit Int.	-0.8%	0.7%	-8.2%	-1.4%	6.4%	6.8%	0.9%	2.1%	2.2%	-2.9%	1.0%	1.3%	2.7%
	High Yield	Bloomberg HY BaB 2% IC	0.2%	5.0%	-10.6%	4.6%	7.7%	15.2%	-1.9%	6.9%	9.8%	1.3%	3.3%	4.3%	6.1%
	Short Duration HY	ICE BofA 1-3 Yrs BB US Cash Pay HY	1.1%	4.7%	-3.1%	3.2%	5.4%	8.7%	1.3%	3.6%	7.5%	2.8%	3.6%	3.7%	5.4%
	Global Bonds	FTSE WGBI	-4.3%	-2.7%	-18.3%	-7.0%	10.1%	5.9%	-0.8%	7.5%	1.0%	-8.7%	-2.6%	-1.2%	1.8%
GTAA	Unconstrained	65% MSCI World /35% FTSE WGBI	-3.7%	6.1%	-18.1%	11.0%	14.6%	19.9%	-5.8%	17.0%	14.4%	2.1%	4.0%	5.1%	6.0%
Real Estate	Core	NCREIF ODCE Equal Weighted (net)	-2.1%	-8.5%	7.6%	21.9%	0.8%	5.2%	7.3%	6.9%	-13.1%	6.7%	5.2%	7.6%	6.6%
Hedge Fund of Funds	Diversified FOFs	HFRI FOF Composite	0.5%	2.8%	-5.3%	6.2%	10.9%	8.4%	-4.0%	7.8%	4.6%	3.8%	3.4%	3.3%	3.3%
	Equity Long-Short	HFRI Equity Hedge	-1.0%	4.7%	-10.1%	11.7%	17.9%	13.7%	-7.1%	13.3%	9.1%	6.5%	5.2%	5.1%	5.3%
Commodities	Commodities	Goldman Sachs Commodity	16.0%	7.2%	26.0%	40.4%	-23.7%	17.6%	-13.8%	5.8%	10.9%	29.5%	5.6%	-2.5%	-0.4%

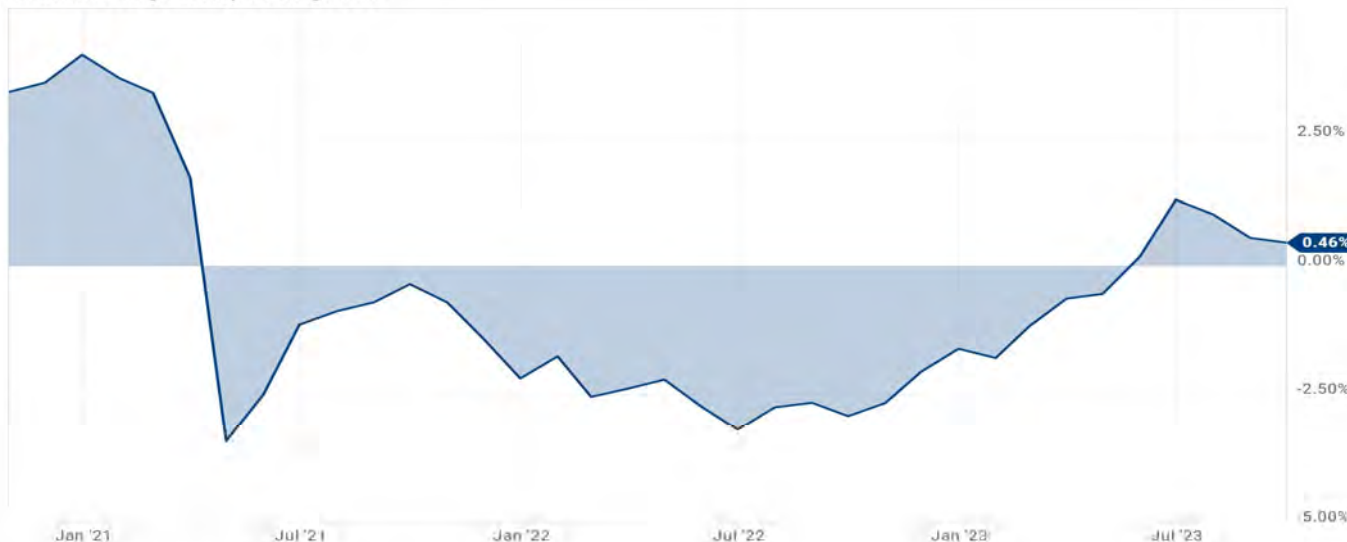
U.S. Economy

U.S. GDP Growth



Sources: U.S. Bureau of Economic Analysis, Federal Reserve, Atlanta Federal Reserve

US Real Average Hourly Earnings YoY



Date Range: 10/31/2020 - 09/30/2023

Source: BLS

Oct 17 2023, 3:20PM EDT, Powered by CHARTS

U.S Economy Remains Resilient

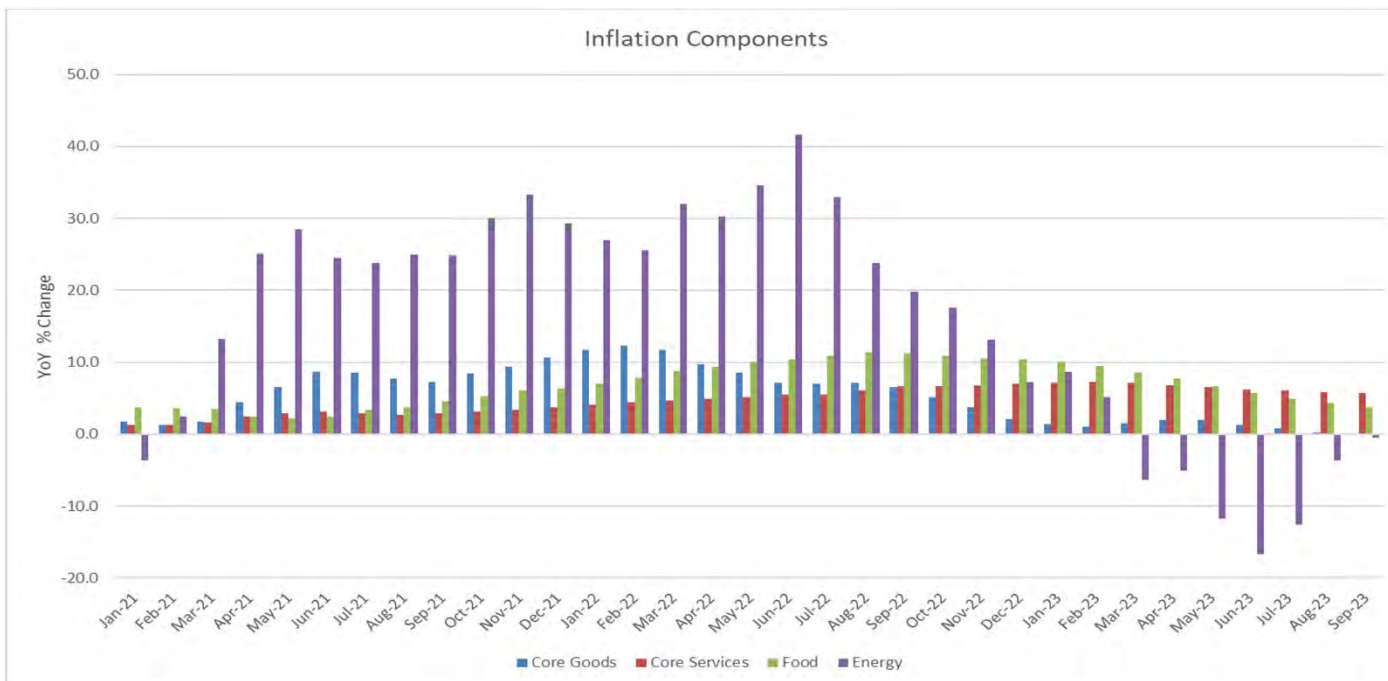
- Despite widespread predictions at the start of the year that a recession was imminent, U.S. economic growth has remained positive, with GDP increasing by over 2.0% in each of the first two quarters of 2023.
- Economic growth likely accelerated in Q3 2023 with the Atlanta Fed GDPNow model forecasting 5.4% growth for the quarter as of October 17, 2023.
- In their most recent projections, the U.S. Federal Reserve increased projected growth for 2023 from 1.0% to 2.1% and increased 2024 from 1.1% to 1.5%.
- Rising inflation resulted in 25 consecutive months of negative real wage growth for U.S. workers through early 2023. However, higher earnings and slowing inflation have resulted in five consecutive months of real wage growth more recently which has helped fuel stronger than expected economic growth.

U.S. Economy



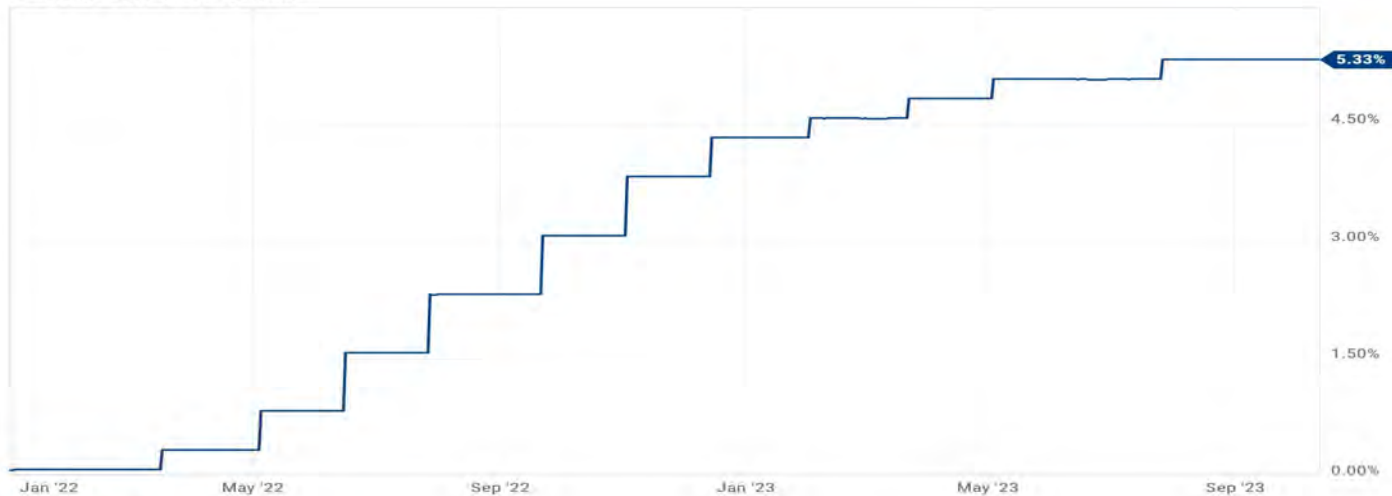
Inflation Continues Downward Trend but Remains Above Target

- Inflation continues to trend downward with year-over-year CPI of 3.7% in September, down from the peak of 9.1% in June 2022. The September CPI print was up from a 3.0% reading in July, primarily driven by a spike in energy prices in August.
- Excluding food and energy, core inflation increased by 4.2% vs. a year ago, down from 4.9% in June 2023.
- Year-over-year core goods inflation was flat in September, driven by falling used car prices.
- Service inflation remains elevated, driven by the shelter component, which tends to lag real time prices.
- PCE, the Fed's preferred inflation measure, increased by 3.9% over the last year through July, the lowest level since May of 2021.



U.S. Economy

Effective Federal Funds Rate



Date Range: 12/31/2021 - 10/13/2023

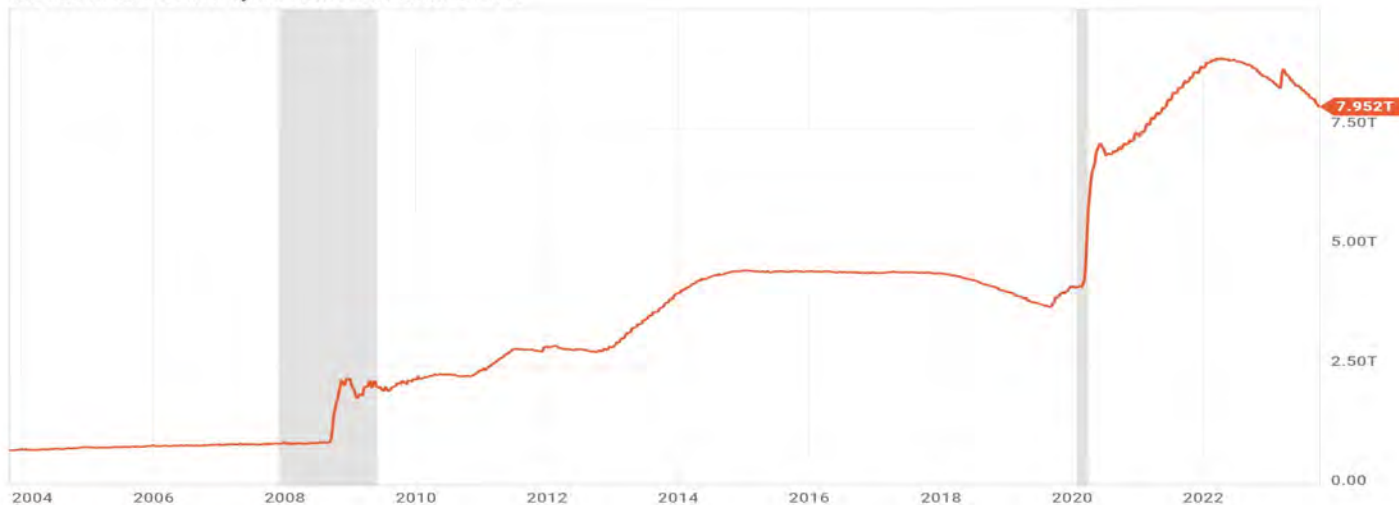
Source: Federal Reserve

Oct 17 2023, 10:37AM EDT. Powered by YCHARTS

End of Rate Hikes on the Horizon

- The U.S. Federal Reserve raised rates from 0.0% to 5.25% since the beginning of 2022, with the most recent 0.25% increase occurring at the July meeting, leaving the effective Fed Funds Rate at 5.33%, the highest level since 2007.
- While the Fed paused at the September meeting, forward guidance alluded to the possibility of an additional hike before year end.
- The reduction in the size of the Fed's balance sheet that began in 2022 was briefly interrupted in March 2023 when the Fed provided a liquidity injection to banks following three of the four largest bank failures in history.
- By the end of Q2 2023, the increase was reversed and the quantitative tightening program resumed with the balance sheet at the lowest level since May 2021.

US Total Assets Held by All Federal Reserve Banks



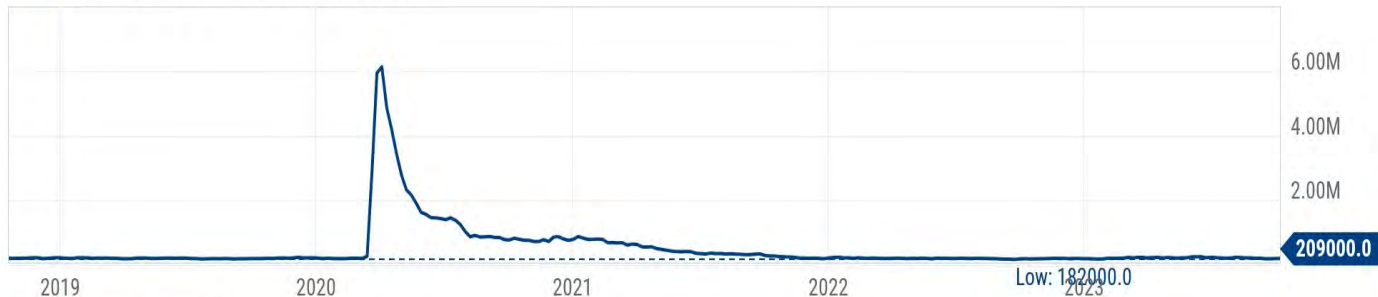
Date Range: 10/22/2003 - 10/11/2023

Source: Federal Reserve

Oct 17 2023, 10:42AM EDT. Powered by YCHARTS

U.S. Economy

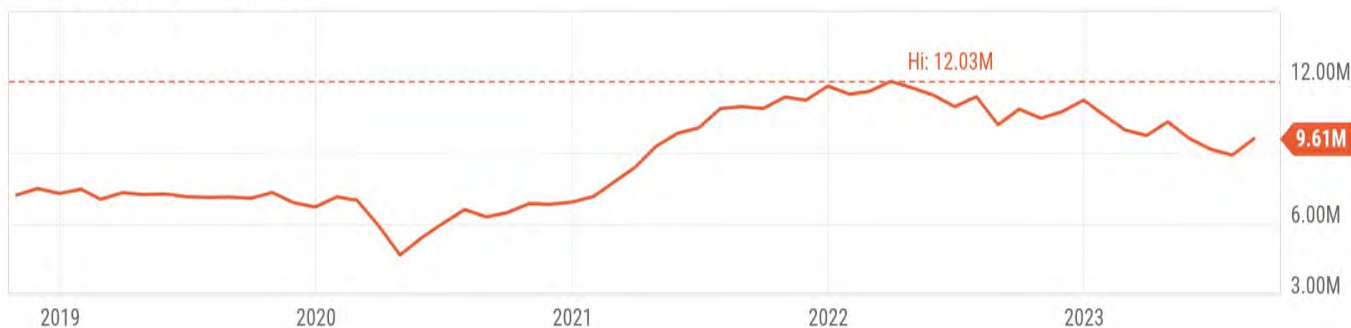
US Initial Claims for Unemployment Insurance



US Unemployment Rate



US Job Openings: Total Nonfarm



Date Range: 10/20/2018 - 10/07/2023

Sources: DoL, BLS

Employment Remains Robust

- Despite significant increases in the Fed Funds rate, various measures suggest the labor market remains strong.
- Weekly claims for unemployment averaged 232,000 in Q3 2023, compared to 240,000 in Q2 2023 and an average of 214,000 for calendar year 2022.
- The unemployment rate increased slightly from 2023 lows; however, increases were primarily driven by higher participation rates, and the unemployment rate remains close to historical lows.
- While off the highest levels of 2022, job openings in the U.S. remain elevated by historical standards.

Oct 17 2023, 10:45AM EDT. Powered by YCHARTS

U.S. Economy

30 Year Mortgage Rate



Date Range: 04/02/1971 - 10/19/2023

Oct 25 2023, 8:22AM EDT. Powered by YCHARTS

Skyrocketing Mortgage Rates Slow Home Sales

- Rising interest rates have resulted in the highest 30-year mortgage rates in over twenty years.
- Current mortgage rates are nearly five percentage points higher than the historical low in early 2021, but are in line with the long term average, which is heavily influenced by the double-digit rates of the 1970s and 1980s.
- Increasing mortgage rates have tempered home buying, with many current homeowners hesitant to part with sub-4% mortgages to purchase properties with higher mortgage rates. Consequently, monthly sales of existing homes declined to the lowest levels since 2010.

US Existing Home Sales



Date Range: 01/31/1999 - 09/30/2023

Oct 25 2023, 8:31AM EDT. Powered by YCHARTS

U.S. Equity Market

Sector	Index	3Q23	YTD	2022	2021	2020	2019	2018	2017	1-Year	3-Year	5-Year	10-Year
Large Cap	S&P 500	-3.3%	13.1%	-18.1%	28.7%	18.4%	31.5%	-4.4%	21.8%	21.6%	10.1%	9.9%	11.9%
	Russell 1000	-3.1%	13.0%	-19.1%	26.4%	21.0%	31.4%	-4.8%	21.7%	21.2%	9.5%	9.6%	11.6%
	Russell 1000 Value	-3.2%	1.8%	-7.6%	25.1%	2.8%	26.5%	-8.3%	13.6%	14.4%	11.0%	6.2%	8.4%
Mid Cap	Russell 1000 Growth	-3.1%	25.0%	-29.1%	27.6%	38.5%	36.4%	-1.5%	30.2%	27.7%	8.0%	12.4%	14.5%
	Russell Mid-Cap	-4.7%	3.9%	-17.3%	22.6%	17.1%	30.5%	-9.1%	18.5%	13.4%	8.1%	6.4%	9.0%
	Russell Mid-Cap Value	-4.5%	0.5%	-12.1%	28.3%	5.0%	27.0%	-12.3%	13.3%	11.0%	10.9%	5.2%	7.9%
Small Cap	Russell Mid-Cap Growth	-5.2%	9.9%	-26.7%	12.7%	35.6%	35.5%	-4.8%	25.3%	17.5%	2.6%	7.0%	9.9%
	Russell 2000	-5.1%	2.5%	-20.5%	14.8%	19.9%	25.5%	-11.0%	14.6%	8.9%	7.1%	2.4%	6.6%
	Russell 2000 Value	-3.0%	-0.6%	-14.5%	28.2%	4.6%	22.4%	-12.9%	7.8%	7.8%	13.3%	2.6%	6.2%
Total Market	Russell 2000 Growth	-7.3%	5.2%	-26.4%	2.8%	34.6%	28.4%	-9.3%	22.1%	9.6%	1.1%	1.5%	6.7%
	Wilshire 5000	-3.3%	12.5%	-19.0%	26.7%	20.8%	31.0%	-5.3%	21.0%	20.5%	9.7%	9.4%	11.5%
	Russell 3000	-3.3%	12.4%	-19.2%	25.6%	20.9%	31.0%	-5.2%	21.1%	20.4%	9.4%	9.1%	11.3%

Major Index Total Return as of September 30, 2023

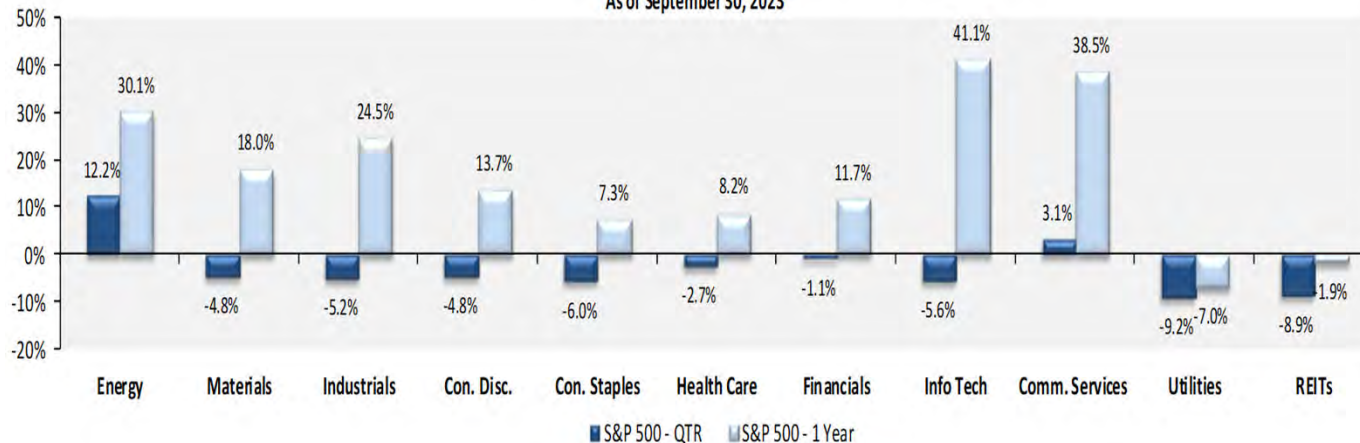
Asset Class	Name	2023 YTD	% off Low	% Off All Time High
U.S. Large Cap	S&P 500	13.1%	21.9%	-8.0%
U.S. Mid Cap	Russell Midcap	3.9%	16.6%	-16.1%
U.S. Smid Cap	Russell 2500	3.6%	11.7%	-19.4%
U.S. Small Cap	Russell 2000	2.5%	9.3%	-24.9%
International Large Cap	MSCI EAFE	7.1%	26.7%	-10.6%
International Small Cap	MSCI EAFE Small Cap (gross)	2.3%	20.5%	-23.5%
Emerging Markets	MSCI Emerging Markets	1.8%	16.0%	-29.2%
Global Equity	MSCI World (gross)	11.6%	23.1%	-8.7%

- Global equities declined in Q3 2023 following a strong H1 2023. Headwinds included rising bond yields, a stronger U.S. Dollar, and consumer spending worries due to higher energy prices resulting from oil supply cuts.
- The S&P 500, comprised of U.S. large-cap stocks, was negative in Q3 2023 for the first time in four quarters as investors conceded high interest rates could persist longer than anticipated.
- The S&P 500's 13.1% year-to-date gain has been mainly attributed to a handful of tech stocks boosted by optimism in artificial intelligence. However, in Q3 2023, most of the "Magnificent Seven" declined, impacting the overall market. Conversely, energy stocks displayed resilience, standing out as one of the few sectors that avoided losses in the quarter.

U.S. Equity Market

S&P 500 Sector Performance

As of September 30, 2023

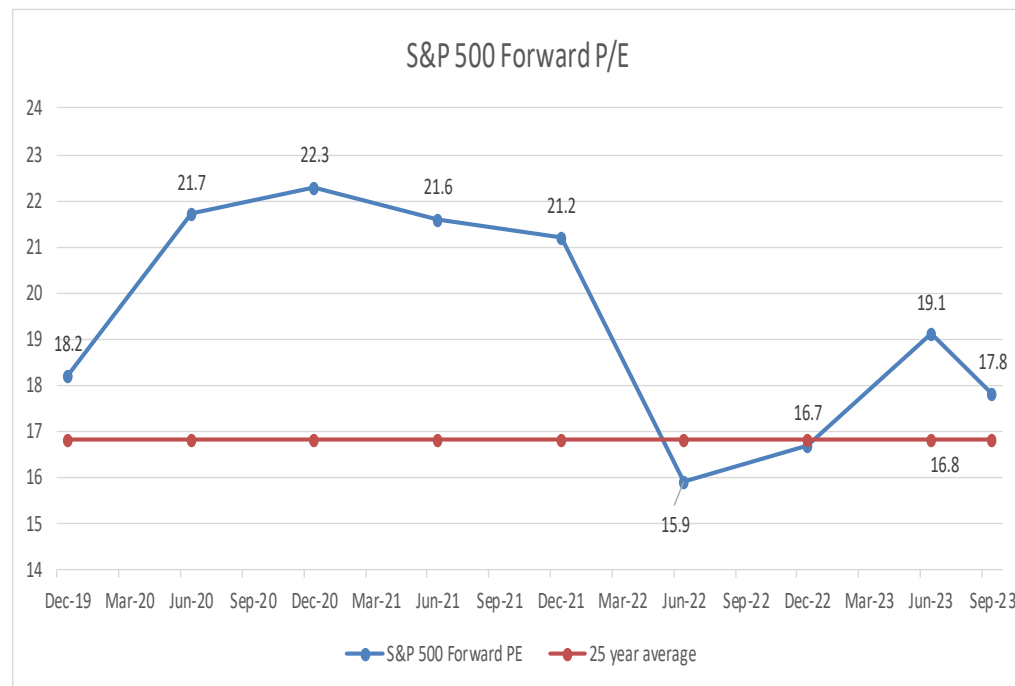


Tech and Comm. Services Lead YTD Gains; Defensive Sectors/Bond Proxies Struggle

- Sector performance displays a clear divide, with Comm. Services and Technology up +40% and +35% YTD, respectively, while defensive sectors like Utilities and Staples are down -14% and -5%, respectively. With some segments of the fixed income market offering their highest yields in 15 years, the attractiveness of "high-dividend" defensive sectors as bond alternatives has diminished relative to the period of near-zero interest rate policy (ZIRP).
- Buoyed by extended supply cuts from OPEC+ and Russia, oil prices, as measured by WTI crude, surged by 29% in Q3 2023, and are up 40% since late June. The energy sector, comprising just 4.4% of the S&P 500, outperformed all other sectors in Q3 2023.

Earnings Growth Returns?

- The S&P 500 is anticipated to post a modest 0.4% year-over-year earnings growth for Q3 2023, marking its first positive year-over-year growth since Q3 2022, albeit by a narrow margin. The S&P 500's forward P/E ratio decreased in the past quarter as stock prices fell and currently stands at 17.8x forward earnings, in the vicinity of its 25-year average.



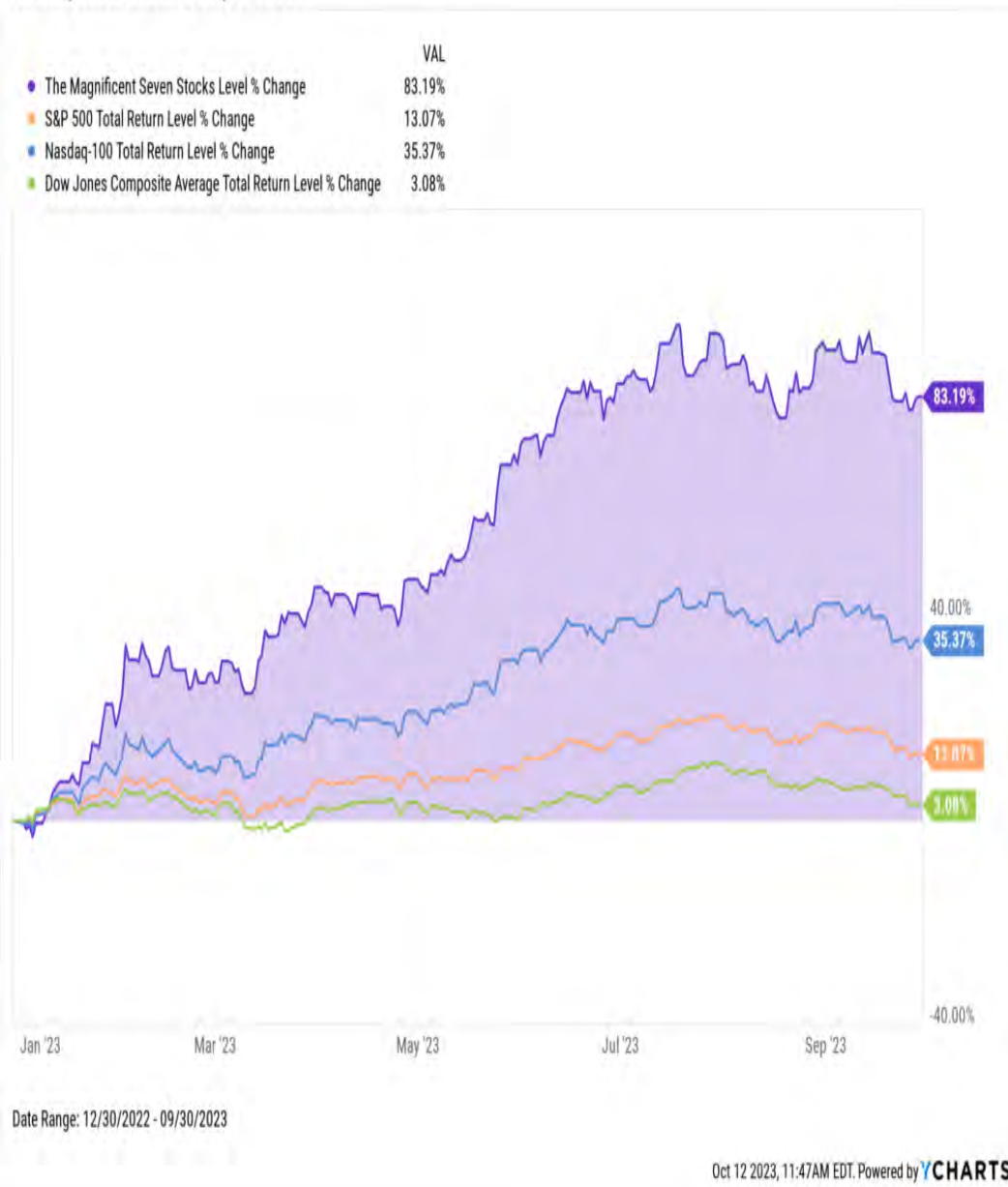
Source: J.P. Morgan Asset Management

U.S. Equity Market

Tech Giants Pull Back but Maintain Market Leadership

- The "Magnificent Seven," a term recently coined by investors, comprises high-growth technology giants Alphabet (Google), Amazon, Apple, Meta Platforms (formerly known as Facebook), Microsoft, NVIDIA, and Tesla. Representing about 28% of the S&P 500, this group is responsible for 84% of the S&P 500 index's 13.1% year-to-date gain.
- The concentrated nature of the S&P 500 expands beyond the Magnificent Seven as the top 50 stocks constitute an astonishing 57% of the total index value. Such a high degree of concentration is a rarity, occurring only twice in the past century, specifically in 1932 and 2000.

