# Town of Newtown Pension Committee Regular Meeting March 16, 2023, 7:30pm

# Newtown Municipal Center – Shared Meeting Room #1 3 Primrose Street, Newtown, CT

### THE FOLLOWING MINUTES ARE SUBJECT TO APPROVAL BY THE PENSION COMMITTEE.

### Meeting called to order by Chairman Ellen Whalen at 7:40 pm.

Committee Members in attendance: Sam Broomer, John DiNoto, Joe Eppers, Charles Farfaglia, Tom Snayd and Ellen Whalen Absent: Paula Wickman (Work Related Injury)

#### **Devon Francis, Senior Consultant & Partner, Fiducient Advisors**

#### **Discussion and Possible Action**

#### Capital Markets & Investment Review; Asset Reallocation Discussion

Ms. Francis provided an update on the collapse of Silicon Valley Bank and its impact for the US banking system. She noted the Pension and OPEB Trust Assets held at Comerica Bank are segregated from Comerica Bank general assets and are safeguarded. Fiducient will continue to monitor the situation and provide updates to the Pension Committee and Town.

Ms. Francis provided an overview of the three themes they see driving the market in the coming year - persistent volatility, moderating inflation, and a bear market bottom. She also touched upon the 2023-2042 Twenty Year Outlook for Fixed Income, Global Equity, and Real Assets & Alternatives. Given the current environment of inflation and expected volatility, allocations to real assets and alternative investments continue to be important. Ms. Francis also noted Fiducient believes Asset Allocation is the primary determinant of long-term investment results. She explained the Fiducient Capital Markets Group develops and analyses a wide variety of factors that have impact on future returns and risks for each asset class studied. Their propriety Frontier Engineer system is cornerstone of asset allocation decisions. Ms. Francis explained she feels it appropriate to make a modest asset reallocation in both the Pension and OPEB Trusts. The overall Asset Target Allocation (60/40 split) will not change but reallocation within the investment grouping is suggested. The Committee discussed Fiducient's recommendation and agreed it was appropriate at this time.

Mr. Farfaglia made a motion to adopt the Proposed Target Allocation as recommended by Fiducient Advisors on Page 12 of the Fourth Quarter 2022 Investment Review. Seconded by Mr. Broomer. All in favor. Motion passes.

#### **Minutes**

### **Discussion and Possible Action**

Approval of the January Meeting Minutes postponed to April Meeting. February's meeting was cancelled.

### Correspondence

#### **Discussion and Possible Action**

None

#### **Retirements/Expenses**

### **Discussion and Possible Action**

#### Retirements

The Committee discussed the approval of Participant Retirement Benefits each month. Mr. Eppers noted his concern for the privacy of participant personal information transmitted via Committee personal emails. Protection of participant information is of significant importance. Mrs. Whalen will speak with Mr. Tait, Finance Director, about the approval process and report back to the Committee at the April meeting.

### Expenses

Approval of the TR Paul and Fiducient invoices were postponed until April meeting.

#### **Old Business**

### **Discussion and Possible Action**

### 457/401/Drop Plan – Progress Update

Mrs. Whalen advised the Committee that the Transition of the 457/401 Participant Assets to a single vendor, Mission Square, is proceeding. Notices to participants have been sent and employee meetings have been scheduled. The target date of April 21<sup>st</sup> is scheduled for the asset transition. Fiducient Advisors will be working with Ms. Patrice Fahey, HR Administrator and Mission Square to complete the transition. Mr. Scott Boulton, Fiducient Defined Contribution Consultant will oversee and assist with the transition. Mr. Boulton will provide updates to the Committee.

### **New Business**

### **Discussion and Possible Action**

Pension/OPEB Trust Market Value/Return Update & Flash Report - February 28, 2023

Mr. Snayd advised the Committee the Pension Plan closed the month of February with a value of \$55.2 million, a loss of \$1.6 million from the previous month. The portfolio is up \$1.3 mil from the beginning of the calendar year and has gained \$2.7 million fiscal year to date. The OPEB Plan closed the month at \$4.1 million, down \$102 thousand from the previous month and is up \$126 thousand from the beginning of the calendar year gaining \$350 thousand fiscal year to date. The Pension Portfolio was down 2.4% for the month, outperforming the 60/40 split (60% S&P 500, 40% Bloomberg Barclays Agg) by 10 bps and outperforming the blended benchmark by 40 bps. Fiscal year to date the plan is up 4.2% outperforming both the 60/40 split and the blended benchmark by 140 bps and 60 bps, respectively. Real Assets, which should help add diversification as well as provide an inflationary hedge, are down -1 percent fiscal year to date.

### **Other**

None

### **Voter Comment**

None

Date of Next Meeting: Thursday, April 20, 2023, at 7:30pm

#### Adjourn

With no further business, Mr. Farfaglia motioned to adjourn meeting. Mr. Snayd seconded. All in favor. Meeting adjourned at 8:50pm.

Respectfully submitted, Kiley Morrison Gottschalk, Clerk

### **Attachments:**

Pension/OPEB Fourth Quarter 2022 Investment Review
Pension/OPEB Monthly Flash Performance Report- February 28, 2023
Pension Trust Report – February 28, 2023
OPEB Trust Report – February 28, 2023



Newtown, CT

Quarterly Investment Review - Fourth Quarter 2022

This report is intended for the exclusive use of clients or prospective clients (the "recipient") of Fiducient Advisors and the information contained herein is confidential and the dissemination or distribution to any other person without the prior approval of Fiducient Advisors is strictly prohibited. Information has been obtained from sources believed to be reliable, though not independently verified. Any forecasts are hypothetical and represent future expectations and not actual return volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. The opinions and analysis expressed herein are based on Fiducient Advisor research and professional experience and are expressed as of the date of this report.

Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is risk of loss.

# **②**

### **Fiducient Advisors Update**



## Retirement Plans

### **Featured Insights**

- Webcast: Current Trends in Target Date Fund Litigation
- Blog: Final Rule Grants Fiduciaries Greater Flexibility When Considering ESG Options

### **Coming Soon**

- Plan Sponsor Newsletter
- Pension Healthcare Webcast



# Research Insights

- Monthly Market Recaps
- Monthly Market Updates
  - A Pivot to Pause November
  - Bear Hunting October
- 2023 Outlook Goodbye TINA (there is no alternative)
- Blog: FTX Lessons Learned from a Lack of Due Diligence
- Webcast: Fiducient Speaker Series with Greg Valliere
- Video: Third Quarter 2022 Update



# **Endowments & Foundations**

### **Featured Insights**

Nonprofit Investment
 Stewards Podcast

### Coming Soon

- Steward Newsletter
- Mission-Aligned Investing Update



# The Wealth Office®

### **Featured Insights**

- 10 Planning Opportunities to Consider Before Year-End
- Blog: Cozy Up to a Good Book

### **Coming Soon**

- Financial Planning Considerations Paper
- Financial Planning Webcast

# **SAVE THE DATE!**

2023 Investor Conference September 26-27

Boston
Westin Copley Center

Reserve your room today:

https://book.passkey.com/event/5042 5437/owner/251/home

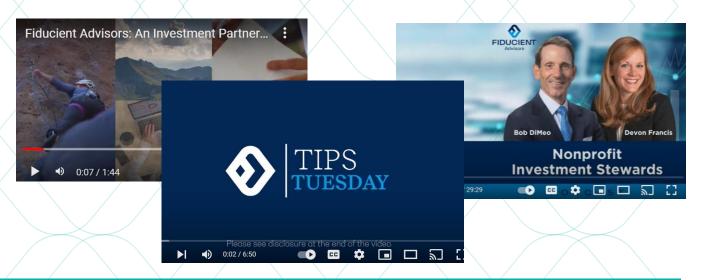


# For more research and insights...

### Subscribe to the Fiducient Advisors YouTube Channel







### 2022 New Associates - Welcome!

- Ikbir Bassi, Performance Analyst
- Ian Bradley, Senior Research Associate
- · Lori Cahill, Finance Billing Specialist
- Celina Cheng, Performance Analyst
- Owen Graham, Performance Analyst
- Federico Lascano, Research Analyst
- Marycarmen Nevarez, Consultant

Marc Seskin, Marketing Associate

· Louis Ressler, Senior Consultant

Colin Schorsch, Consulting Analyst

- Krishma Sharma, Consulting Analyst, The Wealth Office ®
- · Michael Shevlin, Senior Accountant
- Eric Stanley, Data Operations Analyst
- · Joel Urbina, Consulting Analyst
- Hamza Rangwala, Client Service Associate, The Wealth Office®



# **Table of Contents**

Section 1	Fiduciary	Governance	Calendar
Section 1	Fiduciary	Governance	Calendar

Section 2 Capital Markets Overview

Section 3 Pension Portfolio Review

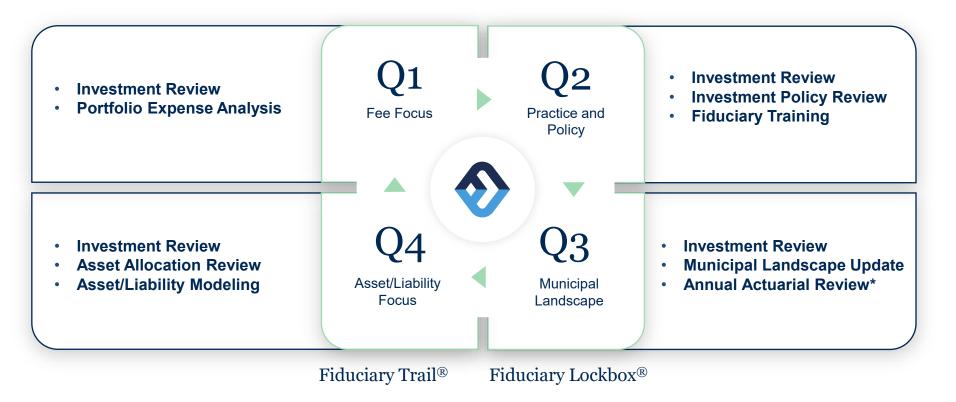
Section 4 OPEB Portfolio Review

Section 5 Recommended Manager Searches



Fiduciary Governance Calendar





<sup>\*</sup>Timing of actuarial review is dependent on client's individual plan and/or fiscal year and actuarial input.

# 2023 Themes

• As captured in our <u>2023 Outlook – Goodbye TINA</u>, the three themes we see driving the market in the coming year are persistent volatility, moderating inflation, and a bear market bottom.

### Persistent Volatility

- The 10+ years leading up to 2022 were characterized by low interest rates, low inflation, and low growth alongside accommodative policy. This environment resulted in abnormally low volatility.
- > The shifts we saw in 2022 will likely produce higher structural volatility on a go-forward basis.

### Moderating Inflation

We have seen evidence that inflation is falling. While inflation is unlikely to drop to the Fed's target rate of 2% within the coming calendar year, a continued downward trajectory will likely have a positive impact on market sentiment.

### Bear Market Bottom

- We don't attempt to time the markets. That being said, the historical pattern of bear markets is multiple contraction first, followed by earnings contraction.
  - Multiple contraction accounted for more than 100% of the 2022 market pullback, as earnings remained modestly positive.
  - ✓ Late 2022 data is beginning to reflect negative earnings (ex-energy).
- An earnings contraction, along with the expectation of a less hawkish Fed, suggests the current bear market may be nearer its end than its beginning.

Y/Y

# 2023-2042 Twenty-Year Outlook

			2023	2022	Change
	The 2022 pull back in fixed income was painful, but it has	U.S. Bonds	5.0%	2.4%	2.6%
	also sowed the seeds for opportunity going forward. Yields across many fixed income sectors are multiple times higher	TIPS	4.6%	2.1%	2.5%
	from year-end 2021 producing greater opportunity for meaningfully higher returns in the years to come.	Dynamic Bonds <sup>1</sup>	5.6%	2.8%	2.8%
Fixed	Additionally, the diversifying principles of fixed income with	High Yield Bonds	7.1%	5.6%	1.5%
Income	recharged yields makes owning fixed income and duration more compelling than it was in 2022 and doing so may add to portfolio resiliency going forward.	Global Bonds	5.1%	2.2%	2.9%
		Muni Bond²	5.8%	2.1%	3.7%
	-	Muni High Yield	9.9%	5.6%	4.3%
Global Equity	Our global equity outlook has improved, bolstered by more attractive valuations. U.S. valuations are near averages relative to history while International and Emerging Markets remains more attractive, but with elevated risks.	U.S. All Cap Intl Developed Equity Emerging Markets	6.7% 8.9% 10.8%	6.8% 8.6% 10.5%	-0.1% 0.3% 0.3%
Real Assets & Alternatives	A continued bid for inflationary assets and more attractive valuations across some subsets of assets contributed to higher forecasts.	Real Estate Broad Real Assets <sup>3</sup>	6.4% 6.8%	6.3% 5.6%	0.1%
	The opportunity set for marketable alternatives rose with				
& Alternatives	more attractive valuations in both global equities and fixed income.	Marketable Alts	8.1%	6.8%	1.3%

<sup>1)</sup> Dynamic bonds are a blend of 33% Cash, 33% Corp HY, and 34% Global Bonds. 2) Tax Equivalent yield based on highest marginal Federal tax rate (37%). 3) Broad Real Assets is 20% REITS, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS Outputs and opinions are as of the date referenced and are subject to change based on market or economic conditions. Information is intended for general information purposes only and does not represent any specific investment recommendation. Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice. There is no guarantee that any of these expectations will become actual results. For additional information on forecast methodologies, please speak with your advisor. Please see Index Proxy Summary slide at the end of this presentation for summary of indices used to represent each asset class. Past performance does not indicate future performance and there is a possibility of a loss. Please see the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information.

# 0

# Portfolio Implications

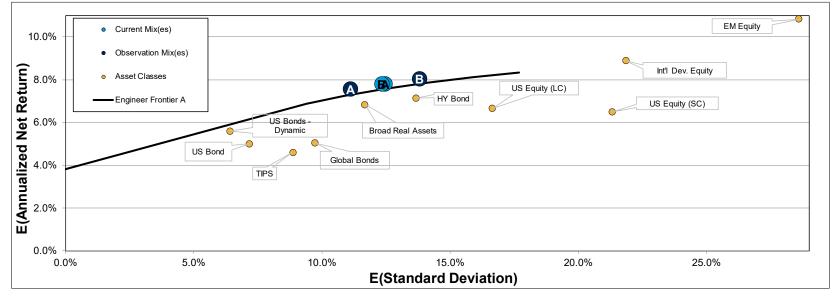
- With the expectation of continued volatility in the markets, we expect portfolio diversification to be increasingly important in 2023 and beyond.
- The fixed income environment is markedly different than a year ago, with the Fed having raised rates aggressively throughout 2022.
  - With yields much higher than they were a year ago, forward-looking return expectations for fixed income are more compelling.
  - Given that much of the Fed's rate hike campaign seems to be in the rear window, investors may want to **consider increasing exposure to high quality and intermediate duration U.S. fixed income**, sourced from a reduction in dynamic bonds.
  - Modest exposure to **high yield bonds** is compelling, given the higher yield landscape and solid fundamentals.
  - Introducing a modest allocation to Treasury Inflation Protected Securities (TIPS), which currently offer positive real yields, may help provide a measure of protection against longer-dated inflation.
- Given the broad pullback in **equity markets** in 2022, **valuations look more attractive** and forward-looking return expectations have increased. **Opportunities for growth exist in both domestic and foreign markets.** 
  - Investors may want to consider modestly reducing exposure to large cap domestic equities in favor of small/mid cap:
    - Small/mid cap equities have historically tended to outperform their larger cap counterparts in market rebounds.
    - Small/ mid cap equities are more attractively priced than their larger cap counterparts, given market activity in 2022 and in the prior several years.
  - While global equity valuations (both developed and emerging) continue to favor markets overseas, the greater potential for exogenous events outside of the U.S. tempers some of the relative appeal for foreign holdings. A sizeable **allocation to international markets continues to be appropriate**, but we do not necessarily advocate for a substantial overweight to international markets.
- Given the current environment of meaningful inflation and expected volatility, allocations to real assets and alternative investments continue to be important.

# **Asset Allocation Analysis**

- We believe Asset Allocation is the primary determinant of long-term investment results.
- Our propriety Frontier Engineer® system is the cornerstone of asset allocation decisions.
- Our Capital Markets Group develops Capital Market Assumptions (CMAs) for each major asset class at least annually.
  - √ The Capital Markets Group considers and analyzes a wide variety of factors that we believe will have the
    greatest impact on future returns and risks for each asset class studied.
  - ✓ Our CMAs are not intended to predict the future return in any single year, but rather to reflect our median expected outcome over the next ten years.
  - ✓ Our forecasting efforts center on a ten-year horizon. Any adjustments made to extend the forecast horizon to twenty years or beyond are grounded in our expectation that asset classes ultimately mean revert towards longer term historical averages.
  - ✓ Fiducient Advisors' Capital Markets Team develop our CMAs based on a "building block" approach outlined in our white paper "Capital Market Forecasts". (Copies are available upon requested.)
- Correlations (how asset classes behave in reference to one another) also significantly impact asset allocation analysis.
- Fat Tails (non-normal return elements of skewness & kurtosis) also meaningfully impact our asset allocation analysis.

### Frontier Engineer® Analysis

12/31/2022					Asse	t Allo	catio	n								Forec	asts		Past (1/8	88-12/22)
	Fixed Income	Equity	Real Assets	Alternatives	TIPS	US Bond	US Bonds - Dynamic	HY Bond	Global Bonds	US Equity (LC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Broad Real Assets	Annualized Net Return	Annualized Volatility	Normal 100 Year Flood*	Non-Normal 100 Year Flood**	Annualized Net Return	Annualized Volatility
Newtown Target (A)	35%	60%	5%			20.5%	11.0%	3.5%		25.0%	10.0%	18.5%	6.5%	5.0%	7.8%	12.5%	-20%	-27%	8.2%	10.1%
Proposed Mix (B)	35%	60%	5%		1.5%	23.5%	7.0%	1.5%	1.5%	24.5%	10.5%	17.0%	8.0%	5.0%	7.8%	12.3%	-20%	-27%	8.2%	10.0%
Observation Mix (A)	45%	50%	5%		3%	26%	9%	4%	3%	21%	9%	14%	7%	5%	7.6%	11.1%	-18%	-23%	7.9%	8.8%
Observation Mix (B)	25%	70%	5%	0%	1%	17%	5%	1%	1%	29%	13%	20%	10%	5%	8.1%	13.8%	-23%	-32%	8.5%	11.4%



<sup>\*</sup>The expected one in a hundred worst case calendar year return based on normally distributed capital market assumptions. Greater losses are possible (1% expected likelihood).

Historical Returns and Risk Metrics for each Mix represent back-tested calculations developed with the benefit of hindsight. Return calculations use an asset-weighted methodology based on the target asset allocation of each mix and the total return of index proxies used to represent each asset class and are net of fees. Historical returns are hypothetical and do not represent returns earned by a client. It is not possible to invest in an index. Please see the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information, including index proxies used to represent each asset class. Please ask for a copy of Fiducient Advisors' white paper titled 10-Year Capital Market Forecasts. Past performance does not indicate future performance and it is possible to lose money when investing. Please refer to the Capital Markets Assumptions Slide for the hypothetical alpha and hypothetical fee inputs used in the calculation methodology.

<sup>\*\*</sup>The expected one in a hundred worst case calendar year return based on non-normally distributed capital market assumptions (factoring in skewness & kurtosis). Greater losses are possible (1% expected likelihood).

# **Proposed Portfolio Changes**

Newtown DB & OPEB Plans							
Investment Name	Current Target Allocation	Proposed Target Allocation	Expense Ratio				
Cash	0.0%	0.0%					
Cash	0.0%	0.0%					
Fixed Income	35.0%	35.0%					
Fidelity Inflation-Protected Bond Index	0.0%	1.5%	0.05%				
Baird Aggregate Bond Fund I	10.25%	11.75%	0.30%				
Metropolitan West Total Return Bond Fund Plan	10.25%	11.75%	0.36%				
BlackRock Strategic Income Opportunities Fund K	11.0%	7.0%	0.59%				
PIMCO High Yield I	3.5%	0.0%	0.56%				
Artisan High Income I	0.0%	1.5%	0.71%				
BrandywineGLOBAL Global Opportunities Bond IS	0.0%	1.5%	0.56%				
Domestic Equity	35.0%	35.0%					
Fidelity 500 Index Fund	25.0%	24.5%	0.02%				
Boston Partners Small Cap Value Fund II I	5.0%	0.0%	0.99%				
Hotchkis & Wiley Small Cap Diversified Value Z	0.0%	5.25%	0.76%				
Conestoga Small Cap I	5.0%	5.25%	0.90%				
International Equity	25.0%	25.0%					
Fidelity International Index Fund	6.5%	6.0%	0.04%				
MFS Instl International Equity Fund	6.0%	5.5%	0.68%				
Aristotle International Equity I	6.0%	5.5%	0.80%				
ARGA Emerging Markets Value I	0.0%	4.0%	0.90%				
GQG Partners Emerging Markets Equity I	6.5%	4.0%	0.98%				
Real Assets	5.0%	5.0%					
Principal Diversified Real Asset R6	5.0%	5.0%	0.78%				
Investment Portfolio Total	100.0%	100.0%					
Weighted Average Portfolio Expense Ratio	0.45%	0.43%					

# **Asset Allocation Analysis**

Asset Class	IPS Range	IPS Target	Current Allocation
Cash & Equivalents	0% - 10%	0%	0.3%
Fixed Income	25% - 45%	35%	35.3%
Domestic Equity	25% - 45%	35%	34.1%
International Equity	15% - 35%	25%	25.5%
Real Assets	0% - 15%	5%	4.9%

The current allocation is within the allowable range as stated within the Investment Policy Statement (IPS). Any portfolio adjustments that are considered will likely remain within the allowable range, but the IPS targets may need to be updated.

# **Actuarial Review**

Town of Newtown Pension Plans							
	BOE & To	wn Report	Police Report				
	7/1/2022	7/1/2021	7/1/2022	7/1/2021			
Actuarial Value of Assets	35,356,839	33,552,012	21,525,245	20,317,504			
Total Accrued Liability	40,004,963	39,361,925	29,824,915	28,961,203			
Funded Ratio	88.4%	85.2%	72.2%	70.2%			
Actuarial Return Assumption	6.50%	6.50%	6.50%	6.50%			

# **Actuarial Review**

Town of Newtown OPEB Plan							
	7/1/2020	<u>7/1/2018</u>					
Actuarial Value of Assets	3,109,880	2,465,606					
Total Accrued Liability	7,906,194	7,485,048					
Funded Ratio	39.3%	32.9%					
Actuarial Return Assumption	6.50%	6.75%					



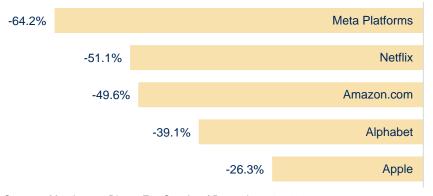
Capital Markets Overview

### **Market Themes**

- High inflation, which catalyzed the Fed's hike campaign, fears of recession and geopolitical risks all contributed to the elevated volatility environment in 2022. We expect volatility to persist in 2023 and the abnormally low volatility regime of the last decade may be over.
- Returns in 2022 were driven by multiple compression, which typically precede earnings declines in the business cycle. While difficult to call the bottom, we believe we are closer to the bear market end rather than the beginning.
- The Bloomberg Agg Bond Index had its worst year on record, but the pain from falling prices pushed yields to levels not seen in nearly 15 years making prospective fixed income returns more compelling.

### **FAANG Stocks Performance 2022**

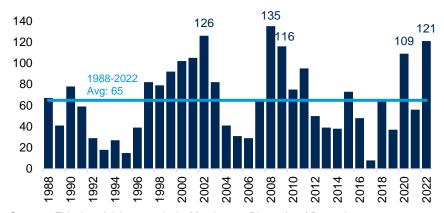
Multiple compression has been the driver of performance this year for equities and many higher P/E stocks have re-rated materially lower. The S&P 500 has seen modest earnings growth this year, however, if the energy component is removed, earnings for the S&P 500 are expected to decline by 1.8 percent in 2022.



Sources: Morningstar Direct, FactSet. As of December 31, 2022.

### Number Of Days With S&P 500 Return At Least +/- 1%

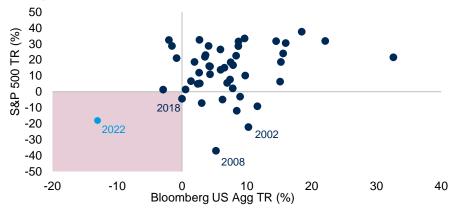
The S&P 500 had the most days of moving at least +/- one percent since the global financial crisis in 2008.



Sources: Fiducient Advisors analysis, Morningstar Direct. As of December 31, 2022.

### Nowhere To Hide In 2022 - Equity vs. Fixed Income Returns

2022 was the first year on record where both the Bloomberg Agg and S&P 500 indices experienced negative returns. The traditional diversification benefits of fixed income were muted in 2022, but with interest rates higher we expect this paradigm to revert to historical norms.



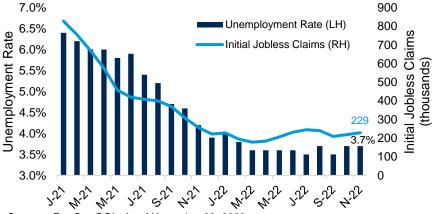
Source: Morningstar Direct. Calendar year data 1976 to 2022.

See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss. Indices cannot be invested in directly.

### **Economic Review**

### **Tight Labor Market**

The U.S. labor market has been resilient, providing a solid foundation for the U.S. consumer, the backbone of the economy. However, strong labor data may support further Fed action in its effort to combat elevated inflation.



Sources: FactSet, DOL. As of November 30, 2022.

#### **Will Rents Follow Home Prices?**

Tighter financial conditions have led to higher mortgages rates and subsequently lower home prices. However, owners equivalent rent, one of the primary components of CPI, has yet to show signs of slowing.



Sources: FactSet, BLS, S&P/Case Shiller. As of October 31, 2022

### U.S. Dollar Falls of Recent Highs

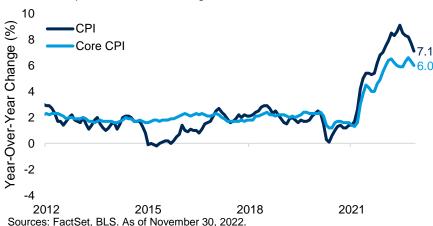
Softening inflation in the U.S., expectations for less hawkish Fed actions, and the BOJ shifting its yield curve control target higher led to a weakening U.S. dollar late in the year; DXY declined 7.7 percent in the fourth quarter.



Source: FactSet. As of December 31, 2022

### **U.S. Inflation**

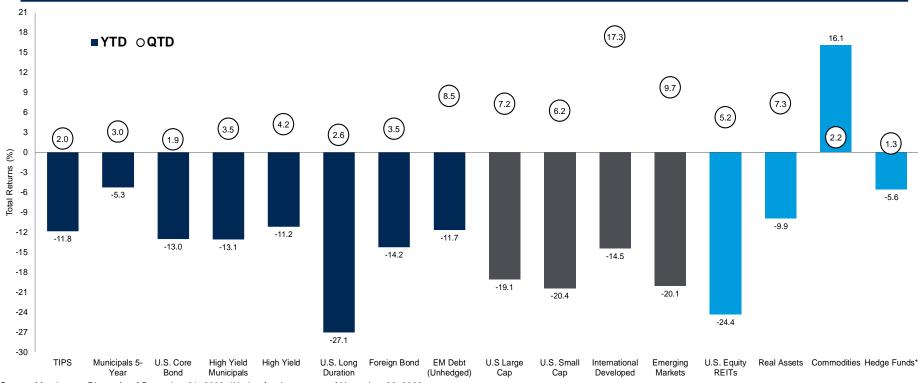
Inflation is trending lower. Fed policy impacts prices on a lagged basis and we may see inflation moderate further as its actions work through the system. The shelter component remains a driving factor as rents remain elevated.



See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss. Indices cannot be invested in directly.

### **Asset Class Returns**





Source: Morningstar Direct. As of December 31, 2022. \*Hedge fund returns as of November 30, 2022.

### Fixed Income (4Q)

- + Lower inflation readings mid-quarter pushed rates lower and helped drive fixed income returns for the quarter. The Fed raised rates by 50 basis points in December, marking its seventh increase of the year.
- + Spread sectors generally outpaced governments in the quarter in the risk-on environment. High yield generated favorable returns.
- + A weaker U.S. dollar and favorable news out of emerging countries, in particular China on "zero-Covid", helped propel non-US bond prices higher.

### Equity (4Q)

- + Risk assets rallied in the fourth quarter, fueled by favorable inflation prints and expectations for subdued central bank action in 2023.
- + International developed markets had a standout quarter. Notable strength came from Europe as energy price concerns diminished and a weakening U.S. dollar provided further support.
- + Clarity around China's "zero-Covid" policy provided a tailwind for the country and subsequently the broader EM space. Mexico also performed well on the back of positive economic news.

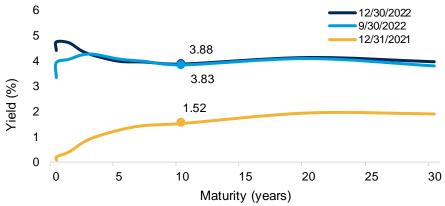
### Real Asset / Alternatives (4Q)

- + Commodity markets rose modestly in the quarter and remain the standout for the calendar year. Industrial and precious metals drove returns, while energy detracted as prices continued to moderate from post-Russia invasion peaks.
- + REITs had a strong quarter. Retail oriented and data centers were among the top contributors while residential REITs declined.
- + Hedge Funds were modestly positive in the quarter and continue to provide favorable results relative to traditional equities and fixed income.

### **Fixed Income Market Update**

### **U.S. Treasury Yield Curve**

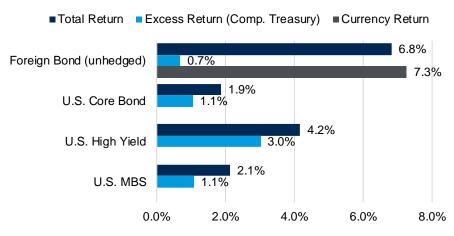
The Fed raised its target rate by 50 basis points in December, capping off the year with its seventh hike for a total of 425 basis points in 2022. Rates were volatile in the quarter as the 10-year pushed past 4.2 percent before falling below 3.7 percent and ultimately ending 5 basis points higher than it started.



Source: FactSet. As of December 30, 2022.

