### TOWN OF SOUTH WINDSOR PENSION COMMITTEE MINUTES December 13, 2023

### 1. Call Meeting to Order

The meeting was called to order at 10:00 a.m.

### **Members Present:**

Chris Chemerka, Business Manager Board of Education Kristian Lindstrom, Chief of Police Carolyn Carey, Town Council Michael Maniscalco, Town Manager Elizabeth Pendleton, Town Council Zoe Peak, Asst. Dir. Of Finance Patricia Perry, Director of Finance Kenna Kimber, Board of Education

### **Members Absent:**

**Toby Lewis, Town Council** 

### **Guests Present:**

**Anthony Tranghese, Fiducient Advisors** 

### 1. Approval of Minutes

Kristian Lindstrom moved to approve the minutes of September 13, 2023. Chris Chemerka seconded, and the motion was approved unanimously.

### 2. Discussion Items

### A. Update - Fiducient Advisors

Mr. Tranghese reviewed the Quarter 3 results (See attached South Windsor – Pension & OPEB Plans Quarterly Investment Review –Third Quarter 2023 (For further detail on this report, please see Exhibit A) There were no recommendations for changes to the portfolio.

### 3. Miscellaneous

### 4. Schedule the Next Meeting

The next meeting of the Pension Committee will be scheduled for March 13, 2024

### TOWN OF SOUTH WINDSOR PENSION COMMITTEE MINUTES December 13, 2023

### 5. Adjournment

Elizabeth Pendleton motioned to adjourn the meeting at 10:50 am. Chris Chemerka seconded the motion. The motion passed unanimously.

Respectfully submitted,

Katherine Senerth

**Executive Assistant** 

### **Attachments:**

Quarterly Investment Review – Third Quarter 2023, prepared by Fiducient Advisors. (Exhibit A)

Attachments may be reviewed upon request in the Town Clerk's Office.



South Windsor Town and BoE

Quarterly Investment Review - Third Quarter 2023

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 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. 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 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 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

## **Fiducient Advisors Update**





### Retirement Plans



## Endowments & Foundations



### Featured Insights

- Blog Smart Nudges: Behavioral Finance Successes and Opportunities in Defined Contribution Plans
- Pension Awareness Video Series and Newsletter
- Liability-Driven Investing
- Cash Balance Plans
- Alternative Investments
- Inverted Yield Curves
- Effective Use of Glidepaths

### Featured Insights

- Nonprofit Investment Stewards Podcast
- Mission-Aligned Investing: Where Are We and Where to Next?
- Blog: Knowledge is Power in Uncertain Times

### Featured Insights

- Blog: Don't Let Healthcare Costs
   Derail a Healthy Retirement
- Blog: Shield Your Wealth Seven Steps to Better Protect Your Financial Information
- Blog: Preparing for Rising College Costs: Start Early & Save Often
- Watch Your Step! Avoid These
   10 Common Investor Pitfalls



- Monthly Market Recaps
- Monthly Market Updates
- Summer Doldrums August
- Markets Heat Up in July July
- 2023 Third Quarter Considerations

- Mid-Year Capital Markets Outlook
- Marketable Alternatives Mid-Year Update
- Private Markets Semi-Annual Update



# 2023 Investor Conference

Featured speakers:
Rick Rieder | BlackRock

Thasunda Brown Duckett | TIAA

John Diehl | Hartford Funds

Dr. Joseph Coughlin | MIT AgeLab

Sarah Hoffman | Fidelity Investments

Rob Mazzoni | Wellington Management



# Save the Date! 2024 Investor Conference

Chicago Marriott Downtown Magnificent Mile September 25 - 26

2023 New Associates - Welcome!

Sabrina Bailey
CEO

Jeffrey Mitchell Senior Consultant

Graham Chidester
Performance Analyst

Samia Naz
Middle Office Associate

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Section 1 Fiduciary Governance Calendar

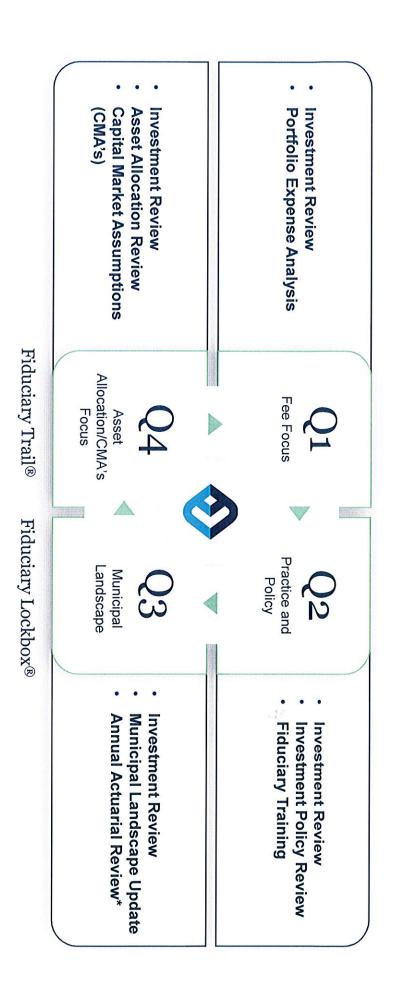
Section 2 Capital Markets Overview

Section 3 Portfolio and Manager Review Fiduciary Governance Calendar



## Fiduciary Governance Calendar





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

## Actuarial Review



South Wind	South Windsor Town Employees Pension	Pension
	7/1/2022	7/1/2021
Actuarial Value of Assets	39,024,540	36,771,161
Total Accrued Liability	53,807,052	51,292,020
Funded Ratio	72.5%	71.7%
Actuarial Return Assumption	6.0%	6.25%

## **Actuarial Review**



South Wind	South Windsor Board of Education Pension	Pension
	7/1/2022	7/1/2021
Actuarial Value of Assets	17,970,837	17,238,201
Total Accrued Liability	21,070,926	20,354,410
Funded Ratio	85.3%	84.7%
Actuarial Return Assumption	6.0%	6.25%

Source: Milliman, 2022 Valuation Report, as of 7/1/2022

## **Actuarial Review**



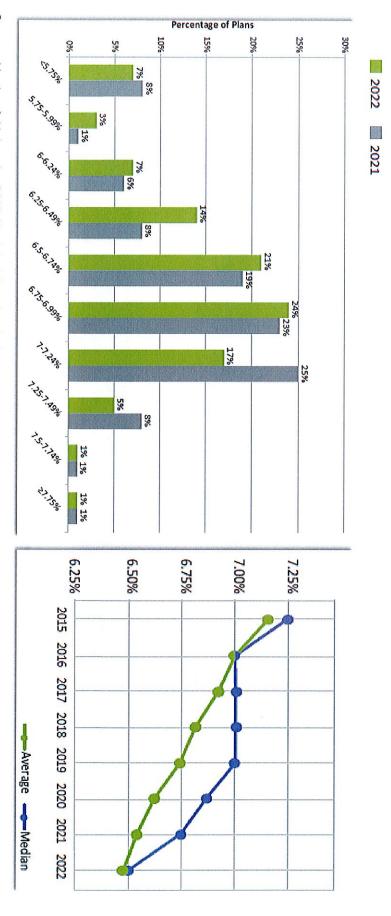
Sou	South Windsor OPEB Plan	
	7/1/2021	7/1/2019
Actuarial Value of Assets	4,428,805	2,716,235
Total Accrued Liability	13,343,329	11,862,536
Funded Ratio	33.2%	22.9%
Actuarial Return Assumption	6.25%	6.75%

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# Trends in Investment Return Assumptions



- median was 6.50% for FY 2022. This represents a continued trend of public plans setting the assumed rate of The average investment return assumption across Connecticut municipal pension plans was 6.46% and the return at lower, more achievable targets
- 2015 to FY 2022. We expect to see a pause in setting lower assumed rates of return on a go forward bases due to the restoration of higher bond yields. The average long-term rate of return assumption has declined by 68 basis points, from 7.14% to 6.46%, from FY



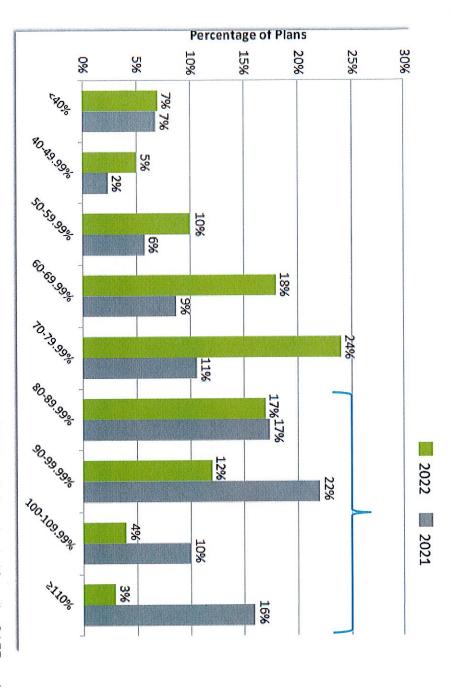
municipalities in CT for fiscal year ending June 30, 2022 Source: Hooker & Holcombe 2023 Municipal Pension & OPEB Report: 200 Municipal CT Plans. Data extracted from the CAFRs submitted by local

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### **\$**

## Trends in Funded Ratios

- Funded ratios for CT municipal pension plans declined for FY 2022 following a challenging investment environment. The average funded ratio stood at 72.4% for FY 2022 down from 85.8% as of FY 2021.
- For FY 2022, 36% of the pension plans analyzed exceeded the 80% funded mark, a notable decrease from when 65% of pension plans exceeded 80% funded levels in FY 2021.



municipalities in CT for fiscal year ending June 30, 2022 Source: Hooker & Holcombe 2023 Municipal Pension & OPEB Report: 200 Municipal CT Plans. Data extracted from the CAFRs submitted by local

## Trends in Funded Ratios



- The illustration below provides a historical trend for CT municipal pension plans since 2017.
- Following outsized investment performance in FY 2021 which resulted in a meaningful spike and improvement in the average funded ratio, FY 2022's challenging investment environment resulted in a return to historical

averages.



municipalities in CT for fiscal year ending June 30, 2022 Source: Hooker & Holcombe 2023 Municipal Pension & OPEB Report: 200 Municipal CT Plans. Data extracted from the CAFRs submitted by local

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# Trends in Funded Ratios for OPEB Plans



- Roughly 53% of CT OPEB plans are unfunded with 47% of plans funded with an OPEB trust
- For plans funding an OPEB, the average funded ratio was 36.5% for FY 2022 and represents a 6.6% decrease of 25 basis points FY 2021. from FY 2021. The median investment return assumption for funded OPEB plans stood at 6.25%, a decrease

## PERCENTAGE OF FUNDED OPEB PLAN INCREASES

## **DECREASE IN AVERAGE FUNDED RATIO**





## Investment Return Assumptions



local municipalities in CT for fiscal year ending June 30, 2022 Source: Hooker & Holcombe 2023 Municipal Pension & OPEB Report: 175 municipal OPEB plans. Data extracted from the CAFRs submitted by Capital Markets Overview



### Market Themes



- We are likely at or near the peak cycle Federal Funds rate as actions. Although markets consolidated a bit in the quarter on capital market returns. longer environment has historically resulted in favorable an evolving Fed narrative, a Fed "pause" and a higher for the Fed evaluates a lagged impact from its monetary policy
- N plays in meeting investment objectives is top of mind for Evaluating the new environment and the role fixed income income and valuations look attractive relative to equities. Rising interest rates have increased the return outlook for fixed investors
- S overcome and the path may not be linear. Inflation has improved significantly since peaking above nine target. However, the final steps will likely be the hardest to percent in 2022 and is approaching the Fed's two percent

# Performance Following the Fed's Last Hike - Next 12 Months

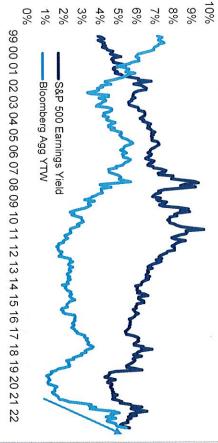
Financial markets have performed well following the Federal Reserve's last rate Treasury yield typically peaks prior to a Fed pause. hike, historically re-pricing ahead of the Fed. For example, the 10-year U.S

Date of Last Fed	"Pause"	Forward 3-V	Forward 3-Year Return from Date of Last Rate Hike (%)	rom Date of
Rate Hike	(Months to Next Cut)	Bbg Agg	1-3m Tbill	S&P 500
12/20/2018	7.5	5.0	0.9	25.0
6/29/2006	14.9	6.6	3.1	-8.0
5/16/2000	7.7	11.1	3.4	-12.4
3/25/1997	18.4	6.3	5.2	26.5
2/1/1995	5.2	10.2	5.5	30.5
	Averages	7.8	3.6	12.3

used are Bloomberg U.S. Aggregate Bond Index, Bloomberg 1-3m TBill Index, and S&P 500 Sources: Federal Reserve, FactSet, Morningstar Direct. As of September 30, 2023. Indexes

# Relative Valuations Between Equity and Fixed Income

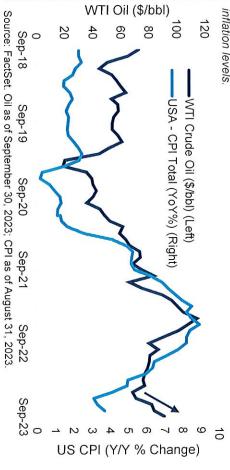
been in over 20 years. fixed income has converged to nearly equal levels, the closest valuations have Bond yields have risen and the relative valuation gap between U.S. equity and



Source: FactSet. As of September 30, 2023

## Oil Prices Ticked Higher in the Quarter

constraints from OPEC. Commodity prices are a large component of inflation and Oil prices moved higher during the third quarter on the back of continued supply are one of the many factors that may contribute to the volatile path toward target



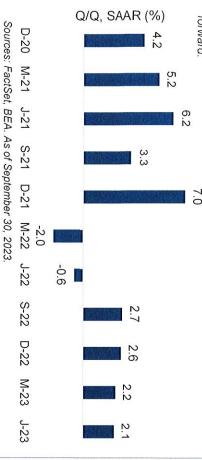
See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss.