The Magnificent Seven vs Major Indices

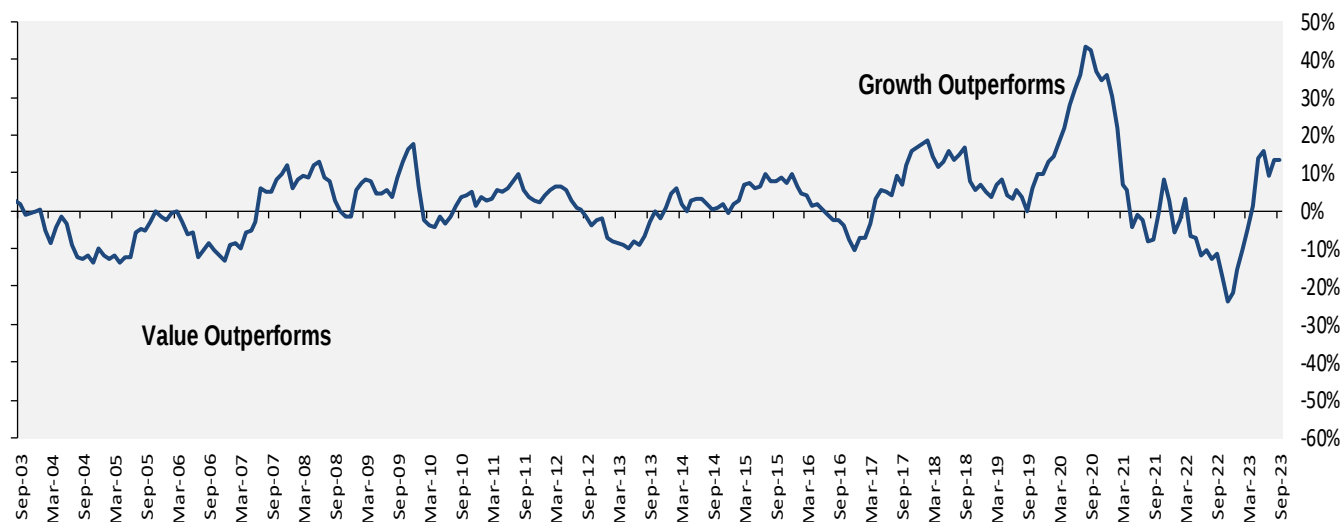


Mega-Cap Stocks Benefiting from Better Debt Profile

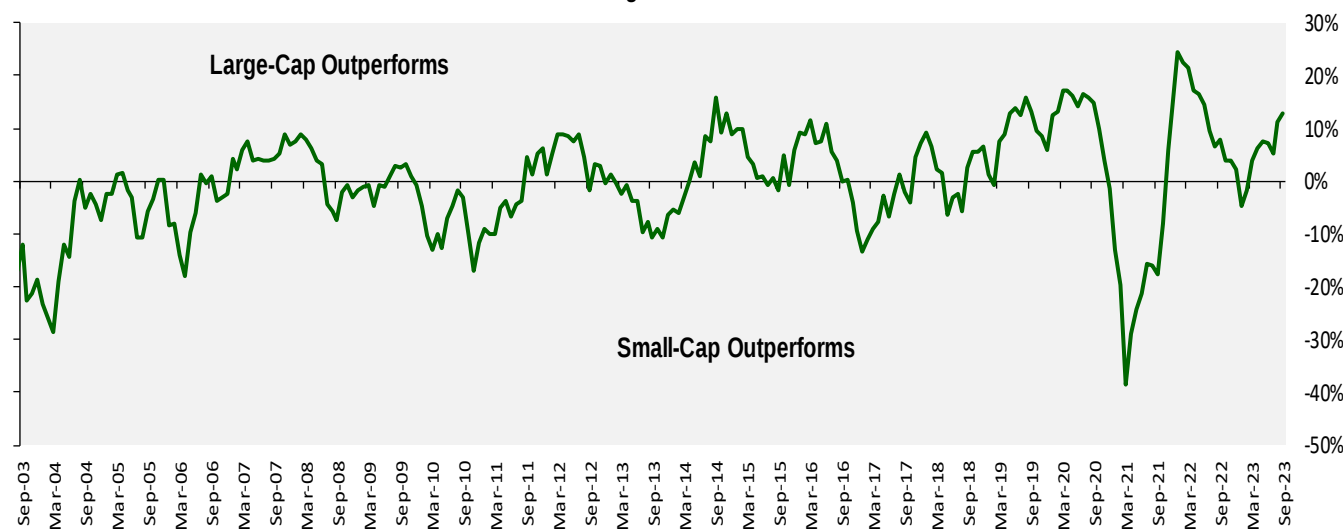
- The Q3 2023 equity market pullback led to losses across most equity categories and erased year-to-date gains in vulnerable areas like leveraged smaller companies.
- Mega-cap companies took advantage of pandemic-era low interest rates by securing long-term fixed-rate bonds, leading to increased cash reserves. Currently, S&P 500 companies pay an average effective interest rate of 3.3% on their long-term debt, with nearly half maturing after 2030, while their corporate cash reserves earn 5%.
- Conversely, smaller companies are grappling with the impact of rising floating rate debt and an impending refinance wall over the next few years.

U.S. Equity Market

Russell 1000 Growth vs. Russell 1000 Value
Rolling One-Year Returns



S&P 500 vs. Russell 2000
Rolling One-Year Returns



Growth and Quality Attributes Lead in 2023

- Q3 2023 proved to be a challenging period for equity assets, with few positive factors and lackluster performance from both growth and value segments. The quarter failed to narrow the gap between Russell Top 200 Growth (Mega Cap Growth) and Russell 2000 Value (Small Cap Value), leaving a substantial 30% spread in year-to-date returns.
- In the past quarter, high-beta securities pulled back after a strong start to the year. Companies with growth and quality attributes are still leading in 2023, while those stocks that display low volatility factors and high dividend factors are trailing.
- In 2023, the Russell 2000 index, representing U.S. small-cap stocks, initially rebounded before dropping 11% from mid-summer, highlighting the impact of rising interest rates on smaller firms. This marked a nearly two-year bear cycle for the asset class as it re-entered bear territory in Q3 2023, with a 25% decline from its peak on November 8, 2021.

International Equity Market

Sector	Index	3Q23	YTD	2022	2021	2020	2019	2018	1-Year	3-Year	5-Year	10-Year
Global	MSCI AC World Index (net)	-3.4%	10.1%	-18.4%	18.5%	16.3%	26.6%	-9.4%	20.8%	6.9%	6.5%	7.6%
	MSCI World Small Cap (net)	-4.4%	2.9%	-18.8%	15.8%	16.0%	26.2%	-13.9%	14.0%	6.2%	3.1%	6.3%
	MSCI World ex US (net)	-4.1%	6.7%	-14.3%	12.6%	7.6%	22.5%	-14.1%	24.0%	6.1%	3.4%	3.8%
Developed ex US	MSCI World ex US Small Cap (net)	-3.5%	1.8%	-20.6%	11.1%	12.8%	25.4%	-18.1%	17.3%	1.8%	1.3%	4.1%
	MSCI EAFE (net)	-4.1%	7.1%	-14.5%	11.3%	7.8%	22.0%	-13.8%	25.6%	5.8%	3.2%	3.8%
	MSCI EAFE Value (net)	0.6%	9.9%	-5.6%	10.9%	-2.6%	16.1%	-14.8%	31.5%	11.1%	2.8%	3.0%
	MSCI EAFE Growth (net)	-8.6%	4.3%	-22.9%	11.3%	18.3%	27.9%	-12.8%	20.0%	0.4%	3.2%	4.4%
Emerging Markets	MSCI EAFE Small Cap (net)	-3.5%	1.8%	-21.4%	10.1%	12.3%	25.0%	-17.9%	17.9%	1.1%	0.8%	4.3%
	MSCI Emerging Markets (net)	-2.9%	1.8%	-20.1%	-2.5%	18.3%	18.4%	-14.6%	11.7%	-1.7%	0.6%	2.1%

Foreign Markets Returns



- Due to concerns about the adverse impacts of rising interest rates on economic growth, most European markets declined in Q3 2023. Europe is grappling with persistent inflation, elevated interest rates, and recession concerns, with Germany expected to report negative economic growth for the full year 2023.
- Japanese equities displayed some resilience amid the Q3 2023 market correction, outperforming most developed nations. The weak yen and resurging inflation provided strong support, allowing Japanese companies to increase prices. Furthermore, Japan's attractiveness to global investors seeking Asian exposure without the geopolitical and regulatory risks of China has grown.
- Chinese stocks, a significant part of emerging markets, struggled due to declining retail sales, stagnant house prices, rising household debt, and sluggish private-sector investment.

International Equity Market

ICE US Dollar Index Level



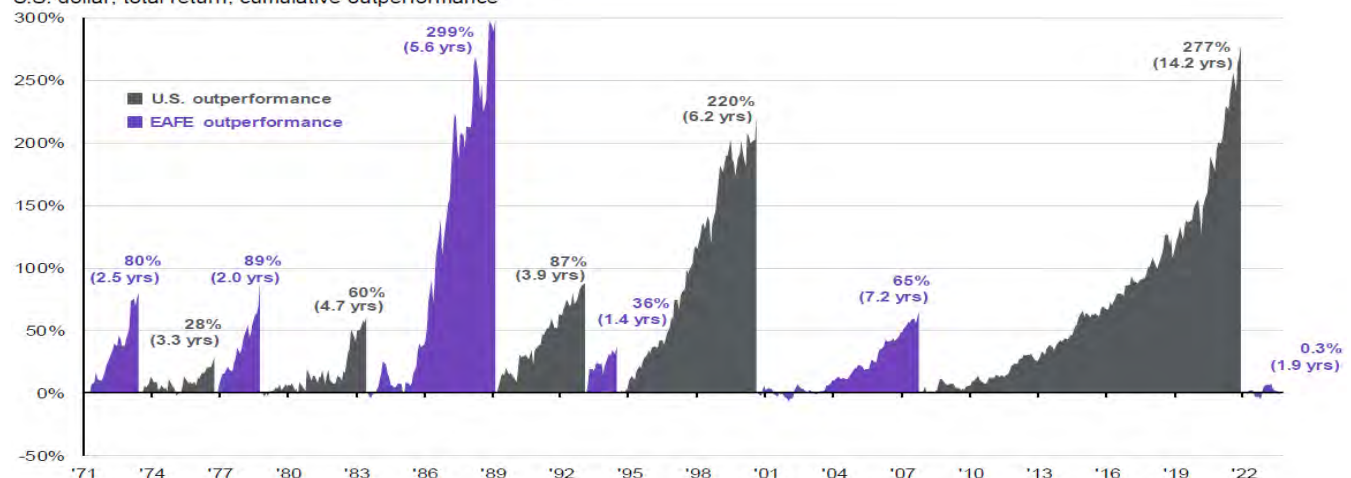
Dollar Index Soars on Expectations of Tight Monetary Policy

- As investors braced for prolonged high interest rates, the U.S. Dollar surged against major currencies, hitting its highest point since late 2022.
- The U.S. Dollar Index (DXY) ended Q3 with an impressive eleven-week winning streak, the second longest in over 50 years, and achieved new highs for 2023, strengthening against nine out of ten G10 currencies and most emerging market currencies.

Regime Change or Just a Pause?

- U.S. equity markets outperformed international markets by 277% in the past 14.2 years, marking the longest duration of outperformance in 50 years; however, this trend may have ended by the close of 2021.
- Over the last two years, international and U.S. markets had similar performance, with neither consistently overtaking the other.

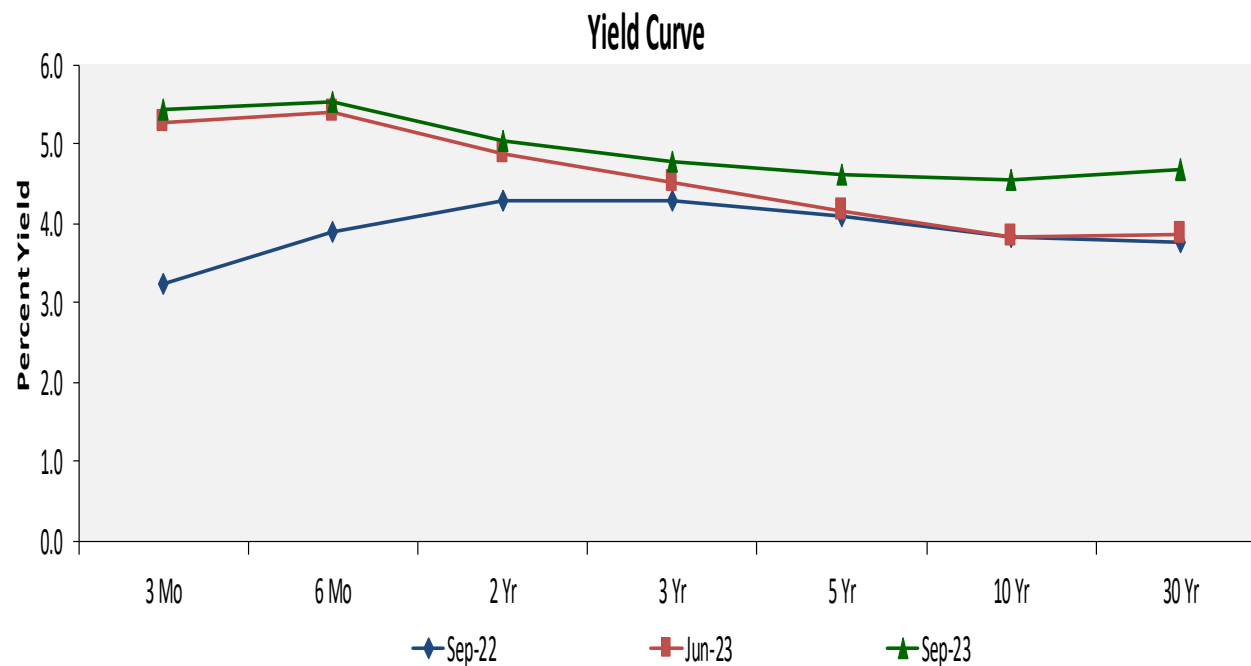
MSCI EAFE and MSCI USA relative performance
U.S. dollar, total return, cumulative outperformance



Source: J.P. Morgan Asset Management

Bond Market

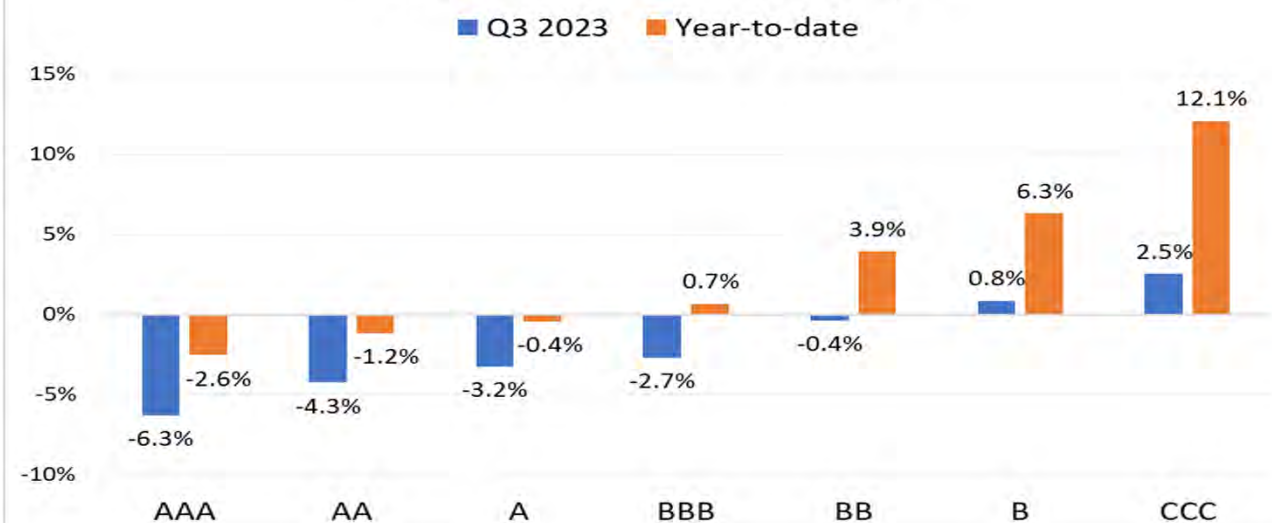
Index	Duration (years)	Yield	3Q23	YTD	2022	2021	2020	2019	2018	1-Year	3-Year	5-Year	10-Year
Bloomberg Aggregate	6.2	5.39%	-3.2%	-1.2%	-13.0%	-1.5%	7.5%	8.7%	0.0%	0.6%	-5.2%	0.1%	1.1%
Bloomberg Govt/Credit	6.3	5.30%	-3.0%	-0.9%	-13.6%	-1.7%	8.9%	9.7%	-0.4%	0.9%	-5.3%	0.4%	1.3%
Bloomberg Int Agg	4.7	5.36%	-1.9%	-0.3%	-9.5%	-1.3%	5.6%	6.7%	0.9%	1.4%	-3.7%	0.4%	1.1%
Bloomberg Int Govt/Credit	3.9	5.23%	-0.8%	0.7%	-8.2%	-1.4%	6.4%	6.8%	0.9%	2.2%	-2.9%	1.0%	1.3%
Bloomberg U.S. Corporate	7.0	6.04%	-3.1%	0.0%	-15.8%	-1.0%	9.9%	14.5%	-2.5%	3.6%	-4.9%	0.9%	2.2%
Bloomberg HY Ba/B 2% IC	4.1	8.26%	0.2%	5.0%	-10.6%	4.6%	7.7%	15.2%	-1.9%	9.8%	1.3%	3.3%	4.3%
ICE BofA 1-3 Yrs BB US Cash Pay HY	1.9	7.41%	1.1%	4.7%	-3.1%	3.2%	5.4%	8.7%	1.3%	7.5%	2.8%	3.6%	3.7%
Bloomberg Mortgage	6.3	5.57%	-4.1%	-2.3%	-11.8%	-1.0%	3.9%	6.4%	1.0%	-0.2%	-5.1%	-0.8%	0.6%
Bloomberg Treasury	6.0	4.85%	-3.1%	-1.5%	-12.5%	-2.3%	8.0%	6.9%	0.9%	-0.8%	-5.8%	-0.1%	0.6%
Bloomberg US TIPS	6.6	5.02%	-2.6%	-0.8%	-11.8%	6.0%	11.0%	8.4%	-1.3%	1.2%	-2.0%	2.1%	1.7%
BofA ML 91 day T-Bills	0.3	5.46%	1.3%	3.7%	1.5%	0.0%	0.7%	2.3%	1.9%	4.6%	1.8%	1.8%	1.1%



- The U.S. treasury yield curve shifted higher in Q3 2023 with yields on longer maturity bonds seeing the largest increase.
- The yield curve remains heavily inverted, reflecting a view that a slow-down in growth and/or lower levels of inflation will arrive at some point in the next 5-10 years.
- Returns for U.S. bond markets were mostly negative in Q3 2023. Riskier, higher yielding bonds outperformed while safer, longer duration bonds underperformed. High Yield and bonds with short maturities (under 3 years until maturity) generated positive returns in Q3 2023 while longer maturity bonds experienced losses.

Bond Market

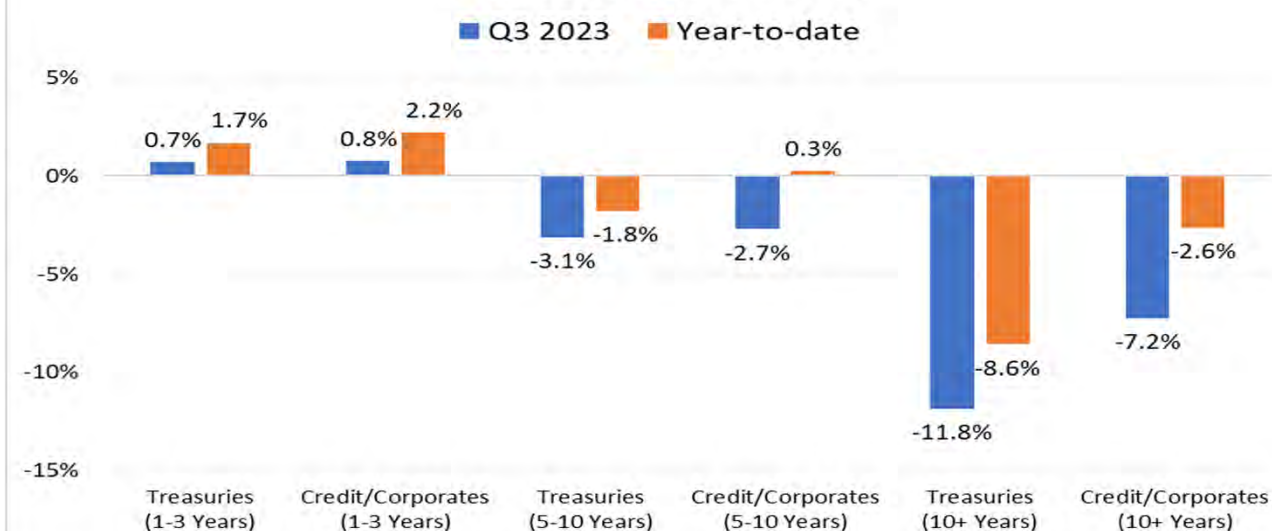
Returns by Credit Rating



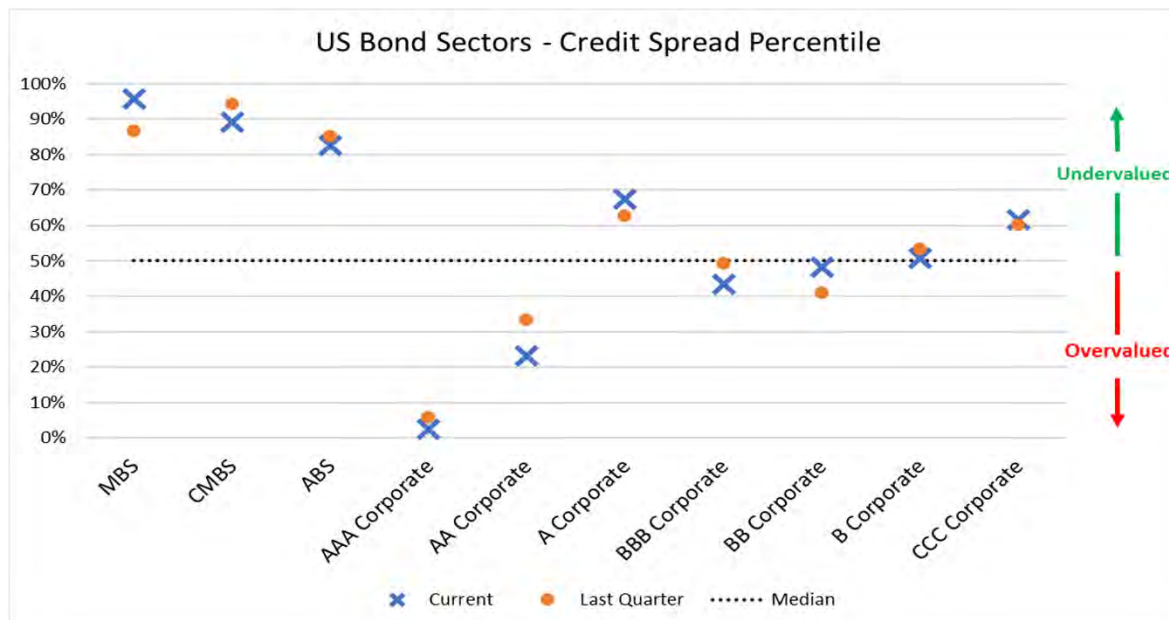
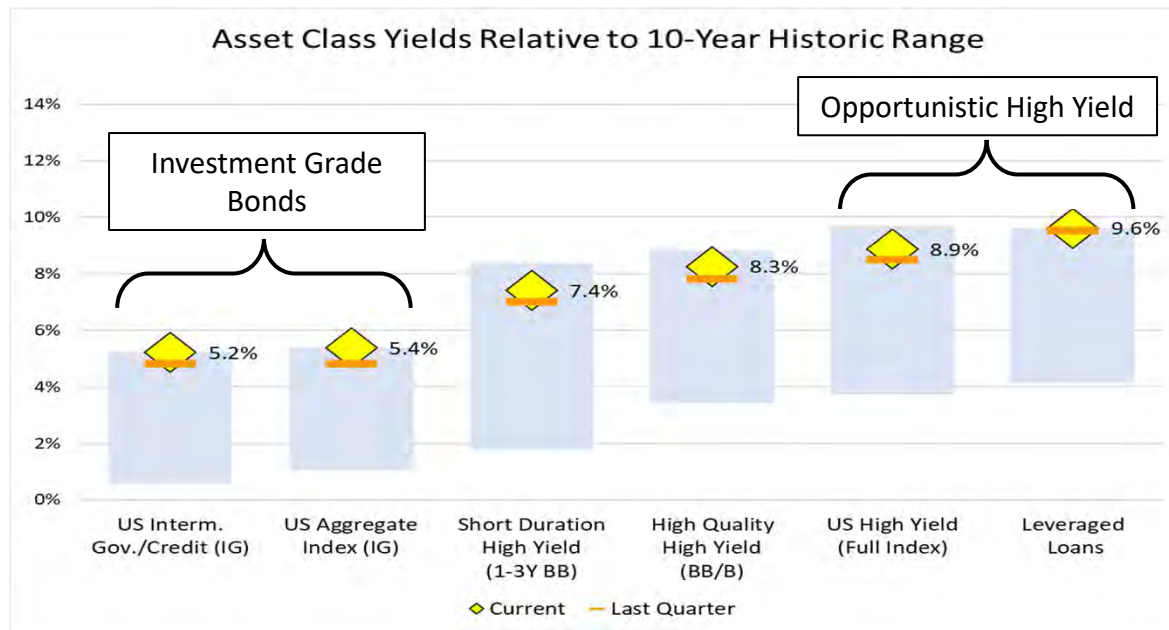
Lower Quality & Shorter Maturity Bonds Continue to Outperform

- High Yield corporate bonds generated positive returns in Q3 2023 while investment grade corporate bonds experienced losses for the quarter.
- Credit spreads held steady with some tightening (bond prices increasing) in Q3 2023.
- Rising interest rates across the yield curve were the primary driver of returns in Q3 2023. Longer maturity bonds experienced a greater increase in yields.
- The rise in interest rates put pressure on high quality credit (AAA-BBB) and longer maturity bonds. Long maturity bonds with little credit risk (US Treasuries, 10+ Year AAA-rated corporate bonds) experienced the largest losses in Q3 2023.
- Year-to-date, the riskiest bonds are outperforming by a wide margin due to high levels of interest income and relatively low levels of defaults. Shorter maturity bonds outperformed longer maturity bonds due to lower sensitivity to rising interest rates.

Returns by Maturity



Bond Market



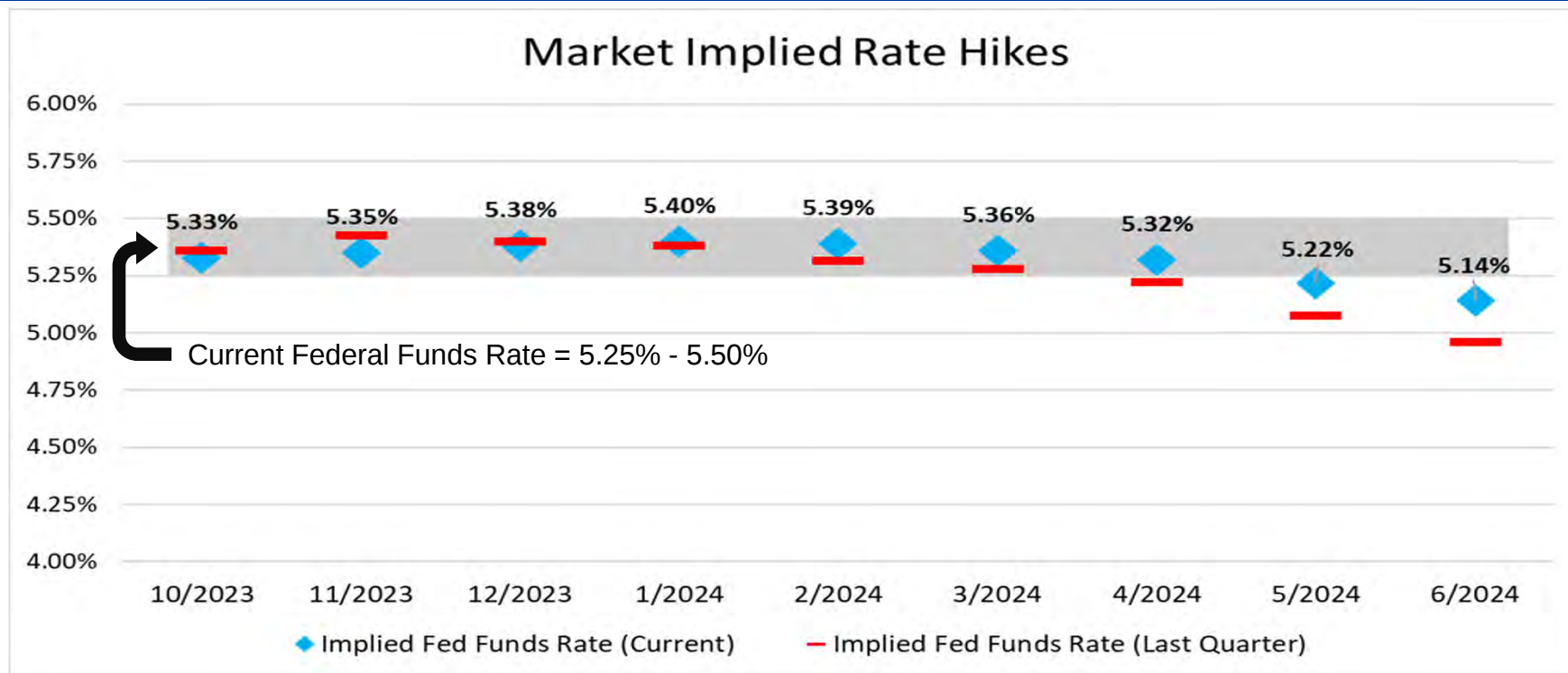
Bond Yields

- due to the move higher in U.S. interest rates, yields across bond sectors moved slightly higher in Q3 2023.
- Investment grade bonds are currently yielding more than 5% with investment grade corporates yielding closer to 6%.
- Investors can earn an additional yield pick-up of 200 to 300 bps in higher-quality high yield bonds relative to U.S. investment grade bonds.
- The broader high yield & leveraged loan universes are currently yielding ~9%, offering the potential for equity-like returns in future years.

Credit Spreads/Valuations

- Credit spreads were mixed in a volatile quarter.
- Most corporate bonds offer spreads in-line with their 10-year median. AAA/AA-rated corporates offer less value versus their 10-year history, suggesting investors are more defensively positioned.
- Spreads in structured credit (MBS, CMBS, ABS) remain well above their pre-2022 lows. MBS remains just below the widest spreads experienced in the past decade.

Bond Market

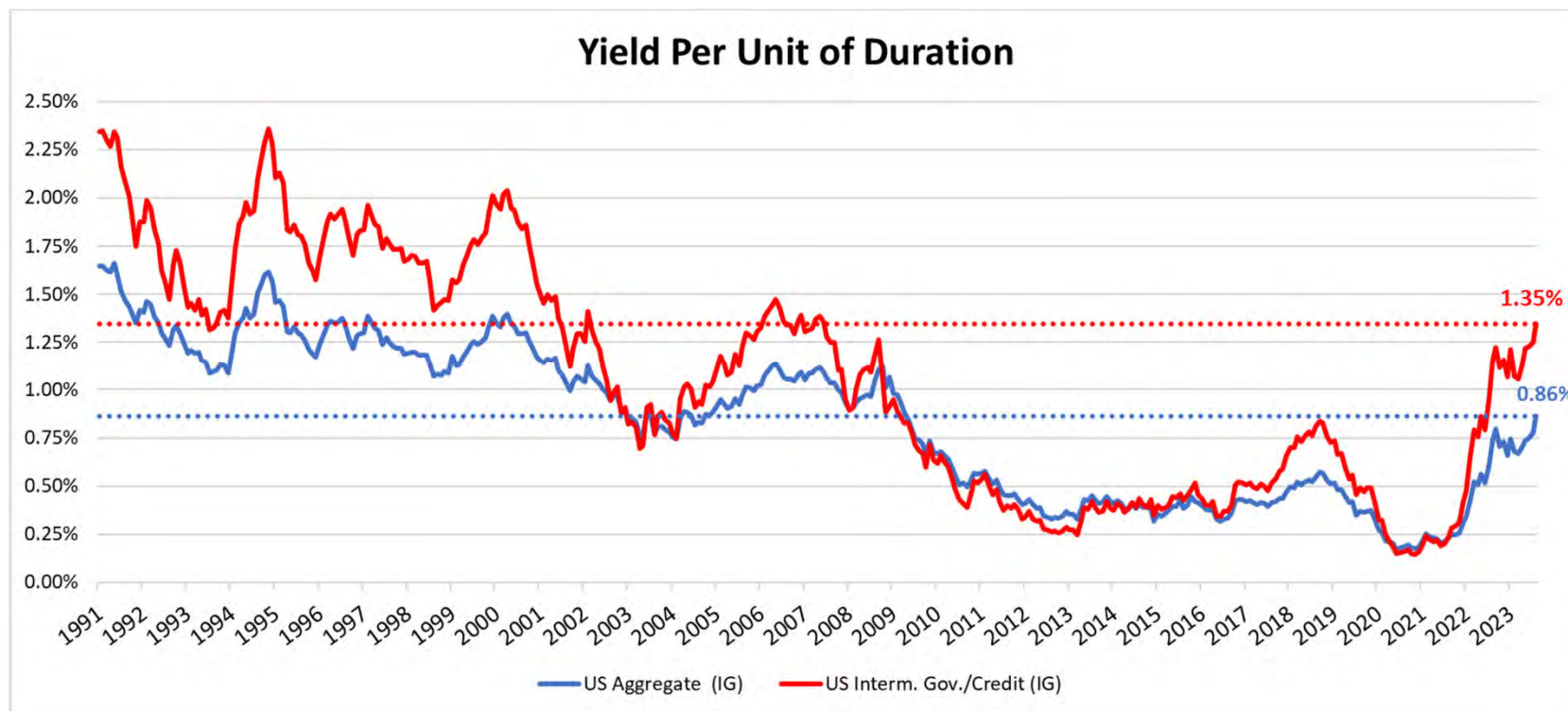


As of 10/11/23

- The FOMC raised interest rates by another 25 bps in late July, but elected to pause at their September meeting. The current target federal funds rate is now at 5.25-5.50%, up from 5.00-5.25% at the end of Q2 2023 and up from 4.25-4.50% in Q4 2022.
- The Fed Funds Rate futures market is currently pricing in no additional rate hikes for the next two quarters, indicating the Federal Reserve is done raising rates for the near term.
- The Fed Funds futures market continues to price in the potential for a 25 bps rate-cut in the 1st half of 2024; however, we have seen these pricings dissipate over time as Federal Reserve members continue to emphasize that the probability of future rate cuts is extremely low.
- Market expectations based on Fed Fund futures align with the sentiment and views of most bond managers. The general consensus is that the Federal Reserve is likely done raising short-term interest rates, but uncertainty remains around how long the Federal Reserve will keep rates at this level and under what circumstances would they feel obligated to lower interest rates.

