



BPL FINANCE AND AUDIT COMMITTEE

Evelyn Arana Ortiz, Committee Chair

3.14.23

Members of the Public may sign up for Public Comment via the CHAT by 9:00 a.m.
Comments left in the chat will not be acknowledged. written comments may be submitted to the Clerk of the Board, pcarver@bpl.org

BPL OPENING STATEMENT

The Trustees of The Boston Public Library reaffirm our commitment to racial equity and to principles of diversity equity and inclusion, more broadly.

The Library is formally committed to becoming an anti-racist organization in response to systemic racism, inequity, and injustice prevalent in our society.

We acknowledge also that the Boston Public Library's Central Library stands on land that was once a water-based ecosystem providing sustenance for the indigenous Massachusetts people *and is a place which has long served as a site of meeting and exchange among nations*. We are committed to land acknowledgements for all locations at which we operate.

We reaffirm this commitment to set the context for our planning, deliberations, and public engagement so that they take place from the spirit of welcome and respect, found in our motto 'free to all.'

Taken from the Institutional Statement Ratified by the Board of Trustees for the Boston Public Library on September 29, 2020.

F&A COMMITTEE

Evelyn Arana Ortiz, Committee Chair

- Welcome Remarks
- Roll Call of Committee Members
- Approval of Meeting Minutes from January 10, 2023



**BOSTON
PUBLIC
LIBRARY**

MARKET AND PORTFOLIO UPDATE

BOSTON PUBLIC LIBRARY

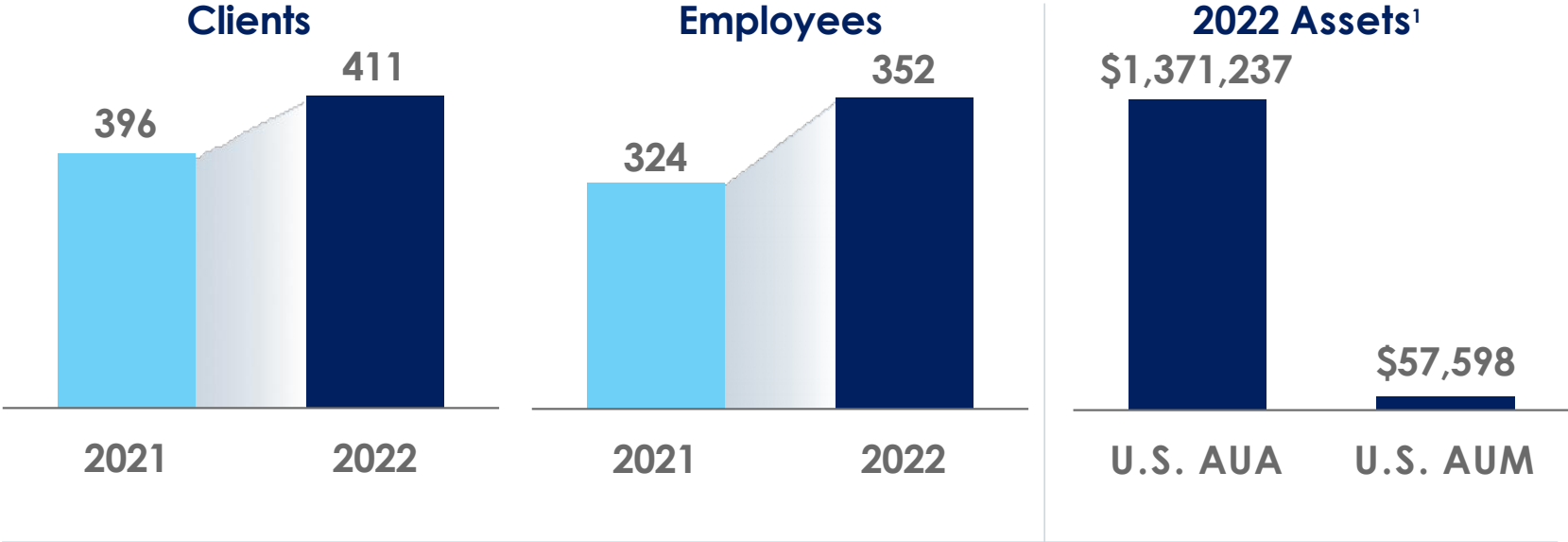
MARCH 21, 2023

Sebastian Grzejka, CAIA, Partner
Alexandra Sollers, CFA, Consultant

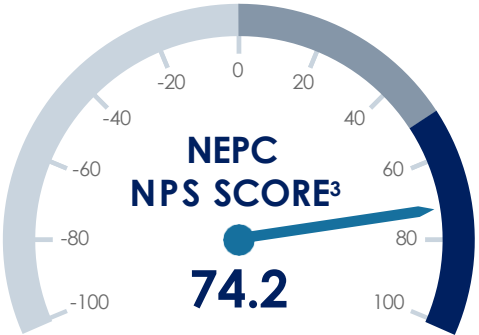


PROPRIETARY & CONFIDENTIAL

2022 HIGHLIGHTS



Awards and Recognitions²



NPS scores of 50 and above are considered excellent

- [Sarah Samuels wins With Intelligence/The Allocator “Advisor of the Year” award](#)
- [NEPC nominated for “Consultant of the Year” and for “Diversity” at the CIO Awards.](#)

¹As of 10/1/2022. Assets in millions. AUA = Assets Under Advisement (advisory mandates). AUM = Assets Under Management (OCIO/Discretionary mandates) ²These ratings or awards may not be representative of any one client's experience with NEPC. Any rating or award is representative of NEPC's past performance only and is not indicative of NEPC's future performance, nor does it indicate an endorsement of NEPC. NEPC did not pay a fee in connection with these awards. ³In May 2022, NEPC received an NPS score of 74.2% on a range of -100% to 100%. Any score above 0% indicates more promoters than detractors.