### **Index Performance Attribution (4Q 2022)**

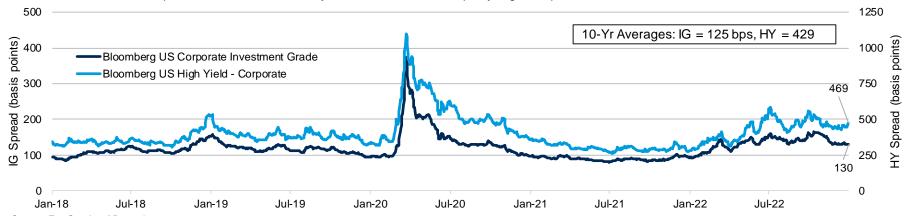
Spread sectors of the bond market outpaced Treasuries in the fourth quarter in the risk-on environment. A falling U.S. dollar against major currencies proved to be beneficial for non-U.S. bonds.



Source: FactSet. As of December 30, 2022.

### **Corporate Market Spreads – Trailing 5 Years**

Corporate credit spreads were tighter during the fourth quarter. Investment grade spreads compressed 34 basis points while high yield spreads were 92 basis points lower. Risk-on sentiment helped fuel the sector. Additionally, limited issuance in both quality segments provided a technical tailwind.



Source: FactSet. As of December 30, 2022.

### **Equity Market Update**

### **Equity Valuations (Trailing PE – Last 15 Years)**

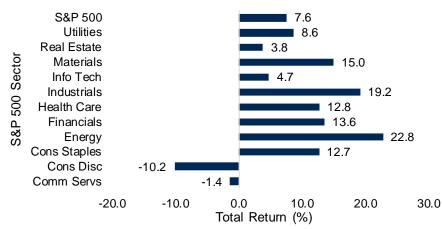
Positive equity markets in the fourth quarter shifted valuations slightly higher as earnings ticked lower. International markets look more attractive on a relative basis compared to the U.S.



Source: FactSet. As of December 30, 2022.

### U.S. Equities – Return by Sector (4Q 2022)

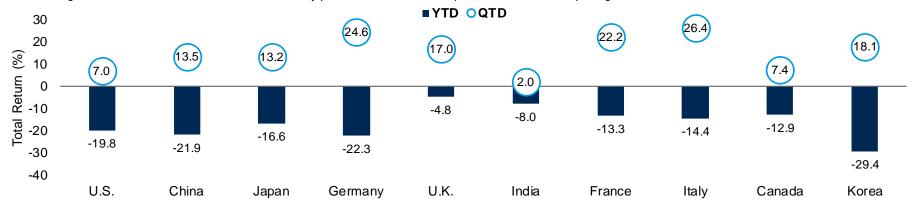
U.S. equities were broadly positive on the back of softening inflation data and the prospect of less aggressive Fed policy action in 2023. However, Amazon and Tesla, down over 20% and 50%, respectively, drove consumer discretionary lower.



Source: Morningstar Direct. As of December 31, 2022.

### Country Total Returns (%) - Top 10 Largest Economies

Equity markets around the globe benefited from the risk-on investor sentiment in the fourth quarter. A host of factors fueled strength across regions. The U.K. market jumped following the replacement of Prime Minister Truss and clarity around the country's budget. European countries broadly benefited as expectations for a warmer winter began to take hold and concerns about commodity prices abated. Chinese equities rallied on the reopening trade as "zero-Covid" restrictions were lifted.

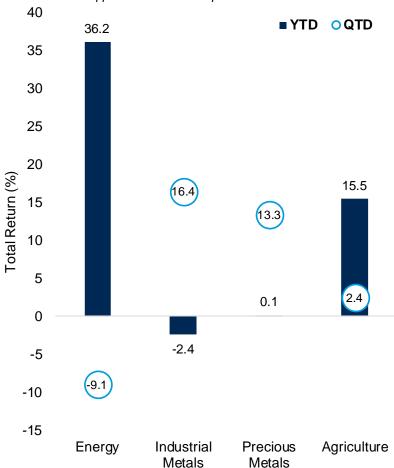


Source: Morningstar Direct. As of December 31, 2022.

### **Real Assets Market Update**

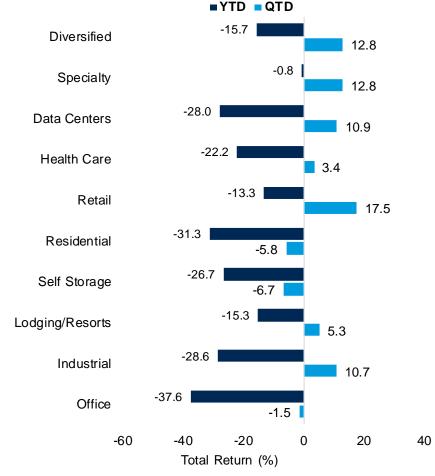
### **Commodity Performance**

Commodities advanced during the fourth quarter, rounding out a strong year. Energy weakness was due to natural gas, whose prices retreated sharply on weaker demand from a warmer than anticipated start to the winter. Elsewhere, a weaker dollar supported industrial and precious metals.



#### **REIT Sector Performance**

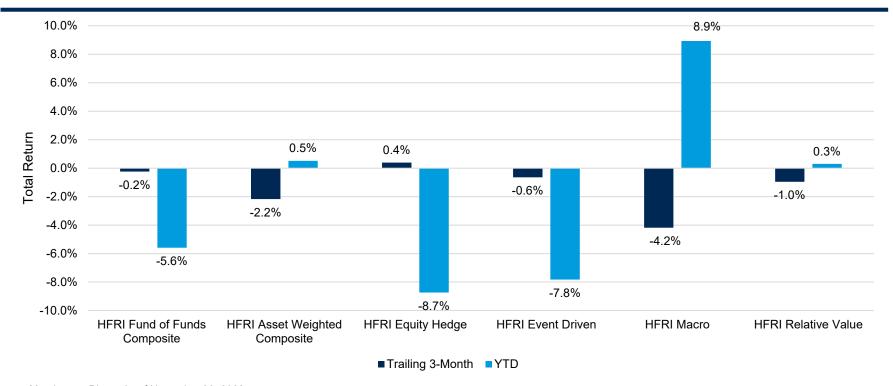
REITs posted their first quarterly gain in 2022, benefiting from cooler than anticipated inflation data and expectations of a subsequent easing of Fed rate hikes. The retail segment was a notable outperformer, with particular strength from regional malls.



Source: Morningstar Direct. As of December 31, 2022.

Source: Morningstar Direct. As of December 31, 2022.





Source: Morningstar Direct. As of November 30, 2022.

### Fund of Funds / Asset Weighted (4Q)

- The HFRI Fund of Funds Composite returned -0.2% over the trailing 3-month period, keeping year-to-date returns in negative territory at -5.6%.
- The HFRI Asset Weighted Composite detracted -2.2% over the trailing 3-month period, bringing year-to-date returns to 0.5%.
- + Marketable alternatives broadly have served their purpose in portfolios, limiting drawdowns relative to equities and fixed income.

### **Equity Hedge / Event Driven (4Q)**

- + Equity hedge strategies added slightly during the period, led by Quantitative Directional strategies.
- +/- Event driven strategies detracted slightly during the period. Activist and Special Situation strategies were the largest contributors during the period while Multi Strategy and Distressed Restructuring were the largest detractors.
- Equity hedge and event driven strategies have been the largest detractors year-to-date.

### Macro / Relative Value (4Q)

- +/- Macro strategies were negative over the period but have still been the strongest performers year-to-date. All macro sub-strategies have generated positive returns year-to-date.
- +/- Relative Value strategies returned -1.0% over the period but remain positive year-to-date. Fixed Income Sovereign strategies were the primary contributors over the period.
- + Volatility and Yield Alternatives strategies added slightly over the period, adding to strong year-to-date returns.

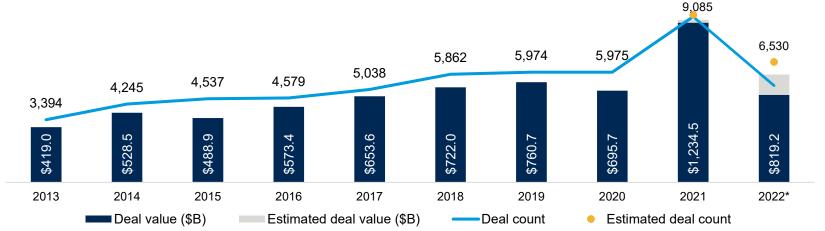
### **Private Equity Market Update**



24

### **U.S. Private Equity Deal Activity**

U.S. Private Equity deal activity, while still high historically, moderated during the first three quarters relative to the frantic environment that consumed investors throughout 2021.



Source: Pitchbook. As of September 30, 2022.

### Private Equity Performance (As of June 30, 2022)

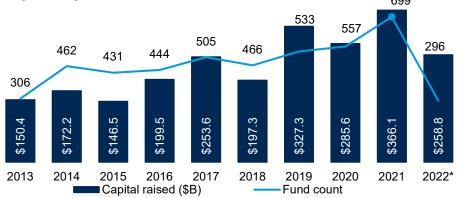
Private equity performance was negative during the second quarter with US Growth and Venture leading the decline. Over longer time periods, performance remains strong with dispersion between asset classes normalizing in recent quarters.

Benchmark	1-YR	3-YR	5-YR	10-Y	15-Y
US Private Equity	6.7%	23.0%	20.6%	17.8%	12.6%
US Buyout Index	16.6%	24.2%	21.0%	18.5%	15.0%
US Growth Equity Index	0.4%	26.5%	24.7%	19.4%	15.1%
US Venture Capital Index	2.7%	30.5%	25.7%	19.3%	13.6%
S&P 500 Index	-10.6%	10.6%	11.3%	13.0%	8.5%

Source: Cambridge Associates. As of June 30, 2022. Returns presented as horizon pooled return, net of fees. S&P 500 Index as of June 30, 2022. Indices cannot be invested in directly.

### **U.S. Private Equity Fundraising Activity**

The fundraising market showed signs of slowing in the second half of the year as the denominator effect and commitments from the two prior years began to create some fatigue among investors. 699



Source: Pitchbook. As of September 30, 2022.



### The Case for Diversification

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 Years (Ann)
Emerging Markets 18.2	U.S. Small Cap 38.8	U.S. Equity REITs 30.1	U.S. Equity REITs 3.2	U.S. Small Cap 21.3	Emerging Markets 37.3	High Yield Munis 4.8	U.S. Large Cap 31.5	U.S. Small Cap 20.0	U.S. Equity REITs 43.2	Commodities 16.1	U.S. Large Cap 12.4
High Yield Munis 18.1	U.S. Large Cap 32.4	High Yield Munis 13.8	Municipals 5-Year 2.4	High Yield 17.1	International Dev. 25.0	Municipals 5-Year 1.7	U.S. Equity REITs 26.0	U.S. Large Cap 18.4	Commodities 27.1	Municipals 5-Year -5.3	U.S. Small Cap 9.0
U.S. Equity REITs 18.1	International Dev. 22.8	U.S. Large Cap 13.7	High Yield Munis 1.8	U.S. Large Cap 12.0	U.S. Large Cap 21.8	Foreign Bond 0.5	U.S. Small Cap 25.5	Emerging Markets 18.3	US Large Cap 26.5	Hedge Funds -5.6	U.S. Equity REITs 6.5
International Dev. 17.3	Balanced 12.2	Core Bond 6.0	U.S. Large Cap 1.4	Commodities 11.7	EM Debt (unhedged) 15.2	Core Bond 0.0	International Dev. 22.5	TIPS 11.0	US Small Cap 14.8	High Yield -11.2	International Developed 4.7
EM Debt (unhedged) 16.9	Hedge Funds 9.0	Balanced 5.1	Core Bond 0.6	Emerging Markets 11.2	U.S. Small Cap 14.6	TIPS -1.3	Emerging Markets 18.4	Balanced 8.8	International Dev. 11.3	EM Debt (unhedged) -11.7	Balanced 4.4
U.S. Small Cap 16.3	High Yield 7.4	U.S. Small Cap 4.9	Hedge Funds -0.3	EM Debt (unhedged) 9.9	Balanced 13.6	High Yield -2.1	Balanced 17.5	International Dev. 7.8	Balanced 9.8	TIPS -11.8	High Yield 4.0
U.S. Large Cap 16.0	U.S. Equity REITs 2.5	TIPS 3.6	International Dev. -0.8	U.S. Equity REITs 8.5	High Yield Munis 9.7	Hedge Funds -4.0	High Yield 14.3	Core Bond 7.5	High Yield Munis 7.8	U.S. Core Bond -13.0	Hedge Funds 3.6
High Yield 15.8	Municipals 5-Year 0.8	Hedge Funds 3.4	TIPS -1.4	Balanced 7.6	Hedge Funds 7.8	U.S. Large Cap -4.4	EM Debt (unhedged) 13.5	Hedge Funds 7.1	TIPS 6.0	High Yield Municipals -13.1	High Yield Municipals 3.5
Balanced 11.5	Foreign Bond -1.0	Municipals 5-Year 3.2	Foreign Bond -2.3	TIPS 4.7	High Yield 7.5	U.S. Equity REITs -4.6	High Yield Munis 10.7	High Yield 7.1	Hedge Funds 5.7	Foreign Bond -14.2	Municipals 5-Year 1.5
TIPS 7.0	Core Bond -2.0	Foreign Bond 2.9	Balanced -3.3	Foreign Bond 3.2	Foreign Bond 6.5	Balanced -5.8	Core Bond 8.7	Foreign Bond 7.0	High Yield 5.3	International Developed -14.5	Emerging Markets 1.4
Foreign Bond 5.3	Emerging Markets -2.6	High Yield 2.5	U.S. Small Cap -4.4	High Yield Munis 3.0	U.S. Equity REITs 5.2	EM Debt (unhedged) -6.2	TIPS 8.4	High Yield Munis 4.9	Municipals 5-Year 0.3	Balanced -14.9	TIPS 1.1
Hedge Funds 4.8	High Yield Munis -5.5	Emerging Markets -2.2	High Yield -4.5	Core Bond 2.6	Core Bond 3.5	U.S. Small Cap -11.0	Hedge Funds 7.8	Municipals 5-Year 4.3	Core Bond -1.5	U.S. Large Cap -19.1	U.S. Core Bond 1.1
Core Bond 4.2	TIPS -8.6	International Dev. -4.9	Emerging Markets -14.9	International Dev. 1.0	Municipals 5-Year 3.1	Commodities -11.2	Commodities 7.7	EM Debt (unhedged) 2.7	Emerging Markets -2.5	Emerging Markets -20.1	Foreign Bond 0.2
Municipals 5-Year 3.0	EM Debt (unhedged) -9.0	EM Debt (unhedged) -5.7	EM Debt (unhedged) -14.9	Hedge Funds 0.5	TIPS 3.0	International Dev. -13.8	Foreign Bond 6.3	Commodities -3.1	Foreign Bond -4.2	U.S. Small Cap -20.4	Commodities -1.3
Commodities -1.1	Commodities -9.5	Commodities -17.0	Commodities -24.7	Municipals 5-Year -0.4	Commodities 1.7	Emerging Markets -14.6	Municipals 5-Year 5.4	U.S. Equity REITs -8.0	EM Debt (unhedged) -8.7	U.S. Equity REITs -24.4	EM Debt (unhedged) -2.0

Sources: Morningstar, FactSet. As of December 31, 2022. \*Periods greater than one year are annualized. Total returns in U.S. dollars. Hedge Funds as of November 30, 2022.

### **Financial Markets Performance**

# Total Return as of December 31, 2022 Periods greater than one year are annualized All returns are in U.S. dollar terms

		All return	ns are in U.S. dolla	ai teillis				
Global Fixed Income Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg 1-3-Month T-Bill	0.9%	1.5%	1.5%	0.7%	1.2%	1.0%	0.7%	0.6%
loomberg U.S. TIPS	2.0%	-11.8%	-11.8%	1.2%	2.1%	2.6%	1.1%	3.1%
Bloomberg Municipal Bond (5 Year)	3.0%	-5.3%	-5.3%	-0.3%	1.2%	1.3%	1.5%	2.8%
Hoomberg High Yield Municipal Bond	3.5%	-13.1%	-13.1%	-0.6%	2.6%	3.7%	3.5%	4.4%
loomberg U.S. Aggregate	1.9%	-13.0%	-13.0%	-2.7%	0.0%	0.9%	1.1%	2.7%
Bloomberg U.S. Corporate High Yield	4.2%	-11.2%	-11.2%	0.0%	2.3%	5.0%	4.0%	6.1%
Bloomberg Global Aggregate ex-U.S. Hedged	0.2%	-9.8%	-9.8%	-2.6%	0.5%	1.4%	2.1%	3.0%
loomberg Global Aggregate ex-U.S. Unhedged	6.8%	-18.7%	-18.7%	-5.9%	-3.1%	-0.6%	-1.6%	0.5%
Bloomberg U.S. Long Gov / Credit	2.6%	-27.1%	-27.1%	-6.2%	-1.2%	1.5%	1.6%	4.4%
PMorgan GBI-EM Global Diversified	8.5%	-11.7%	-11.7%	-6.1%	-2.5%	1.6%	-2.0%	1.5%
lobal Equity Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
&P 500	7.6%	-18.1%	-18.1%	7.7%	9.4%	11.5%	12.6%	8.8%
ow Jones Industrial Average	16.0%	-6.9%	-6.9%	7.3%	8.4%	12.1%	12.3%	9.0%
IASDAQ Composite	-0.8%	-32.5%	-32.5%	6.1%	9.7%	12.2%	14.4%	10.7%
ussell 3000	7.2%	-19.2%	-19.2%	7.1%	8.8%	11.0%	12.1%	8.7%
ussell 1000	7.2%	-19.1%	-19.1%	7.3%	9.1%	11.3%	12.4%	8.8%
ussell 1000 Growth	2.2%	-29.1%	-29.1%	7.8%	11.0%	12.9%	14.1%	10.3%
ussell 1000 Value	12.4%	-7.5%	-7.5%	6.0%	6.7%	9.1%	10.3%	7.0%
ussell Mid Cap	9.2%	-17.3%	-17.3%	5.9%	7.1%	9.6%	11.0%	8.4%
ussell Mid Cap Growth	6.9%	-26.7%	-26.7%	3.8%	7.6%	10.0%	11.4%	8.6%
ussell Mid Cap Value	10.5%	-12.0%	-12.0%	5.8%	5.7%	8.7%	10.1%	8.0%
ussell 2000	6.2%	-20.4%	-20.4%	3.1%	4.1%	7.9%	9.0%	7.2%
ussell 2000 Growth	4.1%	-26.4%	-26.4%	0.6%	3.5%	7.1%	9.2%	7.3%
ussell 2000 Value	8.4%	-14.5%	-14.5%	4.7%	4.1%	8.2%	8.5%	6.8%
ISCI ACWI	9.8%	-18.4%	-18.4%	4.0%	5.2%	8.1%	8.0%	4.8%
ISCI ACWI ex. U.S.	14.3%	-16.0%	-16.0%	0.1%	0.9%	4.8%	3.8%	1.5%
ISCI EAFE	17.3%	-14.5%	-14.5%	0.9%	1.5%	4.5%	4.7%	1.8%
ISCI EAFE Growth	15.0%	-22.9%	-22.9%	0.5%	2.5%	5.1%	5.6%	2.6%
ISCI EAFE Value	19.6%	-5.6%	-5.6%	0.6%	0.2%	3.7%	3.5%	0.8%
ISCI EAFE Small Cap	15.8%	-21.4%	-21.4%	-0.9%	0.0%	4.4%	6.2%	3.8%
ISCI Emerging Markets	9.7%	-20.1%	-20.1%	-2.7%	-1.4%	5.2%	1.4%	0.6%
lternatives	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
onsumer Price Index*	0.5%	6.5%	7.1%	5.0%	3.8%	3.3%	2.6%	2.3%
TSE NAREIT Equity REITs	5.2%	-24.4%	-24.4%	-0.1%	3.7%	4.6%	6.5%	6.2%
&P Real Assets	7.3%	-9.9%	-9.9%	1.7%	3.0%	5.2%	3.5%	4.0%
TSE EPRA NAREIT Developed	7.1%	-24.4%	-24.4%	-4.1%	0.7%	2.8%	3.9%	2.9%
TSE EPRA NAREIT Developed ex U.S.	10.5%	-23.8%	-23.8%	-8.2%	-2.3%	1.3%	1.5%	0.6%
loomberg Commodity Total Return	2.2%	16.1%	16.1%	12.6%	6.4%	6.5%	-1.3%	-2.6%
FRI Fund of Funds Composite*	1.3%	-5.6%	-5.3%	4.1%	3.1%	3.2%	3.6%	1.7%
FRI Asset Weighted Composite*	-2.4%	0.5%	2.3%	3.8%	3.4%	3.6%	4.1%	0.0%
lerian MLP	10.1%	30.9%	30.9%	9.4%	4.1%	4.4%	2.0%	5.4%

Sources: Morningstar, FactSet. As of December 31, 2022. \*Consumer Price Index and HFRI indexes as of November 30, 2022.

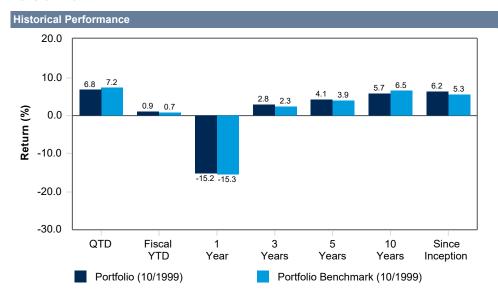
Section 3 Pension Portfolio Review



### **Portfolio Dashboard**

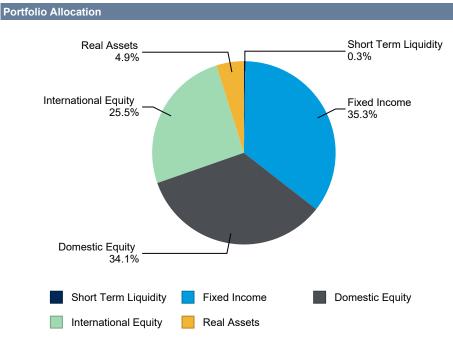
Pension Plan

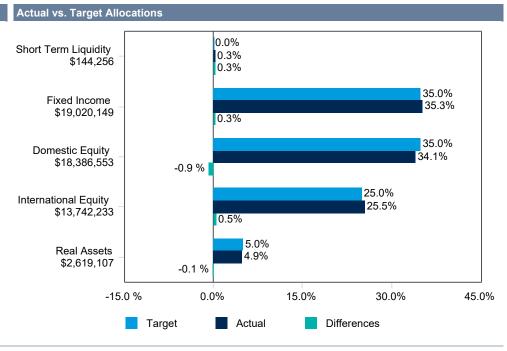
As of December 31, 2022



Summary of Cash Flows			
	QTD	1 Year	Since Inception
			00.0=0.400
Beginning Market Value	51,104,835	63,938,726	36,976,103
Net Contributions	-655,070	-410,028	877,368
Gain/Loss	3,462,534	-9,616,399	16,058,828
Ending Market Value	53,912,299	53,912,299	53,912,299

Current Benchmar	k Composition	
From Date	To Date	
06/2021	Present	35.00% Blmbg. U.S. Aggregate, 35.00% Russell 3000 Index, 25.00% MSCI AC World ex USA (Net), 5.00% Diversified Real Asset Blended Index

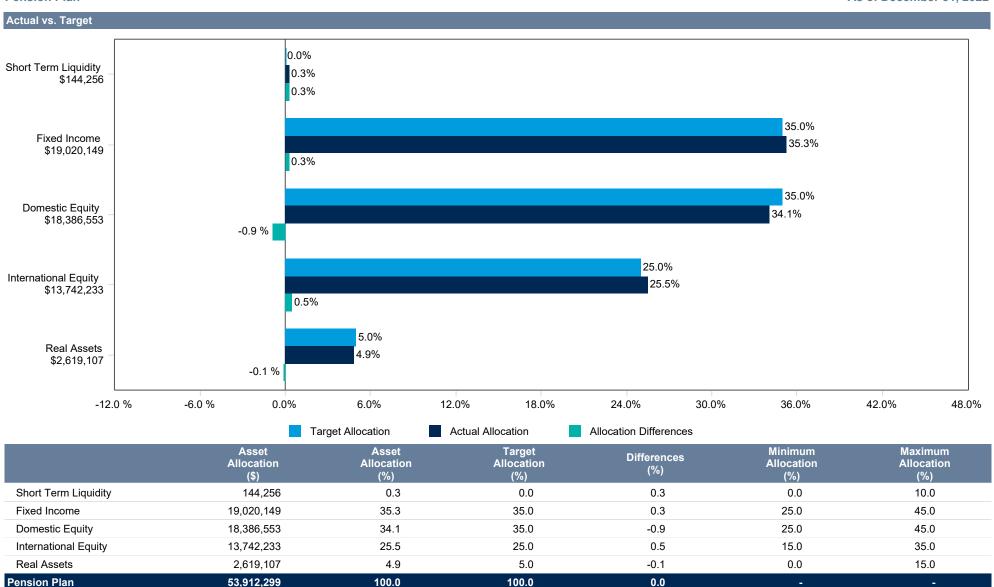






### **Asset Allocation**







### **Asset Allocation**

Pension Plan

As of December 31, 2022

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Pension Plan	53,912,299	100.0	100.0	0.0
Short Term Liquidity	144,256	0.3	0.0	0.3
Comerica Short Term Fund	144,256	0.3	0.0	0.3
Fixed Income	19,020,149	35.3	35.0	0.3
Baird Aggregate Bond Fund Class Institutional	5,494,201	10.2	10.3	-0.1
Metropolitan West Total Return Bond PI	5,403,121	10.0	10.3	-0.2
BlackRock Strategic Income Opportunities Fund K	6,182,928	11.5	11.0	0.5
PIMCO High Yield Instl	1,939,900	3.6	3.5	0.1
Domestic Equity	18,386,553	34.1	35.0	-0.9
Fidelity 500 Index Fund	13,128,549	24.4	25.0	-0.6
Boston Partners Small Cap Value Fund II Instl	2,625,150	4.9	5.0	-0.1
Conestoga Small Cap Instl	2,632,854	4.9	5.0	-0.1
International Equity	13,742,233	25.5	25.0	0.5
Fidelity International Index Fund	3,683,638	6.8	6.5	0.3
MFS Instl International Equity Fund	3,396,686	6.3	6.0	0.3
Aristotle International Equity Instl	3,327,694	6.2	6.0	0.2
GQG Partners Emerging Markets Equity Inst	3,334,215	6.2	6.5	-0.3
Real Assets	2,619,107	4.9	5.0	-0.1
Principal Diversified Real Asset R6	2,619,107	4.9	5.0	-0.1



### **Performance Overview**

Pension Plan

As of December 31, 2022

Trailing Performance Sur	nmary								
	QTD	Fiscal YTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Pension Plan	6.8	0.9	-15.2	2.8	4.1	5.7	5.7	6.2	10/1999
Blended Benchmark	7.2	0.7	-15.3	2.3	3.9	5.8	6.5	5.3	10/1999

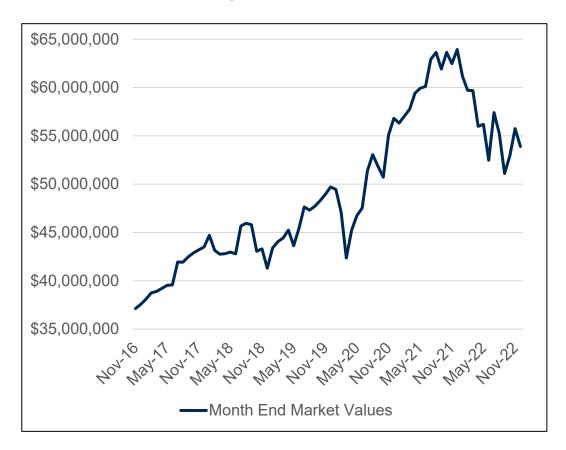
Calendar Year Performance Summary											
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	
Pension Plan	12.4	14.0	19.7	-6.0	15.1	5.1	-0.3	5.9	11.3	8.9	
Blended Benchmark	11.2	13.6	20.5	-6.2	14.9	6.7	1.0	7.7	16.3	11.6	

Plan Reconciliation								
	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Pension Plan								10/1999
Beginning Market Value	51,104,835	52,486,223	63,938,726	49,708,650	43,511,766	-	36,976,103	
Net Contributions	-655,070	919,502	-410,028	-152,952	592,866	877,368	877,368	
Gain/Loss	3,462,534	506,574	-9,616,399	4,356,601	9,807,667	53,034,931	16,058,828	
Ending Market Value	53,912,299	53,912,299	53,912,299	53,912,299	53,912,299	53,912,299	53,912,299	

Benchmark Composition	
	Weight (%)
Jun-2021	
Blmbg. U.S. Aggregate	35.0
Russell 3000 Index	35.0
MSCI AC World ex USA (Net)	25.0
Diversified Real Asset Blended Index	5.0

# Town of Newtown, CT Pension Portfolio

# Market Value History



Month	Month End Market Value
January 2022	\$61,178,688
February 2022	\$59,723,947
March 2022	\$59,688,763
April 2022	\$55,992,927
May 2022	\$56,184,193
June 2022	\$52,486,223
July 2022	\$57,423,145
August 2022	\$55,244,586
September 2022	\$51,104,835
October 2022	\$52,944,441
November 2022	\$55,758,040
December 2022	\$53,912,299

DISCLOSURE: The balance information has been compiled solely by Fiducient Advisors and has not been independently verified. In preparing this report, Fiducient Advisors has relied upon information provided by the investment managers and by the custodian.



# **Manager Status Commentary**

As of December 31, 2022

Manager	Recommendation	Comments
Baird Aggregate Bond Fund Class Institutional	Maintain	
Metropolitan West Total Return Bond PI	Maintain	
BlackRock Strategic Income Opportunities Fund K	Discuss 3Q 2022	BlackRock Strategic Income Opportunities remains on Discuss. BlackRock announced that Bob Miller, one of the portfolio managers on the strategy, will be retiring at the end of March 2023. Rick Rieder, CIO of Global Fixed Income, and David Rogal will remain as portfolio managers on the strategy. In addition, Russ Brownback has been named a portfolio manager alongside Mr. Rieder and Mr. Rogal.
PIMCO High Yield Instl	Discuss 4Q 2022	The strategy was placed on Discuss status due to the departure of portfolio manager Amit Agrawal.
Fidelity 500 Index Fund	Maintain	
Boston Partners Small Cap Value Fund II Instl	Watch 3Q 2022	The strategy was moved to Watch at the end of Q3 2022 after Boston Partners announced that David Dabora, Portfolio Manager on the Boston Partners Small Cap Value strategy, retired on September 19, 2022. Mr. Dabora was the longest tenured portfolio manager on the strategy, working on the portfolio since 1998. George Gumpert, who has been a portfolio manager on the strategy for the past 12 years, will continue as the Lead Portfolio Manager going forward. Due to the sudden nature of David Dabora's departure, the strategy was moved to Watch.
Conestoga Small Cap Instl	Maintain	
Fidelity International Index Fund	Maintain	
MFS Instl International Equity Fund	Maintain	
Aristotle International Equity Instl	Maintain	
GQG Partners Emerging Markets Equity Inst	Discuss 4Q 2022	James Anders, listed Portfolio Manager on the GQG U.S., Global, International and Emerging Markets strategies resigned effective immediately on November 30, 2022. Mr. Anders' departure follows his recent promotion in July to Portfolio Manager from Deputy Portfolio Manager. The investment team will otherwise remain unchanged following his departure. All strategies will continue to be overseen by remaining Portfolio Managers Rajiv Jain, Brian Kersmanc, and Sudarsahn Murthy. Additionally, the team of seventeen underlying investment analysts supporting all portfolios is unchanged.
Principal Diversified Real Asset R6	Maintain	

Commentary produced upon change of status.