Bond Market

Investment Grade Investors Are Now Compensated For Duration Risk



- Investment grade bond returns were susceptible to a rise in interest rates for most of the past decade. With the recent surge higher in bond yields, investment grade bond investors are now being adequately compensated for duration risk.
- Interest rates can now move ~85 bps higher before core bond investors (US Aggregate Index) start to realize negative returns on their portfolio in the near-term while intermediate investment grade investors can withstand a ~135 bps rise in interest rates before realizing losses on their portfolio.
- Given yields are equal for the US Intermediate Gov./Credit Index and the US Aggregate Index, intermediate investment grade bonds (US Interm. Gov./Credit) are seemingly better positioned to limit downside risk in the near-term while core bonds (US Aggregate) can provide more upside if interest rates fall, but have less protection in the event interest rates continue to rise.

Bond Market

Interest Rate Sensitivity

12 Month Holding Period - Annualized Returns as of 9/30/2023

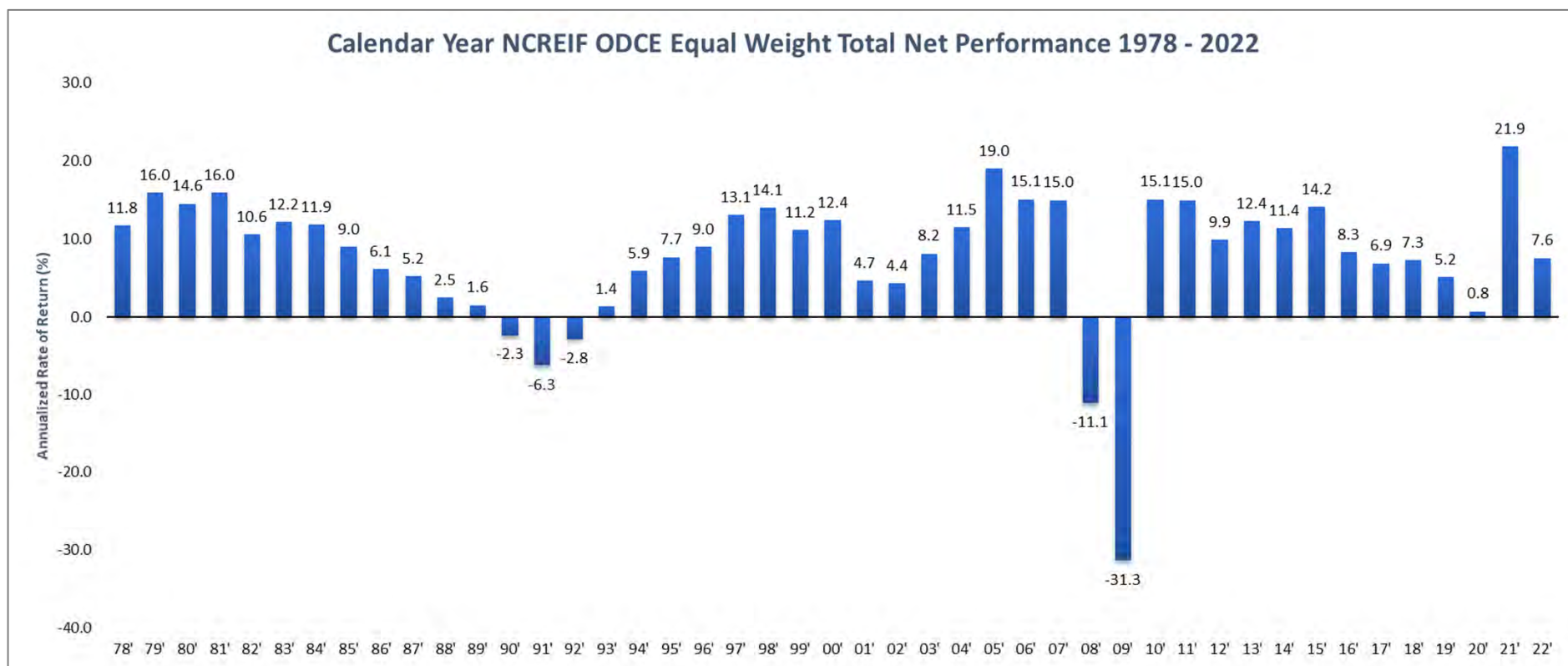
Yield Change (bps)	10 Year Treasury	Bloomberg Aggregate	Bloomberg Int Govt/Credit	ICE BofA Gov/Corp Master	ICE BofA 1-3 yr Gov/Corp	Defensive ICE BofA US HY BB/B ND	Short Duration ICE BofA US HY BB/B 1-3 yr
-300	28.62	24.09	16.87	23.89	10.89	19.92	13.72
-250	24.62	20.98	14.93	20.79	9.97	17.96	12.80
-200	20.61	17.86	12.99	17.70	9.06	15.99	11.87
-150	16.60	14.74	11.05	14.60	8.14	14.02	10.94
-100	12.59	11.62	9.11	11.51	7.22	12.06	10.02
-75	10.59	10.06	8.14	9.96	6.76	11.07	9.55
-50	8.58	8.50	7.17	8.41	6.30	10.09	9.09
-25	6.58	6.95	6.20	6.86	5.84	9.11	8.63
0	4.58	5.39	5.23	5.31	5.38	8.12	8.17
25	2.57	3.83	4.26	3.77	4.92	7.14	7.70
50	0.57	2.27	3.29	2.22	4.46	6.16	7.24
75	-1.44	0.71	2.32	0.67	4.00	5.17	6.78
100	-3.44	-0.85	1.35	-0.88	3.55	4.19	6.31
150	-7.45	-3.97	-0.59	-3.98	2.63	2.22	5.39
200	-11.46	-7.08	-2.53	-7.07	1.71	0.26	4.46
250	-15.47	-10.20	-4.47	-10.17	0.79	-1.71	3.54
300	-19.47	-13.32	-6.42	-13.26	-0.13	-3.68	2.61
Duration	8.02	6.24	3.88	6.19	1.84	3.93	1.85

FOR ILLUSTRATIVE PURPOSES ONLY: For each index the current yield to worst as of 9/30/2023 was used as the base case annualized return. The annualized return sensitivity to a uniform increase or decrease in the yield curve was calculated by taking the index's Option-Adjusted Duration as of 9/30/2023 multiplied by the percentage point change in the yield curve (basis point change divided by 100) and then appropriately adding or subtracting this implied percentage change in the value of the index (due to the shift in the yield curve) to the base case annualized return. This is a rough approximation of the annual return sensitivity to parallel shifts in the yield curve.

Real Estate Market

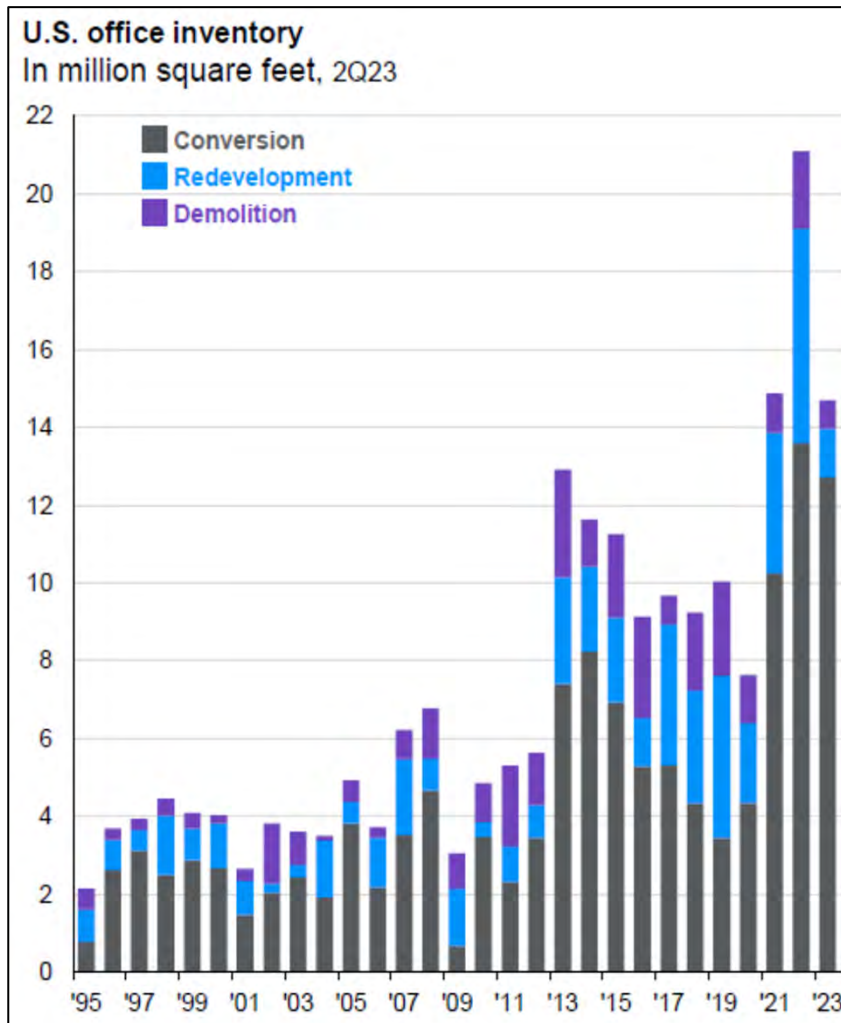
Sector	Index	3Q23	YTD	2022	2021	2020	2019	2018	1-Year	3-Year	5-Year	10-Year
US Private	NCREIF ODCE Equal Weighted (net)	-2.1%	-8.5%	7.6%	21.9%	0.8%	5.2%	7.3%	-13.1%	6.7%	5.2%	7.6%
	NCREIF ODCE EW Income Index	0.9%	2.6%	3.5%	4.1%	3.6%	3.5%	3.5%	3.4%	3.7%	3.7%	3.8%
	NCREIF ODCE EW Appreciation Index	-2.8%	-10.4%	4.8%	18.3%	-2.4%	1.7%	3.7%	-15.4%	3.7%	2.1%	4.0%

- The NCREIF ODCE Equal Weighted Index (net) declined for the fourth quarter in a row, generating a return of -2.1% in Q3 2023 and -8.5% YTD through the third quarter.
- 2023 is expected to be just the sixth negative calendar year for the index since 1978 and first since 2009, when the index declined by more than -31%.

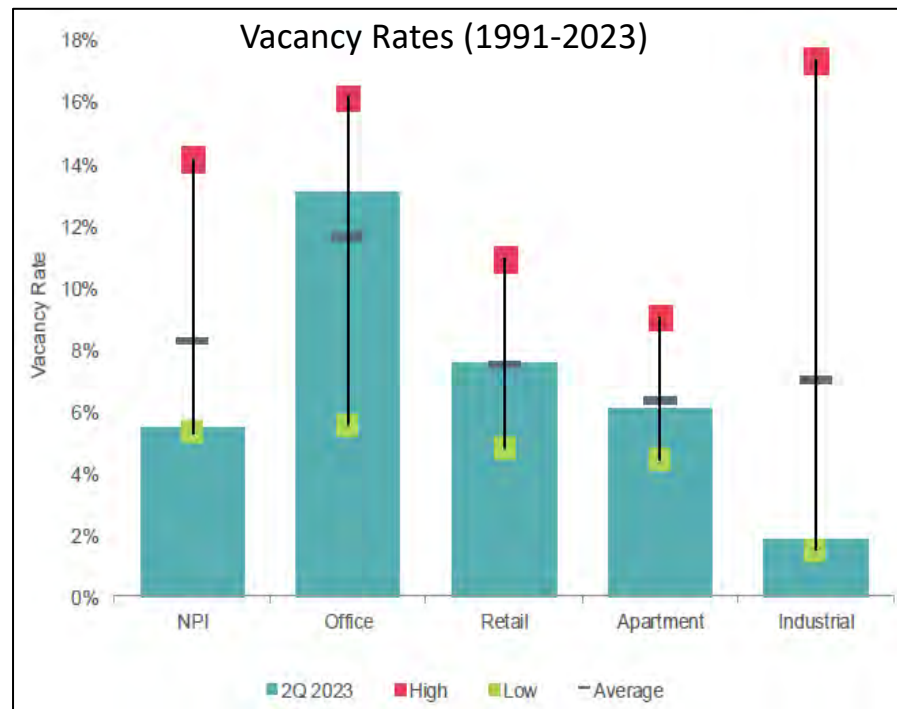


Real Estate Market

- Vacancy rates have largely declined from their early pandemic (2020) peaks in apartment, industrial and retail assets, while remaining elevated in U.S. office assets at approximately 13%. Industrial and apartment vacancies are below their long-term averages, as shown to the right.



Source: J.P. Morgan Asset Management, August 2023.



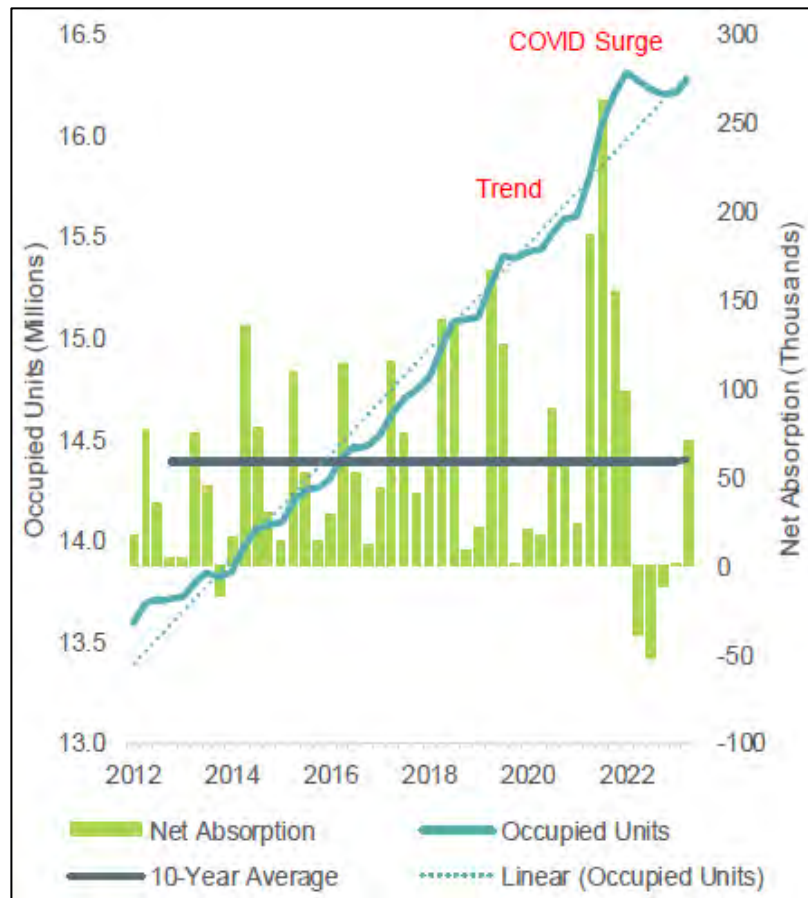
Source: NCREIF, via DWS, as of June 2023.

- Office properties were again the largest contributor to valuation declines in Q3. Office owners are attempting to keep existing tenants in place (though potentially at reduced footprints) and sign new leases on vacant space, which continues to be challenging due to companies' changing need for office space amid higher levels of remote work. This environment has put downward pressure on office rents, and often owners need to provide lease concessions to attract tenants. Lower rents, combined with high vacancy rates and higher borrowing costs, continue to put downward pressure on office valuations.
- A significant amount of office assets, relative to historical norms, have been slated to be repurposed, redeveloped or demolished since the onset of the COVID-19 pandemic, as shown in the chart to the left.

Real Estate Market

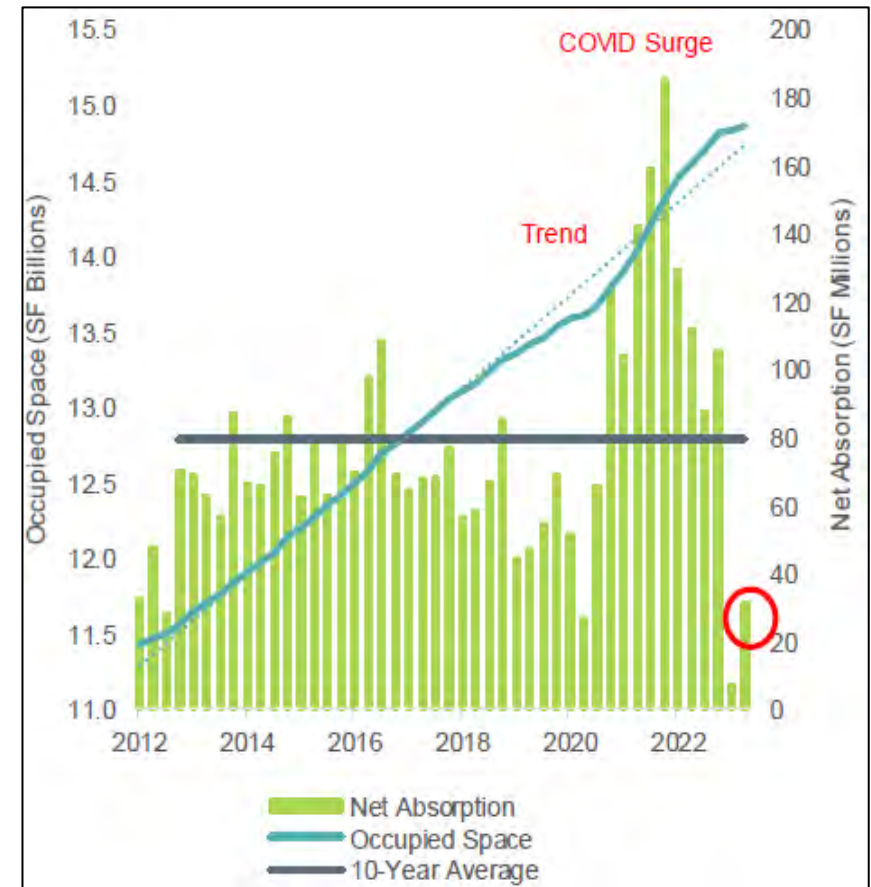
- Though valuation writedowns have occurred in other real estate sectors outside of the office sector, fundamentals in these sectors appear stronger relative to office and should recover faster.
- Apartments had negative net absorption following the pandemic surge, but net absorption has again turned positive in 2023, with strong demand for apartments driven by high mortgage rates, lower levels of development and a reduced supply of existing homes for sale.
- Industrial demand has softened from its pandemic peak, though net absorption remains positive.
- Retail vacancy rates have declined from their pandemic highs, and new supply remains limited.

Apartment Demand



Source: CBRE (via DWS), as of June 2023.

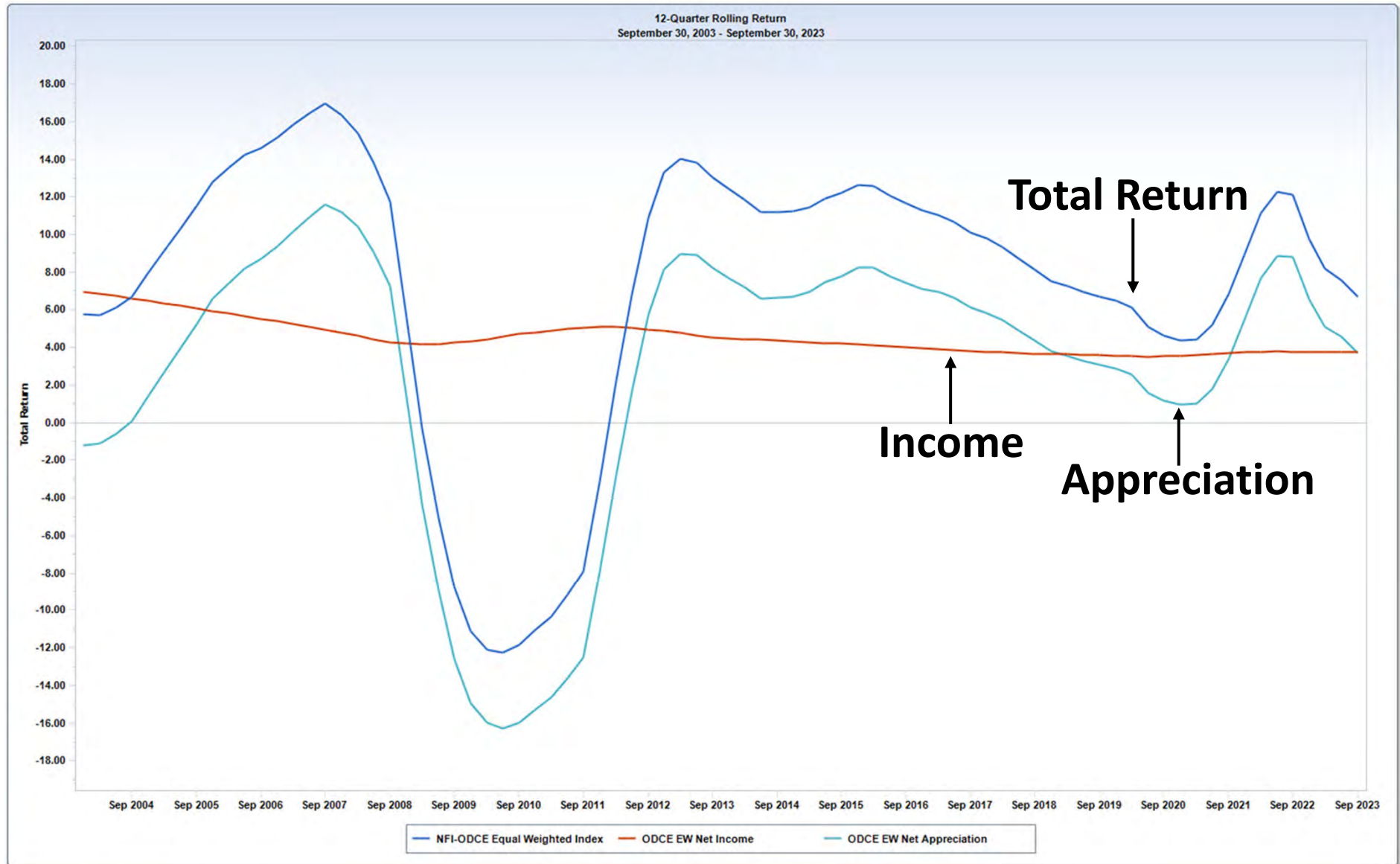
Industrial Demand



Source: CBRE, DWS as of June 2023.

Real Estate Market

- The income component of real estate returns continues to remain stable, providing a buffer against the recent periods of negative appreciation. Appreciation was positive in the first half of 2022 and drove the positive calendar year return for the index last year but was flat in Q3 2022 and has been negative since Q4 2022, driving the negative returns for the ODCE index over the last four quarters.



Hedge Fund Market

Strategy	Index	3Q23	YTD	2022	2021	2020	2019	2018	1-Year	3-Year	5-Year	10-Year
Fund of Funds	HFRI FOF Composite	0.5%	2.8%	-5.3%	6.2%	10.9%	8.4%	-4.0%	4.6%	3.8%	3.4%	3.3%
Equity Long-Short	HFRI Equity Hedge	-1.0%	4.7%	-10.1%	11.7%	17.9%	13.7%	-7.1%	9.1%	6.5%	5.2%	5.1%
Event Driven	HFRI Event Driven	2.4%	4.9%	-4.8%	12.4%	9.3%	7.5%	-2.1%	8.2%	7.8%	4.6%	4.5%
Global Macro	HFRI Macro Index	1.4%	0.6%	9.0%	7.7%	5.4%	6.5%	-4.1%	-0.7%	7.4%	5.3%	3.4%
Relative Value	HFRI Relative Value	1.5%	4.1%	-0.7%	7.6%	3.4%	7.4%	-0.4%	5.6%	5.4%	3.6%	4.0%
Credit	HFRI Credit Index	1.6%	4.4%	-2.6%	7.9%	6.3%	6.5%	-0.0%	5.8%	5.3%	3.8%	4.1%

Hedge Fund Strategy Performance



- Hedge fund strategies were mostly positive in Q3 2023, providing a safe haven to investors amid a period of losses for global stocks and investment grade bonds. The HFRI Fund of Funds Composite generated a 0.51% return in Q3 2023 and is up 2.81% YTD.
- Gains during the quarter were broad-based, as event-driven, global macro, relative value and credit strategies all generated positive performance. Hedge funds seemingly found opportunities amidst choppy markets during the quarter that saw an increase in interest rates, slowing inflation, mostly higher commodity prices (particularly in energy) and a strengthening U.S. Dollar.
- Long-short equity strategies were negative during the quarter, as the HFRI Equity Hedge Index returned -0.97% but remains up 4.65% YTD. Fundamental stock pickers have been challenged by a market lacking breadth; while technology and AI stocks have been the winners this year, they largely stumbled through Q3. Hedge funds with exposures in energy and financials fared better during the quarter.



Operating Engineers Local No. 77 Pension Plan

Master Consulting Services Report

Period Ended

September 30, 2023

Total Fund Growth of Assets

	Third Quarter	Fiscal Year-To-Date	One Year	Three Years
Beginning Market Value	\$189,852,057	\$183,835,645	\$179,443,767	\$179,656,261
Net Cash Flow	-\$1,676,443	-\$5,136,308	-\$7,059,013	-\$23,565,411
Net Investment Change	-\$3,265,197	\$6,211,079	\$12,525,662	\$28,819,567
Ending Market Value	\$184,910,417	\$184,910,417	\$184,910,417	\$184,910,417

Total Fund Growth of Assets

	Five Years	Seven Years	Ten Years
Beginning Market Value	\$176,972,377	\$161,735,967	\$156,846,955
Net Cash Flow	-\$39,907,531	-\$58,824,143	-\$89,475,632
Net Investment Change	\$47,845,570	\$81,998,593	\$117,539,093
Ending Market Value	\$184,910,417	\$184,910,417	\$184,910,417

- The Fund's fiscal year end is December 31st.

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Summary (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023			
			2023 Q3	Fiscal YTD	1 Yr	3 Yrs
Total Fund	\$184,910,417	100.0%	-1.6%	3.7%	7.5%	5.7%
Total Domestic Large Cap Equity	\$29,744,028	16.1%	-2.9%	12.4%	17.8%	5.7%
Total Domestic Mid Cap Equity	\$9,174,186	5.0%	-3.8%	11.0%	15.9%	6.4%
Total Domestic Small Cap Equity	\$8,437,917	4.6%	-7.8%	0.9%	10.9%	9.7%
Total International Large Cap Equity	\$9,072,016	4.9%	-5.9%	1.0%	20.9%	-1.0%
Total International Small Cap Equity	\$9,215,732	5.0%	-3.9%	5.7%	23.1%	2.0%
Total Investment Grade Fixed Income	\$15,766,324	8.5%	-0.8%	0.9%	2.5%	-2.6%
Total Short Duration High Yield Fixed Income	\$20,529,417	11.1%	0.8%	3.4%	6.1%	2.1%
Total Mortgages	\$9,884,278	5.3%	0.8%	2.8%	3.6%	2.5%
Total Real Estate - Core	\$19,036,804	10.3%	-2.5%	-6.0%	-9.5%	6.5%
Total Real Estate - Value Add	\$18,832,660	10.2%	-0.3%	0.4%	2.0%	--
Total Opportunistic Strategies	\$20,812,202	11.3%				
Total Private Equity	\$11,001,582	5.9%				
Total Infrastructure - Value Add	\$2,492,455	1.3%				
Total Cash Equivalents	\$910,815	0.5%				

Note: The present assumed actuarial rate as determined by the plan actuary is 7.0%.

Note: Time-weighted returns are not shown for asset classes for which internal rate of return (IRR) is a more appropriate performance measurement. IRRs can be found on the Commitment and Funding of Alternative Investments chart.

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Summary (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023		
			5 Yrs	7 Yrs	10 Yrs
Total Fund	\$184,910,417	100.0%	5.9%	7.3%	7.6%
Total Domestic Large Cap Equity	\$29,744,028	16.1%	8.0%	11.2%	11.1%
Total Domestic Mid Cap Equity	\$9,174,186	5.0%	9.9%	12.3%	11.4%
Total Domestic Small Cap Equity	\$8,437,917	4.6%	0.8%	3.4%	3.7%
Total International Large Cap Equity	\$9,072,016	4.9%	5.1%	7.4%	6.5%
Total International Small Cap Equity	\$9,215,732	5.0%	2.8%	--	--
Total Investment Grade Fixed Income	\$15,766,324	8.5%	1.5%	1.0%	1.7%
Total Short Duration High Yield Fixed Income	\$20,529,417	11.1%	3.0%	3.1%	3.1%
Total Mortgages	\$9,884,278	5.3%	3.4%	3.5%	3.9%
Total Real Estate - Core	\$19,036,804	10.3%	5.8%	6.8%	8.5%
Total Real Estate - Value Add	\$18,832,660	10.2%	--	--	--
Total Opportunistic Strategies	\$20,812,202	11.3%			
Total Private Equity	\$11,001,582	5.9%			
Total Infrastructure - Value Add	\$2,492,455	1.3%			
Total Cash Equivalents	\$910,815	0.5%			

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Summary (Gross of Fees)

	Fiscal Year Ending December 31st						
	Fiscal YTD	2022	2021	2020	2019	2018	2017
Total Fund	3.7%	-9.7%	15.1%	13.8%	17.1%	-2.5%	15.4%
<i>Total Fund Benchmark</i>	<i>5.0%</i>	<i>-9.6%</i>	<i>13.7%</i>	<i>12.8%</i>	<i>17.6%</i>	<i>-3.7%</i>	<i>11.1%</i>

	Fiscal Year Ending December 31st				
	2016	2015	2014	2013	2012
Total Fund	7.6%	4.0%	7.9%	21.5%	11.9%
<i>Total Fund Benchmark</i>	<i>9.5%</i>	<i>1.6%</i>	<i>7.2%</i>	<i>19.7%</i>	<i>11.9%</i>

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Summary (Net of Fees)

	Fiscal Year Ending December 31st						
	Fiscal YTD	2022	2021	2020	2019	2018	2017
Total Fund	3.2%	-10.4%	14.2%	13.0%	16.2%	-3.3%	14.5%
<i>Total Fund Benchmark</i>	<i>5.0%</i>	<i>-9.6%</i>	<i>13.7%</i>	<i>12.8%</i>	<i>17.6%</i>	<i>-3.7%</i>	<i>11.1%</i>

	Fiscal Year Ending December 31st				
	2016	2015	2014	2013	2012
Total Fund	6.7%	3.3%	7.1%	20.6%	11.1%
<i>Total Fund Benchmark</i>	<i>9.5%</i>	<i>1.6%</i>	<i>7.2%</i>	<i>19.7%</i>	<i>11.9%</i>

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Current vs. Policy						
	Current	Current	Policy	Policy Range	Difference	Difference
Domestic Large Cap Equity	\$29,744,028	16.1%	15.0%	10.0% - 20.0%	1.1%	\$2,007,465
Domestic Mid Cap Equity	\$9,174,186	5.0%	5.0%	0.0% - 10.0%	0.0%	-\$71,335
Domestic Small Cap Equity	\$8,437,917	4.6%	5.0%	0.0% - 10.0%	-0.4%	-\$807,604
International Large Cap Equity	\$9,072,016	4.9%	5.0%	0.0% - 10.0%	-0.1%	-\$173,505
International Small Cap Equity	\$9,215,732	5.0%	5.0%	0.0% - 10.0%	0.0%	-\$29,789
Investment Grade Fixed Income	\$15,766,324	8.5%	10.0%	5.0% - 15.0%	-1.5%	-\$2,724,717
Short Duration High Yield Fixed Income	\$20,529,417	11.1%	12.5%	7.5% - 17.5%	-1.4%	-\$2,584,385
Mortgages	\$9,884,278	5.3%	5.0%	0.0% - 10.0%	0.3%	\$638,757
Real Estate - Core	\$19,036,804	10.3%	10.0%	5.0% - 15.0%	0.3%	\$545,762
Real Estate - Value Add	\$18,832,660	10.2%	10.0%	5.0% - 15.0%	0.2%	\$341,618
Opportunistic Strategies	\$20,812,202	11.3%	10.0%	5.0% - 15.0%	1.3%	\$2,321,160
Private Equity	\$11,001,582	5.9%	5.0%	0.0% - 10.0%	0.9%	\$1,756,061
Infrastructure - Value Add	\$2,492,455	1.3%	2.5%	0.0% - 7.5%	-1.2%	-\$2,130,305
Cash Equivalents	\$910,815	0.5%	0.0%	0.0% - 0.0%	0.5%	\$910,815
Total	\$184,910,417	100.0%	100.0%			

- Policy adopted August 2023; October 2023.
- Cash equivalents includes:
 - \$89K distribution-proceeds from real estate - core (Boyd Watterson GSA Fund, LP); proceeds distributed in October 2023.
 - \$245K distribution-proceeds from real estate - value add (Boyd Watterson State Government Fund, LP); proceeds distributed in October 2023.