NEPC FOUNDATION & ENDOWMENT PRACTICE

DEDICATED PHILANTHROPIC PRACTICE GROUP OF 53
PROFESSIONALS INCLUDING EIGHT PARTNERS

NEPC FOUNDATIONS & ENDOWMENTS

155 Funds | Assets: \$104 billion



ENDOWMENTS

60 Funds | \$83 billion



FOUNDATIONS

95 Funds | \$21 billion



AVERAGE ENDOWMENT

\$1.4 billion



AVERAGE FOUNDATION

\$225 million

As of 10/1/2022



NEPC'S ANNUAL INVESTMENT CONFERENCE

SAVE THE DATE

- Please save the date for our Investment Conference on **Tuesday, May 9** and **Wednesday, May 10**
- We are thrilled to welcome you back to Boston this year at the Renaissance Boston Waterfront Hotel.
- In addition to our dynamic speakers and breakout sessions, there will also be plenty of opportunities to network with your peers
- Registration and additional details will follow in the coming weeks. Please reach out to Sarah Winrow: swinrow@nepc.com with any questions

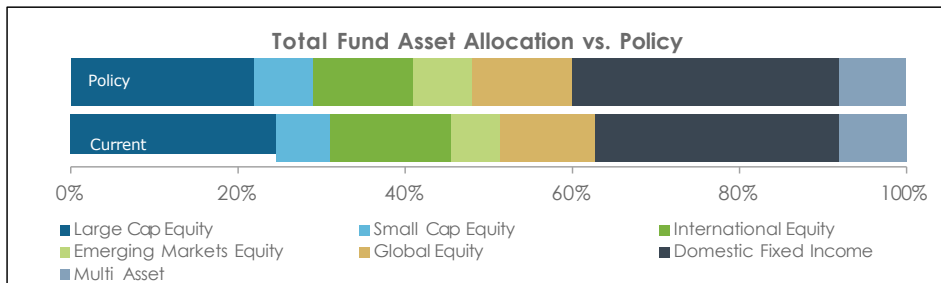
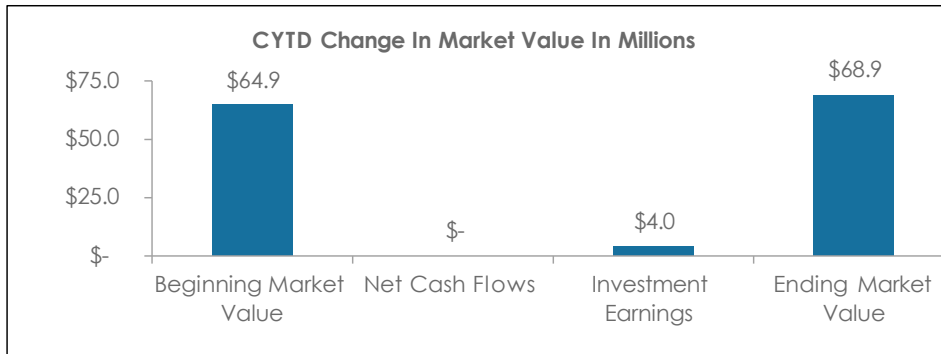
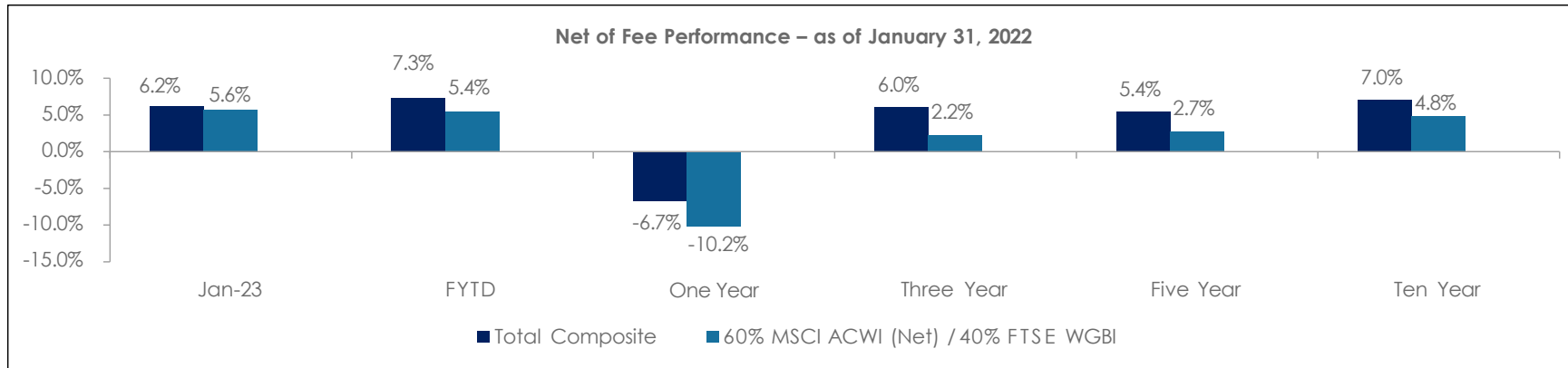




EXECUTIVE SUMMARY



TOTAL FUND EXECUTIVE SUMMARY



Overview of Portfolio and Considerations

- Asset Allocation**
 - The Fund is generally in line with long term target allocation, and we do not recommend changes to the allocation currently
 - NEPC will work with the Committee and Staff on rebalancing for annual draw
- Performance**
 - Long term performance is strong on both an absolute and relative basis
 - January performance benefited from active management, especially across equities, as the Fund outperformed the 60/40 Index by 60 bps for the month



TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Composite	68,875,892	100.0	100.0	6.2	7.3	-6.7	6.0	5.4	7.0	9.1	Jan-81
<i>60% MSCI ACWI (Net) / 40% FTSE WGBI</i>											
Total Domestic Equity	21,361,351	31.0	29.0	6.6	11.6	-10.9	10.2	9.3	12.1	12.4	Dec-10
<i>S&P 500 Index</i>				6.3	8.7	-8.2	9.9	9.5	12.7	13.5	
Diamond Hill Large Cap Class Y Shares	8,201,245	11.9		6.4	11.9	-5.5	9.2	7.8	-	-	Mar-17
<i>Russell 1000 Value Index</i>				5.2	11.6	-0.4	8.5	6.9	-	8.1	
Segall Bryant & Hamill Small Cap	4,491,123	6.5		6.5	17.2	0.2	13.1	10.6	-	9.8	Jan-15
<i>Russell 2000 Index</i>				9.0	12.0	-2.4	8.8	5.5	-	7.5	
Total International Equity	9,990,738	14.5	12.0	9.0	12.0	-2.4	8.8	5.5	-	7.5	Mar-14
<i>MSCI AC World Ex USA (Net)</i>											
Total Emerging Markets Equity	4,019,486	5.8	7.0	9.5	11.9	-17.7	-1.9	1.4	-	3.6	Jun-19
<i>MSCI Emerging Markets (Net)</i>				7.9	4.7	-12.1	1.4	-	-	3.4	
Total Global Equity	7,874,941	11.4	12.0	9.3	11.0	-5.9	-	-	-	20.9	Apr-20
Impax Global Resource Optimization Fund	7,874,941	11.4		9.3	11.0	-5.9	-	-	-	20.9	Apr-20
<i>MSCI AC World Index (Net)</i>				7.9	8.6	-9.8	-0.8	1.3	1.8	16.3	
Total Domestic Fixed Income	20,069,825	29.1	32.0	2.9	8.6	-9.8	-0.8	1.3	1.8	16.3	Dec-10
<i>Blmbg. U.S. Aggregate Index</i>				3.1	0.0	-8.4	-2.3	0.9	1.4	3.0	
SSgA Treasury Inflation Protected Securities	3,938,818	5.7		2.0	-1.4	-8.4	1.1	2.6	-	2.4	Jan-18
<i>Blmbg. U.S. TIPS</i>				1.8	-1.4	-8.4	1.1	2.7	-	2.4	
Manulife Asset Management	4,853,151	7.0		3.1	3.7	-5.2	-0.4	1.4	-	2.0	Jan-17
<i>Blmbg. Global Aggregate</i>				3.3	0.5	-11.7	-3.9	-1.3	-	0.3	
State Street U.S. Treasury Index Non-Lending Common Trust Fund	5,707,966	8.3		2.7	-1.3	-8.6	-	-	-	-5.8	Jun-21
<i>Blmbg. U.S. Treasury Index</i>				2.5	-1.2	-8.5	5.7	3.9	3.9	-5.9	
Total Balanced - GAA	5,559,551	8.1	8.0	2.2	-1.2	-8.5	5.7	3.9	3.9	-5.9	Jul-12
<i>PIMCO All Asset Index</i>				3.0	2.0	-7.9	0.1	2.3	2.8	3.0	