# **Manager Performance**

Pension Plan

As of December 31, 2022

	Allocati	on				Perform	ance(%)				
	Market Value (\$)	%	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
Pension Plan	53,912,299	100.0	6.8	0.9	-15.2	2.8	4.1	5.7	6.2	10/1999	
Blended Benchmark			7.2	0.7	-15.3	2.3	3.9	6.5	5.3		
60% S&P 500 / 40% Bloomberg Barclays Aggregate Index			5.4	0.4	-15.8	3.8	6.0	8.1	6.0		
Short Term Liquidity	144,256	0.3	1.0	1.4	1.7	0.7	1.2	-	1.2	12/2016	
90 Day U.S. Treasury Bill			0.8	1.3	1.5	0.7	1.3	0.8	1.2		
Comerica Short Term Fund	144,256	0.3	1.0	1.4	1.7	0.7	-	-	0.9	08/2019	
90 Day U.S. Treasury Bill			0.8	1.3	1.5	0.7	1.3	0.8	0.9		
Fixed Income	19,020,149	35.3	2.1	-1.5	-11.3	-2.1	0.5	1.6	4.5	10/1999	
Blmbg. U.S. Aggregate			1.9	-3.0	-13.0	-2.7	0.0	1.1	3.9		
Baird Aggregate Bond Fund Class Institutional	5,494,201	10.2	2.1	-2.6	-13.4	-2.5	0.2	1.5	-8.2	06/2021	Maintain
Blmbg. U.S. Aggregate			1.9	-3.0	-13.0	-2.7	0.0	1.1	-8.0		
IM U.S. Broad Market Core Fixed Income (MF) Median			1.7	-3.1	-13.7	-2.7	-0.1	1.0	-8.5		
Baird Aggregate Bond Fund Class Institutional Rank			15	22	35	36	25	12	28		
Metropolitan West Total Return Bond PI	5,403,121	10.0	1.8	-3.5	-14.7	-2.7	0.2	1.4	-9.1	06/2021	Maintain
Blmbg. U.S. Aggregate			1.9	-3.0	-13.0	-2.7	0.0	1.1	-8.0		
IM U.S. Broad Market Core+ Fixed Income (MF) Median			1.8	-2.6	-13.7	-2.4	0.1	1.2	-8.4		
Metropolitan West Total Return Bond Pl Rank			52	84	75	67	47	39	78		
BlackRock Strategic Income Opportunities Fund K	6,182,928	11.5	1.6	-0.2	-5.6	0.8	1.9	2.4	-3.6	06/2021	Discuss
Blmbg. U.S. Aggregate			1.9	-3.0	-13.0	-2.7	0.0	1.1	-8.0		
IM Alternative Credit Focus (MF) Median			2.4	0.7	-7.6	0.4	1.0	1.4	-4.6		
BlackRock Strategic Income Opportunities Fund K Rank			55	75	41	45	26	22	39		
PIMCO High Yield Instl	1,939,900	3.6	4.2	3.6	-10.8	-0.7	1.8	3.5	-5.4	06/2021	Discuss
ICE BofAML High Yield BB-B Constrained Index			4.3	3.5	-10.6	-0.2	2.3	3.9	-5.1		
IM U.S. High Yield Bonds (MF) Median			4.0	3.3	-10.9	-0.5	1.7	3.2	-5.5		
PIMCO High Yield Instl Rank			34	34	46	60	44	29	45		

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



Pension Plan

As of December 31, 2022

	Allocati	on				Perform	ance(%)				
	Market Value (\$)	%	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
Domestic Equity	18,386,553	34.1	7.5	2.2	-18.8	7.5	8.8	-	10.9	12/2016	
Russell 3000 Index			7.2	2.4	-19.2	7.1	8.8	12.1	11.0		
Fidelity 500 Index Fund	13,128,549	24.4	7.6	2.3	-18.1	7.6	9.4	12.6	-4.1	06/2021	Maintain
S&P 500			7.6	2.3	-18.1	7.7	9.4	12.6	-4.1		
IM U.S. Large Cap Core Equity (MF) Median			7.8	2.4	-18.7	6.9	8.8	11.7	-5.4		
Fidelity 500 Index Fund Rank			57	53	45	29	30	16	29		
Boston Partners Small Cap Value Fund II Instl	2,625,150	4.9	9.2	3.1	-11.5	4.2	3.9	8.4	-7.7	06/2021	Watch
Russell 2000 Value Index			8.4	3.4	-14.5	4.7	4.1	8.5	-9.0		
IM U.S. Small Cap Value Equity (MF) Median			11.7	5.3	-11.1	6.8	4.7	8.5	-5.6		
Boston Partners Small Cap Value Fund II Instl Rank			84	87	58	93	68	55	84		
Conestoga Small Cap Instl	2,632,854	4.9	5.8	1.3	-28.1	3.0	6.7	11.7	-12.3	06/2021	Maintain
Russell 2000 Growth Index			4.1	4.4	-26.4	0.6	3.5	9.2	-18.2		
IM U.S. Small Cap Growth Equity (MF) Median			4.5	3.4	<b>-</b> 27.5	3.5	6.1	9.8	-16.3		
Conestoga Small Cap Instl Rank			36	76	54	56	39	12	22		
International Equity	13,742,233	25.5	12.8	3.2	-17.7	0.7	1.3	-	5.5	12/2016	
International Equity Hybrid			14.3	3.0	-16.0	0.2	0.9	-	5.1		
Fidelity International Index Fund	3,683,638	6.8	18.3	6.1	-14.2	1.1	1.8	4.7	-8.8	06/2021	Maintain
MSCI EAFE (Net)			17.3	6.4	-14.5	0.9	1.5	4.7	-8.8		
IM International Large Cap Core Equity (MF) Median			17.1	5.2	-15.1	0.8	1.2	3.8	-9.8		
Fidelity International Index Fund Rank			17	26	34	43	29	18	28		
MFS Insti International Equity Fund	3,396,686	6.3	16.2	6.2	-14.8	2.9	4.6	6.2	-6.7	06/2021	Maintain
MSCI EAFE (Net)			17.3	6.4	-14.5	0.9	1.5	4.7	-8.8		
IM International Large Cap Core Equity (MF) Median			17.1	5.2	-15.1	0.8	1.2	3.8	-9.8		
MFS Instl International Equity Fund Rank			68	25	46	18	8	1	9		

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



Pension Plan

As of December 31, 2022

	Allocatio	n				Perform	ance(%)				
	Market Value (\$)	%	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	· Manager Status
Aristotle International Equity Instl	3,327,694	6.2	14.2	4.6	-20.9	0.4	2.5	-	-11.5	06/2021	Maintain
MSCI EAFE (Net)			17.3	6.4	-14.5	0.9	1.5	4.7	-8.8		
IM International Large Cap Core Equity (MF) Median			17.1	5.2	-15.1	0.8	1.2	3.8	-9.8		
Aristotle International Equity Instl Rank			84	59	94	57	11	-	72		
GQG Partners Emerging Markets Equity Inst	3,334,215	6.2	3.2	-3.9	-20.9	1.1	1.3	-	-17.1	06/2021	Discuss
MSCI Emerging Markets Growth (Net)			9.6	-3.7	-24.0	-2.9	-1.3	2.7	-22.4		
IM Emerging Markets Equity (MF) Median			9.9	-2.3	-22.4	-3.2	-1.7	1.2	-19.4		
GQG Partners Emerging Markets Equity Inst Rank			93	70	37	14	12	-	31		
Real Assets	2,619,107	4.9	7.5	-1.4	-6.1	-		-	-0.3	06/2021	
Diversified Real Asset Blended Index			8.1	-0.4	-5.1	3.9	3.6	2.6	-0.2		
Principal Diversified Real Asset R6	2,619,107	4.9	7.5	-1.4	-6.1	4.6	4.0	-	-0.3	06/2021	Maintain
Diversified Real Asset Blended Index			8.1	-0.4	-5.1	3.9	3.6	2.6	-0.2		



Pension Plan

As of December 31, 2022

					Perform	ance(%)				
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Pension Plan	12.4	14.0	19.7	-6.0	15.1	5.1	-0.3	5.9	11.3	8.9
Blended Benchmark	11.2	13.6	20.5	-6.2	14.9	6.7	1.0	7.7	16.3	11.6
60% S&P 500 / 40% Bloomberg Barclays Aggregate Index	15.9	14.7	22.2	-2.3	14.2	8.3	1.3	10.6	17.6	11.3
Short Term Liquidity	0.0	0.5	2.1	1.7	0.9	-	-	-	-	-
90 Day U.S. Treasury Bill	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0	0.0	0.1
Comerica Short Term Fund	0.0	0.5	-	-	-	-	-	-	-	-
90 Day U.S. Treasury Bill	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0	0.0	0.1
Fixed Income	-1.7	7.7	8.7	0.6	4.1	5.2	-0.1	5.1	-0.7	8.0
Blmbg. U.S. Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
Baird Aggregate Bond Fund Class Institutional	-1.5	8.6	9.5	-0.3	4.2	3.5	0.6	6.9	-1.3	7.9
Blmbg. U.S. Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
IM U.S. Broad Market Core Fixed Income (MF) Median	-1.3	8.2	8.8	-0.6	3.6	2.9	0.0	5.5	-2.0	6.0
Baird Aggregate Bond Fund Class Institutional Rank	58	37	27	32	22	33	19	8	24	17
Metropolitan West Total Return Bond PI	-1.1	9.2	9.2	0.3	3.5	2.6	0.2	6.2	0.4	11.6
Blmbg. U.S. Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
IM U.S. Broad Market Core+ Fixed Income (MF) Median	-0.9	8.6	9.3	-1.0	4.5	4.1	-0.3	5.1	-1.1	8.2
Metropolitan West Total Return Bond Pl Rank	58	36	55	11	79	86	26	25	16	7
BlackRock Strategic Income Opportunities Fund K	1.0	7.3	7.8	-0.5	5.0	3.6	-0.6	3.6	3.0	9.6
Blmbg. U.S. Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
IM Alternative Credit Focus (MF) Median	1.9	3.9	7.3	-1.9	4.5	4.9	-1.6	1.0	-0.1	9.2
BlackRock Strategic Income Opportunities Fund K Rank	58	17	43	29	43	64	25	21	31	44
PIMCO High Yield Instl	4.1	5.3	14.9	-2.5	7.0	12.7	-1.9	3.3	5.8	14.6
ICE BofAML High Yield BB-B Constrained Index	4.6	6.3	15.1	-2.0	7.0	14.7	-2.8	3.5	6.3	14.6
IM U.S. High Yield Bonds (MF) Median	4.9	5.4	13.8	-3.0	6.6	13.8	-4.0	1.5	6.7	14.6
PIMCO High Yield Instl Rank	73	53	24	32	35	70	21	13	74	50

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



Pension Plan

As of December 31, 2022

					Perform	ance(%)				
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
omestic Equity	25.3	22.0	30.5	-5.8	20.7	-	-	-	-	
Russell 3000 Index	25.7	20.9	31.0	-5.2	21.1	12.7	0.5	12.6	33.6	16.4
idelity 500 Index Fund	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0
S&P 500	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0
IM U.S. Large Cap Core Equity (MF) Median	26.9	18.4	30.6	-5.4	21.4	9.7	0.5	11.5	31.8	15.4
Fidelity 500 Index Fund Rank	26	50	37	32	45	20	35	18	38	41
oston Partners Small Cap Value Fund II Instl	25.8	1.6	28.0	-16.3	9.8	26.0	-4.3	4.2	34.7	22.9
Russell 2000 Value Index	28.3	4.6	22.4	-12.9	7.8	31.7	-7.5	4.2	34.5	18.1
IM U.S. Small Cap Value Equity (MF) Median	32.0	3.6	21.1	-16.1	8.5	26.7	-7.0	3.4	36.5	16.2
Boston Partners Small Cap Value Fund II Instl Rank	91	64	7	51	36	61	19	35	70	6
onestoga Small Cap Instl	16.4	30.6	25.4	0.8	28.7	14.3	8.3	-8.0	49.3	11.0
Russell 2000 Growth Index	2.8	34.6	28.5	-9.3	22.2	11.3	-1.4	5.6	43.3	14.6
IM U.S. Small Cap Growth Equity (MF) Median	10.5	36.5	27.7	-5.6	20.7	10.1	-2.4	2.8	42.5	13.6
Conestoga Small Cap Instl Rank	27	64	63	12	14	24	2	98	11	74
ternational Equity	12.6	10.3	22.1	-14.5	26.5	-	-	-	-	
International Equity Hybrid	9.1	9.8	22.1	-15.0	26.1	-	-	-	-	
idelity International Index Fund	11.4	8.2	22.0	-13.5	25.4	1.3	-0.7	-5.3	21.9	18.9
MSCI EAFE (Net)	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
IM International Large Cap Core Equity (MF) Median	10.7	9.1	22.1	-15.0	25.0	0.0	-1.9	-6.0	20.4	18.0
Fidelity International Index Fund Rank	36	64	52	15	43	35	26	33	26	43
FS Instl International Equity Fund	15.2	11.1	28.4	-10.7	28.0	0.3	0.0	-4.2	18.6	22.5
MSCI EAFE (Net)	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
IM International Large Cap Core Equity (MF) Median	10.7	9.1	22.1	-15.0	25.0	0.0	-1.9	-6.0	20.4	18.0
MFS Instl International Equity Fund Rank	4	35	2	7	21	47	18	20	70	14
ristotle International Equity Instl	15.8	10.4	24.0	-9.9	22.6	-1.2	0.2	-	-	
MSCI EAFE (Net)	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
IM International Large Cap Core Equity (MF) Median	10.7	9.1	22.1	-15.0	25.0	0.0	-1.9	-6.0	20.4	18.0
Aristotle International Equity Instl Rank	4	41	28	5	83	59	17	-	-	

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



As of December 31, 2022

### **Calendar Year Performance**

**Pension Plan** 

Performance(%) 2021 2020 2019 2018 2017 2016 2015 2014 2012 2013 **GQG Partners Emerging Markets Equity Inst** -2.4 34.0 21.1 -14.7 32.0 7.6 -0.2 MSCI Emerging Markets Growth (Net) -8.4 31.3 25.1 -18.3 46.8 -11.3 -0.3 20.6 17.7 20.2 -16.5 35.7 8.3 -13.7 -1.5 IM Emerging Markets Equity (MF) Median -1.6 -3.0 18.8

GQG Partners Emerging Markets Equity Inst Rank	57	11	46	32	69	-	-	-	-	-
Real Assets		-	-	-	-	-	-	-	-	-
Diversified Real Asset Blended Index	15.9	2.1	14.9	-7.3	10.4	12.4	-11.7	0.2	-1.2	8.7
Principal Diversified Real Asset R6	17.4	3.9	15.1	-7.8	10.2	5.9	-12.4	-	-	-
Diversified Real Asset Blended Index	15.9	2.1	14.9	-7.3	10.4	12.4	-11.7	0.2	-1.2	8.7



# **Investment Gain/Loss Summary**

Pension Plan

1 Quarter Ending December 31, 2022

	N 1 ()/ 1		- Quarto	
	Market Value as of 10/01/2022	Net Contributions	Gain/Loss	Market Value As of 12/31/2022
Pension Plan	51,104,835	-655,070	3,462,534	53,912,299
Short Term Liquidity	196,479	-55,070	2,847	144,256
Comerica Short Term Fund	196,479	-55,070	2,847	144,256
Fixed Income	18,630,456	-	389,693	19,020,149
Baird Aggregate Bond Fund Class Institutional	5,378,636	-	115,565	5,494,201
Metropolitan West Total Return Bond Pl	5,307,023	-	96,098	5,403,121
BlackRock Strategic Income Opportunities Fund K	6,082,849	-	100,078	6,182,928
PIMCO High Yield Instl	1,861,948	-	77,952	1,939,900
Domestic Equity	17,660,011	-600,000	1,326,542	18,386,553
Fidelity 500 Index Fund	12,629,696	-450,000	948,853	13,128,549
Boston Partners Small Cap Value Fund II Instl	2,494,762	-100,000	230,388	2,625,150
Conestoga Small Cap Instl	2,535,553	-50,000	147,301	2,632,854
International Equity	12,180,745	-	1,561,488	13,742,233
Fidelity International Index Fund	3,114,396	-	569,242	3,683,638
MFS Instl International Equity Fund	2,923,404	-	473,282	3,396,686
Aristotle International Equity Instl	2,912,683	-	415,011	3,327,694
GQG Partners Emerging Markets Equity Inst	3,230,262	-	103,953	3,334,215
Real Assets	2,437,144	-	181,963	2,619,107
Principal Diversified Real Asset R6	2,437,144	-	181,963	2,619,107



# **Portfolio Statistics**

Pension Plan

As of December 31, 2022

	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Return	6.8	-15.2	2.8	4.1	5.7	6.2	10/1999
Standard Deviation	3.8	14.8	14.0	12.2	9.7	9.6	
Upside Risk	4.1	2.6	10.1	8.8	7.3	7.6	
Downside Risk	1.7	12.7	9.8	8.5	6.5	6.1	
s. Blended Benchmark							
Alpha	-0.2	-0.3	0.5	0.3	-0.7	1.8	
Beta	1.0	1.0	1.0	1.0	1.0	0.8	
Information Ratio	-0.2	0.0	0.5	0.2	-0.5	0.1	
Tracking Error	0.5	1.4	1.0	0.8	1.6	5.6	
s. 90 Day U.S. Treasury Bill							
Sharpe Ratio	0.5	-1.1	0.2	0.3	0.5	0.5	

Calculation based on monthly periodicity.



## **Estimated Fee Analysis**

Pension Plan

As of December 31, 2022

	Market Value (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Pension Plan	53,912,299	239,043	0.44
Short Term Liquidity	144,256	-	-
Comerica Short Term Fund	144,256	-	-
Fixed Income	19,020,149	83,277	0.44
Baird Aggregate Bond Fund Class Institutional	5,494,201	16,483	0.30
Metropolitan West Total Return Bond Pl	5,403,121	19,451	0.36
BlackRock Strategic Income Opportunities Fund K	6,182,928	36,479	0.59
PIMCO High Yield Instl	1,939,900	10,863	0.56
Domestic Equity	18,386,553	51,654	0.28
Fidelity 500 Index Fund	13,128,549	1,969	0.02
Boston Partners Small Cap Value Fund II Instl	2,625,150	25,989	0.99
Conestoga Small Cap Instl	2,632,854	23,696	0.90
nternational Equity	13,742,233	83,684	0.61
Fidelity International Index Fund	3,683,638	1,289	0.04
MFS Instl International Equity Fund	3,396,686	23,097	0.68
Aristotle International Equity Instl	3,327,694	26,622	0.80
GQG Partners Emerging Markets Equity Inst	3,334,215	32,675	0.98
Real Assets	2,619,107	20,429	0.78
Principal Diversified Real Asset R6	2,619,107	20,429	0.78

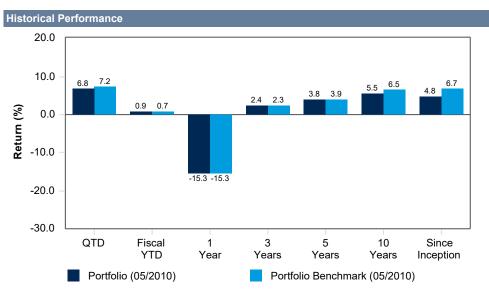
Fee calculations for mutual funds represent fees at the net expense level. Fee calculations for commingled funds and/or alternative investments reflect base management fees and exclude underlying fund expenses captured at the NAV level, any applicable performance-based fees, or incentive fees. Fees for fund of funds are shown at the fund of fund level and do not include fees charged by underlying investment managers/funds.

The figures on this page have been obtained from sources we deem to be reliable. Fiducient Advisors has not independently verified this information.

Section 4 OPEB Portfolio Review

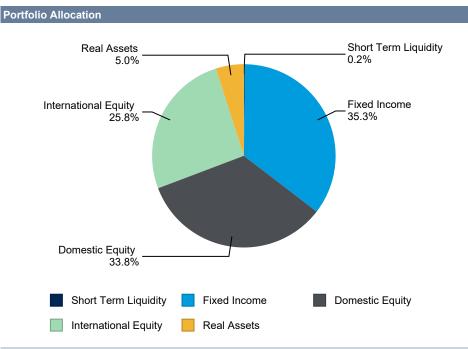


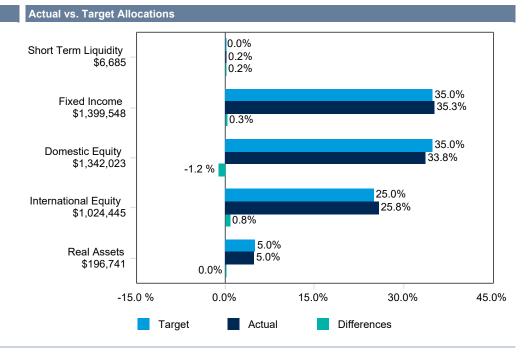
### **Portfolio Dashboard**



Summary of Cash Flows			
	QTD	1 Year	Since Inception
Beginning Market Value	3,723,497	4,467,833	1,917,731
Net Contributions	-6,733	180,102	1,148,469
Gain/Loss	252,679	-678,492	903,243
Ending Market Value	3,969,443	3,969,443	3,969,443

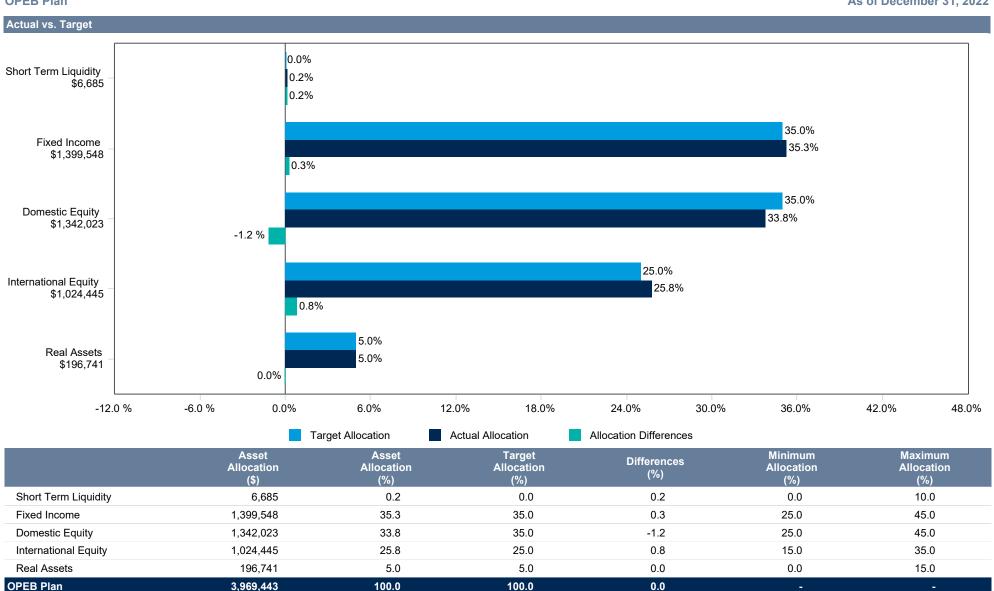
Current Benchma	rk Composition	
From Date	To Date	
06/2021	Present	35.00% Blmbg. U.S. Aggregate, 35.00% Russell 3000 Index, 25.00% MSCI AC World ex USA (Net), 5.00% Diversified Real Asset Blended Index







### **Asset Allocation**





# **Asset Allocation**

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
PEB Plan	3,969,443	100.0	100.0	0.0
Short Term Liquidity	6,685	0.2	0.0	0.2
Goldman Sachs Financial Square Fund	6,685	0.2	0.0	0.2
Fixed Income	1,399,548	35.3	35.0	0.3
Baird Aggregate Bond Fund Class Institutional	405,638	10.2	10.3	0.0
Metropolitan West Total Return Bond Pl	404,108	10.2	10.3	-0.1
BlackRock Strategic Income Opportunities Fund K	446,941	11.3	11.0	0.3
PIMCO High Yield Instl	142,861	3.6	3.5	0.1
Domestic Equity	1,342,023	33.8	35.0	-1.2
Fidelity 500 Index Fund	959,218	24.2	25.0	-0.8
Boston Partners Small Cap Value Fund II Instl	195,020	4.9	5.0	-0.1
Conestoga Small Cap Instl	187,785	4.7	5.0	-0.3
International Equity	1,024,445	25.8	25.0	0.8
Fidelity International Index Fund	275,758	6.9	6.5	0.4
MFS Instl International Equity Fund	251,202	6.3	6.0	0.3
Aristotle International Equity Instl	246,525	6.2	6.0	0.2
GQG Partners Emerging Markets Equity Inst	250,961	6.3	6.5	-0.2
Real Assets	196,741	5.0	5.0	0.0
Principal Diversified Real Asset R6	196,741	5.0	5.0	0.0



# **Performance Overview**

Trailing Performance Summary											
	QTD	Fiscal YTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date		
OPEB Plan	6.8	0.9	-15.3	2.4	3.8	5.4	5.5	4.8	05/2010		
Blended Benchmark	7.2	0.7	-15.3	2.3	3.9	5.8	6.5	6.7	05/2010		

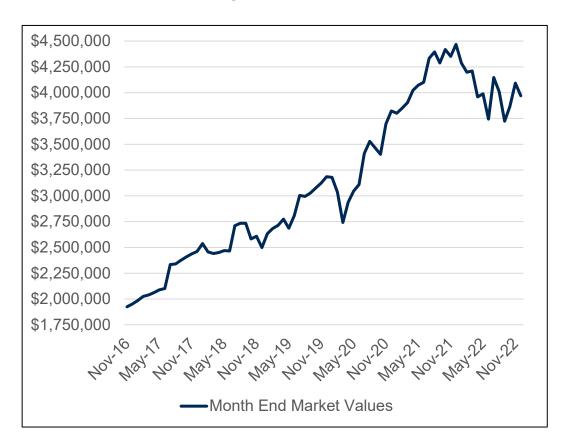
Calendar Year Performar	nce Summary									
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
OPEB Plan	12.0	13.1	19.3	-6.0	15.5	4.1	0.5	5.7	10.8	8.1
Blended Benchmark	11.2	13.6	20.5	-6.2	14.9	6.7	1.0	7.7	16.3	11.6

Plan Reconciliation								
	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
OPEB Plan								05/2010
Beginning Market Value	3,723,497	3,743,958	4,467,833	3,185,572	2,461,309	-	1,917,731	
Net Contributions	-6,733	189,998	180,102	556,170	945,132	1,148,469	1,148,469	
Gain/Loss	252,679	35,486	-678,492	227,700	563,001	2,820,974	903,243	
Ending Market Value	3,969,443	3,969,443	3,969,443	3,969,443	3,969,443	3,969,443	3,969,443	

Benchmark Composition	
	Weight (%)
Jun-2021	
Blmbg. U.S. Aggregate	35.0
Russell 3000 Index	35.0
MSCI AC World ex USA (Net)	25.0
Diversified Real Asset Blended Index	5.0

# Town of Newtown, CT OPEB Portfolio

# Market Value History



Month	Month End Market Value
January 2022	\$4,285,906
February 2022	\$4,197,706
March 2022	\$4,210,912
April 2022	\$3,958,737
May 2022	\$3,988,070
June 2022	\$3,743,958
July 2022	\$4,147,146
August 2022	\$4,008,203
September 2022	\$3,723,497
October 2022	\$3,867,128
November 2022	\$4,093,236
December 2022	\$3,969,443

DISCLOSURE: The balance information has been compiled solely by Fiducient Advisors and has not been independently verified. In preparing this report, Fiducient Advisors has relied upon information provided by the investment managers and by the custodian.

www.FiducientAdvisors.com 48



# **Manager Status Commentary**

As of December 31, 2022

Manager	Recommendation	Comments
Baird Aggregate Bond Fund Class Institutional	Maintain	
Metropolitan West Total Return Bond PI	Maintain	
BlackRock Strategic Income Opportunities Fund K	Discuss 3Q 2022	BlackRock Strategic Income Opportunities remains on Discuss. BlackRock announced that Bob Miller, one of the portfolio managers on the strategy, will be retiring at the end of March 2023. Rick Rieder, CIO of Global Fixed Income, and David Rogal will remain as portfolio managers on the strategy. In addition, Russ Brownback has been named a portfolio manager alongside Mr. Rieder and Mr. Rogal.
PIMCO High Yield Instl	Discuss 4Q 2022	The strategy was placed on Discuss status due to the departure of portfolio manager Amit Agrawal.
Fidelity 500 Index Fund	Maintain	
Boston Partners Small Cap Value Fund II Instl	Watch 3Q 2022	The strategy was moved to Watch at the end of Q3 2022 after Boston Partners announced that David Dabora, Portfolio Manager on the Boston Partners Small Cap Value strategy, retired on September 19, 2022. Mr. Dabora was the longest tenured portfolio manager on the strategy, working on the portfolio since 1998. George Gumpert, who has been a portfolio manager on the strategy for the past 12 years, will continue as the Lead Portfolio Manager going forward. Due to the sudden nature of David Dabora's departure, the strategy was moved to Watch.
Conestoga Small Cap Instl	Maintain	
Fidelity International Index Fund	Maintain	
MFS Instl International Equity Fund	Maintain	
Aristotle International Equity Instl	Maintain	
GQG Partners Emerging Markets Equity Inst	Discuss 4Q 2022	James Anders, listed Portfolio Manager on the GQG U.S., Global, International and Emerging Markets strategies resigned effective immediately on November 30, 2022. Mr. Anders' departure follows his recent promotion in July to Portfolio Manager from Deputy Portfolio Manager. The investment team will otherwise remain unchanged following his departure. All strategies will continue to be overseen by remaining Portfolio Managers Rajiv Jain, Brian Kersmanc, and Sudarsahn Murthy. Additionally, the team of seventeen underlying investment analysts supporting all portfolios is unchanged.
Principal Diversified Real Asset R6	Maintain	

Commentary produced upon change of status.



