

TOWN OF LEDYARD CONNECTICUT

741 Colonel Ledyard Highway Ledyard, Connecticut 06339

Retirement Board ~ AGENDA ~

Regular Meeting

Tuesday, August 20, 2024

10:00 AM

Council Chambers - Hybrid Format

REMOTE MEETING INFORMATION

Zoom Meeting Link:

https://us06web.zoom.us/j/85946358360?pwd=FHKZQ7780PYI1CY7MyzBjJYaJAlf1j.1

Meeting ID: 859 4635 8360

Passcode: 046751 Dial by your location:

+1 646 558 8656 US (New York)

- I. CALL TO ORDER
- II. ROLL CALL
- III. PRESENTATIONS
 - 1. Chris Rowlins, Fiducient Advisors Second Quarter 2024 review.

Attachments: Town of Ledyard - 2Q24 QIR

IV. REVIEW AND APPROVAL OF MINUTES

1. Motion to APPROVE Regular Meeting Minutes from June 18, 2024, as written.

Attachments: Retirement minutes 6-18-24

V. DIRECTOR OF HUMAN RESOURCES UPDATE

1. Director of Human Resources update.

VI. FINANCE DIRECTOR'S REPORT

1. Finance Director's Report.

VII. OLD BUSINESS

1. Motion to approve a monthly retirement benefit for Karen Goetchius in the amount of \$3,207.60 as of September 1, 2024, payable in the normal form of a Modified Cash Refund Annuity based on her service and earnings through this retirement date.

This Motion was TABLED on June 18, 2024.

Attachments: Karen Goetchuis-Benefit Package.pdf

2. Any Other Old Business to come before the Board.

VIII. NEW BUSINESS

1. Motion to APPROVE payment of USI invoice # 90097419, dated June 30, 2024, for Karen Goetchius Benefit Calculation in the amount of \$400.00 and Core Installment Fee/Actuarial Services in the amount of \$2,900.00, for a total of \$3,300.00.

Attachments: USI 90097419 6-30-24

- 2. Motion to approve a monthly retirement benefit for Mark Yuells.
- 3. Any Other New Business to come before the Board.

IX. ADJOURNMENT

DISCLAIMER: Although we try to be timely and accurate these are not official records of the Town.



TOWN OF LEDYARD

741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0726 Agenda Date: 8/20/2024 Agenda #: 1.

AGENDA REQUEST GENERAL DISCUSSION ITEM

Subject:

Chris Rowlins, Fiducient Advisors - Second Quarter 2024 review.

Background:

(type text here)

Department Comment/Recommendation:

(type text here)



Ledyard, CT

Quarterly Investment Review - Second Quarter 2024

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Retirement Plans

Featured Insights

- Blog: In Pursuit of Savings: The Growing Trend of Collective Investment Trusts
- Blog: <u>Under the Hood: Exploring</u>
 <u>Critical Aspects of Your</u>
 Retirement Plan
- Blog: <u>Five Trends in Retirement</u>
 <u>Plan Fee Evaluation</u>

Endowments & Foundations

Featured Insights

- Blog: <u>Structuring an Effective</u>
 Investment Committee <u>Best</u>
 Practices for Supporting Your Mission
- Blog: <u>Effective Plan Management</u>
 <u>Starts with a Strong Investment</u>

 <u>Policy Statement</u>
- Nonprofit Investment Stewards
 Podcast: Al in Action Transforming
 Nonprofit Efficiency and Impact

The Wealth Office®

Featured Insights

- Video: Best Practices to Prevent Identity Theft
- Video: <u>529 Savings Plans</u> <u>The Supercharged Savings Tool</u>
- Video: <u>Financing a Home Purchase</u>

Research Insights

- Monthly Market Recaps
- Monthly Market Updates
- Webcast: Mid-Year Capital Markets Update
- Webcast: Fiducient Speaker Series Spotlight on Japan
- The Next Chapter in the Active vs. Passive Debate
- Marketable Alternatives Mid-Year Update

New Associates – Welcome!

Abbas Akbar Consulting Analyst

Anthony Bruno
Middle Office Associate

John (J.P.) Kreisher
Data Administrator

Calla Loehr
Consulting Analyst

Evans Papanikolaou

Principal, Chief Operating Officer



Registration is open!

2024 Investor Conference

September 26

Chicago Marriott Downtown Magnificent Mile

> Welcome Reception September 25



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Section 2 Capital Markets Overview

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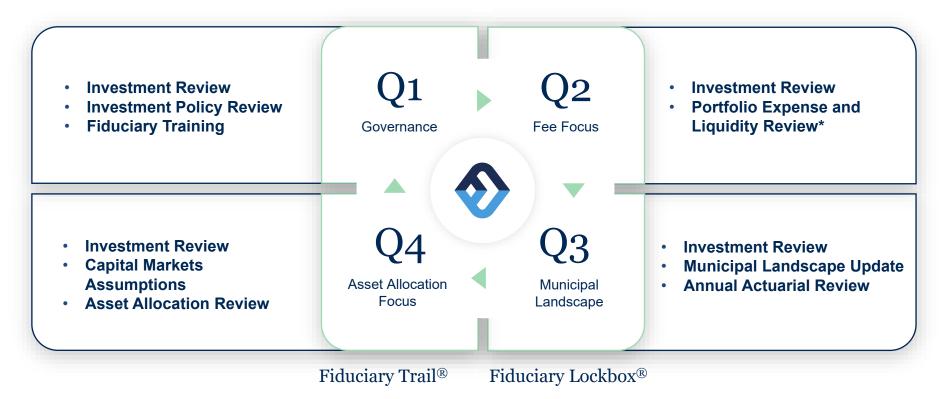
Section 4 International Equity Portfolio Review

Fiduciary Governance Calendar

Fiduciary Governance Calendar



The fiduciary governance calendar is designed to create a disciplined framework around governance, which helps ensure that over the course of a calendar year key fiduciary obligations and responsibilities are being met.



^{*}Liquidity analysis is provided only for portfolios with marketable alternatives and/or private equity.



Underlying Investment Management Fees

	Market Value (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Town of Ledyard Pension Plan	30,443,700	121,936	0.40
Short Term Liquidity	958,461	-	-
Dreyfus Treasury Securities Cash Management	958,461	-	-
ixed Income	12,192,046	35,982	0.30
Vanguard Total Bond Market Index Adm	2,958,890	1,479	0.05
Baird Aggregate Bond Instl	2,093,322	6,280	0.30
Harbor Core Bond Retirement - IR&M	2,090,301	5,435	0.26
PGIM Total Return Bond R6	3,859,140	15,051	0.39
BlackRock Strategic Income Opportunities Class K	1,190,392	7,738	0.65
omestic Equity	9,989,896	44,928	0.45
Vanguard Institutional Index Fund Instl	4,388,329	1,536	0.04
Touchstone Large Cap Focused Fund Instl	2,146,921	15,243	0.71
Neuberger Berman Genesis R6	1,789,257	13,241	0.74
William Blair Small Cap Value R6	789,542	6,237	0.79
Hood River Small Cap Growth R	875,847	8,671	0.99
nternational Equity	6,555,853	34,299	0.52
Vanguard Total International Stock Index Adm	2,462,006	2,954	0.12
T. Rowe Price Overseas Stock Instl	2,229,191	14,936	0.67
Invesco Developing Markets R6	1,864,655	16,409	0.88
eal Assets	747,444	6,727	0.90
DWS RREEF Real Assets R6	747,444	6,727	0.90





	Name of Plan	
	7/1/2023	7/1/2022
Actuarial Value of Assets	\$30,367,826	\$28,700,912
Total Accrued Liability	\$34,234,228	\$32,850,603
Funded Ratio	88.7%	87.4%
Actuarial Return Assumption	6.25%	6.25%

Source: USI, 2023 Valuation Report, as of 7/1/2023



Capital Markets Overview

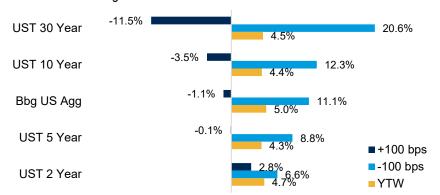
Market Themes

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- The U.S. Core Consumer Price Index fell throughout the quarter from 3.8 to 3.3 percent, the lowest since April 2021. The current market environment has provided room for the Federal Reserve to reduce the Fed Funds rate.
- 2. Investors complacent in cash may miss potential total return opportunities in core fixed income. The current environment, with higher yields across the curve, provides a positive asymmetric risk-reward profile.
- Concentration in U.S. large cap markets continues to support returns, with nearly half of the S&P 500 Index constituents underperforming during the quarter and generating negative average returns.

Prepare, Not Predict – Be Mindful of the Skew

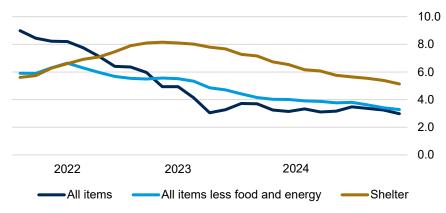
While cash yields are near five percent, investors can achieve similar yields in Core Bonds with added total return opportunity if rates fall, and limited downside risk if rates move higher.



Source: FactSet as of June 28, 2024. Total potential return based on a parallel move in interest rates up or down by 100 basis points. Data based on respective Bloomberg Bellwether Treasury Indices and Bloomberg US Agg Bond Index. YTW = yield to worst.

Messy Middle – U.S. Core Consumer Price Index

The shelter component, comprising 36 percent of the consumer price index, continues to fall, suggesting further moderation of inflation.



Sources: FactSet. As of June 30, 2024.

Concentrated Consequences – Bifurcation of Returns

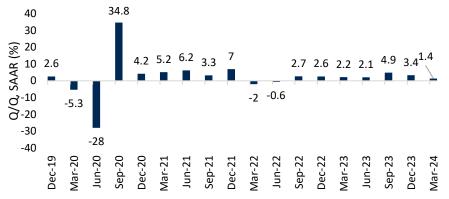
Concentration continues to buoy returns in the S&P 500, with the top 10 stocks comprising 37 percent of the index and 48 percent of stocks underperforming the index during the quarter.



Economic Review

U.S. Real GDP Growth

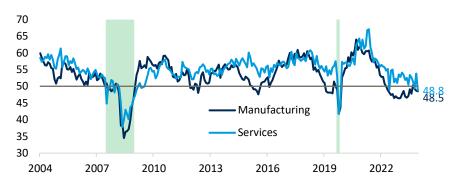
The U.S. economy has remained robust in 2024 despite restrictive central bank policy. Services sectors have contributed positively, while manufacturing has been a drag. The decline from Q4 2023 has been driven primarily by reduced consumer and government spending.



Sources: FactSet. BEA. As of June 28, 2024.

U.S. ISM PMI Levels

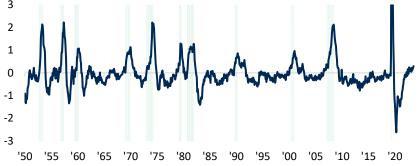
The U.S. economy has remained resilient, but cracks are beginning to surface. Services PMIs fell below 50 during the quarter and, for the first time in over a year, both services and manufacturing sit below 50, a level that has historically been associated with economic weakness.



Sources: FactSet, ISM, ECRI. As of June 28, 2024. Green bars indicate recession period. A level over 50 indicates expansion.

U.S. Unemployment Rate

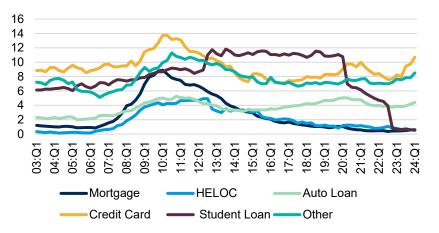
The labor market is still strong, but unemployment increased to 4.1%, the highest level since November 2021. The current level is now above the 12-month moving average, a cautionary signal historically.



Sources: FactSet, BLS. As of June 30, 2024. Data is the monthly U.S. unemployment rate less the 12 month moving average of the U.S. unemployment rate. Note, axis scale cuts off the extreme values in April, May, June, and July of 2020: 10.3, 7.9, 5.0, and 3.6, respectively. Green bars indicate U.S. recession.

Percent of 90+ Days Delinquent Loans

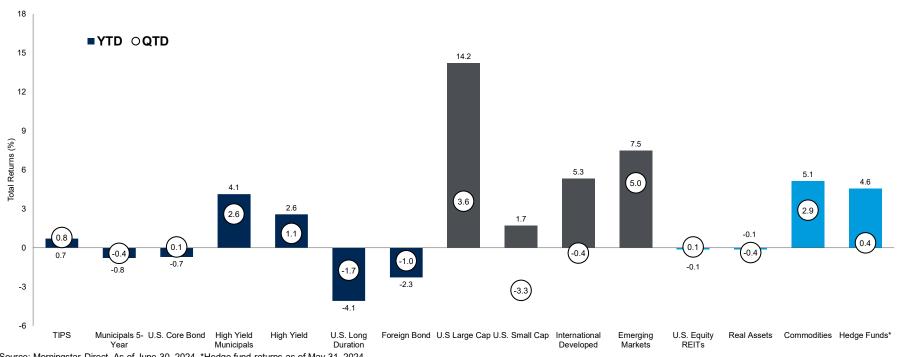
Climbing delinquencies in credit cards, auto loans, and resuming student loan payments could weigh on future consumer spending and GDP growth.



Source: NY Federal Reserve. June 30, 2024.

Asset Class Returns





Source: Morningstar Direct. As of June 30, 2024. *Hedge fund returns as of May 31, 2024.

Fixed Income (2Q 2024)

- Rate volatility contributed to mixed performance across fixed income markets. Longer duration markets were negative on rising rates.
- + High yield fared best as the segment, which has a lower duration profile than core fixed income, is less sensitive to interest rate changes.
- Foreign bond markets declined on a strengthening U.S. Dollar and political uncertainty.

Equity (2Q 2024)

- + U.S. markets were mixed during the quarter. Concentrated leadership and hype around artificial intelligence benefitted large cap while small cap declined.
- International developed markets were negative on increased volatility from divergent central bank policies and election-related risks.
- + Emerging markets increased on positive returns in India due to expected rate cuts and optimism around economic growth.

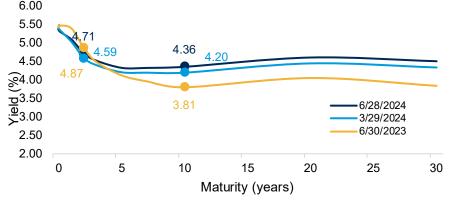
Real Asset / Alternatives (2Q 2024)

- REITs took a step back during the period. Lodging and offices were among the worst performing sub-sectors.
- + Commodities were a standout in the quarter. Strong results stemmed from a jump in oil prices and metals.
- + Hedge funds (reported on a month lag) posted a positive return for the first two months of the guarter.

Fixed Income Market Update

U.S. Treasury Yield Curve

The U.S. yield curve shifted modestly higher during the second quarter as investors' expectations for the timing of a first Fed rate cut this year waivered. The Fed has indicated there has been further progress made toward its 2% inflation target, but remains data driven on future actions in an effort to remain balanced in its dual mandate.



Source: FactSet. As of June 28, 2024.

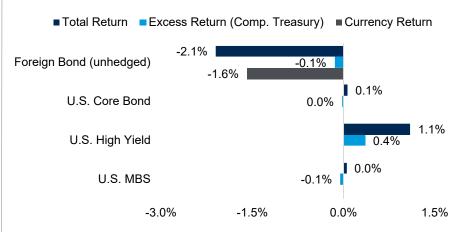
Corporate Market Spreads - Trailing 5 Years

The corporate bond market continues to perform well and credit spreads have moved below longer-term averages. A resilient economy, favorable corporate fundamentals and strong demand have been supportive of the sector.



Index Performance Attribution (2Q 2024)

Less rate-sensitive spread sectors generally outpaced core markets during the quarter. Foreign bonds fell primarily due to negative currency impact and a strong U.S. Dollar.



Source: FactSet. As of June 28, 2024.

Current Yield-to-Worst vs. 1 Year Ago

All-in yields remain attractive across fixed income sectors with many in-line with the prior year. Spread compression and strong performance from high yield over the last twelve months have pushed yields slightly lower.

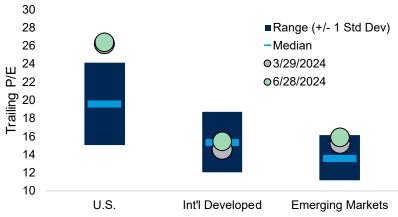


Source: FactSet. As of June 28, 2024. Based on respective Bloomberg Index.

Equity Market Update

Equity Valuations (Trailing PE – Last 15 Years)

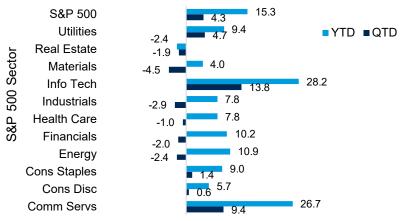
While earnings growth has been positive, price movement continued to drive multiple expansion. Relative valuations of non-U.S. continue to look attractive compared to U.S. markets.



Source: FactSet. As of June 28, 2024.

U.S. Equities – Return by Sector (2Q 2024)

The S&P 500 continued its climb with another strong quarter, however, results were driven by the technology and communications sectors. Concentrated leadership remains as Nvidia, Apple, Alphabet, and Amazon continue to outperform.



Source: Morningstar Direct. As of June 30, 2024. Total Returns.

Country Total Returns (%) - Top 10 Largest Economies

Major economies around the globe saw mixed results during the quarter. Japan had a weak quarter as investors continued to assess whether the BOJ will continue to raise interest rates on mixed inflation and wage data. Uncertainty around economic trends and political elections in Europe moved markets lower. China increased on upbeat inflation data and renewed optimism.