-PIMCO All Asset Index consists of 40% Bloomberg Aggregate / 30% Bloomberg US TIPS Index/ 10% S&P 500 / 10% HY / 10% 3PM EMBI-TR.
 -New Policy % targets as of 4/1/2020; Returns are net of fees.



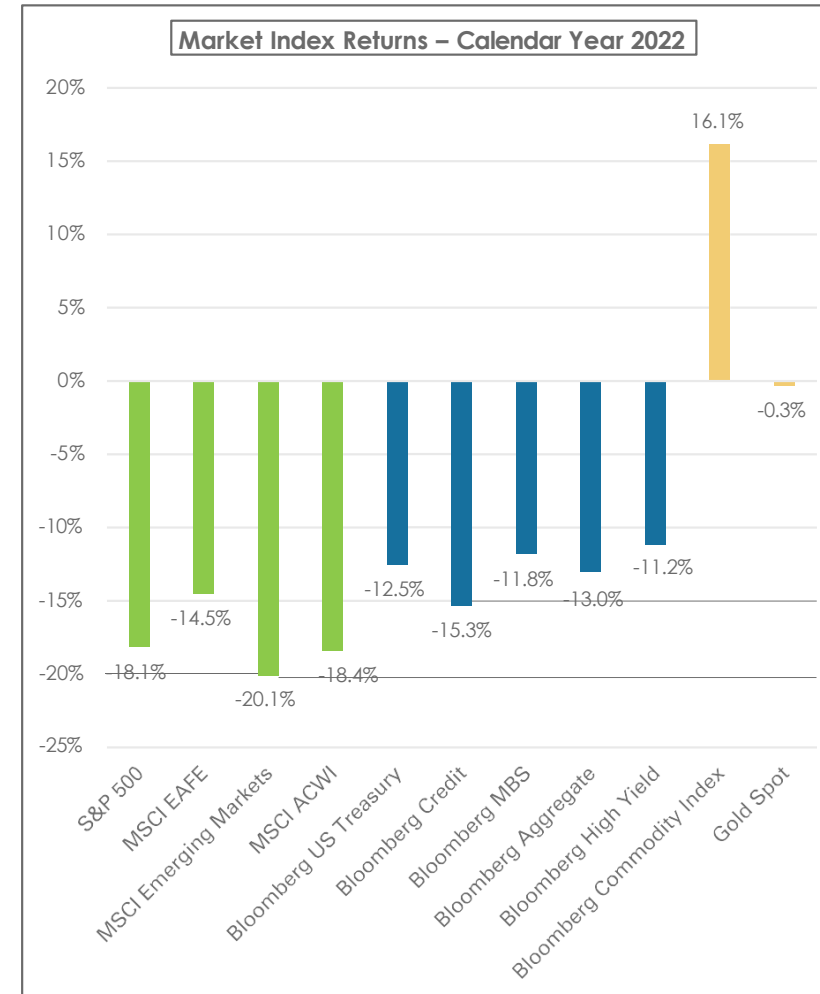


MARKET OVERVIEW



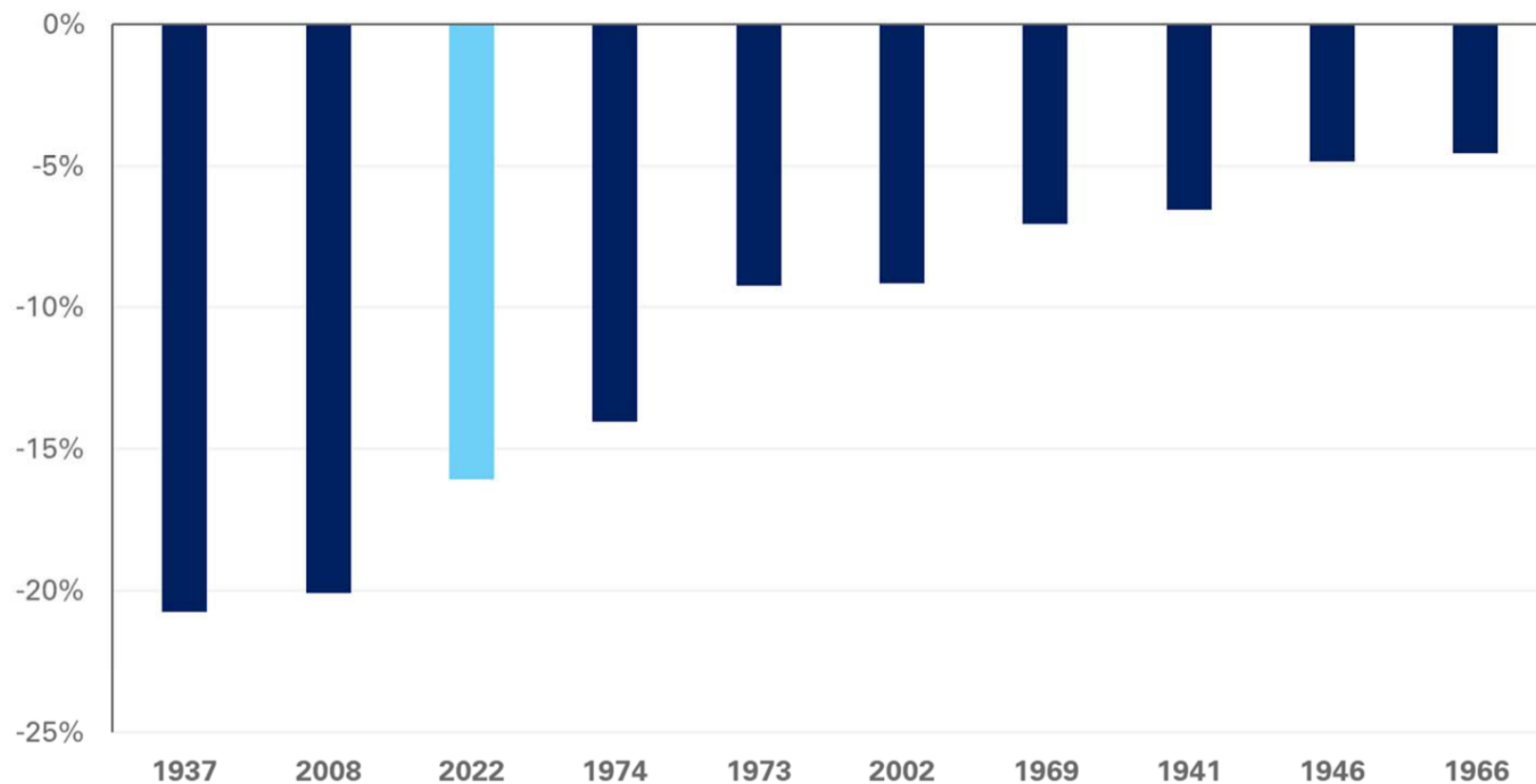
2022 YEAR IN REVIEW

- **Global equities delivered negative returns in 2022, due to central banks around the globe tightening monetary policies amid persisting inflationary pressures despite softening economic growth**
 - Domestic stocks had one of the worst years on record, with the S&P 500 returning -18.1%
 - International developed-market equities fell -14.5%, while emerging markets had the largest drawdown at -20.1%
- **The Federal Reserve raised the federal funds rate seven times in 2022 to combat inflation, ending the year at a range of 4.25% - 4.50%**
 - Returns across investment grade bonds were negative for the year, as interest rates began to climb
- **Commodity prices surged during the calendar year, fueled by supply constraints due to the war in Ukraine**



MOST ASSET CLASS RETURNS WERE CHALLENGED

WORST ANNUAL RETURNS: 60/40 PORTFOLIO



60/40 Portfolio represents 60% S&P 500 and 40% U.S. Aggregate Bonds (post 1975) and 40% Treasury (prior to 1974)