	Allocat	ion				Perform	ance(%)				
	Market Value (\$)	<u></u> %	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
OPEB Plan	3,969,443	100.0	6.8	0.9	-15.3	2.4	3.8	5.5	4.8	05/2010	
Blended Benchmark			7.2	0.7	-15.3	2.3	3.9	6.5	6.7		
60% S&P 500 / 40% Bloomberg Barclays Aggregate Index			5.4	0.4	-15.8	3.8	6.0	8.1	8.1		
Short Term Liquidity	6,685	0.2	0.8	2.1	2.1	0.8	1.2	-	1.3	12/2016	
90 Day U.S. Treasury Bill			0.8	1.3	1.5	0.7	1.3	0.8	1.2		
Goldman Sachs Financial Square Fund	6,685	0.2	0.8	2.1	2.1	0.8	-	-	0.9	08/2019	
90 Day U.S. Treasury Bill			0.8	1.3	1.5	0.7	1.3	0.8	0.9		
Fixed Income	1,399,548	35.3	2.1	-1.5	-11.4	-2.1	0.6	1.6	2.4	05/2010	
Blmbg. U.S. Aggregate			1.9	-3.0	-13.0	-2.7	0.0	1.1	2.1		
Baird Aggregate Bond Fund Class Institutional	405,638	10.2	2.1	-2.6	-13.4	-2.5	0.2	1.5	-8.2	06/2021	Maintain
Blmbg. U.S. Aggregate			1.9	-3.0	-13.0	-2.7	0.0	1.1	-8.0		
IM U.S. Broad Market Core Fixed Income (MF) Median			1.7	-3.1	-13.7	-2.7	-0.1	1.0	-8.5		
Baird Aggregate Bond Fund Class Institutional Rank			15	22	35	36	25	12	28		
Metropolitan West Total Return Bond Pl	404,108	10.2	1.8	-3.5	-14.7	-2.7	0.2	1.4	-9.1	06/2021	Maintain
Blmbg. U.S. Aggregate			1.9	-3.0	-13.0	-2.7	0.0	1.1	-8.0		
IM U.S. Broad Market Core+ Fixed Income (MF) Median			1.8	-2.6	-13.7	-2.4	0.1	1.2	-8.4		
Metropolitan West Total Return Bond Pl Rank			52	84	75	67	47	39	78		
BlackRock Strategic Income Opportunities Fund K	446,941	11.3	1.6	-0.2	-5.6	0.8	1.9	2.4	-3.6	06/2021	Discuss
Blmbg. U.S. Aggregate			1.9	-3.0	-13.0	-2.7	0.0	1.1	-8.0		
IM Alternative Credit Focus (MF) Median			2.4	0.7	-7.6	0.4	1.0	1.4	-4.6		
BlackRock Strategic Income Opportunities Fund K Rank			55	75	41	45	26	22	39		
PIMCO High Yield Instl	142,861	3.6	4.2	3.6	-10.8	-0.7	1.8	3.5	-5.4	06/2021	Discuss
ICE BofAML High Yield BB-B Constrained Index			4.3	3.5	-10.6	-0.2	2.3	3.9	-5.1		
IM U.S. High Yield Bonds (MF) Median			4.0	3.3	-10.9	-0.5	1.7	3.2	-5.5		
PIMCO High Yield Instl Rank			34	34	46	60	44	29	45		

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



	Allocati	ion				Perform	ance(%)				
	Market Value (\$)	 %	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
Domestic Equity	1,342,023	33.8	7.5	2.2	-18.7	7.7	8.9	-	11.0	12/2016	
Russell 3000 Index			7.2	2.4	-19.2	7.1	8.8	12.1	11.0		
Fidelity 500 Index Fund	959,218	24.2	7.6	2.3	-18.1	7.6	9.4	12.6	-4.1	06/2021	Maintain
S&P 500			7.6	2.3	-18.1	7.7	9.4	12.6	-4.1		
IM U.S. Large Cap Core Equity (MF) Median			7.8	2.4	-18.7	6.9	8.8	11.7	-5.4		
Fidelity 500 Index Fund Rank			57	53	45	29	30	16	29		
Boston Partners Small Cap Value Fund II Instl	195,020	4.9	9.2	3.1	-11.5	4.2	3.9	8.4	-7.7	06/2021	Watch
Russell 2000 Value Index			8.4	3.4	-14.5	4.7	4.1	8.5	-9.0		
IM U.S. Small Cap Value Equity (MF) Median			11.7	5.3	-11.1	6.8	4.7	8.5	-5.6		
Boston Partners Small Cap Value Fund II Instl Rank			84	87	58	93	68	55	84		
Conestoga Small Cap Instl	187,785	4.7	5.8	1.3	-28.1	3.0	6.7	11.7	-12.3	06/2021	Maintain
Russell 2000 Growth Index			4.1	4.4	-26.4	0.6	3.5	9.2	-18.2		
IM U.S. Small Cap Growth Equity (MF) Median			4.5	3.4	-27.5	3.5	6.1	9.8	-16.3		
Conestoga Small Cap Instl Rank			36	76	54	56	39	12	22		
International Equity	1,024,445	25.8	12.8	3.2	-17.7	0.7	1.3	-	5.5	12/2016	
International Equity Hybrid			14.3	3.0	-16.0	0.2	0.9	-	5.1		
Fidelity International Index Fund	275,758	6.9	18.3	6.1	-14.2	1.1	1.8	4.7	-8.8	06/2021	Maintain
MSCI EAFE (Net)			17.3	6.4	-14.5	0.9	1.5	4.7	-8.8		
IM International Large Cap Core Equity (MF) Median			17.1	5.2	-15.1	8.0	1.2	3.8	-9.8		
Fidelity International Index Fund Rank			17	26	34	43	29	18	28		
MFS InstI International Equity Fund	251,202	6.3	16.2	6.2	-14.8	2.9	4.6	6.2	-6.7	06/2021	Maintain
MSCI EAFE (Net)			17.3	6.4	-14.5	0.9	1.5	4.7	-8.8		
IM International Large Cap Core Equity (MF) Median			17.1	5.2	-15.1	8.0	1.2	3.8	-9.8		
MFS Instl International Equity Fund Rank			68	25	46	18	8	1	9		

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



	Allocation	on				Perform	nance(%)				
	Market Value (\$)	%	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
Aristotle International Equity Instl	246,525	6.2	14.2	4.6	-20.9	0.4	2.5	-	-11.5	06/2021	Maintain
MSCI EAFE (Net)			17.3	6.4	-14.5	0.9	1.5	4.7	-8.8		
IM International Large Cap Core Equity (MF) Median			17.1	5.2	-15.1	8.0	1.2	3.8	-9.8		
Aristotle International Equity Instl Rank			84	59	94	57	11	-	72		
GQG Partners Emerging Markets Equity Inst	250,961	6.3	3.2	-3.9	-20.9	1.1	1.3	-	-17.1	06/2021	Discuss
MSCI Emerging Markets Growth (Net)			9.6	-3.7	-24.0	-2.9	-1.3	2.7	-22.4		
IM Emerging Markets Equity (MF) Median			9.9	-2.3	-22.4	-3.2	-1.7	1.2	-19.4		
GQG Partners Emerging Markets Equity Inst Rank			93	70	37	14	12	-	31		
Real Assets	196,741	5.0	7.5	-1.4	-6.1	-	-	-	-0.3	06/2021	
Diversified Real Asset Blended Index			8.1	-0.4	-5.1	3.9	3.6	2.6	-0.2		
Principal Diversified Real Asset R6	196,741	5.0	7.5	-1.4	-6.1	4.6	4.0	-	-0.3	06/2021	Maintain
Diversified Real Asset Blended Index			8.1	-0.4	-5.1	3.9	3.6	2.6	-0.2		



					Perform	ance(%)				
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
OPEB Plan	12.0	13.1	19.3	-6.0	15.5	4.1	0.5	5.7	10.8	8.1
Blended Benchmark	11.2	13.6	20.5	-6.2	14.9	6.7	1.0	7.7	16.3	11.6
60% S&P 500 / 40% Bloomberg Barclays Aggregate Index	15.9	14.7	22.2	-2.3	14.2	8.3	1.3	10.6	17.6	11.3
Short Term Liquidity	0.0	0.3	1.9	1.8	1.5	-	-	-	-	-
90 Day U.S. Treasury Bill	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0	0.0	0.1
Goldman Sachs Financial Square Fund	0.0	0.3	-	-	-	-	-	-	-	-
90 Day U.S. Treasury Bill	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0	0.0	0.1
Fixed Income	-1.7	7.7	8.7	0.8	3.6	3.8	1.6	5.2	-0.4	7.9
Blmbg. U.S. Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
Baird Aggregate Bond Fund Class Institutional	-1.5	8.6	9.5	-0.3	4.2	3.5	0.6	6.9	-1.3	7.9
Blmbg. U.S. Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
IM U.S. Broad Market Core Fixed Income (MF) Median	-1.3	8.2	8.8	-0.6	3.6	2.9	0.0	5.5	-2.0	6.0
Baird Aggregate Bond Fund Class Institutional Rank	58	37	27	32	22	33	19	8	24	17
Metropolitan West Total Return Bond Pl	-1.1	9.2	9.2	0.3	3.5	2.6	0.2	6.2	0.4	11.6
Blmbg. U.S. Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
IM U.S. Broad Market Core+ Fixed Income (MF) Median	-0.9	8.6	9.3	-1.0	4.5	4.1	-0.3	5.1	-1.1	8.2
Metropolitan West Total Return Bond Pl Rank	58	36	55	11	79	86	26	25	16	7
BlackRock Strategic Income Opportunities Fund K	1.0	7.3	7.8	-0.5	5.0	3.6	-0.6	3.6	3.0	9.6
Blmbg. U.S. Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
IM Alternative Credit Focus (MF) Median	1.9	3.9	7.3	-1.9	4.5	4.9	-1.6	1.0	-0.1	9.2
BlackRock Strategic Income Opportunities Fund K Rank	58	17	43	29	43	64	25	21	31	44
PIMCO High Yield Instl	4.1	5.3	14.9	-2.5	7.0	12.7	-1.9	3.3	5.8	14.6
ICE BofAML High Yield BB-B Constrained Index	4.6	6.3	15.1	-2.0	7.0	14.7	-2.8	3.5	6.3	14.6
IM U.S. High Yield Bonds (MF) Median	4.9	5.4	13.8	-3.0	6.6	13.8	-4.0	1.5	6.7	14.6
PIMCO High Yield Instl Rank	73	53	24	32	35	70	21	13	74	50

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



OPEB Plan
As of December 31, 2022

					Perform	anco(%)			or Becelling	
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Domestic Equity	25.6	22.2	30.5	-5.8	20.7	-	-	-	-	
Russell 3000 Index	25.7	20.9	31.0	-5.2	21.1	12.7	0.5	12.6	33.6	16.4
idelity 500 Index Fund	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0
S&P 500	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0
IM U.S. Large Cap Core Equity (MF) Median	26.9	18.4	30.6	-5.4	21.4	9.7	0.5	11.5	31.8	15.4
Fidelity 500 Index Fund Rank	26	50	37	32	45	20	35	18	38	41
oston Partners Small Cap Value Fund II Instl	25.8	1.6	28.0	-16.3	9.8	26.0	-4.3	4.2	34.7	22.9
Russell 2000 Value Index	28.3	4.6	22.4	-12.9	7.8	31.7	-7.5	4.2	34.5	18.1
IM U.S. Small Cap Value Equity (MF) Median	32.0	3.6	21.1	-16.1	8.5	26.7	-7.0	3.4	36.5	16.2
Boston Partners Small Cap Value Fund II Instl Rank	91	64	7	51	36	61	19	35	70	6
Conestoga Small Cap Instl	16.4	30.6	25.4	0.8	28.7	14.3	8.3	-8.0	49.3	11.0
Russell 2000 Growth Index	2.8	34.6	28.5	-9.3	22.2	11.3	-1.4	5.6	43.3	14.6
IM U.S. Small Cap Growth Equity (MF) Median	10.5	36.5	27.7	-5.6	20.7	10.1	-2.4	2.8	42.5	13.6
Conestoga Small Cap Instl Rank	27	64	63	12	14	24	2	98	11	74
nternational Equity	12.5	10.3	22.1	-14.5	26.4	-	-	-	-	
International Equity Hybrid	9.1	9.8	22.1	-15.0	26.1	-	-	-	-	•
idelity International Index Fund	11.4	8.2	22.0	-13.5	25.4	1.3	-0.7	-5.3	21.9	18.9
MSCI EAFE (Net)	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
IM International Large Cap Core Equity (MF) Median	10.7	9.1	22.1	-15.0	25.0	0.0	-1.9	-6.0	20.4	18.0
Fidelity International Index Fund Rank	36	64	52	15	43	35	26	33	26	43
IFS Instl International Equity Fund	15.2	11.1	28.4	-10.7	28.0	0.3	0.0	-4.2	18.6	22.5
MSCI EAFE (Net)	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
IM International Large Cap Core Equity (MF) Median	10.7	9.1	22.1	-15.0	25.0	0.0	-1.9	-6.0	20.4	18.0
MFS Instl International Equity Fund Rank	4	35	2	7	21	47	18	20	70	14
ristotle International Equity Instl	15.8	10.4	24.0	-9.9	22.6	-1.2	0.2	-	-	
MSCI EAFE (Net)	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
IM International Large Cap Core Equity (MF) Median	10.7	9.1	22.1	-15.0	25.0	0.0	-1.9	-6.0	20.4	18.0
Aristotle International Equity Instl Rank	4	41	28	5	83	59	17	-	-	

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



					Perform	ance(%)				
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
GQG Partners Emerging Markets Equity Inst	-2.4	34.0	21.1	-14.7	32.0	-	-	-	-	-
MSCI Emerging Markets Growth (Net)	-8.4	31.3	25.1	-18.3	46.8	7.6	-11.3	-0.3	-0.2	20.6
IM Emerging Markets Equity (MF) Median	-1.6	17.7	20.2	-16.5	35.7	8.3	-13.7	-3.0	-1.5	18.8
GQG Partners Emerging Markets Equity Inst Rank	57	11	46	32	69	-	-	-	-	-
Real Assets	-	-	-	-	-	-	-	-	-	-
Diversified Real Asset Blended Index	15.9	2.1	14.9	-7.3	10.4	12.4	-11.7	0.2	-1.2	8.7
Principal Diversified Real Asset R6	17.4	3.9	15.1	-7.8	10.2	5.9	-12.4	-	-	-
Diversified Real Asset Blended Index	15.9	2.1	14.9	-7.3	10.4	12.4	-11.7	0.2	-1.2	8.7



# **Investment Gain/Loss Summary**

OPEB Plan 1 Quarter Ending December 31, 2022

	Made AValue			Maria (Value
	Market Value as of 10/01/2022	Net Contributions	Gain/Loss	Market Value As of 12/31/2022
OPEB Plan	3,723,497	-6,733	252,679	3,969,443
Short Term Liquidity	13,338	-6,733	81	6,685
Goldman Sachs Financial Square Fund	13,338	-6,733	81	6,685
Fixed Income	1,370,974	-	28,574	1,399,548
Baird Aggregate Bond Fund Class Institutional	397,106	-	8,532	405,638
Metropolitan West Total Return Bond Pl	397,042	-	7,066	404,108
BlackRock Strategic Income Opportunities Fund K	439,706	-	7,235	446,941
PIMCO High Yield Instl	137,120	-	5,741	142,861
Domestic Equity	1,247,851	-	94,172	1,342,023
Fidelity 500 Index Fund	891,832	-	67,386	959,218
Boston Partners Small Cap Value Fund II Instl	178,549	-	16,471	195,020
Conestoga Small Cap Instl	177,470	-	10,315	187,785
International Equity	908,261	-	116,185	1,024,445
Fidelity International Index Fund	233,145	-	42,614	275,758
MFS Instl International Equity Fund	216,200	-	35,002	251,202
Aristotle International Equity Instl	215,780	-	30,745	246,525
GQG Partners Emerging Markets Equity Inst	243,136	-	7,824	250,961
Real Assets	183,073	<del>-</del>	13,669	196,741
Principal Diversified Real Asset R6	183,073	-	13,669	196,741



# **Portfolio Statistics**

OPEB Plan

As of December 31, 2022

	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Return	6.8	-15.3	2.4	3.8	5.5	4.8	05/2010
Standard Deviation	3.8	14.8	13.9	12.1	9.6	9.1	
Upside Risk	4.1	2.5	9.9	8.7	7.2	6.8	
Downside Risk	1.7	12.7	9.8	8.5	6.6	6.3	
vs. Blended Benchmark							
Alpha	-0.2	-0.4	0.1	0.0	-0.9	-1.3	
Beta	1.0	1.0	1.0	1.0	1.0	0.9	
Information Ratio	-0.3	0.0	0.1	-0.1	-0.6	-0.7	
Tracking Error	0.5	1.4	1.0	0.9	1.6	2.5	
vs. 90 Day U.S. Treasury Bill							
Sharpe Ratio	0.5	-1.1	0.2	0.3	0.5	0.5	

Calculation based on monthly periodicity.



## **Estimated Fee Analysis**

OPEB Plan

As of December 31, 2022

	Market Value (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
OPEB Plan	3,969,443	17,644	0.44
Short Term Liquidity	6,685	-	-
Goldman Sachs Financial Square Fund	6,685	-	-
Fixed Income	1,399,548	6,109	0.44
Baird Aggregate Bond Fund Class Institutional	405,638	1,217	0.30
Metropolitan West Total Return Bond Pl	404,108	1,455	0.36
BlackRock Strategic Income Opportunities Fund K	446,941	2,637	0.59
PIMCO High Yield Instl	142,861	800	0.56
Domestic Equity	1,342,023	3,765	0.28
Fidelity 500 Index Fund	959,218	144	0.02
Boston Partners Small Cap Value Fund II Instl	195,020	1,931	0.99
Conestoga Small Cap Instl	187,785	1,690	0.90
nternational Equity	1,024,445	6,236	0.61
Fidelity International Index Fund	275,758	97	0.04
MFS Instl International Equity Fund	251,202	1,708	0.68
Aristotle International Equity Instl	246,525	1,972	0.80
GQG Partners Emerging Markets Equity Inst	250,961	2,459	0.98
Real Assets	196,741	1,535	0.78
Principal Diversified Real Asset R6	196,741	1,535	0.78

Fee calculations for mutual funds represent fees at the net expense level. Fee calculations for commingled funds and/or alternative investments reflect base management fees and exclude underlying fund expenses captured at the NAV level, any applicable performance-based fees, or incentive fees. Fees for fund of funds are shown at the fund of fund level and do not include fees charged by underlying investment managers/funds.

The figures on this page have been obtained from sources we deem to be reliable. Fiducient Advisors has not independently verified this information.



Section 5 Recommended Manager Searches



# Client Investment Analysis February 2023

### **Table of Contents**

<u>Categories</u>	Pa	age	<u>s</u>
U.S. TIPS	61	-	63
U.S. High Yield	64	-	66
Global Fixed Income	67	-	69
U.S. Small Cap Value	70	-	72
Emerging Markets Value Equity	73	-	75

Note: This report is intended for the exclusive use of clients or prospective clients of Fiducient Advisors, L.L.C. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represent median expectations and actual returns, volatilities and correlations will differ from forecasts. Past performance does not indicate future performance.

### **DEFINITION OF KEY METRICS**

#### Alpha

The Alpha is the nonsystematic return, or the return that can't be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.

#### Batting Average

Batting average is a measure of a manager's consistency. It is calculated as the ratio between the number of periods that a manager outperforms a benchmark and the total number of periods observed. For example, a batting average of 0.60 implies that a manager outperformed its benchmark 6 out of 10 time periods.

#### · Beta

This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse than the market in down markets. It is important to note, however, that a low fund beta does not imply that the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).

#### · Information Ratio

The information ratio is a measure of the excess return per volatility of that excess return. This value is determined by taking the annualized excess return over a benchmark and dividing it by the standard deviation of excess return.

#### R-Squared

This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates that very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by the market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.

#### Return

Time-weighted average annual returns for the time period indicated.

#### Sharpe Ratio

The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk.

#### Volatility (or Standard Deviation)

Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning that there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.

#### Tracking Error

Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.

www.fiducientadvisors.com

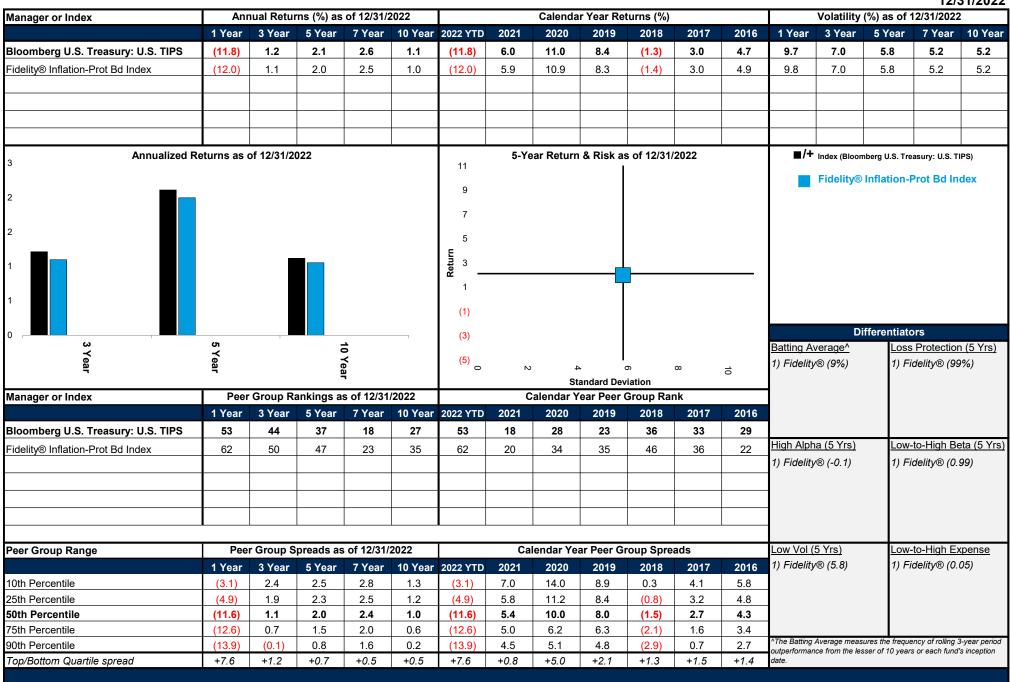
#### U.S. TIPS

U.S. TIPS	
Fund / Manager	Fidelity® Inflation-Prot Bd Index
Status	Maintain
Manager (Tenure in Years)	Team (8.7)
Net Assets (\$ Millions)	\$9,300
Firm	- Fidelity Investments is based in Boston, MA and was founded in 1946 The firm is privately held, 51% employee-owned and 49% family owned The firm has a diverse offering of strategies that span equities, fixed income, alternatives and multi-asset.
Team	- The strategy is managed by Brandon Bettencourt and Richard Munclinger.
Philosophy/Process	- Fidelity seeks to provide a low-cost index-based solution to investors looking to gain exposure to U.S. Treasury Inflation-Protected Securities ("TIPS") The portfolio seeks to track the Bloomberg US TIPS Index.
Portfolio Construction	- The strategy utilizes a full replication approach to match the key exposures and risk factors of the benchmark, including duration, maturity, and credit quality, among others.
Expense Ratio	0.05
Management Fee	N.A.
Redemption Fee	N.A.



# U.S. TIPS Return, Standard Deviation and Peer Group Comparisons

12/31/2022





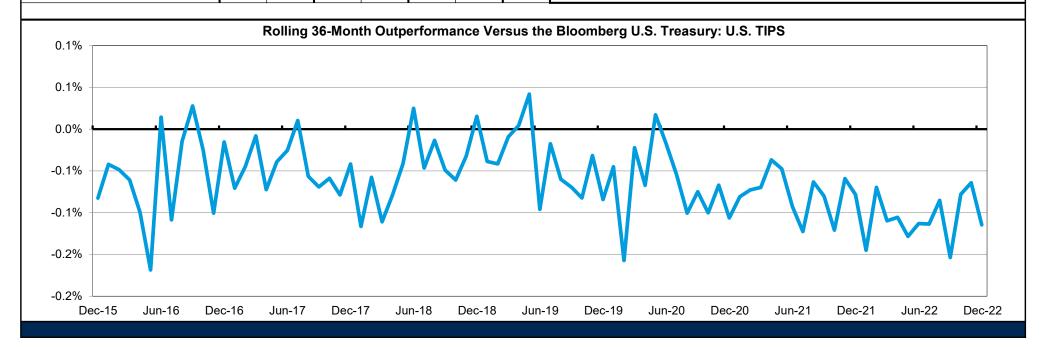
# U.S. TIPS MPT and Other Quantitative Risk and Return Metrics

12/31/2022

	Past 10-Year Metrics as of 12/31/2022								Past 5-Year Metrics as of 12/31/2022								Max Drawdowns (10 yrs)		
Managers vs. Bloomberg U.S. Treasury: U.S. TIPS	Correl /	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	1/2022 - 9/2022	5/2013 - 12/2013	9/2018 - 10/2018		
Bloomberg U.S. Treasury: U.S. TIPS	1/1	1	0	0.08	0/0	100%	100%	1/1	1	0	0.15	0/0	100%	100%	-13.6%	-9.0%	-2.5%		
Fidelity® Inflation-Prot Bd Index	1 / 0.99	1.00	(0.1)	0.06	0.5 / -0.15	100%	101%	1 / 0.99	0.99	(0.1)	0.13	0.5 / -0.25	98%	99%	-13.7%	-9.1%	-2.4%		
	Monthly	, 12-month	and 36-mo	onth batting	g averages v	s. Bloomb	erg U.S.					Graph	Legend						

Treasury: U.S. TIPS for 10 Years (or manager inception date) Managers vs. Bloomberg U.S. Treasury: U.S. TIPS 1 Month Return Start 12 Month % + 12-36 Month % + 36 Periods Periods Months Date Fidelity® Inflation-Prot Bd Index 120 46% 109 34% 9% Dec-12 85

**—** Fidelity® Inflation-Prot Bd Index



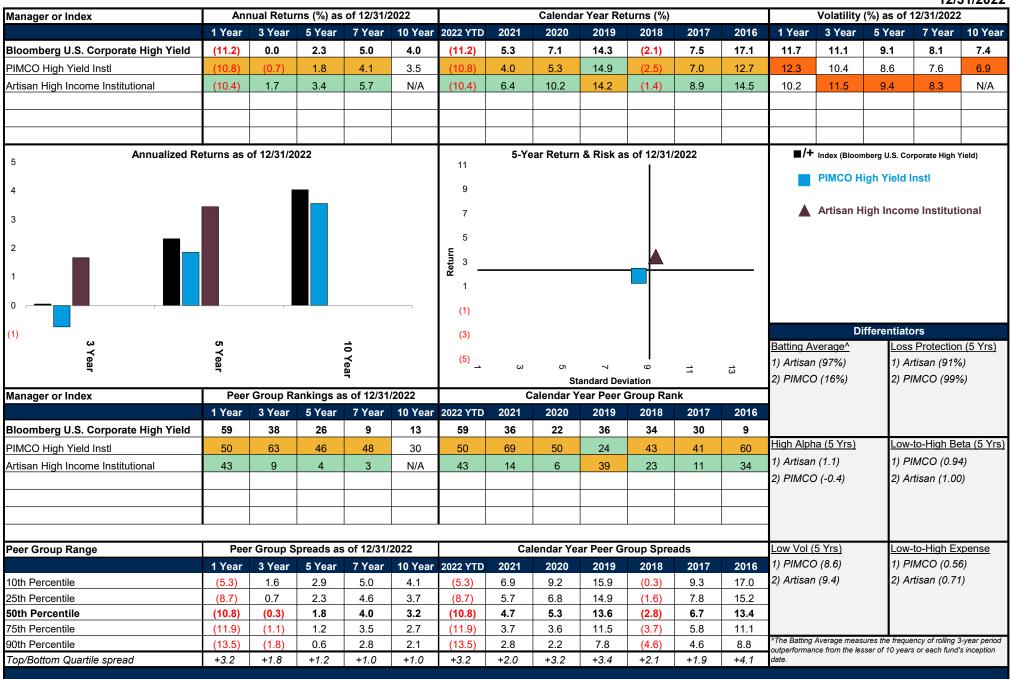
#### U.S. High Yield

Fund / Manager	PIMCO High Yield Instl	Artisan High Income Institutional
Status	Discuss	Maintain
Manager (Tenure in Years) Net Assets (\$ Millions)	Team (13) \$8,053	Team (8.8) \$5,935
Firm	PIMCO is a wholly-owned, independent subsidiary of Allianz SE.     PIMCO is one of the world's largest fixed income managers, also offering expertise across real assets and alternative investments.	-Artisan Partners, founded in 1994, is a globally diversified asset manager. Strategies are diversified across equities and fixed income asset classes and are managed by independent investment teams.
Team	- Andrew Jessop has led the high yield investment team since 2010. Mr. Jessop is supported by a deep Leveraged Finance Portfolio Management Team, which manages global portfolios.  - Portfolio managers are further supported by a global team of credit analysts and traders	- Lead portfolio manager Bryan Krug is the key decision maker and is supported by a team of credit analysts, traders and a data scientist.  - The team is relatively lean, analysts maintain generalist coverage with sector tendencies.  - To make the team more efficient, more recent hires have focused on data analytics.
Philosophy/Process	- In concert with other strategies managed at PIMCO, the high yield strategy blends top-down macro and bottom-up fundamental analysis. Top-down macro views are formulated at the firm's annual Secular Forum and reviewed at quarterly Cyclical Forums.  - Bottom-up analysis focuses on business models, cash flows, balance sheets, and security structure with a preference towards improving credits exhibiting moderate interest rate risk. Global business cycle forecasting process helps determine average maturity, portfolio quality, and cyclical versus non-cyclical industry positioning.  - Forward looking perspective helps identify credits with improving or worsening fundamentals.	-The strategy seeks relative value opportunities across the below investment grade credit universe. Investment ideas will fall under one of three themes, including core, spread tightening and opportunistic.  - Core holdings are the foundation of the portfolio and are typically higher quality with lower loan to value ratios and have a potential catalyst that should produce outsized returns relative to the benchmark.  - Spread tightening investments are primarily contrarian in nature and typically composed of firms that may have undergone spread widening due to new short-term information.  - Opportunistic positions are typically driven by shorter-term catalysts and may include out of benchmark securities.
Portfolio Construction	- The strategy exhibits a higher quality bias, benchmarking itself to a BB-rated index The portfolio will be broadly diversified across credit sector and industry and will at times include larger allocations to out-of-benchmark securities and derivatives should the market present attractive risk-adjusted return opportunities	- Portfolio construction is driven by a holistic view of the below investment grade credit universe, and will include allocations to both floating rate bank loans and fixed rate bonds Historically, the strategy allocates a majority of assets to high yield bonds Relative value analysis across industries and a company's capital structure drives security selection.
Expense Ratio	0.56	0.71
Management Fee	N.A.	N.A.
Redemption Fee	N.A.	2% (90 Days)