Operating Engineers Local No. 77 Pension Plan – Asset Allocation

- Asset allocation reviews were presented and discussed with the Trustees at the following meetings: November 10, 2020, February 9, 2021, February 8, 2022, February 14, 2023, and August 8, 2023.
- A private equity pacing analysis was presented and discussed with the Trustees at the following meetings: May 11, 2021, May 10, 2022, and February 14, 2023.
- At the February 14, 2023, meeting, the Trustees elected to adopt Policy: 15.0% (-5.0%) domestic large cap equity, 5.0% domestic mid cap equity, 5.0% domestic small cap equity, 5.0% (-2.5%) international large cap equity, 5.0% international small cap equity, 10.0% (+5.0%) investment grade fixed income, 5.0% short duration high yield fixed income, 10.0% (+5.0%) mortgages, 2.5% global tactical asset allocation, 10.0% real estate - core, 10.0% real estate – value add, 0.0% (-2.5%) hedge fund of funds – multi strategy, 10.0% opportunistic strategies, 5.0% private equity, 2.5% infrastructure – value add. To rebalance closer to the new Policy, transfer the following: 1) \$5.0M to investment grade fixed income (Wedge Capital Management) from domestic large cap equity (Fred Alger Management - \$2.5M) and international equity (Hardman Johnston International Equity Group Trust - \$2.5M). 2) \$5.0M to short duration high yield fixed income (Chartwell Investment Partners SDHY) from domestic large cap equity (Fred Alger Management - \$1.25M and Wedge Capital Management – QVM - \$3.75M). Status: All transfers completed as of April 6, 2023. Additionally, IPS recommended terminating domestic large cap equity (Fred Alger Management) and retaining domestic large cap equity (Northern Trust Collective Russell 1000 Growth Index Fund) for an estimated fee savings of \$39,872. Decision: Approved. Status: Fred Alger Management termination proceeds of \$14.0M were transferred to Northern Trust Collective Russell 1000 Growth Index Fund on May 1, 2023.
- At the August 8, 2023, meeting, the Trustees elected to adopt Policy: 15.0% domestic large cap equity, 5.0% domestic mid cap equity, 5.0% domestic small cap equity, 5.0% international large cap equity, 5.0% international small cap equity, 10.0% investment grade fixed income, 12.5% (+7.5%) short duration high yield fixed income, 5.0% (-5.0%) mortgages, 0.0% (-2.5%) global tactical asset allocation, 10.0% real estate - core, 10.0% real estate – value add, 10.0% opportunistic strategies, 5.0% private equity, 2.5% infrastructure – value add. To rebalance closer to the new Policy, transfer \$5.5M of cash proceeds from hedge fund of funds (Grosvenor Institutional Partners (PF), Ltd) redemption to investment grade fixed income (Wedge Capital Management - \$3.0M) and short duration high yield fixed income (Chartwell Investment Partners SDHY - \$2.5M). Status: All transfers completed as of August 16, 2023. Additionally, IPS recommended the following: 1) To increase diversification of international equity allocation, add an international equity large cap value manager. Decision: Approved. Status: The Trustees elected to retain Barrow Hanley Non-U.S. Value CIT – Founder Class for a \$4.5M mandate. Barrow Hanley Non-U.S. Value CIT – Founder Class is expected to fund December 8, 2023, with proceeds from international equity (Hardman Johnston International Equity Group Trust). 2) Terminate the global tactical asset allocation manager (Lazard/Wilmington LCAS Global Diversified - CIT). Decision: Approved. Status: Lazard/Wilmington LCAS Global Diversified - CIT termination proceeds of \$4.8M were transferred to short duration high yield fixed income (Chartwell Investment Partners SDHY) on September 1, 2023.

Recommendation: None.

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Real Estate - Core Redemption (In Millions) as of September 30, 2023						
Manager	Redemption Type	Effective Date	Withdrawal Queue	Requested \$	Received \$	Remaining \$
Principal U.S. Property Account	Partial	Aug-22	Jul-22	\$1.00	\$0.10	\$0.90
Total				\$1.00	\$0.10	\$0.90

Hedge Fund of Funds - Multi Strategy Redemption (In Millions) as of September 30, 2023						
Manager	Redemption Type	Effective Date	Withdrawal Queue	Requested \$	Received \$	Remaining \$
Grosvenor Institutional Partners (PF), Ltd*	Full	Jun-23	N/A	\$6.50	\$6.50	\$0.00
Total				\$6.50	\$6.50	\$0.00

*Redemption request was fully satisfied on September 15, 2023. Proceeds were received on September 15, 2023 and were used for cash needs.

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Commitment and Funding of Real Estate - Core (In Millions) as of September 30, 2023

Investments		Commitments			Contributions & Distributions		Valuations		Performance	
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI
Principal U.S. Property Account	2001	\$33.8	\$0.0	1.0	\$33.8	\$51.0	\$6.9	\$57.9	1.5	1.7
Multi-Employer Property Trust	2001	\$20.0	\$0.0	1.0	\$20.0	\$27.9	\$5.7	\$33.6	1.4	1.7
Boyd Watterson GSA Fund, LP	2015	\$5.0	\$0.0	1.0	\$5.0	\$2.2	\$6.5	\$8.7	0.4	1.7
Total		\$58.8	\$0.0	1.0	\$58.8	\$81.2	\$19.0	\$100.2	1.4	1.7

Commitment and Funding of Real Estate - Value Add (In Millions) as of September 30, 2023

Investments		Commitments			Contributions & Distributions		Valuations		Performance	
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI
Boyd Watterson State Government Fund, LP	2021	\$18.0	\$0.0	1.0	\$18.0	\$0.5	\$18.8	\$19.3	0.0	1.1
Total		\$18.0	\$0.0	1.0	\$18.0	\$0.5	\$18.8	\$19.3	0.0	1.1

Commitment and Funding of Opportunistic Strategies (In Millions) as of September 30, 2023

Investments		Commitments			Contributions & Distributions		Valuations		Performance		
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI	IRR
Grosvenor Opportunistic Credit Fund III, Ltd	2014	\$3.0	\$0.0	1.0	\$3.0	\$3.4	\$0.1	\$3.5	1.1	1.2	4.7%
Grosvenor Opportunistic Credit Fund IV, Ltd	2015	\$3.0	\$0.0	1.0	\$3.0	\$3.2	\$0.3	\$3.5	1.1	1.2	4.1%
Grosvenor Opportunistic Credit Fund V, Ltd	2017	\$8.7	\$0.0	1.0	\$8.7	\$0.5	\$10.3	\$10.8	0.1	1.2	
Total		\$14.7	\$0.0	1.0	\$14.7	\$7.1	\$10.8	\$17.8	0.5	1.2	

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Commitment and Funding of Private Equity (In Millions) as of September 30, 2023

Investments		Commitments			Contributions & Distributions		Valuations		Performance		
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI	IRR
^{1,2} GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	2018	\$10.6	\$3.5	0.7	\$7.2	\$2.5	\$7.4	\$9.9	0.3	1.4	13.0%
GCM Grosvenor Secondary Opportunities Feeder Fund III, LP	2021	\$8.5	\$5.6	0.3	\$2.9	\$0.0	\$3.6	\$3.6	0.0	1.2	
Total		\$19.1	\$9.1	0.5	\$10.1	\$2.5	\$11.0	\$13.5	0.2	1.3	

¹Unfunded commitment includes recallable distributions of \$138K.

²Commitment amount includes \$2.1M unfunded commitment adjustment.

Commitment and Funding of Infrastructure - Value Add (In Millions) as of September 30, 2023

Investments		Commitments			Contributions & Distributions		Valuations		Performance	
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI
¹ WaCap - SP Infrastructure Fund IV Feeder	2021	\$5.0	\$2.7	0.5	\$2.5	\$0.2	\$2.5	\$2.7	0.1	1.1
Total		\$5.0	\$2.7	0.5	\$2.5	\$0.2	\$2.5	\$2.7	0.1	1.1

¹Unfunded commitment includes recallable distributions of \$190K. After October 10, 2023, unfunded commitment is \$2.7M.

- Distribution to Paid-In (DPI) – The DPI is the value of all distributions to limited partners divided by the amount limited partners have contributed to the fund. A DPI of 1 indicates the investor has received capital back equal to what they invested while a DPI over 1 indicates an investor has received more capital back than they invested. DPI is most relevant for closed-end fund structures such as private equity.
- Total Value to Paid in Multiple (TVPI) – The TVPI is a measure of return that expresses how much a fund has made relative to how much was contributed. It is calculated by dividing the sum of the amount of capital distributed to investors and the amount of remaining value by the amount of invested capital. A TVPI below 1 indicates the current value of the investment plus the capital returned to the investor is less than the investor contributed. A TVPI greater than 1 indicates the current value of the investment plus the capital returned to the investor is more than the investor contributed. For closed-end funds such as private equity, DPI and TVPI will be the same at the end of the fund's life.
- Internal Rate of Return (IRR) – The discount rate at which the net present value of an investment's cash flows is equal to zero. IRR is commonly used to gauge fund performance.
- Performance data included in the table above may differ from performance data provided by the investment manager due to the availability and timing of data used in the calculations.

Operating Engineers Local No. 77 Pension Plan

Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023				
	Market Value	% of Portfolio	2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
Total Fund	\$184,910,417	100.0%	-1.8%	3.2%	6.7%	4.8%	5.0%
Total Domestic Large Cap Equity	\$29,744,028	16.1%	-3.0%	12.1%	17.3%	5.1%	7.4%
Northern Trust Collective Russell 1000 Growth Index Fund	\$15,080,308	8.2%	-3.1%	--	--	--	--
<i>Russell 1000 Growth</i>			-3.1%	--	--	--	--
Wedge Capital Management - QVM	\$14,663,720	7.9%	-2.8%	4.8%	15.1%	11.9%	6.8%
<i>Russell 1000 Value</i>			-3.2%	1.8%	14.4%	11.0%	6.2%
Total Domestic Mid Cap Equity	\$9,174,186	5.0%	-4.0%	10.3%	15.0%	5.5%	9.0%
TimesSquare Capital Management	\$9,174,186	5.0%	-4.0%	10.3%	15.0%	5.5%	9.0%
<i>Russell MidCap Growth</i>			-5.2%	9.9%	17.5%	2.6%	7.0%
Total Domestic Small Cap Equity	\$8,437,917	4.6%	-8.0%	0.5%	10.3%	9.1%	0.2%
Eaton Vance Small Cap Collective Investment Trust Fund	\$8,437,917	4.6%	-8.0%	0.5%	10.3%	9.1%	--
<i>Russell 2000</i>			-5.1%	2.5%	8.9%	7.2%	--

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023				
	Market Value	% of Portfolio	2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
Total International Large Cap Equity	\$9,072,016	4.9%	-6.1%	0.4%	20.0%	-1.8%	4.3%
Hardman Johnston International Equity Group Trust	\$9,072,016	4.9%	-6.1%	0.4%	20.0%	-1.8%	4.3%
<i>MSCI EAFE</i>			-4.1%	7.1%	25.6%	5.8%	3.2%
<i>MSCI ACWI ex USA</i>			-3.8%	5.3%	20.4%	3.7%	2.6%
<i>MSCI EAFE Growth</i>			-8.6%	4.3%	20.0%	0.4%	3.2%
Total International Small Cap Equity	\$9,215,732	5.0%	-4.1%	5.0%	22.1%	1.1%	1.9%
Victory Trivalent International Small-Cap Collective Fund	\$9,215,732	5.0%	-4.1%	5.0%	22.1%	1.1%	1.9%
<i>S&P Developed Ex-U.S. Small Cap (Net)</i>			-3.8%	2.5%	19.1%	1.3%	0.8%
Total Investment Grade Fixed Income	\$15,766,324	8.5%	-0.9%	0.7%	2.2%	-2.9%	1.1%
Wedge Capital Management	\$15,766,324	8.5%	-0.9%	0.7%	2.2%	-2.9%	1.1%
<i>Wedge Custom Benchmark</i>			-0.8%	0.7%	2.2%	-2.9%	1.0%
Total Short Duration High Yield Fixed Income	\$20,529,417	11.1%	0.6%	3.0%	5.6%	1.6%	2.5%
Chartwell Investment Partners SDHY	\$20,529,417	11.1%	0.6%	3.0%	5.6%	1.6%	2.5%
<i>ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR</i>			1.1%	4.7%	7.5%	2.7%	3.6%
<i>Bloomberg US Govt/Credit Int TR</i>			-0.8%	0.7%	2.2%	-2.9%	1.0%

Operating Engineers Local No. 77 Pension Plan

Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023				
	Market Value	% of Portfolio	2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
Total Mortgages	\$9,884,278	5.3%	0.6%	2.4%	3.1%	1.9%	2.8%
Ullico - J for Jobs	\$4,671,232	2.5%	0.5%	2.2%	3.0%	2.1%	2.5%
Bloomberg US Aggregate TR			-3.2%	-1.2%	0.6%	-5.2%	0.1%
Washington Capital JMT Mortgage Income Fund	\$5,213,046	2.8%	0.7%	2.6%	3.2%	1.8%	3.2%
Bloomberg US Aggregate TR			-3.2%	-1.2%	0.6%	-5.2%	0.1%
Total Real Estate - Core	\$19,036,804	10.3%	-2.8%	-6.7%	-10.5%	5.4%	4.7%
Principal U.S. Property Account	\$6,884,043	3.7%	-3.9%	-8.9%	-14.6%	5.7%	4.6%
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	6.7%	5.2%
Boyd Watterson GSA Fund, LP	\$6,483,002	3.5%	-0.9%	-1.0%	-0.8%	4.5%	5.4%
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	6.7%	5.2%
Long-Term Income Objective 8%			1.9%	5.9%	8.0%	8.0%	8.0%
Multi-Employer Property Trust	\$5,669,759	3.1%	-3.5%	-10.3%	-15.7%	5.3%	4.2%
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	6.7%	5.2%
Total Real Estate - Value Add	\$18,832,660	10.2%	-0.6%	-0.5%	0.7%	--	--
Boyd Watterson State Government Fund, LP	\$18,832,660	10.2%	-0.6%	-0.5%	0.7%	--	--
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	--	--
Long-Term Income Objective 9%			2.2%	6.7%	9.0%	--	--

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023				
			2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
Total Opportunistic Strategies	\$20,812,202	11.3%					
Grosvenor Opportunistic Credit Fund III, Ltd	\$113,673	0.1%					
Grosvenor Opportunistic Credit Fund IV, Ltd	\$349,881	0.2%					
Grosvenor Opportunistic Credit Fund V, Ltd	\$10,304,161	5.6%	1.3%	5.6%	6.4%	6.7%	4.7%
<i>HFRI Credit Index</i>			1.6%	4.4%	5.8%	5.3%	3.8%
Corbin ERISA Opportunity Fund, LP - Class C Shares	\$10,044,487	5.4%	1.2%	2.1%	2.0%	6.8%	--
<i>HFRI Credit Index</i>			1.6%	4.4%	5.8%	5.3%	--
<i>Long-Term Target Return of 8%</i>			1.9%	5.9%	8.0%	8.0%	--
Total Private Equity	\$11,001,582	5.9%					
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,445,024	4.0%					
GCM Grosvenor Secondary Opportunities Feeder Fund III, LP	\$3,556,558	1.9%					
Total Infrastructure - Value Add	\$2,492,455	1.3%					
WaCap - SP Infrastructure Fund IV Feeder	\$2,492,455	1.3%					

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023				
	Market Value	% of Portfolio	2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
Total Cash Equivalents	\$910,815	0.5%					
Cash Account	\$577,343	0.3%					
Cash in Transit - Boyd Watterson GSA Fund, LP Distribution Proceeds	\$88,883	0.0%					
Cash in Transit - Boyd Watterson State Government Fund, LP Distribution Proceeds	\$244,590	0.1%					

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023			
	Market Value	% of Portfolio	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund	\$184,910,417	100.0%	6.5%	6.8%	8.5%	Apr-88
Total Domestic Large Cap Equity	\$29,744,028	16.1%	10.6%	10.5%	--	Jul-01
Northern Trust Collective Russell 1000 Growth Index Fund	\$15,080,308	8.2%	--	--	8.2%	May-23
<i>Russell 1000 Growth</i>			--	--	8.2%	May-23
Wedge Capital Management - QVM	\$14,663,720	7.9%	9.2%	9.4%	9.0%	Jul-01
<i>Russell 1000 Value</i>			7.9%	8.4%	7.0%	Jul-01
Total Domestic Mid Cap Equity	\$9,174,186	5.0%	11.4%	10.6%	--	Apr-06
TimesSquare Capital Management	\$9,174,186	5.0%	11.4%	10.6%	9.7%	Apr-06
<i>Russell MidCap Growth</i>			10.4%	9.9%	8.8%	Apr-06
Total Domestic Small Cap Equity	\$8,437,917	4.6%	2.7%	3.0%	--	Jul-04
Eaton Vance Small Cap Collective Investment Trust Fund	\$8,437,917	4.6%	--	--	5.7%	Sep-19
<i>Russell 2000</i>			--	--	5.8%	Sep-19

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023			
	Market Value	% of Portfolio	7 Yrs	10 Yrs	Inception	Inception Date
Total International Large Cap Equity	\$9,072,016	4.9%	6.6%	5.7%	--	Apr-97
Hardman Johnston International Equity Group Trust	\$9,072,016	4.9%	6.6%	5.7%	7.1%	Jul-09
<i>MSCI EAFE</i>			5.3%	3.8%	6.0%	Jul-09
<i>MSCI ACWI ex USA</i>			4.7%	3.3%	5.4%	Jul-09
<i>MSCI EAFE Growth</i>			5.3%	4.4%	6.7%	Jul-09
Total International Small Cap Equity	\$9,215,732	5.0%	--	--	1.5%	Mar-18
Victory Trivalent International Small-Cap Collective Fund	\$9,215,732	5.0%	--	--	1.5%	Mar-18
<i>S&P Developed Ex-U.S. Small Cap (Net)</i>			--	--	0.2%	Mar-18
Total Investment Grade Fixed Income	\$15,766,324	8.5%	0.6%	1.4%	4.2%	Jun-95
Wedge Capital Management	\$15,766,324	8.5%	0.6%	1.4%	3.1%	Jan-03
<i>Wedge Custom Benchmark</i>			0.6%	1.3%	3.0%	Jan-03
Total Short Duration High Yield Fixed Income	\$20,529,417	11.1%	2.6%	2.6%	2.7%	Jan-13
Chartwell Investment Partners SDHY	\$20,529,417	11.1%	2.6%	2.6%	2.7%	Jan-13
<i>ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR</i>			3.5%	3.7%	3.7%	Jan-13
<i>Bloomberg US Govt/Credit Int TR</i>			0.6%	1.3%	1.1%	Jan-13

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023			
	Market Value	% of Portfolio	7 Yrs	10 Yrs	Inception	Inception Date
Total Mortgages	\$9,884,278	5.3%	2.9%	3.3%	3.3%	Oct-04
Ullico - J for Jobs	\$4,671,232	2.5%	2.6%	2.8%	2.7%	Oct-04
Bloomberg US Aggregate TR			-0.1%	1.1%	2.8%	Oct-04
Washington Capital JMT Mortgage Income Fund	\$5,213,046	2.8%	3.2%	3.8%	4.5%	Oct-04
Bloomberg US Aggregate TR			-0.1%	1.1%	2.8%	Oct-04
Total Real Estate - Core	\$19,036,804	10.3%	5.7%	7.4%	6.2%	Jul-01
Principal U.S. Property Account	\$6,884,043	3.7%	5.8%	7.6%	6.5%	Oct-01
NCREIF ODCE Equal Weighted Net			5.9%	7.6%	6.5%	Oct-01
Boyd Watterson GSA Fund, LP	\$6,483,002	3.5%	6.4%	--	6.9%	Feb-15
NCREIF ODCE Equal Weighted Net			5.9%	--	7.1%	Feb-15
Long-Term Income Objective 8%			8.0%	--	8.0%	Feb-15
Multi-Employer Property Trust	\$5,669,759	3.1%	4.8%	6.7%	5.7%	Jul-01
NCREIF ODCE Equal Weighted Net			5.9%	7.6%	6.4%	Jul-01
Total Real Estate - Value Add	\$18,832,660	10.2%	--	--	3.6%	Oct-21
Boyd Watterson State Government Fund, LP	\$18,832,660	10.2%	--	--	3.6%	Oct-21
NCREIF ODCE Equal Weighted Net			--	--	2.9%	Oct-21
Long-Term Income Objective 9%			--	--	9.0%	Oct-21

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023			
			7 Yrs	10 Yrs	Inception	Inception Date
Total Opportunistic Strategies	\$20,812,202	11.3%				
Grosvenor Opportunistic Credit Fund III, Ltd	\$113,673	0.1%				
Grosvenor Opportunistic Credit Fund IV, Ltd	\$349,881	0.2%				
Grosvenor Opportunistic Credit Fund V, Ltd	\$10,304,161	5.6%	--	--	4.7%	Feb-17
<i>HFRI Credit Index</i>			--	--	4.0%	Feb-17
Corbin ERISA Opportunity Fund, LP - Class C Shares	\$10,044,487	5.4%	--	--	4.7%	Jan-20
<i>HFRI Credit Index</i>			--	--	4.2%	Jan-20
<i>Long-Term Target Return of 8%</i>			--	--	8.0%	Jan-20
Total Private Equity	\$11,001,582	5.9%				
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,445,024	4.0%				
GCM Grosvenor Secondary Opportunities Feeder Fund III, LP	\$3,556,558	1.9%				
Total Infrastructure - Value Add	\$2,492,455	1.3%				
WaCap - SP Infrastructure Fund IV Feeder	\$2,492,455	1.3%				

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023			
	Market Value	% of Portfolio	7 Yrs	10 Yrs	Inception	Inception Date
Total Cash Equivalents	\$910,815	0.5%				
Cash Account	\$577,343	0.3%				
Cash in Transit - Boyd Watterson GSA Fund, LP Distribution Proceeds	\$88,883	0.0%				
Cash in Transit - Boyd Watterson State Government Fund, LP Distribution Proceeds	\$244,590	0.1%				

Account Information	
Account Name	Northern Trust Collective Russell 1000 Growth Index Fund
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	5/01/23
Account Type	Domestic Large Cap Growth Equity
Benchmark	Russell 1000 Growth
Universe	eV US Large Cap Growth Equity Net

Northern Trust Collective Russell 1000 Growth Index Fund		
Ending September 30, 2023		
	Third Quarter	Inception 5/1/23
Beginning Market Value	\$15,664,430	\$0
Net Cash Flow	-\$97,650	\$13,925,130
Net Investment Change	-\$486,472	\$1,155,177
Ending Market Value	\$15,080,308	\$15,080,308

	Calendar Years												Inception	Inception Date
	2023 Q3	Rank	YTD Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank	2022 Rank	2021 Rank	2020 Rank	2019 Rank	2018 Rank	2017 Rank		
Northern Trust Collective Russell 1000 Growth Index Fund	-3.1%	41	--	--	--	--	--	--	--	--	--	--	8.2%	May-23
<i>Russell 1000 Growth</i>	-3.1%	41	--	--	--	--	--	--	--	--	--	--	8.2%	May-23

Note: Returns are net of fees.

Operating Engineers Local No. 77 Pension Plan - Northern Trust Collective Russell 1000 Growth Index Fund

Manager Summary

Recommendation: None.

Compliance Summary

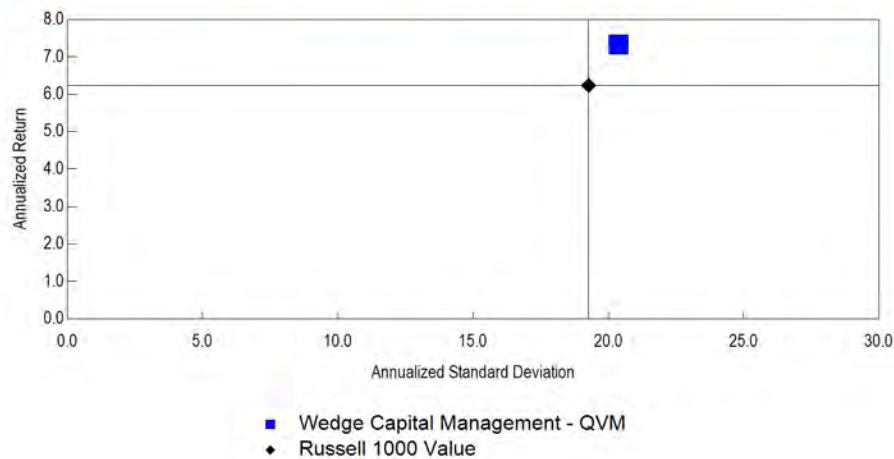
Manager verified the portfolio and individual holdings are currently, and have been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or prospectus governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or prospectus guidelines.

Items of Interest: Personnel Addition - The manager stated in September 2023, Anwiti Bahuguna joined Northern Trust Asset Management as Chief Investment Officer of Global Asset Allocation. **Form ADV - ADV Part 1, Material Changes:** Updated *Schedule A* to reflect leadership changes as of September 2023: Remove Peter Ewing as a director. Addition of Paulemi Kar and Maureen Bromwell as directors. Addition of Joseph McInerney as NTI Chief Risk Officer. **Errors and Omissions** - The manager stated there was no change Northern Trust's Errors & Omissions insurance policy over the last quarter, and the policy was recently renewed for the period 30 June 2023 – 30 June 2024.

Account Information

Account Name	Wedge Capital Management - QVM
Account Structure	Separate Account
Investment Style	Active
Inception Date	7/01/01
Account Type	Domestic Large Cap Value Equity
Benchmark	Russell 1000 Value
Universe	eV US Large Cap Value Equity Gross

Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2023



Wedge Capital Management - QVM

Ending September 30, 2023

	Third Quarter	Inception 7/1/01
Beginning Market Value	\$15,158,925	\$22,264,495
Net Cash Flow	-\$97,650	-\$52,044,449
Net Investment Change	-\$397,555	\$44,443,675
Ending Market Value	\$14,663,720	\$14,663,720

3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wedge Capital Management - QVM	12.4%	18.2%	99.6%	95.1%
Russell 1000 Value	11.0%	17.6%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wedge Capital Management - QVM	7.3%	20.4%	104.3%	99.2%
Russell 1000 Value	6.2%	19.3%	100.0%	100.0%

Calendar Years

	2023 Q3		Rank		YTD Rank		1 Yr Rank		3 Yrs Rank		5 Yrs Rank		2022 Rank		2021 Rank		2020 Rank		2019 Rank		2018 Rank		Inception		Inception Date	
Wedge Capital Management - QVM	-2.7%	58	5.2%	31	15.6%	54	12.4%	51	7.3%	56	-12.3%	88	33.2%	9	6.8%	38	29.6%	25	-12.0%	82			9.5%	Jul-01		
Russell 1000 Value	-3.2%	76	1.8%	58	14.4%	62	11.0%	67	6.2%	79	-7.5%	69	25.2%	72	2.8%	62	26.5%	54	-8.3%	50			7.0%	Jul-01		

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan- Wedge Capital Management - QVM

Correspondence Summary

- Manager presented annual reviews at meetings in February 2015, May 2016, May 2017, February 2018, May 2019, and February 2020.

Manager Summary

- IPS conducted due diligence meetings with Wedge Capital on February 10, 2022 and October 17, 2023.

Recommendation: None.

Compliance Summary

Exceptions: None.

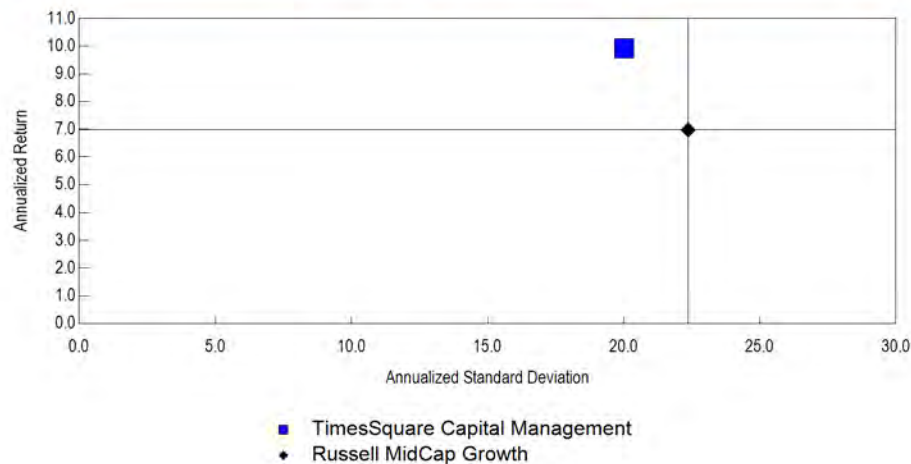
Action to be taken: None.

Items of Interest: Personnel Departure - The manager stated effective August 15, 2023, Brandon Smith, Mid Cap Equity Analyst departed the firm.

Account Information

Account Name	TimesSquare Capital Management
Account Structure	Separate Account
Investment Style	Active
Inception Date	4/01/06
Account Type	Domestic Mid Cap Growth Equity
Benchmark	Russell MidCap Growth
Universe	eV US Mid Cap Growth Equity Gross

Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2023



TimesSquare Capital Management

Ending September 30, 2023

	Third Quarter	Inception 4/1/06
Beginning Market Value	\$9,580,710	\$11,020,228
Net Cash Flow	-\$39,100	-\$20,246,335
Net Investment Change	-\$367,424	\$18,400,292
Ending Market Value	\$9,174,186	\$9,174,186

3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
TimesSquare Capital Management	6.4%	18.2%	96.8%	89.2%
Russell MidCap Growth	2.6%	21.1%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
TimesSquare Capital Management	9.9%	20.0%	92.6%	92.3%
Russell MidCap Growth	7.0%	22.4%	100.0%	100.0%

Calendar Years

	2023 Q3	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	2022	Rank	2021	Rank	2020	Rank	2019	Rank	2018	Rank	Inception	Inception Date
TimesSquare Capital Management	-3.8%	16	11.0%	31	15.9%	52	6.4%	17	9.9%	15	-21.5%	13	17.1%	37	34.2%	62	37.6%	37	-3.1%	44	10.6%	Apr-06
Russell MidCap Growth	-5.2%	51	9.9%	42	17.5%	28	2.6%	50	7.0%	60	-26.7%	41	12.7%	65	35.6%	54	35.5%	53	-4.8%	58	8.8%	Apr-06

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - TimesSquare Capital Management

Correspondence Summary

- Manager presented annual reviews at meetings in February 2015, May 2016, February 2017, November 2018 and August 2019.

Manager Summary

- IPS conducted due diligence meetings with TimesSquare on February 3, 2021, July 14, 2021, October 14, 2021 and September 28, 2022.

Recommendation: None.

Compliance Summary

Exceptions: None.

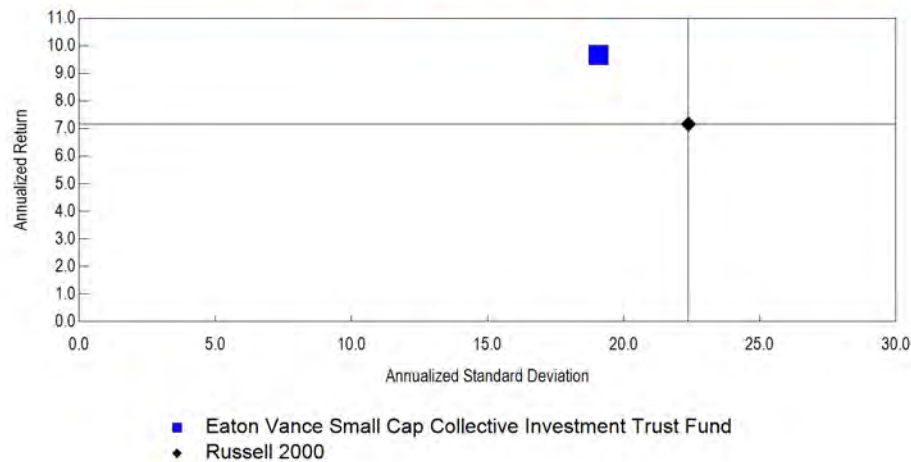
Action to be taken: None.

Items of Interest: **Personnel Departure** - The manager stated that David Cielusniak, formerly Chief Compliance Officer and Chief Operating Officer, departed from TimesSquare in August 2023. **Personnel Addition** - The manager stated that Preeti Kohli joined TimesSquare in August 2023 as the Chief Compliance Officer and General Counsel. **Personnel Change** - The manager stated that Joe McComb, Head of Operations, was promoted to Chief Operating Officer. **Form ADV** - The manager stated there have been changes to the Form ADV. Please see the full Compliance Report for a copy of the Form ADV Part 2B.

Account Information

Account Name	Eaton Vance Small Cap Collective Investment Trust Fund
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	9/01/19
Account Type	Domestic Small Cap Core Equity
Benchmark	Russell 2000
Universe	eV US Small Cap Core Equity Gross

Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2023



Eaton Vance Small Cap Collective Investment Trust Fund

Ending September 30, 2023

	Third Quarter	Inception 9/1/19
Beginning Market Value	\$9,214,886	\$0
Net Cash Flow	-\$58,600	\$6,337,650
Net Investment Change	-\$718,369	\$2,100,267
Ending Market Value	\$8,437,917	\$8,437,917

3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Eaton Vance Small Cap Collective Investment Trust Fund	9.7%	19.1%	85.4%	85.1%
Russell 2000	7.2%	22.4%	100.0%	100.0%

Calendar Years

	2023 Q3	Rank	YTD Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank	2022 Rank	2021 Rank	2020 Rank	2019 Rank	2018 Rank	Inception	Inception Date
Eaton Vance Small Cap Collective Investment Trust Fund	-7.8%	96	0.9%	81	10.9%	69	9.7%	73	--	--	--	6.3%	Sep-19
Russell 2000	-5.1%	69	2.5%	71	8.9%	83	7.2%	91	--	--	--	5.8%	Sep-19

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Eaton Vance Small Cap Collective Investment Trust Fund

Manager Summary

- IPS conducted a due diligence meeting with Eaton Vance on June 15, 2022.
- On October 8, 2020, Eaton Vance announced they will be acquired by Morgan Stanley. The transaction closed on March 1, 2021.

Recommendation: None.

Compliance Summary

Manager verified that the portfolio and individual holdings are currently, and have been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or prospectus governing the management of the investment. With respect to the portfolio(s) under management, the manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: None.