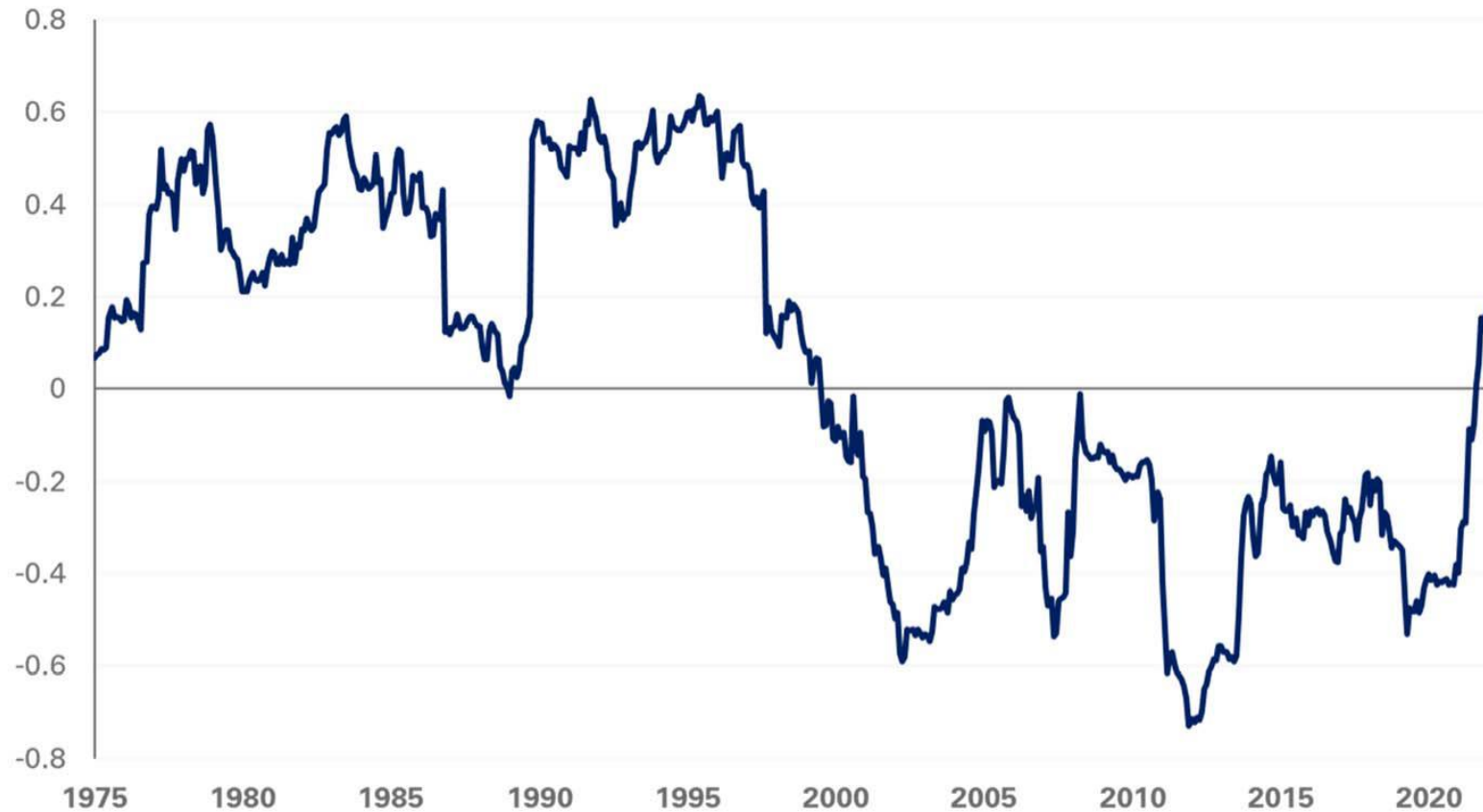
Data calculated from 12/31/1936

Sources: S&P, Bloomberg, FactSet



ASSET CLASS CORRELATIONS SHIFTED

ROLLING CORRELATION BETWEEN THE S&P 500 AND TREASURIES

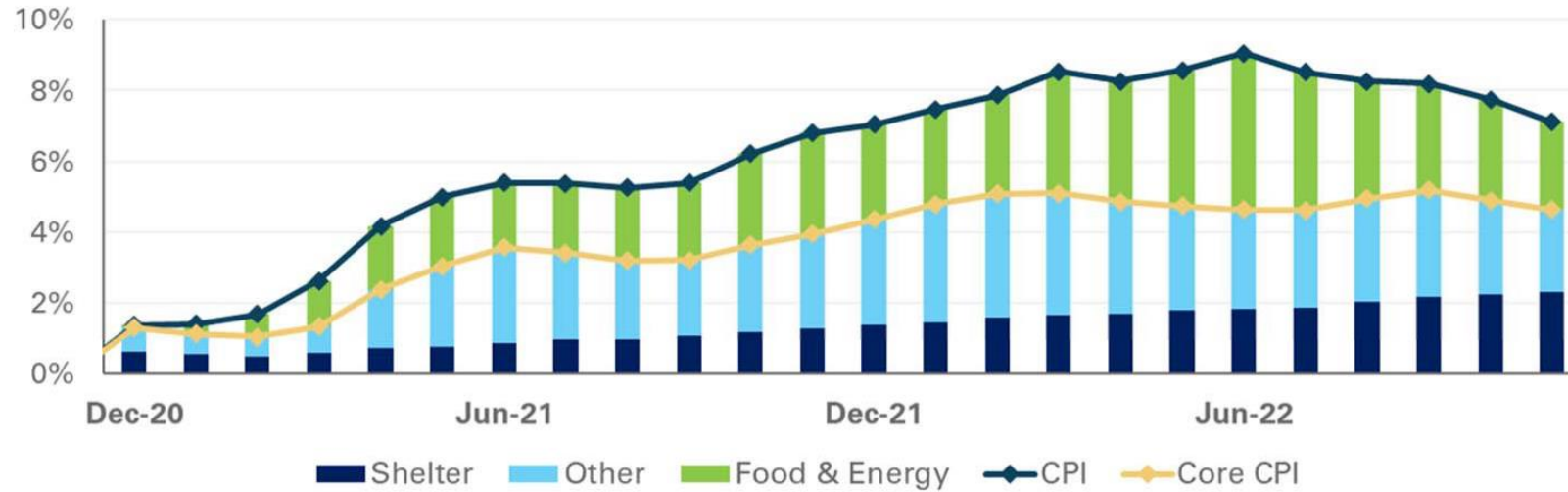


Correlations are calculated based on a rolling 3-year time horizon
Source: S&P, Bloomberg, FactSet