# U.S. High Yield Return, Standard Deviation and Peer Group Comparisons

12/31/2022





-3.0%

Dec-15

Jun-16

Dec-16

Jun-17

Dec-17

Jun-18

Dec-18

Jun-19

Dec-19

Jun-20

Dec-20

Jun-21

Dec-21

# U.S. High Yield MPT and Other Quantitative Risk and Return Metrics

12/31/2022

		Pas	t 10-Year	Metrics a	s of 12/31/2	2022			Past 5-Year Metrics as of 12/31/2022								Max Drawdowns (10 yrs)			
Managers vs. Bloomberg U.S. Corporate High Yield	Correl /	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)		DOWN Capture	1/2022 - 9/2022	2/2020 - 3/2020	6/2015 1/201			
Bloomberg U.S. Corporate High Yield	1/1	1	0	0.45	0/0	100%	100%	1/1	1	0	0.12	0/0	100%	100%	-14.7%	-12.7%	-9.7%			
PIMCO High Yield Instl	0.99 / 0.97	0.92	(0.2)	0.41	1.3 / -0.37	91%	94%	0.99 / 0.98	0.94	(0.4)	0.07	1.2 / -0.38	95%	99%	-14.4%	-11.0%	-6.2%			
Artisan High Income Institutional	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.97 / 0.93	1.00	1.1	0.23	2.4 / 0.46	102%	91%	-11.3%	-14.5%	-5.2%			
Name of the state	C-0				g averages v							Graph	Legend							
Managers vs. Bloomberg U.S. Corporate High /ield	1 Month Periods	% + Months	12 Month periods	% + 12- Months	36 Month Periods	% + 36 Months	Return Star Date	t	=			rield Inst		onal						
PIMCO High Yield Instl	120	37%	109	42%	85	16%	Dec-12	1			3									
Artisan High Income Institutional	105	64%	94	77%	70	97%	Mar-14													
								_												
								4												
4.0%	R	Rolling 3	6-Mont	h Outpo	erformar	nce Ver	sus the	Bloomb	perg U.	S. Corp	orate H	igh Yield	d				<u> </u>			
3.0%															^^	~~	_			
															/	/ ` \				
2.0%		_													<u>′</u>					
														<i>/</i>			`			
1.0%									1											
						\ /		ノ		$\times$										
0.0%													•	•	•					
-1.0%															~~		-			
-1.070																				
-2.0%																				

Dec-22

Jun-22

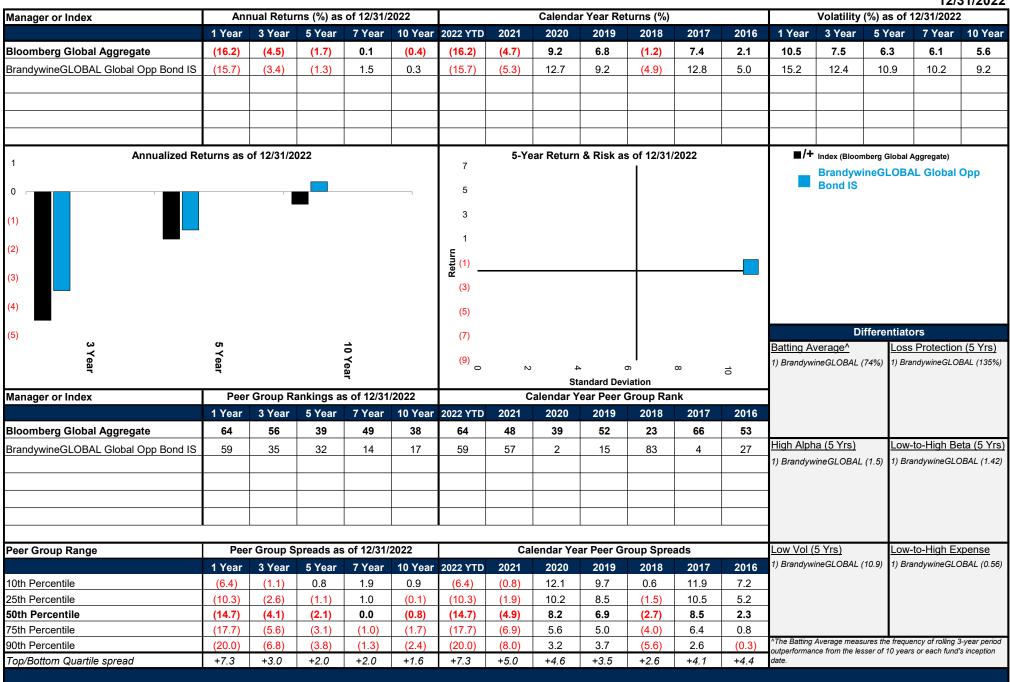
#### Global Fixed Income

Fund / Manager	Brandwins GLOBAL Clobal Opp Bond IS
rund / Manager	BrandywineGLOBAL Global Opp Bond IS
Status	Maintain
Manager (Tenure in Years) Net Assets (\$ Millions)	Team (16.2) \$1,977
Firm	Brandywine was founded in 1986 and acquired by Legg Mason in 1998.     More Recently, Legg Mason was acquired by Frankli Templeton. Brandywine operates independently, despite being wholly-owned.
Team	- The portfolio management team includes, David Hoffman, Jack McIntyre, Anujeet Sareen, Brian Kloss and Tracy Chen In addition to the portfolio management team, the strategy will incorporate insights from the Global Macro Research and Global Credit teams.
Philosophy/Process	- Brandywine employs an active, value-oriented, macridriven approach to fixed income investing.  - The team believes that active management is the most successful approach to global fixed income investing as there are methodological flaws in most global fixed income benchmarks that emphasize the largest issuers of debt.  - The primary measure of value is real yield and the team seeks to capture the highest real yields globally while maintaining strong credit fundamentals.  - The team's research has found that interest rates mean-revert over time due to their usage as economic regulators.
Portfolio Construction	- Brandywine strives to provide a portfolio of uncorrelated themes by employing macro analysis and quantitative valuation screening across a broad range of countries and currencies They do not use any quantitative measures as absolute restraints but rather indicators Position sizing for the corporate bonds will be 1-3% depending on liquidity conditions for each particular bond.
Expense Ratio	0.56
Management Fee	N.A.
Redemption Fee	N.A.



# Global Fixed Income Return, Standard Deviation and Peer Group Comparisons

12/31/2022





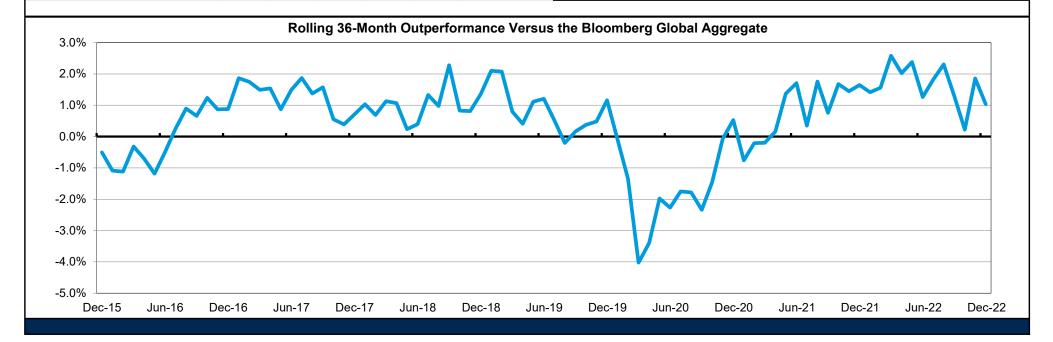
# Global Fixed Income MPT and Other Quantitative Risk and Return Metrics

12/31/2022

	Past 10-Year Metrics as of 12/31/2022								Past 5-Year Metrics as of 12/31/2022								Max Drawdowns (10 yrs)		
Managers vs. Bloomberg Global Aggregate	Correl / R <sup>2</sup>	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	1/2021 - 10/2022	7/2014 - 11/2015	10/2016 - 12/2016		
Bloomberg Global Aggregate	1/1	1	0	(0.21)	0/0	100%	100%	1/1	1	0	(0.45)	0/0	100%	100%	-24.2%	-7.7%	-7.1%		
BrandywineGLOBAL Global Opp Bond IS	0.82 / 0.67	1.36	1.2	(0.04)	5.6 / 0.14	142%	123%	0.83 / 0.68	1.42	1.5	(0.24)	6.7 / 0.05	160%	135%	-27.2%	-9.5%	-6.4%		
												Granh	Legend						



\_\_\_\_ BrandywineGLOBAL Global Opp Bond IS



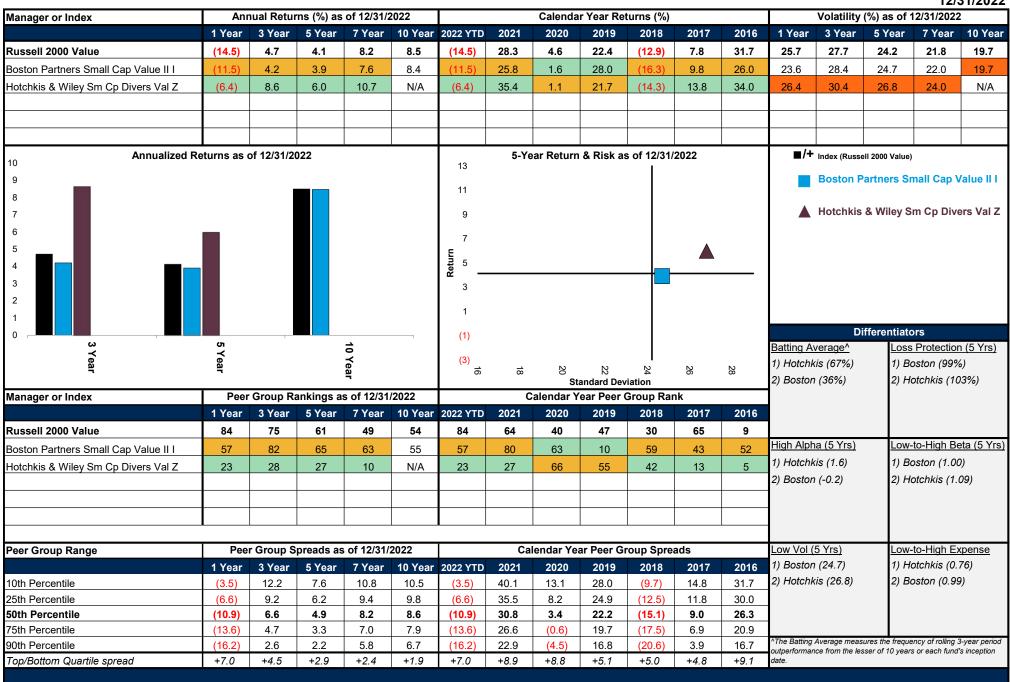
#### U.S. Small Cap Value

Fund / Manager	Boston Partners Small Cap Value II I	Hotchkis & Wiley Sm Cp Divers Val Z
Status	Watch	Maintain
Manager (Tenure in Years) Net Assets (\$ Millions)	Team (17.1) \$707	Team (8.6) \$594
Firm	- Boston Partners is a value equity specialist founded in 1995. The firm is a subsidiary of Orix Corporation.	- Hotchkis & Wiley was founded in 1980 and based in Los Angeles, CA. The firm is majority-owned by curren and past employees and manages over \$30 billion in assets.
Team	The strategy is managed by portfolio manager George Gumpert, who is supported by Boston Partners centralized research team.	- The strategy is led by Judd Peters and Ryan Thomes who are supported by a 22 person investment team that averages over 15 years with the firm.
Philosophy/Process	- The investment process begins with a quantitative screen to narrow the universe using the three circle characteristics: attractive valuation, sound business fundamentals and positive business momentum.  -The following categories of factors exemplify Boston Partners' stock selection process: 1) attractive valuation (discount to intrinsic value), 2) sound business fundamentals (favorable and sustainable returns on capital, strong competitive dynamics, higher quality growth and profitable characteristics), 3) positive business momentum (does a catalyst for change exist that will unlock value?)  - Boston Partner's fundamental work incorporates the full menu of public filings industry information and management discussions, which formulates their assessment of each company's intrinsic value and its prospects for achieving it.	The guiding philosophy of this strategy is to invest in companies where the present value of future cash flows exceeds the current market price. Capital will be allocated to companies which are currently experiencing depressed margins and ROE that have the expectation of returning to normalized levels over time.
Portfolio Construction	- The portfolio typically consists of 145-165 holdings with a maximum position size of 5%. There are no formal sector weight restrictions relative to the benchmark. However, the maximum investment in any one industry is 25%. The portfolio can hold up to 20% in micro-cap stocks.	- The portfolio will have a heavy allocation (up to 40%) to micro-cap companies with small position sizes ranging from 10 bps to 40 bps and 350-400 names
Expense Ratio	0.99	0.76
Management Fee	N.A.	N.A.
Redemption Fee	N.A.	N.A.



### U.S. Small Cap Value Return, Standard Deviation and Peer Group Comparisons

12/31/2022





# U.S. Small Cap Value MPT and Other Quantitative Risk and Return Metrics

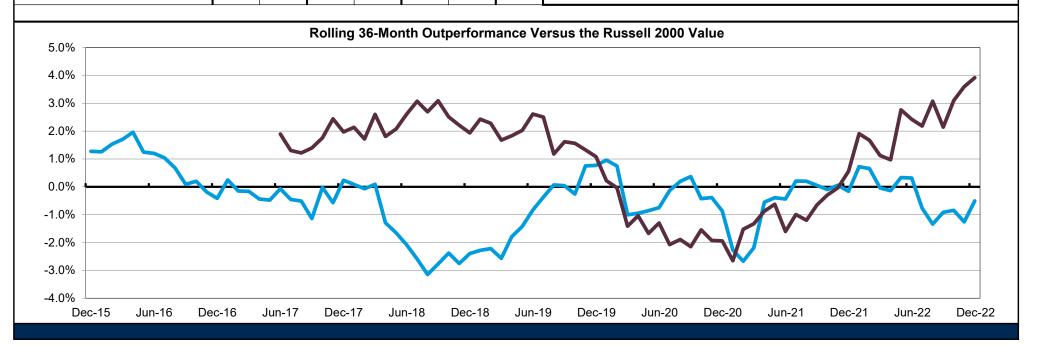
12/31/2022

		Past	t 10-Year I	Metrics as	of 12/31/2	2022			Pas	t 5-Year N	/letrics as	of 12/31/2	022		Max Dra	wdowns	(10 yrs)
Managers vs. Russell 2000 Value	Correl /	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	9/2018 - 3/2020	1/2022 - 9/2022	4/2015 - 1/2016
Russell 2000 Value	1/1	1	0	0.39	0/0	100%	100%	1/1	1	0	0.12	0/0	100%	100%	-37.5%	-21.1%	-15.4%
Boston Partners Small Cap Value II I	0.98 / 0.96	0.98	0.1	0.39	4 / -0.01	95%	96%	0.98 / 0.96	1.00	(0.2)	0.11	4.8 / -0.04	97%	99%	-38.1%	-19.0%	-13.7%
Hotchkis & Wiley Sm Cp Divers Val Z	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.98 / 0.97	1.09	1.6	0.18	5.3 / 0.35	113%	103%	-44.2%	-17.8%	-15.8%



Boston Partners Small Cap Value II I
 Hotchkis & Wiley Sm Cp Divers Val Z

**Graph Legend** 



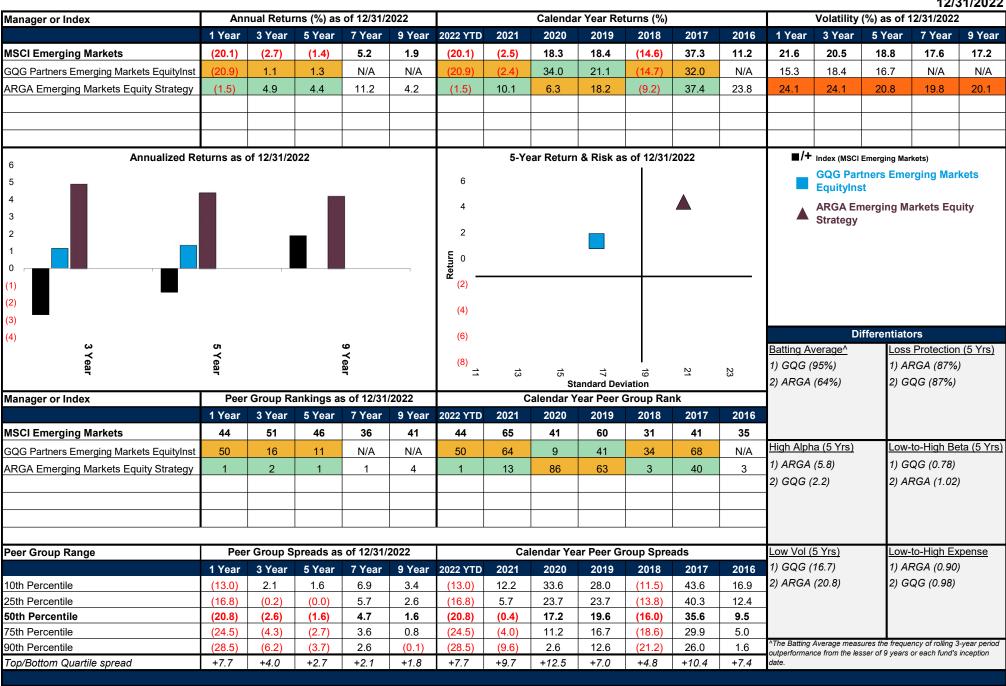
**Emerging Markets Equity** 

Emerging Markets Equity		
Fund / Manager	GQG Partners Emerging Markets EquityInst	ARGA Emerging Markets Equity Strategy
Status	Discuss	Maintain
Manager (Tenure in Years) Net Assets (\$ Millions)	Team (6.1) \$9,856	Team (1.6) \$433
Firm	- GQG Partners is based in Ft. Lauderdale, FL and majority owned by its founder and ClO, Rajiv Jain Private equity firm Pacific Current Group owns a 5% stake in the business, with a minority stake listed on the Australian Stock Exchange.	- ARGA Investment Management, LP – founded in 2013 by A. Rama Krishna – is headquarted in Stamford, Connecticut. ARGA manages value-oriented portfolios across international and global equity asset classes.
Team	- Mr. Jain is supported by a team of analysts, who conduct bottom-up fundamental research under the direction of Mr. Jain.  The team was intentionally built out with members having both differentiated and complementary backgrounds, education, and experiences.	- The strategy is managed by the Portfolio Construction Team ("PCT") consisting of three members: Chief Investment Officer Rama Krishna and Global Business Analysts Takashi Ito and Sujith Kumar.  - The PCT is supported by ARGA's Director of Research and its team of global business analysts and research associates.
Philosophy/Process	The strategy seeks to compound returns over the long-term through a portfolio of high quality, growing emerging markets companies purchased at reasonable prices.  The team pursues companies with durable earnings growth that the market may misprice due to a short-term focus and reliance on backward-looking statistics. Instead, the team's differentiated research mosaic assesses forward-looking quality, such as barriers to entry, sustainability, and industry dynamics, in order to effectively gauge a company's future prospects.  The process is designed to leverage the analysts' varied expertise which range from traditional accounting, financial, and capital structure specialists to non-traditional investigative and domain specialists.	The strategy takes a long-term perspective and employs a bottom-up, fundamentally driven approach and seeks to invest in businesses trading at a discount to intrinsic value.  The front-end screen ranks every stock in the universe on key value metrics including price to earnings, price to book, dividend yield and normalized earnings yield adjusted for return on invested capital.  The PCT and Director of Research assign the analysts companies in the cheapest quintile for fundamental research. The analysts conduct one-week research projects and present to the PCT; if the stock warrants further analysis the analyst performs a detailed research project.  The analysts determine intrinsic value using ARGA's multistage dividend discount model.
Portfolio Construction	The portfolio is fairly concentrated with 40 - 70 names, and position sizes are determined by conviction. Portfolio constraints, including a 7% limit for position sizes, a maximum 20% relative country overweight, and exposure to at least five sectors, help to ensure diversification. Key risk management considerations include diversifying risk factors and focusing on absolute volatility, not relative volatility.	- Position sizes are determined based on a stock's upside-to-downside profile and ARGA's level of conviction Initial position sizes typically range from 1% to 3% and tend to increase as ARGA builds conviction in the thesis; positions are limited to 5% of the portfolio at the time of purchase and 8% based on market value The portfolio typically holds between 35 and 80 stocks.
Expense Ratio	0.98	N.A.
Management Fee	N.A.	0.90
Redemption Fee	N.A.	N.A.



### **Emerging Markets Equity** Return, Standard Deviation and Peer Group Comparisons

12/31/2022





Dec-16

Jun-17

Dec-17

Jun-18

Dec-18

Jun-19

Dec-19

Jun-20

Dec-20

Jun-21

Dec-21

Jun-22

# Emerging Markets Core Equity MPT and Other Quantitative Risk and Return Metrics

12/31/2022

		Pas	st 9-Year N	letrics as	of 12/31/2	022			Pas	st 5-Year l	Metrics as	of 12/31/2	2022		Max Dr	awdowns	(9 yrs)
Managers vs. MSCI Emerging Markets	Correl /	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)		DOWN Capture	7/2021 - 10/2022	9/2014 - 2/2016	2/2018 3/2020
MSCI Emerging Markets	1/1	1	0	0.06	0/0	100%	100%	1/1	1	0	(0.14)	0/0	100%	100%	-36.0%	-29.8%	-28.7%
GQG Partners Emerging Markets EquityInst	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.88 / 0.77	0.78	2.2	0.01	9 / 0.3	93%	87%	-26.7%	N/A	-23.3%
ARGA Emerging Markets Equity Strategy	0.92 / 0.85	1.08	2.2	0.17	7.8 / 0.29	109%	98%	0.92 / 0.85	1.02	5.8	0.15	8 / 0.72	108%	87%	-23.1%	-38.7%	-30.8%
	Monthl				g averages v		merging					Graph	Legend				
Managers vs. MSCI Emerging Markets	1 Month Periods	% + Months	12 Month periods	% + 12- Months	36 Month Periods	% + 36 Months	Return Star Date		_			Emergi ng Mark			uitylnst ategy		
GQG Partners Emerging Markets EquityInst	72	54%	61	66%	37	95%	Dec-16										
ARGA Emerging Markets Equity Strategy	108	48%	97	58%	73	64%	Jun-13										
		Ro	olling 36	6-Month	Outper	forman	ce Ver	sus the N	/ISCI E	mergino	g Marke	ts					
10.0%					•												
8.0%																	
6.0%														Λ		~/	
					1											M	
4.0%	_					1									~		
2.0%																	
0.0%								$\lambda$ —				/-					_
-2.0%																	
-4.0%										_/_							
-6.0%																	
-8.0%																	
-10.0%																	

Dec-22





### **Historical Annual Total Return**

Annualized net returns as of 12/31/2022	Fixed Income	Equity	Real Assets	Alternatives	Past 3 Months (Not Annualized)	1-Year Return	3-Year Return	5-Year Return	7-Year Return	10-Year Return	15-Year Return	20-Year Return	25-Year Return	30-Year Return	35-Year Return
Newtown Target (A)	35%	60%	5%	0%	7.6%	-14.3%	2.5%	4.1%	6.4%	6.4%	5.4%	7.6%	6.4%	7.5%	8.2%
Proposed Mix (B)	35%	60%	5%	0%	7.5%	-14.6%	2.3%	4.0%	6.3%	6.2%	5.3%	7.5%	6.5%	7.5%	8.2%
Observation Mix (A)	45%	50%	5%	0%	6.7%	-14.1%	1.8%	3.5%	5.7%	5.5%	5.1%	7.1%	6.2%	7.2%	7.9%
Observation Mix (B)	25%	70%	5%		8.3%	-15.2%	2.9%	4.4%	7.0%	6.9%	5.5%	8.0%	6.7%	7.8%	8.5%
Cash	100%				0.9%	1.5%	0.7%	1.2%	1.0%	0.7%	0.6%	1.2%	1.8%	2.3%	2.9%
TIPS	100%				2.0%	-11.8%	1.2%	2.1%	2.6%	1.1%	3.1%	3.8%	4.8%	5.0%	5.8%
US Bond	100%				1.9%	-13.0%	-2.7%	0.0%	0.9%	1.1%	2.7%	3.1%	4.0%	4.6%	5.4%
US Bonds - Dynamic	100%				2.0%	-7.0%	-0.5%	1.4%	2.5%	2.2%	3.3%	4.0%	4.0%	4.7%	5.5%
For. Dev. Bond	100%				2.4%	-17.6%	-5.9%	-2.1%	-0.2%	-0.2%	1.5%	2.6%	3.3%	4.2%	4.6%
Global Bonds	100%				4.5%	-16.2%	-4.5%	-1.7%	0.1%	-0.4%	1.5%	2.7%	3.3%	4.0%	5.0%
HY Bond	100%				4.2%	-11.2%	0.0%	2.3%	5.0%	4.0%	6.1%	7.3%	5.9%	6.8%	7.5%
EM Bond	100%				8.5%	-11.7%	-6.1%	-2.5%	1.6%	-2.0%	1.5%	4.9%	5.7%	6.9%	7.6%
Global Equity		100%			9.9%	-18.0%	4.5%	5.8%	8.7%	8.5%	5.4%	8.6%	6.4%	7.8%	7.7%
US Equity (AC)		100%			7.2%	-19.2%	7.1%	8.8%	11.0%	12.1%	8.7%	9.9%	7.7%	9.6%	10.5%
US Equity (LC)		100%			7.6%	-18.1%	7.7%	9.4%	11.5%	12.6%	8.8%	9.8%	7.6%	9.6%	10.5%
US Equity (MC)		100%			9.2%	-17.3%	5.9%	7.1%	9.6%	11.0%	8.4%	10.8%	9.0%	10.5%	11.4%
US Equity (SC)		100%			6.2%	-20.4%	3.1%	4.1%	7.9%	9.0%	7.2%	9.4%	7.1%	8.6%	9.5%
Non-US Equity (ACWI)		100%			14.4%	-15.6%	0.5%	1.4%	5.3%	4.3%	2.0%	7.2%	5.2%	6.2%	5.6%
Int'l Dev. Equity		100%			17.4%	-14.0%	1.3%	2.0%	5.0%	5.2%	2.3%	6.9%	4.9%	6.0%	5.4%
EM Equity		100%			9.8%	-19.7%	-2.3%	-1.0%	5.6%	1.8%	1.0%	9.1%	6.2%	6.4%	9.5%
Real Estate			100%		4.1%	-24.9%	0.2%	4.4%	5.6%	7.1%	6.6%	9.4%	8.2%	9.8%	9.8%
Broad Real Assets			100%		7.3%	-9.9%	1.7%	3.0%	5.2%	3.5%	4.0%	7.2%	6.8%	6.4%	5.6%
Marketable Alternatives				100%	1.6%	-5.3%	3.7%	3.0%	3.3%	3.5%	1.7%	3.6%	3.9%	5.3%	6.9%
Private Equity				100%	0.0%	0.0%	9.8%	11.6%	11.8%	12.8%	10.2%	12.6%	13.0%	15.1%	14.4%

www.FiducientAdvisors.com 78

<sup>&</sup>lt;sup>1</sup>The expected one in a hundred worst case calendar year return based on normally distributed capital market assumptions. Greater losses are possible (1% expected likelihood).

<sup>&</sup>lt;sup>2</sup>The expected one in a hundred worst case calendar year return based on non-normally distributed capital market assumptions (factoring in skewness & kurtosis). Greater losses are possible (1% expected likelihood).

Historical Returns and Risk Metrics for each Mix represent back-tested calculations developed with the benefit of hindsight. Return calculations use an asset-weighted methodology based on the target asset allocation of each mix and the total return of index proxies used to represent each asset class and are net of fees. Historical returns are hypothetical and do not represent returns earned by a client. It is not possible to invest in an index. Please see the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information, including index proxies used to represent each asset class. Please ask for a copy of Fiducient Advisor's white paper titled 10-Year Capital Market Forecasts. Past performance does not indicate future performance and it is possible to lose money when investing.