Account Information

Account Name	Hardman Johnston International Equity Group Trust
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	7/01/09
Account Type	International Large Cap Equity
Benchmark	MSCI EAFE
Universe	eV All EAFE Equity Gross

Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2023



Hardman Johnston International Equity Group Trust

Ending September 30, 2023

	Third Quarter	Inception 7/1/09
Beginning Market Value	\$9,661,119	\$6,099,925
Net Cash Flow	\$0	-\$8,435,348
Net Investment Change	-\$589,103	\$11,407,439
Ending Market Value	\$9,072,016	\$9,072,016

3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Hardman Johnston International Equity Group Trust	-1.0%	21.3%	80.9%	108.8%
MSCI EAFE	5.8%	18.2%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Hardman Johnston International Equity Group Trust	5.1%	21.8%	125.3%	103.5%
MSCI EAFE	3.2%	18.0%	100.0%	100.0%

Calendar Years

	2023 Q3	Rank	YTD Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank	2022 Rank	2021 Rank	2020 Rank	2019 Rank	2018 Rank	Inception	Inception Date									
Hardman Johnston International Equity Group Trust	-5.9%	77	1.0%	90	20.9%	69	-1.0%	90	5.1%	19	-23.1%	86	1.9%	99	36.5%	1	34.3%	3	-13.3%	34	7.8%	Jul-09
MSCI EAFE	-4.1%	53	7.1%	45	25.6%	39	5.8%	48	3.2%	61	-14.5%	42	11.3%	68	7.8%	61	22.0%	63	-13.8%	40	6.0%	Jul-09
MSCI ACWI ex USA	-3.8%	46	5.3%	63	20.4%	72	3.7%	66	2.6%	72	-16.0%	52	7.8%	84	10.7%	42	21.5%	66	-14.2%	44	5.4%	Jul-09
MSCI EAFE Growth	-8.6%	93	4.3%	71	20.0%	75	0.4%	86	3.2%	61	-22.9%	85	11.3%	68	18.3%	19	27.9%	19	-12.8%	28	6.7%	Jul-09

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Hardman Johnston International Equity Group Trust

Correspondence Summary

- Manager presented annual reviews at meetings in August 2016, August 2017, May 2018, and May 2019.

Manager Summary

- IPS conducted due diligence meetings with Hardman Johnston on February 5, 2021, July 19, 2021, January 19, 2022, April 11, 2022, October 13, 2022 and April 5, 2023.

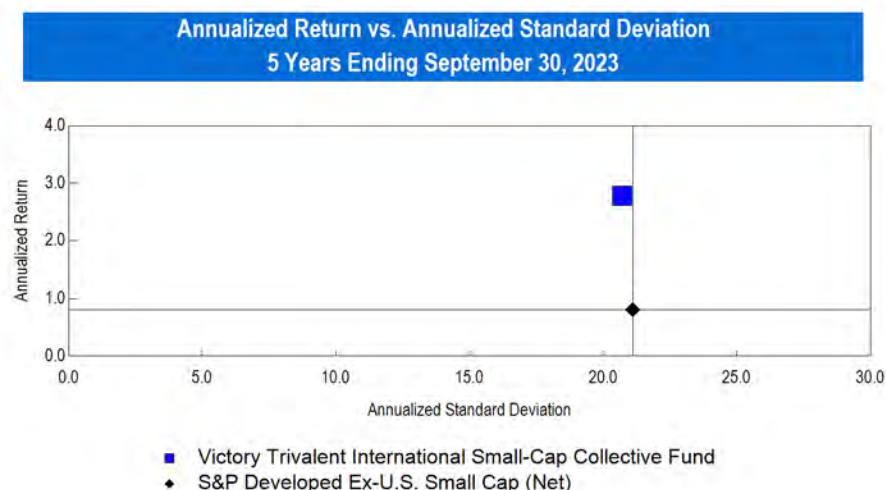
Recommendation: None.

Compliance Summary

Manager verified that the portfolio and individual holdings are currently, and have been during the past quarter, in compliance with the firm's commingled investment vehicle investment guidelines and/or prospectus governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or prospectus guidelines.

Items of Interest: None.

Account Information	
Account Name	Victory Trivalent International Small-Cap Collective Fund
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	3/01/18
Account Type	International Small Cap Equity
Benchmark	S&P Developed Ex-U.S. Small Cap (Net)
Universe	



Victory Trivalent International Small-Cap Collective Fund		
Ending September 30, 2023		
	Third Quarter	Inception 3/1/18
Beginning Market Value	\$9,591,176	\$0
Net Cash Flow	\$0	\$8,059,128
Net Investment Change	-\$375,444	\$1,156,603
Ending Market Value	\$9,215,732	\$9,215,732

3 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Victory Trivalent International Small-Cap Collective Fund	2.0%	18.6%	98.7%	97.7%
S&P Developed Ex-U.S. Small Cap (Net)	1.3%	19.8%	100.0%	100.0%

5 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Victory Trivalent International Small-Cap Collective Fund	2.8%	20.7%	106.7%	98.4%
S&P Developed Ex-U.S. Small Cap (Net)	0.8%	21.1%	100.0%	100.0%

	Calendar Years										Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	
Victory Trivalent International Small-Cap Collective Fund	-3.9%	5.7%	23.1%	2.0%	2.8%	-21.9%	13.7%	16.4%	29.2%	--	2.4% Mar-18
S&P Developed Ex-U.S. Small Cap (Net)	-3.8%	2.5%	19.1%	1.3%	0.8%	-21.6%	9.6%	14.3%	24.1%	--	0.2% Mar-18

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Victory Trivalent International Small-Cap Collective Fund

Correspondence Summary

- Manager presented annual review at meeting in February 2019.

Manager Summary

- IPS conducted due diligence meetings with Victory Capital/Trivalent on April 21, 2021 and June 14, 2022.

Recommendation: None.

Compliance Summary

The manager verified the portfolio and individual holdings are currently, and have been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or prospectus governing the management of the investment. With respect to the portfolio(s) under management, the manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment and/or prospectus guidelines.

Items of Interest: None.

Account Information

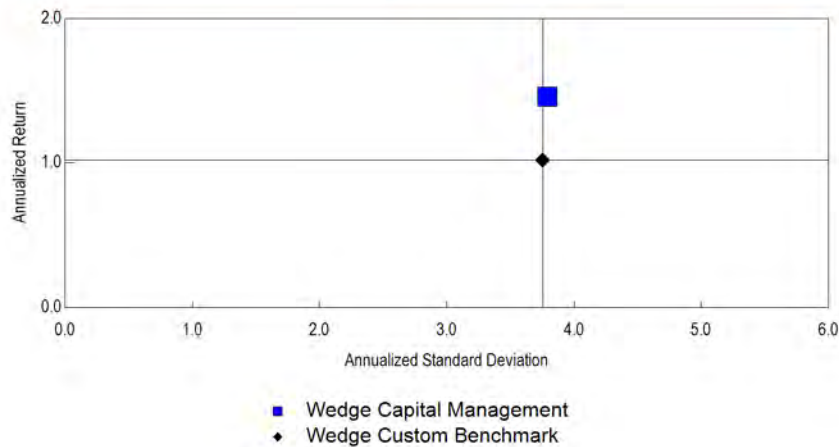
Account Name	Wedge Capital Management
Account Structure	Separate Account
Investment Style	Active
Inception Date	1/01/03
Account Type	Investment Grade Fixed Income
Benchmark	Wedge Custom Benchmark
Universe	

Wedge Capital Management

Ending September 30, 2023

	Third Quarter	Inception 1/1/03
Beginning Market Value	\$12,919,041	\$19,772,647
Net Cash Flow	\$2,960,900	-\$12,473,288
Net Investment Change	-\$113,617	\$8,466,965
Ending Market Value	\$15,766,324	\$15,766,324

Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2023



3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wedge Capital Management	-2.6%	4.1%	99.1%	95.0%
Wedge Custom Benchmark	-2.9%	4.1%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wedge Capital Management	1.5%	3.8%	102.9%	94.0%
Wedge Custom Benchmark	1.0%	3.8%	100.0%	100.0%

Calendar Years

	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	Inception Date
Wedge Capital Management	-0.8%	0.9%	2.5%	-2.6%	1.5%	-7.9%	-1.1%	7.5%	7.0%	1.0%	3.4%	Jan-03
Wedge Custom Benchmark	-0.8%	0.7%	2.2%	-2.9%	1.0%	-8.2%	-1.4%	6.4%	6.8%	0.9%	3.0%	Jan-03

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Wedge Capital Management

Correspondence Summary

- Manager presented annual reviews at meetings in February 2015, May 2016, May 2017, February 2018, May 2019, and February 2020.

Manager Summary

- IPS conducted due diligence meetings with Wedge Capital on January 20, 2021 and November 15, 2022.

Recommendation: None.

Compliance Summary

Exceptions: None.

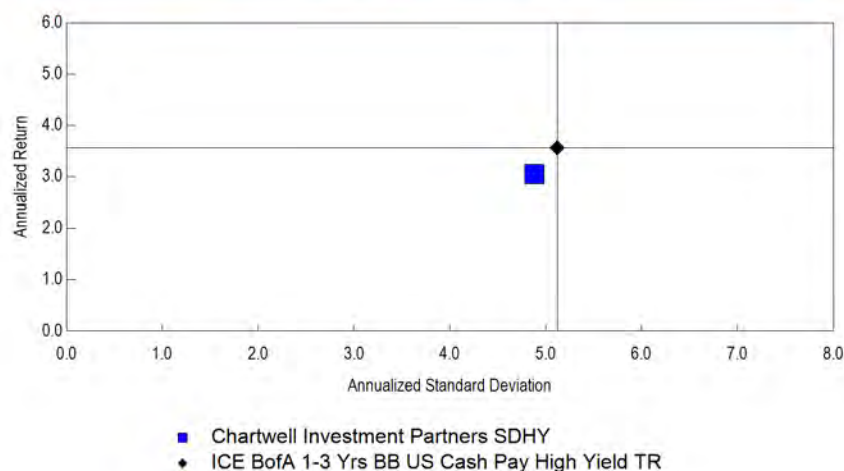
Action to be taken: None.

Items of Interest: Personnel Departure - The manager stated effective August 15, 2023, Brandon Smith, Mid Cap Equity Analyst departed the firm.

Account Information

Account Name	Chartwell Investment Partners SDHY
Account Structure	Separate Account
Investment Style	Active
Inception Date	1/31/13
Account Type	Short Duration High Yield Fixed Income
Benchmark	ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR
Universe	

Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2023



Chartwell Investment Partners SDHY

Ending September 30, 2023

	Third Quarter	Inception 1/31/13
Beginning Market Value	\$13,604,898	\$0
Net Cash Flow	\$6,832,502	\$18,496,219
Net Investment Change	\$92,017	\$2,033,198
Ending Market Value	\$20,529,417	\$20,529,417

3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Chartwell Investment Partners SDHY	2.1%	4.1%	94.0%	106.1%
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR	2.7%	4.0%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Chartwell Investment Partners SDHY	3.0%	4.9%	91.2%	98.4%
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR	3.6%	5.1%	100.0%	100.0%

Calendar Years

	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	Inception Date
Chartwell Investment Partners SDHY	0.8%	3.4%	6.1%	2.1%	3.0%	-2.7%	2.8%	4.7%	8.0%	1.1%	3.2%	Jan-13
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR	1.1%	4.7%	7.5%	2.7%	3.6%	-3.1%	3.2%	5.4%	8.7%	1.4%	3.7%	Jan-13
Bloomberg US Govt/Credit Int TR	-0.8%	0.7%	2.2%	-2.9%	1.0%	-8.2%	-1.4%	6.4%	6.8%	0.9%	1.1%	Jan-13

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Chartwell Investment Partners SDHY

Correspondence Summary

- Manager presented annual reviews at meetings in February 2016, May 2017, August 2018, August 2019, and May 2020.

Manager Summary

- IPS conducted due diligence meetings with Chartwell on January 19, 2021, July 22, 2021, July 19, 2022 and July 18, 2023.
- On October 20, 2021, Chartwell announced that their parent company, TriState Capital Holdings, has agreed to be acquired by Raymond James Financial. Upon closing of the transaction, Chartwell will become an affiliate of Carillon Tower, the asset management subsidiary of Raymond James Financial. Chartwell provided a letter to clients requesting acknowledgment and consent to the ownership change. IPS provided a memo recommending clients consent to the ownership change, subject to counsel review. Consent was provided. The transaction closed on June 1, 2022.

Recommendation: None.

Compliance Summary

Exceptions: None.

Action to be taken: None.

Items of Interest: Personnel Additions - The manager stated during 3Q 2023, Chartwell Investment Partners expanded their Fixed Income investment team with the hiring of Thomas Buckley as Research Analyst and Trader for both high grade and high yield.

Account Information

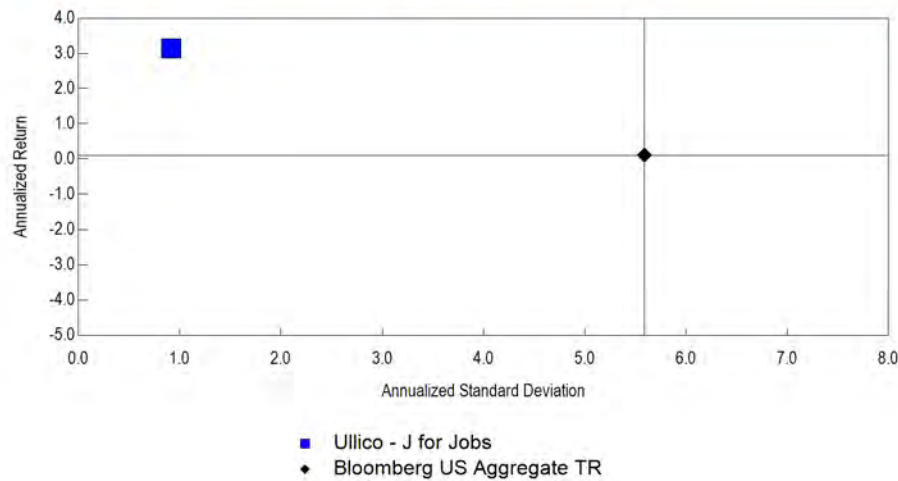
Account Name	Ullico - J for Jobs
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	10/01/04
Account Type	Mortgages
Benchmark	Bloomberg US Aggregate TR
Universe	

Ullico - J for Jobs

Ending September 30, 2023

	Third Quarter	Inception 10/1/04
Beginning Market Value	\$4,646,750	\$10,000,000
Net Cash Flow	\$0	-\$8,968,786
Net Investment Change	\$24,482	\$3,640,018
Ending Market Value	\$4,671,232	\$4,671,232

Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2023



3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Ullico - J for Jobs	2.7%	1.0%	32.2%	-7.7%
Bloomberg US Aggregate TR	-5.2%	6.2%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Ullico - J for Jobs	3.1%	0.9%	28.4%	-12.1%
Bloomberg US Aggregate TR	0.1%	5.6%	100.0%	100.0%

Calendar Years

	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	Inception Date
Ullico - J for Jobs	0.7%	2.6%	3.6%	2.7%	3.1%	0.9%	3.6%	2.6%	4.7%	3.8%	3.2%	Oct-04
Bloomberg US Aggregate TR	-3.2%	-1.2%	0.6%	-5.2%	0.1%	-13.0%	-1.5%	7.5%	8.7%	0.0%	2.8%	Oct-04

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Ullico - J for Jobs

Correspondence Summary

- Manager presented annual reviews at meetings in August 2016, August 2017, November 2018, and August 2019.

Manager Summary

- IPS conducted due diligence meetings with Ullico on June 2, 2022, January 31, 2023 and May 23, 2023.
- On May 13, 2022, Ullico announced that effective July 1, 2022, the annual investment management fee for J for Jobs will be reduced to 0.55% on all assets under management. For investors with \$90 million or more invested, the annual investment management fee will be reduced to 0.50% on all assets under management.

Recommendation: None.

Compliance Summary

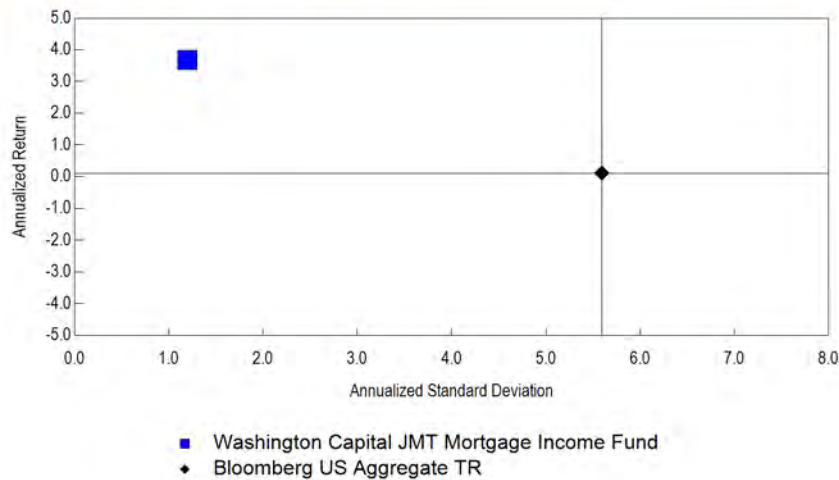
Separate Account J was not in compliance with all of the Account's investment guidelines during the 1st quarter of 2023. See manager's Investment Guideline Update in the full Compliance Report. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Legal - Litigation Relating to Kleman Plaza LLLP, Borrower - In July 2019, the Plaza Tower Master Association, Inc. ("Plaza Tower"), filed suit against the Borrower/former developer, and declarant, the successor declarant (300 South Duval Associates, LLC), and various contractors and subcontractors for alleged constructive defects on the property. Plaza Tower alleged claims of negligence, breach of implied warranty, and statutory building code violations in connection with the alleged defects. On November 8, 2022, Plaza Tower filed a Voluntary Dismissal without Prejudice to dismiss 300 South Duval Associates, LLC from the pending litigation. Both parties entered into a Tolling Agreement through which the 300 Duval Associates, LLC dismissal will become with prejudice upon resolution of the claims against the remaining parties. ***The Union Labor Life Insurance Company v. J. Brian O'Neill*** - Union Labor Life filed a lawsuit against J. Brian O'Neill, a guarantor on a March 20, 2012 amended and restated loan agreement between Union Labor Life and Carnegie Tower Development Company, Inc. and Carnegie Holdings, LLC, in connection with the development of a property in Portsmouth, Rhode Island. The borrowers defaulted on the loan agreement in October 2013 and on January 7, 2014 Union Labor issued a demand letter to the borrowers for the full payment of the loan. Union Labor Life entered into a forbearance agreement with O'Neill in April 2014. Union Labor Life sued O'Neill to enforce his personal guaranty and for breach of a forbearance agreement. Union Labor Life obtained a final judgment against O'Neill in the amount of \$3,942,602.15 on October 29, 2018. A final settlement agreement resolving Union Labor Life's judgment was executed on June 27, 2019. In August 2020, O'Neill fulfilled a portion of the settlement agreement by paying \$1,600,000 to Union Labor Life in return for releasing the judgment lien against O'Neill's Hyannis property. The remaining portion of the judgment in the amount of \$500,000 will remain in effect until repayment has been made in full under the settlement agreement. ***The Union Labor Life Insurance Company v. 670 6th Retail LLC. et al.*** - On October 11, 2023, Union Labor Life filed a verified foreclosure complaint against, 670 6th Retail LLC (the "Borrower") and Guarantors, Michael Fuchs and Aby J Rosen. On May 15, 2014 Union Labor Life, on behalf of its Separate Account J, made a permanent loan to the Borrower in the original principal amount of \$15,000,000 pursuant to a loan agreement, to acquire the retail building known as 670 Avenue of the Americas located in New York, New York. The Borrower defaulted on the loan. This default included, without limitation, the failure to pay interest on the loan due on July 10, 2023 in the amount of \$62,500.00, and all subsequent payments, including property taxes and water charges assessed on the property.

Account Information

Account Name	Washington Capital JMT Mortgage Income Fund
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	10/01/04
Account Type	Mortgages
Benchmark	Bloomberg US Aggregate TR
Universe	

Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2023



Washington Capital JMT Mortgage Income Fund

Ending September 30, 2023

	Third Quarter	Inception 10/1/04
Beginning Market Value	\$5,168,933	\$5,000,000
Net Cash Flow	\$0	-\$3,500,000
Net Investment Change	\$44,113	\$3,713,046
Ending Market Value	\$5,213,046	\$5,213,046

3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Washington Capital JMT Mortgage Income Fund	2.4%	1.1%	32.6%	-3.8%
Bloomberg US Aggregate TR	-5.2%	6.2%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Washington Capital JMT Mortgage Income Fund	3.7%	1.2%	36.6%	-10.3%
Bloomberg US Aggregate TR	0.1%	5.6%	100.0%	100.0%

Calendar Years

	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	Inception Date
Washington Capital JMT Mortgage Income Fund	0.9%	2.9%	3.7%	2.4%	3.7%	0.1%	3.2%	3.3%	7.4%	3.6%	5.0%	Oct-04
Bloomberg US Aggregate TR	-3.2%	-1.2%	0.6%	-5.2%	0.1%	-13.0%	-1.5%	7.5%	8.7%	0.0%	2.8%	Oct-04

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Washington Capital JMT Mortgage Income Fund

Correspondence Summary

- Manager presented annual reviews at meetings in May 2015, February 2017, and May 2018.

Manager Summary

- IPS conducted due diligence meetings with Washington Capital on October 28, 2021, April 14, 2022 and November 2, 2023.

Recommendation: None.

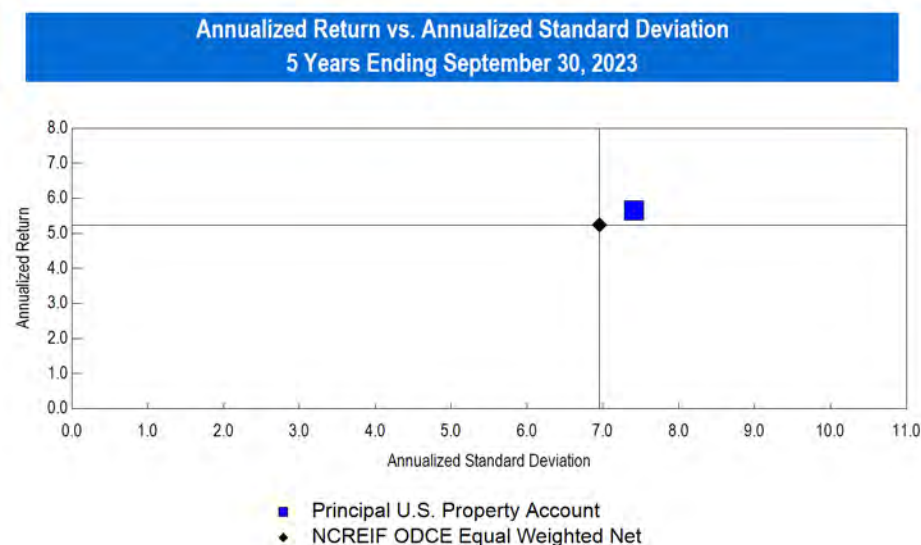
Compliance Summary

Manager certified that the portfolio and individual holdings are currently, and have been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or prospectus governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle guidelines and/or prospectus.

Items of Interest: Personnel Changes - The manager stated there were no changes to this investment team. However, David Littlefield, SVP, Real Assets, transitioned to an Advisor Role for Washington Capital effective September 30, 2023. **Ownership Changes** - The manager stated there were some percentage ownership changes among shareholders; however, the firm remains 100% employee owned.

Account Information	
Account Name	Principal U.S. Property Account
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	10/01/01
Account Type	Real Estate - Core
Benchmark	NCREIF ODCE Equal Weighted Net
Universe	

Income is distributed.



Principal U.S. Property Account Ending September 30, 2023		
	Third Quarter	Inception 10/1/01
Beginning Market Value	\$7,274,442	\$7,999,474
Net Cash Flow	-\$103,378	-\$25,245,860
Net Investment Change	-\$287,021	\$24,130,429
Ending Market Value	\$6,884,043	\$6,884,043

3 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Principal U.S. Property Account	6.8%	9.5%	102.8%	104.6%
NCREIF ODCE Equal Weighted Net	6.7%	8.9%	100.0%	100.0%

5 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Principal U.S. Property Account	5.7%	7.4%	107.3%	102.7%
NCREIF ODCE Equal Weighted Net	5.2%	7.0%	100.0%	100.0%

	Calendar Years										Inception	Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018		
Principal U.S. Property Account	-3.7%	-8.1%	-13.6%	6.8%	5.7%	5.0%	23.8%	1.6%	7.0%	9.1%	7.6%	Oct-01
NCREIF ODCE Equal Weighted Net	-2.1%	-8.4%	-13.0%	6.7%	5.2%	7.6%	21.9%	0.8%	5.2%	7.3%	6.5%	Oct-01

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Principal U.S. Property Account

Correspondence Summary

- Manager presented annual reviews at meetings in February 2016, February 2017, May 2018, and August 2019.
- A partial redemption request of \$9.6M was submitted on September 21, 2021; proceeds were used for the Boyd Watterson State Government Fund capital call. The partial redemption request was fully satisfied as of September 29, 2021.
- Partial redemption requests for \$550K, \$450K, \$250K, and \$825K were submitted on February 22, 2022, March 22, 2022, May 24, 2022, and June 23, 2022 respectively; proceeds were used for ongoing benefit obligations. The partial redemption requests were fully satisfied as of February 24, 2022, March 24, 2022, May 25, 2022, and June 27, 2022.
- A partial redemption request of \$1.0M was submitted effective August 31, 2022; pending availability in withdrawal queue, proceeds will be used for rebalancing and cash needs.

Manager Summary

- IPS conducted due diligence meetings with Principal on May 26, 2021 and August 2, 2023.
- USPA attempts to maintain sufficient cash to satisfy withdrawal requests in the ordinary course of business, but the recent concentration and dollar volume of withdrawal requests resulted in the implementation of a withdrawal limitation effective July 1, 2022. Redemption requests may be satisfied if sufficient levels of cash are available.
- On June 1, 2023, Principal announced the departure of U.S. Property co-portfolio manager Meighan Phillips, effective June 30, 2023. Co-portfolio manager Darren Kleis, who has been with Principal since 2007, remains in place, and Kyle Elfers, Managing Director - Acquisitions/Dispositions, is being promoted to replace Ms. Phillips. John Berg, Principal's Head of Real Estate, Private Equity, who served as Senior Portfolio Manager for U.S. Property from 2003-2022, is expected to resume a more active role with the team on an interim basis to ensure a smooth transition.

Recommendation: None.

Operating Engineers Local No. 77 Pension Plan - Principal U.S. Property Account

Compliance Summary

Manager verified the portfolio and individual holdings are currently, and have been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or offering documents governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges fiduciary responsibility under ERISA with regard to the selection, monitoring and retention of the portfolio managers for Separate Accounts. Services by Principal Real Estate Investors are provided to the client as an investor in a commingled investment vehicle.

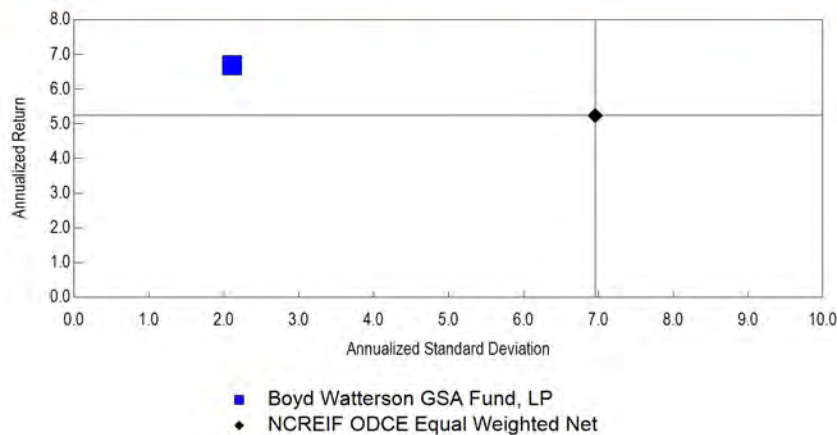
Items of Interest: Compliance - The manager answered N/A to Part A question 5 regarding derivatives and to Part B question 7, regarding the amount of insurance coverage. **Liquidity** – On July 1, 2022, Principal Life Insurance Company ("Principal") determined that it was in the best interest of all investors to implement a withdrawal limitation which delays the payment of withdrawal requests and provides for payment of such requests on a pro-rata basis as cash becomes available for distribution, as determined by Principal. As of September 30, 2023, the withdrawal limitation totaled approximately \$1.2 billion. On September 22, 2023, Principal announced a payment of \$125 million to satisfy a portion of withdrawal requests subject to the Principal U.S. Property Portfolio (the "Portfolio") withdrawal limitation. After satisfying de minimus amounts, the payment, distributed on a pro-rata basis, satisfied approximately 9% of total outstanding withdrawal requests. The timing and amount of the payment are consistent with the continued management of the Portfolio in the best interest of all investors. **Personnel Additions** - The manager stated during the third quarter of 2023, Principal had the following personnel additions: Jacob T Poncelet (Investment Analyst), Daniel Robert Sullivan (CMS Asset Manager), and Charlize Faith Tornell (Asset Management Analyst).

Account Information

Account Name	Boyd Watterson GSA Fund, LP
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	2/01/15
Account Type	Real Estate - Core
Benchmark	NCREIF ODCE Equal Weighted Net
Universe	

Income is distributed.

Annualized Return vs. Annualized Standard Deviation
5 Years Ending September 30, 2023



Boyd Watterson GSA Fund, LP

Ending September 30, 2023

	Third Quarter	Inception 2/1/15
Beginning Market Value	\$6,708,603	\$0
Net Cash Flow	-\$169,120	\$2,759,730
Net Investment Change	-\$56,481	\$3,723,272
Ending Market Value	\$6,483,002	\$6,483,002

3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Boyd Watterson GSA Fund, LP	5.8%	2.3%	45.0%	-3.3%
NCREIF ODCE Equal Weighted Net	6.7%	8.9%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Boyd Watterson GSA Fund, LP	6.7%	2.1%	68.5%	-18.3%
NCREIF ODCE Equal Weighted Net	5.2%	7.0%	100.0%	100.0%

Calendar Years

	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	Inception Date
Boyd Watterson GSA Fund, LP	-0.5%	0.0%	0.4%	5.8%	6.7%	5.9%	9.4%	7.2%	9.5%	9.6%	8.2%	Feb-15
NCREIF ODCE Equal Weighted Net	-2.1%	-8.4%	-13.0%	6.7%	5.2%	7.6%	21.9%	0.8%	5.2%	7.3%	7.1%	Feb-15
Long-Term Income Objective 8%	1.9%	5.9%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	Feb-15

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Boyd Watterson GSA Fund, LP

Correspondence Summary

- Manager presented annual reviews at meetings in November 2016, February 2018, and May 2019.
- A partial redemption request of \$1.0M was submitted effective December 31, 2022; proceeds will be used for rebalancing and cash needs. The partial redemption request was fully satisfied on its effective date, December 31, 2022. Proceeds were received January 27, 2023.

Manager Summary

- IPS conducted due diligence meetings with Boyd Watterson on May 26, 2021, September 21, 2021, October 17, 2022 and July 14, 2023.
- In January 2023, Boyd Watterson requested limited partner consent for several proposed amendments to the Fund's Limited Partnership Agreement (LPA). IPS provided clients with a memo recommending consent to the proposed amendment, subject to counsel review. Boyd Watterson has requested consent be provided by March 31, 2023. In April 2023, Boyd Watterson notified IPS that the amendment received the necessary approval and will take effect on July 1, 2023.

Recommendation: None.

Compliance Summary

Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines to the extent described in the Fund Documents.

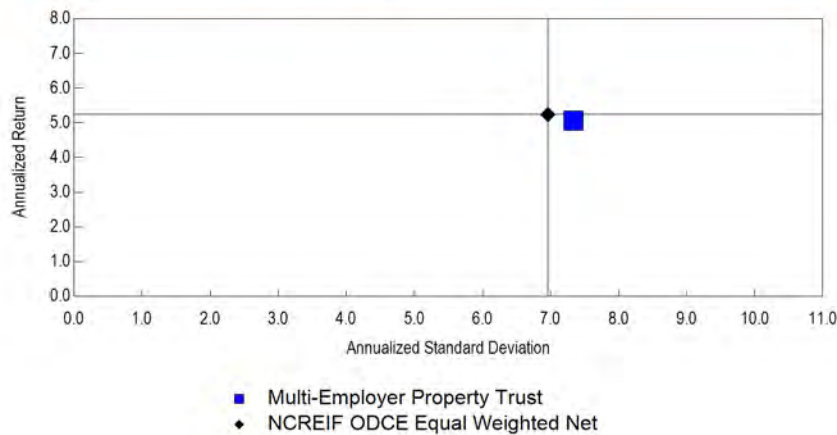
Items of Interests: Derivatives - The manager stated the Fund does not utilize derivatives as an investment vehicle. The manager also stated the Fund does not utilize interest rate swaps to hedge risk related to variable rate loans. **E&O** -The manager stated the investment manger provides bonding for the Fund in accordance with the requirements of Section 412 of ERISA.

Account Information

Account Name	Multi-Employer Property Trust
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	7/01/01
Account Type	Real Estate - Core
Benchmark	NCREIF ODCE Equal Weighted Net
Universe	

Income is distributed.

Annualized Return vs. Annualized Standard Deviation
5 Years Ending September 30, 2023



Multi-Employer Property Trust

Ending September 30, 2023

	Third Quarter	Inception 7/1/01
Beginning Market Value	\$5,873,047	\$0
Net Cash Flow	\$0	-\$7,931,775
Net Investment Change	-\$203,289	\$13,601,534
Ending Market Value	\$5,669,759	\$5,669,759

3 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Multi-Employer Property Trust	6.2%	9.3%	102.8%	114.9%
NCREIF ODCE Equal Weighted Net	6.7%	8.9%	100.0%	100.0%

5 Years Ending September 30, 2023

	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Multi-Employer Property Trust	5.1%	7.3%	107.7%	120.1%
NCREIF ODCE Equal Weighted Net	5.2%	7.0%	100.0%	100.0%

Calendar Years

	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	Inception Date
Multi-Employer Property Trust	-3.2%	-9.7%	-15.0%	6.2%	5.1%	8.7%	20.8%	1.4%	4.6%	8.2%	6.7%	Jul-01
NCREIF ODCE Equal Weighted Net	-2.1%	-8.4%	-13.0%	6.7%	5.2%	7.6%	21.9%	0.8%	5.2%	7.3%	6.4%	Jul-01

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Multi-Employer Property Trust

Correspondence Summary

- Manager presented annual reviews at meetings in August 2016, August 2017, and February 2019.
- A partial redemption request of \$1.5M was submitted effective June 30, 2020; proceeds were used for rebalancing purposes. The partial redemption request was fully satisfied as of July 2021.
- A partial redemption request of \$1.25M was submitted effective March 31, 2022; proceeds were used for ongoing cash needs. The partial redemption request was fully satisfied as of October 2022.