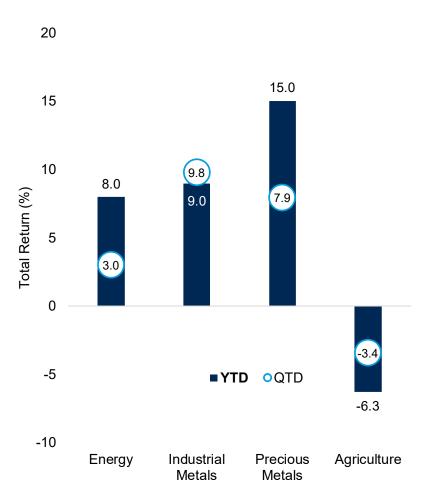
Source: Morningstar Direct. As of June 30, 2024.

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Real Assets Market Update

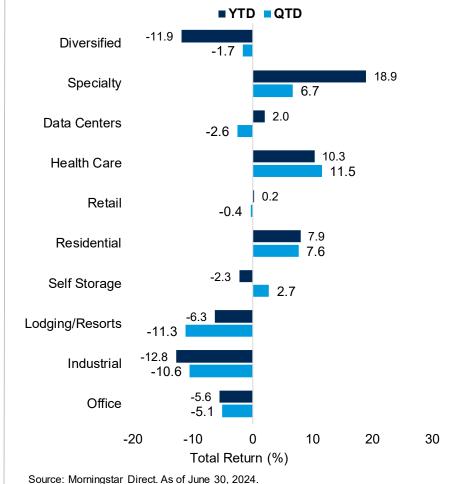
Commodity Performance (2Q 2024)

Commodities, overall, were positive in the second quarter, but underlying results were mixed. Metals and energy led the way, as geopolitical unrest and supply chain disruption in the Middle East put upward pressure on prices.



REIT Sector Performance (2Q 2024)

The move higher in interest rates was a broad headwind for the REIT sector. Underlying components experienced varied returns. Sectors with longer average lives such as lodging, industrial, and office were the primary detractors.



Source: Morningstar Direct. As of June 30, 2024.

The Case for Diversification

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD 2024	10 Years (Ann)
U.S. Equity REITs 30.1	U.S. Equity REITs 3.2	U.S. Small Cap 21.3	Emerging Markets 37.3	High Yield Munis 4.8	U.S. Large Cap 31.5	U.S. Small Cap 20.0	U.S. Equity REITs 43.2	Commodities 16.1	U.S. Large Cap 26.5	U.S. Large Cap 14.2	U.S. Large Cap12.5
High Yield Munis 13.8	Municipals 5-Year 2.4	High Yield 17.1	International Dev. 25.0	Municipals 5-Year 1.7	U.S. Equity REITs 26.0	U.S. Large Cap 18.4	Commodities 27.1	Municipals 5-Year -5.3	International Developed 18.2	Emerging Markets 7.5	U.S. Small Cap 7.0
U.S. Large Cap 13.7	High Yield Munis 1.8	U.S. Large Cap 12.0	U.S. Large Cap 21.8	Foreign Bond 0.5	U.S. Small Cap 25.5	Emerging Markets 18.3	US Large Cap 26.5	Hedge Funds -5.6	U.S. Small Cap 16.9	International Developed 5.3	U.S. Equity REITs 5.9
Core Bond 6.0	U.S. Large Cap 1.4	Commodities 11.7	EM Debt (unhedged) 15.2	Core Bond 0.0	International Dev. 22.5	TIPS 11.0	US Small Cap 14.8	High Yield -11.2	U.S. Equity REITs 13.7	Commodities 5.1	High Yield Municipals 4.7
Balanced 5.1	Core Bond 0.6	Emerging Markets 11.2	U.S. Small Cap 14.6	TIPS -1.3	Emerging Markets 18.4	Balanced 8.8	International Dev. 11.3	EM Debt (unhedged) -11.7	High Yield 13.4	Hedge Funds 4.6	Balanced 4.5
U.S. Small Cap 4.9	Hedge Funds -0.3	EM Debt (unhedged) 9.9	Balanced 13.6	High Yield -2.1	Balanced 17.5	International Dev. 7.8	Balanced 9.8	TIPS -11.8	Balanced 12.8	High Yield Municipals 4.1	International Developed 4.3
TIPS 3.6	International Dev. -0.8	U.S. Equity REITs 8.5	High Yield Munis 9.7	Hedge Funds -4.0	High Yield 14.3	Core Bond 7.5	High Yield Munis 7.8	U.S. Core Bond -13.0	EM Debt (unhedged) 12.7	Balanced 4.0	High Yield 4.3
Hedge Funds 3.4	TIPS -1.4	Balanced 7.6	Hedge Funds 7.8	U.S. Large Cap -4.4	EM Debt (unhedged) 13.5	Hedge Funds 7.1	TIPS 6.0	High Yield Municipals -13.1	Emerging Markets 9.8	High Yield 2.6	Hedge Funds 3.6
Municipals 5-Year 3.2	Foreign Bond -2.3	TIPS 4.7	High Yield 7.5	U.S. Equity REITs -4.6	High Yield Munis 10.7	High Yield 7.1	Hedge Funds 5.7	Foreign Bond -14.2	High Yield Municipals 9.2	U.S. Small Cap 1.7	Emerging Markets 2.8
Foreign Bond 2.9	Balanced -3.3	Foreign Bond 3.2	Foreign Bond 6.5	Balanced -5.8	Core Bond 8.7	Foreign Bond 7.0	High Yield 5.3	International Dev. -14.5	Foreign Bond 7.0	TIPS 0.7	TIPS 1.9
High Yield 2.5	U.S. Small Cap -4.4	High Yield Munis 3.0	U.S. Equity REITs 5.2	EM Debt (unhedged) -6.2	TIPS 8.4	High Yield Munis 4.9	Municipals 5-Year 0.3	Balanced -14.9	U.S. Core Bond 5.5	U.S. Equity REITs -0.1	Municipals 5-Year 1.6
Emerging Markets -2.2	High Yield -4.5	Core Bond 2.6	Core Bond 3.5	U.S. Small Cap -11.0	Hedge Funds 7.8	Municipals 5-Year 4.3	Core Bond -1.5	U.S. Large Cap -19.1	Hedge Funds 4.4	U.S. Core Bond -0.7	U.S. Core Bond 1.3
International Dev. -4.9	Emerging Markets -14.9	International Dev. 1.0	Municipals 5-Year 3.1	Commodities -11.2	Commodities 7.7	EM Debt (unhedged) 2.7	Emerging Markets -2.5	Emerging Markets -20.1	Municipals 5-Year 4.3	Municipals 5-Year -0.8	Foreign Bond 0.3
EM Debt (unhedged) -5.7	EM Debt (unhedged) -14.9	Hedge Funds 0.5	TIPS 3.0	International Dev. -13.8	Foreign Bond 6.3	Commodities -3.1	Foreign Bond -4.2	U.S. Small Cap -20.4	TIPS 3.9	Foreign Bond -2.3	EM Debt (unhedged) -0.9
Commodities -17.0	Commodities -24.7	Municipals 5-Year -0.4	Commodities 1.7	Emerging Markets -14.6	Municipals 5-Year 5.4	U.S. Equity REITs -8.0	EM Debt (unhedged) -8.7	U.S. Equity REITs -24.4	Commodities -7.9	EM Debt (unhedged) -3.7	Commodities -1.3

Sources: Morningstar, FactSet. As of June 30, 2024. *Periods greater than one year are annualized. Total returns in U.S. dollars. Hedge Funds as of May 31, 2024.

Financial Markets Performance

Total Return as of June 30, 2024
Periods greater than one year are annualized
All returns are in U.S. dollar terms

Global Fixed Income Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg 1-3-Month T-Bill	1.3%	2.7%	5.5%	3.1%	2.2%	2.1%	1.5%	1.0%
Bloomberg U.S. TIPS	0.8%	0.7%	2.7%	-1.3%	2.1%	2.5%	1.9%	3.1%
Bloomberg Municipal Bond (5 Year)	-0.4%	-0.8%	2.3%	-0.6%	0.8%	1.4%	1.6%	2.4%
Bloomberg High Yield Municipal Bond	2.6%	4.1%	8.9%	0.1%	3.0%	4.3%	4.7%	6.4%
Bloomberg U.S. Aggregate	0.1%	-0.7%	2.6%	-3.0%	-0.2%	0.9%	1.3%	2.5%
Bloomberg U.S. Corporate High Yield	1.1%	2.6%	10.4%	1.6%	3.9%	4.2%	4.3%	7.4%
Bloomberg Global Aggregate ex-U.S. Hedged	0.1%	0.7%	5.3%	-0.5%	0.5%	1.9%	2.5%	3.1%
Bloomberg Global Aggregate ex-U.S. Unhedged	-2.1%	-5.3%	-0.7%	-7.5%	-3.6%	-1.6%	-1.9%	0.2%
Bloomberg U.S. Long Gov / Credit	-1.7%	-4.1%	-1.6%	-8.5%	-2.2%	0.1%	1.6%	4.2%
Global Equity Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
S&P 500	4.3%	15.3%	24.6%	10.0%	15.0%	14.3%	12.9%	14.8%
Dow Jones Industrial Average	-1.3%	4.8%	16.0%	6.4%	10.3%	11.4%	11.3%	13.4%
NASDAQ Composite	8.5%	18.6%	29.6%	7.8%	18.2%	17.4%	16.1%	17.5%
Russell 3000	3.2%	13.6%	23.1%	8.1%	14.1%	13.5%	12.1%	14.5%
Russell 1000	3.6%	14.2%	23.9%	8.7%	14.6%	13.9%	12.5%	14.7%
Russell 1000 Growth	8.3%	20.7%	33.5%	11.3%	19.3%	18.6%	16.3%	17.3%
Russell 1000 Value	-2.2%	6.6%	13.1%	5.5%	9.0%	8.6%	8.2%	11.8%
Russell Mid Cap	-3.3%	5.0%	12.9%	2.4%	9.5%	9.6%	9.0%	13.2%
Russell Mid Cap Growth	-3.2%	6.0%	15.1%	-0.1%	9.9%	11.7%	10.5%	14.0%
Russell Mid Cap Value	-3.4%	4.5%	12.0%	3.7%	8.5%	7.7%	7.6%	12.5%
Russell 2000	-3.3%	1.7%	10.1%	-2.6%	6.9%	6.8%	7.0%	11.2%
Russell 2000 Growth	-2.9%	4.4%	9.1%	-4.9%	6.2%	7.3%	7.4%	11.6%
Russell 2000 Value	-3.6%	-0.8%	10.9%	-0.5%	7.1%	5.9%	6.2%	10.6%
MSCI ACWI	2.9%	11.3%	19.4%	5.4%	10.8%	10.0%	8.4%	10.3%
MSCI ACWI ex. U.S.	1.0%	5.7%	11.6%	0.5%	5.5%	5.2%	3.8%	6.2%
MSCI EAFE	-0.4%	5.3%	11.5%	2.9%	6.5%	5.7%	4.3%	6.8%
MSCI EAFE Growth	-0.8%	6.2%	9.4%	0.1%	6.5%	6.6%	5.4%	7.6%
MSCI EAFE Value	0.0%	4.5%	13.7%	5.5%	6.1%	4.6%	3.0%	5.7%
MSCI EAFE Small Cap	-1.8%	0.5%	7.8%	-3.4%	4.2%	3.7%	4.3%	7.8%
MSCI Emerging Markets	5.0%	7.5%	12.5%	-5.1%	3.1%	3.5%	2.8%	4.9%
Alternatives	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Consumer Price Index*	0.3%	1.5%	3.3%	5.3%	4.2%	3.6%	2.8%	2.6%
FTSE NAREIT Equity REITs	0.1%	-0.1%	7.8%	0.3%	3.9%	4.9%	5.9%	11.5%
S&P Real Assets	-0.4%	-0.1%	5.9%	0.5%	3.4%	4.1%	2.9%	6.2%
FTSE EPRA NAREIT Developed	-2.1%	-3.2%	5.7%	-3.8%	0.3%	2.3%	3.0%	7.6%
FTSE EPRA NAREIT Developed ex U.S.	-5.4%	-7.1%	3.9%	-9.0%	-3.7%	-0.4%	0.1%	4.4%
Bloomberg Commodity Total Return	2.9%	5.1%	5.0%	5.7%	7.2%	5.1%	-1.3%	-0.2%
HFRI Fund of Funds Composite*	0.4%	4.6%	9.7%	2.2%	5.1%	4.3%	3.6%	3.8%
HFRI Asset Weighted Composite*	0.7%	5.7%	9.6%	3.9%	4.8%	4.3%	3.8%	5.0%

Sources: Morningstar, FactSet. As of June 30, 2024. *Consumer Price Index and HFRI indexes as of May 31, 2024.

Portfolio & Manager Review



Asset Allocation

Town of Ledyard Pension Plan

As of June 30, 2024

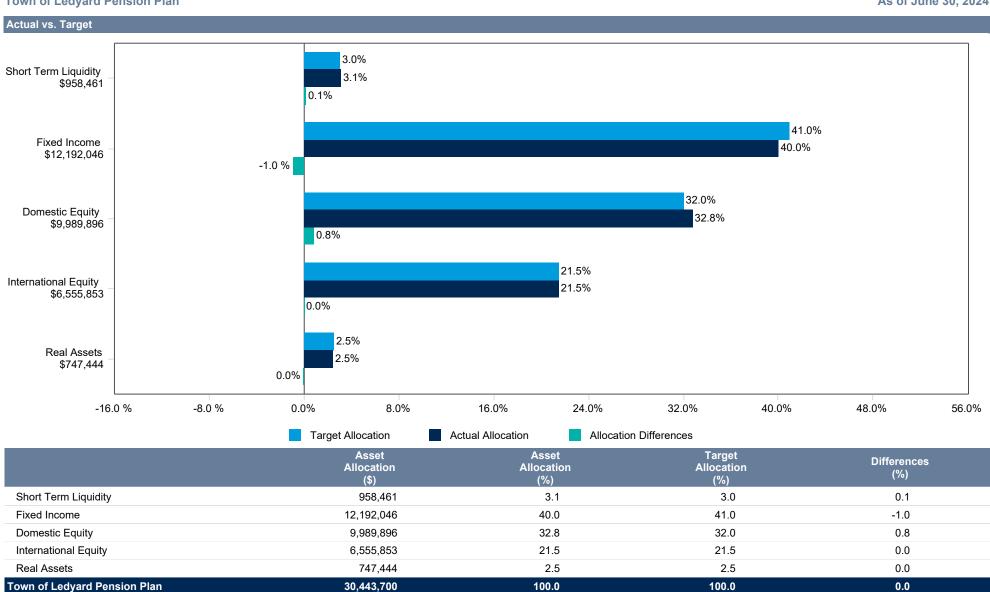
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
own of Ledyard Pension Plan	30,443,700	100.0	100.0	0.0
Short Term Liquidity	958,461	3.1	3.0	0.1
Dreyfus Treasury Securities Cash Management	958,461	3.1	3.0	0.1
Fixed Income	12,192,046	40.0	41.0	-1.0
Vanguard Total Bond Market Index Adm	2,958,890	9.7	10.0	-0.3
Baird Aggregate Bond Instl	2,093,322	6.9	7.0	-0.1
Harbor Core Bond Retirement - IR&M	2,090,301	6.9	7.0	-0.1
PGIM Total Return Bond R6	3,859,140	12.7	13.0	-0.3
BlackRock Strategic Income Opportunities Class K	1,190,392	3.9	4.0	-0.1
Domestic Equity	9,989,896	32.8	32.0	0.8
Vanguard Institutional Index Fund Instl	4,388,329	14.4	14.0	0.4
Touchstone Large Cap Focused Fund Instl	2,146,921	7.1	7.0	0.1
Neuberger Berman Genesis R6	1,789,257	5.9	6.0	-0.1
William Blair Small Cap Value R6	789,542	2.6	2.5	0.1
Hood River Small Cap Growth R	875,847	2.9	2.5	0.4
International Equity	6,555,853	21.5	21.5	0.0
Vanguard Total International Stock Index Adm	2,462,006	8.1	8.0	0.1
T. Rowe Price Overseas Stock Instl	2,229,191	7.3	7.5	-0.2
Invesco Developing Markets R6	1,864,655	6.1	6.0	0.1
Real Assets	747,444	2.5	2.5	0.0
DWS RREEF Real Assets R6	747,444	2.5	2.5	0.0



Asset Allocation

Town of Ledyard Pension Plan

As of June 30, 2024

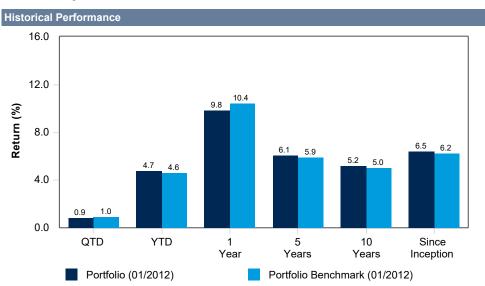




Portfolio Dashboard

Town of Ledyard Pension Plan

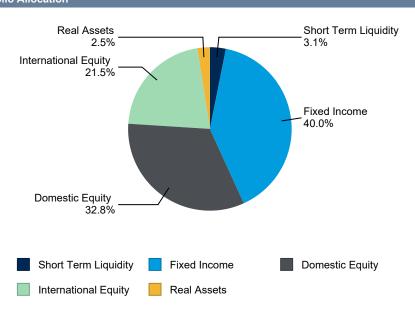
As of June 30, 2024



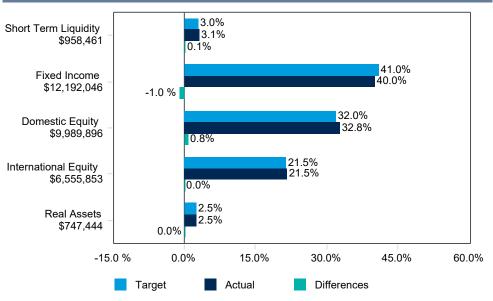
Summary of Cash Flows				
	QTD	YTD	1 Year	Since Inception
Beginning Market Value	29.752.961	29,163,734	28.790.563	11,303,089
Net Contributions	443,877	-64,975	-1,031,605	2,044,843
Gain/Loss	246,862	1,344,942	2,684,742	17,095,768
Ending Market Value	30,443,700	30,443,700	30,443,700	30,443,700

Current Benchmarl	k Composition	
From Date	To Date	
04/2024	Present	3.00% 90 Day U.S. Treasury Bill, 41.00% Blmbg. U.S. Aggregate, 21.00% S&P 500, 11.00% Russell 2000 Index, 8.00% MSCI AC World ex USA (Net), 7.50% MSCI EAFE (Net), 6.00% MSCI Emerging Markets (Net), 2.50% S&P Real Assets

Portfolio Allocation



Actual vs. Target Allocations



Client portfolio performance is presented net of underlying investment manager fees but gross of Fiducient Advisors' fees.