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### **Economic Review**

### U.S. Real GDP Growth

Q2 2023. Market expectations of recession have shifted significantly lower since the start of the year, but there are cautionary signs that may impact growth going Favorable consumer spending and business investment helped propel growth in The U.S. economy remains resilient despite tightening monetary conditions



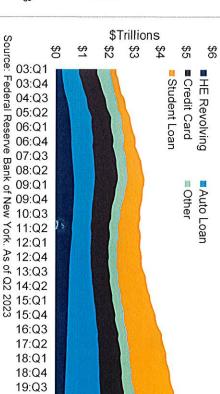
## S&P Case Shiller 20 City Home Price Index

prices, which have been a stubbornly sticky portion of inflation, have moderated and may help ease inflation levels in the future. The index fell on a year over year basis for the first time in over ten years. Home



## Rising Consumer Debt – Ex Mortgages

levels, rising delinquencies, increased cost of financing, declining savings, and the resumption of student loan payments, may test consumer resilience going forward The U.S. consumer has been strong over the past few years but growing debt



Source: 03:Q1 Federal Reserve Bank of New York. As of Q2 14:Q2

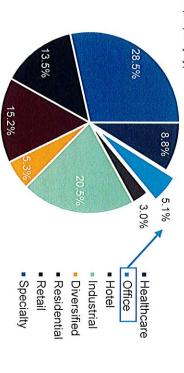
20:Q2

21:Q1 21:Q4 22:Q3

23:Q2

## Office Only a Small Portion of REIT Market

office market. While the office space certainly deserves attention, it only accounts for a small portion of the REIT market and fundamentals remain healthy across Commercial real estate continues to garner headlines, driven by weakness in the other property types.



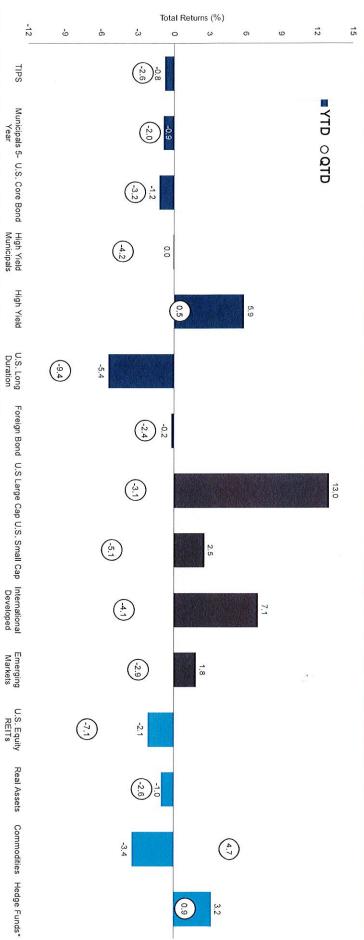
Nareit Equity REIT Index. Source: Morningstar Direct. As of September 30, 2023. Sector weights of the FTSE

Indices cannot be invested in directly. r. As of July 31, 2023.
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.

Sources: FactSet, S&P/Case Shiller. www.FiducientAdvisors.com

### **Asset Class Returns**





# Source: Morningstar Direct. As of September 30, 2023. \*Hedge fund returns as of August 31, 2023.

### Fixed Income (3Q)

- Volatility continued in fixed income markets and most segments posted negative returns. Interest rates rose as markets digested the possibility of a higher-for-longer regime from the Federal Reserve as the central bank continues to tackle bringing inflation to target levels.
- + High yield fared best as the segment, which has a lower duration profile than core fixed income, is less sensitive to interest rate changes.
- Long duration assets saw large declines in the quarter as longer dated rates experienced a sharp jump higher in the quarter.

### Equity (3Q)

- Equities were broadly lower in the period as higher interest rates led to a re-pricing of valuations. U.S. large cap outperformed small cap.
- Developed non-U.S. struggled in the quarter. The Eurozone continues to have weak economic activity and central banks remain in tightening stances.
- Emerging markets outperformed in the quarter but were still negative on an absolute basis. Positive momentum in the Indian economy provided a tailwind for the emerging region.

### Real Asset / Alternatives (3Q)

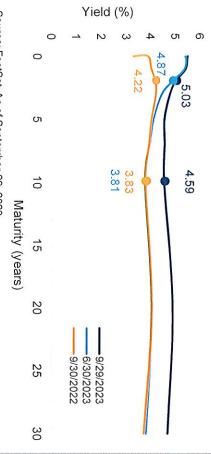
- REITs took a step back during the period. Selfstorage, Diversified and Residential were among the worst performing sub-sectors.
- + Commodities were a standout in the third quarter. Strong results stemmed from a jump in oil prices.
- + Hedge funds (reported on a month lag) posted a positive return for the first two months of the quarter. Event Driven and Relative Value strategies were among the top performing components.

## Fixed Income Market Update



### U.S. Treasury Yield Curve

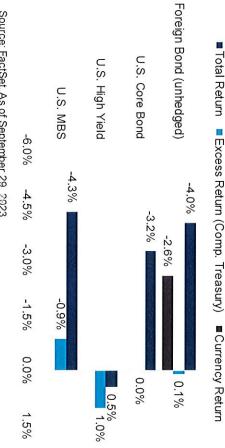
in September following July's 25 basis point hike. The prospect of a higher-forlonger environment as inflation moves closer to the 2% target was a main Interest rates rose across the yield curve during the quarter. The Fed paused driver of the move higher.



### Source: FactSet. As of September 29, 2023

## Index Performance Attribution (3Q 2023)

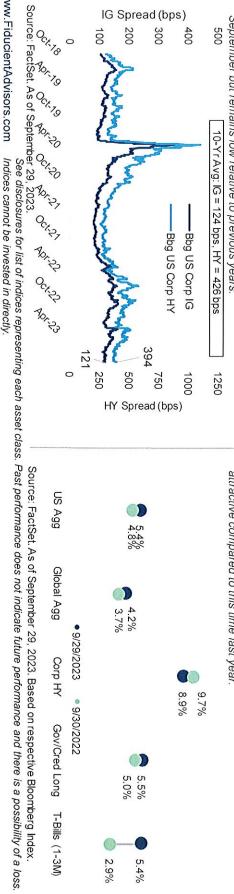
market continues to struggle amid the volatile and rising interest rate environment. fundamentals remain favorable and supply has been constrained. The MBS "Risk-on" sentiment early in the quarter fueled the corporate high yield market as



## Source: FactSet. As of September 29, 2023

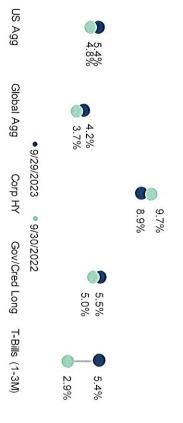
## Corporate Market Spreads - Trailing 5 Years

a strong rally in July, spreads widened to end the quarter. Issuance ticked up in September but remains low relative to previous years. Corporate credit spreads ended the quarter essentially where they began. After



## Current Yield-to-Worst vs. 1 Year Ago

spreads have remained subdued. The return outlook for fixed income looks more attractive compared to this time last year. Yields continue to rise, fueled primarily by increasing interest rates as credit

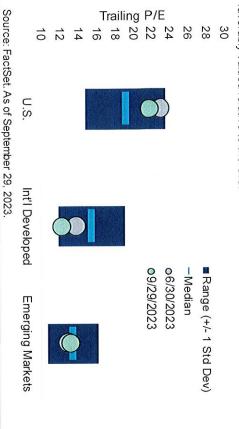


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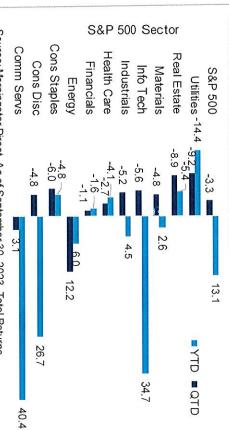
## Equity Valuations (Trailing PE – Last 15 Years)

Equity valuations compressed in the third quarter as prices fell. Higher rates were the main culprit of the repricing. Non-U.S. markets continue to look favorably valued relative to the U.S.



## U.S. Equities – Return by Sector (3Q 2023)

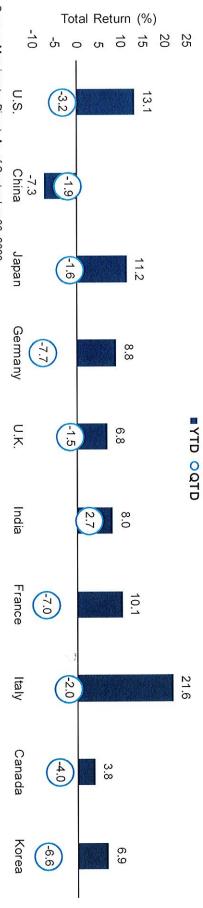
Energy and communication services were the lone positive sectors in the quarter Energy benefited from a spike in oil prices, while Alphabet and Meta were top contributors within the communication sector.



Source: Morningstar Direct. As of September 30, 2023. Total Returns

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

much of the sell-off for developed markets as investors weighed the potential impact to future economic growth and the effect on corporate earnings. Much of Europe Most global equity markets saw declining returns during the third quarter, but still remain positive year to date. A higher-for-longer interest rate environment prompted struggled, with key countries such as Germany reporting negative GDP growth. On the other hand, India was a bright spot on the back of favorable economic data.



Source: Morningstar Direct. As of September 30, 2023.

www.FiducientAdvisors.com Indices cannot be invested in directly. 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.

## Real Assets Market Update



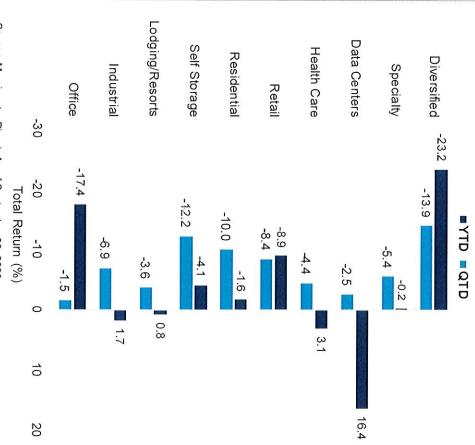
### **Commodity Performance**

mixed. Energy was the clear leader in the quarter, driven by constrained supply Commodities overall posted a positive return, but underlying results were from OPEC, with oil prices approaching \$100 a barrel.



### **REIT Sector Performance**

concerns surrounding cable lines polluting rivers. the segment lower. The Diversified sub-sector was among the worst in the quarter as Towers, which are a large component, came under pressure amid The general equity selloff and greater interest rate sensitivity of REITs pushed



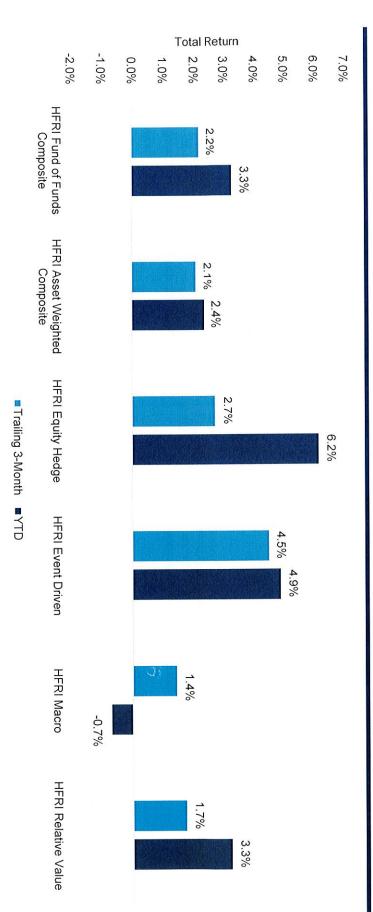
Source: Morningstar Direct. As of September 30, 2023.

www.FiducientAdvisors.com Source: Morningstar Direct. As of September 30, 2023.

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## Marketable Alternatives





Source: Morningstar Direct. As of August 31, 2023.

## Fund of Funds / Asset Weighted (3Q)

- + The HFRI Fund of Funds Composite returned 2.2 percent over the trailing 3-month period, bringing its year-to-date return to 3.3 percent.
   + The HFRI Asset Weighted Composite returned 2.1
- + The HFRI Asset Weighted Composite returned 2.1 percent over the trailing 3-month period, bringing its year-to-date return to 2.4 percent.
- +/- Marketable alternatives lagged equity markets but outpaced fixed income markets over the trailing 3-month period amidst continued volatility in fixed income and rising interest rates.

### Equity Hedge / Event Driven (3Q)

- + Equity Hedge strategies returned 2.7 percent over the period, participating in a strong equity market.
  Fundamental Value and Quantitative Directional focused funds were notable contributors.
- Event Driven strategies returned 4.5 percent over the period and finished as the best performing strategy type.
- + Activist and Special Situations focused funds were amongst the highest performers during the period, returning 6.6 percent and 6.2 percent, respectively.

### Macro / Relative Value (3Q)

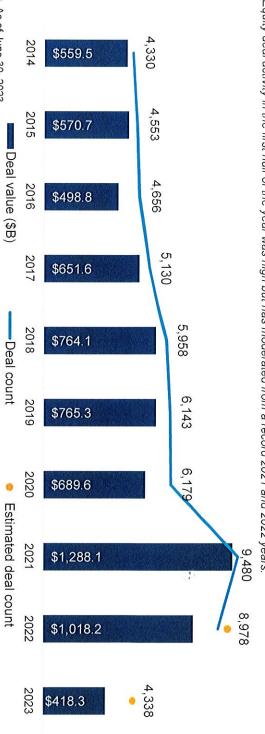
- Macro strategies retuned 1.4 percent over the period with discretionary managers generally outpacing their systematic peers.
- + Relative Value strategies returned 1.7 percent over the period with broad positive performance across strategy types.
- + Within Relative Value strategies, Yield Alternatives focused funds were a notable bright spot, returning 4.9 percent over the period.