Manager Summary

- IPS conducted due diligence meetings with MEPT on February 25, 2021, September 14, 2021 and February 16, 2023.
- MEPT implemented a withdrawal queue effective March 31, 2020, and income distributions are gated pending available liquidity as determined by the manager.

Recommendation: None.

Compliance Summary

Manager verified the portfolio is currently, and has been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Liquidity – The manager stated it is the Fund's normal practice to provide for contributions and redemptions on the first day of the quarter following a valid request to contribute or redeem an investor's capital. The Fund has implemented a redemption queue and until such time that all redemption requests are satisfied, on a pro-rata basis, excess liquidity is distributed quarterly to clients that have requested redemptions.

Account Information	
Account Name	Boyd Watterson State Government Fund, LP
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	10/01/21
Account Type	Real Estate - Value Add
Benchmark	NCREIF ODCE Equal Weighted Net
Universe	

Income is distributed.

Boyd Watterson State Government Fund, LP		
Ending September 30, 2023		
	Third Quarter	Inception 10/1/21
Beginning Market Value	\$19,436,929	\$0
Net Cash Flow	-\$491,011	\$17,508,989
Net Investment Change	-\$113,258	\$1,323,671
Ending Market Value	\$18,832,660	\$18,832,660

	Calendar Years											Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	
Boyd Watterson State Government Fund, LP	-0.3%	0.4%	2.0%	--	--	7.4%	--	--	--	--	4.9%	Oct-21
NCREIF ODCE Equal Weighted Net	-2.1%	-8.4%	-13.0%	--	--	7.6%	--	--	--	--	2.9%	Oct-21
Long-Term Income Objective 9%	2.2%	6.7%	9.0%	--	--	9.0%	--	--	--	--	9.0%	Oct-21

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Boyd Watterson State Government Fund, LP

Manager Summary

- IPS conducted due diligence meetings with Boyd Watterson on May 26, 2021, September 21, 2021, October 17, 2022 and July 14, 2023.
- IPS clients received discounted annual management fees of 90 basis points (0.90%) through December 31, 2020 and 115 bps (1.15%) for calendar year 2021. Effective January 1, 2022, a tiered management fee structure of 125 basis points (1.25%) on the first \$25 million, 115 bps (1.15%) on the next \$75 million and 1.05% on invested capital above \$100 million will apply.
- In December 2022, Boyd Watterson requested limited partner consent for several proposed amendments to the Fund's Limited Partnership Agreement (LPA). IPS provided clients with a memo recommending consent to the proposed amendment, subject to counsel review. Boyd Watterson has requested consent be provided by March 31, 2023. In April 2023, Boyd Watterson notified IPS that the amendment received the necessary approval and will take effect on July 1, 2023.

Recommendation: None.

Compliance Summary

Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines to the extent described in the Fund Documents.

Items of Interests: Derivatives - The manager stated the Fund does not utilize derivatives as an investment vehicle. The manager also stated the Fund does not utilize interest rate swaps to hedge risk related to variable rate loans. **E&O** -The manager stated the investment manger provides bonding for the Fund in accordance with the requirements of Section 412 of ERISA.

Account Information	
Account Name	Grosvenor Opportunistic Credit Fund III, Ltd
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	1/01/14
Account Type	Opportunistic Strategies
Benchmark	
Universe	

Grosvenor Opportunistic Credit Fund III, Ltd		
Ending September 30, 2023		
	Third Quarter	Inception 1/1/14
Beginning Market Value	\$112,484	\$0
Net Cash Flow	\$0	-\$454,525
Net Investment Change	\$1,189	\$568,198
Ending Market Value	\$113,673	\$113,673

Note: Reported market values were provided by the manager and are preliminary.
Market values and returns are subject to change.

Operating Engineers Local No. 77 Pension Plan - Grosvenor Opportunistic Credit Fund III, Ltd

Correspondence Summary

- Manager presented annual reviews at meetings in May 2016, February 2017, and November 2018.

Manager Summary

- IPS conducted due diligence meetings with Grosvenor on January 15, 2021, October 27, 2021, February 7, 2022, April 19, 2022, August 10, 2022, November 28, 2022, March 2, 2023 and September 12, 2023.
- In January 2021, Grosvenor announced that Craig Goldsmith, a Managing Director and one of three portfolio managers for Grosvenor's opportunistic credit strategies, will leave the firm later in the year. Mr. Goldsmith's responsibilities are expected to be absorbed by other members of Grosvenor's investment team.
- Tom Rowland, Grosvenor's Co-Head of Credit, left the firm in October 2022. Mr. Rowland has been with Grosvenor for 16 years. The Co-Head of Credit, Steve McMillan, remains in place and is now the sole Head of Credit. Grosvenor does not expect to replace Mr. Rowland and is comfortable having his responsibilities absorbed by Mr. McMillan and the remainder of the credit team.

Recommendation: The investment is illiquid (closed-end, self-liquidating fund).

Compliance Summary

Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Personnel Departure - The manager stated Akhil Unni, a Managing Director in the Infrastructure team, left the firm in September 2023. **Form ADV** – The manager stated GCMLP's Form ADV Part 1, which is several hundred pages in length, can be found online at www.adviserinfo.sec.gov and Form ADV Part 2A can be accessed via the SEI Investor Dashboard/Client Web Portal. Any material changes in the Part 2A are listed in Item 2 of the Part 2A. **Communication** – The manager stated they believe the Fund is receiving all reporting it requires or has requested, but as the general partner and a fiduciary to Grosvenor Opportunistic Credit Fund III, Ltd. and its investors, the firm cannot be bound by the terms and conditions of the Fund's investment policy statement.

Account Information	
Account Name	Grosvenor Opportunistic Credit Fund IV, Ltd
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	9/30/15
Account Type	Opportunistic Strategies
Benchmark	
Universe	

Grosvenor Opportunistic Credit Fund IV, Ltd		
Ending September 30, 2023		
	Third Quarter	Inception 9/30/15
Beginning Market Value	\$340,751	\$0
Net Cash Flow	\$0	-\$183,207
Net Investment Change	\$9,130	\$533,088
Ending Market Value	\$349,881	\$349,881

Note: Reported market values were provided by the manager and are preliminary.
Market values and returns are subject to change.

Operating Engineers Local No. 77 Pension Plan - Grosvenor Opportunistic Credit Fund IV, Ltd

Correspondence Summary

- Manager presented annual reviews at meetings in May 2016, February 2017, and November 2018.

Manager Summary

- IPS conducted due diligence meetings with Grosvenor on January 15, 2021, October 27, 2021, February 7, 2022, April 19, 2022, August 10, 2022, November 28, 2022, March 2, 2023 and September 12, 2023.
- In January 2021, Grosvenor announced that Craig Goldsmith, a Managing Director and one of three portfolio managers for Grosvenor's opportunistic credit strategies, will leave the firm later in the year. Mr. Goldsmith's responsibilities are expected to be absorbed by other members of Grosvenor's investment team.
- Tom Rowland, Grosvenor's Co-Head of Credit, left the firm in October 2022. Mr. Rowland has been with Grosvenor for 16 years. The Co-Head of Credit, Steve McMillan, remains in place and is now the sole Head of Credit. Grosvenor does not expect to replace Mr. Rowland and is comfortable having his responsibilities absorbed by Mr. McMillan and the remainder of the credit team.

Recommendation: The investment is illiquid (closed-end, self-liquidating fund).

Compliance Summary

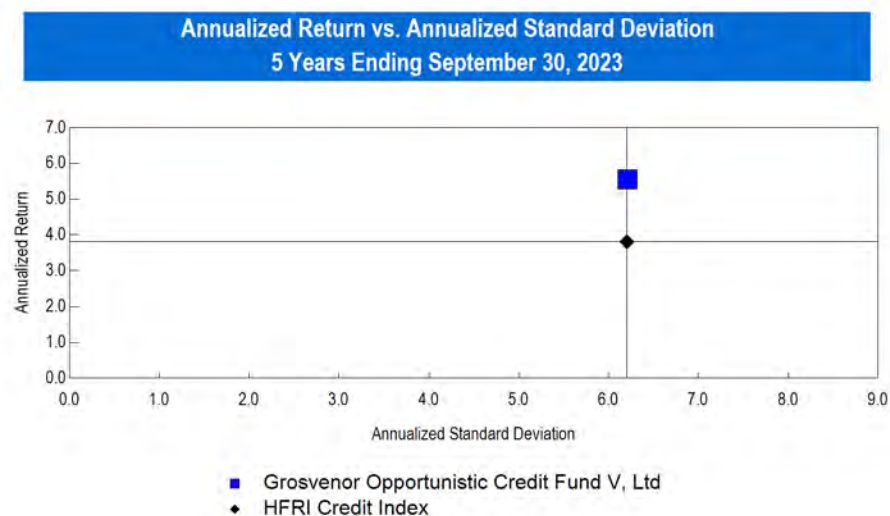
Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Personnel Departure - The manager stated Akhil Unni, a Managing Director in the Infrastructure team, left the firm in September 2023. **Form ADV** – The manager stated GCMLP's Form ADV Part 1, which is several hundred pages in length, can be found online at www.adviserinfo.sec.gov and Form ADV Part 2A can be accessed via the SEI Investor Dashboard/Client Web Portal. Any material changes in the Part 2A are listed in Item 2 of the Part 2A. **Communication** – The manager stated they believe the Fund is receiving all reporting it requires or has requested, but as the general partner and a fiduciary to Grosvenor Opportunistic Credit Fund IV, Ltd. and its investors, the firm cannot be bound by the terms and conditions of the Fund's investment policy statement.

Account Information	
Account Name	Grosvenor Opportunistic Credit Fund V, Ltd
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	2/01/17
Account Type	Opportunistic Strategies
Benchmark	HFRI Credit Index
Universe	

Grosvenor Opportunistic Credit Fund V, Ltd		
Ending September 30, 2023		
	Third Quarter	Inception 2/1/17
Beginning Market Value	\$10,174,292	\$0
Net Cash Flow	\$0	\$8,221,823
Net Investment Change	\$129,869	\$2,082,338
Ending Market Value	\$10,304,161	\$10,304,161

Note: Reported market values were provided by the manager and are preliminary. Market values and returns are subject to change.



3 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Grosvenor Opportunistic Credit Fund V, Ltd	7.7%	2.5%	95.5%	8.8%
HFRI Credit Index	5.3%	4.0%	100.0%	100.0%

5 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Grosvenor Opportunistic Credit Fund V, Ltd	5.6%	6.2%	97.7%	63.3%
HFRI Credit Index	3.8%	6.2%	100.0%	100.0%

	Calendar Years										Inception	Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018		
Grosvenor Opportunistic Credit Fund V, Ltd	1.5%	6.3%	7.3%	7.7%	5.6%	1.1%	10.9%	1.6%	9.5%	3.0%	5.6%	Feb-17
HFRI Credit Index	1.6%	4.4%	5.8%	5.3%	3.8%	-2.6%	8.0%	6.2%	6.5%	0.0%	4.0%	Feb-17

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Grosvenor Opportunistic Credit Fund V, Ltd

Correspondence Summary

- Manager presented annual reviews at meetings in February 2017, and November 2018.

Manager Summary

- IPS conducted due diligence meetings with Grosvenor on January 15, 2021, October 27, 2021, February 7, 2022, April 19, 2022, August 10, 2022, November 28, 2022, March 2, 2023 and September 12, 2023.
- In January 2021, Grosvenor announced that Craig Goldsmith, a Managing Director and one of three portfolio managers for Grosvenor's opportunistic credit strategies, will leave the firm later in the year. Mr. Goldsmith's responsibilities are expected to be absorbed by other members of Grosvenor's investment team.
- Tom Rowland, Grosvenor's Co-Head of Credit, left the firm in October 2022. Mr. Rowland has been with Grosvenor for 16 years. The Co-Head of Credit, Steve McMillan, remains in place and is now the sole Head of Credit. Grosvenor does not expect to replace Mr. Rowland and is comfortable having his responsibilities absorbed by Mr. McMillan and the remainder of the credit team.

Recommendation: None.

Compliance Summary

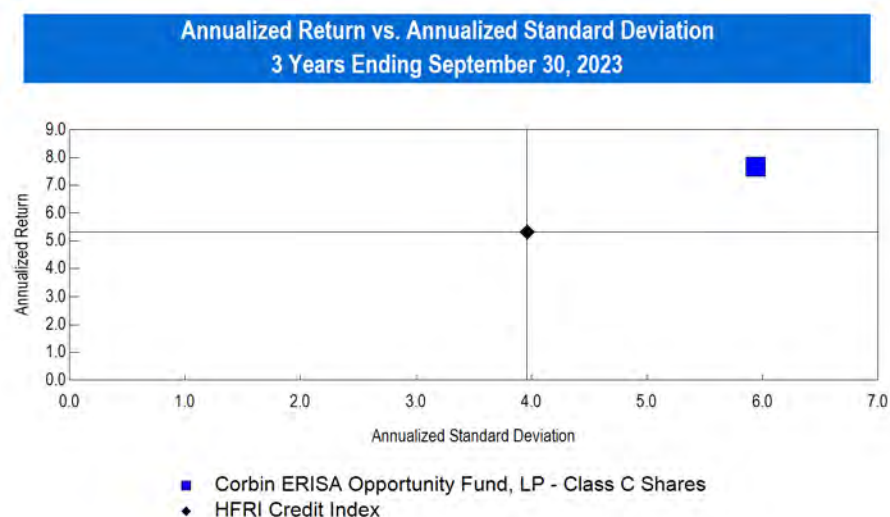
Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Personnel Departure - The manager stated Akhil Unni, a Managing Director in the Infrastructure team, left the firm in September 2023. **Form ADV** – The manager stated GCMLP's Form ADV Part 1, which is several hundred pages in length, can be found online at www.adviserinfo.sec.gov and Form ADV Part 2A can be accessed via the SEI Investor Dashboard/Client Web Portal. Any material changes in the Part 2A are listed in Item 2 of the Part 2A. **Communication** – The manager stated they believe the Fund is receiving all reporting it requires or has requested, but as the general partner and a fiduciary to Grosvenor Opportunistic Credit Fund V, Ltd. and its investors, the firm cannot be bound by the terms and conditions of the Fund's investment policy statement.

Account Information	
Account Name	Corbin ERISA Opportunity Fund, LP - Class C Shares
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	1/31/20
Account Type	Opportunistic Strategies
Benchmark	HFRI Credit Index
Universe	

Corbin ERISA Opportunity Fund, LP - Class C Shares		
Ending September 30, 2023		
	Third Quarter	Inception 1/31/20
Beginning Market Value	\$9,924,002	\$0
Net Cash Flow	\$0	\$8,500,000
Net Investment Change	\$120,485	\$1,544,487
Ending Market Value	\$10,044,487	\$10,044,487

Note: Reported market values were provided by the manager and are preliminary. Market values and returns are subject to change.



3 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Corbin ERISA Opportunity Fund, LP - Class C Shares	7.7%	5.9%	138.3%	113.3%
HFRI Credit Index	5.3%	4.0%	100.0%	100.0%

	Calendar Years											Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	
Corbin ERISA Opportunity Fund, LP - Class C Shares	1.4%	2.7%	2.8%	7.7%	--	-3.7%	13.3%	--	--	--	5.5%	Jan-20
HFRI Credit Index	1.6%	4.4%	5.8%	5.3%	--	-2.6%	8.0%	--	--	--	4.2%	Jan-20
Long-Term Target Return of 8%	1.9%	5.9%	8.0%	8.0%	--	8.0%	8.0%	--	--	--	8.0%	Jan-20

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Pension Plan - Corbin ERISA Opportunity Fund, LP - Class C Shares

Correspondence Summary

- A partial redemption request of \$2.0M was submitted effective December 31, 2022; proceeds will be used for benefit payments. The partial redemption request was fully satisfied on its effective date, December 31, 2022. Proceeds were received in March 2023.

Manager Summary

- IPS conducted due diligence meetings with Corbin Capital on January 14, 2021, May 5, 2021, August 12, 2021, February 14, 2022, August 9, 2022, February 2, 2023 and August 15, 2023.
- On July 12, 2021, Corbin contacted IPS regarding a planned ownership change that will result in a change in control event. The planned transaction will eliminate the ownership stake of one of the firm's two original co-founders (both of whom are no longer employed by Corbin or involved in the management of the business) and reduce the ownership stake of the other co-founder. Subsequently, Corbin will have a new, passive minority partner and the existing employee partners will increase their ownership stakes to hold a majority interest. None of the existing employee owners are expected to depart as a result of the transaction, which will increase the ownership stake of Corbin's employee partners and does not represent a liquidity event for them, nor is it expected to have an immediate impact on the investment team. The transaction closed on October 1, 2021.

Recommendation: None.

Compliance Summary

The manager verified the portfolio and individual holdings are currently, and have been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio(s) under management, the manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Legal - The manager stated, as previously disclosed, in October 2020 Corbin was named as one of the defendants in a civil action brought by certain lenders to Boardriders Inc., a company to which one or more funds managed by Corbin has lent money. The defendant lenders, including Redwood and Corbin, filed a motion to dismiss the complaint, asserting that the plaintiffs lacked standing to bring their suit because of their failure to comply with the credit agreement's no-action provision and their failure to state viable claims. A hearing on the motion to dismiss took place September 2021 and the court denied the motion to dismiss in October 2022. In March 2023, another company announced an agreement to purchase Boardriders and its assets; given the anticipated purchase and expected repayment of the loans, the plaintiffs have agreed to a standstill in litigation. In September 2023, the parties entered into a settlement agreement and the action was discontinued with prejudice. In 2Q 2023, Corbin together with two funds that it manages were named as defendants in a complaint filed by an underlying manager alleging, among other things, breach of contract. Corbin filed a motion to dismiss, the underlying manager replied, and Corbin is due to submit its reply in the coming weeks.

Account Information	
Account Name	GCM Grosvenor Secondary Opportunities Feeder Fund II, LP
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	5/31/18
Account Type	Private Equity
Benchmark	
Universe	

GCM Grosvenor Secondary Opportunities Feeder Fund II, LP		
Ending September 30, 2023		
	Third Quarter	Inception 5/31/18
Beginning Market Value	\$7,445,024	\$0
Net Cash Flow	\$0	\$4,759,697
Net Investment Change	\$0	\$2,685,327
Ending Market Value	\$7,445,024	\$7,445,024

Note: Investment is valued as of June 30, 2023, plus or minus any flows.

Operating Engineers Local No. 77 Pension Plan - GCM Grosvenor Secondary Opportunities Feeder Fund II, LP

Correspondence Summary

- Manager presented annual review at meeting in November 2018.

Manager Summary

- IPS conducted due diligence meetings with Grosvenor on March 17, 2021, December 3, 2021 and June 28, 2023.

The investment is illiquid (closed-end, self-liquidating fund).

Compliance Summary

Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and /or offering document guidelines.

Items of Interest: Personnel Departure - The manager stated Akhil Unni, a Managing Director in the Infrastructure team, left the firm in September 2023. **Form ADV** – The manager stated GCMLP's Form ADV Part 1, which is several hundred pages in length, can be found online at www.adviserinfo.sec.gov and Form ADV Part 2A can be accessed via the SEI Investor Dashboard/Client Web Portal. Any material changes in the Part 2A are listed in Item 2 of the Part 2A. **Communication** – The manager stated they believe the Fund is receiving all reporting it requires or has requested, but as the general partner and a fiduciary to GCM Grosvenor Secondary Opportunities Fund II, L.P. and its investors, the firm cannot be bound by the terms and conditions of the Fund's investment policy statement.

Account Information	
Account Name	GCM Grosvenor Secondary Opportunities Feeder Fund III, LP
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	7/01/21
Account Type	Private Equity
Benchmark	
Universe	

GCM Grosvenor Secondary Opportunities Feeder Fund III, LP		
Ending September 30, 2023		
	Third Quarter	Inception 7/1/21
Beginning Market Value	\$3,075,169	\$0
Net Cash Flow	\$481,389	\$2,892,119
Net Investment Change	\$0	\$664,438
Ending Market Value	\$3,556,558	\$3,556,558

Note: Investment is valued as of June 30, 2023, plus or minus any flows.

Operating Engineers Local No. 77 Pension Plan - GCM Grosvenor Secondary Opportunities Feeder Fund III, LP

Manager Summary

- IPS conducted due diligence meetings with Grosvenor on March 17, 2021, December 3, 2021 and June 28, 2023.

The investment is illiquid (closed-end, self-liquidating fund).

Compliance Summary

Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Personnel Departure - The manager stated Akhil Unni, a Managing Director in the Infrastructure team, left the firm in September 2023. **Form ADV** – The manager stated GCMLP's Form ADV Part 1, which is several hundred pages in length, can be found online at www.adviserinfo.sec.gov and Form ADV Part 2A can be accessed via the SEI Investor Dashboard/Client Web Portal. Any material changes in the Part 2A are listed in Item 2 of the Part 2A. **Communication** – The manager stated they believe the Fund is receiving all reporting it requires or has requested, but as the general partner and a fiduciary to GCM Grosvenor Secondary Opportunities Fund III, L.P. and its investors, the firm cannot be bound by the terms and conditions of the Fund's investment policy statement.

Account Information	
Account Name	WaCap - SP Infrastructure Fund IV Feeder
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	7/01/21
Account Type	Infrastructure
Benchmark	
Universe	

WaCap - SP Infrastructure Fund IV Feeder		
Ending September 30, 2023		
	Third Quarter	Inception 7/1/21
Beginning Market Value	\$2,483,283	\$0
Net Cash Flow	\$9,172	\$2,271,125
Net Investment Change	\$0	\$221,331
Ending Market Value	\$2,492,455	\$2,492,455

Note: Investment is valued as of June 30, 2023, plus or minus any flows.

Operating Engineers Local No. 77 Pension Plan - WaCap - SP Infrastructure Fund IV Feeder

Manager Summary

- IPS participated in the Stonepeak mid-year update call on May 26, 2022 and May 11, 2023.

The investment is illiquid (closed-end, self-liquidating fund).

Compliance Summary

Manager certified that the portfolio and individual holdings are currently, and have been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or prospectus governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle guidelines and/or prospectus.

Items of Interest: Personnel Changes - The manager stated David Littlefield, SVP, Real Assets, transitioned to an Advisor Role for Washington Capital effective September 30, 2023. Julie Railey, VP, Real Assets, has taken over his previous duties. **Ownership Changes** - The manager stated there were some percentage ownership changes among shareholders; however, the firm remains 100% employee owned.

Investment Policy Statement

- The current investment policy statement was adopted and signed on August 11, 2015.

Custody Bank

- The current custodian is PNC Bank.
- Separate account market values and flows are derived from the custodial statement.

Commission Recapture Provider

- Cowen and Company, LLC.
- IPS evaluated the benefits of ongoing participation in a commission recapture program and suggested Funds continue to participate in them. To potentially enhance the managers' utilization of the commission recapture program, in November 2022, as a courtesy IPS provided draft notices for the Fund Administrator to consider sending to the investment managers.

Commingled Funds

- Commingled Fund: Due to the commingled fund structure, IPS does not monitor the holdings within the commingled fund for compliance with the client's investment policy statement. The commingled fund is governed by its own investment policy.
- Commingled fund market values and flows are derived from the manager statement.



Operating Engineers Local No. 77 Pension Plan

Appendix

Operating Engineers Local No. 77 Pension Plan

Master Consulting Services Report as of September 30, 2023

Performance Detail (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023								Inception Date
			2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	
Total Fund	\$184,910,417	100.0%	-1.6%	3.7%	7.5%	5.7%	5.9%	7.3%	7.6%	8.9%	Apr-88
Total Domestic Large Cap Equity	\$29,744,028	16.1%	-2.9%	12.4%	17.8%	5.7%	8.0%	11.2%	11.1%	--	Jul-01
Northern Trust Collective Russell 1000 Growth Index Fund	\$15,080,308	8.2%	-3.1%	--	--	--	--	--	--	8.2%	May-23
Russell 1000 Growth			-3.1%	--	--	--	--	--	--	8.2%	May-23
Wedge Capital Management - QVM	\$14,663,720	7.9%	-2.7%	5.2%	15.6%	12.4%	7.3%	9.8%	10.0%	9.5%	Jul-01
Russell 1000 Value			-3.2%	1.8%	14.4%	11.0%	6.2%	7.9%	8.4%	7.0%	Jul-01
Total Domestic Mid Cap Equity	\$9,174,186	5.0%	-3.8%	11.0%	15.9%	6.4%	9.9%	12.3%	11.4%	--	Apr-06
TimesSquare Capital Management	\$9,174,186	5.0%	-3.8%	11.0%	15.9%	6.4%	9.9%	12.3%	11.4%	10.6%	Apr-06
Russell MidCap Growth			-5.2%	9.9%	17.5%	2.6%	7.0%	10.4%	9.9%	8.8%	Apr-06
Total Domestic Small Cap Equity	\$8,437,917	4.6%	-7.8%	0.9%	10.9%	9.7%	0.8%	3.4%	3.7%	--	Jul-04
Eaton Vance Small Cap Collective Investment Trust Fund	\$8,437,917	4.6%	-7.8%	0.9%	10.9%	9.7%	--	--	--	6.3%	Sep-19
Russell 2000			-5.1%	2.5%	8.9%	7.2%	--	--	--	5.8%	Sep-19
Total International Large Cap Equity	\$9,072,016	4.9%	-5.9%	1.0%	20.9%	-1.0%	5.1%	7.4%	6.5%	--	Apr-97
Hardman Johnston International Equity Group Trust	\$9,072,016	4.9%	-5.9%	1.0%	20.9%	-1.0%	5.1%	7.4%	6.5%	7.8%	Jul-09
MSCI EAFE			-4.1%	7.1%	25.6%	5.8%	3.2%	5.3%	3.8%	6.0%	Jul-09
MSCI ACWI ex USA			-3.8%	5.3%	20.4%	3.7%	2.6%	4.7%	3.3%	5.4%	Jul-09
MSCI EAFE Growth			-8.6%	4.3%	20.0%	0.4%	3.2%	5.3%	4.4%	6.7%	Jul-09
Total International Small Cap Equity	\$9,215,732	5.0%	-3.9%	5.7%	23.1%	2.0%	2.8%	--	--	2.4%	Mar-18
Victory Trivalent International Small-Cap Collective Fund	\$9,215,732	5.0%	-3.9%	5.7%	23.1%	2.0%	2.8%	--	--	2.4%	Mar-18
S&P Developed Ex-U.S. Small Cap (Net)			-3.8%	2.5%	19.1%	1.3%	0.8%	--	--	0.2%	Mar-18
Total Investment Grade Fixed Income	\$15,766,324	8.5%	-0.8%	0.9%	2.5%	-2.6%	1.5%	1.0%	1.7%	4.4%	Jun-95
Wedge Capital Management	\$15,766,324	8.5%	-0.8%	0.9%	2.5%	-2.6%	1.5%	1.0%	1.7%	3.4%	Jan-03
Wedge Custom Benchmark			-0.8%	0.7%	2.2%	-2.9%	1.0%	0.6%	1.3%	3.0%	Jan-03
Total Short Duration High Yield Fixed Income	\$20,529,417	11.1%	0.8%	3.4%	6.1%	2.1%	3.0%	3.1%	3.1%	3.2%	Jan-13
Chartwell Investment Partners SDHY	\$20,529,417	11.1%	0.8%	3.4%	6.1%	2.1%	3.0%	3.1%	3.1%	3.2%	Jan-13
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR			1.1%	4.7%	7.5%	2.7%	3.6%	3.5%	3.7%	3.7%	Jan-13
Bloomberg US Govt/Credit Int TR			-0.8%	0.7%	2.2%	-2.9%	1.0%	0.6%	1.3%	1.1%	Jan-13

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Gross of Fees) - Annualized

			Ending September 30, 2023								
	Market Value	% of Portfolio	2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Mortgages	\$9,884,278	5.3%	0.8%	2.8%	3.6%	2.5%	3.4%	3.5%	3.9%	3.7%	Oct-04
Ullico - J for Jobs	\$4,671,232	2.5%	0.7%	2.6%	3.6%	2.7%	3.1%	3.3%	3.5%	3.2%	Oct-04
Bloomberg US Aggregate TR			-3.2%	-1.2%	0.6%	-5.2%	0.1%	-0.1%	1.1%	2.8%	Oct-04
Washington Capital JMT Mortgage Income Fund	\$5,213,046	2.8%	0.9%	2.9%	3.7%	2.4%	3.7%	3.7%	4.3%	5.0%	Oct-04
Bloomberg US Aggregate TR			-3.2%	-1.2%	0.6%	-5.2%	0.1%	-0.1%	1.1%	2.8%	Oct-04
Total Real Estate - Core	\$19,036,804	10.3%	-2.5%	-6.0%	-9.5%	6.5%	5.8%	6.8%	8.5%	6.9%	Jul-01
Principal U.S. Property Account	\$6,884,043	3.7%	-3.7%	-8.1%	-13.6%	6.8%	5.7%	6.8%	8.7%	7.6%	Oct-01
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	6.7%	5.2%	5.9%	7.6%	6.5%	Oct-01
Boyd Watterson GSA Fund, LP	\$6,483,002	3.5%	-0.5%	0.0%	0.4%	5.8%	6.7%	7.7%	--	8.2%	Feb-15
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	6.7%	5.2%	5.9%	--	7.1%	Feb-15
Long-Term Income Objective 8%			1.9%	5.9%	8.0%	8.0%	8.0%	8.0%	--	8.0%	Feb-15
Multi-Employer Property Trust	\$5,669,759	3.1%	-3.2%	-9.7%	-15.0%	6.2%	5.1%	5.7%	7.6%	6.7%	Jul-01
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	6.7%	5.2%	5.9%	7.6%	6.4%	Jul-01
Total Real Estate - Value Add	\$18,832,660	10.2%	-0.3%	0.4%	2.0%	--	--	--	--	4.9%	Oct-21
Boyd Watterson State Government Fund, LP	\$18,832,660	10.2%	-0.3%	0.4%	2.0%	--	--	--	--	4.9%	Oct-21
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	--	--	--	--	2.9%	Oct-21
Long-Term Income Objective 9%			2.2%	6.7%	9.0%	--	--	--	--	9.0%	Oct-21
Total Opportunistic Strategies	\$20,812,202	11.3%									
Grosvenor Opportunistic Credit Fund III, Ltd	\$113,673	0.1%									
Grosvenor Opportunistic Credit Fund IV, Ltd	\$349,881	0.2%									
Grosvenor Opportunistic Credit Fund V, Ltd	\$10,304,161	5.6%	1.5%	6.3%	7.3%	7.7%	5.6%	--	--	5.6%	Feb-17
HFRI Credit Index			1.6%	4.4%	5.8%	5.3%	3.8%	--	--	4.0%	Feb-17
Corbin ERISA Opportunity Fund, LP - Class C Shares	\$10,044,487	5.4%	1.4%	2.7%	2.8%	7.7%	--	--	--	5.5%	Jan-20
HFRI Credit Index			1.6%	4.4%	5.8%	5.3%	--	--	--	4.2%	Jan-20
Long-Term Target Return of 8%			1.9%	5.9%	8.0%	8.0%	--	--	--	8.0%	Jan-20

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Performance Detail (Gross of Fees) - Annualized

			Ending September 30, 2023									
	Market Value	% of Portfolio	2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date	
Total Private Equity	\$11,001,582	5.9%										
GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	\$7,445,024	4.0%										
GCM Grosvenor Secondary Opportunities Feeder Fund III, LP	\$3,556,558	1.9%										
Total Infrastructure - Value Add	\$2,492,455	1.3%										
WaCap - SP Infrastructure Fund IV Feeder	\$2,492,455	1.3%										
Total Cash Equivalents	\$910,815	0.5%										
Cash Account	\$577,343	0.3%										
Cash in Transit - Boyd Watterson GSA Fund, LP Distribution Proceeds	\$88,883	0.0%										
Cash in Transit - Boyd Watterson State Government Fund, LP Distribution Proceeds	\$244,590	0.1%										

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Account	Fee Schedule	Market Value As of 9/30/2023	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Domestic Large Cap Equity	-	\$29,744,028	16.1%	--	--
Northern Trust Collective Russell 1000 Growth Index Fund	0.04% of Assets	\$15,080,308	8.2%	\$6,032	0.04%
**Wedge Capital Management - QVM	0.50% of Assets	\$14,663,720	7.9%	\$73,319	0.50%
Total Domestic Mid Cap Equity	-	\$9,174,186	5.0%	--	--
TimesSquare Capital Management	0.80% of First 50.0 Mil, 0.70% of Next 50.0 Mil, 0.60% Thereafter	\$9,174,186	5.0%	\$73,393	0.80%
Total Domestic Small Cap Equity	-	\$8,437,917	4.6%	--	--
Eaton Vance Small Cap Collective Investment Trust Fund	0.55% of Assets	\$8,437,917	4.6%	\$46,409	0.55%
Total International Large Cap Equity	-	\$9,072,016	4.9%	--	--
Hardman Johnston International Equity Group Trust	0.75% of First 25.0 Mil, 0.60% of Next 75.0 Mil, 0.50% Thereafter	\$9,072,016	4.9%	\$68,040	0.75%
Total International Small Cap Equity	-	\$9,215,732	5.0%	--	--
Victory Trivalent International Small-Cap Collective Fund	0.85% of Assets	\$9,215,732	5.0%	\$78,334	0.85%
Total Investment Grade Fixed Income	-	\$15,766,324	8.5%	--	--
**Wedge Capital Management	0.33% of Assets	\$15,766,324	8.5%	\$51,241	0.33%
Total Short Duration High Yield Fixed Income	-	\$20,529,417	11.1%	--	--
Chartwell Investment Partners SDHY	0.50% of Assets	\$20,529,417	11.1%	\$102,647	0.50%
Total Mortgages	-	\$9,884,278	5.3%	--	--
Ullico - J for Jobs	0.55% of Assets	\$4,671,232	2.5%	\$25,692	0.55%
Washington Capital JMT Mortgage Income Fund	0.50% of Assets	\$5,213,046	2.8%	\$26,065	0.50%

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Account	Fee Schedule	Market Value As of 9/30/2023	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Real Estate - Core	-	\$19,036,804	10.3%	--	--
Principal U.S. Property Account	1.10% of Assets	\$6,884,043	3.7%	\$75,724	1.10%
Boyd Watterson GSA Fund, LP	1.25% of First 25.0 Mil, 1.15% of Next 75.0 Mil, 1.05% Thereafter	\$6,483,002	3.5%	\$81,038	1.25%
Multi-Employer Property Trust	0.87% of Assets	\$5,669,759	3.1%	\$49,327	0.87%
Total Real Estate - Value Add	-	\$18,832,660	10.2%	--	--
Boyd Watterson State Government Fund, LP	1.25% of First 25.0 Mil, 1.15% of Next 75.0 Mil, 1.05% Thereafter	\$18,832,660	10.2%	\$235,408	1.25%
Total Opportunistic Strategies	-	\$20,812,202	11.3%	--	--
Grosvenor Opportunistic Credit Fund III, Ltd	0.80% of Assets	\$113,673	0.1%	\$909	0.80%
Grosvenor Opportunistic Credit Fund IV, Ltd	0.80% of Assets	\$349,881	0.2%	\$2,799	0.80%
Grosvenor Opportunistic Credit Fund V, Ltd	0.80% of Assets	\$10,304,161	5.6%	\$82,433	0.80%
Corbin ERISA Opportunity Fund, LP - Class C Shares	0.85% of Assets	\$10,044,487	5.4%	\$85,378	0.85%
Total Private Equity	-	\$11,001,582	5.9%	--	--
*GCM Grosvenor Secondary Opportunities Feeder Fund II, LP	18,473 Quarterly	\$7,445,024	4.0%	\$73,892	0.99%
*GCM Grosvenor Secondary Opportunities Feeder Fund III, LP	14,875 Quarterly	\$3,556,558	1.9%	\$59,500	1.67%
Total Infrastructure - Value Add	-	\$2,492,455	1.3%	--	--
*WaCap - SP Infrastructure Fund IV Feeder	18,750 Quarterly	\$2,492,455	1.3%	\$75,000	3.01%

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Account	Fee Schedule	Market Value As of 9/30/2023	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Cash Equivalents	-	\$910,815	0.5%	--	--
Cash Account	-	\$577,343	0.3%	--	--
Cash in Transit - Boyd Watterson GSA Fund, LP Distribution Proceeds	-	\$88,883	0.0%	--	--
Cash in Transit - Boyd Watterson State Government Fund, LP Distribution Proceeds	-	\$244,590	0.1%	--	--
Investment Management Fee		\$184,910,417	100.0%	\$1,368,056	0.74%

Note: The above fee schedules may not include incentive fees, operating expenses, custodian fees, or other administrative costs.