Performance Overview

Town of Ledyard Pension Plan

As of June 30, 2024

Trailing Performance Summary									
	QTD	YTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Town of Ledyard Pension Plan	0.9	4.7	9.8	0.9	6.1	6.1	5.2	6.5	01/2012
Blended Benchmark	1.0	4.6	10.4	1.0	5.9	5.9	5.0	6.2	01/2012

Calendar Year Performance Summ	nary									
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Town of Ledyard Pension Plan	13.6	-16.2	10.6	14.9	19.0	-6.3	13.1	10.0	-3.1	2.3
Blended Benchmark	13.4	-15.2	9.8	13.6	18.4	-6.0	12.9	9.1	-3.5	3.6

Plan Reconciliation								
	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Town of Ledyard Pension Plan								01/2012
Beginning Market Value	29,752,961	29,163,734	28,790,563	32,013,838	25,167,634	18,992,215	11,303,089	
Net Contributions	443,877	-64,975	-1,031,605	-2,250,757	-2,869,722	-1,380,377	2,044,843	
Gain/Loss	246,862	1,344,942	2,684,742	680,620	8,145,788	12,831,862	17,095,768	
Ending Market Value	30,443,700	30,443,700	30,443,700	30,443,700	30,443,700	30,443,700	30,443,700	

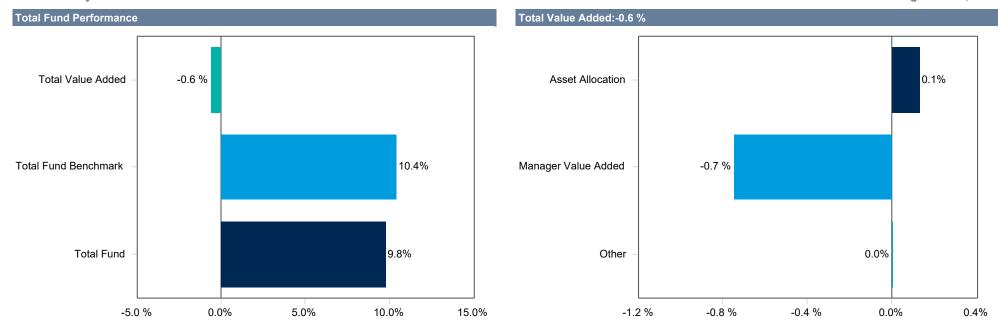
Benchmark Composition	
	Weight (%)
Apr-2024	
90 Day U.S. Treasury Bill	3.0
Blmbg. U.S. Aggregate	41.0
S&P 500	21.0
Russell 2000 Index	11.0
MSCI AC World ex USA (Net)	8.0
MSCI EAFE (Net)	7.5
MSCI Emerging Markets (Net)	6.0
S&P Real Assets	2.5

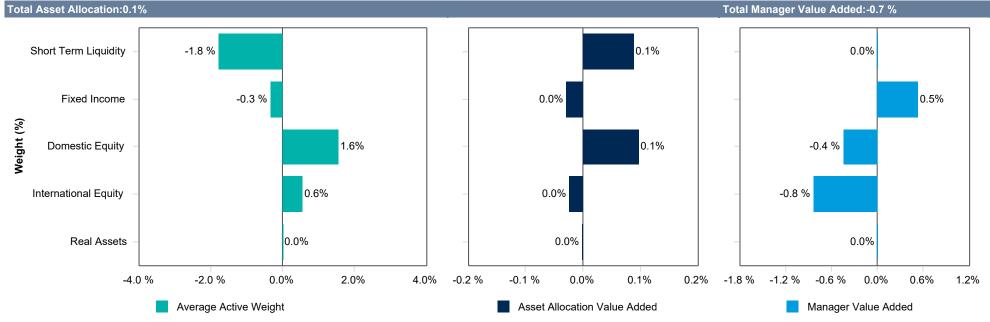
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Performance Attribution

Town of Ledyard Pension Plan vs. Attribution Blended Benchmark

1 Year Ending June 30, 2024







Manager Status Commentary

As of June 30, 2024

Manager	Recommendation	Comments
Vanguard Total Bond Market Index Adm	Maintain	Commence
Baird Aggregate Bond Instl	Maintain	
Harbor Core Bond Retirement - IR&M	Maintain	
PGIM Total Return Bond R6	Maintain	
BlackRock Strategic Income Opportunities Class K	Maintain	
Vanguard Institutional Index Fund Instl	Maintain	
Touchstone Large Cap Focused Fund Instl	Maintain	
Neuberger Berman Genesis R6	Maintain	
William Blair Small Cap Value R6	Maintain	
Hood River Small Cap Growth R	Maintain	
Vanguard Total International Stock Index Adm	Maintain	
T. Rowe Price Overseas Stock Instl	Watch 1Q 2024	The strategy was placed on "Watch" status in March 2024 after T. Rowe Price announced that Lead Portfolio Manager Ray Mills will be retiring at the end of 2024. Mr. Mills has served as the lead portfolio manager since the strategy's inception and was the sole portfolio manager until Elias Chrysostomou joined the team as an associate portfolio manager in October 2023. After the announcement, Mr. Chrysostomou became co-portfolio manager effective April 1, 2024 and he will take over as the lead and sole portfolio manager at the start of 2025. Mr. Chrysostomou's background is covering European and Canadian financials and his only previous portfolio management experience was co-managing an international financials strategy at UBS for approximately two years from 2008 to 2010. We believe the strategy merits additional scrutiny given Mr. Mills' role in developing the process and leading the strategy for so long as well as the fact that Mr. Chrysostomou is relatively new to the team and has very little previous portfolio management experience.
Invesco Developing Markets R6	Maintain	
DWS RREEF Real Assets R6	Maintain	



Helping Clients Prosper

FLASH Memo

Subject: T. Rowe Price Overseas Stock Portfolio Manager Retirement

Previous Status: Maintain Current Status: Watch Effective Date: April 2024

Overview

T. Rowe Price announced that Ray Mills, Lead Portfolio Manager of the T. Rowe Price Overseas Stock Strategy, will retire from the firm at the end of 2024. Mr. Mills has served as the lead portfolio manager since the strategy's inception in January 2000. Elias Chrysostomou, Associate Portfolio Manager on the strategy, has been at T. Rowe Price for approximately four years and joined Mr. Mills on the team in a dedicated capacity in October 2023. Mr. Chrysostomou was elevated to Co-Portfolio Manager on the strategy effective April 1, 2024, and will take over as the lead and sole portfolio manager on the strategy at the beginning of 2025.

Mr. Chrysostomou's background is largely as an analyst covering Canadian and European financials. His only previous portfolio management experience was co-managing a global financials strategy at UBS from approximately 2008-2010. He has also co-managed an international financials paper portfolio at T. Rowe Price from 2022 until mid-2023, when he began working more closely with Mr. Mills (prior to joining the team in October 2023). Currently, approximately 20 percent of the strategy is invested in the financials sector. According to T. Rowe Price, Mr. Chrysostomou will eventually get a dedicated resource on the strategy but the timing of this and the level of seniority of the role is yet to be determined; T. Rowe Price expects to have more visibility into this late in the third quarter or in the fourth quarter.

Recommendation

Given that Mr. Mills was an architect of the investment philosophy and process, and that he has served as the lead portfolio manager since the strategy's inception, we are concerned about the impact of his departure on the strategy. Additionally, Mr. Chrysostomou has minimal portfolio management experience, and that experience was managing a financials focused sector fund. As an analyst, his experience and coverage have also been entirely focused on the financials sector. We feel that the strategy merits additional scrutiny given the importance of Mr.

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Mills to the strategy and the nature of Mr. Chrysostomou's experience and therefore have placed the strategy on "Watch" status.

Contact Fiducient Advisors

If you have any questions, please contact your investment consultant.



Manager Performance

Town of Ledyard Pension Plan

As of June 30, 2024

	Allocati	on				Perform	ance(%)				
	Market Value (\$)	 %	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
Town of Ledyard Pension Plan	30,443,700	100.0	0.9	4.7	9.8	0.9	6.1	5.2	6.5	01/2012	
Blended Benchmark			1.0	4.6	10.4	1.0	5.9	5.0	6.2		
Short Term Liquidity	958,461	3.1	1.2	2.5	5.0	2.8	1.9	1.3	1.1	01/2012	
90 Day U.S. Treasury Bill			1.3	2.6	5.4	3.0	2.2	1.5	1.2		
Dreyfus Treasury Securities Cash Management	958,461	3.1	1.2	2.5	5.0	2.8	1.9	1.3	1.1	01/2012	
90 Day U.S. Treasury Bill			1.3	2.6	5.4	3.0	2.2	1.5	1.2		
Fixed Income	12,192,046	40.0	0.3	-0.1	3.9	-2.6	0.2	1.8	2.3	01/2012	
Blmbg. U.S. Aggregate			0.1	-0.7	2.6	-3.0	-0.2	1.3	1.6		
Vanguard Total Bond Market Index Adm	2,958,890	9.7	0.2	-0.6	2.8	-3.0	-0.2	1.3	1.5	01/2012	Maintain
Vanguard Spliced Bloomberg U.S. Agg Flt Adj			0.1	-0.6	2.7	-3.0	-0.2	1.4	1.6		
IM U.S. Broad Market Core Fixed Income (MF) Median			0.2	-0.3	3.1	-3.1	-0.1	1.3	1.7		
Vanguard Total Bond Market Index Adm Rank			60	75	67	41	60	52	68		
Baird Aggregate Bond Instl	2,093,322	6.9	0.2	-0.2	3.7	-2.7	0.2	1.8	0.2	04/2024	Maintain
Blmbg. U.S. Aggregate			0.1	-0.7	2.6	-3.0	-0.2	1.3	0.1		
IM U.S. Broad Market Core Fixed Income (MF) Median			0.2	-0.3	3.1	-3.1	-0.1	1.3	0.2		
Baird Aggregate Bond Instl Rank			45	42	32	23	29	15	45		
Harbor Core Bond Retirement - IR&M	2,090,301	6.9	0.2	-0.4	2.8	-3.0	0.1	-	0.2	04/2024	Maintain
Blmbg. U.S. Aggregate			0.1	-0.7	2.6	-3.0	-0.2	1.3	0.1		
IM U.S. Broad Market Core Fixed Income (MF) Median			0.2	-0.3	3.1	-3.1	-0.1	1.3	0.2		
Harbor Core Bond Retirement - IR&M Rank			51	53	62	42	38	-	51		
PGIM Total Return Bond R6	3,859,140	12.7	0.5	0.6	5.1	-2.5	0.3	2.2	1.9	04/2015	Maintain
Blmbg. U.S. Aggregate			0.1	-0.7	2.6	-3.0	-0.2	1.3	1.1		
IM U.S. Broad Market Core+ Fixed Income (MF) Median			0.3	-0.1	3.7	-3.0	0.3	1.5	1.3		
PGIM Total Return Bond R6 Rank			14	13	11	31	45	11	13		



Manager Performance

Town of Ledyard Pension Plan

As of June 30, 2024

	Allocation	on	Performance(%)								
	Market Value (\$)	%	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Managei Status
BlackRock Strategic Income Opportunities Class K	1,190,392	3.9	0.7	1.7	6.9	0.9	2.8	2.7	2.7	04/2022	Maintain
Blmbg. U.S. Aggregate			0.1	-0.7	2.6	-3.0	-0.2	1.3	-1.4		
IM Alternative Credit Focus (MF) Median			1.0	2.6	6.8	0.6	2.1	1.8	2.3		
BlackRock Strategic Income Opportunities Class K Rank			70	73	48	45	39	20	46		
Domestic Equity	9,989,896	32.8	1.8	10.8	18.2	6.8	13.0	11.6	13.6	01/2012	
Domestic Equity Benchmark			1.7	10.4	19.5	5.8	12.5	11.0	13.2		
Vanguard Institutional Index Fund Insti	4,388,329	14.4	4.3	15.3	24.5	10.0	15.0	12.8	14.6	01/2012	Maintain
S&P 500			4.3	15.3	24.6	10.0	15.0	12.9	14.6		
IM U.S. Large Cap Core Equity (MF) Median			3.5	14.7	23.9	8.6	14.1	11.8	13.7		
Vanguard Institutional Index Fund Instl Rank			29	39	45	28	24	17	19		
Touchstone Large Cap Focused Fund Instl	2,146,921	7.1	3.1	11.5	18.1	7.4	14.9	12.9	16.9	01/2019	Maintain
S&P 500			4.3	15.3	24.6	10.0	15.0	12.9	17.2		
IM U.S. Large Cap Core Equity (MF) Median			3.5	14.7	23.9	8.6	14.1	11.8	16.2		
Touchstone Large Cap Focused Fund Instl Rank			60	79	83	75	27	14	32		
Neuberger Berman Genesis R6	1,789,257	5.9	-2.5	3.0	6.4	1.8	8.7	9.1	10.5	04/2012	Maintain
Russell 2000 Index			-3.3	1.7	10.1	-2.6	6.9	7.0	9.1		
IM U.S. Small Cap Core Equity (MF) Median			-3.3	1.7	10.0	1.2	7.9	7.0	9.1		
Neuberger Berman Genesis R6 Rank			28	31	86	45	37	3	7		
William Blair Small Cap Value R6	789,542	2.6	-5.4	-1.9	6.6	0.1	6.7	7.1	1.0	12/2021	Maintain
Russell 2000 Value Index			-3.6	-0.8	10.9	-0.5	7.1	6.2	0.5		
IM U.S. Small Cap Value Equity (MF) Median			-3.8	0.1	11.4	2.6	8.8	6.5	3.2		
William Blair Small Cap Value R6 Rank			87	74	85	87	86	30	84		
Hood River Small Cap Growth R	875,847	2.9	2.7	17.2	23.9	1.8	15.5	13.3	2.1	12/2021	Maintain
Russell 2000 Growth Index			-2.9	4.4	9.1	-4.9	6.2	7.4	-3.3		
IM U.S. Small Cap Growth Equity (MF) Median			-2.5	5.1	9.5	-3.4	6.9	7.9	-3.2		
Hood River Small Cap Growth R Rank			3	5	2	10	2	1	8		



Manager Performance

Town of Ledyard Pension Plan

As of June 30, 2024

	Allocatio	on	Performance(%)								
	Market Value (\$)	%	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Manager Status
International Equity	6,555,853	21.5	0.5	4.3	8.2	-1.8	4.7	3.2	4.6	03/2012	
International Equity Benchmark			1.6	6.1	11.9	-0.3	5.2	3.8	4.7		
Vanguard Total International Stock Index Adm	2,462,006	8.1	0.8	5.1	11.0	0.3	5.8	4.0	5.4	04/2012	Maintain
Vanguard Spliced Total Int'l Stock Index (Net)			0.9	5.2	11.7	0.5	5.9	4.1	5.5		
IM International Large Cap Core Equity (MF) Median			-0.1	5.4	10.3	1.9	6.3	3.8	5.6		
Vanguard Total International Stock Index Adm Rank			28	58	41	80	67	42	57		
T. Rowe Price Overseas Stock Instl	2,229,191	7.3	0.1	4.3	9.4	1.7	6.8	4.5	4.8	06/2018	Watch
MSCI EAFE (Net)			-0.4	5.3	11.5	2.9	6.5	4.3	5.3		
IM International Large Cap Core Equity (MF) Median			-0.1	5.4	10.3	1.9	6.3	3.8	4.8		
T. Rowe Price Overseas Stock Instl Rank			47	67	57	57	36	11	49		
Invesco Developing Markets R6	1,864,655	6.1	0.6	2.8	3.2	-9.1	0.3	1.6	2.9	04/2012	Maintain
MSCI Emerging Markets (Net)			5.0	7.5	12.5	-5.1	3.1	2.8	2.9		
IM Emerging Markets Equity (MF) Median			4.2	7.3	11.6	-5.8	3.2	2.5	2.8		
Invesco Developing Markets R6 Rank			87	84	92	78	90	73	47		
Real Assets	747,444	2.5	-0.7	1.4	5.8	-	-	-	-4.5	04/2022	
S&P Real Assets			-0.4	-0.1	5.9	0.5	3.4	2.9	-2.1		
DWS RREEF Real Assets R6	747,444	2.5	-0.7	1.4	5.8	0.4	5.0	4.0	-4.5	04/2022	Maintain
S&P Real Assets			-0.4	-0.1	5.9	0.5	3.4	2.9	-2.1		