## **Private Equity Market Update**



## U.S. Private Equity Deal Activity

U.S. Private Equity deal activity in the first half of the year was high but has moderated from a record 2021 and 2022 years.



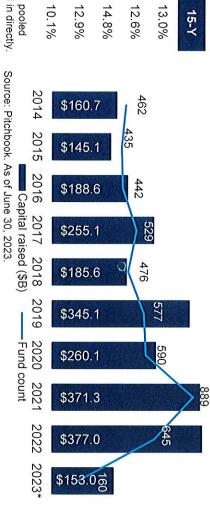
Source: Pitchbook. As of June 30, 2023.

## Private Equity Performance (As of March 31, 2023)

Private equity performance was dispersed during the first quarter of 2023 with US Venture posting negative returns while buyout was modestly positive. For most of 2022 and early 2023, buyout was more resilient while growth and venture lagged.

## U.S. Private Equity Fundraising Activity

Following record years in 2021 and 2022, the fundraising market moderated in the first and second quarter of 2023. However, the middle market, funds \$100MM - \$5BN, is on track to have its best fundraising year ever.



Source: Cambridge Associates. As of March 31,2023. Returns presented as horizon pooled return, net of fees. S&P 500 Index as of March 31, 2023. Indices cannot be invested in directly.

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S&P 500 Index

US Growth Equity Index

-10.3%

26.2%

21.0%

18.2%

2.0%

25.7%

17.7%

16.6%

US Buyout Index

US Private Equity Index

-1.5%

25.8%

18.5%

17.0%

1-YR

3-YR

5-YR

10-Y

Benchmark

**US Venture Capital Index** 

-18.2%

26.3%

21.5%

18.4%

-7.7%

18.6%

11.2%

12.2%



## The Case for Diversification

S 2016         2017         2018         2019         2020         2021         2022         YTD         10 Years (Ann)           RETR         U.S. Small Cap         Empty Market         H9h Yeald Munis         U.S. Small Cap         Heapy Finds         Heapy Finds         U.S. Small Cap         Heapy Finds         Heapy Finds         U.S. Small Cap         U.S. Small											1	
2016         2017         2018         2019         2020         2021         2021         YTD           US. Small Cop 17,13         Emerging Markets         High Yield Munis         US. Lamp Cop 4,4         US. Lamp Cop 20,0         US. Small Cop 18,1         US. Lamp Cop 18,2         US. Lamp Cop 18,2         US. Lamp Cop 18,2         US. Lamp Cop 18,3         US. Lamp Cop 18,4         US. Lamp Cop 18,3         US. Lamp Cop 18,4         US. Small Cop 18,4 <t< th=""><th>Commodities -0.7</th><th>Commodities 3,4</th><th>U.S. Equity REITs -24.4</th><th>Foreign Bond -4.2</th><th>U</th><th>Municipals 5-Year 5,4</th><th>Emerging Markets -14.6</th><th>Commodities 1.7</th><th>Municipals 5-Year -0,4</th><th>Commodities -24.7</th><th>Commodities -17.0</th><th>Commodities -9.5</th></t<>	Commodities -0.7	Commodities 3,4	U.S. Equity REITs -24.4	Foreign Bond -4.2	U	Municipals 5-Year 5,4	Emerging Markets -14.6	Commodities 1.7	Municipals 5-Year -0,4	Commodities -24.7	Commodities -17.0	Commodities -9.5
2016         2017         2018         2019         2020         2021         2022         YTD           U.S. Small Cap 2133         Emerging Markets 2133         High Yield Munis 4.8         U.S. Large Cap 37.3         U.S. Small Cap 4.2         U.S. Small Cap 4.2         U.S. Early RETTs 20.0         U.S. Small Cap 20.0         U.S. Early RETTs 20.0         U.S. Small Cap 20.0         U.S. Small Cap 20.0         U.S. Small Cap 20.0         U.S. Small Cap 20.0         Commodities         Municipals S-Year Municipals S-Year 20.0         Municipals S-Yea	Foreign Bond 0.3	U.S. Equity REITs -2.1	U.S. Small Cap -20.4	Emerging Markets -2.5	Commodities -3.1	Foreign Bond 6.3	International Dev. -13.8	ПРS 3.0	Hedge Funds 0.5	Emerging Markets -14.9	International Dev. -4.9	ПРS -8.6
2016         2017         2018         2019         2020         2020         2021         2022         YTD           U.S. Small Cap 21.3         Emerging Markets         High Yield Munits         U.S. Large Cap 31.5         U.S. Small Cap 20.0         U.S. Equily REITs         U.S. Equily REITs         Commodities         U.S. Large Cap 16.1         U.S. Large Cap 17.7         U.S. Equily REITs         U.S. Large Cap 20.0         U.S. Equily REITs         U.S. Equily REITs         U.S. Large Cap 20.0         U.S. Equily REITs         U.S. Large Cap 27.1         Municipals S-Year         U.S. Equily REITs         U.S. Equily REITs         U.S. Large Cap 27.1         Municipals S-Year         U.S. Equily REITs         U.S. Small Cap 27.1         High Yield Municipals S-Year         High Yield Municipals S-Year         High Yield Municipals S-Year         High Yield Municipals S-Year         U.S. Small Cap 27.1         High Yield Municipals S-Year         High Yield Municipals S-Year         High Yield Municipals S-Year         High Yield Municipals S-Year         U.S. Small Cap 27.1         U.S. Small Cap 27.1         U.S. Small Cap 27.1         U.	U.S. Core Bond 1.1	U.S. Core Bond -1.2	Emerging Markets -20.1	Core Bond -1.5	Municipals 5-Year 4.3	Commodities 7.7	Commodities -11.2	Municipals 5-Year 3.1	International Dev. 1.0	High Yield 4.5	Emerging Markets -2.2	High Yield Munis -5.5
2016         2017         2018         2019         2020         2021         2022         YTD           U.S. Small Cap 2113         Emerging Markets 2113         High Yield Munis 4.8         U.S. Large Cap 37.2         U.S. Small Cap 4.8         U.S. Small Cap 250         U.S. Small Cap 4.8         U.S. Small Cap 250         U.S. Equity REITs         Commodities 4.2         Commodities 4.2         Commodities 4.2         Commodities 4.2         Municipals 5-Year 4.2         Municipals 5-Year 11.0         International 4.8         U.S. Small Cap 25.0         Commodities 4.2         U.S. Small Cap 27.1         Municipals 5-Year 4.2         International 4.3         High Yield 4.3         Municipals 5-Year 4.2         International 4.3         High Yield 4.3         High Yield 4.3         U.S. Small Cap 4.1         High Yield 4.3         U.S. Small Cap 4.1         U.S. Small Cap 4.1         U.S. Small Cap 4.1         High Yield 4.3         U.S. Small Cap 4.1	Municipals 5-Year 1.4	Municipals 5-Year -0.9	U.S. Large Cap -19.1	Municipals 5-Year 0.3	High Yield Munis 4,9	Hedge Funds 7.8	U.S. Small Cap -11.0	Core Bond 3.5	Core Bond 2.6	U.S. Small Cap 4.4	High Yield 2.5	Emerging Markets -2.6
2016         2017         2018         2019         2020         2021         2022         YTD           U.S. Small Cap 21,3         Emerging Markets 21,3         Emerging Markets 31,5         U.S. Large Cap 31,5         U.S. Small Cap 20,0         U.S. Equity REITS 20,0         U.S. Small Cap 20,0         U.S. Small Ca	TIPS 1.7	TIPS -0.8	Balanced -14.9	High Yield 5.3	Foreign Bond 7.0	TIPS 8.4	Balanced -5.8	U.S. Equity REITs 5.2	High Yield Munis 3.0	Balanced -3.3	Foreign Bond 2.9	Core Bond -2.0
2016         2017         2018         2019         2020         2021         2022         YTD           U.S. Small Cap 21.3         Emerging Markets         High Yield Munis 37.3         U.S. Large Cap 4.8         U.S. Small Cap 20.0         U.S. Equity REITs 20.0         U.S. Equity REITs 20.0         Commodities         U.S. Equity REITs 20.0         U.S. Equity REITs 20.0         Commodities         U.S. Large Cap 20.0         Commodities         U.S. Large Cap 20.0         Commodities         U.S. Large Cap 20.5         Commodities         U.S. Small Cap 27.1         High Yield 20.0         High Yield 20.0         U.S. Small Cap 20.0         U.S. Small Cap 20.0         U.S. Small Cap 20.0         U.S. Small Cap 20.0         High Yield 20.0         High Yield 20.0         U.S. Small Cap 20.0         High Yield 20.0         High Yield 20.0         U.S. Small Cap 20.0         U.S. Small Cap 20.0         High Yield Munis 20.0         U.S. Small Cap 20.0	Emerging Markets 2.1	Foreign Bond -0.2	International Dev. -14.5	Hedge Funds 5.7	High Yield 7.1	Core Bond 8.7	U.S. Equity REITs 4.6	Foreign Bond 6.5	Foreign Bond 3.2	Foreign Bond -2.3	Municipats 5-Year 3.2	Foreign Bond -1.0
2016         2017         2018         2019         2020         2021         2022         YTD           U.S. Small Cap         Emerging Markets         High Yield Munis         U.S. Large Cap         U.S. Small Cap         U.S. Equity REITs         Commodities         Commodities         U.S. Large Cap         U.S. Equity REITs         U.S. Large Cap         Municipals 5-Year         U.S. Large Cap         U.S. Large Cap         Municipals 5-Year         U.S. Large Cap         Commodities         Municipals 5-Year         U.S. Small Cap         Commodities         Municipals 5-Year         International Davidad         Municipals 5-Year         International Davidad         Municipals 5-Year         International Davidad         Large Cap         Municipals 5-Year         International Davidad         Hedge Funds         High Yield         Halph Yield         Halph Yield         U.S. Small Cap         U.S. Small Cap         High Yield Municipals 5-Year         Hedge Funds         High Yield Municipals 5-Year         Hedge Funds         High Yield Municipals 5-Year         U.S. Small Cap         Hedge Funds         Hedge Funds         Hedge Funds         High Yield Municipals 5-Year         U.S. Small Cap         U.S. Small Cap <td< td=""><td>Hedge Funds 3.5</td><td>High Yield Municipals 0.0</td><td></td><td>ПРS 6.0</td><td>Hedge Funds 7.1</td><td>High Yield Munis 10.7</td><td>U.S. Large Cap -4.4</td><td>High Yield 7.5</td><td>TIPS 4.7</td><td>TIPS -1:4</td><td>Hedge Funds 3,4</td><td>Municipals 5-Year 0.8</td></td<>	Hedge Funds 3.5	High Yield Municipals 0.0		ПРS 6.0	Hedge Funds 7.1	High Yield Munis 10.7	U.S. Large Cap -4.4	High Yield 7.5	TIPS 4.7	TIPS -1:4	Hedge Funds 3,4	Municipals 5-Year 0.8
2016         2017         2018         2019         2020         2021         2022         YTD           U.S. Small Cap 21.3         Emerging Markets 21.3         High Yield Munis 4.8         U.S. Large Cap 31.5         U.S. Small Cap 20.00         U.S. Equity REITS 20.00         U.S. Equity REITS 20.00         Commodities 20.00         U.S. Equity REITS 20.00         Commodities 20.00         Municipals 5-Year 13.0         International 25.0         Municipals 5-Year 13.0         International 25.0         Municipals 5-Year 18.4         Commodities 27.1         Municipals 5-Year 18.4         Municipals 5-Year 27.1         Municipals 5-Year 18.4         Municipals 5-Year 27.1         Municipals 5-Year 25.3         Municipals 5-Year 27.1         Municipals 5-Year 25.3         Municipals 5-Year 27.1         Municipals 5-Year 18.	International Developed 3.8	Emerging Markets 1.8	High Yield Municipals -13.1		Core Bond 7.5	High Yield 14.3	Hedge Funds -4.0	Hedge Funds 7.8	Balanced 7.6	International Dev. -0.8	ПРS 3.6	U.S. Equity REITs 2.5
2016         2017         2018         2019         2020         2021         2022         YTD           U.S. Small Cap 21.3         Emerging Markets 37.3         High Yield Munis 4.8         U.S. Large Cap 4.8         U.S. Small Cap 20.0         U.S. Equity REITs 20.0         U.S. Equity REITs 20.0         U.S. Equity REITs 20.0         U.S. Equity REITs 20.0         Commodities 27.1         Municipals 5-Year 18.4         Municipals 5-Year 26.0         International 18.4         Commodities 27.1         Municipals 5-Year 18.4         International 27.1         Municipals 5-Year 26.0         International 27.1         Municipals 5-Year 27.1         International 27.1         Municipals 5-Year 27.1         International 27.1         International 27.1         U.S. Small Cap 27.1         U.S. Small Cap 27.1         U.S. Small Cap 28.5         Hedge Funds 28.6         High Yield 3.4           U.S. Small Cap 11.2         Balanced 11.3         International Dev. 11.8	High Yield Municipals 4.0		U.S. Core Bond -13.0	Balanced 9,8	International Dev. 7.8	Balanced 17.5	High Yield -2.1	High Yield Munis 9.7	U.S. Equity REITs 8.5	Hedge Funds -0.3	U.S. Small Cap 4.9	High Yield 7.4
2016         2017         2018         2019         2020         2021         2022         YTD           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 20.0         U.S. Equity REITs 20.0         Commodities 43.2         Commodities 25.0         U.S. Large Cap 17.1         Commodities 25.0         Municipals 5-Year 1.7         U.S. Equity REITs 26.0         U.S. Large Cap 18.3         Commodities 27.1         Municipals 5-Year 27.1         High Yield 3.9         High Yield 4.8         High Yield 3.4         High Yield 3.4	Balanced 4.1	Hedge Funds 3.2	TIPS -11.8	International Dev. 11.3	Balanced 8.8	Emerging Markets 18.4	TIPS -1.3	Balanced 13.6	Emerging Markets 11.2	Core Bond 0.6	Balanced 5.1	Hedge Funds 9.0
2016         2017         2018         2019         2020         2021         2022         YTD           U.S. Small Cap 21.3         Emerging Markets 37.3         High Yield Munis 4.8         U.S. Large Cap 37.3         U.S. Small Cap 4.8         U.S. Equity REITs 20.0         U.S. Equity REITs 20.0         U.S. Equity REITs 43.2         Commodities 18.0         U.S. Large Cap 27.1         Municipals 5Year 18.0         International Developed 7.1         International Developed 7.1         International Developed 7.1         Developed 7.1         U.S. Small Cap 7.1         U.S. Small Cap 18.3         U.S. Large Cap 26.5         High Yield 4.8         High Yield 5.9         High Yield 5.9	High Yield 4.2	Balanced 3.4	High Yield -11.2	US Small Cap 14.8	TIPS 11.0	International Dev. 22.5	Core Bond 0.0	U.S. Small Cap 14.6	Commodities 11.7	U.S. Large Cap 1.4	Core Bond 6.0	Balanced 12.2
2016         2017         2018         2019         2020         2021         2022         YTD           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 20.0         U.S. Equity REITs 4.2         Commodities 13.0         U.S. Large Cap 16.1         U.S. Large Cap 16.1         International Developed 7.1         International Developed 7.1	U.S. Equity REITs 6.0	High Yield 5.9	Hedge Funds -5.6	US Large Cap 26.5		U.S. Small Cap 25.5	Foreign Bond 0,5	U.S. Large Cap 21.8	U.S. Large Cap 12.0	High Yield Munis 1.8	U.S. Large Cap 13.7	International Dev. 22.8
2016         2017         2018         2019         2020         2021         2022         YTD           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 16.1	U.S. Small Cap 6.6	International Developed 7.1	Municipals 5-Year -5.3	Commodities 27.1	U.S. Large Cap 18.4	U.S. Equity REITs 26.0	Municipals 5-Year 1.7	International Dev. 25.0	High Yield 17.1	Municipals 5-Year 2.4	High Yield Munis 13.8	U.S. Large Cap 32.4
2016 2017 2018 2019 2020 2021 2022 YTD	U.S. Large Cap 11.6	U.S. Large Cap 13.0	Commodities 16.1	U.S. Equity REITs 43.2	U.S. Small Cap 20.0	U.S. Large Cap 31.5	High Yield Munis 4.8	Emerging Markets 37.3	U.S. Small Cap 21.3	U.S. Equity REITs 3.2	U.S. Equity REITs 30.1	U.S. Small Cap 38.8
	10 Years (Ann)	ALD	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013