					8												1		I				ı	l								I						-	$\neg$
Calendar Net Year Returns	Fixed Income	Equity	Real Assets	Alternatives	YTD 12/31/2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988
Newtown Target (A)	35%		5%	0%	_	11%	13%	20%	-6%	16%	9%	-1%	5%	16%	13%	-1%	13%	28%	-28%	9%	16%	8%	13%	27%	-8%	-4%	-4%	17%	12%	14%	12%	20%	1%	19%	6%	26%	-6%	21%	18%
		60%		0%				20%																															
Observation Mix (A)	45%	50%	5%	0%	-14%	9%	12%	18%	-5%	14%	8%	-2%	5%	12%	12%	1%	13%	25%	-24%	9%	15%	8%	12%	24%	-5%	-2%	-2%	14%	10%	13%	10%	20%	0%	18%	6%	25%	-3%	20%	16%
Observation Mix (B)	25%	70%	5%		-15%	13%	14%	22%	-6%	18%	9%	-2%	5%	18%	14%	-2%	14%	29%	-31%	10%	18%	9%	14%	30%	-10%	-5%	-6%	20%	11%	14%	12%	21%	1%	21%	6%	27%	-7%	23%	20%
Cash	100%				2%	0%	1%	2%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	5%	5%	3%	1%	1%	2%	4%	6%	5%	5%	5%	5%	6%	4%	3%	4%	6%	8%	9%	7%
TIPS	100%				-12%	6%	11%	8%	-1%	3%	5%	-1%	4%	-9%	7%	14%	6%	11%	-2%	12%	0%	3%	8%	8%	17%	8%	13%	2%	4%	3%	4%	18%	-3%	10%	7%	16%	9%	15%	8%
US Bond	100%				-13%	-2%	8%	9%																														15%	8%
US Bonds - Dynamic	100%				-7%	1%	5%																						6%									15%	8%
For. Dev. Bond	100%					_																							15%									0%	
Global Bonds	100%				-16%	-5%	9%	7%																															
HY Bond	100%				-11%	5%	7%	14%	-2%	8%	17%	-4%	2%	7%	16%	5%	15%	58%	-26%	2%	12%	3%	11%	29%	-1%	5%	-6%	2%	2%	13%	11%	19%	-1%	17%	16%	46%	-10%	1%	13%
EM Bond	100%							13%																										17%			-10%	1%	13%
Global Equity		100%						27%																															
US Equity (AC)		100%			-19%	26%	21%	31%	-5%	21%	13%	0%	13%	34%	16%	1%	17%	28%	-37%	5%	16%	6%	12%	31%	-22%	-11%	-7%	21%	24%	32%	22%	37%	0%	11%	10%	34%	-5%	29%	18%
US Equity (LC)		100%			-18%	29%	18%	31%	-4%	22%	12%	1%	14%	32%	16%	2%	15%	26%	-37%	5%	16%	5%	11%	29%	-22%	-12%	-9%	21%	29%	33%	23%	38%	1%	10%	8%	30%	-3%	32%	17%
US Equity (MC)		100%						31%																															
US Equity (SC)		100%			_	_	_	26%									_	_	_		_				_														_
Non-US Equity (ACWI)		100%				_		22%			-																												
Int'l Dev. Equity		100%			_	_	_	23%									_	_	_		_		_	_	_				_		_	_				_			
EM Equity		100%						19%																															
Real Estate			100%					29%																															
Broad Real Assets			100%					17%																													-6%	1%	4%
Marketable Alternatives				100%	_	-		8%					3%		_	_	_	_	+		_		_	_			4%	26%	-		_		-3%	26%	12%	14%	18%	23%	19%
Private Equity				100%	0%	0%	32%	16%	13%	16%	9%	8%	15%	23%	12%	12%	18%	10%	-20%	18%	25%	21%	22%	14%	-16%	-21%	10%	125%	21%	32%	33%	32%	14%	23%	14%	14%	4%	9%	9%

Historical Returns for each Mix based on back-tested return calculations developed with the benefit of hindsight. Return calculations use an asset-weighted methodology based on the target asset allocation of each mix and the total return of index proxies used to represent each asset class and are net of fees. Historical returns used are hypothetical and do not represent returns earned by a client. It is not possible to invest in an index. Please see the Frontier Engineer Hypothetical Performance Disclosures at the end of the presentation for additional information, including index proxies used to represent each asset class. For additional information on forecast methodologies, please ask for a copy of Fiducient Advisors' white paper titled 10-Year Capital Market Forecasts. Past performance does not indicate future performance and it is possible to lose money when investing.

www.FiducientAdvisors.com 79

# **Capital Market Assumptions**

Return & Risk Assumptions (Forecasts)	Arithmetic Return	Geometric Return	Standard Deviation	Skewness	Kurtosis
Cash	3.8%	3.8%	0.0%	0	0
TIPS	5.0%	4.6%	8.9%	-0.86	4.83
US Bond	5.3%	5.0%	7.2%	-0.65	1.95
US Bonds - Dynamic	5.8%	5.6%	6.4%	-1.01	6.58
HY Bond	8.1%	7.1%	13.7%	-1.11	8.22
Global Bonds	5.5%	5.1%	9.7%	-0.36	1.26
US Equity (LC)	8.0%	6.7%	16.6%	-0.57	0.83
US Equity (SC)	8.8%	6.5%	21.3%	-0.47	1.21
Int'l Dev. Equity	11.3%	8.9%	21.9%	-0.56	1.30
EM Equity	14.9%	10.8%	28.6%	-0.65	2.01
Broad Real Assets	7.5%	6.8%	11.7%	-1.63	8.81

Correlation Assumptions (Forecasts)	Cash	TIPS	US Bond	US Bonds - Dynamic	HY Bond	Global Bonds	US Equity (LC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Broad Real Assets
Cash	1	0	0	0	0	0	0	0	0	0	0
TIPS	0	1.00	0.77	0.53	0.35	0.68	0.14	0.09	0.18	0.19	0.56
US Bond	0	0.77	1.00	0.56	0.32	0.72	0.21	0.12	0.17	0.07	0.36
US Bonds - Dynamic	0	0.53	0.56	1.00	0.94	0.51	0.60	0.58	0.55	0.56	0.75
HY Bond	0	0.35	0.32	0.94	1.00	0.33	0.62	0.64	0.55	0.59	0.75
Global Bonds	0	0.68	0.72	0.51	0.33	1.00	0.27	0.17	0.43	0.30	0.53
US Equity (LC)	0	0.14	0.21	0.60	0.62	0.27	1.00	0.84	0.70	0.66	0.63
US Equity (SC)	0	0.09	0.12	0.58	0.64	0.17	0.84	1.00	0.63	0.66	0.64
Int'l Dev. Equity	0	0.18	0.17	0.55	0.55	0.43	0.70	0.63	1.00	0.71	0.60
EM Equity	0	0.19	0.07	0.56	0.59	0.30	0.66	0.66	0.71	1.00	0.58
Broad Real Assets	0	0.56	0.36	0.75	0.75	0.53	0.63	0.64	0.60	0.58	1.00

October 31, 2022 Twenty-Year Forecasted CMAs

<sup>\*</sup>Historical mix return calculations assume a weighted average excess return assumption of 0.5% with a Fiducient Advisors' hypothetical fee of 0.25%.

# **Indices for Past Return & Risk Metrics**

Indices used to generate historical risk and return metrics	Most Recent Index		lex tes	Linked Index 1	In Da	nde ate		Linked Index 2		dex ates	Linked Index 2		dex ates
Cash	FTSE Treasury Bill 3 Mon USD	12/22	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	<b>-</b> N.A.	N.A.	N.A.	<b>-</b> N.A.
TIPS	Bloomberg US Treasury US TIPS TR USD	12/22	3/97	Bloomberg US Agg Bond TR USD	2/97	-	1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
US Bond	Bloomberg US Agg Bond TR USD	12/22	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
US Bonds - Dynamic	*Custom Blend of Indices	12/22	2/90	Bloomberg US Agg Bond TR USD	1/90	-	1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
HY Bond	Bloomberg US Corporate High Yield TR USD	12/22	7/83	Bloomberg US Agg Bond TR USD	6/83	-	1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
Global Bonds	Bloomberg Global Aggregate TR USD	12/22	2/90	Bloomberg US Agg Bond TR USD	1/90	-	1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
US Equity (LC)	S&P 500 TR USD	12/22	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
US Equity (SC)	Russell 2000 TR USD	12/22	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
Int'l Dev. Equity	MSCI EAFE GR USD	12/22	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
EM Equity	MSCI EM GR USD	12/22	1/88	MSCI EAFE GR USD	12/87	-	1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.
Broad Real Assets	S&P Real Asset TR USD	12/22	5/05	*Custom Real Assets Index	4/05	-	1/79	N.A.	N.A.	- N.A.	N.A.	N.A.	- N.A.

<sup>\*</sup>US Bonds - Dynamic Index - 1/3 Bloomberg Gbl Agg Ex USD TR Hdg USD, 1/3 FTSE Treasury Bill 3 Mon USD & 1/3 Bloomberg US Corporate High Yield TR USD

# Frontier Engineer Hypothetical Performance Disclosures

The historical performance information derived from the Frontier Engineer and used or presented in charts, tables, or graphs represent simulated historical performance, which has been derived by retroactively applying an asset allocation modeling process in its most recently developed form with its most recently derived ten-year (forward-looking) capital market assumptions. Such historical return simulations (or back testing) was performed by simulating the combination of actual index returns for the historical period with a buy and hold strategy effective January 1, 1988 through the most recently available month-end date with simulated rebalancing occurring every month-end (with the reinvestment of dividends and capital gains from each index).

Back tested performance is hypothetical and does not reflect actual trades or actual client performance. As with all models, there are inherent limitations which are derived from the retroactive application developed with the benefit of hindsight, including the risk that certain factors such as material economic and market conditions could have contributed to materially different (either higher or lower) performance results than those depicted, or that certain material factors may have been included or excluded from consideration. As such, actual results during the applicable back tested period would have been different than those depicted.

The asset allocation modeling process currently used was initially developed in 2002, and was not offered as a strategy prior to that time. The output of a forward-looking model (or process) is a representation of allocation percentages among specific asset classes. Clients cannot invest directly in a target allocation, but rather, in underlying securities within designated asset classes. Advisor may change its models from time to time, and regularly updates its model as additional capital market assumption information becomes available or to increase or decrease relative weightings or emphasis on certain factors. Consequently, the Advisor may choose to deviate from a stated model over time as the model itself is revised, which could have a materially positive or negative impact on performance.

During the period represented, numerous modelling changes were made, including the regular changes in (ten-year) forward-looking expected returns, expected volatilities, expected non-normal return distribution assumptions, as well as tracking-error assumptions and risk budgets. Furthermore, such assumptions can be modified client-by-client depending on certain preferences, priorities, constraints or unique considerations applicable to each client.

Other economic and market factors may have impacted decision-making when using the model to manage client funds, including the list of approved asset classes by a client or client type as well as any client-directed or Advisor implemented constraints.

All investments bear the risk of loss, including the loss of principal. Past performance, actual or hypothetical, is no guarantee of future results.

The hypothetical annual Fiducient Advisors' fee is divided by 12 and subtracted from the historical monthly (index) returns. The hypothetical excess return assumption is divided by 12 and added to the historical monthly (index) returns. Furthermore, for forecasted total portfolio (index-based) annual returns based on capital market assumptions, the annual Fiducient Advisors' fee assumption is subtracted from the hypothetical annual manager excess return assumption. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

# •

## **Disclosures**

#### **INDEX DEFINITIONS**

FTSE Treasury Bill 3 Month measures return equivalents of yield averages and are not marked to market. It is an average of the last three three-month Treasury bill month-end rates.

Bloomberg Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.

Bloomberg Muni 5 Year Index is the 5 year (4-6) component of the Municipal Bond index.

Bloomberg High Yield Municipal Bond Index covers the universe of fixed rate, non-investment grade debt.

**Bloomberg U.S.** Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

FTSE World Government Bond Index (WGBI) (Unhedged) provides a broad benchmark for the global sovereign fixed income market by measuring the performance of fixed-rate, local currency, investment-grade sovereign debt from over 20 countries.

FTSE World Government Bond Index (WGBI) (Hedged) is designed to represent the FTSE WGBI without the impact of local currency exchange rate fluctuations.

Bloomberg US Corporate High Yield TR USD covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.

JP Morgan Government Bond Index-Emerging Market Index (GBI-EMI) is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.

**JPMorgan EMBI Global Diversified** is an unmanaged, market-capitalization weighted, total-return index tracking the traded market for U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

MSCI ACWI is designed to represent performance of the full opportunity set of large- and mid-cap stocks across multiple developed and emerging markets, including cross-market tax incentives.

The S&P 500 is a capitalization-weighted index designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.

Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.

Russell 2000 consists of the 2.000 smallest U.S. companies in the Russell 3000 index.

MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Emerging Markets captures large and mid-cap representation across Emerging Markets countries. The index covers approximately 85% of the free-float adjusted market capitalization in each country

The Wilshire US Real Estate Securities Index (Wilshire US RESI) is comprised of publicly-traded real estate equity securities and designed to offer a market-based index that is more reflective of real estate held by pension funds.

Alerian MLP Index is a float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.

Bloomberg Commodity Index (BCI) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.

Treasury Inflation-Protected Securities (TIPS) are Treasury bonds that are indexed to inflation to protect investors from the negative effects of rising prices. The principal value of TIPS rises as inflation rises.

HFRI Fund of Funds Composite is an equal-weighted index consisting of over 800 constituent hedge funds, including both domestic and offshore funds.

Cambridge Associates U.S. Private Equity Index (67% Buyout vs. 33% Venture) is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.

**HFN Hedge Fund Aggregate Average** is an equal weighted average of all hedge funds and CTA/managed futures products reporting to the HFN Database. Constituents are aggregated from each of the HFN Strategy Specific Indices.

Goldman Sachs Commodity Index (GSCI) is a broadly diversified, unleveraged, long-only composite index of commodities that measures the performance of the commodity market.

# **Definitions & Disclosures**

Please note: Due to rounding methodologies of various data providers, certain returns in this report might differ slightly when compared to other sources

#### REGULATORY DISCLOSURES

Offer of ADV Part 2A: Rule 204-3 under the Investment Advisers Act of 1940 requires that we make an annual offer to clients to send them, without charge, a written disclosure statement meeting the requirements of such rule. We will be glad to send a copy of our ADV Part 2A to you upon your written request to <a href="mailto:compliance@fiducient.com">compliance@fiducient.com</a>.

#### INDEX DEFINITIONS

- Citigroup 3 Month T-Bill measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- Ryan 3 Yr. GIC is an arithmetic mean of market rates of \$1 million Guaranteed Interest Contracts held for three years.
- Bloomberg Treasury U.S. T-Bills-1-3 Month Index includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- Bloomberg Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.
- Bloomberg Muni Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- Bloomberg Muni 1 Year Index is the 1-year (1-2) component of the Municipal Bond index.
- Bloomberg Muni 3 Year Index is the 3-year (2-4) component of the Municipal Bond index.
- Bloomberg Muni 5 Year Index is the 5-year (4-6) component of the Municipal Bond index.
- Bloomberg Muni 7 Year Index is the 7-year (6-8) component of the Municipal Bond index.
- **Bloomberg Intermediate U.S. Gov't/Credit** is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.
- Bloomberg U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
- Bloomberg Global Aggregate ex. USD Indices represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- Bloomberg U.S. Corporate High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- The S&P 500 is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- The Dow Jones Industrial Index is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- The NASDAQ is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- Russell 1000 consists of the largest 1000 companies in the Russell 3000 Index.
- Russell 1000 Growth measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 1000 Value measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.
- Russell Mid Cap Growth measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- Russell Mid Cap Value measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.
- Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- Russell 2000 Growth measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2000 Value measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- Russell 2500 consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- Russell 2500 Growth measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2500 Value measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- MSCI World captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI ACWI (All Country World Index) ex. U.S. Index captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

- MSCI EAFE Value captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float- adjusted market capitalization of the MSCI EAFE Index.
- MSCI EAFE Growth captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI Emerging Markets captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- Consumer Price Index is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- FTSE NAREIT Equity REITs Index contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- S&P Developed World Property defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **S&P Developed World Property x U.S.** defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- Fund Specific Broad Real Asset Benchmarks:
  - DWS Real Assets: 30%: Dow Jones Brookfield Infrastructure Index, 30%: FTSE EPRA/NAREIT Developed Index,15%: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10%: U.S. Treasury Inflation Notes Total Return Index
  - PIMCO Inflation Response Multi Asset Fund: 45% Bloomberg U.S. TIPS, 20% Bloomberg Commodity Index, 15% JP Morgan Emerging Local Markets Plus, 10% Dow Jones Select REIT, 10% Bloomberg Gold Subindex Total Return
  - Principal Diversified Real Assets: 35% BBgBarc U.S. Treasury TIPS Index, 20% S&P Global Infrastructure Index NTR, 20% S&P Global Natural Resources Index NTR, 15% Bloomberg Commodity Index, and 10% FTSE EPRA/NAREIT Developed Index NTR
  - Wellington Diversified Inflation H: 50% MSCI ACWI Commodity Producers Index, 25% Bloomberg Commodity Index, and 25% Bloomberg Bloomberg US TIPS 1 10 Year Index
- Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- The Alerian MLP Index is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- The Adjusted Alerian MLP Index is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.
- Cambridge Associates U.S. Private Equity Index is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.
- Cambridge Associates U.S. Venture Capital Index is based on data compiled from over 1,600 institutional-quality venture capital funds formed between 1986 and 2015.
- Vanguard Spliced Bloomberg US1-5Yr Gov/Cr Flt Adj Index: Bloomberg U.S. 1–5 Year Government/Credit Bond Index through December 31, 2009; Bloomberg U.S. 1–5 Year Government/Credit Float Adjusted Index thereafter.
- Vanguard Spliced Bloomberg US5-10Yr Gov/Cr Fit Adj Index: Bloomberg U.S. 5–10 Year Government/Credit Bond Index through December 31, 2009; Bloomberg U.S. 5–10 Year Government/Credit Float Adjusted Index thereafter.
- Vanguard Spliced Bloomberg US Agg Flt Adj Index: Bloomberg U.S. Aggregate Bond Index through December 31, 2009; Bloomberg U.S. Aggregate Float Adjusted Index thereafter.
- Vanguard Spliced Bloomberg US. Long Gov/Cr Flt Adj Index: Bloomberg U.S. Long Government/Credit Bond Index through December 31, 2009; Bloomberg U.S. Long Government/Credit Float Adjusted Index thereafter.
- Vanguard Balanced Composite Index: Made up of two unmanaged benchmarks, weighted 60% Dow Jones U.S. Total Stock Market Index (formerly the Dow Jones Wilshire 5000 Index) and 40% Bloomberg U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Bloomberg U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through Jan
- Vanguard Spliced Intermediate-Term Tax-Exempt Index: Bloomberg 1–15 Year Municipal Bond Index.
- Vanguard Spliced Extended Market Index: Dow Jones Wilshire 4500 Index through June 17, 2005; S&P Transitional Completion Index through September 16, 2005; S&P Completion Index thereafter.
- Vanguard Spliced Value Index: S&P 500 Value Index (formerly the S&P 500/Barra Value Index) through May 16, 2003; MSCI US Prime Market Value Index through April 16, 2013; CRSP US Large Cap Value Index thereafter.
- Vanguard Spliced Large Cap Index: Consists of MSCI US Prime Market 750 Index through January 30, 2013, and the CRSP US Large Cap Index thereafter.
- Vanguard Spliced Growth Index: S&P 500 Growth Index (formerly the S&P 500/Barra Growth Index) through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index thereafter.
- Vanguard Spliced Mid Cap Value Index: MSCI US Mid Cap Value Index through April 16, 2013; CRSP US Mid Cap Value Index thereafter.
- Vanguard Spliced Mid Cap Index: S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter.
- Vanguard Spliced Mid Cap Growth Index: MSCI US Mid Cap Growth Index through April 16, 2013; CRSP US Mid Cap Growth Index thereafter.
- Vanguard Spliced Total Stock Market Index: Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005; MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.
- Vanguard Spliced Small Cap Value Index: SmallCap 600 Value Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Value Index through April 16, 2013; CRSP US Small Cap Value Index thereafter.

- Vanguard Spliced Small Cap Index: Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter.
- Vanguard Spliced Small Cap Growth Index: S&P SmallCap 600 Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index through April 16, 2013; CRSP US Small Cap Growth Index thereafter.
- Vanguard Spliced Total International Stock Index: Consists of the Total International Composite Index through August 31, 2006; the MSCI EAFE + Emerging Markets Index through December 15, 2010; the MSCI ACWI ex USA IMI Index through June 2, 2013; and FTSE Global All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- Vanguard Spliced Developed Markets Index: MSCI EAFE Index through May 28, 2013; FTSE Developed ex North America Index through December 20, 2015; FTSE Developed All Cap ex US Transition Index through May 31, 2016; FTSE Developed All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- Vanguard Spliced Emerging Markets Index: Select Emerging Markets Index through August 23, 2006; MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; and FTSE Emerging Markets All Cap China A Transition Index thereafter. Benchmark returns are adjusted for withholding taxes.
- Vanguard REIT Spliced Index: MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through January 31, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

#### Additional:

- Equity sector returns are calculated by Russell and MSCI for domestic and international markets, respectively. MSCI sector definitions correspond to the MSCI GICS® classification (Global Industry Classification System); Russell uses its own sector and industry classifications.
- MSCI country returns are calculated by MSCI and are free float-adjusted market capitalization indices that are designed to measure equity market performance in each specific country.
- Currency returns are calculated using Bloomberg's historical spot rate indices and are calculated using the U.S. dollar as the base currency.
- The Index of Leading Economic Indicators, calculated by The Conference Board, is used as a barometer of economic activity over a range of three to six months. The index is used to determine the direction and stability of the economy. The composite index of leading indicators, which is derived from 10 leading indicators, helps to signal turning points in the economy and forecast economic cycles. The leading indicators are the following: average weekly hours, average weekly initial claims, manufacturers' new orders, both consumer and non-defense capital goods, vendor performance, building permits, stock prices, money supply (M2), the interest rate spread and the index of consumer expectations.
- S&P Target Date Indexes are constructed using a survey method of current target date investments with \$100 million or more in assets under management. Allocations for each vintage are comprised of exchange-traded-funds that represent respective asset classes used in target date portfolios. The indexes are designed to represent a market consensus glide path.

#### **DEFINITION OF KEY STATISTICS AND TERMS**

- Returns: A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- Universe Comparison: The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- Returns In Up/Down Markets: This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up market capture ratio is the ratio of the fund's return in up markets to the index. The down market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.
- Standard Deviation: Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- R-Squared: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- **Beta**: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse that the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- Alpha: The Alpha is the nonsystematic return, or the return that can't be attributed to the market. It can be thought of as how the <u>manager</u> performed if the market's return was zero. A <u>positive</u> alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- Sharpe Ratio: The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The <a href="higher-the-sharpe-ratio">higher-the-sharpe-ratio</a>, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- Treynor Ratio: The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns rather than the standard deviation of portfolio returns. High values mean better return for risk taken.

- Tracking Error: Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- Information Ratio: The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- Consistency: Consistency shows the percent of the periods the fund has beaten the index and the percent of the periods the index has beat the fund. A high average for the fund (e.g., over 50) is desirable, indicating the fund has beaten the index frequently.
- **Downside Risk:** Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.
- M-Squared: M-squared, or the Modigliani risk-adjusted performance measure is used to characterize how well a portfolio's return rewards an investor for the amount of risk taken, relative to that of some benchmark portfolio and to the risk-free rate.

#### **DEFINITION OF KEY PRIVATE EQUITY TERMS**

- PIC (Paid in Capital): The amount of committed capital that has been transferred from the limited partner to the general partner.
- TVPI (Total Value to Paid in Capital): Money returned to limited partners plus the fund's unrealized investments, divided by money paid-in to the partnership. The TVPI should equal RVPI plus DPI.
- DPI (Distribution to Paid In Capital): Money returned (distributions) to limited partners divided by money paid in to the partnership. Also called cash-on-cash multiple.
- RVPI (Residual Value to Paid In Capital): The value of a fund's unrealized investments divided by money paid-in to the partnership.
- Internal rate of return (IRR): This is the most appropriate performance benchmark for private equity investments. It is a time-weighted return expressed as a percentage. IRR uses the present sum of cash drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount.
- Commitment: Every investor in a private equity fund commits to investing a specified sum of money in the fund partnership over a specified period of time. The fund records this as the limited partnership's capital commitment. The sum of capital commitments is equal to the size of the fund.
- Capital Distribution: These are the returns that an investor in a private equity fund receives. It is the income and capital realized from investments less expenses and liabilities. Once a limited partner has had their cost of investment returned, further distributions are actual profit. The partnership agreement determines the timing of distributions to the limited partner. It will also determine how profits are divided among the limited partners and general partner.
- Carried Interest: The share of profits that the fund manager is due once it has returned the cost of investment to investors. Carried interest is normally expressed as a percentage of the total profits of the fund.
- **Co-Investment**: Co-Investments are minority investments made alongside a private equity investor in an LBO, a recapitalization, or an expansion capital transaction. It is a passive, non-controlling investment, as the private equity firm involved will typically exercise control and perform monitoring functions.
- General Partner (GP): This can refer to the top-ranking partners at a private equity firm as well as the firm managing the private equity fund.
- **GP Commitments:** It is normal practice for the GP managing a private equity fund to also make a financial commitment to the fund on the same basis as the LPs in the fund, and this is seen as an important factor driving the alignment of GP and LP interests. The historic benchmark for GP commitments has been 1% of the total fund size, but this is by no means universal, and many GPs commit significantly larger amounts. Furthermore, there has been a marked trend towards GPs making larger commitments to their funds over recent years.
- Leveraged Buy-Out (LBO): The acquisition of a company using debt and equity finance.
- Limited Partner (LP): Institutions or high-net-worth individuals/sophisticated investors that contribute capital to a private equity fund.
- Public Market Equivalent (PME): Performance measure used to evaluate performance relative to the market. It is calculated as the ratio of the discounted value of the LP's inflows divided by the discounted value of outflows, with the discounting performed using realized market returns.
- **Primaries:** An original investment vehicle that invests directly into a company or asset.

#### **VALUATION POLICY**

Fiducient Advisors does not engage an independent third-party pricing service to value securities. Our reports are generated using the security prices provided by custodians used by our clients. Our custodial pricing hierarchy is available upon request. If a client holds a security not reported by the first custodian within the hierarchy, the valuation is generated from the next custodian within the hierarchy, and so forth. Each custodian uses pricing services from outside vendors, where the vendors may generate nominally different prices. Therefore, this report can reflect minor valuation differences from those contained in a custodian's report. In rare instances where FA overrides a custodial price, prices are taken from Bloomberg.

#### REPORTING POLICY

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss. Performance calculated net of investment fees. Certain portfolios presented may be gross of Fiducient Advisors' fees and actual performance would be reduced by investment advisory fees. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Custodian reports are the reports that govern the account. There will be different account values between Fiducient Advisors' reports and the custodian reports based on whether the report utilizes trade date or settlement date to calculate value. Additionally, difference between values contained on reports may be caused by different accrued income values. Any forecasts represent future expectations and actual returns, volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is a possibility of aloss.

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Unless specified otherwise, all returns are net of individual manager fees, represent total returns and are annualized for periods greater than one year. The deduction of fees produces a compounding effect that reduces the total rate of return over time. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be \$5,228 in the first year, and cumulative effects of \$30,342 over five years and \$73,826 over ten years. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

#### **MATERIAL RISKS & LIMITATIONS**

Fixed Income securities are subject to interest rate risks, the risk of default and liquidity risk. U.S. investors exposed to non-U.S. fixed income may also be subject to currency risk and fluctuations. -Liability Driven Investing (LDI) Assets

**Cash** may be subject to the loss of principal and over longer period of time may lose purchasing power due to inflation. -Short Term Liquidity

**Domestic Equity** can be volatile. The rise or fall in prices take place for a number of reasons including, but not limited to changes to underlying company conditions, sector or industry factors, or other macro events. These may happen quickly and unpredictably.

International Equity can be volatile. The rise or fall in prices take place for a number of reasons including, but not limited to changes to underlying company conditions, sector or industry impacts, or other macro events. These may happen quickly and unpredictably. International equity allocations may also be impact by currency and/or country specific risks which may result in lower liquidity in some markets.

Real Assets can be volatile and may include asset segments that may have greater volatility than investment in traditional equity securities. Such volatility could be influenced by a myriad of factors including, but not limited to overall market volatility, changes in interest rates, political and regulatory developments, or other exogenous events like weather or natural disaster.

**Private Equity** involves higher risk and is suitable only for sophisticated investors. Along with traditional equity market risks, private equity investments are also subject to higher fees, lower liquidity and the potential for leverage that may amplify volatility and/or the potential loss of capital.

**Private Credit** involves higher risk and is suitable only for sophisticated investors. These assets are subject to interest rate risks, the riskof default and limited liquidity. U.S. investors exposed to non-U.S. private credit may also be subject to currency risk and fluctuations.

**Private Real Estate** involves higher risk and is suitable only for sophisticated investors. Real estate assets can be volatile and may include unique risks to the asset class like leverage and/or industry, sector or geographical concentration. Declines in real estate value may take place for a number of reasons including, but are not limited to economic conditions, change in condition of the underlying property or defaults by the borrow.

Marketable Alternatives involves higher risk and is suitable only for sophisticated investors. Along with traditional market risks, marketable alternatives are also subject to higher fees, lower liquidity and the potential for leverage that may amplify volatility or the potential for loss of capital. Additionally, short selling involved certain risks including, but not limited to additional costs, and the potential for unlimited loss on certain short sale positions.

#### OTHER

By regulation, closed-end funds utilizing debt for leverage must report their interest expense, as well as their income tax expense, as part of their total expense ratio. To make for a useful comparison between closed-end funds and both open-end funds and exchange-traded funds, adjusted expense ratios excluding interest and income tax expenses are utilized for closed-end funds within this report. See disclosure on closed-end fund fact sheets for information regarding the total expense ratio of each closed-end fund.

Please advise us of any changes in your objectives or circumstances.

#### **CUSTODIAN STATEMENTS**

Please remember to review the periodic statements you receive from you custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact FA or your custodian immediately.



Newtown, CT

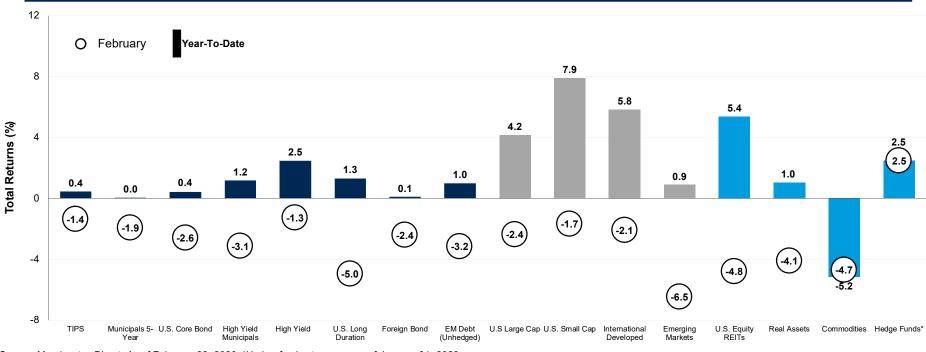
Monthly Performance Update - February 2023

This report is intended for the exclusive use of clients or prospective clients (the "recipient") of Fiducient Advisors and the information contained herein is confidential and the dissemination or distribution to any other person without the prior approval of Fiducient Advisors is strictly prohibited. Information has been obtained from sources believed to be reliable, though not independently verified. Any forecasts are hypothetical and represent future expectations and not actual return volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. The opinions and analysis expressed herein are based on Fiducient Advisor research and professional experience and are expressed as of the date of this report.

Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is risk of loss.

### **Asset Class Performance**





Source: Morningstar Direct. As of February 28, 2023. \*Hedge fund returns are as of January 31, 2023.

#### **Fixed Income (February)**

- Interest rates rose as market expectations "caught up" with Federal Reserve projections. A strong jobs report and a January inflation reading that was higher than expected influenced the reset.
- High yield spreads tightened modestly during the month and higher coupons helped to offset the negative price impact from interest rates leading to HY outpacing the broader fixed income market.
- Non-U.S. debt was not immune to rising rates, and a strengthening U.S. dollar was an added headwind.

#### **Equity (February)**

- Elevated inflation and a strong labor market were drivers of lower equity returns, as investors digested the data and expectations of further Fed actions grew.
- A move higher in interest rates helped fuel a rally in the U.S. dollar, negatively impacting international performance for U.S. dollar-based investors.
- Emerging markets lagged developed, as China and Brazil, two large components of the benchmark came under pressure.