Calendar Year Performance

Town of Ledyard Pension Plan

As of June 30, 2024

	Performance(%)											
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014		
Town of Ledyard Pension Plan	13.6	-16.2	10.6	14.9	19.0	-6.3	13.1	10.0	-3.1	2.3		
Blended Benchmark	13.4	-15.2	9.8	13.6	18.4	-6.0	12.9	9.1	-3.5	3.6		
Short Term Liquidity	4.7	1.3	0.0	0.4	2.0	1.8	0.6	0.2	0.0	0.0		
90 Day U.S. Treasury Bill	5.0	1.5	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0		
Dreyfus Treasury Securities Cash Management	4.7	1.3	0.0	0.4	2.0	1.8	0.6	0.2	0.0	0.0		
90 Day U.S. Treasury Bill	5.0	1.5	0.0	0.7	2.3	1.9	0.9	0.3	0.0	0.0		
Fixed Income	6.6	-13.5	-1.3	8.3	9.1	0.0	4.6	4.6	-0.2	5.2		
Blmbg. U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0		
Vanguard Total Bond Market Index Adm	5.7	-13.2	-1.7	7.7	8.7	0.0	3.6	2.6	0.4	5.9		
Vanguard Spliced Bloomberg U.S. Agg Flt Adj	5.6	-13.1	-1.6	7.7	8.9	-0.1	3.6	2.8	0.4	5.9		
IM U.S. Broad Market Core Fixed Income (MF) Median	5.8	-13.7	-1.3	8.2	8.8	-0.6	3.6	2.9	0.0	5.5		
Vanguard Total Bond Market Index Adm Rank	54	27	66	65	53	20	54	64	30	32		
Baird Aggregate Bond Instl	6.4	-13.4	-1.5	8.6	9.5	-0.3	4.2	3.5	0.6	6.9		
Blmbg. U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0		
IM U.S. Broad Market Core Fixed Income (MF) Median	5.8	-13.7	-1.3	8.2	8.8	-0.6	3.6	2.9	0.0	5.5		
Baird Aggregate Bond Instl Rank	23	36	57	37	27	33	22	33	20	8		
Harbor Core Bond Retirement - IR&M	5.8	-13.3	-1.6	9.1	8.8	-	-	-	-	-		
Blmbg. U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0		
IM U.S. Broad Market Core Fixed Income (MF) Median	5.8	-13.7	-1.3	8.2	8.8	-0.6	3.6	2.9	0.0	5.5		
Harbor Core Bond Retirement - IR&M Rank	48	33	62	26	50	-	-	-	-	-		
PGIM Total Return Bond R6	7.8	-14.9	-1.2	8.1	11.1	-0.6	6.7	4.8	0.1	7.3		
Blmbg. U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0		
IM U.S. Broad Market Core+ Fixed Income (MF) Median	6.3	-13.7	-0.9	8.6	9.3	-1.0	4.5	4.1	-0.3	5.1		
PGIM Total Return Bond R6 Rank	6	76	60	60	11	36	2	30	35	8		



Calendar Year Performance

Town of Ledyard Pension Plan

As of June 30, 2024

	Performance(%)											
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014		
BlackRock Strategic Income Opportunities Class K	7.4	-5.6	1.0	7.3	7.8	-0.5	5.0	3.6	-0.6	3.6		
Blmbg. U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0		
IM Alternative Credit Focus (MF) Median	7.3	-7.6	1.9	3.9	7.3	-1.9	4.5	4.9	-1.6	1.0		
BlackRock Strategic Income Opportunities Class K Rank	49	41	58	17	43	29	43	64	25	21		
Domestic Equity	22.4	-18.2	25.1	21.7	30.7	-5.1	19.7	13.9	1.1	9.0		
Domestic Equity Benchmark	23.1	-18.8	24.4	19.2	29.8	-6.3	19.5	15.1	-0.5	10.8		
Vanguard Institutional Index Fund Instl	26.2	-18.1	28.7	18.4	31.5	-4.4	21.8	11.9	1.4	13.7		
S&P 500	26.3	-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7		
IM U.S. Large Cap Core Equity (MF) Median	24.8	-18.7	26.9	18.4	30.7	-5.4	21.5	9.7	0.5	11.5		
Vanguard Institutional Index Fund Instl Rank	38	46	26	50	37	32	45	20	35	18		
Touchstone Large Cap Focused Fund Instl	25.4	-17.3	25.6	24.2	30.6	-2.4	23.6	11.6	0.9	10.6		
S&P 500	26.3	-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7		
IM U.S. Large Cap Core Equity (MF) Median	24.8	-18.7	26.9	18.4	30.7	-5.4	21.5	9.7	0.5	11.5		
Touchstone Large Cap Focused Fund Instl Rank	46	37	67	10	52	16	25	25	44	65		
Neuberger Berman Genesis R6	15.9	-19.0	18.5	25.2	29.8	-6.4	15.9	18.4	0.5	0.0		
Russell 2000 Index	16.9	-20.4	14.8	20.0	25.5	-11.0	14.6	21.3	-4.4	4.9		
IM U.S. Small Cap Core Equity (MF) Median	16.0	-15.8	25.1	9.9	23.9	-12.7	12.1	21.7	-4.3	4.7		
Neuberger Berman Genesis R6 Rank	52	79	83	5	7	5	14	79	3	86		
William Blair Small Cap Value R6	11.0	-11.1	29.6	2.8	26.2	-14.0	13.1	31.4	-3.2	2.9		
Russell 2000 Value Index	14.6	-14.5	28.3	4.6	22.4	-12.9	7.8	31.7	-7.5	4.2		
IM U.S. Small Cap Value Equity (MF) Median	16.6	-11.1	32.0	3.6	21.1	-16.1	8.5	26.7	-7.0	3.4		
William Blair Small Cap Value R6 Rank	88	49	66	57	9	32	13	18	11	59		
Hood River Small Cap Growth R	21.6	-27.9	23.9	60.8	24.2	-6.8	20.8	13.5	0.8	8.6		
Russell 2000 Growth Index	18.7	-26.4	2.8	34.6	28.5	-9.3	22.2	11.3	-1.4	5.6		
IM U.S. Small Cap Growth Equity (MF) Median	16.5	-27.5	10.5	36.6	27.6	-5.6	20.7	10.1	-2.4	2.8		
Hood River Small Cap Growth R Rank	12	53	9	10	73	57	50	27	17	4		



Calendar Year Performance

Town of Ledyard Pension Plan

As of June 30, 2024

-													
		Performance(%)											
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014			
International Equity	14.7	-18.0	5.2	12.5	23.0	-13.8	28.6	4.1	-7.3	-5.2			
International Equity Benchmark	14.8	-16.6	5.9	12.0	20.6	-14.1	29.8	5.6	-7.2	-3.6			
Vanguard Total International Stock Index Adm	15.5	-16.0	8.6	11.3	21.5	-14.4	27.6	4.7	-4.3	-4.2			
Vanguard Spliced Total Int'l Stock Index (Net)	15.8	-16.1	8.8	11.2	21.8	-14.6	27.4	4.7	-4.3	-3.4			
IM International Large Cap Core Equity (MF) Median	17.2	-15.1	10.7	9.1	22.1	-15.0	25.0	0.0	-1.9	-6.0			
Vanguard Total International Stock Index Adm Rank	77	62	72	34	61	41	25	12	70	19			
T. Rowe Price Overseas Stock Instl	16.6	-15.4	12.4	9.3	23.0	-14.8	27.2	3.0	-2.5	-4.5			
MSCI EAFE (Net)	18.2	-14.5	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9			
IM International Large Cap Core Equity (MF) Median	17.2	-15.1	10.7	9.1	22.1	-15.0	25.0	0.0	-1.9	-6.0			
T. Rowe Price Overseas Stock Instl Rank	62	56	27	47	37	47	25	14	59	23			
Invesco Developing Markets R6	11.5	-24.8	-7.1	17.7	24.5	-11.8	35.3	7.4	-13.7	-4.4			
MSCI Emerging Markets (Net)	9.8	-20.1	-2.5	18.3	18.4	-14.6	37.3	11.2	-14.9	-2.2			
IM Emerging Markets Equity (MF) Median	10.9	-22.5	-1.6	17.7	20.2	-16.5	35.7	8.3	-13.7	-3.0			
Invesco Developing Markets R6 Rank	44	68	81	51	26	12	52	54	50	68			
Real Assets	2.6	-	-	-	-	-	-		-	-			
S&P Real Assets	7.8	-9.9	15.4	1.2	17.2	-5.9	11.2	10.8	-10.1	5.4			
DWS RREEF Real Assets R6	2.6	-9.6	23.9	3.9	21.8	-5.1	15.0	4.4	-9.5	3.5			
S&P Real Assets	7.8	-9.9	15.4	1.2	17.2	-5.9	11.2	10.8	-10.1	5.4			



Investment Gain/Loss Summary

Town of Ledyard Pension Plan 1 Quarter Ending June 30, 2024

·				
	Market Value as of 04/01/2024	Net Contributions	Gain/Loss	Market Value As of 06/30/2024
Town of Ledyard Pension Plan	29,752,961	443,877	246,862	30,443,700
Short Term Liquidity	512,017	443,877	2,567	958,461
Dreyfus Treasury Securities Cash Management	512,017	443,877	2,567	958,461
Fixed Income	12,150,725	-	41,321	12,192,046
Vanguard Total Bond Market Index Adm	2,953,704	-	5,185	2,958,890
Baird Aggregate Bond Instl	2,088,244	-	5,079	2,093,322
Harbor Core Bond Retirement - IR&M	2,085,932	-	4,369	2,090,301
PGIM Total Return Bond R6	3,841,135	-	18,006	3,859,140
BlackRock Strategic Income Opportunities Class K	1,181,710	-	8,682	1,190,392
Domestic Equity	9,814,719	-	175,178	9,989,896
/anguard Institutional Index Fund Instl	4,208,405	-	179,924	4,388,329
Touchstone Large Cap Focused Fund Instl	2,082,936	-	63,985	2,146,921
Neuberger Berman Genesis R6	1,835,946	-	-46,689	1,789,257
William Blair Small Cap Value R6	834,744	-	-45,202	789,542
Hood River Small Cap Growth R	852,688	-	23,159	875,847
nternational Equity	6,522,961	-	32,892	6,555,853
/anguard Total International Stock Index Adm	2,442,584	-	19,423	2,462,006
Γ. Rowe Price Overseas Stock Instl	2,227,479	-	1,712	2,229,191
nvesco Developing Markets R6	1,852,898	-	11,757	1,864,655
Real Assets	752,540	-	-5,096	747,444
DWS RREEF Real Assets R6	752,540	-	-5,096	747,444

Town of
Ledyard
International
Equity
Structure
Review

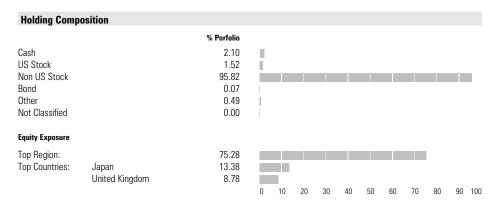
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Town of Ledyard International Allocation Review

- This analysis serves as a review of the town's pension portfolio's international equity manager allocation.
- Each year, Fiducient models the pension portfolio's asset allocation using our firm's most recent 10 and 20-year capital market assumptions. As a result of that recent exercise earlier this year, we are not recommending any changes to the portfolio's overall international equity allocation which stands at 21.5% of the portfolio and aligns with the global opportunity set
- In conjunction with our defined benefit business council, our manager research group and our investment committee, the manager structure review suggests:
 - Replacing current managers T. Rowe Price Overseas and Invesco Developing Markets with two developed market managers, Dodge & Cox, and John Hancock International Dynamic Growth sub advised by Axiom, and two emerging markets managers Arga and Wasatch that employ a growth and value strategy -producing a core driven approach
 - Reducing passive allocation in favor of active management given historical return advantage

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Town of Ledyard International Equity Allocation



Portfolio Constituents		
Name	Weight(%)	Mkt Val
Ledyard Current Intl 06-2024	100.00	10,000.00
	100.00	10,000.00

In	vestn	nent S	Style			
Eq	uity S	tyle				Fixed Income Style
ĝ	Val 20.8	31.3	Gro 33.0	>50%25-50		Ltd Mod Ext
Mid	3.5	5.5	3.8	0-10		10-25 0 -10
Sm	0.6	1.0	0.4			
	Not Cla	ssified C	.0			Not Classified —
	r ket Ca tfolio	p			Mil	Avg Eff Duration (Yrs) — Avg Eff Maturity (Yrs) — Avg Credit Quality —

World Regions	
Region Americas North America Latin America	% Equity 12.22 5.41 6.80
Greater Europe United Kingdom Europe Developed Europe Emerging Africa/Middle East	42.35 8.78 31.17 0.86 1.54
Greater Asia Japan Australasia Asia Developed Asia Emerging	45.43 13.38 3.29 12.70 16.06
Not Classified	NA
Market Maturity Developed Markets Emerging Markets Not Available	75.28 24.72 NA

Cyclic	O Portfolio Cyclical Basic Matls Cons Cyclical Financial Svcs Real Estate	% Equity 39.52 6.69 11.25 19.23 2.36	Sensitive Comm Svcs Energy Industrials Technology	% Equity 39.58 5.87 4.75 11.81 17.16	Defensive Cons Defensive Healthcare Utilities	% Equity 20.90 8.77 10.22 1.90
Cyclic	idl					

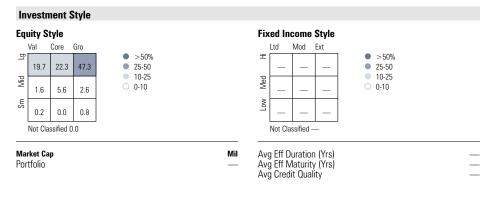
Stock Sectors

Top Countries					
Name Japan United Kingdom China France India	% Equity 13.38 8.78 7.76 7.21 6.87	Name Sweden Denmark United States Norway Other Countries	% Equity 1.75 1.60 1.56 1.22 1.00	Name Belgium Chile Malaysia Thailand Israel	% Equity 0.27 0.23 0.19 0.15
Taiwan Switzerland Germany South Korea Canada	6.71 5.77 5.05 4.34 3.85	Singapore Spain Hong Kong Finland Portugal	0.93 0.91 0.70 0.68 0.67	New Zealand Ireland Austria Greece Russia	0.09 0.07 0.07 0.05 0.05
Mexico Netherlands Australia Brazil Italy	3.82 3.68 3.20 2.49 2.02	Indonesia South Africa Turkey Philippines Poland	0.58 0.57 0.48 0.46 0.28	Hungary Czech Republic Pakistan 43	0.02 0.01 0.00 99.73

Town of Ledyard Proposed International Allocation

Holding Composition % Porfolio Cash 1.67 US Stock 13.05 Non US Stock 85.28 Bond 0.00 Other 0.00 Not Classified 0.00 **Equity Exposure** Top Region: 77.60 Top Countries: United States 13.29 United Kingdom 10.55 90 100 0 10 40 70 80

Portfolio Constituents					
Name	Weight(%)	Mkt Val			
Ledyard Proposed Intl 06-2024	100.00	100.00			
	100.00	10,000.00			



World Regions	
Region Americas North America Latin America	% Equity 24.86 16.48 8.38
Greater Europe United Kingdom Europe Developed Europe Emerging Africa/Middle East	39.49 10.55 28.00 0.19 0.75
Greater Asia Japan Australasia Asia Developed Asia Emerging	35.65 9.99 0.42 12.15 13.08
Not Classified	NA

Stock Sectors						
Nagation ● Po	ortfolio	% Equity		% Equity		% Equity
/ ^ \	O. O. albert		W Concitivo		Defende	
	🤽 Cyclical	38.74	Scholling	46.79	Defensive	14.47
	Básic Matls	6.46	Comm Svcs	6.07	Cons Defensive	4.30
9	Cons Cyclical	11.98	Energy	3.63	Healthcare	9.90
	Financial Svcs	19.12	Industrials	14.77	Utilities	0.27
					Utilities	0.27
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Real Estate	1.18	Technology	22.32		
Cyclical						

Ctack Castan

Top Countries					
Name United States United Kingdom Japan Brazil China	% Equity 13.29 10.55 9.99 7.37 6.57	Name Italy Hong Kong South Africa Belgium Sweden	% Equity 1.14 0.77 0.74 0.62 0.53	Name Ireland Austria New Zealand Portugal Poland	% Equity 0.00 0.00 0.00 0.00 0.00 0.00 0.00
France Taiwan India Switzerland Netherlands	6.43 6.22 6.07 5.86 5.55	Thailand Australia Other Countries Mexico Singapore	0.44 0.42 0.39 0.38 0.36	Indonesia 36	0.00 99.37
Germany South Korea Canada Denmark Spain	4.98 4.42 3.19 1.55 1.15	Hungary Norway Finland Israel Czech Republic	0.19 0.17 0.01 0.01 0.00		