Sources: Morningstar, FactSet. As of September 30, 2023. \*Periods greater than one year are annualized. Total returns in U.S. dollars. Hedge Funds as of August 31, 2023.



## **Financial Markets Performance**

All returns are in U.S. dollar terms
Periods greater than one year are annualized
Total Return as of September 30, 2023

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.

Portfolio and Manager Review



### Asset Allocation

**\$** 

Town Employees Pension

As of September 30, 2023

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Town Employees Pension	37,173,879	100.0	100.0	0.0
Short Term Liquidity	201,995	0.5	0.0	0.5
AllSpring Govt Money Market Fund	201,995	0.5	0.0	0.5
Fixed Income	10,395,465	28.0	27.5	0.5
Metropolitan West Total Return PI	6,760,624	18.2	18.0	0.2
BlackRock Strategic Income Opportunities Fund K	2,136,597	5.7	5.5	0.2
Artisan High Income Institutional	795,106	2.1	2.0	0.1
BrandywineGLOBAL Global Opportunities Bond IS	703,138	1.9	2.0	-0.1
Domestic Equity	13,618,867	36.6	36.5	0.1
T. Rowe Price Equity Income I	2,416,239	6.5	6.5	0.0
Vanguard Institutional Index Fund Insti	5,662,713	15.2	15.0	0.2
Harbor Capital Appreciation Ret	1,604,788	4.3	4.0	0.3
Glenmede Small Cap Equity Instl	3,935,126	10.6	11.0	-0.4
International Equity	9,718,611	26.1	27.0	-0.9
Dodge & Cox International Stock Fund	5,086,473	13.7	13.5	0.2
Vanguard International Growth Fund Adm	4,632,138	12.5	13.5	-1.0
Real Estate	1,577,304	4.2	4.5	-0.3
DFA Global Real Estate Securities I	1,577,304	4.2	4.5	-0.3
Real Assets	1,661,637	4.5	4.5	0.0
Principal Diversified Real Asset R6	1,661,637	4.5	4.5	0.0

### Asset Allocation Board of Education Account

Board of Education Account				As of September 30, 2023
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Board of Education Account	16,418,646	100.0	100.0	0.0
Short Term Liquidity	247,316	1.5	0.0	1.5
AllSpring Govt Money Market Fund	247,316	1.5	0.0	1.5
Fixed Income	4,419,147	26.9	27.5	-0.6
Metropolitan West Total Return PI	2,852,939	17.4	18.0	-0.6
BlackRock Strategic Income Opportunities Fund K	915,703	5.6	5.5	0.1
Artisan High Income Institutional	346,440	2.1	2.0	0.1
BrandywineGLOBAL Global Opportunities Bond IS	304,065	1.9	2.0	-0.1
Domestic Equity	6,081,763	37.0	36.5	0.5
T. Rowe Price Equity Income I	1,035,902	6.3	6.5	-0.2
Vanguard Institutional Index Fund Instl	2,582,083	15.7	15.0	0.7
Harbor Capital Appreciation Ret	687,579	4.2	4.0	0.2
Glenmede Small Cap Equity Instl	1,776,200	10.8	11.0	-0.2
International Equity	4,322,089	26.3	27.0	-0.7
Dodge & Cox International Stock Fund	2,257,687	13.8	13.5	0.3
Vanguard International Growth Fund Adm	2,064,402	12.6	13.5	-0.9
Real Estate	652,537	4.0	4.5	-0.5
DFA Global Real Estate Securities I	652,537	4.0	4.5	-0.5
Real Assets	695,794	4.2	4.5	-0.3
Principal Diversified Real Asset R6	695,794	4.2	4.5	-0.3

### Asset Allocation

As of September 30, 2023

South Windsor OPEB				As of September 30, 2023
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation	Differences (%)
South Windsor OPEB	4,590,909	100.0	100.0	0.0
Short Term Liquidity	12,975	0.3	0.0	0.3
AllSpring Govt Money Market Fund	12,975	0.3	0.0	0.3
Fixed Income	1,273,049	27.7	27.5	0.2
Metropolitan West Total Return PI	827,789	18.0	18.0	0.0
BlackRock Strategic Income Opportunities Fund K	260,166	5.7	5.5	0.2
Artisan High Income Institutional	96,075	2.1	2.0	0.1
BrandywineGLOBAL Global Opportunities IS	89,019	1.9	2.0	-0.1
Domestic Equity	1,702,979	37.1	36.5	0.6
T. Rowe Price Equity Income I	278,377	6.1	6.5	-0.4
Vanguard Institutional Index Fund Instl	727,184	15.8	15.0	0.8
Harbor Capital Appreciation Ret	218,266	4.8	4.0	0.8
Glenmede Small Cap Equity Instl	479,152	10.4	11.0	-0.6
International Equity	1,198,119	26.1	27.0	-0.9
Dodge & Cox International Stock Fund	619,651	13.5	13.5	0.0
Vanguard International Growth Adm	578,468	12.6	13.5	-0.9
Real Estate	198,467	4.3	4.5	-0.2
DFA Global Real Estate Securities I	198,467	4.3	4.5	-0.2
Real Assets	205,320	4.5	4.5	0.0
Principal Diversified Real Asset R6	205,320	4.5	4.5	0.0

# **Town of South Windsor Pension & OPEB Plans**

Portfolio Summary As of September 30, 2023

Total Performance Summary							
	QTR	Fiscal YTD	<u>1-Year</u>	3-Year	<u>5-Year</u>	<u>10-Year</u>	Since 5/1/2008**
Town Employees Pension	-4.0%	4.0%	12.6%	4.1%	4.8%	5.6%	5.5%
Board of Education Pension	-4.0%	4.0%	12.6%	4.1%	4.9%	5.7%	5.5%
Blended Benchmark *	-3.5%	-3.5%	13.5%	3.4%	4.6%	5.5%	5.3%
	QTR	Fiscal YTD	1-Year	<u>3-Year</u>	5-Year	10-Year	Since 9/1/2018
OPEB Plan	-4.0%	4.0%	12.5%	3.9%	4.8%	N/A	4.7%
Blended Benchmark *	-3.5%	-3.5%	13.5%	3.4%	4.6%	N/A	4.5%

<sup>\*</sup>Blended benchmark: 27.5% Bloomberg Barclays US Aggregate Index/36.5% Russell 3000 Index/27.0% MSCI AC World ex USA Index/4.5% S&P Global REIT Index/4.5% Diversified Real Asset Blended Index

Manager Status Summary			
Mandate	Manager/Fund	Status	Note
Fixed Income	Metropolitan West Total Return PI	Watch	TCW announced long-time Generalist Portfolio Managers, Laird Landmann and Stephen Kane, will be retiring at the end of 2023 and no earlier than 2024, respectively. Bryan Whalen, who currently serves as co-CIO and Generalist Portfolio Manager alongside Mr. Kane, will remain in his role and will become the sole CIO at the end of 2023. Ruben Hovhannisyan and Jerry Cudzil will join the Generalist Portfolio Manager team, effective immediately.
Fixed Income	BlackRock Strategic Income Opportunities K	Maintain	N/A
Fixed Income	Artisan High Income Institutional	Maintain	N/A
Fixed Income	BrandywineGLOBAL Global Opportunities IS	Discuss	The strategy was placed on Discuss status following the announcement of Macro Strategist, Francis Scottland's planned retirement in June 2024.
Equity - Large Cap	T. Rowe Price Equity Income I	Maintain	N/A
Equity - Large Cap	Vanguard Institutional Index	Maintain	N/A
Equity - Large Cap	Harbor Capital Appreciation R	Maintain	N/A
Equity - Sm/Mid Cap	Glendmede Small Cap Equity I	Maintain	N/A
International Equity	Dodge & Cox International Stock	Maintain	N/A
International Equity	Vanguard International Growth Adm	Maintain	N/A
Real Estate	DFA Global Real Estate Securities I	Maintain	N/A
Real Assets	Principal Diversified Real Asset R6	Maintain	N/A



### FLASH Memo

Subject: TCW Fixed Income Team – Upcoming Retirements and

Promotions

Previous Status: Maintain Current Status: Watch

Effective Date: August 2023

### WaivravO

TCW recently announced significant changes to the fixed income team, including the upcoming retirements of two longstanding Generalist Portfolio Managers, Laird Landmann and Stephen Kane. Mr. Landmann will be setives at the end of 2023, with Mr. Kane retiring no earlier than the end of 2024. Bryan Whalen, who currently setives as co-CIO and Generalist Portfolio Manager alongside Mr. Kane, will remain in his role and will become the sole CIO at the end of 2023. Mr. Kane will continue to serve as a Generalist Portfolio Manager until his retirement.

Ruben Hovhannisyan and Jerry Cudzil will join the Generalist Portfolio Manager team, effective immediately. Mr. Hovhannisyan has worked directly in support of the Generalist team for 16 years, while Mr. Cudzil has been with the firm for over 10 years and previously served as Co-Head of Credit and Head of Credit Trading. TCW's team approach, where the Generalist Portfolio Managers set the top-down macro-orientation and risk budget while the sector specialists conduct the bottom-up security selection within their respective coverage areas, is expected to continue.

The fixed income team also promoted four senior research professionals (Tammy Karp, Drew Sweeney, Ken Toshima and Palak Pathak) to a newly formed role, Senior Portfolio Manager. They will join the Generalist Portfolio Managers (Liza Crawford, Brian Gelfand, Steven Purdy, Bret Barker, and Jamie Patton) on the newly formalized Fixed Income Investment Committee.

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### Recommendation

Messrs. Landmann and Kane, along with former CIO Tad Rivelle (who departed the firm at the end of 2021), cofounded Metropolitan West Asset Management ("MetWest") in 1996 before it was acquired by TCW in 2010. The three portfolio managers developed and implemented the relative value, contrarian philosophy MetWest is known for, and brought Bryan Whalen into the firm in 2004. The upcoming retirements of Laird Landmann and Stephen Kane are material and mark the next steps in the transition to the second generation of fixed income leadership.

The announcement comes on the heels of previous senior leadership departures, including Tad Rivelle's retirement in 2021 and former CEO David Lippman's departure in 2022. Katie Koch, CEO, filled the firm's leadership position in February 2023. Bryan Whalen has been working alongside the founding investors for the Detter part of two decades and will continue to carry the torch within the investment team, but the newly named Generalist Portfolio Managers have large shoes to fill. While the team structure in place helps provide continuity in the process, the impact of the newly formalized Fixed Income Investment Committee is yet to be determined.

The changes to the fixed income team also come amidst challenging performance relative to peers and the benchmark for the MetWest Total Return strategy. The Generalist/Specialist structure has historically delivered favorable results through a risk-controlled top-down framework combined with strong underlying security selection from the specialist teams. Our evaluation of the changes will aim to determine if the team's ability to deliver long-term alpha can continue in a similar fashion.

As a result of the upcoming retirements and team changes, we have placed the MetWest Total Return, TCW Core Fixed Income, MetWest Low Duration, and TCW Total Return strategies on "Watch" as we further monitor and evaluate the newly named portfolio managers, team structure, and portfolios. We do not recommend any action be taken at this time.