U.S. HEADLINE AND CORE CPI REMAIN ELEVATED

ANNUAL U.S. CPI-U CHANGES



Annual Change in U.S. CPI-U Subcategories



+11.2%
Food



+33.5%
Utilities



+14.7%
Transportation
Services



+19.7%
Motor Fuel



+7.4%
Used Cars
and Trucks



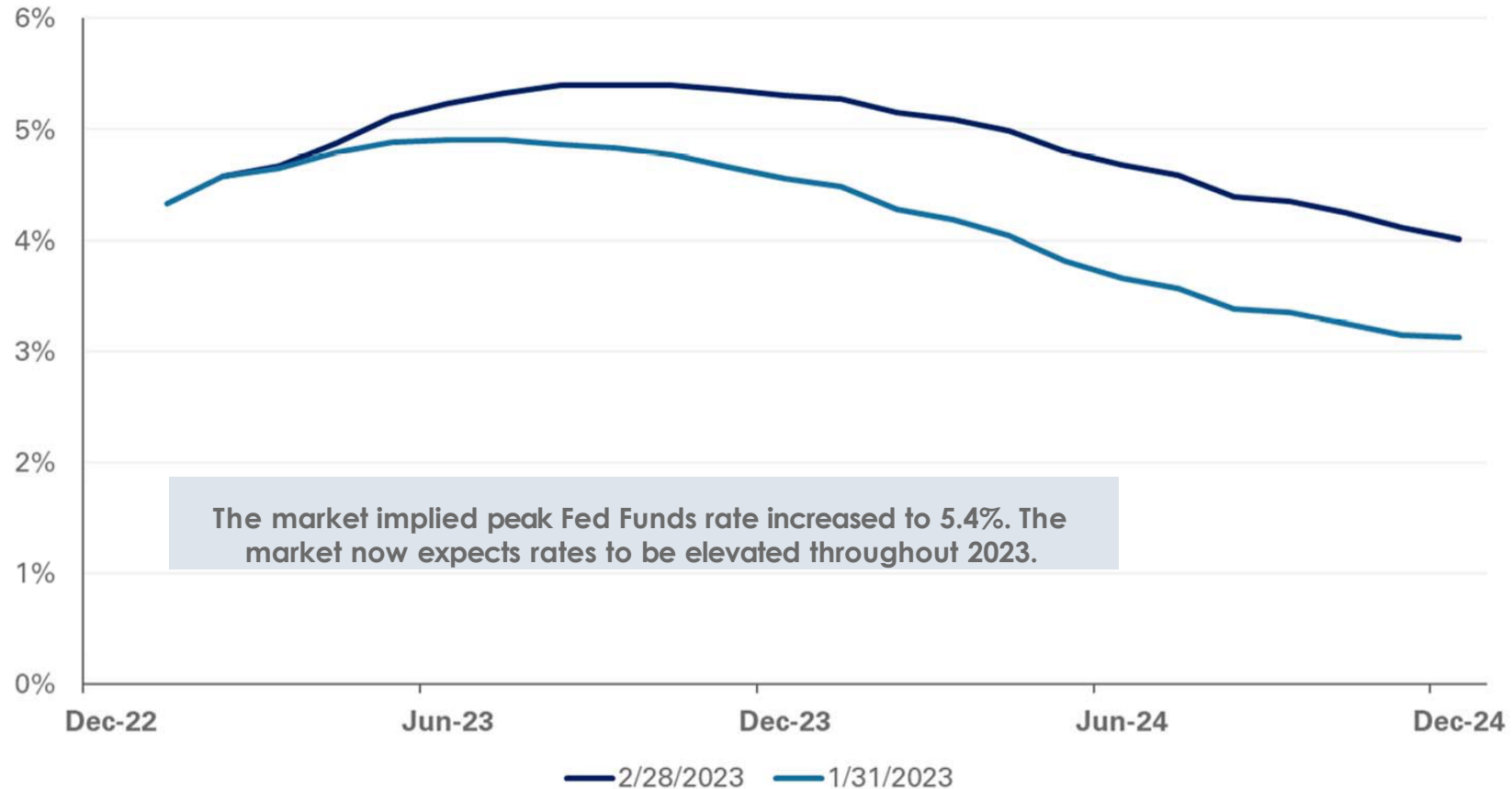
+6.6%
Shelter

Sources: Bureau of Labor Statistics, FactSet



THE MARKET EXPECTS NO RATE CUTS IN 2023

FEDERAL FUNDS FUTURES

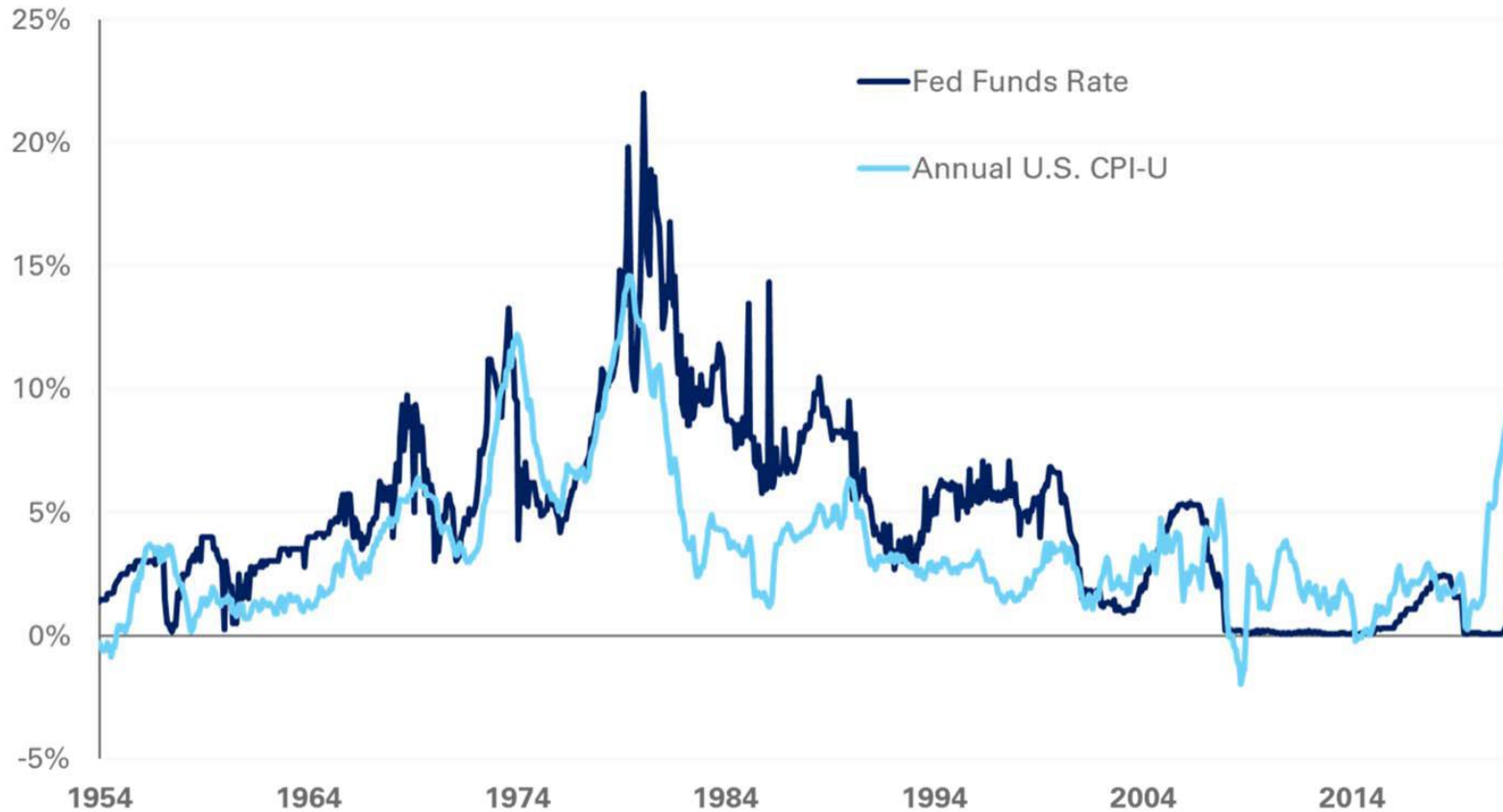


Source: FactSet



INFLATION AND FED FUNDS NEED TO CONVERGE

HISTORICAL RELATIONSHIP BETWEEN FED FUNDS AND INFLATION








Sources: U.S. Department of Labor, Federal Reserve, FactSet



2023 KEY INVESTMENT THEMES

NEPC MARKET OUTLOOK

 Stagflation Trends	Stagflation trends challenge the investment landscape and are the driving force for market dynamics
 Recession Outlook	Changes in unemployment, wages, and service sector inflation will inform the likelihood and potential severity of a U.S. recession
 European Energy Transition	Europe is on the clock to secure new sources of natural gas supply or face severe energy shortages
 China's Reopening	China's reopening will have global implications for growth, trade, and inflation and may drive a consumer resurgence in China
 U.S. Dollar Trajectory	U.S. Dollar strength reveals risks in the global financial system and is a tightening of financial conditions

ASSET ALLOCATION UPDATE



REGIME SHIFTS CHALLENGE INVESTOR BIASES

NEPC MARKET OUTLOOK

Elevated Inflation and Monetary Policy

Central banks have transitioned from supporting investor sentiment and market liquidity to suppressing inflation as their primary policy objective

Interest Rate Super Cycle

The forty-year interest rate super cycle has ended, and capital markets are only beginning to reflect an environment of higher discount rates and an increased cost of capital

Portfolio Construction

Higher volatility in inflation and economic factors have increased stock-bond correlations and diversifying assets offer greater value to a portfolio relative to the last decade

Geopolitical Trends