* The estimated annual fee (%) shown in the above table is calculated based on the investment market value. For investments in which the fee is based on committed capital, the estimated annual fee (%) shown may not be representative of the actual annual fee (%).

**Fee schedule represents the effective rate from the aggregation of assets of related Funds.

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Benchmark History

Total Fund		
10/1/2023	Present	Russell 1000 15% / Russell MidCap Growth 5% / Russell 2000 5% / MSCI EAFE 5% / S&P Developed Ex-U.S. Small Cap (Net) 5% / Bloomberg US Govt/Credit Int TR 10% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 12.5% / Bloomberg US Aggregate TR 5% / NCREIF ODCE Equal Weighted Net 10% / Long-Term Income Objective 9% 10% / HFRI Credit Index 10% / Russell 2000 5% / CPI + 400 Basis Points 2.5%
10/1/2021	9/30/2023	Russell 1000 20% / Russell 2000 5% / Russell MidCap Growth 5% / MSCI EAFE 7.5% / Bloomberg US Govt/Credit Int TR 5% / Bloomberg US Aggregate TR 5% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 5% / NCREIF ODCE Equal Weighted Net 10% / Long-Term Income Objective 9% 10% / HFRI Fund of Funds Composite Index 2.5% / 65% MSCI World Index/35% FTSE WGBI 2.5% / Russell 2000 5% / S&P Developed Ex-U.S. SmallCap 5% / HFRI Credit Index 10% / CPI + 400 Basis Points 2.5%
11/1/2019	9/30/2021	Russell 1000 Value 10% / Russell 1000 Growth 10% / Russell 2000 5% / Russell MidCap Growth 5% / MSCI EAFE 5% / Bloomberg US Govt/Credit Int TR 5% / Bloomberg US Aggregate TR 5% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 5% / NCREIF ODCE Equal Weighted Net 17.5% / HFRI Fund of Funds Composite Index 5% / 65% MSCI World Index/35% FTSE WGBI 7.5% / Russell 2000 5% / S&P Developed Ex-U.S. SmallCap 5% / HFRI Credit Index 10%
2/2/2018	10/31/2019	Russell 1000 Value 10% / Russell 1000 Growth 10% / Russell 2000 Value 5% / Russell MidCap Growth 5% / MSCI EAFE 5% / Bloomberg US Govt/Credit Int TR 7.5% / Bloomberg US Aggregate TR 5% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 5% / NCREIF ODCE Equal Weighted Net 17.5% / HFRI Fund of Funds Composite Index 5% / 65% MSCI World Index/35% FTSE WGBI 10% / HFRI Credit Index 5% / Russell 2000 Value 5% / S&P Developed Ex-U.S. SmallCap 5%
1/1/2017	2/1/2018	Russell 1000 Value 25% / Russell 2000 Value 5% / Russell MidCap Growth 7.5% / MSCI EAFE 5% / Bloomberg US Govt/Credit Int TR 7.5% / Bloomberg US Aggregate TR 5% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 5% / NCREIF ODCE Equal Weighted Net 20% / HFRI Fund of Funds Composite Index 5% / 65% MSCI World Index/35% FTSE WGBI 10% / HFRI Credit Index 5%
2/1/2015	12/31/2016	MSCI EAFE 5% / HFRI Fund of Funds Composite Index 10% / Russell 1000 Value 25% / Russell 2000 Value 5% / Russell MidCap Growth 7.5% / 65% MSCI World Index/35% FTSE WGBI 10% / Bloomberg US Govt/Credit Int TR 7.5% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 5% / NCREIF ODCE Equal Weighted Net 20% / Bloomberg US Aggregate TR 5%
6/1/2013	1/31/2015	MSCI EAFE 7.5% / HFRI Fund of Funds Composite Index 10% / Russell 1000 Value 12.5% / Russell 2000 Value 7.5% / Russell MidCap Growth 7.5% / Russell 1000 Growth 12.5% / 65% MSCI World Index/35% FTSE WGBI 10% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 5% / Bloomberg US Govt/Credit Int TR 5% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 5% / NCREIF ODCE Equal Weighted Net 17.5%
1/1/2013	5/31/2013	MSCI EAFE 7.5% / Bloomberg US Aggregate TR 5% / Bloomberg US Aggregate TR 5% / HFRI Fund of Funds Composite Index 10% / Russell 1000 Value 12.5% / Russell 2000 Value 7.5% / Russell MidCap Growth 7.5% / Russell 1000 Growth 12.5% / 65% MSCI World Index/35% FTSE WGBI 10% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 5% / NCREIF ODCE Equal Weighted Net 17.5%
7/1/2012	12/31/2012	MSCI EAFE 7.5% / Bloomberg US Aggregate TR 5% / Bloomberg US Aggregate TR 5% / HFRI Fund of Funds Composite Index 15% / Russell 1000 Value 12.5% / Russell 2000 Value 7.5% / Russell MidCap Growth 7.5% / Russell 1000 Growth 12.5% / 65% MSCI World Index/35% FTSE WGBI 10% / NCREIF ODCE Equal Weighted Net 17.5%
1/1/2011	6/30/2012	MSCI EAFE 10% / Bloomberg US Aggregate TR 5% / Bloomberg US Aggregate TR 5% / HFRI Fund of Funds Composite Index 15% / Russell 1000 Value 12.5% / Russell 2000 Value 7.5% / Russell MidCap Growth 7.5% / Russell 1000 Growth 12.5% / 65% MSCI World Index/35% FTSE WGBI 10% / NCREIF ODCE Equal Weighted Net 15%
4/1/2010	12/31/2010	MSCI EAFE 15% / Bloomberg US Aggregate TR 5% / Bloomberg US Aggregate TR 5% / HFRI Fund of Funds Composite Index 15% / Russell 1000 Value 12.5% / Russell 2000 Value 10% / Russell MidCap Growth 10% / Russell 1000 Growth 12.5% / NCREIF ODCE Equal Weighted Net 15%
1/1/2009	3/31/2010	S&P 500 34% / MSCI EAFE 11% / Bloomberg US Aggregate TR 25% / HFRI Fund of Funds Composite Index 10% / NCREIF ODCE Equal Weighted Net 20%
4/1/2007	12/31/2008	S&P 500 34% / MSCI EAFE 11% / Bloomberg US Aggregate TR 25% / HFRI Fund of Funds Composite Index 10% / NCREIF ODCE Equal Weighted Net 20%
10/1/2005	3/31/2007	Bloomberg US Aggregate TR 30% / MSCI EAFE 12% / S&P 500 38% / NCREIF ODCE Equal Weighted Net 20%
10/1/2004	9/30/2005	S&P 500 38% / MSCI EAFE 12% / Bloomberg US Aggregate TR 30% / NCREIF ODCE Equal Weighted Net 20%
10/1/2002	9/30/2004	S&P 500 55% / MSCI EAFE 10% / Bloomberg US Aggregate TR 25% / NCREIF ODCE Equal Weighted Net 10%
7/1/2001	9/30/2002	S&P 500 55% / Bloomberg US Govt/Credit TR 25% / MSCI EAFE 10% / NCREIF ODCE Equal Weighted Net 10%
4/1/1997	6/30/2001	Bloomberg US Govt/Credit TR 35% / MSCI EAFE 10% / S&P 500 55%
1/1/1990	3/31/1997	Bloomberg US Govt/Credit TR 6000% / S&P 500 40%
4/1/1988	12/31/1989	Bloomberg US Govt/Credit TR 45% / S&P 500 55%

Operating Engineers Local No. 77 Pension Plan
Master Consulting Services Report as of September 30, 2023

Benchmark History

Wedge Capital Management

6/1/2013	Present	Bloomberg US Govt/Credit Int TR 100%
1/1/2003	5/31/2013	Bloomberg US Aggregate TR 100%

Index Disclosures

- Bloomberg US Govt/Credit Int TR - Index is listed for illustrative purposes.
- HFRI Credit Index - Index is listed for illustrative purposes.
- Long-Term Target Return of 8% - Index is listed for illustrative purposes.
- Long-Term Income Objective 8% -The manager's stated objective of an 8% net income return is listed for illustrative purposes.
- Long-Term Income Objective 9% -The manager's stated objective of an 9% net income return is listed for illustrative purposes.
- MSCI ACWI ex USA - Index is listed for illustrative purposes.
- MSCI EAFE Growth - Index is listed for illustrative purposes.
- The NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE) is a non-investable, time-weighted index comprised of the time weighted returns of approximately 40 open-end commingled funds pursuing a core private real estate investment strategy. The constituent funds qualify for inclusion in the NFI-ODCE based on specific criteria regarding their percentage of net assets invested in private equity real estate, geography, property type, life cycle, diversification and use of leverage. Constituent funds must also comply with the NCREIF PREA Reporting Standards, including annual audits, quarterly valuations and time-weighted returns. The NFI-ODCE returns are mainly driven by the underlying property investments in the constituent funds but can also be impacted by each funds use of leverage, cash balances, fund costs, etc. Returns shown are for the NFI-ODCE Equal Weight Index (fund constituents are equally-weighted), net of fees.
- Total Fund Benchmark History - During 4Q 2018, the real estate benchmark was changed from NCREIF ODCE Equal Weighted Index to NCREIF ODCE Equal Weighted Net Index for all historical time periods since inception.
- Total Fund Benchmark History - As of November 1, 2019, the Total Fund Benchmark domestic small cap equity weighting was changed from the Russell 2000 Value Index to the Russell 2000 Index to more accurately represent the underlying investment in the asset class.
- Total Fund Benchmark History - During 4Q 2019, the opportunistic benchmark was changed from HFRI Event Driven Index to HFRI Credit Index for all historical time periods since inception.

- Total Fund Benchmark History - During 4Q 2021, the real estate - value add benchmark was changed from NCREIF ODCE Equal Weighted Net Index to Long-Term Income Objective 9% for all historical time periods since inception.
- Total Fund Benchmark - The Total Fund Benchmark is comprised of the respective market indices for each asset class weighted at the percentage the asset class represents in the Policy. It is important to acknowledge that not all asset classes have a corresponding market index due to the specialized nature of the asset class (i.e. private equity, private debt, infrastructure, hedge funds) and/or the specialized nature of the investment (opportunistic investments, global tactical asset allocation, absolute return strategies). In such cases, a traditional asset class index may be used as a proxy in the Total Fund Benchmark. The Total Fund Benchmark illustrates how an indexed portfolio with a similar allocation to that of the Policy would have performed during a specific period. The Total Fund Benchmark does not account for ongoing changes in the allocation percentages of the Total Fund resulting from market gains/losses, cash flows, and rebalancing during the same period. While a useful tool in examining performance, due to the static nature of the allocation percentages in the Total Fund Benchmark, the fact that not all asset classes have a representative index, and considering that some indices in the Total Fund Benchmark are not investable, the Total Fund Benchmark should not be used as the primary measure of a Total Fund's success or failure.

Footnotes

- Values, flows, and returns for all commingled funds, mutual funds, partnerships, and all other alternative assets are provided by the firm managing the assets and cannot be independently verified by IPS. Separately managed account returns are calculated by IPS using custodian data.
- The net of fees returns in this report are estimated. Fees do not include: The investment consulting fee paid to IPS, custodian fees, or other administrative costs.
- The information contained in this report is proprietary and confidential information. You are hereby notified that any dissemination, distribution, or copying of this document is strictly prohibited.
- Hedge Fund of Funds - Multi Strategy returns are based on the manager provided estimated value.
- Grosvenor OCF III, OCF IV and OCF V – the net of fee returns include the accrual of the incentive fee. The difference between the gross and net returns may vary widely due to this accounting. The information reported by IPS is provided by the manager and subject to change.
- Net of fees calculations began 3Q 2001 and cannot be calculated for prior time periods.
- Total asset class inception returns may not be available if the performance history begins prior to December 2007.

- The following composite returns prior to 1Q 2010 do not include cash in the returns:
 - Total Fund Domestic Equity
 - Total Fund International Equity
 - Total Domestic Fixed Investment Grade
 - Total Fund Mortgage
 - Total Fund Real Estate
 - Total Fund Hedge Fund of Funds
- Prior to the 4Q 2011 report, Principal's returns were reported net of fees.
- Prior to the 4Q 2011 report, Multi-Employer Property Trust's returns were reported net of fees.

- The following managers are valued as of June 30, 2023, plus or minus any flows:
 - GCM Grosvenor Secondary Opportunities Feeder Fund II, LP
 - GCM Grosvenor Secondary Opportunities Feeder Fund III, LP
 - WaCap - SP Infrastructure Fund IV Feeder
- The following managers' values are preliminary and are subject to change:
 - Corbin ERISA Opportunity Fund, LP - Class C Shares
 - Grosvenor Opportunistic Credit Fund III, Ltd
 - Grosvenor Opportunistic Credit Fund IV, Ltd
 - Grosvenor Opportunistic Credit Fund V, Ltd



Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report

Period Ended

September 30, 2023

Total Fund Growth of Assets

	Third Quarter Fiscal Year-To-Date		One Year	Three Years
Beginning Market Value	\$34,977,953	\$33,628,622	\$33,727,313	\$36,604,794
Net Cash Flow	\$814,618	\$1,084,793	\$527,074	-\$4,329,263
Net Investment Change	-\$210,381	\$868,775	\$1,327,803	\$3,306,659
Ending Market Value	\$35,582,190	\$35,582,190	\$35,582,190	\$35,582,190

Total Fund Growth of Assets

	Five Years	Seven Years	Ten Years
Beginning Market Value	\$35,088,955	\$38,042,899	\$28,702,325
Net Cash Flow	-\$6,146,501	-\$12,643,903	-\$8,932,000
Net Investment Change	\$6,639,737	\$10,183,194	\$15,811,866
Ending Market Value	\$35,582,190	\$35,582,190	\$35,582,190

- The Fund's fiscal year end is December 31st.

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Summary (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023			
			2023 Q3	Fiscal YTD	1 Yr	3 Yrs
Total Fund	\$35,582,190	100.0%	-0.5%	2.7%	4.1%	3.2%
Total Domestic Large Cap Equity	\$4,068,075	11.4%	-3.2%	15.5%	21.3%	11.9%
Total Investment Grade Fixed Income	\$11,066,814	31.1%	-0.9%	1.2%	2.7%	-2.5%
Total Short Duration High Yield Fixed Income	\$11,707,167	32.9%	0.9%	3.9%	6.6%	2.4%
Total Real Estate - Core	\$3,327,559	9.4%	-2.2%	-7.5%	-12.5%	7.7%
Total Real Estate - Value Add	\$3,341,342	9.4%	-0.3%	0.4%	2.0%	--
Total Cash Equivalents	\$2,071,232	5.8%				

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Summary (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023		
			5 Yrs	7 Yrs	10 Yrs
Total Fund	\$35,582,190	100.0%	3.9%	4.2%	4.8%
Total Domestic Large Cap Equity	\$4,068,075	11.4%	7.0%	9.4%	9.7%
Total Investment Grade Fixed Income	\$11,066,814	31.1%	1.5%	1.0%	1.8%
Total Short Duration High Yield Fixed Income	\$11,707,167	32.9%	3.3%	3.3%	3.3%
Total Real Estate - Core	\$3,327,559	9.4%	6.3%	6.8%	8.3%
Total Real Estate - Value Add	\$3,341,342	9.4%	--	--	--
Total Cash Equivalents	\$2,071,232	5.8%			

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Summary (Gross of Fees)

Fiscal Year Ending December 31st							
	Fiscal YTD	2022	2021	2020	2019	2018	2017
Total Fund	2.7%	-5.1%	8.9%	5.5%	9.7%	1.0%	6.8%
<i>Total Fund Benchmark</i>	<i>3.2%</i>	<i>-5.0%</i>	<i>8.0%</i>	<i>4.9%</i>	<i>9.9%</i>	<i>1.0%</i>	<i>5.2%</i>

Fiscal Year Ending December 31st					
	2016	2015	2014	2013	2012
Total Fund	6.5%	3.3%	6.1%	9.2%	7.7%
<i>Total Fund Benchmark</i>	<i>7.5%</i>	<i>3.0%</i>	<i>5.9%</i>	<i>8.3%</i>	<i>8.3%</i>

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Summary (Net of Fees)

	Fiscal Year Ending December 31st						
	Fiscal YTD	2022	2021	2020	2019	2018	2017
Total Fund	2.3%	-5.6%	8.4%	4.9%	9.1%	0.4%	6.2%
<i>Total Fund Benchmark</i>	<i>3.2%</i>	<i>-5.0%</i>	<i>8.0%</i>	<i>4.9%</i>	<i>9.9%</i>	<i>1.0%</i>	<i>5.2%</i>

	Fiscal Year Ending December 31st				
	2016	2015	2014	2013	2012
Total Fund	5.9%	2.7%	5.5%	8.6%	7.3%
<i>Total Fund Benchmark</i>	<i>7.5%</i>	<i>3.0%</i>	<i>5.9%</i>	<i>8.3%</i>	<i>8.3%</i>

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Current vs. Policy						
	Current	Current	Policy	Policy Range	Difference	Difference
Domestic Large Cap Equity	\$4,068,075	11.4%	10.0%	5.0% - 15.0%	1.4%	\$509,856
Investment Grade Fixed Income	\$11,066,814	31.1%	35.0%	30.0% - 40.0%	-3.9%	-\$1,386,952
Short Duration High Yield Fixed Income	\$11,707,167	32.9%	35.0%	30.0% - 40.0%	-2.1%	-\$746,599
Real Estate - Core	\$3,327,559	9.4%	10.0%	5.0% - 15.0%	-0.6%	-\$230,660
Real Estate - Value Add	\$3,341,342	9.4%	10.0%	5.0% - 15.0%	-0.6%	-\$216,877
Cash Equivalents	\$2,071,232	5.8%	0.0%	0.0% - 0.0%	5.8%	\$2,071,232
Total	\$35,582,190	100.0%	100.0%			

- Policy adopted February 2023; effective April 2023.
- Cash equivalents allocation includes:
 - \$25K partial-redemption-proceeds from real estate - core (ARA Core Property Fund, LP); proceeds available in November 2023.
 - \$25K distribution-proceeds from real estate - core (ARA Core Property Fund, LP); proceeds available in November 2023.
 - \$43K distribution-proceeds from real estate - value add (Boyd Watterson State Government Fund, LP); proceeds distributed in October 2023.

Operating Engineers Local No. 77 Trust Fund of Washington DC – Asset Allocation

- Asset allocation reviews were presented and discussed with the Trustees at the following meetings: February 9, 2021, February 8, 2022, and February 14, 2023.
- At the May 10, 2022, meeting, the Trustees elected to redeem \$1.0M from real estate - core (ARA Core Property Fund, LP) effective June 30, 2022. Redemption proceeds were used for cash needs. Status: Redemption proceeds received July 5, 2022.
- At the November 8, 2022, meeting, the Trustees elected to redeem \$600K from real estate - core (ARA Core Property Fund, LP) effective December 31, 2022, and \$600K from real estate - value add (Boyd Watterson State Government Fund, LP) effective March 31, 2023. Redemption proceeds will be used for rebalancing and cash needs, pending availability in withdrawal queue (ARA Core Property Fund, LP). Status: Boyd Watterson State Government Fund, LP redemption was fully satisfied as of March 31, 2023. ARA Core Property Fund, LP in process.
- At the February 14, 2023, meeting, the Trustees elected to adopt Policy: 10.0% (-5.0%) domestic large cap equity, 35.0% investment grade fixed income, 35.0% (+5.0%) short duration high yield fixed income, 10.0% real estate - core, 10.0% real estate - value add. To rebalance closer to the new Policy, transfer \$1.0M to short duration high yield fixed income (Chartwell Investment Partners SDHY) from domestic large cap equity (Vanguard Growth Index Fund Admiral Shares - \$500K and Wedge Capital Management – QVM - \$500K). Status: Transfers completed April 6, 2023.
- At the August 8, 2023, meeting, IPS recommended rebalancing cash to investment grade fixed income allocation; however, administration noted cash was needed for claims and cash needs. Status: No rebalancing occurred.

Recommendation: If not needed for benefits/expenses, rebalance cash to investment grade fixed income.

Real Estate - Core Redemption (In Millions) as of September 30, 2023						
Manager	Redemption Type	Effective Date	Withdrawal Queue	Requested \$	Received \$	Remaining \$
ARA Core Property Fund, LP	Partial	Dec-22	Sep-22	\$0.60	\$0.12	\$0.48
Total				\$0.60	\$0.12	\$0.48

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Commitment and Funding of Real Estate - Core (In Millions) as of September 30, 2023

Investments		Commitments			Contributions & Distributions		Valuations		Performance	
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI
ARA Core Property Fund, LP	2007	\$5.2	\$0.0	1.0	\$5.2	\$7.1	\$3.3	\$10.4	1.4	2.0
Total		\$5.2	\$0.0	1.0	\$5.2	\$7.1	\$3.3	\$10.4	1.4	2.0

Commitment and Funding of Real Estate - Value Add (In Millions) as of September 30, 2023

Investments		Commitments			Contributions & Distributions		Valuations		Performance	
Account Name	Vintage Year	Commitment	Unfunded Commitment	Call Ratio	Cumulative Contributions	Cumulative Distributions	Valuation	Total Value	DPI	TVPI
Boyd Watterson State Government Fund, LP	2021	\$3.8	\$0.0	1.0	\$3.8	\$0.7	\$3.3	\$4.0	0.2	1.1
Total		\$3.8	\$0.0	1.0	\$3.8	\$0.7	\$3.3	\$4.0	0.2	1.1

- Distribution to Paid-In (DPI) – The DPI is the value of all distributions to limited partners divided by the amount limited partners have contributed to the fund. A DPI of 1 indicates the investor has received capital back equal to what they invested while a DPI over 1 indicates an investor has received more capital back than they invested. DPI is most relevant for closed-end fund structures such as private equity.
- Total Value to Paid in Multiple (TVPI) – The TVPI is a measure of return that expresses how much a fund has made relative to how much was contributed. It is calculated by dividing the sum of the amount of capital distributed to investors and the amount of remaining value by the amount of invested capital. A TVPI below 1 indicates the current value of the investment plus the capital returned to the investor is less than the investor contributed. A TVPI greater than 1 indicates the current value of the investment plus the capital returned to the investor is more than the investor contributed. For closed-end funds such as private equity, DPI and TVPI will be the same at the end of the fund's life.
- Performance data included in the table above may differ from performance data provided by the investment manager due to the availability and timing of data used in the calculations.

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023				
			2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
Total Fund	\$35,582,190	100.0%	-0.6%	2.3%	3.5%	2.7%	3.3%
Total Domestic Large Cap Equity	\$4,068,075	11.4%	-3.3%	15.3%	20.9%	11.6%	6.5%
Vanguard Growth Index Fund Admiral Shares	\$2,077,238	5.8%	-3.7%	28.3%	28.1%	--	--
CRSP US Large Cap Growth TR USD			-3.7%	28.3%	28.2%	--	--
Wedge Capital Management - QVM	\$1,990,838	5.6%	-2.8%	4.7%	14.9%	11.2%	6.4%
Russell 1000 Value			-3.2%	1.8%	14.4%	11.0%	6.2%
Total Investment Grade Fixed Income	\$11,066,814	31.1%	-0.9%	0.9%	2.3%	-2.8%	1.2%
Wedge Capital Management	\$11,066,814	31.1%	-0.9%	0.9%	2.3%	-2.8%	1.2%
Bloomberg US Govt/Credit Int TR			-0.8%	0.7%	2.2%	-2.9%	1.0%
Total Short Duration High Yield Fixed Income	\$11,707,167	32.9%	0.8%	3.5%	6.1%	1.9%	2.7%
Chartwell Investment Partners SDHY	\$11,707,167	32.9%	0.8%	3.5%	6.1%	1.9%	2.7%
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR			1.1%	4.7%	7.5%	2.7%	3.6%
Bloomberg US Govt/Credit Int TR			-0.8%	0.7%	2.2%	-2.9%	1.0%

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023				
	Market Value	% of Portfolio	2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
Total Real Estate - Core	\$3,327,559	9.4%	-2.5%	-8.3%	-13.5%	6.5%	5.1%
ARA Core Property Fund, LP	\$3,327,559	9.4%	-2.5%	-8.3%	-13.5%	6.5%	5.1%
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	6.7%	5.2%
Total Real Estate - Value Add	\$3,341,342	9.4%	-0.6%	-0.5%	0.7%	--	--
Boyd Watterson State Government Fund, LP	\$3,341,342	9.4%	-0.6%	-0.5%	0.7%	--	--
Long-Term Income Objective 9%			2.2%	6.7%	9.0%	--	--
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	--	--
Total Cash Equivalents	\$2,071,232	5.8%					
Cash Account	\$1,977,201	5.6%					
Cash in Transit - ARA Core Property Fund, LP Redemption Proceeds	\$25,308	0.1%					
Cash in Transit - ARA Core Property Fund, LP Distribution Proceeds	\$25,327	0.1%					
Cash in Transit - Boyd Watterson State Government Fund, LP Distribution Proceeds	\$43,396	0.1%					

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023			
	Market Value	% of Portfolio	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund	\$35,582,190	100.0%	3.6%	4.2%	4.5%	Oct-97
Total Domestic Large Cap Equity	\$4,068,075	11.4%	9.0%	9.3%	5.1%	Apr-99
Vanguard Growth Index Fund Admiral Shares	\$2,077,238	5.8%	--	--	2.9%	Mar-21
CRSP US Large Cap Growth TR USD			--	--	3.0%	Mar-21
Wedge Capital Management - QVM	\$1,990,838	5.6%	8.8%	9.2%	10.6%	Dec-12
Russell 1000 Value			7.9%	8.4%	9.8%	Dec-12
Total Investment Grade Fixed Income	\$11,066,814	31.1%	0.7%	1.4%	3.6%	Jan-99
Wedge Capital Management	\$11,066,814	31.1%	0.7%	1.4%	3.1%	Jan-03
Bloomberg US Govt/Credit Int TR			0.6%	1.3%	2.8%	Jan-03
Total Short Duration High Yield Fixed Income	\$11,707,167	32.9%	2.8%	2.8%	2.9%	Sep-12
Chartwell Investment Partners SDHY	\$11,707,167	32.9%	2.8%	2.8%	2.9%	Sep-12
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR			3.5%	3.7%	3.9%	Sep-12
Bloomberg US Govt/Credit Int TR			0.6%	1.3%	1.1%	Sep-12

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Detail (Net of Fees) - Annualized

			Ending September 30, 2023			
	Market Value	% of Portfolio	7 Yrs	10 Yrs	Inception	Inception Date
Total Real Estate - Core	\$3,327,559	9.4%	5.6%	7.1%	4.7%	Apr-07
ARA Core Property Fund, LP	\$3,327,559	9.4%	5.6%	7.1%	4.7%	Apr-07
<i>NCREIF ODCE Equal Weighted Net</i>			5.9%	7.6%	5.0%	Apr-07
Total Real Estate - Value Add	\$3,341,342	9.4%	--	--	3.6%	Oct-21
Boyd Watterson State Government Fund, LP	\$3,341,342	9.4%	--	--	3.6%	Oct-21
<i>Long-Term Income Objective 9%</i>			--	--	9.0%	Oct-21
<i>NCREIF ODCE Equal Weighted Net</i>			--	--	2.9%	Oct-21
Total Cash Equivalents	\$2,071,232	5.8%				
Cash Account	\$1,977,201	5.6%				
Cash in Transit - ARA Core Property Fund, LP						
Redemption Proceeds	\$25,308	0.1%				
Cash in Transit - ARA Core Property Fund, LP						
Distribution Proceeds	\$25,327	0.1%				
Cash in Transit - Boyd Watterson State Government Fund, LP						
Distribution Proceeds	\$43,396	0.1%				

Account Information		Vanguard Growth Index Fund Admiral Shares		
Account Name	Vanguard Growth Index Fund Admiral Shares	Ending September 30, 2023		
Account Structure	Mutual Fund	Third Quarter		Inception
Investment Style	Passive			3/31/21
Inception Date	3/31/21	Beginning Market Value	\$2,156,959	\$0
Account Type	Domestic Large Cap Growth Equity	Net Cash Flow	\$0	\$1,825,000
Benchmark	CRSP US Large Cap Growth TR USD	Net Investment Change	-\$79,722	\$252,238
Universe	Large Growth MStar MF	Ending Market Value	\$2,077,238	\$2,077,238

												Calendar Years										Inception	Inception Date
	2023 Q3	Rank	YTD Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank						2022 Rank	2021 Rank	2020 Rank	2019 Rank	2018 Rank							
Vanguard Growth Index Fund Admiral Shares	-3.7%	49	28.3%	12	28.1%	23	--	--	--	--	--	-33.1%	69	--	--	--	--	--	--	--	--	2.9%	Mar-21
CRSP US Large Cap Growth TR USD	-3.7%	49	28.3%	11	28.2%	21	--	--	--	--	--	-33.1%	68	--	--	--	--	--	--	--	--	3.0%	Mar-21

Note: Returns are net of fees.

Operating Engineers Local No. 77 Trust Fund of Washington DC - Vanguard Growth Index Fund Admiral Shares

Manager Summary

Recommendation: None.

Compliance Summary

This is an investment in a mutual fund; the underlying holdings of the mutual fund are not monitored for compliance.