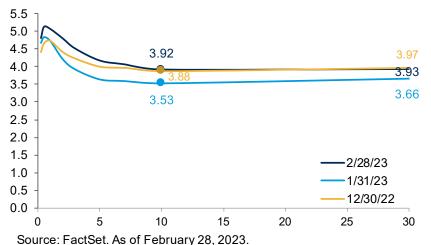
#### Real Asset / Alternatives (February)

- REITs took a step back alongside the broader equity market, weakness in office and lodging were large detractors.
- The commodity complex declined in the month. All underlying sub-sectors were negative, with particular weakness in industrial metals.
- + Hedge funds, reported on a month lag, had a positive January. Long-short managers benefitted from the risk on market last month.

# **Fixed Income Market Update**

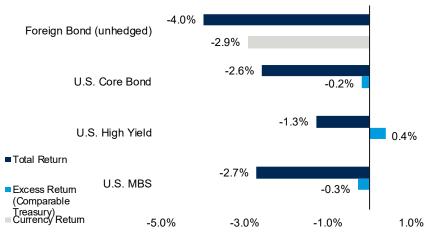
#### **U.S. Treasury Yield Curve**

Rates rose across the yield curve and the curve became more inverted (10yr – 2yr spread) as the Federal Reserve raised its target by 25 basis points. Higher than expected inflation in January and a strong job market fueled the move in rates.



#### **Index Performance Attribution (February 2023)**

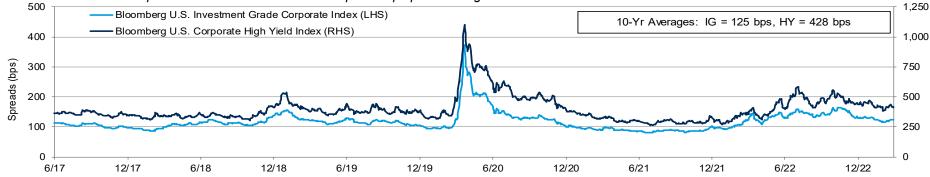
Favorable fundamentals in the high yield space – declining leverage, high interest coverage ratios – helped the sector outperform during February. A strengthening U.S. dollar negatively impacted non-U.S. debt.



Source: FactSet. As of February 28, 2023.

### **Credit Market Spreads – Trailing 5 Years**

Corporate credit spreads ended the month essentially where they began, with modest widening of investment grade spreads (+7 bps) and slight tightening of high yield spreads (-8 bps). Despite slowing earnings growth and the prospect of higher terminal rates than the market originally thought, overall fundamentals remain positive and market technicals helped keep spreads rangebound.

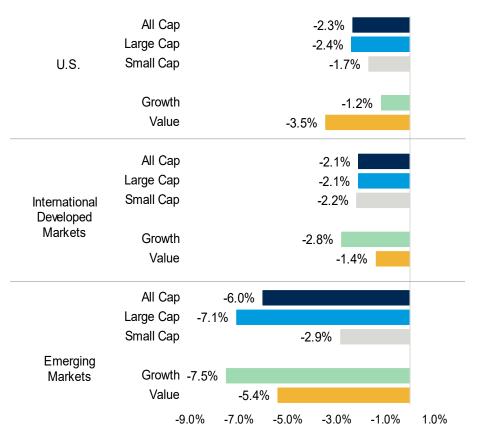


Source: FactSet. As of February 28, 2023.

## **Equity Market Update**

#### Market Capitalization & Style Performance (February 2023)

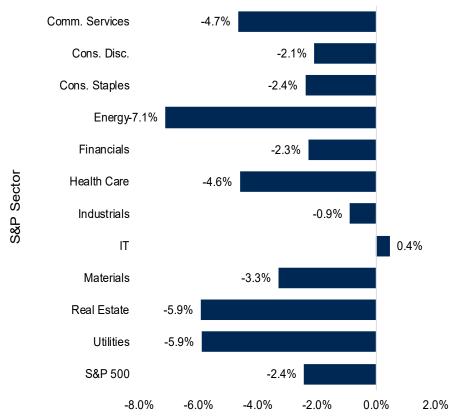
Growth stocks outperformed value stocks within the U.S., driven by relatively strong performance in technology. Abroad, value equities edged out growth. China was the main culprit of negative performance in emerging markets.



Source: Morningstar Direct. As of February 28, 2023.

#### U.S. Equities – Returns by Sector (February 2023)

The information technology sector was the lone positive sector in the S&P 500 in February, with standout names such as NVIDIA, Apple and Microsoft driving returns. Energy, the standout sector from 2022, fell as commodities prices took a step back.

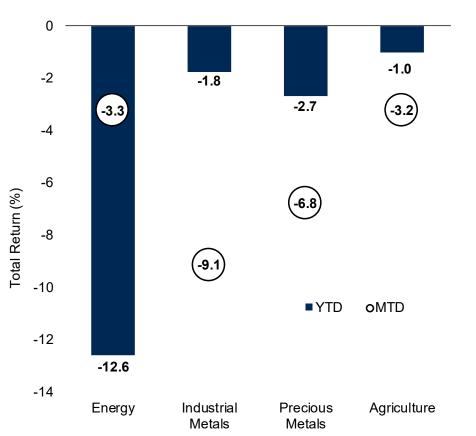


Source: Morningstar Direct. As of February 28, 2023.

# **Real Asset Market Update**

#### **Real Assets Performance (February 2023)**

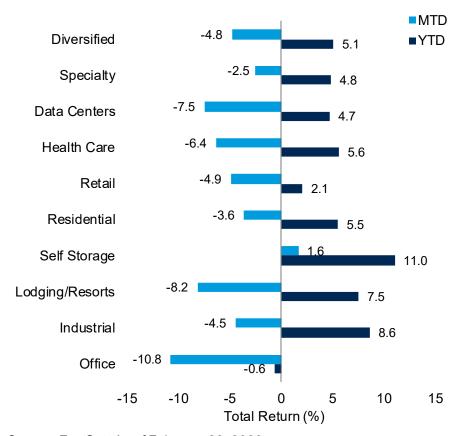
Commodities were broadly negative during February with metals and energy dragging returns lower. Falling electric automobile demand and projections of tighter monetary policy raising the opportunity cost of holding precious metals investments caused lithium and silver to fall, respectively.



Source: FactSet. As of February 28, 2023.

#### **REIT Sector Performance (February 2023)**

REITS were not immune to the risk-off market environment during the month. A cooling housing market, rising interest rates, and concerns about office vacancy were headwinds for the asset class.



Source: FactSet. As of February 28, 2023.

## **Financial Markets Performance**

#### **Financial Markets Performance**

Total Return as of February 28, 2023 Periods greater than one year are annualized All returns are in U.S. dollar terms

		7117 7 01017	ns are in o.s. don	u. (c				
Global Fixed Income Markets	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg 1-3-Month T-Bill	0.3%	0.7%	2.2%	0.8%	1.3%	1.1%	0.8%	0.6%
Bloomberg U.S. TIPS	-1.4%	0.4%	-10.4%	0.2%	2.6%	2.3%	1.2%	2.7%
Bloomberg Municipal Bond (5 Year)	-1.9%	0.0%	-2.5%	-0.9%	1.3%	1.1%	1.4%	2.8%
Bloomberg High Yield Municipal Bond	-3.1%	1.2%	-9.4%	-1.7%	3.1%	3.6%	3.5%	4.7%
Bloomberg U.S. Aggregate	-2.6%	0.4%	-9.7%	-3.8%	0.5%	0.7%	1.1%	2.6%
Bloomberg U.S. Corporate High Yield	-1.3%	2.5%	-5.5%	1.3%	2.9%	5.6%	4.1%	6.5%
Bloomberg Global Aggregate ex-U.S. Hedged	-0.8%	0.8%	-6.7%	-3.1%	0.7%	1.1%	2.2%	2.9%
Bloomberg Global Aggregate ex-U.S. Unhedged	-4.0%	-0.6%	-16.7%	-6.3%	-3.6%	-1.2%	-1.4%	0.1%
Bloomberg U.S. Long Gov / Credit	-5.0%	1.3%	-20.3%	-8.6%	0.1%	1.1%	1.9%	4.4%
JPMorgan GBI-EM Global Diversified	-3.2%	1.0%	-6.1%	-4.3%	-3.0%	1.5%	-2.0%	1.4%
Global Equity Markets	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
S&P 500	-2.4%	3.7%	-7.7%	12.2%	9.8%	12.9%	12.3%	9.8%
Dow Jones Industrial Average	-3.9%	-1.1%	-1.6%	11.0%	7.8%	12.7%	11.3%	9.4%
NASDAQ Composite	-1.0%	9.6%	-16.0%	11.0%	10.5%	15.2%	14.9%	12.6%
Russell 3000	-2.3%	4.4%	-8.1%	11.8%	9.4%	12.7%	11.9%	9.7%
Russell 1000	-2.4%	4.2%	-8.2%	11.9%	9.7%	12.8%	12.1%	9.7%
Russell 1000 Growth	-1.2%	7.0%	-13.3%	12.1%	11.5%	15.0%	14.3%	11.6%
Russell 1000 Value	-3.5%	1.5%	-2.8%	11.0%	7.2%	10.2%	9.6%	7.7%
Russell Mid Cap	-2.4%	5.7%	-5.0%	11.5%	8.4%	11.4%	10.7%	9.5%
Russell Mid Cap Growth	-1.0%	7.7%	-8.3%	8.7%	8.7%	12.1%	11.5%	9.9%
Russell Mid Cap Value	-3.2%	4.6%	-3.4%	12.0%	7.3%	10.2%	9.6%	8.9%
Russell 2000	-1.7%	7.9%	-6.0%	10.1%	6.0%	10.5%	9.1%	8.5%
Russell 2000 Growth	-1.1%	8.8%	-7.9%	6.5%	5.1%	10.3%	9.3%	8.8%
Russell 2000 Value	-2.3%	7.0%	-4.4%	12.9%	6.4%	10.3%	8.5%	7.9%
MSCI ACWI	-2.9%	4.1%	-8.3%	8.8%	5.8%	9.8%	7.9%	5.7%
MSCI ACWI ex. U.S.	-3.5%	4.3%	-7.2%	5.3%	1.6%	6.7%	3.9%	2.3%
MSCI EAFE	-2.1%	5.8%	-3.1%	6.8%	2.6%	6.8%	4.8%	2.8%
MSCI EAFE Growth	-2.8%	5.5%	-7.2%	5.6%	3.5%	7.1%	5.6%	3.5%
MSCI EAFE Value	-1.4%	6.2%	0.6%	7.5%	1.3%	6.1%	3.8%	1.9%
MSCI EAFE Small Cap	-2.2%	5.1%	-9.7%	5.3%	0.7%	6.5%	6.1%	4.6%
MSCI Emerging Markets	-6.5%	0.9%	-15.3%	1.0%	-1.9%	6.3%	1.5%	1.1%
Alternatives	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Consumer Price Index*	0.5%	0.5%	6.3%	5.1%	3.8%	3.4%	2.6%	2.3%
FTSE NAREIT Equity REITs	-4.8%	5.4%	-11.7%	4.1%	7.4%	5.9%	6.6%	6.9%
S&P Real Assets	-4.1%	1.0%	-7.6%	4.0%	3.8%	5.6%	3.4%	4.0%
FTSE EPRA NAREIT Developed	-4.4%	4.3%	-14.3%	-0.2%	2.9%	4.0%	3.9%	3.7%
FTSE EPRA NAREIT Developed ex U.S.	-3.7%	2.6%	-17.8%	-4.9%	-1.5%	2.2%	1.4%	1.3%
Bloomberg Commodity Total Return	-4.7%	-5.2%	-4.7%	15.5%	5.3%	6.2%	-1.6%	-4.0%
HFRI Fund of Funds Composite*	2.5%	2.5%	-0.4%	4.4%	3.0%	4.1%	3.5%	2.1%
HFRI Asset Weighted Composite*	0.5%	0.5%	1.7%	3.6%	3.0%	4.1%	3.8%	3.5%
Alerian MLP	-1.2%	5.3%	18.5%	19.3%	6.1%	7.0%	1.2%	5.8%

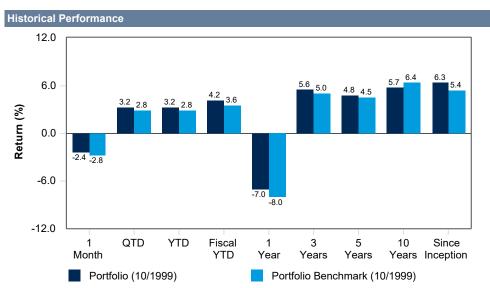
Sources: Morningstar, FactSet. As of February 28, 2023. \*Consumer Price Index and HFRI indexes as of January 31, 2023.



#### **Portfolio Dashboard**

Pension Plan

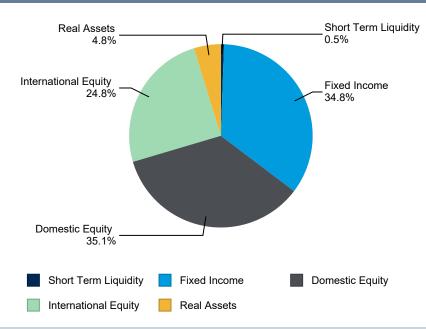
As of February 28, 2023



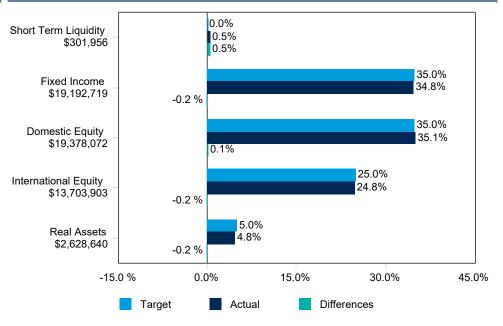
Summary of Cash Flows					
	1 Month	QTD	YTD	Fiscal YTD	Since Inception
Beginning Market Value	56,797,972	53,912,299	53,912,299	52,486,223	36,976,103
Net Contributions	-226,408	-439,637	-439,637	479,865	437,731
Gain/Loss	-1,366,274	1,732,628	1,732,628	2,239,202	17,791,456
Ending Market Value	55,205,290	55,205,290	55,205,290	55,205,290	55,205,290

<b>Current Bench</b>	mark Composition	
From Date	To Date	
06/2021	Present	35.00% Blmbg. U.S. Aggregate, 35.00% Russell 3000 Index, 25.00% MSCI AC World ex USA (Net), 5.00% Diversified Real Asset Blended Index

#### Portfolio Allocation



#### Actual vs. Target Allocations





# **Asset Allocation**

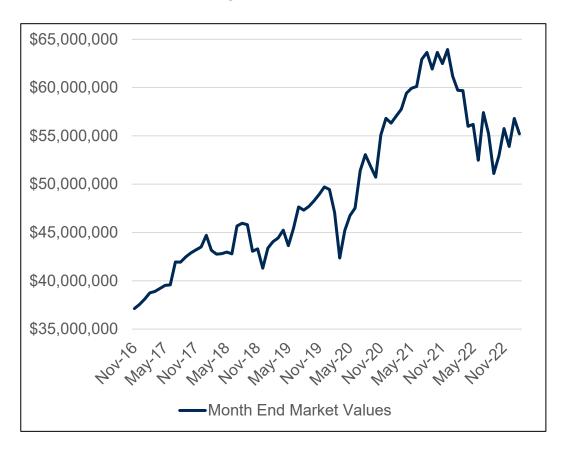
Pension Plan

As of February 28, 2023

			, J J J			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)		
ension Plan	55,205,290	100.0	100.0	0.0		
Short Term Liquidity	301,956	0.5	0.0	0.5		
Comerica Short Term Fund	301,956	0.5	0.0	0.5		
Fixed Income	19,192,719	34.8	35.0	-0.2		
Baird Aggregate Bond Fund Class Institutional	5,537,182	10.0	10.3	-0.2		
Metropolitan West Total Return Bond PI	5,435,641	9.8	10.3	-0.4		
BlackRock Strategic Income Opportunities Fund K	6,238,998	11.3	11.0	0.3		
PIMCO High Yield Instl	1,980,898	3.6	3.5	0.1		
Domestic Equity	19,378,072	35.1	35.0	0.1		
Fidelity 500 Index Fund	13,612,783	24.7	25.0	-0.3		
Boston Partners Small Cap Value Fund II Instl	2,861,142	5.2	5.0	0.2		
Conestoga Small Cap Instl	2,904,147	5.3	5.0	0.3		
International Equity	13,703,903	24.8	25.0	-0.2		
Fidelity International Index Fund	3,649,430	6.6	6.5	0.1		
MFS Instl International Equity Fund	3,361,887	6.1	6.0	0.1		
Aristotle International Equity Instl	3,336,168	6.0	6.0	0.0		
GQG Partners Emerging Markets Equity Inst	3,356,419	6.1	6.5	-0.4		
Real Assets	2,628,640	4.8	5.0	-0.2		
Principal Diversified Real Asset R6	2,628,640	4.8	5.0	-0.2		

# Town of Newtown, CT Pension Portfolio

# Market Value History



Month	Month End Market Value
March 2022	\$59,688,763
April 2022	\$55,992,927
May 2022	\$56,184,193
June 2022	\$52,486,223
July 2022	\$57,423,145
August 2022	\$55,244,586
September 2022	\$51,104,835
October 2022	\$52,944,441
November 2022	\$55,758,040
December 2022	\$53,912,299
January 2023	\$56,797,972
February 2023	\$55,205,290

DISCLOSURE: The balance information has been compiled solely by Fiducient Advisors and has not been independently verified. In preparing this report, Fiducient Advisors has relied upon information provided by the investment managers and by the custodian.

www.FiducientAdvisors.com



Pension Plan

As of February 28, 2023

	Allocation	on										
	Market Value (\$)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Pension Plan	55,205,290	100.0	-2.4	3.2	3.2	4.2	-7.0	5.6	4.8	5.7	6.3	10/1999
Blended Benchmark			-2.8	2.8	2.8	3.6	-8.0	5.0	4.5	6.4	5.4	
60% S&P 500 / 40% Bloomberg Barclays Aggregate Index			-2.5	2.4	2.4	2.8	-8.2	5.9	6.4	7.9	6.0	
Short Term Liquidity	301,956	0.5	0.3	0.6	0.6	2.0	2.2	8.0	1.3	-	1.2	12/2016
90 Day U.S. Treasury Bill			0.3	0.6	0.6	2.0	2.1	0.8	1.3	0.8	1.3	
Comerica Short Term Fund	301,956	0.5	0.3	0.6	0.6	2.0	2.2	0.8	-	-	1.0	08/2019
90 Day U.S. Treasury Bill			0.3	0.6	0.6	2.0	2.1	0.8	1.3	0.8	1.0	
Fixed Income	19,192,719	34.8	-2.2	0.9	0.9	-0.6	-7.6	-3.0	1.0	1.6	4.5	10/1999
Blmbg. U.S. Aggregate			-2.6	0.4	0.4	-2.6	-9.7	-3.8	0.5	1.1	3.9	
Baird Aggregate Bond Fund Class Institutional	5,537,182	10.0	-2.5	0.8	0.8	-1.9	-9.5	-3.4	0.8	1.5	-7.0	06/2021
Blmbg. U.S. Aggregate			-2.6	0.4	0.4	-2.6	-9.7	-3.8	0.5	1.1	-7.0	
IM U.S. Broad Market Core Fixed Income (MF) Median			<b>-</b> 2.5	8.0	0.8	-2.3	-10.0	-3.6	0.5	1.1	-7.3	
Baird Aggregate Bond Fund Class Institutional Rank			49	58	58	29	23	41	25	13	25	
Metropolitan West Total Return Bond PI	5,435,641	9.8	-3.0	0.6	0.6	-2.9	-11.3	-3.7	0.7	1.3	-8.0	06/2021
Blmbg. U.S. Aggregate			-2.6	0.4	0.4	-2.6	-9.7	-3.8	0.5	1.1	-7.0	
IM U.S. Broad Market Core+ Fixed Income (MF) Median			-2.4	1.0	1.0	-1.5	-10.0	-3.1	0.7	1.3	-7.1	
Metropolitan West Total Return Bond Pl Rank			94	88	88	88	87	74	52	45	84	
BlackRock Strategic Income Opportunities Fund K	6,238,998	11.3	-1.3	0.9	0.9	0.7	-2.6	0.8	1.9	2.4	-2.7	06/2021
Blmbg. U.S. Aggregate			-2.6	0.4	0.4	-2.6	-9.7	-3.8	0.5	1.1	-7.0	
IM Alternative Credit Focus (MF) Median			-1.0	1.6	1.6	1.9	-3.8	-0.1	1.3	1.3	-3.2	
BlackRock Strategic Income Opportunities Fund K Rank			70	62	62	62	33	45	28	23	42	
PIMCO High Yield Instl	1,980,898	3.6	-1.5	2.1	2.1	5.8	-5.3	0.5	2.4	3.6	-3.7	06/2021
ICE BofAML High Yield BB-B Constrained Index			-1.5	2.1	2.1	5.7	-5.2	0.9	2.8	4.0	-3.5	
IM U.S. High Yield Bonds (MF) Median			-1.4	2.2	2.2	5.6	-5.6	0.8	2.3	3.3	-3.7	
PIMCO High Yield Instl Rank			57	60	60	39	42	66	40	29	50	

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



Pension Plan

As of February 28, 2023

	Allocation	on					Perforn					
	Market Value (\$)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Domestic Equity	19,378,072	35.1	-1.9	5.4	5.4	7.7	-6.7	12.6	9.7	-	11.6	12/2016
Russell 3000 Index			-2.3	4.4	4.4	6.9	-8.1	11.8	9.4	11.9	11.4	
Fidelity 500 Index Fund	13,612,783	24.7	-2.4	3.7	3.7	6.1	-7.7	12.1	9.8	12.2	-1.7	06/2021
S&P 500			-2.4	3.7	3.7	6.1	-7.7	12.1	9.8	12.3	-1.7	
IM U.S. Large Cap Core Equity (MF) Median			-2.5	3.5	3.5	6.0	-8.2	11.4	9.0	11.3	-3.0	
Fidelity 500 Index Fund Rank			46	44	44	47	41	24	24	15	27	
Boston Partners Small Cap Value Fund II Instl	2,861,142	5.2	-0.8	9.0	9.0	12.3	-2.2	12.8	6.4	8.7	-2.3	06/2021
Russell 2000 Value Index			-2.3	7.0	7.0	10.7	-4.4	12.9	6.4	8.5	-4.6	
IM U.S. Small Cap Value Equity (MF) Median			-1.6	7.9	7.9	13.7	-1.0	16.1	7.2	8.9	-0.8	
Boston Partners Small Cap Value Fund II Instl Rank			22	27	27	70	56	89	65	52	75	
Conestoga Small Cap Instl	2,904,147	5.3	-0.6	10.3	10.3	11.8	-6.2	8.3	8.9	12.0	-6.1	06/2021
Russell 2000 Growth Index			-1.1	8.8	8.8	13.5	-7.9	6.5	5.1	9.3	-12.5	
IM U.S. Small Cap Growth Equity (MF) Median			-0.9	8.3	8.3	11.8	-9.4	8.9	7.5	9.9	-11.1	
Conestoga Small Cap Instl Rank			34	11	11	50	22	55	25	9	18	
International Equity	13,703,903	24.8	-3.3	4.0	4.0	7.4	-6.7	5.8	2.3	-	6.0	12/2016
International Equity Hybrid			-3.5	4.3	4.3	7.4	-7.2	5.7	1.8	-	5.7	
Fidelity International Index Fund	3,649,430	6.6	-2.9	5.3	5.3	11.8	-3.1	6.6	2.9	5.0	-5.2	06/2021
MSCI EAFE (Net)			-2.1	5.8	5.8	12.6	-3.1	6.8	2.6	4.8	-4.9	
IM International Large Cap Core Equity (MF) Median			-3.0	5.3	5.3	10.6	-4.5	6.0	2.2	4.1	-6.5	
Fidelity International Index Fund Rank			38	50	50	29	27	40	29	20	27	
MFS InstI International Equity Fund	3,361,887	6.1	-3.0	5.5	5.5	12.0	-2.9	7.9	5.7	6.5	-3.2	06/2021
MSCI EAFE (Net)			-2.1	5.8	5.8	12.6	-3.1	6.8	2.6	4.8	-4.9	
IM International Large Cap Core Equity (MF) Median			-3.0	5.3	5.3	10.6	-4.5	6.0	2.2	4.1	-6.5	
MFS Instl International Equity Fund Rank			50	47	47	27	25	28	8	1	10	
Aristotle International Equity Instl	3,336,168	6.0	-3.3	4.2	4.2	9.0	-7.8	5.2	2.9	-	-8.3	06/2021
MSCI AC World ex USA Growth (Net)			-4.3	3.8	3.8	6.2	-10.6	3.8	2.2	4.7	-12.5	
IM International Large Cap Growth Equity (MF) Median			-3.4	5.0	5.0	9.5	-7.5	5.6	2.7	5.0	-9.1	
Aristotle International Equity Instl Rank			49	78	78	56	53	58	46	_	38	

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



Pension Plan

As of February 28, 2023

	Allocatio	n		Performance(%)									
	Market Value (\$)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
GQG Partners Emerging Markets Equity Inst	3,356,419	6.1	-4.0	0.7	0.7	-3.2	-13.3	4.1	0.6	-	-15.2	06/2021	
MSCI Emerging Markets Growth (Net)			-7.5	0.4	0.4	-3.3	-17.8	-0.5	-1.8	2.7	-20.3		
IM Emerging Markets Equity (MF) Median			-6.2	2.2	2.2	-0.4	-14.6	0.5	-1.9	1.4	-16.8		
GQG Partners Emerging Markets Equity Inst Rank			16	85	85	80	42	18	17	-	38		
Real Assets	2,628,640	4.8	-3.7	0.4	0.4	-1.0	-7.0	-	-	-	-0.1	06/2021	
Diversified Real Asset Blended Index			-3.9	1.0	1.0	0.6	-5.8	6.7	4.4	2.7	0.3		
Principal Diversified Real Asset R6	2,628,640	4.8	-3.7	0.4	0.4	-1.0	-7.0	7.0	4.4	-	-0.1	06/2021	
Diversified Real Asset Blended Index			-3.9	1.0	1.0	0.6	-5.8	6.7	4.4	2.7	0.3		



# **Benchmark History**

Pension Plan

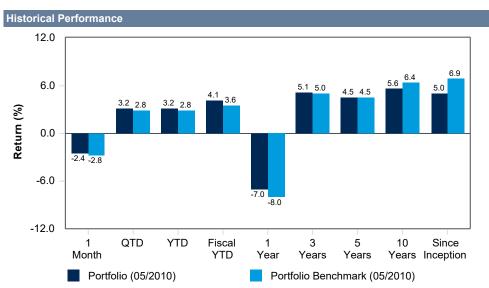
As of February 28, 2023

Account Name	From Date	To Date	Benchmark Composition
Pension Plan	06/2021	Present	35.0% Blmbg. U.S. Aggregate, 35.0% Russell 3000 Index, 25.0% MSCI AC World ex USA (Net), 5.0% Diversified Real Asset Blended Index
	08/2017	06/2021	35.0% Blmbg. U.S. Aggregate, 35.0% Russell 3000 Index, 30.0% FTSE Developed ex US Spliced Index
	12/2016	08/2017	40.0% Blmbg. U.S. Aggregate, 42.0% Russell 3000 Index, 18.0% FTSE Developed ex US Spliced Index
	10/1999	12/2016	40.0% Blmbg. U.S. Aggregate, 45.0% S&P 500, 15.0% MSCI EAFE (Net)



#### **Portfolio Dashboard**

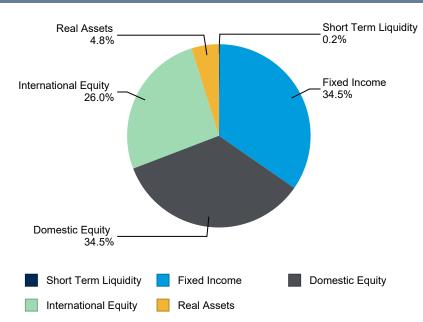
OPEB Plan
As of February 28, 2023



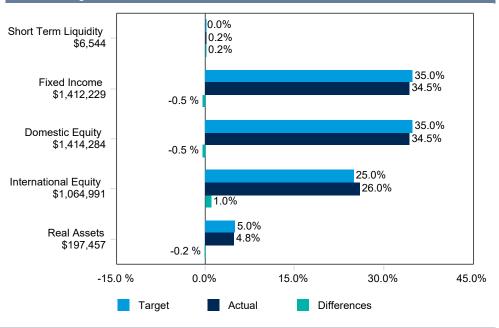
Summary of Cash Flows					
	1 Month	QTD	YTD	Fiscal YTD	Since Inception
Deninging Madest Value	4 400 040	2.000.442	2.000.442	2.742.050	4 047 704
Beginning Market Value	4,198,040	3,969,443	3,969,443	3,743,958	1,917,731
Net Contributions	-	-163	-163	189,835	1,148,305
Gain/Loss	-102,535	126,226	126,226	161,712	1,029,469
Ending Market Value	4,095,505	4,095,505	4,095,505	4,095,505	4,095,505

<b>Current Bench</b>	mark Composition	
From Date	To Date	
06/2021	Present	35.00% Blmbg. U.S. Aggregate, 35.00% Russell 3000 Index, 25.00% MSCI AC World ex USA (Net), 5.00% Diversified Real Asset Blended Index