New geopolitical trends in Europe and the Middle East are straining commodity markets and supply chains while inciting macro-economic stagflation trends

THE END OF THE INTEREST RATE SUPER CYCLE

HIGHER DISCOUNT RATES HAVE A PROLONGED LAG EFFECT



- **The transition to higher levels of interest rates continues to progress with the effects rippling from the public markets to consumer finance, real estate, private markets, and the overall cost of capital**
 - The economic effect has yet to be felt as debt issuance and refinancings slow and weak balance sheets buckle from the pressure of higher interest rates

STRATEGIC ASSET ALLOCATION OUTLOOK

We have transitioned to an investment regime characterized by higher interest rates with **central banks focused on managing inflation not investor sentiment**

The **outlook for investment-grade bonds has improved** and is additive relative to existing strategic allocation targets for safe-haven fixed income exposure

Diversification and portfolio balance are critical and shifts in stock-bond correlation dynamics increase the relative benefit of diversifying asset classes

The **emergence of stagflationary trends** challenges the behavioral biases investors have been conditioned to expect over the last decade

ASSET ALLOCATION OVERVIEW

- The current strategic allocation is structured to utilize a diversified, total return approach
- At this time, we are not recommending changes to the strategic targets

BPL Current Policy	
US Large-Cap Equity	22.0%
US Small/Mid-Cap Equity	7.0%
Non-US Developed Equity	12.0%
Emerging Market Equity	7.0%
Global Equity	12.0%
Total Equity	60.0%
US TIPS	7.0%
US Treasury Bond	7.0%
US Aggregate Bond	10.0%
Global Multi-Sector Fixed Income	8.0%
Total Fixed Income	32.0%
PIMCO All Asset	8.0%
Total Multi Asset	8.0%

12/31/22 Assumptions	
Expected Return (10 Years)	6.3%
Standard Deviation	12.0%
Sharpe Ratio (10 Years)	0.19

12/31/21 Assumptions	
Expected Return (10 Years)	4.6%
Standard Deviation	11.9%
Sharpe Ratio (10 Years)	0.17

Within equities, the exposure is balanced geographically and across market capitalizations.