### FLASH Memo

Subject: Brandywine Global Bond Retirement Announcement

**Previous Status:** Maintain Current Status: Discuss

Effective Date: August 2023

### waiviavO

Brandywine announced that there will be several transitions within the Global Fixed Income Team. In June 2024, Francis Scotland will step back as Director of Global Macro Research. Over the following year, Francis will continue in his role and provide insights to the team. Paul Mielezarski, hired in January 2023 as Head of Macro Strategy, will take on more of Mr. Scotland's managerial and client-related responsibilities. Furthermore, Min Tian, Global Macro Research Specialist, will continue to support quantitative modeling and the maintenance and monitoring of the global macro research platform. Notably, Ms. Tian has worked alongside Mr. Scotland since joining Brandywine in 2006. The portfolio managers on the strategy will remain in place.

### Recommendation

While Mr. Scotland's departure is material, it was well telegraphed, and Brandywine remains well-resourced to absorb his responsibilities. Given the team-based nature of the investment process, continuity amongst the portfolio management team, and the tenure of Ms. Tian within the global macro research platform, we expect no changes to the investment process or strategy efficacy. For these reasons, we have placed the strategy on "Discuss" status and recommend no action at this time.

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### Manager Performance

Town Employees Pension As of September 30, 2023

	Allocation	-				Pe	Performance(%)	%)				
	Market Value (\$)	%	QTD	Fiscal YTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
Town Employees Pension	879	100.0	-4.0	-4.0	4.5	12.6	4.1	4.8	5.6	5.5	05/2008	
South Windsor Blended Benchmark			-3.5	-3.5	5.3	13.5	3.4	4.6	5.5	5.3		
Short Term Liquidity	201,995	0.5	0.7	0.7	1.5	2.2	0.8	1.1	0.7	0.6	01/2009	
90 Day U.S. Treasury Bill			1.3	1.3	3.6	4.5	1.7	1.7	1.1	0.8		
AllSpring Govt Money Market Fund	201,995	0.5	0.7	0.7	1.5	2.2	0.8	1.1	0.7	0.6	05/2008	
90 Day U.S. Treasury Bill			1.3	1.3	3.6	4.5	1.7	1.7	1.1	0.8		
Fixed Income	10,395,465	28.0	-2.8	-2.8	-0.6	1.5	-3.2	0.7	1.6	3.2	01/2009	
Blmbg. U.S. Aggregate			-3.2	-3.2	-1.2	0.6	-5.2	0.1	1.1	2.3		
Metropolitan West Total Return PI	6,760,624	18.2	-3.5	-3.5	-1.4	0.4	-5.5	0.1	1.2	1.3	09/2013	Watch
Blmbg. U.S. Aggregate			-3.2	-3.2	-1.2	0.6	-5.2	0.1	1.1	1.2		
IM U.S. Broad Market Core+ Fixed Income (MF) Median			-3.0	-3.0	-0.6	1.3	4.8	0.3	1.3	1.4		
Metropolitan West Total Return Pl Rank			84	84	77	74	81	61	54	52		
BlackRock Strategic Income Opportunities Fund K	2,136,597	5.7	-0.3	-0.3	1.7	3.4	0.4	2.2	2.5	2.2	11/2014	Maintain
Blmbg. U.S. Aggregate			-3.2	-3.2	-1.2	0.6	-5.2	0.1	1.1	0.7		
IM Alternative Credit Focus (MF) Median			-0.6	-0.6	1.9	4.4	0.2	1.2	1.4	1.2		
BlackRock Strategic Income Opportunities Fund K Rank			46	46	52	57	49	30	20	26		
Artisan High Income Institutional	795,106	2.1	1.5	1.5	8.5	10.7	4.0	4.5		3.4	02/2023	Maintain
Blmbg. U.S. Corp: High Yield			0.5	0.5	5.9	10.3	1.8	3.0	4.2	2.0		
IM U.S. High Yield Bonds (MF) Median			0.4	0.4	5.2	9.5	1.4	2.4	3.4	1.4		
Artisan High Income Institutional Rank			7	7	2	19	0	2	3	6		
BrandywineGLOBAL Global Opportunities Bond IS	703,138	1.9	-7.7	-7.7	4.6	2.5	-5.6	-1.5	0.2	11	07/2011	Discuss
Blmbg. Global Aggregate			-3.6	-3.6	-2.2	2.2	-6.9	-1.6	-0.4	-0.1		
IM Global Fixed Income (MF) Median			-2.4	-2.4	-0.3	2.7	-4.9	-0.7	0.3	0.5		
BrandywineGLOBAL Global Opportunities Bond IS Rank			98	98	97	56	59	68	51	40		

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.

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### Manager Performance

Town Employees Pension

As of September 30, 2023

	Allocation	on .				ע	Performance(%)	%)				
	Market	e	3	Fiscal	ş	<b>-</b>	ಬ	5   ·	6	Since	Inception	Manager Status
	(\$)			ΥTD		Year	Years	Years	Years	Inception	Date	
Domestic Equity	13,618,867	36.6	-3.8	-3.8	9.4	18.8	10.8	9.0	10.9	12.6	01/2009	
Russell 3000 Index			-3.3 3	-3.3	12.4	20.5	9.4	9.1	11.3	13.2		
T. Rowe Price Equity Income I	2,416,239	6.5	<u>3.1</u>	-3.1	-0.6	12.2	13.6	6.4	7.9	9.8	06/2012	Maintain
Russell 1000 Value Index			-3.2	-3.2	1.8	14.4	11.1	6.2	8.4	10.4		
IM U.S. Large Cap Value Equity (MF) Median			-2.4	-2.4	2.0	15.1	11.4	6.7	8.7	10.5		
T. Rowe Price Equity Income I Rank			68	68	81	76	23	62	74	74		
Vanguard Institutional Index Fund Insti	5,662,713	15.2	-3.3	-3.3	13.0	21.6	10.1	9.9	11.9	10.4	03/2018	Maintain
S&P 500			:3 3:3	-3.3	13.1	21.6	10.2	9.9	11.9	10.5		
IM U.S. Large Cap Core Equity (MF) Median			-3.2	-3.2	11.6	20.9	8.9	9.0	10.8	9.6		
Vanguard Institutional Index Fund Instl Rank			56	56	34	40	25	24	13	20		
Harbor Capital Appreciation Ret	1,604,788	4.3	-3.4	-3.4	32.3	30.4	2.4	10.5	13.7	11.6	05/2008	Maintain
Russell 1000 Growth Index			-3.1	-s.1	25.0	27.7	8.0	12.4	14.5	12.0		
IM U.S. Large Cap Growth Equity (MF) Median			-3.6	-3.5	23.2	26.3	4.7	9.6	12.3	10.3		
Harbor Capital Appreciation Ret Rank			45	45	o	16	76	30	15	10		
Glenmede Small Cap Equity Inst!	3,935,126	10.6	-5.0	-5.0	3.6	14.8	16.3	5.6	7.9	8.4	10/2014	Maintain
Russell 2000 Index			-5.1	-5.1	2.5	8.9	7.2	2.4	6.6	7.0		
IM U.S. Small Cap Core Equity (MF) Median			4.0	-4.0	2.6	11.8	12.0	3.5	6.8	6.9		
Glenmede Small Cap Equity Instl Rank			71	71	38	27	12	15	19	13		
International Equity	9,718,611	26.1	-5.2	-5.2	6.2	21.4	3.6	4.4	5.3	8.5	01/2009	
MSCI AC World ex USA (Net)			-3.8	-3.8	5.3	20.4	3.7	2.6	3.3	6.2		
Dodge & Cox International Stock Fund	5,086,473	13.7	-1.3	-1.3	9.3	26.7	12.1	4.4	4	3.3	05/2008	Maintain
MSCI AC World ex USA Value (Net)			-0.1	-0.1	8.2	25.2	9.6	2.3	2.6	1.5		
IM International Large Cap Value Equity (MF) Median			-2.3	-2.3	8.7	29.4	9.2	2.9	3.1	2.0		
Dodge & Cox International Stock Fund Rank			23	23	42	83	14	24	14	22		

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## Manager Performance

Town Employees Pension										As of	As of September 30, 2023	r 30, 20
	Allocation	'n				Pe	Performance(%)	%)				3 - 3 h
	Market Value (\$)	%	QTD	Fiscal YTD	a <u>t</u> ,	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
Vanguard International Growth Fund Adm	4,632,138	12.5	-9.2	-9.2	3.1	16.1	4.7	4.9	6.7	5.1	05/2008	Maintain
MSCI AC World ex USA Growth (Net)			-7.3	-7.3	2.6	15.8	-1.9	2.5	3.9	2.5		
IM International Large Cap Growth Equity (MF) Median			-7.1	-7.1	4.4	18.9	0.9	3.2	4.0	2.9		
Vanguard International Growth Fund Adm Rank			81	81	72	84	95	23	4	ω		
Real Estate	1,577,304	4.2	-7.3	-7.3	-6.6	-0.1	11	-1.0	2.0	6.4	01/2009	
Real Estate Composite Benchmark			-6.5	-6.5	-4.5	2.0	2.2	-0.3	2.5	6.8		
DFA Global Real Estate Securities I	1,577,304	4.2	-7.3	-7.3	-6.6	<u>-</u> 0.1	11	0.9	4.	-3.4	12/2019	Maintain
S&P Global REIT Index (Net)			-6.5	-6.5	-4.5	2.0	2.2	0.0	3.1	-3.9		
IM Global Real Estate (MF) Median			-5.9	-5.9	-3.6	2.7	0.6	0.3	2.7	-3.4		
DFA Global Real Estate Securities I Rank			96	96	99	97	37	34	18	52		
Real Assets	1,661,637	4.5	4.1	4.1	-3.5	3.7			r	2.4	02/2021	
Diversified Real Asset Blended Index			-2.9	-2.9	-3.0	4.9	5.7	3.1	2.5	2.4		
Principal Diversified Real Asset R6	1,661,637	4.5	4.	4	-3.5	3.7	5.6	3.1	•	2.4	02/2021	Maintain
Diversified Real Asset Blended Index			-2.9	-2.9	-3.0	4.9	5.7	3.1	2.5	2.4		

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 outstodian. 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 vray from the inception dates of underlying component strategies.



# Calendar Year Performance

Town Employees Pension As of September 30, 2023

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	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Town Employees Pension	-15.1	12.2	16.7	20.1	-7.2	15.8	7.9	-2.4	4.0	15.5
South Windsor Blended Benchmark	-16.0	12.7	13.5	20.2	-5.8	-5.8 13.6	8.3	-2.1	5.7	15.0
Short Term Liquidity	1.0	0.0	0.3	2.0	1.6	0.7	0.2	0.0	0.0	0.0
90 Day U.S. Treasury Bill	1.5	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0	0.0
AllSpring Govt Money Market Fund	1.0	0.0	0.3	2.0	1.6	0.7	0.2	0.0	0.0	0.0
90 Day U.S. Treasury Bill	1.5	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0	0.0
Fixed Income	-11.0	-0,6	8.6	8.6	-0.5	5.3	4.5	-1.5	4.9	-0.9
Blmbg. U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0
Metropolitan West Total Return PI	-14.7	-1.1	9.2	9.2	0.3	3.5	2.6	0.2	6.2	0.4
Blmbg. U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0
IM U.S. Broad Market Core+ Fixed Income (MF) Median	-13.7	-0.9	8.6	9.3	-1.0	4.5	4.1	-0.3	5.1	<u>'</u>
Metropolitan West Total Return Pl Rank	73	57	36	55	<u> </u>	79	86	26	25	16
BlackRock Strategic Income Opportunities Fund K	-5.6	1.0	7.3	7.8	-0.5	5.0	3.6	-0.6	3.6	3.0
Blmbg. U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0
IM Alternative Credit Focus (MF) Median	-7.6	1.9	3.9	7.3	-1.9	4.5	4.9	-1.6	1.0	-0.1
BlackRock Strategic Income Opportunities Fund K Rank	41	58	17	43	29	43	64	25	21	31
Artisan High Income Institutional	-9.5	6.4	10.2	14.2	-1.4	8.9	14.5	1.2	•	•
Blmbg. U.S. Corp: High Yield	-11.2	5.3	7.1	14.3	-2.1	7.5	17.1	-4.5	2.5	7.4
IM U.S. High Yield Bonds (MF) Median	-11.0	4.9	5.4	13.8	-3.0	6.6	13.8	4.0	1.5	6.7
Artisan High Income Institutional Rank	25	19	4	42	11	Οī	38	2	í	r
BrandywineGLOBAL Global Opportunities Bond IS	-15.7	-5.3	12.7	9.2	4.9	12.8	5.0	-8.5	6.3	-3.9
Blmbg. Global Aggregate	-16.2	-4.7	9.2	6.8	-1.2	7.4	2.1	-3.2	0.6	-2.6
IM Global Fixed Income (MF) Median	-14.7	-2.7	8.3	8.1	-1.8	6.8	2.9	-3.8	1.9	-2.5
BrandywineGLOBAL Global Opportunities Bond IS Rank	62	80	51	25	95	ω	25	96	14	77
Domestic Equity	-15.7	26.5	19.7	29.3	-6.1	23.1	10.8	1.5	8.9	33.7
Russell 3000 Index	-19.2	25.7	20.9	31.0	-5.2	21.1	12.7	0.5	12.6	33.6
T. Rowe Price Equity Income I	-3.1	25.8	1.4	26.7	-9.2	16.3	19.4	-6.7	7.5	29.8
Russell 1000 Value Index	-7.5	25.2	2.8	26.5	-8.3	13.7	17.3	-ယ လ	13.5	32.5
IM U.S. Large Cap Value Equity (MF) Median	-6.1	26.0	3.8	26.5	-8.6	17.0	13.8	-3.0	10.8	32.1
T. Rowe Price Equity Income I Rank	19	55	79	49	62	63	7	92	93	85