#### Portfolio Allocation



#### Actual vs. Target Allocations





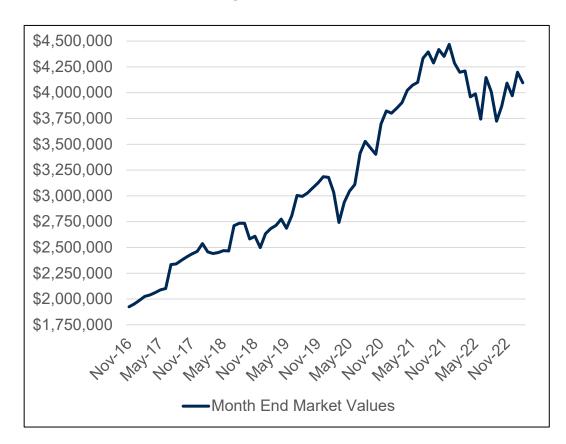
# **Asset Allocation**

OPEB Plan
As of February 28, 2023

				710 01 1 001 daily 20		
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)		
PEB Plan	4,095,505	100.0	100.0	0.0		
Short Term Liquidity	6,544	0.2	0.0	0.2		
Goldman Sachs Financial Square Fund	6,544	0.2	0.0	0.2		
Fixed Income	1,412,229	34.5	35.0	-0.5		
Baird Aggregate Bond Fund Class Institutional	408,812	10.0	10.3	-0.3		
Metropolitan West Total Return Bond Pl	406,540	9.9	10.3	-0.3		
BlackRock Strategic Income Opportunities Fund K	450,998	11.0	11.0	0.0		
PIMCO High Yield Instl	145,880	3.6	3.5	0.1		
Domestic Equity	1,414,284	34.5	35.0	-0.5		
Fidelity 500 Index Fund	994,598	24.3	25.0	-0.7		
Boston Partners Small Cap Value Fund II Instl	212,551	5.2	5.0	0.2		
Conestoga Small Cap Instl	207,135	5.1	5.0	0.1		
International Equity	1,064,991	26.0	25.0	1.0		
Fidelity International Index Fund	290,487	7.1	6.5	0.6		
MFS Instl International Equity Fund	264,949	6.5	6.0	0.5		
Aristotle International Equity Instl	256,923	6.3	6.0	0.3		
GQG Partners Emerging Markets Equity Inst	252,632	6.2	6.5	-0.3		
Real Assets	197,457	4.8	5.0	-0.2		
Principal Diversified Real Asset R6	197,457	4.8	5.0	-0.2		

# Town of Newtown, CT OPEB Portfolio

# Market Value History



Month	Month End Market Value
March 2022	\$4,210,912
April 2022	\$3,958,737
May 2022	\$3,988,070
June 2022	\$3,743,958
July 2022	\$4,147,146
August 2022	\$4,008,203
September 2022	\$3,723,497
October 2022	\$3,867,128
November 2022	\$4,093,236
December 2022	\$3,969,443
January 2023	\$4,198,040
February 2023	\$4,095,505

DISCLOSURE: The balance information has been compiled solely by Fiducient Advisors and has not been independently verified. In preparing this report, Fiducient Advisors has relied upon information provided by the investment managers and by the custodian.

www.FiducientAdvisors.com



OPEB Plan
As of February 28, 2023

	Allocat	ion					Perforn					
	Market Value (\$)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
OPEB Plan	4,095,505	100.0	-2.4	3.2	3.2	4.1	-7.0	5.1	4.5	5.6	5.0	05/2010
OPEB Blended Benchmark			-2.8	2.8	2.8	3.6	-8.0	5.0	4.5	6.4	6.9	
60% S&P 500 / 40% Bloomberg Barclays Aggregate Index			-2.5	2.4	2.4	2.8	-8.2	5.9	6.4	7.9	8.2	
Short Term Liquidity	6,544	0.2	0.0	0.3	0.3	2.4	2.5	0.9	1.3	-	1.3	12/2016
90 Day U.S. Treasury Bill			0.3	0.6	0.6	2.0	2.1	0.8	1.3	0.8	1.3	
Goldman Sachs Financial Square Fund	6,544	0.2	0.0	0.3	0.3	2.4	2.5	0.9	-	-	0.9	08/2019
90 Day U.S. Treasury Bill			0.3	0.6	0.6	2.0	2.1	0.8	1.3	0.8	1.0	
Fixed Income	1,412,229	34.5	-2.2	0.9	0.9	-0.6	-7.7	-3.0	1.0	1.7	2.5	05/2010
Blmbg. U.S. Aggregate			-2.6	0.4	0.4	-2.6	-9.7	-3.8	0.5	1.1	2.1	
Baird Aggregate Bond Fund Class Institutional	408,812	10.0	-2.5	0.8	0.8	-1.9	-9.5	-3.4	0.8	1.5	-7.0	06/2021
Blmbg. U.S. Aggregate			-2.6	0.4	0.4	-2.6	-9.7	-3.8	0.5	1.1	-7.0	
IM U.S. Broad Market Core Fixed Income (MF) Median			-2.5	8.0	8.0	-2.3	-10.0	-3.6	0.5	1.1	-7.3	
Baird Aggregate Bond Fund Class Institutional Rank			49	58	58	29	23	41	25	13	25	
Metropolitan West Total Return Bond PI	406,540	9.9	-3.0	0.6	0.6	-2.9	-11.3	-3.7	0.7	1.3	-8.0	06/2021
Blmbg. U.S. Aggregate			-2.6	0.4	0.4	-2.6	-9.7	-3.8	0.5	1.1	-7.0	
IM U.S. Broad Market Core+ Fixed Income (MF) Median			-2.4	1.0	1.0	-1.5	-10.0	-3.1	0.7	1.3	-7.1	
Metropolitan West Total Return Bond Pl Rank			94	88	88	88	87	74	52	45	84	
BlackRock Strategic Income Opportunities Fund K	450,998	11.0	-1.3	0.9	0.9	0.7	-2.6	0.8	1.9	2.4	-2.7	06/2021
Blmbg. U.S. Aggregate			-2.6	0.4	0.4	-2.6	-9.7	-3.8	0.5	1.1	-7.0	
IM Alternative Credit Focus (MF) Median			-1.0	1.6	1.6	1.9	-3.8	-0.1	1.3	1.3	-3.2	
BlackRock Strategic Income Opportunities Fund K Rank			70	62	62	62	33	45	28	23	42	
PIMCO High Yield Instl	145,880	3.6	-1.5	2.1	2.1	5.8	-5.3	0.5	2.4	3.6	-3.7	06/2021
ICE BofAML High Yield BB-B Constrained Index			-1.5	2.1	2.1	5.7	-5.2	0.9	2.8	4.0	-3.5	
IM U.S. High Yield Bonds (MF) Median			-1.4	2.2	2.2	5.6	-5.6	0.8	2.3	3.3	-3.7	
PIMCO High Yield Instl Rank			57	60	60	39	42	66	40	29	50	

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception. Inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



OPEB Plan
As of February 28, 2023

	Allocati	on					Perforn					
	Market Value (\$)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Domestic Equity	1,414,284	34.5	-1.9	5.4	5.4	7.7	-6.7	12.8	9.8		11.6	12/2016
Russell 3000 Index			-2.3	4.4	4.4	6.9	-8.1	11.8	9.4	11.9	11.4	
Fidelity 500 Index Fund	994,598	24.3	-2.4	3.7	3.7	6.1	-7.7	12.1	9.8	12.2	-1.7	06/2021
S&P 500			-2.4	3.7	3.7	6.1	-7.7	12.1	9.8	12.3	-1.7	
IM U.S. Large Cap Core Equity (MF) Median			-2.5	3.5	3.5	6.0	-8.2	11.4	9.0	11.3	-3.0	
Fidelity 500 Index Fund Rank			46	44	44	47	41	24	24	15	27	
Boston Partners Small Cap Value Fund II Instl	212,551	5.2	-0.8	9.0	9.0	12.3	-2.2	12.8	6.4	8.7	-2.3	06/2021
Russell 2000 Value Index			-2.3	7.0	7.0	10.7	-4.4	12.9	6.4	8.5	-4.6	
IM U.S. Small Cap Value Equity (MF) Median			-1.6	7.9	7.9	13.7	-1.0	16.1	7.2	8.9	-0.8	
Boston Partners Small Cap Value Fund II Instl Rank			22	27	27	70	56	89	65	52	75	
Conestoga Small Cap Instl	207,135	5.1	-0.6	10.3	10.3	11.8	-6.2	8.3	8.9	12.0	-6.1	06/2021
Russell 2000 Growth Index			-1.1	8.8	8.8	13.5	-7.9	6.5	5.1	9.3	-12.5	
IM U.S. Small Cap Growth Equity (MF) Median			-0.9	8.3	8.3	11.8	-9.4	8.9	7.5	9.9	-11.1	
Conestoga Small Cap Instl Rank			34	11	11	50	22	55	25	9	18	
International Equity	1,064,991	26.0	-3.3	4.0	4.0	7.3	-6.8	5.7	2.2	-	6.0	12/2016
International Equity Hybrid			-3.5	4.3	4.3	7.4	-7.2	5.7	1.8	-	5.7	
Fidelity International Index Fund	290,487	7.1	-2.9	5.3	5.3	11.8	-3.1	6.6	2.9	5.0	-5.2	06/2021
MSCI EAFE (Net)			-2.1	5.8	5.8	12.6	-3.1	6.8	2.6	4.8	-4.9	
IM International Large Cap Core Equity (MF) Median			-3.0	5.3	5.3	10.6	-4.5	6.0	2.2	4.1	-6.5	
Fidelity International Index Fund Rank			38	50	50	29	27	40	29	20	27	
MFS InstI International Equity Fund	264,949	6.5	-3.0	5.5	5.5	12.0	-2.9	7.9	5.7	6.5	-3.2	06/2021
MSCI EAFE (Net)			-2.1	5.8	5.8	12.6	-3.1	6.8	2.6	4.8	-4.9	
IM International Large Cap Core Equity (MF) Median			-3.0	5.3	5.3	10.6	-4.5	6.0	2.2	4.1	-6.5	
MFS Instl International Equity Fund Rank			50	47	47	27	25	28	8	1	10	
Aristotle International Equity Instl	256,923	6.3	-3.3	4.2	4.2	9.0	-7.8	5.2	2.9	-	-8.3	06/2021
MSCI AC World ex USA Growth (Net)			-4.3	3.8	3.8	6.2	-10.6	3.8	2.2	4.7	-12.5	
IM International Large Cap Growth Equity (MF) Median			-3.4	5.0	5.0	9.5	-7.5	5.6	2.7	5.0	-9.1	
Aristotle International Equity Instl Rank			49	78	78	56	53	58	46	-	38	

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Funds may include returns of an equivalent share class with a longer return history if period includes dates prior to the fund's inception. Returns are net of fees unless otherwise stated. The fund's inception date represents the first month the client made the investment. Composite performance includes all funds held in the composite since inception dates for asset class composites reflect the start date at which these returns could be calculated using historical and existing system capabilities and may vary from the inception dates of underlying component strategies.



OPEB Plan
As of February 28, 2023

	Allocation	on	Performance(%)										
	Market Value (\$)	%	1 Month	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
GQG Partners Emerging Markets Equity Inst	252,632	6.2	-4.0	0.7	0.7	-3.2	-13.3	4.1	0.6	-	-15.2	06/2021	
MSCI Emerging Markets Growth (Net)			-7.5	0.4	0.4	-3.3	-17.8	-0.5	-1.8	2.7	-20.3		
IM Emerging Markets Equity (MF) Median			-6.2	2.2	2.2	-0.4	-14.6	0.5	-1.9	1.4	-16.8		
GQG Partners Emerging Markets Equity Inst Rank			16	85	85	80	42	18	17	-	38		
Real Assets	197,457	4.8	-3.7	0.4	0.4	-1.0	-7.0	-	-	-	-0.1	06/2021	
Diversified Real Asset Blended Index			-3.9	1.0	1.0	0.6	-5.8	6.7	4.4	2.7	0.3		
Principal Diversified Real Asset R6	197,457	4.8	-3.7	0.4	0.4	-1.0	-7.0	7.0	4.4	-	-0.1	06/2021	
Diversified Real Asset Blended Index			-3.9	1.0	1.0	0.6	-5.8	6.7	4.4	2.7	0.3		



# **Benchmark History**

OPEB Plan
As of February 28, 2023

Account Name	From Date	To Date	Benchmark Composition
OPEB Plan	06/2021	Present	35.0% Blmbg. U.S. Aggregate, 35.0% Russell 3000 Index, 25.0% MSCI AC World ex USA (Net), 5.0% Diversified Real Asset Blended Index
	08/2017	06/2021	35.0% Blmbg. U.S. Aggregate, 35.0% Russell 3000 Index, 30.0% FTSE Developed ex US Spliced Index
	12/2016	08/2017	40.0% Blmbg. U.S. Aggregate, 42.0% Russell 3000 Index, 18.0% FTSE Developed ex US Spliced Index
	05/2010	12/2016	40.0% Blmbg. U.S. Aggregate, 45.0% S&P 500, 15.0% MSCI EAFE (Net)

# **Definitions & Disclosures**

Please note: Due to rounding methodologies of various data providers, certain returns in this report might differ slightly when compared to other sources

#### REGULATORY DISCLOSURES

Offer of ADV Part 2A: Rule 204-3 under the Investment Advisers Act of 1940 requires that we make an annual offer to clients to send them, without charge, a written disclosure statement meeting the requirements of such rule. We will be glad to send a copy of our ADV Part 2A to you upon your written request to <a href="mailto:compliance@fiducient.com">compliance@fiducient.com</a>.

#### INDEX DEFINITIONS

- Citigroup 3 Month T-Bill measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- Ryan 3 Yr. GIC is an arithmetic mean of market rates of \$1 million Guaranteed Interest Contracts held for three years.
- Bloomberg Treasury U.S. T-Bills-1-3 Month Index includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- Bloomberg Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.
- Bloomberg Muni Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- Bloomberg Muni 1 Year Index is the 1-year (1-2) component of the Municipal Bond index.
- Bloomberg Muni 3 Year Index is the 3-year (2-4) component of the Municipal Bond index.
- Bloomberg Muni 5 Year Index is the 5-year (4-6) component of the Municipal Bond index.
- Bloomberg Muni 7 Year Index is the 7-year (6-8) component of the Municipal Bond index.
- **Bloomberg Intermediate U.S. Gov't/Credit** is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.
- Bloomberg U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
- Bloomberg Global Aggregate ex. USD Indices represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- Bloomberg U.S. Corporate High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- The S&P 500 is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- The Dow Jones Industrial Index is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- The NASDAQ is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- Russell 1000 consists of the largest 1000 companies in the Russell 3000 Index.
- Russell 1000 Growth measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 1000 Value measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.
- Russell Mid Cap Growth measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- Russell Mid Cap Value measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.
- Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- Russell 2000 Growth measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2000 Value measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- Russell 2500 consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- Russell 2500 Growth measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2500 Value measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- MSCI World captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI ACWI (All Country World Index) ex. U.S. Index captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

- MSCI EAFE Value captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float- adjusted market capitalization of the MSCI EAFE Index.
- MSCI EAFE Growth captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI Emerging Markets captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- Consumer Price Index is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- FTSE NAREIT Equity REITs Index contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- **S&P Developed World Property** defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **S&P Developed World Property x U.S.** defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- Fund Specific Broad Real Asset Benchmarks:
  - DWS Real Assets: 30%: Dow Jones Brookfield Infrastructure Index, 30%: FTSE EPRA/NAREIT Developed Index,15%: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10%: U.S. Treasury Inflation Notes Total Return Index
  - PIMCO Inflation Response Multi Asset Fund: 45% Bloomberg U.S. TIPS, 20% Bloomberg Commodity Index, 15% JP Morgan Emerging Local Markets Plus, 10% Dow Jones Select REIT, 10% Bloomberg Gold Subindex Total Return
  - Principal Diversified Real Assets: 35% BBgBarc U.S. Treasury TIPS Index, 20% S&P Global Infrastructure Index NTR, 20% S&P Global Natural Resources Index NTR, 15% Bloomberg Commodity Index, and 10% FTSE EPRA/NAREIT Developed Index NTR
  - Wellington Diversified Inflation H: 50% MSCI ACWI Commodity Producers Index, 25% Bloomberg Commodity Index, and 25% Bloomberg Bloomberg US TIPS 1 10 Year Index
- Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- The Alerian MLP Index is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- The Adjusted Alerian MLP Index is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.
- Cambridge Associates U.S. Private Equity Index is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.
- Cambridge Associates U.S. Venture Capital Index is based on data compiled from over 1,600 institutional-quality venture capital funds formed between 1986 and 2015.
- Vanguard Spliced Bloomberg US1-5Yr Gov/Cr Flt Adj Index: Bloomberg U.S. 1–5 Year Government/Credit Bond Index through December 31, 2009; Bloomberg U.S. 1–5 Year Government/Credit Float Adjusted Index thereafter.
- Vanguard Spliced Bloomberg US5-10Yr Gov/Cr Flt Adj Index: Bloomberg U.S. 5–10 Year Government/Credit Bond Index through December 31, 2009; Bloomberg U.S. 5–10 Year Government/Credit Float Adjusted Index thereafter.
- Vanguard Spliced Bloomberg US Agg Flt Adj Index: Bloomberg U.S. Aggregate Bond Index through December 31, 2009; Bloomberg U.S. Aggregate Float Adjusted Index thereafter.
- Vanguard Spliced Bloomberg U.S. Long Gov/Cr Flt Adj Index: Bloomberg U.S. Long Government/Credit Bond Index through December 31, 2009; Bloomberg U.S. Long Government/Credit Float Adjusted Index thereafter.
- Vanguard Balanced Composite Index: Made up of two unmanaged benchmarks, weighted 60% Dow Jones U.S. Total Stock Market Index (formerly the Dow Jones Wilshire 5000 Index) and 40% Bloomberg U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Bloomberg U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg U.S. Aggregate Float Adjusted Index thereafter.
- Vanguard Spliced Intermediate-Term Tax-Exempt Index: Bloomberg 1–15 Year Municipal Bond Index.
- Vanguard Spliced Extended Market Index: Dow Jones Wilshire 4500 Index through June 17, 2005; S&P Transitional Completion Index through September 16, 2005; S&P Completion Index thereafter.
- Vanguard Spliced Value Index: S&P 500 Value Index (formerly the S&P 500/Barra Value Index) through May 16, 2003; MSCI US Prime Market Value Index through April 16, 2013; CRSP US Large Cap Value Index thereafter.
- Vanguard Spliced Large Cap Index: Consists of MSCI US Prime Market 750 Index through January 30, 2013, and the CRSP US Large Cap Index thereafter.
- Vanguard Spliced Growth Index: S&P 500 Growth Index (formerly the S&P 500/Barra Growth Index) through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index thereafter.
- Vanguard Spliced Mid Cap Value Index: MSCI US Mid Cap Value Index through April 16, 2013; CRSP US Mid Cap Value Index thereafter.
- Vanguard Spliced Mid Cap Index: S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter.
- Vanguard Spliced Mid Cap Growth Index: MSCI US Mid Cap Growth Index through April 16, 2013; CRSP US Mid Cap Growth Index thereafter.
- Vanguard Spliced Total Stock Market Index: Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005; MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.
- Vanguard Spliced Small Cap Value Index: SmallCap 600 Value Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Value Index through April 16, 2013; CRSP US Small Cap Value Index thereafter.

- Vanguard Spliced Small Cap Index: Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter.
- Vanguard Spliced Small Cap Growth Index: S&P SmallCap 600 Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index through April 16, 2013; CRSP US Small Cap Growth Index thereafter.
- Vanguard Spliced Total International Stock Index: Consists of the Total International Composite Index through August 31, 2006; the MSCI EAFE + Emerging Markets Index through December 15, 2010; the MSCI ACWI ex USA IMI Index through June 2, 2013; and FTSE Global All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- Vanguard Spliced Developed Markets Index: MSCI EAFE Index through May 28, 2013; FTSE Developed ex North America Index through December 20, 2015; FTSE Developed All Cap ex US Transition Index through May 31, 2016; FTSE Developed All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- Vanguard Spliced Emerging Markets Index: Select Emerging Markets Index through August 23, 2006; MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; and FTSE Emerging Markets All Cap China A Transition Index thereafter. Benchmark returns are adjusted for withholding taxes.
- Vanguard REIT Spliced Index: MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through January 31, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

#### Additional:

- Equity sector returns are calculated by Russell and MSCI for domestic and international markets, respectively. MSCI sector definitions correspond to the MSCI GICS® classification (Global Industry Classification System); Russell uses its own sector and industry classifications.
- MSCI country returns are calculated by MSCI and are free float-adjusted market capitalization indices that are designed to measure equity market performance in each specific country.
- Currency returns are calculated using Bloomberg's historical spot rate indices and are calculated using the U.S. dollar as the base currency.
- The Index of Leading Economic Indicators, calculated by The Conference Board, is used as a barometer of economic activity over a range of three to six months. The index is used to determine the direction and stability of the economy. The composite index of leading indicators, which is derived from 10 leading indicators, helps to signal turning points in the economy and forecast economic cycles. The leading indicators are the following: average weekly hours, average weekly initial claims, manufacturers' new orders, both consumer and non-defense capital goods, vendor performance, building permits, stock prices, money supply (M2), the interestrate spread and the index of consumer expectations.
- S&P Target Date Indexes are constructed using a survey method of current target date investments with \$100 million or more in assets under management. Allocations for each vintage are comprised of exchange-traded-funds that represent respective asset classes used in target date portfolios. The indexes are designed to represent a market consensus glide path.

#### **DEFINITION OF KEY STATISTICS AND TERMS**

- Returns: A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- Universe Comparison: The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- Returns In Up/Down Markets: This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up market capture ratio is the ratio of the fund's return in up markets to the index. The down market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.
- Standard Deviation: Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- R-Squared: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- **Beta**: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse that the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- Alpha: The Alpha is the nonsystematic return, or the return that can't be attributed to the market. It can be thought of as how the <u>manager</u> performed if the market's return was zero. A <u>positive</u> alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- Sharpe Ratio: The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The <a href="higher-the-sharpe-ratio">higher-the-sharpe-ratio</a>, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- Treynor Ratio: The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns rather than the standard deviation of portfolio returns. High values mean better return for risk taken.

- Tracking Error: Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- Information Ratio: The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- Consistency: Consistency shows the percent of the periods the fund has beaten the index and the percent of the periods the index has beat the fund. A high average for the fund (e.g., over 50) is desirable, indicating the fund has beaten the index frequently.
- **Downside Risk:** Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.
- M-Squared: M-squared, or the Modigliani risk-adjusted performance measure is used to characterize how well a portfolio's return rewards an investor for the amount of risk taken, relative to that of some benchmark portfolio and to the risk-free rate.

#### **DEFINITION OF KEY PRIVATE EQUITY TERMS**

- PIC (Paid in Capital): The amount of committed capital that has been transferred from the limited partner to the general partner.
- TVPI (Total Value to Paid in Capital): Money returned to limited partners plus the fund's unrealized investments, divided by money paid-in to the partnership. The TVPI should equal RVPI plus DPI.
- DPI (Distribution to Paid In Capital): Money returned (distributions) to limited partners divided by money paid in to the partnership. Also called cash-on-cash multiple.
- RVPI (Residual Value to Paid In Capital): The value of a fund's unrealized investments divided by money paid-in to the partnership.
- Internal rate of return (IRR): This is the most appropriate performance benchmark for private equity investments. It is a time-weighted return expressed as a percentage. IRR uses the present sum of cash drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount.
- Commitment: Every investor in a private equity fund commits to investing a specified sum of money in the fund partnership over a specified period of time. The fund records this as the limited partnership's capital commitment. The sum of capital commitments is equal to the size of the fund.
- Capital Distribution: These are the returns that an investor in a private equity fund receives. It is the income and capital realized from investments less expenses and liabilities. Once a limited partner has had their cost of investment returned, further distributions are actual profit. The partnership agreement determines the timing of distributions to the limited partner. It will also determine how profits are divided among the limited partners and general partner.
- Carried Interest: The share of profits that the fund manager is due once it has returned the cost of investment to investors. Carried interest is normally expressed as a percentage of the total profits of the fund.
- **Co-Investment**: Co-Investments are minority investments made alongside a private equity investor in an LBO, a recapitalization, or an expansion capital transaction. It is a passive, non-controlling investment, as the private equity firm involved will typically exercise control and perform monitoring functions.
- General Partner (GP): This can refer to the top-ranking partners at a private equity firm as well as the firm managing the private equity fund.
- **GP Commitments:** It is normal practice for the GP managing a private equity fund to also make a financial commitment to the fund on the same basis as the LPs in the fund, and this is seen as an important factor driving the alignment of GP and LP interests. The historic benchmark for GP commitments has been 1% of the total fund size, but this is by no means universal, and many GPs commit significantly larger amounts. Furthermore, there has been a marked trend towards GPs making larger commitments to their funds over recent years.
- Leveraged Buy-Out (LBO): The acquisition of a company using debt and equity finance.
- Limited Partner (LP): Institutions or high-net-worth individuals/sophisticated investors that contribute capital to a private equity fund.
- Public Market Equivalent (PME): Performance measure used to evaluate performance relative to the market. It is calculated as the ratio of the discounted value of the LP's inflows divided by the discounted value of outflows, with the discounting performed using realized market returns.
- **Primaries:** An original investment vehicle that invests directly into a company or asset.

#### **VALUATION POLICY**

Fiducient Advisors does not engage an independent third-party pricing service to value securities. Our reports are generated using the security prices provided by custodians used by our clients. Our custodial pricing hierarchy is available upon request. If a client holds a security not reported by the first custodian within the hierarchy, the valuation is generated from the next custodian within the hierarchy, and so forth. Each custodian uses pricing services from outside vendors, where the vendors may generate nominally different prices. Therefore, this report can reflect minor valuation differences from those contained in a custodian's report. In rare instances where FA overrides a custodial price, prices are taken from Bloomberg.

#### REPORTING POLICY

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss. Performance calculated net of investment fees. Certain portfolios presented may be gross of Fiducient Advisors' fees and actual performance would be reduced by investment advisory fees. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Custodian reports are the reports that govern the account. There will be different account values between Fiducient Advisors' reports and the custodian reports based on whether the report utilizes trade date or settlement date to calculate value. Additionally, difference between values contained on reports may be caused by different accrued income values. Any forecasts represent future expectations and actual returns, volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is a possibility of aloss.

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Unless specified otherwise, all returns are net of individual manager fees, represent total returns and are annualized for periods greater than one year. The deduction of fees produces a compounding effect that reduces the total rate of return over time. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be \$5,228 in the first year, and cumulative effects of \$30,342 over five years and \$73,826 over ten years. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

#### **MATERIAL RISKS & LIMITATIONS**

Fixed Income securities are subject to interest rate risks, the risk of default and liquidity risk. U.S. investors exposed to non-U.S. fixed income may also be subject to currency risk and fluctuations. -Liability Driven Investing (LDI) Assets

**Cash** may be subject to the loss of principal and over longer period of time may lose purchasing power due to inflation. -Short Term Liquidity

**Domestic Equity** can be volatile. The rise or fall in prices take place for a number of reasons including, but not limited to changes to underlying company conditions, sector or industry factors, or other macro events. These may happen quickly and unpredictably.

International Equity can be volatile. The rise or fall in prices take place for a number of reasons including, but not limited to changes to underlying company conditions, sector or industry impacts, or other macro events. These may happen quickly and unpredictably. International equity allocations may also be impact by currency and/or country specific risks which may result in lower liquidity in some markets.

Real Assets can be volatile and may include asset segments that may have greater volatility than investment in traditional equity securities. Such volatility could be influenced by a myriad of factors including, but not limited to overall market volatility, changes in interest rates, political and regulatory developments, or other exogenous events like weather or natural disaster.

**Private Equity** involves higher risk and is suitable only for sophisticated investors. Along with traditional equity market risks, private equity investments are also subject to higher fees, lower liquidity and the potential for leverage that may amplify volatility and/or the potential loss of capital.

**Private Credit** involves higher risk and is suitable only for sophisticated investors. These assets are subject to interest rate risks, the riskof default and limited liquidity. U.S. investors exposed to non-U.S. private credit may also be subject to currency risk and fluctuations.

**Private Real Estate** involves higher risk and is suitable only for sophisticated investors. Real estate assets can be volatile and may include unique risks to the asset class like leverage and/or industry, sector or geographical concentration. Declines in real estate value may take place for a number of reasons including, but are not limited to economic conditions, change in condition of the underlying property or defaults by the borrow.

Marketable Alternatives involves higher risk and is suitable only for sophisticated investors. Along with traditional market risks, marketable alternatives are also subject to higher fees, lower liquidity and the potential for leverage that may amplify volatility or the potential for loss of capital. Additionally, short selling involved certain risks including, but not limited to additional costs, and the potential for unlimited loss on certain short sale positions.

#### OTHER

By regulation, closed-end funds utilizing debt for leverage must report their interest expense, as well as their income tax expense, as part of their total expense ratio. To make for a useful comparison between closed-end funds and both open-end funds and exchange-traded funds, adjusted expense ratios excluding interest and income tax expenses are utilized for closed-end funds within this report. See disclosure on closed-end fund fact sheets for information regarding the total expense ratio of each closed-end fund.

Please advise us of any changes in your objectives or circumstances.

#### **CUSTODIAN STATEMENTS**

Please remember to review the periodic statements you receive from you custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact FA or your custodian immediately.



Helping Clients Prosper

# **FLASH Memo**

**Subject:** PIMCO High Yield Portfolio Manager Departure

**Previous Status:** Discuss **Current Status:** Watch

**Effective Date:** February 2023

#### **Overview**

PIMCO announced that Andrew Jessop, Managing Director and Portfolio Manager on the PIMCO High Yield strategy, will be retiring from the firm at the end of June. As a senior portfolio manager on PIMCO's credit team, Mr. Jessop's expertise in high yield and the broader leveraged finance market has played a key role in the management of the High Yield strategy and other strategies at PIMCO. This announcement comes on the heels of former portfolio manager Amit Agrawal's departure earlier in the year. Leading the strategy going forward will be David Forgash, who was added as a named portfolio manager following Mr. Agrawal's departure in January and Sonali Pier, who has been a portfolio manager on the strategy since 2019.

Similar to other PIMCO strategies, the High Yield Strategy benefits from a team approach and input from the Investment Committee. Mr. Forgash, Executive Vice President and Portfolio Manager, will continue to oversee the Leveraged Finance efforts at PIMCO and he will work closely with other senior members of the team including Ms. Pier, Managing Director and Portfolio Manager, and Charlie Watford, Executive Vice President and Portfolio Manager, as well as the deep bench of Leveraged Finance sector specialist PMs/traders. Mr. Forgash has nearly 30 years of experience in leveraged finance, and his focus is expected to be managing the High Yield Strategy and overseeing the broader franchise. For all intents and purposes, Mr. Forgash will assume Andrew's place as lead portfolio manager on the High Yield Strategy.

### Recommendation

The PIMCO High Yield strategy has experienced team turnover this year, with Mr. Agrawal's departure in January and Mr. Jessop's upcoming retirement. Team changes should be scrutinized, however Mr. Forgash's experience in leveraged finance and PIMCO's deep resources on the credit team provide a level of comfort on the transition. We do not expect any material shifts in the way the High Yield strategy is managed but will be monitoring performance and portfolio exposures for any style shifts as Mr. Forgash takes the lead role. As a result of the recent team changes, we have placed the PIMCO High Yield strategy on "Watch."

This report is intended for the exclusive use of clients or prospective clients of Fiducient Advisors. The information contained herein is intended for the recipient, is confidential and may not be disseminated or distributed to any other person without the prior approval of Fiducient Advisors. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecasts represent future expectations and actual returns, volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is a possibility of a loss.