Within fixed income, the allocation is balanced across high-quality assets and yield seeking fixed income and has both domestic and global exposure.

The forward-looking return characteristics have improved from last year since a year ago, as yields have shifted higher and equity valuations became more favorable in 2022

ADD SHORT-TERM INVESTMENT GRADE CREDIT

Short-Term IG Credit

Build exposure to short-term IG credit while sourcing from risk-asset positions

RATIONALE

- The opportunity for IG credit has improved as higher yields lift expected returns and our outlook for risk assets is more subdued

IMPLEMENTATION VIEW

Public Credit

Portfolio Tilt:

Bloomberg U.S. 1-5 Yr Corporate

Opportunity Cost:

50% Bloomberg U.S. High Yield
50% MSCI ACWI Index

Elevated inflation levels and **tight monetary policy** support a **subdued outlook for risk assets**

Look to **build exposure to short-term investment grade credit** as elevated yields support our outlook relative to risk assets

The **outlook for investment-grade bonds has improved** and can be considered in addition to existing safe-haven fixed income exposure

IMPLEMENTATION

Fund	Vehicle / Ticker	Fee	Yield	Duration	Trailing 1 Year Returns	Trailing 3 Year Returns	Trailing 5 Year Returns
Vanguard Short-Term Corporate Bond Fund	Mutual Fund/ (VSTBX)	0.01%	5.21%	2.7	-3.4%	-0.9%	1.5%

- **Given current yields, NEPC recommends the Boston Public Library establish a 3% position in Vanguard’s Short Term Corporate Bond Fund mutual fund (VSTBX)**
 - Proposal locks in attractive yields and takes risk off the table by reducing exposure to risk assets and moving the portfolio further up the capital stack
 - Full rebalance recommendation included on the following page

**All performance figures as of 2/28/2023*



RECOMMEND REBALANCE FOR ANNUAL SPEND

Boston Public Library

Asset Allocation Rebalance Summary

January 31, 2023

	Market Value	Current Weight in Fund	Target Weight	Over/ Under%	Recommendation	New Market Value	New Weight
Composite	\$64,873,771	88.9%	100.0%	-9.5%	-\$3,872,953	\$61,000,818	100.0%
Total US Equity	\$20,044,356	30.9%	29.0%	1.9%	-\$2,300,000	\$17,744,356	29.1%
SSgA SRI S&P 500	\$8,119,607	12.5%	11.0%	1.5%	-\$1,700,000	\$6,419,607	10.5%
Diamond Hill Large Cap	\$7,710,391	11.9%	11.0%	0.9%	-\$600,000	\$7,110,391	11.7%
Segall Bryant Small Cap	\$4,214,358	6.5%	7.0%	-0.5%	\$0	\$4,214,358	6.9%
Total Non US Equity	\$12,831,161	19.8%	19.0%	-4.9%	-\$1,300,000	\$11,531,161	18.9%
Earnest International Equity	\$9,161,893	14.1%	12.0%	2.1%	-\$1,600,000	\$7,561,893	12.4%
UBS Emerging Markets HALO	\$3,669,268	5.7%	7.0%	-1.3%	\$300,000	\$3,969,268	6.5%
Total Global Equity	\$7,204,027	11.1%	12.0%	-4.7%	\$0	\$7,204,027	11.8%
Impax	\$7,204,027	11.1%	12.0%	-0.9%	\$0	\$7,204,027	11.8%
Total Fixed Income	\$19,510,694	30.1%	32.0%	-1.9%	\$200,000	\$19,710,694	32.3%
IRM Core Bond	\$5,383,733	8.3%	10.0%	-1.7%	\$0	\$5,383,733	8.8%
SSgA TIPS	\$3,860,914	6.0%	7.0%	-1.0%	\$0	\$3,860,914	6.3%
SSgA Treasury	\$5,557,981	8.6%	7.0%	1.6%	-\$400,000	\$5,157,981	8.5%
Manulife	\$4,708,066	7.3%	8.0%	-0.7%	-\$1,200,000	\$3,508,066	5.8%
Vanguard Short Corporate (VSTBX)	\$0	0.0%	0.0%	0.0%	\$1,800,000	\$1,800,000	3.0%
Total Multi Asset	\$5,283,533	8.1%	8.0%	0.1%	-\$472,953	\$4,810,580	7.9%
PIMCO All Asset	\$5,283,533	8.1%	8.0%	0.1%	-\$472,953	\$4,810,580	7.9%