Town of Ledyard Pension Portfolio

Sample Cash Flow for International Portfolio

Investment Name	Account Number	Ticker	CUSIP	Liquidity	Unreconciled Balance As of: 8/9/2024	Current Allocation	Target Allocation	Trade Amount	Resulting Balances	Resulting Allocation
Cash					\$212,460	0.7%	3.0%	\$35,423	\$247,883	0.8%
Cash	WTC520800	CASH			\$212,460	0.7%	3.0%	\$35,423	\$247,883	0.8%
Cash	***************************************	C/ (C/)			Ψ212, 100	0.770	3.070	ψ33, 123	Ψ2 17,003	0.070
Fixed Income					\$12,872,400	42.4%	41.0%	\$0	\$12,872,400	42.4%
Vanguard Total Bond Market Index Fund Adm Shares	WTC520800	VBTLX	921937603	Daily T+1	\$3,149,501	10.4%	10.0%		\$3,149,501	10.4%
Baird Aggregate Bond Fund Instl	WTC520800	BAGIX	057071854	Daily T+1	\$2,208,342	7.3%	7.0%		\$2,208,342	7.3%
Harbor Core Bond Fund Retirement	WTC520800	HCBRX	411512197	Daily T+1	\$2,205,567	7.3%	7.0%		\$2,205,567	7.3%
PGIM Total Return Bond Fund - Class R6	WTC520800	PTRQX	74440B884	Daily T+1	\$4,043,648	13.3%	13.0%		\$4,043,648	13.3%
BlackRock Strategic Income Opportunities K	WTC520800	BSIKX	09260B374	Daily T+1	\$1,265,342	4.2%	4.0%		\$1,265,342	4.2%
Domestic Equity					\$9,931,377	32.7%	32.0%	\$0	\$9,931,377	32.7%
Touchstone Large Cap Focused Fund Cl I	WTC520800	SCRLX	89154Q273	Daily T+1	\$2,118,664	7.0%	7.0%		\$2,118,664	7.0%
Vanguard Institutional Index Fund I	WTC520800	VINIX	922040100	Daily T+1	\$4,299,437	14.2%	14.0%		\$4,299,437	14.2%
Neuberger Berman Equity Fds Genesis Cl R6	WTC520800	NRGSX	64122Q531	Daily T+1	\$1,839,078	6.1%	6.0%		\$1,839,078	6.1%
William Blair Small Cap Value Fund Class R6	WTC520800	WBVRX	969251461	Daily T+1	\$798,745	2.6%	2.5%		\$798,745	2.6%
Hood River Small Cap Growth Fund	WTC520800	HRSIX	56170L505	Daily T+1	\$875,454	2.9%	2.5%		\$875,454	2.9%
International Equity					\$6,561,786	21.6%	21.5%	(\$35,423)	\$6,526,363	21.5%
Vanguard Total International Stock Index Fund Admiral Shs	WTC520800	VTIAX	921909818	Daily T+1	\$2,445,268	8.1%	3.5%	(\$1,375,000)	\$1,070,268	3.5%
Dodge & Cox International Stock Fund	WTC520800	DODFX	256206103	Daily T+1	\$0	0.0%	6.0%	\$1,825,000	\$1,825,000	6.0%
T. Rowe Price Overseas Stock Fund I Class	WTC520800	TROIX	77956H435	Daily T+1	\$2,256,095	7.4%	6.0%	(\$425,000)	\$1,831,095	6.0%
Wasatch Emerging Markets Select Instl	WTC520800	WIESX	936793744	Liquid	\$0	0.0%	3.0%	\$900,000	\$900,000	3.0%
Invesco Developing Markets Fund Class R6	WTC520800	ODVIX	00143W859	Daily T+1	\$1,860,423	6.1%	0.0%	(\$1,860,423)	\$0	0.0%
ARGA Emerging Markets Value Instl	WTC520800	ARMIX	00775Y207	Daily T+1	\$0	0.0%	3.0%	\$900,000	\$900,000	3.0%
Real Assets					\$797,580	2.6%	2.5%	\$0	\$797,580	2.6%
DWS RREEF Real Assets R6	WTC520800	AAAVX	25159K713	Daily T+1	\$797,580	2.6%	2.5%		\$797,580	2.6%
Investment Portfolio Total					\$30,375,604	100.0%	100.0%	\$0	\$30,375,604	100.0%



Town of Ledyard Investment Analysis August 2024

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DEFINITION OF KEY METRICS

Alpha

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

Batting Average

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

Beta

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

Information Ratio

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

R-Squared

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

Return

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

Sharpe Ratio

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

Volatility (or Standard Deviation)

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

Tracking Error

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

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International Large Cap Value (EAFE)

Fund / Manager	Dodge & Cox International Stock I
Status	Maintain
Manager (Tenure in Years) Net Assets (\$ Millions)	Team (20.5) \$49,805
Firm	 Founded in 1930, employee-owned Dodge & Cox focuses solely on the management of a small number of value strategies. The team-based approach to investment management is a hallmark of the firm.
Team	 The portfolio is managed by the firm's International Equity Investment Committee ("IEIC"); the IEIC typically consists of between six and ten investment professionals. The IEIC leverages the work of the firm's team of global industry analysts; the Director of Research coordinates the work of the analyst team.
Philosophy/Process	 The strategy seeks to invest in undervalued, often out-of-favor, companies based on their long-term profit potential. The team employs a research-intensive, fundamentally driven bottom-up approach to stock selection. Analysts focus on assessing a company's valuation, growth prospects, business strategy and financial results and build detailed integrated financial statement models based on their assessment of a company's profit and cash flow prospects over the next three to five years in various scenarios. Analysts present ideas to one of five sector committees, which must approve an idea before it goes to the IEIC. Analysts subsequently present to the IEIC, who votes anonymously in real-time on all portfolio management decisions.
Portfolio Construction	 The portfolio typically holds between 60 and 100 stocks; turnover has historically been in the range of 10-20 percent annually. Position sizes typically range from a half a percent to five percent of assets; initial positions typically do not exceed one percent of assets.
Expense Ratio	0.62



International Large Cap Value (EAFE) Return, Standard Deviation and Peer Group Comparisons

6/30/2024

Manager or Index	۸۵	nual Retu	rne (%) ac	of 6/20/	2024			Calonda	r Year Re	turne /0/\				Volatilita	(%) as of		30/2024
Manager or index			· · ·			2024 VTD	2022			` '		2049	1 Voor				
	1 Year	3 Year	5 Year			2024 YTD		2022	2021	2020	2019	2018	1 Year	3 Year	5 Year	7 Year	
MSCI EAFE Value	13.7	5.5	6.1	4.6	3.0	4.5	19.0	(5.6)	10.9	(2.6)	16.1	(14.8)	13.4	16.3	19.2	17.5	16.3
Dodge & Cox International Stock I	8.7	3.6	6.7	4.8	3.5	3.2	16.7	(6.8)	11.0	2.1	22.8	(18.0)	15.5	17.6	21.0	19.5	18.1
Bodge & Cox International Stock I	0.7	3.0	0.7	4.0	3.3	0.2	10.7	(0.0)	11.0	2.1	22.0	(10.0)	10.0	17.0	21.0	19.5	10.1
					1												
					+												
MSCI EAFE Value	13.5	3.5	5.3	4.4	2.8	4.7	17.3	(8.6)	10.5	(8.0)	15.7	(14.0)	13.2	15.6	18.5	17.1	16.0
Annualized	Returns as	of 6/30/20)24				5-Y	ear Returi	1 & Risk a	s of 6/30/	2024		/+	Index (MSCI	EAFE Value)		
8						15				1						4	Marala I
7						13								Doage &	Cox Inter	national S	STOCK I
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ω	OT .	'		10	,								Batting A	verage^	Loss	Protection	n (5 Yrs)
Yea	Yea			Y e		(1)) N) N)	N N	1) Dodge	_	1) D	odge (109)	%)
	₹			อั		_	ν ω	15 15 S i	ਰੇ ਹੈ tandard De	ab do book do	21 22	24 23					
Manager or Index	Pee	r Group R	ankings a	as of 6/30	/2024		С		ear Peer		nk		1				
3	1 Year	3 Year	5 Year	7 Year		2024 YTD		2022	2021	2020	2019	2018					
MSCI EAFE Value	23	24	52	56	62	42	36	19	57	80	75	43					
Dodge & Cox International Stock I	75	53	39	49	43	65	64	29	56	48	13		High Alph	na (5 Yrs)	<u>Low</u>	to-High Be	eta (5 Yrs
Bodgo di Gox miomational Giock i				1.5	1	- 55	<u> </u>			1		02	1) Dodge	(0.4)	1) D	odge (1.07	7)
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Daan Onesse Davis	5	N. O	Nama a al-	- cf 0/00'	2004		<u> </u>	lander W	D		- a a a		L 044 \ / 5 L /	5 Vra	Lave	to Link C	VDODGE
Peer Group Range		er Group S				0004.			ar Peer G				Low Vol (-		to-High Ex	
40th Damassille		3 Year				2024 YTD		2022	2021	2020	2019	2018	1) Dodge	(21.0)	ט (ו	odge (0.62	-)
10th Percentile	16.4	7.2	8.5	6.5	4.6	7.6	21.8	(3.6)	16.7	7.4	23.8	(9.8)	-				
25th Percentile	13.5	5.4	7.5	5.9	4.2	5.9	19.8	(6.4)	14.4	4.9	20.8	(12.4)	-				
50th Percentile	11.5	3.7	6.2	4.8	3.3	4.2	17.9	(9.1)	11.6	1.9	18.3	(17.5)	-				
75th Percentile	8.6	1.8	4.8	3.8	2.7	2.1	15.5	(11.8)	9.4	(1.9)	16.0	(17.5)	^The Batting	Average meas	sures the freque	ency of rollina	3-year period
90th Percentile Top/Bottom Quartile spread	4.6 +4.9	0.1 +3.6	3.8 +2.7	2.7 +2.0	1.9 +1.5	(0.2) +3.8	12.6 +4.3	(14.2) +5.4	7.0 +5.0	(5.9) +6.9	14.7 +4.8	(18.8) +5.1			sser of 10 year		
i i uu/dullulli Quallie SD[ead	+4.9	ı ±5.0	I T//	ı +2.U	1 7/3	T 5 A	+4 1	. +04	. +0//	. +n u	. + 4 ×	. = - /	= aloto				



International Large Cap Value (EAFE) MPT and Other Quantitative Risk and Return Metrics

6/30/2024

		Pas	t 10-Year	Metrics a	s of 6/30/2	2024			Pas	st 5-Year	Metrics as	of 6/30/20	024		Max Dr	awdowns	(10 yrs)
Managers vs. MSCI EAFE Value	Correl / R ²	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	2/2018 - 3/2020	7/2014 - 2/2016	6/2021 9/2022
ISCI EAFE Value	1/1	1	0	0.09	0/0	100%	100%	1/1	1	0	0.20	0/0	100%	100%	-32.6%	-24.2%	-22.8%
Oodge & Cox International Stock I	0.97 / 0.94	1.08	0.4	0.11	4.5 / 0.11	113%	107%	0.98 / 0.96	1.07	0.4	0.22	4.6 / 0.14	116%	109%	-34.2%	-27.7%	-21.79
												Granh	Lanand				
/Janagers vs. MSCI EAFE Value	Monthly, 1				verages vs. nception dat		E Value for					Graph	Legend				
	1 Month Periods	% + Months	12 Month periods	% + 12- Months	36 Month Periods	% + 36 Months	Return Start Date		_	Dodge	& Cox	Internat	ional S	tock I			
Dodge & Cox International Stock I	120	53%	109	53%	85	76%	Jun-14										
5.0%			Rolling	36-Mo	nth Out	perforr	nance V	ersus t	he MSC	I EAFE	Value						
4.0%										•							
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International Large Cap Growth (EAFE)

Fund / Manager	JHancock International Dynamic Gr R6
Status	Maintain
Manager (Tenure in Years) Net Assets (\$ Millions)	Team (5.3) \$846
Firm	-Axiom was founded in 1998 by Andrew Johnston, who serves as the firm's CIO and CEO and is the lead portfolio manager on the Axiom International Equity StrategyThe firm is a specialist in global growth equity investing.
Team	-The lead portfolio manager for the strategy is Andrew JohnstonMr. Johnston is supported by co-Portfolio Manager, Bradley Amoils and Associate Portfolio Manager, Dean BumbacaAxiom operates with one central research team, comprised of seven global sector analysts, working across the firm's strategies.
Philosophy/Process	-Axiom utilizes a "dynamic growth" philosophy, defined as investing in wide-moat, quality companies that achieve underappreciated, sustainable business accelerations over a medium-term time horizon. -The investment process is extremely data intensive, cataloguing a wide array of datapoints related to specific companies the team monitors, as well as industry and macroeconomic trends and news. -The data is collected, organized, and categorized through the firm's proprietary database, Axware. -Research is focused around three "alpha drivers," including positive change (60% weight), sustainability of growth (20%), and valuation (20%).
Portfolio Construction	-The portfolio can hold between 40-80 securities but is generally around 50 holdingsPosition sizes max out at 5% with a typical hold period between 18 to 36 months.
Expense Ratio	0.84



International Large Cap Growth (EAFE) Return, Standard Deviation and Peer Group Comparisons

6/30/2024

Managar ar leday	Α	mual Date	me (0/\ -	of Clonic	0024			Calarata	v Vaar Da	411800 /0/N			1	Velet!!!	/0/\ f		30/2024
Manager or Index		nual Retu				00043/77	0000			turns (%)	0040	0040	4. 1/4			6/30/2024	
	1 Year		3 Year			2024 YTD		2022	2021	2020	2019	2018	1 Year	2 Year	3 Year	4 Year	5 Year
MSCI EAFE Growth	9.4	14.7	0.1	7.0	6.5	6.2	17.6	(22.9)	11.3	18.3	27.9	(12.8)	16.9	19.3	19.2	18.3	18.0
JHancock International Dynamic Gr R6	29.8	21.5	2.6	11.9	12.7	25.3	19.0	(31.4)	18.7	36.7	N/A	N/A	19.4	20.0	20.9	19.4	19.6
								(5.5.5)									
MSCI EAFE Growth	9.9	11.6	(2.6)	5.4	5.5	6.7	14.0	(23.1)	5.1	22.2	27.3	(14.4)	16.1	18.7	18.1	17.2	17.4
Annualized F			, ,	1 5	1 0.0	.		ear Return		•	·	()	 	Index (MSCI			
25 Amidanzed I	.J.aiiig as	J. SIGUIZO				15	U -11	Ja. Notali		.5 5. 5/56/			'			, ional Dyna	ımic Gr
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<u> </u>	är			är		1	12 13			18 19	21 22	24 23	i) JHaric	ock (68%)	1) 3	Hancock (1	01%)
Managar ar Inday	Poo	r Group P	ankings s	oc of 6/30/	2024				andard Dev		nk		4				
Manager or Index	1 Year	er Group R 2 Year	3 Year			2024 YTD		alendar Y 2022	2021	2020	2019	2018					
MSCI EAFE Growth	48	34	36	40	45	47	43	39	34	74	61	39					
JHancock International Dynamic Gr R6	1 1	1	9	2	1	1	25	85	1	12	N/A	N/A	High Alph	na (3 Yrs)	Low	-to-High Be	eta (3 Yrs)
oriancock international Dynamic of No	'	'	9		'	'		00	4	12	IN/A	IN/A	1) JHance	` '		Hancock (1	•
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		1											-				
			<u> </u>					<u> </u>		<u> </u>							
Peer Group Range	Por	er Group S	Sproads a	s of 6/30/	2024		Ca	endar Ye	ar Poor G	roun Snro	ade		Low Vol (3 Yrs)	Low	-to-High Ex	nense
reer Group Kange	1 Year		3 Year			2024 YTD		2022	2021	2020	2019	2018		ock (20.9)		Hancock (0	
	i i cai			9.2	9.2	12.3	21.1	(17.7)	16.7	43.2	34.7	(8.3)	,	(==,-)	1, 3		,
10th Percentile	16 4	17 2	l 2h	1 9/				1 (' ' ' ' ' ' '		10.2	<u> </u>	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					
	16.4 13.1	17.2 15.6	2.6 0.7					(20.8)	12.4	30.5	32.1	(11.5)					
25th Percentile	16.4 13.1 9.2	17.2 15.6 13.1	0.7	8.3 6.0	7.8 6.2	8.5 6.0	19.0 16.6	(20.8) (24.5)	12.4 9.4	30.5 22.4	32.1 29.1	(11.5) (14.0)					
25th Percentile 50th Percentile	13.1	15.6		8.3	7.8	8.5	19.0	(20.8) (24.5) (29.4)		i	t	<u> </u>	-				
10th Percentile 25th Percentile 50th Percentile 75th Percentile 90th Percentile	13.1 9.2	15.6 13.1	0.7 (1.5)	8.3 6.0	7.8 6.2	8.5 6.0	19.0 16.6	(24.5)	9.4	22.4	29.1	(14.0)				ency of rolling 3 or each fund's	



International Large Cap Growth (EAFE) MPT and Other Quantitative Risk and Return Metrics

6/30/2024

		Pas	st 5-Year l	Metrics a	s of 6/30/2	024			Pa	st 3-Year	Metrics as	of 6/30/2	024		Max Dr	awdowns	(5 yrs)
Managers vs. MSCI EAFE Growth	Correl /	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	1/2022 - 9/2022	1/2020 - 3/2020	9/2020 10/2020
MSCI EAFE Growth	1/1	1	0	0.24	0/0	100%	100%	1/1	1	0	(0.16)	0/0	100%	100%	-33.0%	-17.5%	-4.6%
JHancock International Dynamic Gr R6	0.92 / 0.84	1.00	6.2	0.54	7.8 / 0.8	119%	94%	0.93 / 0.86	1.01	2.6	(0.02)	7.8 / 0.33	115%	101%	-37.8%	-16.7%	-1.3%
Managers vs. MSCI EAFE Growth	Monthly,				averages vs inception da		FE Growth					Graph	Legend				
	1 Month Periods	% + Months	12 Month periods	% + 12- Months	36 Month Periods	% + 36 Months	Return Start Date	t	_	JHano	ock Inte	rnation	al Dyna	ımic Gr	R6		
JHancock International Dynamic Gr R6	60	60%	49	54%	25	68%	Apr-19	-									
								1									
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			Rollina	36-Mor	nth Outp	erform	ance V	ersus th	e MSC	I EAFE	Growth						
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Emerging Markets Value Equity

Status Manager (Tenure in Years) Net Assets (\$ Millions)	Maintain Team (3.1) \$723
ir ir o	ARGA Investment Management, LP – founded in 2010 by A. Rama Krishna – is headquartered in Stamford, Connecticut. ARGA manages value-priented international, global, and domestic equity portfolios.
C m K lt - R	The strategy is managed by the Portfolio Construction Team ("PCT") consisting of three nembers: Chief Investment Officer Rama Krishna and Global Business Analysts Takashi to and Sujith Kumar. The PCT is supported by ARGA's Director of Research and its team of global business analysts and research associates.
e a tr - u e n ir - a fu w if p -	The strategy takes a long-term perspective and employs a bottom-up, fundamentally driven approach and seeks to invest in businesses rading at a discount to intrinsic value. The front-end screen ranks every stock in the universe on key value metrics including price to earnings, price to book, dividend yield and normalized earnings yield adjusted for return on envested capital. The PCT and Director of Research assign the analysts companies in the cheapest quintile for undamental research. The analysts conduct one-week research projects and present to the PCT; if the stock warrants further analysis the analyst performs a detailed research project. The analysts determine intrinsic value using ARGA's multi-stage dividend discount model.
s: e - 3 c: 5 8 -	Position sizes are determined based on a stock's upside-to-downside profile and ARGA's evel of conviction. Initial position sizes typically range from 1% to 3% and tend to increase as ARGA builds conviction in the thesis; positions are limited to 5% of the portfolio at the time of purchase and 8% based on market value. The portfolio typically holds between 35 and 80 stocks.
Expense Ratio	0.87