#### **©**

# Calendar Year Performance

Town Employees Pension								As	As of September 30, 2023	er 30, 202
					Perform	ance(%)				
	2022	2021	2020	2019	2018	2018 2017	2016	2015	2014	2013
Vanguard Institutional Index Fund Instl	-18.1	28.7	18.4	31.5	4.4	21.8	11.9	1.4	13.7	32.3
S&P 500	-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4
IM U.S. Large Cap Core Equity (MF) Median	-18.7	26.9	18.4	30.7	-5.4	21.5	9.7	0.5	11.5	31.8
Vanguard Institutional Index Fund Instl Rank	46	26	50	37	32	45	20	35	18	38
Harbor Capital Appreciation Ret	-37.7	15.7	54.6	33.4	-1.0	36.7	-1.0	11.0	9.9	37.7
Russell 1000 Growth Index	-29.1	27.6	38.5	36.4	-1.5	30.2	7.1	5.7	13.1	33.5
IM U.S. Large Cap Growth Equity (MF) Median	-31.3	22.4	35.6	33.3	-1.2	29.3	2.2	5.6	10.5	34.1
Harbor Capital Appreciation Ret Rank	87	88	7	49	48	Oī	82	51	58	16
Glenmede Small Cap Equity Instl	-10.5	29.1	15.9	21.3	-15.7	16.0	18.3	-2.7	3.3	48.2
Russell 2000 Index	-20.4	14.8	20.0	25.5	-11.0	14.6	21.3	-4.4	4.9	38.8
IM U.S. Small Cap Core Equity (MF) Median	-15.8	25.1	9.9	23.9	-12.7	12.1	21.7	4.3	4.7	36.8
Glenmede Small Cap Equity Instl Rank	20	26	23	77	74	14	80	29	67	ω
International Equity	-18.7	5.2	27.6	26.1	-17.2	34.1	5.0	-6.0	-2.7	24.5
MSCI AC World ex USA (Net)	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3
Dodge & Cox International Stock Fund	-6.8	11.0	2.1	22.8	-18.0	23.9	8.3	-11.4	0.1	26.3
MSCI AC World ex USA Value (Net)	-8.6	10.5	-0.8	15.7	-14.0	22.7	8.9	-10.1	-5.1	15.0
IM International Large Cap Value Equity (MF) Median	-10.6	13.2	4.1	19.0	-16.7	22.9	1.3	-1.8	-7.0	21.8
Dodge & Cox International Stock Fund Rank	10	59	75	o	80	34	_	89	9	7
Vanguard International Growth Fund Adm	-30.8	-0.7	59.7	31.5	-12.6	43.2	1.8	-0.5	-5.5	23.1
MSCI AC World ex USA Growth (Net)	-23.1	5.1	22.2	27.3	-14.4	32.0	0.1	-1.3	-2.6	15.5
IM International Large Cap Growth Equity (MF) Median	-20.2	8.9	20.0	27.5	-14.7	28.6	-1.9	0.2	-4.5	20.0
Vanguard International Growth Fund Adm Rank	93	97	_	14	28	ω	13	60	64	17
Real Estate	-23.8	31.0	-6.7	19.0	-8.0	9.7	3.6	-0.9	14.1	3.2
Real Estate Composite Benchmark	-24.4	31.4	-9.1	21.0	-5.6	10.4	4.1	-0.8	15.0	3.7
DFA Global Real Estate Securities I	-23.8	31.0	-6.7	26.4	42	9.2	6.6	0.7	22.7	1.8
S&P Global REIT Index (Net)	-24.4	31.4	-9.1	23.1	-5.9	7.4	5.8	-0.4	21.5	1.7
IM Global Real Estate (MF) Median	-25.9	26.9	-4.8	23.6	-5.5	11.5	2.8	-0.3	14.3	3.0
DFA Global Real Estate Securities I Rank	15	13	74	22	14	79	0	29	4	76



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					Performa	ance(%)				
	2022	2021	2020	2019	2018	2017,	2016	2015	2014	2013
Real Assets	-6.1	•	•	•	•	•	•		•	1
Diversified Real Asset Blended Index	-5.1	15.9	2.1	14.9	-7.3	10.4	12.4	-11.7	0.2	-1.2
Principal Diversified Real Asset R6	-6.1	17.4	3.9	15.1	-7.8	10.2	5.9	-12.4	•	
Diversified Real Asset Blended Index	-5.1	15.9	2.1	14.9	-7.3	10.4	12.4	-11.7	0.2	-1.2

# Manager Status Commentary



		As of September 30, 2023
Manager	Recommendation	Comments
Metropolitan West Total Return PI	Watch 3Q 2023	3Q 2023 - TCW announced long-time Generalist Portfolio Managers, Laird Landmann and Stephen Kane, will be retiring at the end of 2023 and no earlier than 2024, respectively. Bryan Whalen, who currently serves as co-ClO and Generalist Portfolio Manager alongside Mr. Kane, will remain in his role and will become the sole ClO at the end of 2023. Mr. Kane will continue to serve as a Generalist Portfolio Manager until his retirement. Ruben Howhamistyan and Jerry Cudzil will join the Generalist Portfolio Manager team, effective immediately, Mr. Howhamistyan has worked directly in support of the Generalist team for 16 years, while Mr. Cudzil has been with the firm for over 10 years and previously served as Co-Head of Credit and Head of Credit Trading.
BlackRock Strategic Income Opportunities Fund K	Maintain	
Artisan High Income Institutional	Maintain	
BrandywineGLOBAL Global Opportunities Bond IS	Discuss 3Q 2023	The strategy was placed on Discuss status following the announcement of Macro Strategist, Francis Scottland's planned retirement in June 2024.
T. Rowe Price Equity Income I	Maintain	
Vanguard Institutional Index Fund InstI	Maintain	
Harbor Capital Appreciation Ret	Maintain	
Glenmede Small Cap Equity Instl	Maintain	
Dodge & Cox International Stock Fund	Maintain	
Vanguard International Growth Fund Adm	Maintain	
DFA Global Real Estate Securities I	Maintain	
Principal Diversified Real Asset R6	Maintain	

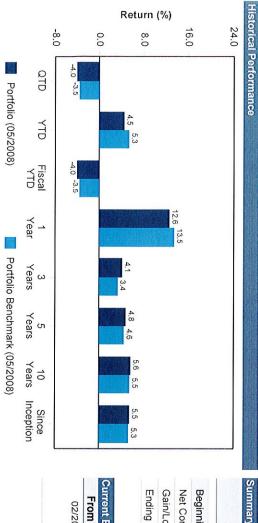
Commentary produced upon change of status.

### Portfolio Dashboard



As of September 30, 2023

Town Employees Pension



**Ending Market Value** 

37,173,879 37,173,879

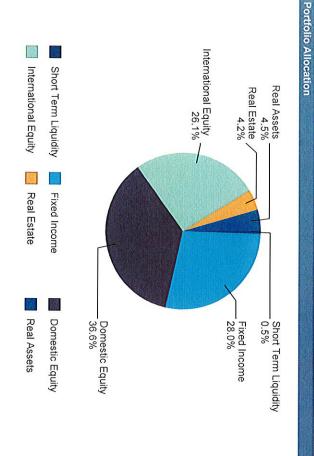
37,173,879

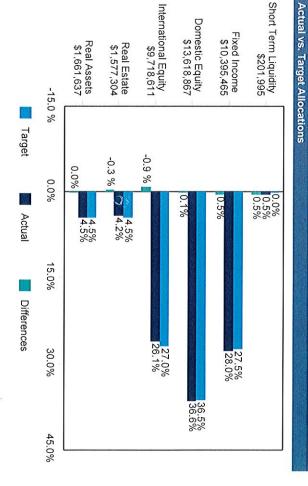
37,173,879

37,173,879 19,521,714

Summary of Cash Flows					
	QTD	Fiscal YTD	YTD	1 Year	Since Inception
Beginning Market Value	37,643,458	37,643,458	35,893,556	33,901,542	11,284,955
Net Contributions	1,110,586	1,110,586	-257,080	-908,120	6,367,210
Gain/Loss	-1,580,166	-1,580,166	1,537,403	4,180,456	19,521,714
7 - J W	020 020	0=0 0=0	21 (10 010	2	

02/2023	From Date	<b>Current Benchmark Composition</b>
Present	To Date	rk Composition
27.50% Blmbg. U.S. Aggregate, 36.50% Russell 3000 Index, 27.00% MSCI AC World ex USA (Net), 4.50% S&P Global REIT Index (Net), 4.50% Diversified Real Asset Blended Index		

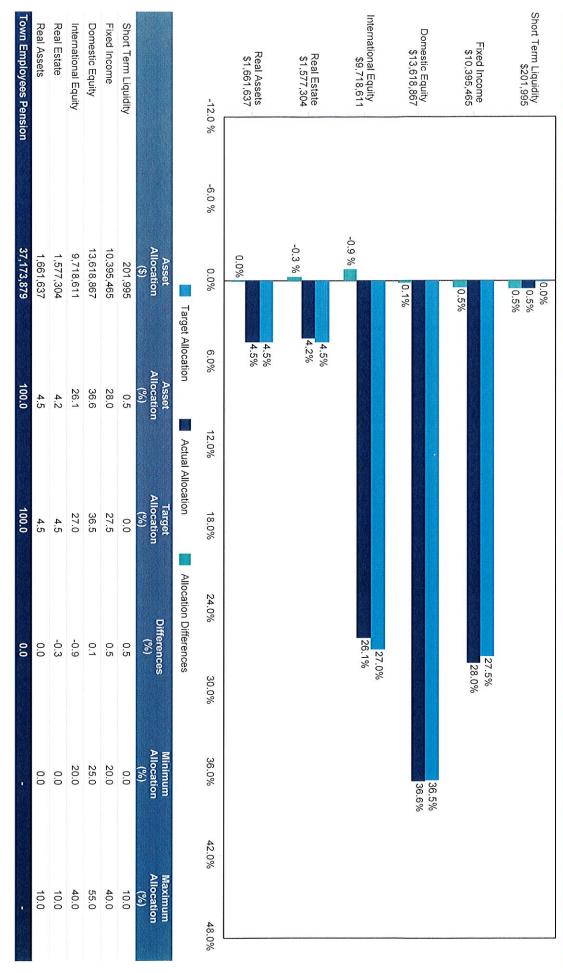




### Asset Allocation



Actual vs. Target Town Employees Pension As of September 30, 2023



#### \$

# Performance Overview

05/2008	5.3	5.5	5.6	4.6	3.4	13.5	5.3	-3.5	<b>-</b> 3.5	South Windsor Blended Benchmark
05/2008	5.5	5.6	6.0	4.8	4.1	12.6	4.5	-4.0	-4.0	Town Employees Pension
Inception Date	Since Inception	10 Years	7 Years	5 Years	3 Years	1 Year	YTD	Fiscal YTD	QTD	
										Trailing Performance Summary
er 30, 2023	As of September 30, 2023	A								own Employees Pension

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Town Employees Pension	-15.1	12.2	16.7	20.1	-7.2	15.8	7.9	-2.4	4.0	15.5
South Windsor Blended Benchmark	-16.0	12.7	13.5	20.2	-5.8	13.6	<u>ဇ</u> ယ	-2.1	5.7	15.0

Plan Reconciliation									
	QTD	Fiscal YTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Town Employees Pension									05/2008
Beginning Market Value	37,643,458	37,643,458	35,893,556	33,901,542	33,311,906	29,282,065	20,219,484	11,284,955	
Net Contributions	1,110,586	1,110,586	-257,080	-908,120	-275,956	264,337	1,934,472	6,367,210	
Gain/Loss	-1,580,166	-1,580,166	1,537,403	4,180,456	4,137,928	7,627,477	15,019,922	19,521,714	
Ending Market Value	37,173,879	37,173,879	37,173,879	37,173,879	37,173,879	37,173,879	37,173,879	37,173,879	
Benchmark Composition									
					Weight (%)				
Feb-2023									
Blmbg. U.S. Aggregate					27.5				
Russell 3000 Index					36.5				
MSCI AC World ex USA (Net)					27.0				
S&P Global REIT Index (Net)					4.5				
Diversified Real Asset Blended Index	Index				4.5				



# Investment Gain/Loss Summary

Town Employees Pension

1 Quarter Ending September 30, 2023

	Market Value as of 07/01/2023	Net Contributions	Gain/Loss	Market Value As of 09/30/2023
Town Employees Pension	37,643,458	1,110,586	-1,580,166	37,173,879
Short Term Liquidity	337,446	-139,414	3,963	201,995
AllSpring Govt Money Market Fund	337,446	-139,414	3,963	201,995
Fixed Income	9,989,415	710,000	-303,950	10,395,465
Metropolitan West Total Return PI	6,508,304	500,000	-247,680	6,760,624
BlackRock Strategic Income Opportunities Fund K	2,014,591	130,000	-7,994	2,136,597
Artisan High Income Institutional	738,645	45,000	11,461	795,106
BrandywineGLOBAL Global Opportunities Bond IS	727,875	35,000	-59,737	703,138
Domestic Equity	14,040,518	115,000	-536,651	13,618,867
T. Rowe Price Equity Income I	2,383,666	115,000	-82,426	2,416,239
Vanguard Institutional Index Fund Instl	5,854,662	,	-191,949	5,662,713
Harbor Capital Appreciation Ret	1,661,310	r	-56,522	1,604,788
Glenmede Small Cap Equity Instl	4,140,880	,	-205,754	3,935,126
International Equity	10,085,008	175,000	-541,397	9,718,611
Dodge & Cox International Stock Fund	5,023,993	135,000	-72,520	5,086,473
Vanguard International Growth Fund Adm	5,061,015	40,000	-468,877	4,632,138
Real Estate	1,576,006	130,000	-128,702	1,577,304
DFA Global Real Estate Securities I	1,576,006	130,000	-128,702	1,577,304
Real Assets	1,615,065	120,000	-73,428	1,661,637
Principal Diversified Real Asset R6	1,615,065	120,000	-73,428	1,661,637

### **Portfolio Statistics**



lown Employees Pension							ASC	As of September 30, 2023
	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Return	-4.0	4.5	12.6	4.1	4.8	5.6	5.5	05/2008
Standard Deviation	3.2	3.6	13.5	13.8	14.4	11.2	11.9	
Upside Risk	1.8	3.0	3.5	10.7	10.7	8.5	8.8	
Downside Risk	2.9	2.1	7.0	8.9	9.8	7.5	8.1	
vs. South Windsor Blended Benchmark	큿							
Alpha		-0.1	-1.9	0.7	0.0	-0.2	0.1	
Beta	1.2	1.1	1.1	1.0	7	1.1	1.0	
Information Ratio	-0.4	-0.2	-0.4	0.5	0.2	0.1	0.2	
Tracking Error	0.5	0.5	1.6	1.5	1.8	1.5	1.5	
vs. 90 Day U.S. Treasury Bill								
Sharpe Ratio	-0.5	0.0	0.6	0.2	0.3	0.4	0.4	



# **Estimated Fee Analysis**

Town Employees Pension

As of September 30, 2023

	Market Value (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Town Employees Pension	37,173,879	165,268	0.44
Short Term Liquidity	201,995		_
AllSpring Govt Money Market Fund	201,995		•
Fixed Income	10,395,465	47,844	0.46
Metropolitan West Total Return PI	6,760,624	25,014	0.37
BlackRock Strategic Income Opportunities Fund K	2,136,597	13,247	0.62
Artisan High Income Institutional	795,106	5,645	0.71
BrandywineGLOBAL Global Opportunities Bond IS	703,138	3,938	0.56
Domestic Equity	13,618,867	53,708	0.39
T. Rowe Price Equity Income I	2,416,239	13,531	0.56
Vanguard Institutional Index Fund Instl	5,662,713	1,982	0.04
Harbor Capital Appreciation Ret	1,604,788	9,468	0.59
Glenmede Small Cap Equity Instl	3,935,126	28,726	0.73
International Equity	9,718,611	47,285	0.49
Dodge & Cox International Stock Fund	5,086,473	31,536	0.62
Vanguard International Growth Fund Adm	4,632,138	15,749	0.34
Real Estate	1,577,304	3,470	0.22
DFA Global Real Estate Securities I	1,577,304	3,470	0.22
Real Assets	1,661,637	12,961	0.78
Principal Diversified Real Asset R6	1,661,637	12,961	0.78

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

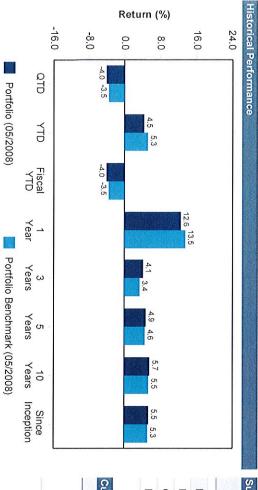
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### Portfolio Dashboard



As of September 30, 2023

**Board of Education Account** 



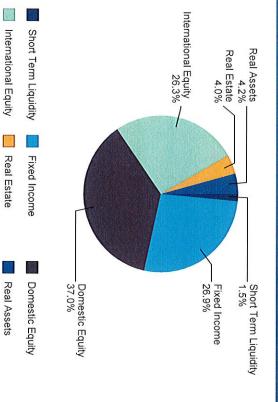
**Ending Market Value** 

16,418,646 16,418,646 16,418,646 16,418,646

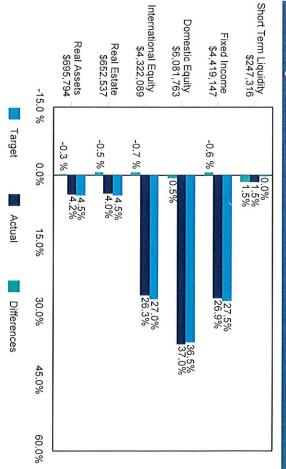
ummary of Cash Flows					
	QTD	Fiscal YTD	YTD	1 Year	Since Inception
Beginning Market Value	17,285,880	17,285,880	16,089,617	15,145,539	6,280,589
Net Contributions	-180,500	-180,500	-396,357	-630,475	623,770
Gain/Loss	-686,734	-686,734	725,386	1,903,582	9,514,287

	02/2023	From Date	<b>Current Benchmark Composition</b>
	Present	To Date	ark Composition
27,00% MSCI AC World ex USA (Net), 4,50% S&P Global REIT Index (Net), 4,50% Diversified Real Asset Blended Index	27 50% Blmba 11 S. Aggregate 36 50% Blissell 3000 Index		

### Portfolio Allocation

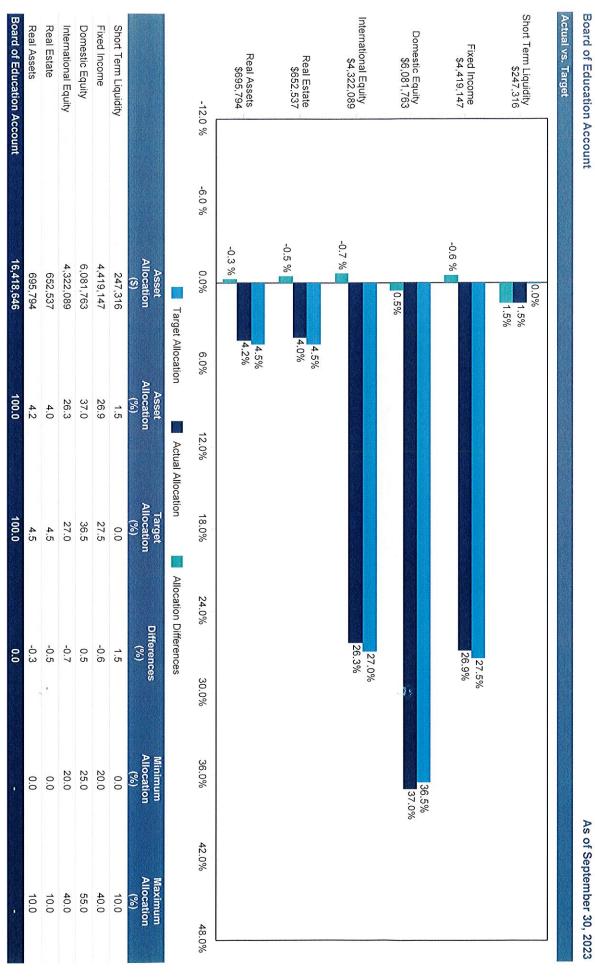


### Actual vs. Target Allocations



### Asset Allocation





#### **\$**

## **Performance Overview**

05/2008	5.3	5.5	5.6	4.6	3.4	13.5	5.3	-3.5	-3.5	South Windsor Blended Benchmark
05/2008	5.5	5.7	6.1	4.9	4.1	12.6	4.5	4.0	4.0	<b>Board of Education Account</b>
Inception Date	Since Inception	10 Years	7 Years	5 Years	3 Years	1 Year	ALD	Fiscal YTD	QTD	
										Trailing Performance Summary
r 30, 2023	As of September 30, 2023	A								Board of Education Account

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
<b>Board of Education Account</b>	-15.0	12.2	16.6	20.3	-7.1	15.8	8.0	-2.5	3.9	15.5
South Windsor Blended Benchmark	-16.0	12.7	13.5	20.2	-5.8	13.6	8.3	-2.1	5.7	15.0

Plan Reconciliation									
	QTD	Fiscal YTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Board of Education Account</b>									05/2008
Beginning Market Value	17,285,880	17,285,880	16,089,617	15,145,539	15,421,368	13,864,953	10,035,436	6,280,589	
Net Contributions	-180,500	-180,500	-396,357	-630,475	-978,120	-1,104,259	-1,000,436	623,770	
Gain/Loss	-686,734	-686,734	725,386	1,903,582	1,975,398	3,657,953	7,383,647	9,514,287	
Ending Market Value	16,418,646	16,418,646	16,418,646	16,418,646	16,418,646	16,418,646	16,418,646	16,418,646	
Benchmark Composition									
					Weight (%)				
Feb-2023  Rimba IIS Aggregate					27 5				
Russell 3000 Index					36.5				
MSCI AC World ex USA (Net)					27.0				

S&P Global REIT Index (Net)
Diversified Real Asset Blended Index

4.5



# Investment Gain/Loss Summary Board of Education Account

1 Quarter Ending September 30, 2023

	Market Value as of 07/01/2023	Net Contributions	Gain/Loss	Market Value As of 09/30/2023
Board of Education Account	17,285,880	-180,500	-686,734	16,418,646
Short Term Liquidity	177,432	69,500	383	247,316
AllSpring Govt Money Market Fund	177,432	69,500	383	247,316
Fixed Income	4,546,443		-127,296	4,419,147
Metropolitan West Total Return PI	2,956,833		-103,894	2,852,939
BlackRock Strategic Income Opportunities Fund K	918,771		-3,068	915,703
BrandywineGLOBAL Global Opportunities Bond IS	329,586	1	-25,521	304,065
Domestic Equity	6,572,447	-250,000	-240,684	6,081,763
T. Rowe Price Equity Income I	1,069,490	t	-33,587	1,035,902
Vanguard Institutional Index Fund Instl	2,795,533	-125,000	-88,451	2,582,083
Harbor Capital Appreciation Ret	838,353	-125,000	-25,775	687,579
Glenmede Small Cap Equity Instl	1,869,071	h	-92,871	1,776,200
International Equity	4,560,744	•	-238,654	4,322,089
Dodge & Cox International Stock Fund	2,287,885		-30,198	2,257,687
Vanguard International Growth Fund Adm	2,272,858	1	-208,456	2,064,402
Real Estate	703,618	•	-51,081	652,537
DFA Global Real Estate Securities I	703,618	1	-51,081	652,537
Real Assets	725,197		-29,403	695,794
Principal Diversified Real Asset R6	725,197	31	-29,403	695,794

### Portfolio Statistics



Board of Education Account							Asc	As of September 30, 2023
	QTD	ΥTO	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Return	-4.0	4.5	12.6	4.1	4.9	5.7	5.5	05/2008
Standard Deviation	3.2	3.6	13.4	13.8	14.5	11.2	11.9	
Upside Risk	1.9	3.0	3.5	10.7	10.7	8.5	8.8	
Downside Risk	2.9	2.1	7.0	8.9	9.9	7.5	8.1	
vs. South Windsor Blended Benchmark	*							
Alpha	0.0	-0.1	-1.9	0.6	0.1	-0.2	0.1	
Beta	1.2	1.1	1.1	1.0		1.1	1.0	
Information Ratio	-0.3	-0.2	-0.4	0.5	0.2	0.2	0.2	
Tracking Error	0.5	0.5	1.6	1.5	1.8	1.5	1.5	
vs. 90 Day U.S. Treasury Bill								
Sharpe Ratio	-0.5	0.0	0 0	0.0	٠ ۵	0.4	02	

#### **©**

# **Estimated Fee Analysis**

**Board of Education Account** 

As of September 30, 2023

	Market Value (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Board of Education Account	16,418,646	72,003	0.44
Short Term Liquidity	247,316		
AllSpring Govt Money Market Fund	247,316		•
Fixed Income	4,419,147	20,396	0.46
Metropolitan West Total Return Pl	2,852,939	10,556	0.37
BlackRock Strategic Income Opportunities Fund K	915,703	5,677	0.62
Artisan High Income Institutional	795,106	5,645	0.71
BrandywineGLOBAL Global Opportunities Bond IS	304,065	1,703	0.56
Domestic Equity	6,081,763	23,728	0.39
T. Rowe Price Equity Income I	1,035,902	5,801	0.56
Vanguard Institutional Index Fund Instl	2,582,083	904	0.04
Harbor Capital Appreciation Ret	687,579	4,057	0.59
Glenmede Small Cap Equity Instl	1,776,200	12,966	0.73
International Equity	4,322,089	21,017	0.49
Dodge & Cox International Stock Fund	2,257,687	13,998	0.62
Vanguard International Growth Fund Adm	2,064,402	7,019	0.34
Real Estate	652,537	1,436	0.22
DFA Global Real Estate Securities I	652,537	1,436	0.22
Real Assets	695,794	5,427	0.78
Principal Diversified Real Asset R6	695,794	5,427	0.78

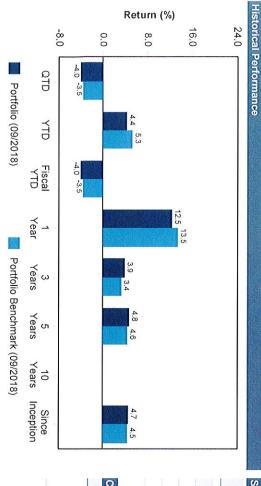
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### Portfolio Dashboard



South Windsor OPEB

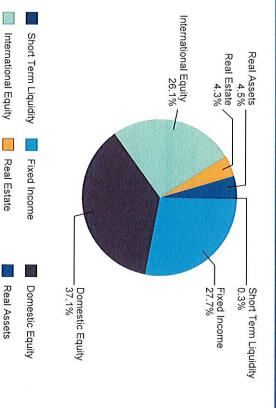


As of September 30, 2023

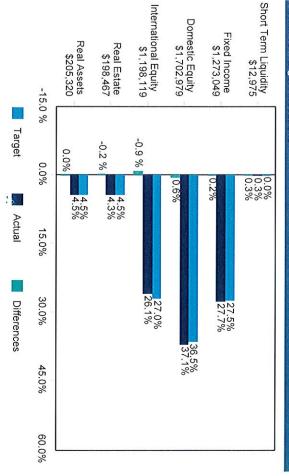
Summary of Cash Flows					
	QTD	Fiscal YTD	YTD	1 Year	Since Inception
Beginning Market Value	4,637,772	4,637,772	4,269,536	3,963,103	2,682,652
Net Contributions	146,305	146,305	144,226	142,448	1,129,327
Gain/Loss	-193,168	-193,168	177,147	485,357	778,930
<b>Ending Market Value</b>	4,590,909	4,590,909	4,590,909	4,590,909	4,590,909

	02/2023	From Date	rent Benchmark Composition
	Present	To Date	Composition
27.00% MSCI AC World ex USA (Net), 4.50% S&P Global REIT Index (Net), 4.50% Diversified Real Asset Blended Index	27.50% Blmbg. U.S. Aggregate, 36.50% Russell 3000 Index,		

### Portfolio Allocation

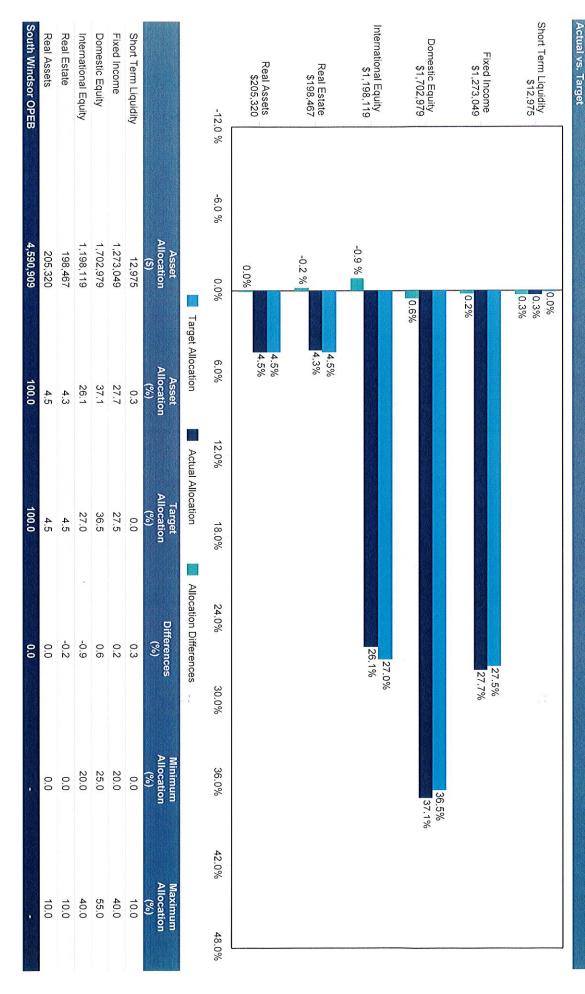


### Actual vs. Target Allocations



### Asset Allocation

South Windsor OPEB As of September 30, 2023



## Performance Overview



many         QTD         Fiscal VTD         YTD         1 3 5 7 10 Since Date         7 10 Since Date         Inception Date           4.0         4.0         4.4         12.5         3.9         4.8         -         -         4.5         09/2018           nded Benchmark         -3.5         -3.5         5.3         13.5         3.4         4.6         -         -         4.5         09/2018											
Fiscal YTD 1 3 5 7 10 Since Years Years Years Inception 4.0 4.4 12.5 3.9 4.8 4.7	09/2018	4.5	ã	ı	4.6	3.4	13.5	5.3	-3.5s	-3.5	South Windsor OPEB Blended Benchmark
As of September Fiscal YTD 1 3 5 7 10 Since Years Years Years Years Inception	09/2018	4.7		•	4.8	3.9	12.5	4.4	4.0	4.0	South Windsor OPEB
As of September 30, 2023	Inception Date	Since Inception	10 Years	7 Years	5 Years	3 Years	1 Year	YTD	Fiscal YTD	QTD	
As of September 30, 2023											Trailing Performance Summary
	r 30, 2023	of Septembe	As								South Windsor OPEB

South Windsor OPEB Blended Benchmark	South Windsor OPEB		Calendar Year Performance Summary
-16.0	-15.6	2022	
12.7	12.5	2021	
13.5	16.9	2020	
20.2	20.3	2019	
	ı	2018	
1		2017	
	•	2016	
i	ı	2015	
	•	2014	
		2013	

	QTD	Fiscal YTD	ALD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
South Windsor OPEB									09/2018
Beginning Market Value	4,637,772	4,637,772	4,269,536	3,963,103	3,583,730	2,680,516	•	2,682,652	
Net Contributions	146,305	146,305	144,226	142,448	593,904	1,129,564		1,129,327	
Gain/Loss	-193,168	-193,168	177,147	485,357	413,275	780,828	•	778,930	
Ending Market Value	4 590 909	4 590 909	4 590 909	4.590.909	4 590 909	4,590,909	,	E00 000	

	Weight (%)
Feb-2023	
Blmbg. U.S. Aggregate	27.5
Russell 3000 Index	36.5
MSCI AC World ex USA (Net)	27.0
S&P Global REIT Index (Net)	4.5
Diversified Real Asset Blended Index	4.5



# Investment Gain/Loss Summary

South Windsor OPEB

1 Quarter Ending September 30, 2023

	Market Value as of	Net Contributions	Gain/Loss	Market Value As of
	07/01/2023			09/30/2023
South Windsor OPEB	4,637,772	146,305	-193,168	4,590,909
Short Term Liquidity	26,843	-13,695	-172	12,975
AllSpring Govt Money Market Fund	26,843	-13,695	-172	12,975
Fixed Income	1,223,008	86,000	-35,959	1,273,049
Metropolitan West Total Return PI	795,025	62,000	-29,236	827,789
BlackRock Strategic Income Opportunities Fund K	248,059	13,000	-893	260,166
BrandywineGLOBAL Global Opportunities IS	88,245	8,000	-7,225	89,019
Domestic Equity	1,769,395		-66,416	1,702,979
T. Rowe Price Equity Income I	287,403	r	-9,026	278,377
Vanguard Institutional Index Fund Instl	751,833	ı	-24,649	727,184
Harbor Capital Appreciation Ret	225,953	_	-7,687	218,266
Glenmede Small Cap Equity Instl	504,205	e,	-25,053	479,152
International Equity	1,227,779	37,000	-66,660	1,198,119
Dodge & Cox International Stock Fund	616,090	12,000	-8,440	619,651
Vanguard International Growth Adm	611,688	25,000	-58,220	578,468
Real Estate	191,821	22,000	-15,355	198,467
DFA Global Real Estate Securities I	191,821	22,000	-15,355	198,467
Real Assets	198,927	15,000	-8,607	205,320
Principal Diversified Real Asset R6	198,927	15,000	-8,607	205,320

### Portfolio Statistics South Windsor OPEB



								The section of the se
	QTD	YTD	1 Year	3 Years	5 Years	10~) Years	Since Inception	Inception Date
Return	-4.0	4.4	12.5	3.9	4.8	-	4.7	09/2018
Standard Deviation	3.2	3.6	13.4	13.9	14.6	1	14.4	
Upside Risk	1.9	2.9	3.5	10.7	10.7	-	10.6	
Downside Risk	2.9	2.1	7.0	9.0	10.0		9.9	
vs. South Windsor OPEB Blended Benchmark	ided Benchmark							
Alpha	0.0	-0.1	-1.9	0.4	0.0		0.0	
Beta	1.2	1.1	1.1	1.0	<u>-</u>	1	1.1	
Information Ratio	-0.3	-0.2	-0.5	0.4	0.2	,	0.2	
Tracking Error	0.5	0.4	1.5	1.5	1.8	ı	1.8	
vs. 90 Day U.S. Treasury Bill								
Sharpe Ratio	-0.5	0.0	0.6	0.2	0.3	The state of the s	<b>ဂ</b>	

Calculation based on monthly periodicity.



# **Estimated Fee Analysis**

South Windsor OPEB

As of September 30, 2023

	Market Value (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
South Windsor OPEB	4,590,909	20,302	0.44
Short Term Liquidity	12,975		
AllSpring Govt Money Market Fund	12,975	•	
Fixed Income	1,273,049	5,856	0.46
Metropolitan West Total Return Pl	827,789	3,063	0.37
BlackRock Strategic Income Opportunities Fund K	260,166	1,613	0.62
Artisan High Income Institutional	795,106	5,645	0.71
BrandywineGLOBAL Global Opportunities IS	89,019	499	0.56
Domestic Equity	1,702,979	6,599	0.39
T. Rowe Price Equity Income I	278,377	1,559	0.56
Vanguard Institutional Index Fund Instl	727,184	255	0.04
Harbor Capital Appreciation Ret	218,266	1,288	0.59
Glenmede Small Cap Equity Instl	479,152	3,498	0.73
International Equity	1,198,119	5,809	0.48
Dodge & Cox International Stock Fund	619,651	3,842	0.62
Vanguard International Growth Adm	578,468	1,967	0.34
Real Estate	198,467	437	0.22
DFA Global Real Estate Securities I	198,467	437	0.22
Real Assets	205,320	1,601	0.78
Principal Diversified Real Asset R6	205,320	1,601	0.78

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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.

#### Page 3

Prepared: 09/29/2023

#### Statement of Changes in Fund Fixed Income - Regular Account Fund Town of South Windsor Connecticut Town of South Account

Investment Service Account 1 For the period: July 01, 2023 through September 30, 2023

 552,843.88	\$		Unallocated Fund Balance
67.002,704			Annuity Allocation
79.44£,08e	\$		Fund Balance at End of Period
88.627,6			Total Investment Return
		88.627,6	Fixed Income Interest
			Investment Return:
(24.976,5)			Total Service Fees
		(24.979,2)	Deduction of Service Fees
			Service Fees:
(07.755,8)	30.5 S		Total Activity
		(07.752,8)	\$ Participant Distributions
			:snoitudintions:
			:viivity
\$6.488,189	\$		Fund Balance at Beginning of Period

Note: 1. Fund is shown at Book Value. 2. Fixed income interest amount

3.

Fixed income interest amount is based on estimated interest rates.

The Withdrawal Value of the Unallocated Fund Balance is \$501,602.69. This is the amount which was available for withdrawal in a lump sum on the period end date. This amount is stated before assessment of any outstanding service fees, according to the terms of your contract. The Withdrawal Value was calculated using the current basis for computing Market Value Adjustments for contracts of this type.

Aetna Contract Number: 001407 Aetna Contract Number: 001574

#### Page 4

Prepared: 09/29/2023

Statement of Changes in Fund
Fixed Income - Regular Account Fund
Town of South Windsor Connecticut
Board of Education
Investment Service Account S
For the period: July 01, 2023 through September 30, 2023

89.486,294	\$	Unallocated Fund Balance
05.281,44		noitsoollA yiunnA
81,781,783	\$	Fund Balance at End of Period
86.824,3	86.824,8	Investment Return: Fixed Income Interest Total Investment Return
(68.85£,1)		Total Service Fees
	(68.366,1)	Service Fees: Deduction of Service Fees
(96.139)		Total Activity
	(96.139)	\$ Distributions: Participant Distributions
		:ytivitə
533,727.65	\$	Fund Balance at Beginning of Period

Note: 1. Fund is shown at Book Value.
2. Fixed income interest amount

.ε

Fixed income interest amount is based on estimated interest rates.

The Withdrawal Value of the Unallocated Fund Balance is \$447,291.63. This is the amount which was available for withdrawal in a lump sum on the period end date. This amount is stated before assessment of any outstanding service fees, according to the terms of your contract. The Withdrawal Value was calculated using the current basis for computing Market Value Adjustments for contracts of this type.

Aetna Plan Number: 001407 Aetna Contract Number: 001574

# 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

We will be glad to send a copy of our ADV Part 2A to you upon your written request to compliance@fiducient.com. 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.

#### 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 stripss
- 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.
- 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 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
- 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
- Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate 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
- 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 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 or
- 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 1000 consists of the largest 1000 companies in the Russell 3000 Index 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 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.
- constituents, the index covers approximately 14% 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
- 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

- 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 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 float-adjusted market capitalization of the MSCI EAFE Index.
- 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. 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 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
- 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
- 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.
- activities, such as property ownership, management, development, rental and investment 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
- 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
- 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% 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% 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% 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% Real Assets: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10% Real Assets: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10% Real Assets: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 15%: S&P Global N 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
- 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 USTIPS 1 10 Year Index
- weight-caps are applied at the commodity, sector and group level for diversification 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
- 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 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
- market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis. 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
- 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. Venture Capital Index is based on data compiled from over 1,600 institutional-quality venture capital funds formed between 1986 and 2015 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.
- 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.
- 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
- 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 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.
- Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Blomberg U.S. Aggregate Float Adjusted Index thereafter 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. 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
- 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 through April 16, 2013; CRSP US Large Cap Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index through April 16, 2013; CRSP US Large Cap Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through May 16, 2003; MSCI US Prime Market Growth Index through May 16, 2003; MSCI US Prime Market Growth May 16, 2003; MSCI US
- 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
- 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 Cap Value Index through April 16, 2013; CRSP US Small Cap Cap Value Index through April 16, 2013; CRSP US Small Cap Value Index through April 16, 2013; CRSP US Sma

- 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; Vanguard Spliced Small Cap 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; MSCI US Small Cap 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; MSCI US Small Cap Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap 600/Barra Value Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap 600/Barra Value Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap 600/Barra Value Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap 600/Barra Value Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap 600/Barra Value Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap 600/Barra Value Index (formerly the S&P Small Cap 600/Barra Value Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap 600/Barra Value Index (formerly the S&P Small Cap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap 600/Barra Value Index (formerly the S&P Small Cap CRSP US Small Cap Growth Index thereafter.
- 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 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
- 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.
- 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 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
- 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

#### Additions

- 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 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 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 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
- 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 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
- 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 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 index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio. 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 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
- 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 will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not. 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 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 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
- 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 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 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. underweighting of industry groups or individual securities is responsible for 30% of the fund's movement. 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
- 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) 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 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
- 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.
- 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. This measure can be used to rank the 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
- 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 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

- 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 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
- the standard deviation of excess 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
- 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 theindex 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.
- drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount. 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
- capital commitment. The sum of capital commitments is equal to the size of the fund 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?
- 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 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
- 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
- private equity firm involved will typically exercise control and perform monitoring functions. 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
- 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
- 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. 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 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.
- $\mathsf{Limited}$   $\mathsf{Partner}(\mathsf{LP})$ : Institutions or high-net-worth individuals/sophisticated investors that contribute capital to a private equity fund.
- of outflows, with the discounting performed using realized market returns. 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
- Primaries: An original investment vehicle that invests directly into a company or asset.

#### VALUATION POLICY

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. 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

#### REPORTING POLICY

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 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. 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 recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice. 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

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 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. Any forecasts represent future expectations and actual returns, volatilities and correlations not indicate future performance and there is a possibility of aloss.

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. 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 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) 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

### **MATERIAL RISKS & LIMITATIONS**

-Liability Driven Investing (LDI) Assets 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

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 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

#### 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.