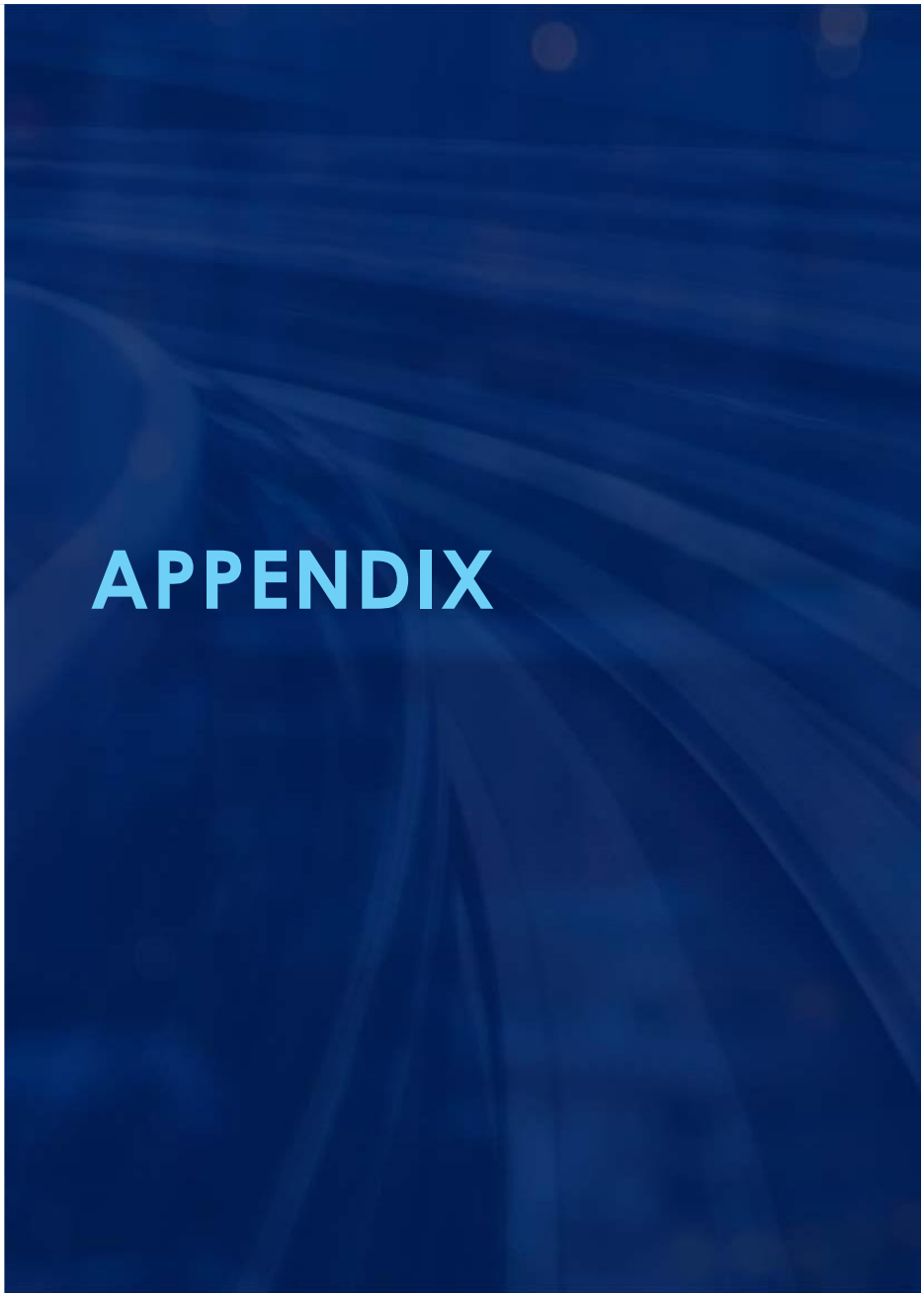


CORE ASSET CLASS RETURN ASSUMPTIONS

	Asset Class	12/31/22 10-Year Return	12/31/21 10-Year Return	Delta
	Cash	4.0%	1.5%	+2.5%
	U.S. Inflation	2.5%	2.4%	+0.1%
Equity	U.S. Large-Cap Equity	5.4%	4.3%	+1.1%
	Non-U.S. Developed Equity	5.6%	5.2%	+0.4%
	Emerging Market Equity	9.6%	8.3%	+1.3%
	Global Equity*	6.3%	5.4%	+0.9%
	Private Equity*	9.2%	9.0%	+0.2%
Fixed Income	US Treasury Bond	4.2%	1.5%	+2.7%
	US Municipal Bond	4.4%	1.6%	+2.8%
	US Aggregate Bond*	4.8%	2.0%	+2.8%
	US TIPS	4.4%	1.4%	+3.0%
	US High Yield Corporate Bond	7.1%	3.2%	+3.9%
	Private Debt*	8.8%	6.6%	+2.2%
Real Assets	Commodity Futures	4.2%	0.4%	+3.8%
	REIT	6.2%	4.5%	+1.7%
	Gold	5.1%	3.3%	+1.8%
	Real Estate - Core	4.0%	4.7%	-0.7%
	Private Real Assets - Infrastructure	6.6%	5.3%	+1.3%
Multi-Asset	60% S&P 500 & 40% U.S. Aggregate	5.4%	3.7%	+1.7%
	60% MSCI ACWI & 40% U.S. Agg.	6.0%	4.4%	+1.6%
	Hedge Fund*	6.5%	4.2%	+2.3%

*Calculated as a blend of other asset classes





APPENDIX



INFLATION ASSUMPTIONS

OVERVIEW

- **Inflation is a key building block to develop asset class assumptions**
- **Inflation assumptions are model-driven and informed by multiple inputs for both the U.S. and global assets**
 - Includes forecasts from international organizations (e.g. IMF), local consumer and producer price indices, global interest rate curves, and break-even inflation expectations
- **NEPC's U.S. inflation expectations reflect stickier inflation over the near-term, but a stable inflation outlook over the long-term**
 - We anticipate continued volatility among inflation measures as market-based inflation expectations diverge from current consumer inflation metrics

Region	10-Year Inflation Assumption	30-Year Inflation Assumption
United States	2.5%	2.6%

INFORMATION DISCLAIMER

Past performance is no guarantee of future results.

The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

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NEPC PORTFOLIO AND ASSET ALLOCATION OVERVIEW

A. Vote to Rebalance the Annual Spend (Pending Discussion)

VOTED: “that, the Trustees Finance and Audit Committee of the Public Library of the City of Boston vote to rebalance the annual spend based on the recommendations presented and discussed with NEPC.”

DISCUSSION & REVIEW OF CONTRACTS

Ellen Donaghey, Chief Financial Officer

A. Vote to approve Camera purchase

VOTED: “that, the Trustees Finance and Audit Committee of the Public Library of the City of Boston approve the purchase of the Phase One iXH 150MP - 72MM (MKII) camera from The Digital Transitions, Inc. of 35 West 35th Street 10th floor, New York, NY 10001 in the amount of Sevent-Six Thousand one hundred ninety dollars and zero cents (\$76,190.00) with funding from the Library for the Commonwealth.”

New Business

**BOSTON
PUBLIC
LIBRARY**



Evelyn Arana Ortiz, Committee Chair

Presentation of the Draft
Tax Returns (IRS Form 990)

**BOSTON
PUBLIC
LIBRARY**



Ellen Donaghey, Chief Financial Officer

Public Comment

**BOSTON
PUBLIC
LIBRARY**



- People will be chosen in the order they were received and allowed 2 minutes to speak.
- The Moderator will unmute your mic when you are called on.
- Comments made in chat during meeting will not be acknowledged.
- If follow up is required, please send your contact email or phone number to the Clerk of the Board at pcarver@bpl.org

**BOSTON
PUBLIC
LIBRARY**



Adjournment

**Committee Meeting Schedule*

- *May 16, 2023, at 8:30 a.m.*

(Date, time, and location are subject to change- will be posted to the BPL website/Trustees page)