Emerging Markets Value Equity Return, Standard Deviation and Peer Group Comparisons

6/30/2024

Manager or Index	Δn	nual Retu	rne (%) ae	s of 6/30/2	024			Calonda	r Voar Ro	turns (%)			Ī	Volatility	, (%) as o	f 6/30/2024	30/2024
Manager of index						2024 VTD	2022			` <i>`</i>		2040	4 Voor				
	1 Year	2 Year	3 Year	4 Year		2024 YTD		2022	2021	2020	2019	2018	1 Year	2 Year	3 Year		
MSCI Emerging Markets Value	14.1	9.0	(1.1)	8.2	2.9	6.5	14.2	(15.8)	4.0	5.5	12.0	(10.7)	14.6	17.6	16.1	16.3	18.4
ARGA Emerging Markets Value Instl	8.7	14.0	4.1	N/A	N/A	5.5	16.7	(1.2)	N/A	N/A	N/A	N/A	15.1	21.0	19.0	N/A	N/A
MSCI Emerging Markets Value	7.8	9.0	(3.4)	6.2	4.2	0.5	13.2	(21.4)	10.1	12.3	25.0	(17.9)	17.7	18.8	18.5	18.4	19.9
Annualized F	Returns as	of 6/30/20	24				3-Y	ear Returi	n & Risk a	as of 6/30/2	2024		/+	Index (MSCI	Emerging Ma	rkets Value)	
16						9										larkets Va	lue Instl
12 10						7											
8						5											
6 4						Return 8											
2						(1)											
0						(1)											
(2)						(3)								D	ifferentia	ors	
2 4	ა ≺			5 ≺		(=)							Batting A	verage^	Los	s Protection	n (3 Yrs)
ear	ear			ear		(5)	1 13	14 15 S	1 る つ tandard Dev		2 22	24	1) ARGA	(50%)	1) A	NRGA (98%	6)
Manager or Index	Pee	r Group R	ankings a	as of 6/30/	2024		С	alendar Y	ear Peer (Group Ra	nk						
	1 Year	2 Year	3 Year	4 Year	5 Year	2024 YTD	2023	2022	2021	2020	2019	2018					
MSCI Emerging Markets Value	37	44	25	26	61	61	35	20	35	86	93	8					
ARGA Emerging Markets Value Instl	74	14	3	N/A	N/A	68	22	1	N/A	N/A	N/A	N/A	High Alph	na (3 Yrs)	Lov	/-to-High Be	eta (3 Yrs
										1 111 1			1) ARGA	(5.7)	1) A	ARGA (1.11	1)
	1																
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Peer Group Range	Pec	er Group S	Spreads a	s of 6/30/2	2024		Ca	lendar Ye	ar Peer G	roup Spre	ads		Low Vol (/-to-High Ex	
	1 Year	2 Year	3 Year	4 Year	5 Year	2024 YTD	2023	2022	2021	2020	2019	2018	1) ARGA	(19.0)	1) A	NRGA (0.87	7)
10th Percentile	20.7	15.2	2.2	11.4	7.6	11.5	21.2	(13.0)	13.3	34.6	28.1	(11.3)					
25th Percentile	16.2	11.6	(1.1)	8.4	5.7	9.5	16.2	(16.8)	6.4	23.6	23.4	(13.9)					
50th Percentile	12.3	8.6	(4.6)	5.6	3.7	7.2	11.7	(20.9)	0.3	17.1	19.5	(16.0)					
75th Percentile	8.5	5.7	(7.3)	3.0	2.1	4.5	8.8	(24.6)	(3.5)	10.6	16.6	(18.5)				_	
90th Percentile	4.1	3.5	(10.0)	0.6	0.3	1.0	5.9	(28.7)	(7.9)	1.8	12.6	(20.9)				ency of rolling 3	B-year period inception date
Top/Bottom Quartile spread					_	_		_		_		_	UULDEHUHHAH	CC II OIII LIIC IC.	SOCI UI D VEALS	or cacil lunios i	IIIOODUOII GGI



Emerging Markets Value Equity MPT and Other Quantitative Risk and Return Metrics

6/30/2024

		Pa	st 5-Year	Metrics as	s of 6/30/2	024			Pa	st 3-Year	Metrics as	of 6/30/2	024		Max Dr	awdowns	(5 yrs)
Managers vs. MSCI Emerging Markets Value	Correl /	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	6/2021 - 10/2022	1/2020 - 3/2020	7/2019 8/2019
ISCI Emerging Markets Value	1/1	1	0	0.04	0/0	100%	100%	1/1	1	0	(0.26)	0/0	100%	100%	-29.2%	-28.0%	-8.5%
ARGA Emerging Markets Value Instl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.94 / 0.89	1.11	5.7	0.05	6.6 / 0.79	128%	98%	-24.4%	N/A	N/A
Janagara va MSCI Emanaina Markata Valua		ily, 12-montl Markets V			g averages v							Graph	Legend				
Managers vs. MSCI Emerging Markets Value	1 Month Periods	% + Months	12 Month periods	% + 12- Months	36 Month Periods	% + 36 Months	Return Start		_	ARGA	Emergi	ng Mark	ets Val	ue Instl			
ARGA Emerging Markets Value Instl	36	67%	25	76%	2	50%	Jun-21]									
]									
		Rollir	ng 36-M	onth O	utperfor	mance	Versus	the MS0	CI Eme	rging M	arkets \	/alue					
6.0%																	
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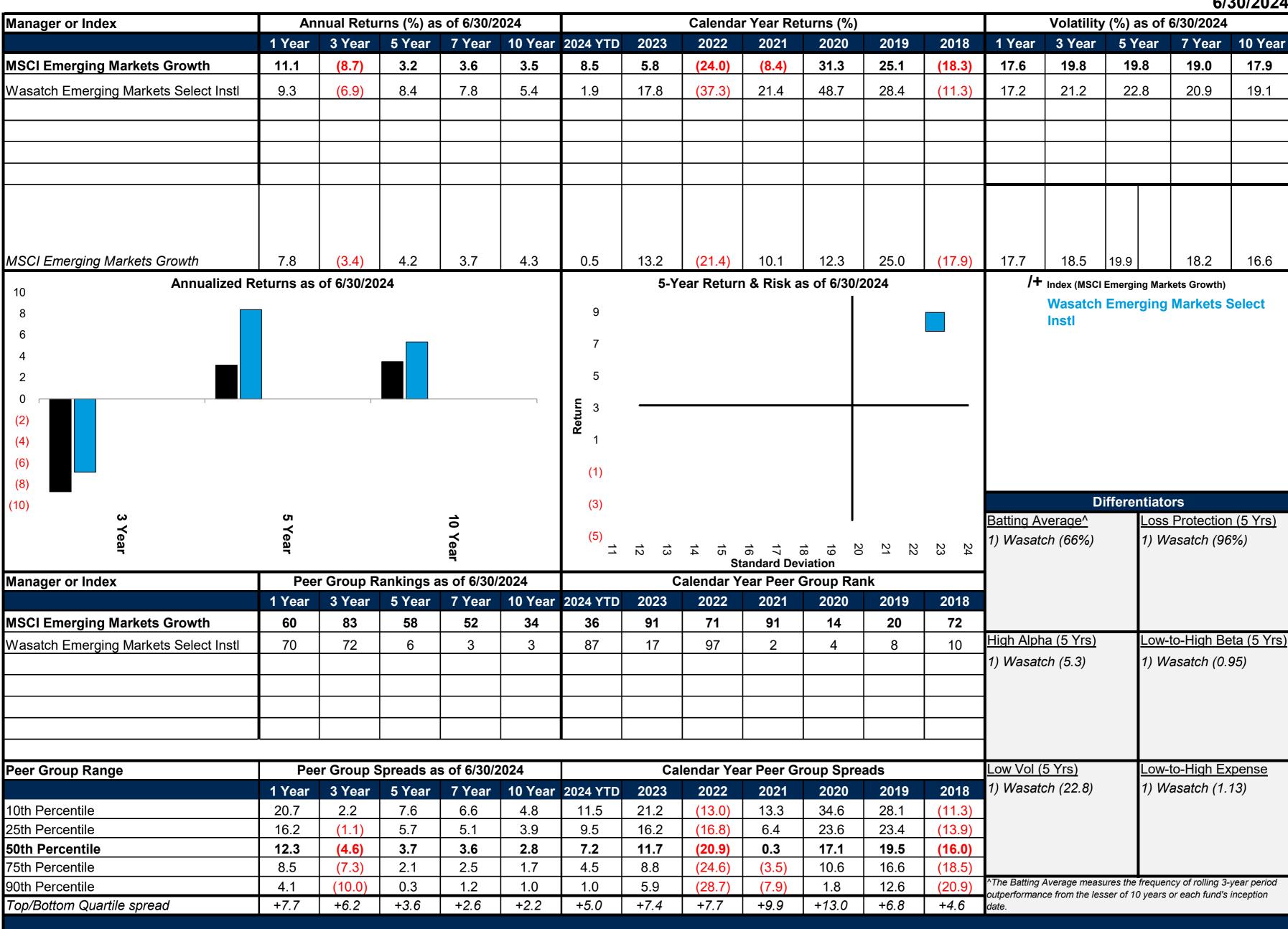
Emerging Markets Growth Equity

Fund / Manager	Wasatch Emerging Markets Select Instl
Status	Maintain
Manager (Tenure in Years)	Team (11.6)
Net Assets (\$ Millions)	\$46 5
Firm	-Wasatch Global Investors was founded in 1975 and is based out of Salt Lake City, Utah.□ -The firm is 100% employee-owned and is committed to maintaining this ownership structure.□ -Wasatch's roots are in global growth equity investing, down market cap.□
Team	-The team is led by Lead Portfolio Manager Ajay Krishan.□ -Mr. Krishnan is supported by Co-Portfolio Manager Neal Dihora and Associate Portfolio Managers Matthew Dreith and Scott Thomas.□ -There are six dedicated members of the Emerging Markets team.□ -They are also supported by the broader ex- U.S. Team, which consists of 16 investment professionals.□
Philosophy/Process	-The strategy operates under the philosophy that, over the long-term, earnings growth ultimately drives stock prices. □ -The strategy employs a team-based, bottomup, fundamentally driven approach and seeks to invest in high-quality, stable companies that have the potential to grow and compound their revenues and earnings over long periods of time. □ -The team develops an understanding of the underlying business model, the industry and competitive landscape, the quality of the management team and the market's expectations for a company. □ -Critical questions are identified for each investment thesis and the team seeks to answer those questions. The critical questions keep the team focused on identifying the key considerations that will make or break the investment thesis. □
Portfolio Construction	-The portfolio is constructed on a bottom-up basis and typically holds 20 to 40 stocks. □ -Maximum position size is 8% at time of purchase and typical hold period is three to five years. □
Expense Ratio	1.13



Emerging Markets Growth Equity Return, Standard Deviation and Peer Group Comparisons

6/30/2024





Emerging Markets Growth Equity MPT and Other Quantitative Risk and Return Metrics

6/30/2024

		Pas	t 10-Year	Metrics a	s of 6/30/2	024			Pa	st 5-Year	Metrics as	of 6/30/20	024		Max Dra	awdowns	(10 yrs)
Managers vs. MSCI Emerging Markets Growth	Correl /	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	2/2021 - 10/2022	2/2018 - 10/2018	5/2015 2/2016
MSCI Emerging Markets Growth	1/1	1	0	0.11	0/0	100%	100%	1/1	1	0	0.05	0/0	100%	100%	-42.3%	-25.9%	-25.5%
Wasatch Emerging Markets Select Instl	0.83 / 0.69	0.89	2.1	0.20	10.8 / 0.17	98%	93%	0.82 / 0.67	0.95	5.3	0.27	13.2 / 0.4	117%	96%	-26.8%	-20.3%	-22.6%
												Granh	Legend				
lanagers vs. MSCI Emerging Markets Growth	N	_			g averages v manager inc							Огарп	Logona				
	1 Month Periods	% + Months	12 Month periods	% + 12- Months	36 Month Periods	% + 36 Months	Return Start Date			Wasat	ch Emei	rging Ma	arkets S	Select Ir	nstl		
Wasatch Emerging Markets Select Instl	120	57%	109	56%	85	66%	Jun-14	-									
								1									
		Rolling	36-Mo	nth Ou	tperforn	nance V	/ersus t	he MSC	I Emer	ging Ma	rkets G	rowth					
25.0%																	
20.0%										~							
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-5.0%	<u> </u>																
-10.0%																	
-15.0% Jun-17 Dec-17 Ju																	



International Stock Fund

CLASS I SHARES

TICKER **DODFX** June 30

Open to All Investors

Average Annual Total Returns

Established in 1930, Dodge & Cox is one of the largest independently owned investment firms in the world. We manage money for individuals and institutions using a single value-oriented investment philosophy across a focused set of strategies.

Dodge & Cox International Stock Fund seeks long-term growth of principal and income.



Fund Inception May 1, 2001



Active Share¹ 86.4%



of Companies



Countries Represented²

Details

Expense Ratio	0.62%
Total Net Assets (billions)	\$47.6
CUSIP	256206103
Distribution Frequency	Annually
30-Day SEC Yield4	2.33%
Portfolio Turnover ⁵	11%
(1/1/2024 to 6/30/2024, unanr	nualized)

No sales charges or distribution fees

Risk Metrics (5 Years)

Beta (vs. MSCI ACWI ex USA)6 1.14 Standard Deviation7 20.78

Investment Approach

Investment Objective

The Fund offers investors a highly selective, actively managed core international equity fund that typically invests in companies in developed markets, (excluding the United States), and emerging markets, based on our analysis of companies' fundamentals relative to their current valuations. Generally, we:

- Target a diversified portfolio of equity securities issued by medium-to-large, well-established non-U.S. companies that, in our opinion, appear to be temporarily undervalued by the stock market but have a favorable outlook for long-term growth.
- · Select individual securities based on our analyses of various factors-including a company's financial strength, economic condition, competitive advantage, quality of the business franchise, financially material environmental, social, and governance (ESG) issues, and the reputation, experience, and competence of its management-as weighed against valuation.

Performance ³	14%	
Total Returns (%)	12%	
	10%	
MSCI All Country	8%	
World ex USA Index	6%	
(MSCI ACWI ex USA)	4%	
MSCI Europe, Australasia, and the	2%	
Far East Index (MSCI	0%	
EAFE)	-2%	

	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	20 Years
DODFX (Net)	0.02	3.15	8.72	3.57	6.71	3.52	6.49
MSCI ACWI ex USA	0.96	5.69	11.62	0.46	5.55	3.84	5.78
MSCI EAFE	-0.42	5.34	11.54	2.89	6.46	4.33	5.63

Returns represent past performance and do not guarantee future results. Investment return and share price will fluctuate with market conditions, and investors may have a gain or loss when shares are sold. Mutual fund performance changes over time and may be significantly lower than stated above. Performance is updated and published monthly. Visit the Fund's website at dodgeandcox.com or call 800-621-3979 for current month-end performance figures.

Hypothetical Growth of \$10,000³

For an investment made on June 30, 2004



Investment Committee

Managed by the International Equity Investment Committee, whose members' average tenure at Dodge & Cox is 21 years.



Roger Kuo President (26 yrs at Dodge & Cox)



Mario DiPrisco Global Industry Analyst (26 yrs)



Bert Bangayan Global Industry Analyst (22 yrs)



Ray Mertens Global Industry Analyst (21 yrs)



Paritosh Somani Global Industry Analyst (17 yrs)



Sophie Chen Global Industry Analys (12 yrs) 56

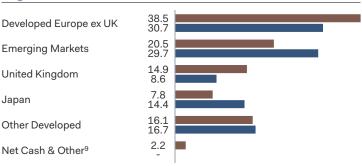
Portfolio Breakdown (% of Fund)

■ Fund ■ MSCI ACWI ex USA

Sectors⁸



Regions^{2,8}



		MSCI ACWI			MSCI ACWI
Ten Largest Equity Positions (% of Fund) ^{8,10}	Fund	ex USA	Portfolio Characteristics	Fund	ex USA
Novartis AG (Switzerland)	3.4	0.8	Price-to-Earnings (forward) ^{11,12}	10.8x	13.4x
Sanofi SA (France)	3.1	0.4	Price-to-Earnings (trailing) ¹¹	11.9x	15.6x
BNP Paribas SA (France)	3.1	0.3	Price-to-Book Value	1.4x	1.9x
Holcim AG (Switzerland)	3.0	0.2	Price-to-Sales ¹³	1.2x	1.5x
Banco Santander SA (Spain)	3.0	0.3	Weighted Average Market Cap. (billions) ¹⁴	\$96	\$93
Johnson Controls International PLC (United States)	2.9	_	Median Market Cap. (billions) ¹⁵	\$41	\$4
GSK PLC (United Kingdom)	2.8	0.3			
TotalEnergies SE (France)	2.7	0.6			
UBS Group AG (Switzerland)	2.6	0.4			
Taiwan Semiconductor Manufacturing Co., Ltd. (Taiwan)	2.4	2.8			

Risks

The Fund invests in individual stocks and other securities whose market values fluctuate within a wide range, so that your investment may be worth more or less than its original cost. The Fund's performance could be hurt by equity risk, market risk, manager risk, non-U.S. currency risk, liquidity risk, derivatives risk, and geographic risk. The Fund invests in foreign securities which involve political, economic and currency risks, greater volatility and differences in accounting methods. These risks are greater for emerging markets. Please read the prospectus for specific details regarding the Fund's risk profile.