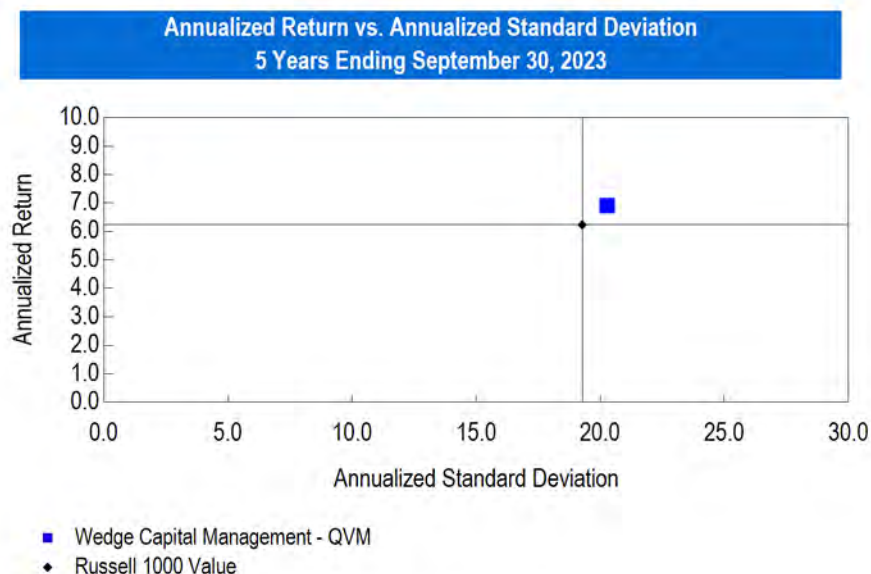
Account Information	
Account Name	Wedge Capital Management - QVM
Account Structure	Separate Account
Investment Style	Active
Inception Date	12/01/12
Account Type	Domestic Large Cap Value Equity
Benchmark	Russell 1000 Value
Universe	eV US Large Cap Value Equity Gross

Wedge Capital Management - QVM		
Ending September 30, 2023		
	Third Quarter	Inception 12/1/12
Beginning Market Value	\$2,045,393	\$0
Net Cash Flow	\$0	-\$4,078,444
Net Investment Change	-\$54,555	\$6,069,282
Ending Market Value	\$1,990,838	\$1,990,838

3 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wedge Capital Management - QVM	11.8%	18.0%	96.3%	94.7%
Russell 1000 Value	11.0%	17.6%	100.0%	100.0%

5 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wedge Capital Management - QVM	6.9%	20.3%	101.5%	99.1%
Russell 1000 Value	6.2%	19.3%	100.0%	100.0%

Calendar Years												Inception	Inception Date
2022 Rank		2021 Rank		2020 Rank		2019 Rank		2018 Rank					
-12.2%	88	30.9%	19	6.5%	40	29.6%	25	-11.9%	81			11.2%	Dec-12
-7.5%	69	25.2%	72	2.8%	62	26.5%	54	-8.3%	50			9.8%	Dec-12



Note: Returns are gross of fees.

Operating Engineers Local No. 77 Trust Fund of Washington DC - Wedge Capital Management - QVM

Correspondence Summary

- Manager presented annual reviews at meetings in February 2014, May 2016, May 2017, February 2018, May 2019, and February 2020.

Manager Summary

- IPS conducted due diligence meetings with Wedge Capital on February 10, 2022 and October 17, 2023.

Recommendation: None.

Compliance Summary

Exceptions: None.

Action to be taken: None.

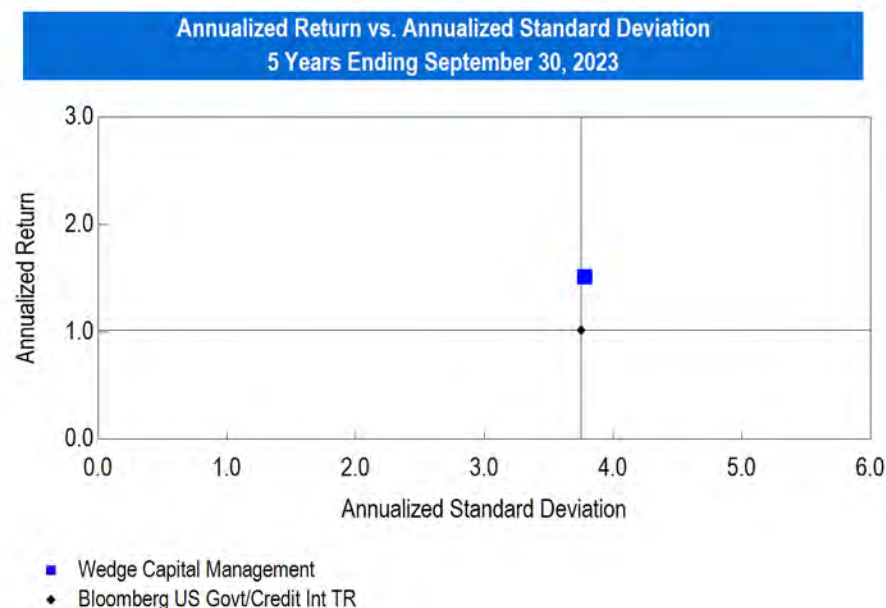
Items of Interest: Personnel Departure - The manager stated effective August 15, 2023, Brandon Smith, Mid Cap Equity Analyst departed the firm.

Account Information	
Account Name	Wedge Capital Management
Account Structure	Separate Account
Investment Style	Active
Inception Date	1/01/03
Account Type	Investment Grade Fixed Income
Benchmark	Bloomberg US Govt/Credit Int TR
Universe	

Wedge Capital Management		
Ending September 30, 2023		
	Third Quarter	Inception 1/1/03
Beginning Market Value	\$11,162,583	\$3,769,223
Net Cash Flow	\$0	\$450,913
Net Investment Change	-\$95,769	\$6,846,679
Ending Market Value	\$11,066,814	\$11,066,814

3 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wedge Capital Management	-2.5%	4.1%	100.7%	94.9%
Bloomberg US Govt/Credit Int TR	-2.9%	4.1%	100.0%	100.0%

5 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wedge Capital Management	1.5%	3.8%	103.4%	93.5%
Bloomberg US Govt/Credit Int TR	1.0%	3.8%	100.0%	100.0%



	Calendar Years											Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	
Wedge Capital Management	-0.9%	1.2%	2.7%	-2.5%	1.5%	-7.9%	-1.1%	7.6%	6.9%	1.1%	3.4%	Jan-03
Bloomberg US Govt/Credit Int TR	-0.8%	0.7%	2.2%	-2.9%	1.0%	-8.2%	-1.4%	6.4%	6.8%	0.9%	2.8%	Jan-03

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Trust Fund of Washington DC - Wedge Capital Management

Correspondence Summary

- Manager presented annual reviews at meetings in May 2016, May 2017, February 2018, May 2019, and February 2020.

Manager Summary

- IPS conducted due diligence meetings with Wedge Capital on January 20, 2021 and November 15, 2022.

Recommendation: None.

Compliance Summary

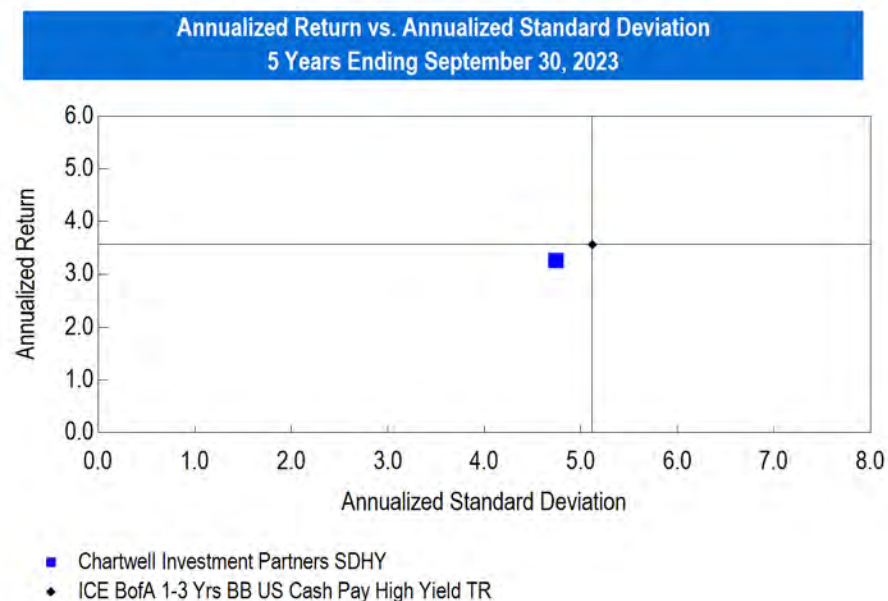
Exceptions: None.

Action to be taken: None.

Items of Interest: Personnel Departure - The manager stated effective August 15, 2023, Brandon Smith, Mid Cap Equity Analyst departed the firm.

Account Information	
Account Name	Chartwell Investment Partners SDHY
Account Structure	Separate Account
Investment Style	Active
Inception Date	9/01/12
Account Type	Short Duration High Yield Fixed Income
Benchmark	ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR
Universe	

Chartwell Investment Partners SDHY		
Ending September 30, 2023		
	Third Quarter	Inception 9/1/12
Beginning Market Value	\$11,602,344	\$0
Net Cash Flow	\$0	\$7,884,627
Net Investment Change	\$104,823	\$3,822,540
Ending Market Value	\$11,707,167	\$11,707,167



3 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Chartwell Investment Partners SDHY	2.4%	4.1%	95.7%	102.4%
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR	2.7%	4.0%	100.0%	100.0%

5 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Chartwell Investment Partners SDHY	3.3%	4.7%	91.3%	94.3%
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR	3.6%	5.1%	100.0%	100.0%

	Calendar Years											Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	
Chartwell Investment Partners SDHY	0.9%	3.9%	6.6%	2.4%	3.3%	-2.5%	3.0%	5.0%	7.9%	1.2%	3.4%	Sep-12
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR	1.1%	4.7%	7.5%	2.7%	3.6%	-3.1%	3.2%	5.4%	8.7%	1.4%	3.9%	Sep-12
Bloomberg US Govt/Credit Int TR	-0.8%	0.7%	2.2%	-2.9%	1.0%	-8.2%	-1.4%	6.4%	6.8%	0.9%	1.1%	Sep-12

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Trust Fund of Washington DC - Chartwell Investment Partners SDHY

Correspondence Summary

- Manager presented annual reviews at meetings in February 2016, May 2017, August 2018 and August 2019.

Manager Summary

- IPS conducted due diligence meetings with Chartwell on January 19, 2021, July 22, 2021, July 19, 2022 and July 18, 2023.
- On October 20, 2021, Chartwell announced that their parent company, TriState Capital Holdings, has agreed to be acquired by Raymond James Financial. Upon closing of the transaction, Chartwell will become an affiliate of Carillon Tower, the asset management subsidiary of Raymond James Financial. Chartwell provided a letter to clients requesting acknowledgment and consent to the ownership change. IPS provided a memo recommending clients consent to the ownership change, subject to counsel review. Consent was provided. The transaction closed on June 1, 2022.

Recommendation: None.

Compliance Summary

Exceptions: None.

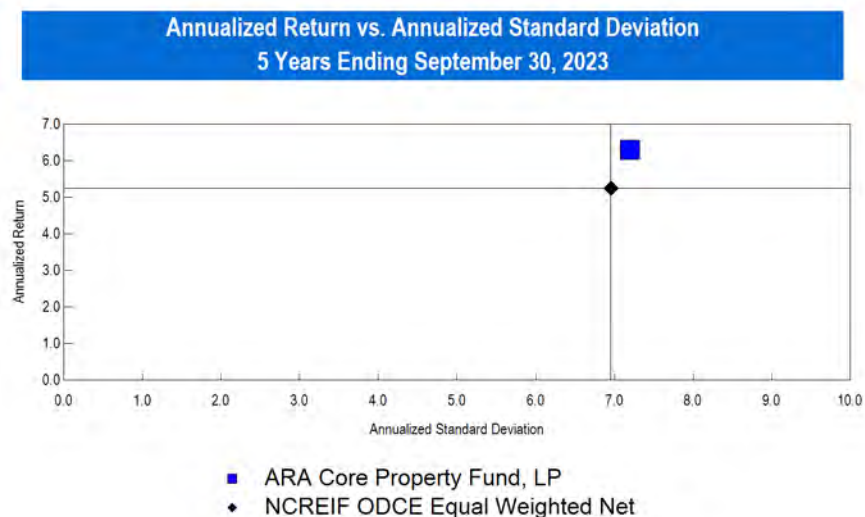
Action to be taken: None.

Items of Interest: Personnel Additions - The manager stated during 3Q 2023, Chartwell Investment Partners expanded their Fixed Income investment team with the hiring of Thomas Buckley as Research Analyst and Trader for both high grade and high yield.

Account Information	
Account Name	ARA Core Property Fund, LP
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	4/01/07
Account Type	Real Estate - Core
Benchmark	NCREIF ODCE Equal Weighted Net
Universe	

ARA Core Property Fund, LP		
Ending September 30, 2023		
	Third Quarter	Inception 4/1/07
Beginning Market Value	\$3,464,282	\$0
Net Cash Flow	-\$50,635	-\$1,914,393
Net Investment Change	-\$86,088	\$5,241,953
Ending Market Value	\$3,327,559	\$3,327,559

Income is distributed.



3 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
ARA Core Property Fund, LP	7.7%	9.2%	108.0%	96.1%
NCREIF ODCE Equal Weighted Net	6.7%	8.9%	100.0%	100.0%

5 Years Ending September 30, 2023				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
ARA Core Property Fund, LP	6.3%	7.2%	112.7%	95.1%
NCREIF ODCE Equal Weighted Net	5.2%	7.0%	100.0%	100.0%

	Calendar Years											Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	
ARA Core Property Fund, LP	-2.2%	-7.5%	-12.5%	7.7%	6.3%	9.4%	21.9%	1.6%	6.3%	8.7%	5.8%	Apr-07
NCREIF ODCE Equal Weighted Net	-2.1%	-8.4%	-13.0%	6.7%	5.2%	7.6%	21.9%	0.8%	5.2%	7.3%	5.0%	Apr-07

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Trust Fund of Washington DC - ARA Core Property Fund, LP

Correspondence Summary

- Manager presented annual reviews at meetings in February 2015, May 2016, May 2017, August 2018, and February 2020.
- Partial redemption requests were submitted effective June 30, 2020 (\$500K) and March 31, 2021 (\$3.25M); proceeds were used for rebalancing purposes. Both redemptions were satisfied as of June 30, 2021.
- A partial redemption request was submitted effective June 30, 2022 (\$1.0M); proceeds were used for cash needs. Redemption proceeds received July 5, 2022.
- A partial redemption request was submitted effective December 31, 2022 (\$600K); pending availability in withdrawal queue, proceeds will be used for rebalancing and cash needs.

Manager Summary

- IPS conducted due diligence meetings with American Realty Advisors on November 16, 2021, August 3, 2022 and June 29, 2023.
- On August 24, 2022, ARA announced the implementation of a withdrawal queue effective September 30, 2022.
- On May 27, 2021, ARA announced that the American Core Realty Fund, LP will be changing its name to the ARA Core Property Fund, LP. No changes are expected in the strategy or objectives of the Fund as a result.

Recommendation: None.

Compliance Summary

Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the firm's commingled investment vehicle investment guidelines and/or offering document governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

Items of Interest: Liquidity - The manager stated that partial redemption payments were made for all requests timely received for the September 30, 2023 redemption date. The number of quarters required to satisfy outstanding redemptions requests is uncertain and depends on market conditions, but ARA anticipates that the Fund will make partial payments for requests that were received timely for the December 31, 2023 redemption date and that a queue will be in place for the first quarter of 2024. **Derivatives** - The manager stated yes to Part A question #5, however ARA does not perform stress testing as the Fund only holds one derivative security for interest rate hedging purposes.

Account Information		Boyd Watterson State Government Fund, LP		
Account Name	Boyd Watterson State Government Fund, LP	Ending September 30, 2023		
Account Structure	Commingled Fund	Third Quarter		Inception
Investment Style	Active			10/1/21
Inception Date	10/01/21	Beginning Market Value	\$3,448,554	\$0
Account Type	Real Estate - Value Add	Net Cash Flow	-\$87,117	\$3,062,883
Benchmark	Long-Term Income Objective 9%	Net Investment Change	-\$20,095	\$278,459
Universe		Ending Market Value	\$3,341,342	\$3,341,342

Income is distributed.

	Calendar Years											Inception Date
	2023 Q3	YTD	1 Yr	3 Yrs	5 Yrs	2022	2021	2020	2019	2018	Inception	
Boyd Watterson State Government Fund, LP	-0.3%	0.4%	2.0%	--	--	7.4%	--	--	--	--	4.9%	Oct-21
Long-Term Income Objective 9%	2.2%	6.7%	9.0%	--	--	9.0%	--	--	--	--	9.0%	Oct-21
NCREIF ODCE Equal Weighted Net	-2.1%	-8.4%	-13.0%	--	--	7.6%	--	--	--	--	2.9%	Oct-21

Note: Returns are gross of fees.

Operating Engineers Local No. 77 Trust Fund of Washington DC - Boyd Watterson State Government Fund, LP

Correspondence Summary

- A partial redemption request was submitted effective March 31, 2023 (\$600K); proceeds will be used for rebalancing and cash needs. The partial redemption request was fully satisfied on its effective date, March 31, 2023. Proceeds were received April 28, 2023.

Manager Summary

- IPS conducted due diligence meetings with Boyd Watterson on May 26, 2021, September 21, 2021, October 17, 2022 and July 14, 2023.
- IPS clients received discounted annual management fees of 90 basis points (0.90%) through December 31, 2020 and 115 bps (1.15%) for calendar year 2021. Effective January 1, 2022, a tiered management fee structure of 125 basis points (1.25%) on the first \$25 million, 115 bps (1.15%) on the next \$75 million and 1.05% on invested capital above \$100 million will apply.
- In December 2022, Boyd Watterson requested limited partner consent for several proposed amendments to the Fund's Limited Partnership Agreement (LPA). IPS provided clients with a memo recommending consent to the proposed amendment, subject to counsel review. Boyd Watterson has requested consent be provided by March 31, 2023. In April 2023, Boyd Watterson notified IPS that the amendment received the necessary approval and will take effect on July 1, 2023.

Recommendation: None.

Compliance Summary

Manager verified that the portfolio is currently, and has been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio(s) under management, manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines to the extent described in the Fund Documents.

Items of Interests: Derivatives - The manager stated the Fund does not utilize derivatives as an investment vehicle. The manager also stated the Fund does not utilize interest rate swaps to hedge risk related to variable rate loans. **E&O** -The manager stated the investment manger provides bonding for the Fund in accordance with the requirements of Section 412 of ERISA.

Investment Policy Statement

- The current investment policy statement was adopted and signed on August 11, 2015.

Custody Bank

- The current custodian is PNC Bank.
- Separate account market values and flows are derived from the custodial statement.

Commission Recapture Provider

- Cowen and Company, LLC.
- IPS evaluated the benefits of ongoing participation in a commission recapture program and suggests Funds continue to participate in them. To potentially enhance the manager's utilization of the commission recapture program, in November 2022, as a courtesy IPS provided draft notices for fund Administrator to consider sending to the investment managers.

Commingled Funds

- Commingled Fund: Due to the commingled fund structure, IPS does not monitor the holdings within the commingled fund for compliance with the client's investment policy statement. The commingled fund is governed by its own investment policy.
- Commingled fund market values and flows are derived from the manager statement.

Mutual Funds

- Mutual Fund: Due to the mutual fund structure, IPS does not monitor the holdings within the mutual fund for compliance with the client's investment policy statement. The mutual fund is governed by its own investment policy.
- Mutual fund market values and flows are derived from the manager statement.



Operating Engineers Local No. 77 Trust Fund of Washington DC

Appendix

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Detail (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023						
			2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund	\$35,582,190	100.0%	-0.5%	2.7%	4.1%	3.2%	3.9%	4.2%	4.8%
Total Domestic Large Cap Equity	\$4,068,075	11.4%	-3.2%	15.5%	21.3%	11.9%	7.0%	9.4%	9.7%
Vanguard Growth Index Fund Admiral Shares	\$2,077,238	5.8%	-3.7%	28.3%	28.2%	--	--	--	--
CRSP US Large Cap Growth TR USD			-3.7%	28.3%	28.2%	--	--	--	--
Wedge Capital Management - QVM	\$1,990,838	5.6%	-2.7%	5.1%	15.5%	11.8%	6.9%	9.4%	9.7%
Russell 1000 Value			-3.2%	1.8%	14.4%	11.0%	6.2%	7.9%	8.4%
Total Investment Grade Fixed Income	\$11,066,814	31.1%	-0.9%	1.2%	2.7%	-2.5%	1.5%	1.0%	1.8%
Wedge Capital Management	\$11,066,814	31.1%	-0.9%	1.2%	2.7%	-2.5%	1.5%	1.0%	1.8%
Bloomberg US Govt/Credit Int TR			-0.8%	0.7%	2.2%	-2.9%	1.0%	0.6%	1.3%
Total Short Duration High Yield Fixed Income	\$11,707,167	32.9%	0.9%	3.9%	6.6%	2.4%	3.3%	3.3%	3.3%
Chartwell Investment Partners SDHY	\$11,707,167	32.9%	0.9%	3.9%	6.6%	2.4%	3.3%	3.3%	3.3%
ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR			1.1%	4.7%	7.5%	2.7%	3.6%	3.5%	3.7%
Bloomberg US Govt/Credit Int TR			-0.8%	0.7%	2.2%	-2.9%	1.0%	0.6%	1.3%

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Performance Detail (Gross of Fees) - Annualized

	Market Value	% of Portfolio	Ending September 30, 2023						
			2023 Q3	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Real Estate - Core	\$3,327,559	9.4%	-2.2%	-7.5%	-12.5%	7.7%	6.3%	6.8%	8.3%
ARA Core Property Fund, LP	\$3,327,559	9.4%	-2.2%	-7.5%	-12.5%	7.7%	6.3%	6.8%	8.3%
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	6.7%	5.2%	5.9%	7.6%
Total Real Estate - Value Add	\$3,341,342	9.4%	-0.3%	0.4%	2.0%	--	--	--	--
Boyd Watterson State Government Fund, LP	\$3,341,342	9.4%	-0.3%	0.4%	2.0%	--	--	--	--
Long-Term Income Objective 9%			2.2%	6.7%	9.0%	--	--	--	--
NCREIF ODCE Equal Weighted Net			-2.1%	-8.4%	-13.0%	--	--	--	--
Total Cash Equivalents	\$2,071,232	5.8%							
Cash Account	\$1,977,201	5.6%							
Cash in Transit - ARA Core Property Fund, LP Redemption Proceeds	\$25,308	0.1%							
Cash in Transit - ARA Core Property Fund, LP Distribution Proceeds	\$25,327	0.1%							
Cash in Transit - Boyd Watterson State Government Fund, LP Distribution Proceeds	\$43,396	0.1%							

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Account	Fee Schedule	Market Value As of 9/30/2023	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Domestic Large Cap Equity	-	\$4,068,075	11.4%	--	--
Vanguard Growth Index Fund Admiral Shares	0.05% of Assets	\$2,077,238	5.8%	\$1,039	0.05%
*Wedge Capital Management - QVM	0.50% of Assets	\$1,990,838	5.6%	\$9,954	0.50%
Total Investment Grade Fixed Income	-	\$11,066,814	31.1%	--	--
*Wedge Capital Management	0.33% of Assets	\$11,066,814	31.1%	\$35,967	0.33%
Total Short Duration High Yield Fixed Income	-	\$11,707,167	32.9%	--	--
Chartwell Investment Partners SDHY	0.50% of Assets	\$11,707,167	32.9%	\$58,536	0.50%
Total Real Estate - Core	-	\$3,327,559	9.4%	--	--
ARA Core Property Fund, LP	1.10% of Assets	\$3,327,559	9.4%	\$36,603	1.10%
Total Real Estate - Value Add	-	\$3,341,342	9.4%	--	--
Boyd Watterson State Government Fund, LP	1.25% of First 25.0 Mil, 1.15% of Next 75.0 Mil, 1.05% Thereafter	\$3,341,342	9.4%	\$41,767	1.25%
Total Cash Equivalents	-	\$2,071,232	5.8%	--	--
Cash Account	-	\$1,977,201	5.6%	--	--
Cash in Transit - ARA Core Property Fund, LP Redemption Proceeds	-	\$25,308	0.1%	--	--
Cash in Transit - ARA Core Property Fund, LP Distribution Proceeds	-	\$25,327	0.1%	--	--
Cash in Transit - Boyd Watterson State Government Fund, LP - Distribution Proceeds	-	\$43,396	0.1%	--	--
Investment Management Fee		\$35,582,190	100.0%	\$183,866	0.52%

Note: The above fee schedules may not include incentive fees, operating expenses, custodian fees, or other administrative costs.

Note: The above information utilizes net expense ratio for any mutual fund investment. Management fee is used for all other investment types.

*Fee schedule represents the effective rate from the aggregation of assets of related Funds.

Operating Engineers Local No. 77 Trust Fund of Washington DC

Master Consulting Services Report as of September 30, 2023

Benchmark History

Total Fund		
4/1/2023	Present	Russell 1000 10% / Bloomberg US Govt/Credit Int TR 35% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 35% / NCREIF ODCE Equal Weighted Net 10% / Long-Term Income Objective 9% 10%
10/1/2021	3/31/2023	Russell 1000 15% / Bloomberg US Govt/Credit Int TR 35% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 30% / NCREIF ODCE Equal Weighted Net 10% / Long-Term Income Objective 9% 10%
12/1/2012	9/30/2021	Russell 1000 Value 15% / Bloomberg US Govt/Credit Int TR 35% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 30% / NCREIF ODCE Equal Weighted Net 20%
7/1/2012	11/30/2012	S&P 500 15% / Bloomberg US Govt/Credit Int TR 35% / ICE BofA 1-3 Yrs BB US Cash Pay High Yield TR 30% / NCREIF ODCE Equal Weighted Net 20%
7/1/2009	6/30/2012	S&P 500 20% / Bloomberg US Govt/Credit Int TR 65% / NCREIF ODCE Equal Weighted Net 15%
4/1/2007	6/30/2009	S&P 500 20% / Bloomberg US Govt/Credit Int TR 60% / NCREIF ODCE Equal Weighted Net 20%
4/1/1999	3/31/2007	S&P 500 20% / Bloomberg US Govt/Credit Int TR 80%
10/1/1997	3/31/1999	91 Day T-Bills 100%

Index Disclosures

- Bloomberg US Govt/Credit Int TR Index is listed for illustrative purposes.
- Long-Term Income Objective 9% - The manager's stated objective of a 9% net income return is listed for illustrative purposes.
- The NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE) is a non-investable, time-weighted index comprised of the time weighted returns of approximately 40 open-end commingled funds pursuing a core private real estate investment strategy. The constituent funds qualify for inclusion in the NFI-ODCE based on specific criteria regarding their percentage of net assets invested in private equity real estate, geography, property type, life cycle, diversification and use of leverage. Constituent funds must also comply with the NCREIF PREA Reporting Standards, including annual audits, quarterly valuations and time-weighted returns. The NFI-ODCE returns are mainly driven by the underlying property investments in the constituent funds but can also be impacted by each funds use of leverage, cash balances, fund costs, etc. Returns shown are for the NFI-ODCE Equal Weight Index (fund constituents are equally-weighted), net of fees.
- Total Fund Benchmark History - During 4Q 2018, the real estate benchmark was changed from NCREIF ODCE Equal Weighted Index to NCREIF ODCE Equal Weighted Net Index for all historical time periods since inception.
- Total Fund Benchmark - The Total Fund Benchmark is comprised of the respective market indices for each asset class weighted at the percentage the asset class represents in the Policy. It is important to acknowledge that not all asset classes have a corresponding market index due to the specialized nature of the asset class (i.e. private equity, private debt, infrastructure, hedge funds) and/or the specialized nature of the investment (opportunistic investments, global tactical asset allocation, absolute return strategies). In such cases, a traditional asset class index may be used as a proxy in the Total Fund Benchmark. The Total Fund Benchmark illustrates how an indexed portfolio with a similar allocation to that of the Policy would have performed during a specific period. The Total Fund Benchmark does not account for ongoing changes in the allocation percentages of the Total Fund resulting from market gains/losses, cash flows, and rebalancing during the same period. While a useful tool in examining performance, due to the static nature of the allocation percentages in the Total Fund Benchmark, the fact that not all asset classes have a representative index, and considering that some indices in the Total Fund Benchmark are not investable, the Total Fund Benchmark should not be used as the primary measure of a Total Fund's success or failure. Real Estate Benchmark - During 4Q2018 the real estate benchmark was changed from NCREIF ODCE Equal Weighted Index to NCREIF ODCE Equal Weighted Net Index for all historical time periods since inception.

Footnotes

- Values, flows, and returns for all commingled funds, mutual funds, partnerships, and all other alternative assets are provided by the firm managing the assets and cannot be independently verified by IPS. Separately managed account returns are calculated by IPS using custodian data.
- The net of fees returns in this report are estimated. Fees do not include: The investment consulting fee paid to IPS, custodian fees, or other administrative costs.
- The information contained in this report is propriety and confidential information. You are hereby notified that any dissemination, distribution, or copying of this document is strictly prohibited.
- Net of fees calculations began 3Q 2001, and cannot be calculated for prior time periods.
- Starting 4Q 2021, mutual fund returns are calculated utilizing the net expense ratio. Prior to 4Q 2021, mutual fund returns were calculated utilizing the fund's management fee.

Glossary of Investment Terminology

Total Return	The annual return on an investment including appreciation, depreciation and income (interest, dividends, net operating income).
Alpha	The excess return (positive or negative) generated by active portfolio management and security selection, relative to a benchmark.
Beta	A historical measure of an investment's volatility relative to the market. The beta of the market is 1.0 (as represented by a benchmark such as the S&P 500 Index). A beta of greater than 1.0 indicates an investment with greater volatility than the benchmark. A beta of less than 1.0 indicates less volatility than the benchmark.
Standard Deviation	Standard deviation is a statistical measurement of the dispersion of a set of data from its mean. The more spread apart the data are, the greater the standard deviation.
Risk	For an investment portfolio, risk is typically defined as the volatility of the returns, as measured by calculating the standard deviation. The risk does not necessarily indicate the risk of loss, but does indicate the risk of inconsistent returns.
Capture Ratio	Calculates how well a manager performs in a rising or falling market as a percentage of a benchmark. In a rising market, a percentage of 100 or better is preferred, and indicates the manager exceeded the benchmark (upside capture ratio). In a falling market, a percentage of less than 100 is preferred, indicating that the manager lost less than the benchmark (downside capture ratio).
Correlation	A statistical measure of how two asset classes perform in relation to each other. Asset classes with a correlation of 1.0 have perfect positive correlation (exactly the same). Assets with perfect negative correlation of -1.0 will perform equally but in opposite directions.
Efficient Frontier	A series of portfolios with the maximum expected return for any level of risk, which is calculated based on assumptions of risk, return and correlation. These portfolios are shown graphically on a risk and return chart, and represent the most efficient tradeoff between risk and return.
Market Cap	The dollar value of a corporation, which is calculated by multiplying the share price and the number of outstanding shares.
Large Cap	Stocks which typically have a market capitalization of \$10 billion or higher.
Mid Cap	Stocks which typically have a market capitalization of \$2 to \$10 billion.
Small Cap	Stocks which typically have a market capitalization of \$2 billion or less.
Geometric Calculation	Geometric Calculations are used when determining an annualized investment return and tends to dampen the effect of very high or very low values. The result is a number that is smaller than (or equal to) the arithmetic average of the values.
Compound Annual Returns	Compound annual returns show the annual investment return, assuming the investment grew at a constant rate, and reflects the impact of the time in the calculation of an investment return.
Return/Risk Ratio	The return/risk ratio is the expected return of an investment divided by the expected standard deviation (risk). When comparing return/risk ratios a higher value is presumed to be better than a lower value

Disclaimer:

This report has been prepared by Investment Performance Services, LLC ("IPS"). Certain information, including information relating to market indices, was provided by sources external to IPS and may not have been verified. While IPS has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of source information contained herein. Information provided in this report is as of the date of the report unless noted otherwise, and IPS is under no obligation to update the information or communicate that any updates have been made. If this report contains information regarding a matter that is outside of the description of services in the written agreement between IPS and the Fund, such information is included for informational purposes only and, the inclusion of such information does not alter or expand the scope of the services provided by IPS.

The Fund's performance is attributable to factors other than the advice of IPS because, among other things, (a) IPS may act in an advisory capacity (i.e., IPS may not have discretion over Fund assets), (b) the Fund may or may not follow advice provided by IPS, and (c) returns may include investments made prior to the Fund's relationship with IPS. Nothing contained herein constitutes investment, legal, accounting, actuarial, or tax advice, or a recommendation to buy, sell, or hold a security or pursue a particular investment vehicle or any trading strategy. Past performance is no guaranty of future results.

© 2023 by Investment Performance Services, LLC. All rights reserved.

EPIC

May 3-5, 2023

The following investment managers and providers attended and helped to defray the cost of IPS' annual conference EPIC. EPIC is an educational conference addressing various issues related to employee benefit plans. IPS does not give preferential treatment to investment managers or any other provider that pays to attend EPIC.

Amalgamated Bank of Chicago
American Realty Advisors
Ares Management
Aristotle
ASB Real Estate Investments
Atlanta Capital Management
Barrow Hanley Global Investors
BentalGreenOak
BNY Mellon Asset Management (Mellon)
Boston Partners Global Investors
Boyd Watterson Asset Management
Capital Group
Chartwell Investment Partners
Christenson Investment Partners
Columbia Threadneedle Investments
Constitution Capital Equity Partners
Corbin Capital Partners
Earnest Partners
Empower
EnTrust Global
Fidelity Investments
First Eagle Investment Mgmt.
Foundry Partners
Fred Alger Management
GAMCO Asset Management
GCM Grosvenor
Glouston Capital Partners

GoldenTree Asset Management
Great Lakes Advisors
Hamilton Lane Advisors
Hardman Johnston Global Advisors
HPS Partners
Intercontinental Real Estate Corp.
Invesco Advisers, Inc.
Janus Henderson Investors
John Hancock
JP Morgan Asset Management
Kearney Capital LLC
Kelson Group
Lazard Asset Management
Loomis, Sayles & Company
Lord Abbett & Co.
LSV Asset Management
Lyrical Asset Management
MacKay Shields
McMorgan & Company
Manning & Napier
Manulife
Mesirow Private Equity
National Investment Services
National Real Estate Investors
Neuberger Berman
Northern Trust Asset Management
Nuveen Investment Group

Oaktree Capital Management
Old Glory Asset Management
Partners Group
Patriot Financial Partners
PNC Capital Advisors
Post Advisory Group
Principal Financial Group
Principal Life Insurance
Raymond James Investment Management
Richmond Capital Mgmt
Schroders Investment Management
Segall Bryant & Hamill
Sierra Investment Partners
Smith Graham & Co.
State Street Global Advisors
Stonepeak Partners
Ullico Investment Company
Vanguard
Victory Capital Management
Vista Underwriting
Washington Capital Management
WEDGE Capital Management
Wellington Management Company
Westfield Capital Management
Westport Capital Partners
William Blair & Company
Xponance