- Active Share is a measure of how much an investment portfolio differs from its primary benchmark index, based on a scale of 0% (complete overlap with the index) to 100% (no overlap). Overlap for each security in the Fund is the lower of either its percentage weight in the Fund or its percentage weight in the relevant index. Active share is calculated as 100% minus the sum of the overlapping security weights. The Fund may classify a company or issuer in a different category than the Index. The Fund usually classifies a company or issuer based on its country of risk, but may designate a different country in certain 1
- 3 All returns are stated in U.S. dollars, unless otherwise noted. The Fund's total returns include the reinvestment of dividend and capital gain distributions, but have not been adjusted for any income taxes payable by An returns are stated in 0.3. tollars, unless otherwise hoted. The roll of stotal returns include dividend and/or interest income but, unlike Fund returns, do not reflect fees or expenses. SEC Yield is an annualization of the Fund's net investment income for the trailing 30-day period. Dividends paid by the Fund may be higher or lower than implied by the SEC Yield. Portfolio Turnover is calculated as the lesser of the portfolio purchases or sales divided by the average portfolio value for the period.

 Beta is a measure of the volatility-or systematic risk-of a portfolio compared to the benchmark measured over a specified time period.

- Standard Deviation measures the volatility of the Fund's returns. Higher Standard Deviation represents higher volatility.
- Excludes derivatives.
- Net Cash & Other includes cash, short-term investments, unrealized gain (loss) on derivatives, receivables, and payables.

 The Fund's portfolio holdings are subject to change without notice. The mention of specific securities is not a recommendation to buy, sell, or hold any particular security and is not indicative of Dodge & Cox's current or future trading activity.

 The portfolio's Price-to-Earnings ratios exclude extraordinary items and negative earnings. Benchmark figures exclude extraordinary items but include negative earnings.

 Price-to-Earnings (forward) ratios are calculated using 12-month forward earnings estimates from third-party sources as of the reporting period. Estimates reflect a consensus of sell-side analyst estimates, which
- may lag as market conditions change.
- Portfolio and benchmark calculation excludes Financials, Utilities, and Real Estate.
- 14
- This figure sums the product of each holding's company market capitalization (market price multiplied by the number of shares outstanding) and weighting in the portfolio.

 Median market capitalization represents the midpoint of market capitalization for all of the equity securities in the portfolio. Half of the securities will have a higher market capitalization and half will have a lower market capitalization. (Market capitalization is a measure of the security's size. It is the market price of a security multiplied by the number of shares outstanding.)

Figures represented by a dash are zero or have no associated data while figures represented by a zero may be rounded to zero.

The MSCI ACWI (All Country World Index) ex USA Index is a broad-based, unmanaged equity market index aggregated from developed and emerging market country indices, excluding the United States. This is the Fund's Primary Benchmark. The MSCI EAFE (Europe, Australasia, Far East) Index is a broad-based, unmanaged equity market index aggregated from developed market country indices, excluding the United States and Canada. It covers approximately 85% of the free float-adjusted market capitalization in each country. Results reflect dividends net of withholding taxes. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

MSCI ACWI ex USA is a service mark of MSCI. MSCI EAFE is a service mark of MSCI. For more information, visit dodgeandcox.com/index_disclosures.

Before investing in any Dodge & Cox Fund, you should carefully consider the Fund's investment objectives, risks, and charges and expenses. To obtain a Fund's prospectus and summary prospectus, which contain this and other important information, visit <u>dodgeandcox.com</u> or call 800-621-3979. Please read the <u>prospectus</u> and <u>summary prospectus</u> carefully before investing.



ARGA EMERGING MARKETS VALUE FUND

2nd Quarter 2024

INVESTMENT OBJECTIVE

Long-term capital appreciation

STRATEGY

Invest primarily in equity and equity-linked securities of emerging market companies that we consider undervalued

FUND OVERVIEW

Class	Institutional
Ticker	ARMIX
CUSIP	00775Y207
Inception	6/3/2021
Expense Ratio - Gross*	0.87%
Expense Ratio - Net*	0.87%
Minimum Investment	\$250K

^{*} Fee waivers are contractual until April 30, 2025

PORTFOLIO CHARACTERISTICS

# of Holdings	54
Market Cap - Wtd Avg	\$109.8B
Market Cap - Median	\$13.4B
Return on Equity - 5 Yr Avg	14.3%
Price to Earnings - FY1	8.9x
Price to Book	1.2x

TOP TEN HOLDINGS¹

SK Hynix	5.7%
TSMC	4.6%
Alibaba	4.5%
Gree	4.2%
Samsung Electronics	4.1%
Yageo	3.2%
Tencent	3.2%
COLI	3.2%
MTN Group	3.1%
Banco Bradesco	2.7%

CONTACT

www.argainvest.com

+1.203.614.0800

PERFORMANCE SUMMARY (as of 06/30/2024)

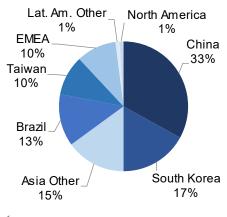
	QTD	YTD	1 Year	Annualized Since Inception
ARGA Emerging Markets Value Fund (Net)	4.27%	5.45%	8.71%	3.56%
MSCI Emerging Markets (Net)	5.00%	7.49%	12.55%	-5.06%
MSCI Emerging Markets Value (Net)	5.08%	6.46%	14.13%	-1.43%

Performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth less than their original cost and current performance may be higher or lower that the performance quoted. For performance current to the most recent month end, please call 866-234-ARGA (866-234-2742).

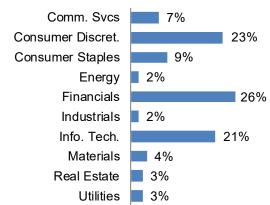
INVESTMENT APPROACH: CLASSIC VALUE

- ARGA invests in deeply undervalued businesses.
- We believe fear and uncertainty create investment opportunity.
- Our approach is based on fundamental research and present value.
- · We manage risk through stress tests and diversification.
- Our disciplined process removes emotion from investment decisions.
- We integrate Environment, Social, and Governance (ESG) risks and opportunities including climate transition.
- We believe our approach best maximizes client returns over time.

GEOGRAPHIC EXPOSURE¹



SECTOR EXPOSURE



¹ Holdings, exposures and characteristics are rounded and subject to change without notice. The top ten holdings identified do not represent all the securities purchased, sold or recommended for inclusion in the Fund and no assumption should be made that such securities or future recommendations were or will be profitable in the future.

ABOUT ARGA

ARGA Investment Management, LP ("ARGA") is an independent investment management firm focused on global equities. We use a sophisticated process combining research and technology to identify businesses that are underpriced. We build portfolios of global businesses for clients around the world.



ARGA EMERGING MARKETS VALUE FUND

2nd Quarter 2024

Material Disclosures

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Carefully consider the fund's investment objective, risk, and charges and expenses before investing. This and other information can be found in the fund's prospectus and the summary prospectus, which may be obtained by visiting www.argainvest.com/mutual-funds or by calling 866-234-ARGA (866-234-2742). Please read the prospectus or summary prospectus carefully before investing.

The benchmarks are the MSCI Emerging Markets Index (USD) and the MSCI Emerging Markets Value Index (USD) and are net of withholding taxes on dividends, interest income and capital gains. The MSCI Emerging Market Index captures large and mid cap representation across 24 Emerging Markets countries. The MSCI Emerging Markets Value Index captures large and mid cap securities exhibiting overall value style characteristics across 24 Emerging Markets countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. Indices are unmanaged and do not include the effect of fees. One cannot invest in an index.

Definitions:

Market Cap - Weighted Average is the average market capitalization (market price multiplied by the number of shares outstanding) of companies held in the portfolio weighted by security weight. Market Cap - Median is the midpoint of market capitalization (market price multiplied by the number of shares outstanding) of the companies held in the portfolio. Return on Equity - 5 Yr Avg is the weighted average of the previous 5-year ROE numbers of companies held in the portfolio. Price-to-Earnings - FY1 is the 12-month forward earnings estimates of companies from third-party sources as of the reporting period. Estimates reflect a consensus of sell-side analysts estimates, which may lag as market conditions change. ARGA uses weighted harmonic average to calculate the ratio of the portfolio as it is the most appropriate measure for ratios and rates because it equalizes the weights of each data point. Price to Book is a valuation ratio of a company's current share price compared to its book value. ARGA uses weighted harmonic average to calculate the ratio of the portfolio as it is the most appropriate measure for ratios and rates because it equalizes the weights of each data point. All portfolio characteristics are derived from FactSet.

Potential Risks:

There are risks involved in investing, including the loss of principal. There is no guarantee that the Fund will achieve its investment objective. Because the Fund is new, investors bear the risk that the Fund may not be successful in implementing its investment strategy or may fail to attract sufficient assets under management to realize economics of scale. International investments may involve additional risks including the fund's securities may decline in response to investor sentiment, general economic and market conditions, regional or global instability, and currency and interest rate fluctuations. Emerging markets involve heightened risks related to the same factors as well as increased volatility and lower trading volume. In addition, the impact of any epidemic, pandemic or natural disaster, or widespread fear that such events may occur, could negatively affect the global economy, as well as the economies of individual countries, the financial performance of individual companies and sectors, and the markets in general in significant and unforeseen ways. Any such impact could adversely affect the prices and liquidity of the securities and other instruments in which the Fund invests, which in turn could negatively impact the Fund's performance and cause losses on your investment in the Fund. Market risk may affect a single issuer, an industry, a sector or the equity or bond market as a whole.

The Fund may purchase and hold securities that present Environment, Social, and Governance (ESG) risks. The integration of ESG considerations may cause the Fund to perform differently compared to accounts that do not integrate ESG considerations. For example, ESG considerations may result in the Fund foregoing opportunities to buy certain securities when it might otherwise be advantageous to do so.

The funds are distributed by SEI Investment Distribution Company (SIDCO) 1 Freedom Valley Dr, Oaks PA 19456. SIDCO is not affiliated with ARGA. Check the background of SIDCO on FINRA's BrokerCheck.

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ARGA is an investment adviser registered with the United States Securities and Exchange Commission. ARGA is also registered in Canada as an adviser in the category of portfolio manager. ARGA manages global, international, and emerging markets equity portfolios for institutional and qualified investors.

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Emerging Markets Select Fund

AS OF JUNE 30, 2024

Investor Class: WAESX Institutional Class: WIESX



Fund Overview

- A concentrated, yet diversified high-conviction portfolio of 30-50 stocks
- Seeks the highest-quality growth companies in emerging markets
- Truly active, collaborative, bottom-up, fundamental process
- Systematic coverage of the emerging markets universe

Fund Facts

\$473M

Total Assets (all share classes)

\$41B

Number of

ABOUT THE FUND	Investor Class	Institutional Class
Inception	12/13/2012	12/13/2012
Minimum Initial Investment	\$2,000	\$100,000
Gross Expense Ratio	1.36%	1.13%
Net Expense Ratio	1.36%	1.13%

936793751

Net expense ratios reflect the expense waiver, if any, contractually agreed to through 1/31/2025.

FUND MANAGERS



936793744

Ajay Krishnan, CFA Lead Portfolio Manager Years of Experience: 29



Scott Thomas, CFA, CPA Associate Portfolio Manager Years of Experience: 19

MORNINGSTAR RATING™

CUSIP

Overall Morningstar Rating (out of 718 funds) $\star \star \star \star$ Morningstar Category Diversified Emerging Mkts

Rating based on risk-adjusted returns of the Investor Class as of 6/30/2024.

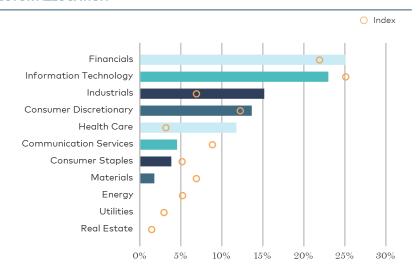
				Т	OTAL RETUR	NS	
INVESTMENT RESULTS AS OF 6/30/2024	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Inception
Investor Class: WAESX	4.22	1.88	9.08	-7.01	8.19	5.12	4.68
Institutional Class: WIESX	4.29	1.95	9.30	-6.87	8.40	5.36	4.95
MSCI Emerging Markets Index	5.00	7.49	12.55	-5.07	3.10	2.79	2.83
MSCI Emerging Markets Mid Cap Growth Index	1.07	1.60	7.42	-6.00	2.19	3.00	3.29
Returns for periods greater than one year are annualized.							
CALENDAR YEAR RETURNS	2017	2018	2019	2020	2021	2022	2023
Investor Class: WAESX	37.66	-11.50	28.04	48.36	21.33	-37.38	17.52
Institutional Class: WIESX	37.98	-11.26	28.40	48.71	21.41	-37.26	17.80
MSCI Emerging Markets Index	37.28	-14.57	18.42	18.31	-2.54	-20.09	9.83
MSCI Emerging Markets Mid Cap Growth Index	40.78	-11.72	15.34	13.94	1.87	-20.10	11.97

The performance data quoted represents past performance. Past performance does not guarantee future results. Current performance may be lower or higher than the data quoted. For the most recent month-end performance data, visit wasatchglobal.com. Investment returns and principal value will fluctuate and shares, when redeemed, may be worth more or less than their original cost. The Advisor may absorb certain expenses, without which total returns would have been lower. Wasatch Funds will deduct a 2% redemption fee on Fund shares held 60 days or less. Performance data does not reflect this redemption fee or taxes.

The Morningstar Rating for funds, or 'star rating', is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange-traded funds, closed end funds, and separate accounts) with at least a 3-year history. Exchange-traded funds and open ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its 3-, 5-, and 10 year (if applicable) Morningstar Rating metrics. The weights are 100% 3-year rating for 36-59 months of total returns, 60% 5 year rating/40% 3-year rating for 60-119 months of total returns, and 50% 10 year rating/30% 3-year rating/20% 3 year rating for 120 or more months of total returns. While the 10 year overall rating formula seems to give the most weight to the 10 year period, the most recent 3-year period actually has the greatest impact because it is included in all 3 rating periods. The Fund was rated 2, 4 and 4 stars against 718, 646 and 423 funds in the category for the for the 3-, 5- and 10-year periods, respectively. The Funds other share class may have different performance characteristics. Past performance is no guarantee of future results. 2024@Morningstar, Inc. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this informati

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SECTOR ALLOCATION



Weights are calculated as a percentage of total net assets including cash & cash equivalents.

COUNTRY ALLOCATION

	Fund	Index
Developed	20.0%	-
United States	11.8	
Japan	4.2	
Singapore	2.7	
Hong Kong	1.3	

	Fund	Index
Emerging and Frontier	79.1%	100.0%
India	31.9	19.2
Taiwan	18.1	19.3
Brazil	14.1	4.3
China	8.0	25.3
Mexico	3.9	2.1
South Korea	3.1	12.1
Other		17.7

Weights are calculated as a percentage of total net assets including cash & cash equivalents.

FUND CHARACTERISTICS	Fund	Index
Average Market Cap (\$ weighted)	\$41.2B	\$156.9B
Median Market Cap	\$11.0B	\$7.7B
Number of Holdings	33	1,330
Est. 5-year EPS Growth (%)	27.0	18.3
P/E (forward)	30.1	12.1
Portfolio Turnover (%)	24	n/a
Active Share (%)	94	n/a

PERFORMANCE STATISTICS	INVESTOR CLASS SHARES
Alpha	5.69
Beta	1.04
R-Squared	0.71
Standard Deviation	22.66
Upside Capture	132.56
Downside Capture	98.72

Performance period: 5 year

TOP TEN HOLDINGS AS OF 3/31/2024

101 1211102211100 7.0 0. 0, 0., 202.	
MercadoLibre, Inc.	7.8
NU Holdings Ltd. Class A	7.3
Bajaj Finance Ltd.	6.9
Globant SA	6.0
Lasertec Corp.	5.7
HDFC Bank Ltd.	5.2
Voltronic Power Technology Corp.	4.9
WEG SA	4.5
ASPEED Technology, Inc.	4.1
Raia Drogasil SA	3.8
Total	56%

Investing in foreign securities, especially in emerging markets, entails special risks, such as currency fluctuations and political uncertainties, which are described in more detail in the prospectus. Investing in small cap funds will be more volatile and loss of principal could be greater than investing in large cap or more diversified funds. Fund Objective: Long-term growth of capital

An investor should consider investment objectives, risks, charges and expenses carefully before investing. To obtain a prospectus, which contains this and other information, visit wasatchglobal.com or call 800.551.1700. Please read the prospectus carefully before investing.

Index represents MSCI Emerging Markets Index.

MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used to create indices or financial products. This report is not approved or produced by MSCI. The MSCI Emerging Markets TR Net Index is a free float-adjusted market capitalization index designed to measure the equity market performance of emerging markets. The MSCI Emerging Markets Mid Cap Growth TR Net Index is an unmanaged free float-adjusted market capitalization index designed to measure the equity market performance of mid-cap representation exhibiting growth style characteristics of emerging markets. You cannot invest directly in any index.

Country Allocation is defined by the MSCI Country Classification Standard and may differ from the economic country classification used to determine qualifying investments. Est. 5-year EPS Growth %: Estimated percentage increase in earnings per share (EPS) per year of the fund's holdings over the next 5 years. Returns are not guaranteed and may be higher or lower. Source: Wasatch and FactSet.P/E Ratio (forward): Sum of stock prices of the fund's holdings divided by the aggregate earnings per share of those holdings for the next 12 months. Market Cap: Weighted average market capitalization of companies held by the fund, median is the midpoint. Portfolio Turnover. A measure of trading activity in a fund's portfolio over the past 12 months expressed as a percentage of the fund's average total assets. Alpha measures a fund's risk/reward potential. A positive alpha means the fund outperformed the index. A negative alpha means the fund underperformed the index. Beta measures a fund's sensitivity to market movements. The beta of the market is 1.0 by definition. R-Squared measures (from 0 to 1.0) how closely a fund's movements are correlated with movements of its benchmark. An R-squared of 1.0 would mean that the fund's movements are completely correlated with the movements of its benchmark. Active Share measures the difference between portfolio holdings and the benchmark Standard Deviation measures the degree to which a fund's performance has varied from its average performance over a particular time period. The greater the standard deviation, the greater a funds volatility (risk). Upside Capture explains how well a fund performs in time periods where the benchmark's returns are greater than zero. Downside Capture explains how well a fund performs in time periods where the benchmark's returns are greater than zero.

Wasatch Funds are distributed by ALPS Distributors, Inc.

Fund holdings are subject to risks and may change at any time. References to specific securities should not be construed as recommendations by the Fund or its Advisor

Wasatch Global Investors | 505 Wakara Way, 3rd Floor | Salt Lake City UT 84108 | 800.381.1065 | wasatchglobal.com

WAS006025 10/20/2024

Definitions & Disclosures

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

REGULATORY DISCLOSURES

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

INDEX DEFINITIONS

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

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

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

Additional:

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

DEFINITION OF KEY STATISTICS AND TERMS

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

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

DEFINITION OF KEY PRIVATE EQUITY TERMS

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

VALUATION POLICY

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

REPORTING POLICY

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

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

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

MATERIAL RISKS & LIMITATIONS

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

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

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

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

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

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

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

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

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

OTHER

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

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

CUSTODIAN STATEMENTS

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



741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0689 Agenda Date: 8/20/2024 Agenda #: 1.

MINUTES

Minutes:

Motion to APPROVE Regular Meeting Minutes from June 18, 2024, as written.



John Rodolico

TOWN OF LEDYARD

741 Colonel Ledyard Highway Ledyard, Connecticut 06339

Retirement Board Meeting Minutes

Regular Meeting

Tuesday, June 18, 2024

10:00 AM

Council Chambers - Hybrid Format

I. CALL TO ORDER

Chairman Rodolico called the meeting to order at 10:00 a.m.

II. ROLL CALL

Present Board Member Roger Codding

Board Member Sharon Wadecki

Chairman John Rodolico

Alternate Member Minna DeGaetano

Excused Board Member William Thorne

Board Member Daniel Panosky

Also in attendance:

Naomi Rodriguez, Town Council Chairperson.

Staff Present:

Matt Bonin, Finance Director Marisa Iannella Rodriguez, Human Resource Director Ian Stammel, Assistant Finance Director Christina Hostetler, Town Hall Assistant

Staff Excused:

Mayor Fred Allyn III

Minna DeGaetano was appointed as a voting member

III. PRESENTATIONS

1. Chris Rowlins, Fiducient Advisors - First Quarter 2024 review.

Chris Rowlins, Fiducient Advisors was unable to attend the meeting. Chris Kachmar, Fiducient Advisors presented the First Quarter Review.

Mr. Kachmar started by saying that Mr. Rowlins sends his regrets and provided a guideline and framework to catch the Board up on the portfolio.

Highlights - In terms of governance the task is twofold. One is the investment review. The

Board's Investment Policy Statement (IPS) is in good working order and abides by all the statements put forth by Fiducient Advisors. The only edits that are suggested are confined to the recent re-allocation the Board approved and is undertaking (considering higher interest rates the Board moved a bit more into fixed income). Mr. Kachmar suggested bringing the allocation exhibit table up to the new targets. The second is governance oversight. Mr. Kachmar said the Board is in good working order from a governance standpoint and follows all best practices. The Board is engaged, meets regularly, takes minutes, and follows the governance calendar and protocols. No action is needed to improve best practices.

Markets - This was an interesting year in markets. 2023 ended with a good deal of momentum in both the equity and fixed income markets, with a very strong fourth quarter. There was a lot of expectation that the momentum would continue for 2024. However, the narrative around the Feds changed completely. In the beginning of the year thoughts were that four or five interest rate cuts would occur, but it may only prove to be a single rate cut at the end of the calendar year, if at all. Although inflation rates started to calm down, it's still not at the 2% level that Feds targeted. The economy has proven to be more resilient. Fixed income markets were under a bit of stress over the quarter. Global equity markets continued to do well, especially AI related companies. April was a difficult month; May was good, and June is faring well to date.

Portfolio - The quarter is up just under 4%, the fiscal year to date is up approximately 9%, the one-year number is up close to 12%. The portfolio has investment gains of around \$2.4 million for the fiscal year and \$3.2 million for the one-year mark. Longer-term returns align well with the Board's actuarial expectation of 6.25%. Mr. Kachmar said that Mr. Rowlins intends to speak to the Board about the complexion of the International Equity Program. T. Rowe has been elevated to watch status after the announcement that Ray Mills, Portfolio Manager is retiring.

Chairman Rodolico said he was very pleased with the report. He then asked for recommendations regarding T. Rowe. Mr. Kachmar said no action needs to be taken at this point, but Mr. Rowlins will make recommendations in the next quarter. He added that the Manager retirement isn't occurring until the end of the calendar year.

IV. REVIEW AND APPROVAL OF MINUTES

1. Motion to APPROVE Regular Meeting Minutes from April 16, 2024, as written.

RESULT: APPROVED AND SO DECLARED

MOVER: Sharon Wadecki SECONDER: Minna DeGaetano

AYE 4 Codding Wadecki Rodolico DeGaetano

EXCUSED 2 Thorne Panosky

V. DIRECTOR OF HUMAN RESOURCE UPDATE

1. Director of Human Resources update.

Marisa Iannella Rodriguez, Human Resource Director said a brainstorming session is being formed to discuss Connecticut Municipal Employees Retirement System, (CMERS), pension

and 457 options with the Unions. She is looking for a volunteer from the Board to participate. Once the group has been formed a session date will be determined collaboratively. The session will be held prior to January 2025.

RESULT: DISCUSSED

VI. FINANCE DIRECTOR'S REPORT

1. Finance Director's Report.

Matt Bonin, Finance Director reported that the FY24 contribution check was cut last week. Once Webster receives the check, they will meet with Mr. Rowlins to determine how to allocate it accordingly.

RESULT: DISCUSSED

VII. OLD BUSINESS

1. Discussion on a review of applicable labor contracts and retirement documents for Town of Ledyard employee groups with applicability to retirement eligibility and benefits continued.

Chairman Rodolico said since Mr. Thorne is absent this item will be put on hold until the next meeting.

2. Any Other Old Business to come before the Board.

None.

VIII. NEW BUSINESS

1. Motion to APPROVE payment of invoice #609_06302024, to Fiducient Advisors, dated June 6, 2024, in the amount of \$12,475.39, for consulting costs for the Town of Ledyard Defined Benefit Pension Plan for the billing period April 1, 2024, to June 30, 2024.

RESULT: APPROVED AND SO DECLARED

MOVER: John Rodolico SECONDER: Sharon Wadecki

AYE 4 Codding Wadecki Rodolico DeGaetano

EXCUSED 2 Thorne Panosky

2. Motion to approve a monthly retirement benefit for Karen Goetchius in the amount of \$3,207.60 as of September 1, 2024, payable in the normal form of a Modified Cash Refund Annuity based on her service and earnings through this retirement date.

This Motion was TABLED on June 18, 2024.

RESULT: APPROVED AND SO DECLARED

MOVER: John Rodolico SECONDER: Sharon Wadecki

AYE 4 Codding Wadecki Rodolico DeGaetano

EXCUSED 2 Thorne Panosky

Ms. Wadecki said this calculation has a caveat that the calculations are based on expected pay and contributions and may need to be recalculated. She suggested that the Board wait to vote on the retirement benefit until closer to the actual retirement date. Ms. Iannella Rodriguez said that Ms. Goetchius is a fixed salary not an hourly employee. Ms. Wadecki added that normally votes are held closer to the retirement date, not three months in advance. After this discussion Chairman Rodolico held a vote to table the vote until August.

Chairman Rodolico asked Ms. Iannella Rodriguez if she reviews the calculations once she receives it from the actuaries. She answered that she does not perform calculations but verifies that the actuary used the data that she provided to them, and that the data aligns correctly.

Motion to TABLE the vote until Board's meeting on August 20, 2024.

RESULT: TABLED
MOVER: John Rodolico
SECONDER: Sharon Wadecki

AYE 4 Codding Wadecki Rodolico DeGaetano

EXCUSED 2 Thorne Panosky

3. Any other New Business to come before the Board.

None.

IX. ADJOURNMENT

Motion to ADJOURN the Regular Meeting at 10:27 a.m.

RESULT: APPROVED AND SO DECLARED

MOVER: Sharon Wadecki SECONDER: John Rodolico

AYE 4 Codding Wadecki Rodolico DeGaetano

EXCUSED 2 Thorne Panosky

DISCLAIMER: Although we try to be timely and accurate these are not official records of the Town.



741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0690 Agenda Date: 8/20/2024 Agenda #: 1.

AGENDA REQUEST GENERAL DISCUSSION ITEM

Subject:

Director of Human Resources update.

Background:

(type text here)

Department Comment/Recommendation:



741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0691 Agenda Date: 8/20/2024 Agenda #: 1.

AGENDA REQUEST GENERAL DISCUSSION ITEM

Subject:

Finance Director's Report.

Background:

(type text here)

Department Comment/Recommendation:



741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0490 Agenda Date: 8/20/2024 Agenda #: 1.

RETIREMENT-EMPLOYEE BENEFITS

Motion/Request:

Motion to approve a monthly retirement benefit for Karen Goetchius in the amount of \$3,207.60 as of September 1, 2024, payable in the normal form of a Modified Cash Refund Annuity based on her service and earnings through this retirement date.

This Motion was TABLED on June 18, 2024.

Background:

Karen Goetchius has applied for pension benefits effective with her retirement on 8/10/24.

Human Resources Comment/Recommendation:

Recommendation to approve.

Finance Director Comment/Recommendation:

(type text here)

Mayor Comment/Recommendation:



USI Consulting Group 95 Glastonbury Boulevard Glastonbury, CT 06033 www.usi.com Phone: 860.633.5283

May 31, 2024

CONFIDENTIAL

Marisa Iannella-Rodriguez Town of Ledyard 741 Colonel Ledyard Highway Ledyard, CT 06339

Re: Retirement Plan for Full-Time Employees of the Town of Ledyard – Calculation for Karen Goetchius

Dear Marisa:

As requested, we have prepared the attached Benefit Calculation Worksheet for Karen Goetchius for a September 1, 2024, retirement date. Based on the projected compensation provided for the period ending August 31st, 2024, we've calculated that Ms. Goetchius is eligible to receive a monthly retirement benefit of \$3,207.60 as of September 1, 2024, payable in the normal form of a Modified Cash Refund Annuity, and \$2,832.31 if she elected a 50% Joint and Survivor annuity, based on her service and earnings through this retirement date. In addition, Ms. Goetchius employee contributions with and without interest will be \$142,587.98 and \$84,151.55, respectively, as of that same date. The non-taxable portion of the monthly benefit will be \$400.72 for 210 months if she elects the Modified Cash Refund or a 10-year Certain & Life Annuity, or \$323.66 for 260 months for a joint & survivor annuity. Please note that Ms. Goetchius benefit and accumulated employee contributions as of September 1, 2024, are based on expected pay and contributions, thus these benefit amounts may need to be recalculated if actual pay and contributions are different once finalized.

The calculation is based upon a 1.5% multiplier and the participant's three-year average salary. These are the current plan provisions in effect for Administrative Non-Union Professionals. Our calculation of the referenced pension benefit is based on the service, compensation and other relevant information provided to us by the Town of Ledyard. USI Consulting Group has not independently confirmed the accuracy or completeness of such information.

Please forward a copy of completed forms to us for our records. If you have any questions regarding this calculation, please do not hesitate to contact me.

Sincerely,
USI CONSULTING GROUP

Nelroy Giddings Actuarial Consultant

cc: Frederica S. Daniels, USI Consulting Group

Town of Ledyard Benefit Calculation

Demographic Information:

	Name:		Goetchius, Karen			
	Department:	Administrative-Non-U	nion Professionals			
	Date of Birth:		9/26/1957	As of 7/1/2023:		
	Original Date of Hire:		7/21/1997	Emloyee Contributions:	\$	78,482.65
	Date of Participation:		8/1/1998	Emloyee Contributions With Inte	erest: \$	129,305.31
	Date of Termination:		8/10/2024			
	Normal Retirement Date (NRD):		10/1/2022	As of BCD:		
	Benefit Commencement Date (BCD):		9/1/2024	Emloyee Contributions:	\$	84,151.55
	Beneficiary's Date of Birth:		9/24/1954	Emloyee Contributions With Inte	erest: \$	142,587.98
	Credited Service:		27.0000			
	Salary History (Based on Plan Year Ending June 30):					
	2024	\$	97,869.24			
	2023	\$	95,011.15			
	2022	\$	92,239.86			
	2021	\$	90,431.15			
	2020	\$	88,657.92			
	2019	\$	86,917.86			
	2018	\$	83,841.40			
	2017	\$	85,192.80			
	2016	\$	80,109.11			
	3-Year Final Average Earnings (FAE):	\$	95,040.08			
Ве	nefit Formula (Amount Payable as a Modified Cash F	efund):				
Α	3-Year Final Average Earnings (FAE):	\$	95,040.08			
В	Multiplier:		1.50%			
С	Credited Service:		27.00			
D	Vesting Percentage:		<u>100%</u>			
Ε	Annual Benefit Payable at NRD: [AxBxCxD]	\$	38,491.23			
F	Maximum Annual Benefit: 50% of FAE	\$	47,520.04			
G	Annual Benefit Payable at NRD: Lesser of [E, F]	\$	38,491.23			
Н	Early Retirement Factor:		<u>100%</u>			
I	Monthly Benefit Payable at BCD: [GxH]/12	\$	3,207.60			
				Participant Spo	ouse	

	Factor	Participant Benefit			Spouse Benefit	
Optional Forms of Benefit:						
Modified Cash Refund Annuity:		1.000	\$	3,207.60		N/A
50% Joint & Survivor:		0.883	\$	2,832.31	\$	1,416.16
66-2/3% Joint & Survivor:		0.850	\$	2,726.46	\$	1,817.64
75% Joint & Survivor:		0.834	\$	2,675.14	\$	2,006.36
100% Joint & Survivor:		0.791	\$	2,537.21	\$	2,537.21
10 Years Certain & Continuous:		0.923	\$	2,960.61	\$	2,960.61

IMPORTANT NOTICE

The retirement benefit to which you are entitled is stated in the Plan's documents. This retirement benefit illustration has been prepared based on the current understanding of the Plan's provisions as in effect on the date of preparation of the calculation, and on personnel and employment data available on that date. To the extent your benefit differs from this illustration, the terms of the Plan control. If the understanding of the Plan's provisions or this data should prove to be incorrect, or if the calculation is for any reason erroneous, your Plan benefit will be adjusted retroactively to an amount which reflects the correct Plan provisions and data.

Date Prepared: 6/4/2024 **76**



741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0685 Agenda Date: 8/20/2024 Agenda #: 3.

AGENDA REQUEST GENERAL DISCUSSION ITEM

Subject:

Any Other Old Business to come before the Board.

Background:

(type text here)

Department Comment/Recommendation:



741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0625 Agenda Date: 8/20/2024 Agenda #: 1.

RETIREMENT-EMPLOYEE BENEFITS

Motion/Request:

Motion to APPROVE payment of USI invoice # 90097419, dated June 30, 2024, for Karen Goetchius Benefit Calculation in the amount of \$400.00 and Core Installment Fee/Actuarial Services in the amount of \$2,900.00, for a total of \$3,300.00.

Background:

The Retirement Board is only responsible for items marked with "1" on the invoice. The Board of Education is responsible for item "2".

Human Resources Comment/Recommendation:

(type text here)

Finance Director Comment/Recommendation:

(type text here)

Mayor Comment/Recommendation:



USI Consulting Group, Inc. 95 Glastonbury Blvd. Suite 102 Glastonbury, CT 06033-6503 (860) 633-5283

261 Madison Avenue 5th Floor, New York, NY 10016

601 Union Street Suite 1000 Seattle, WA 98101

725 RXR Plaza, East Tower Uniondale, NY 11556

Invoice

Bill To:

Town of Ledyard Matt Bonin 741 Colonel Ledyard Highway Ledyard CT 06339

Remit To:

USI Consulting Group, Inc. 95 Glastonbury Blvd

Glastonbury, CT 06033 (860) 633-5283

Information

Invoice No. 90097419 **Invoice Date** 06/30/2024 **Customer No.** 1003385

Terms of Payment Net due in 15 days

Purchase Order Number DB-CT - 1

Service	Quantity	Unit Price	Amoun
Benefit Calculation(s) Services rendered regarding Benefit Calculation(s): Karen Goetchius	1	400.00	400.00
Core Actuarial Services Core Installment Fee (100%) - Actuarial Services - 2024 Plan Year			2,900.00
OPEB-ASC 715-60 Valuation Core Installment Fee (100%) - OPEB Services - 2024 Plan Year			1,550.00
(1) Pay From PENSiON	ASSETS (WE	BSTOR)	
(2) BOE HEAUTH BW	ast		
	Total		4,850.00



741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0725 Agenda Date: 8/20/2024 Agenda #: 2.

RETIREMENT-EMPLOYEE BENEFITS

Motion/Request:

Motion to approve a monthly retirement benefit for Mark Yuells.

Background:

Specific calculation details are expected by August 20, 2024.

Human Resources Comment/Recommendation:

(type text here)

Finance Director Comment/Recommendation:

(type text here)

Mayor Comment/Recommendation:



741 Colonel Ledyard Highway Ledyard, CT 06339-1511

File #: 24-0686 Agenda Date: 8/20/2024 Agenda #: 3.

AGENDA REQUEST GENERAL DISCUSSION ITEM

Subject:

Any Other New Business to come before the Board.

Background:

(type text here)

Department Comment/Recommendation: