



# HAMPDEN COUNTY REGIONAL RETIREMENT BOARD

PRESENTED BY  
Francesco Daniele, Director of Client Services

MARCH 6, 2024

**Deborah B. Goldberg**, Treasurer and Receiver General, Chair  
**Michael G. Trotsky**, CFA, Executive Director and Chief Investment Officer

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# PRIM BOARD & PRIT FUND OVERVIEW



AS OF DECEMBER 31, 2023

# PRIT Fund Snapshot

As of December 31, 2023

## PRIT FUND FACTS

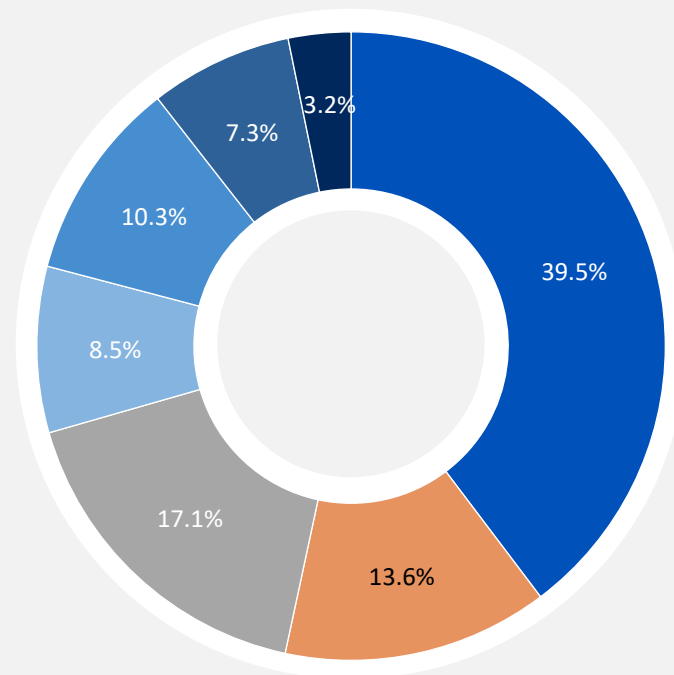
- \$100.9 billion AUM
- 63 public markets portfolios
- 15 real estate, timber and REIT portfolios
- 100+ private equity managers;  
375+ partnerships
- 35 portfolio completion strategies managers

## OVERSIGHT AND STAFFING

- 9 appointed and elected trustees
- 5 advisory committees, consisting of 43 industry professionals and Board members
- Staff of 60 professionals
  - 31 Masters
  - 14 CFAs
  - 6 CPAs
  - 3 CAIAs
  - 3 JDs
  - 1 FRM
  - 1 CRE
- 10 CFA Investment Foundations Program Certificate Holders

## ASSET ALLOCATION

(as of 12/31/23)



## TARGET RANGES

(approved 2/15/24)

- Global Equities 31% - 41%
- Core Fixed Income 12% - 18%
- Private Equity 13% - 19%
- Portfolio Completion Strategies 7% - 13%
- Real Estate 7% - 13%
- Value-Added Fixed Income 6% - 12%
- Timberland 1% - 7%

# About PRIM



**\$100.9 billion investment fund that invests public employee pension benefits**

- PRIM has a professional, experienced and focused investment staff.
- PRIM does not administer benefits.

**PRIM's mission is to relieve the pension funding burden on the taxpayer**

- Self-funded agency which generates asset returns for the Massachusetts pension system.
- PRIM's Project SAVE initiative is achieving over \$275 million annualized value enhancing activities for the fund annually.

**PRIM is independent and governed by a nine-member Board of Trustees**

- Massachusetts State Treasurer is the Chair of the PRIM Board.
- A robust committee structure lends investment and operational expertise to the decision-making process.



## PRIM Core Beliefs

We believe that any investment must be evaluated on three equally important parameters: return, risk and cost.

We don't make tactical asset allocation decisions or investment decisions based on market or economic predictions. Instead, we engineer a strategic, long-term asset allocation strategy that we hope will stand the test of a long-time horizon.

We value a basis point of cost reduction more than a basis point of return. Because we can count on cost savings every year, but nobody ever really knows what the markets will deliver.

# PRIM Board



**Chair**  
**DEBORAH B. GOLDBERG**  
State Treasurer and  
Receiver General,  
Commonwealth of Massachusetts



**Ruth Ellen  
Fitch**

Appointee of  
the State  
Treasurer



**Catherine  
D'Amato**

Designee  
of the  
Governor,  
Ex Officio  
Member



**Peter  
Monaco**

Appointee  
of the  
Governor,  
Non-State  
Employee or  
Official



**Carly Rose**

Appointee  
of the  
Governor,  
Public Safety



**Theresa F.  
McGoldrick,  
Esquire**

State  
Retirement  
Board  
Member  
(SRB)



**Dennis J.  
Naughton**

Teachers'  
Retirement  
Board  
Member  
(TRB)



**Robert L.  
Brousseau**

Elected  
Representative  
State Teachers'  
Retirement  
System



**Paul E.  
Shanley,  
Esquire**

Elected  
Representative  
State  
Employees  
Retirement  
System



# PRIM Advisory Committees

## Investment Committee

The Committee advises the Board with respect to the asset allocation policy of PRIM and related investment policies and assist the Board in overseeing the investment program. The mandate of the Investment Committee does not include real estate and timber. Members include:

1. **Deborah B. Goldberg**, Chair, Treasurer and Receiver General of Massachusetts, PRIM Board Chair (Ex Officio)
2. **Joseph C. Bonfiglio**, Massachusetts & Northern New England Laborers' District Council
3. **C. LaRoy Brantley**, Investment Consultant
4. **Catherine D'Amato**, President and CEO, The Greater Boston Food Bank
5. **Michael Even**, Former President and CEO, Numeric Investors
6. **Constance M. Everson**, CFA, Managing Director, Capital Markets Outlook Group
7. **Ruth Ellen Fitch**, Esq., Board Member, Former President and CEO, the Dimock Center
8. **James B. G. Hearty**, Board Member, Former Partner, Clough Capital (Ex Officio)
9. **Peter Monaco**, Board Member, Managing Director, Raptor Group
10. **Phillip H. Perelmuter**, Former Managing Partner, Wellington Management
11. **Philip Rotner**, Chief Investment Officer, Boston Children's Hospital
12. **Paul E. Shanley**, Esq., Board Member, Former Director of Professional Liability, Amity Insurance
13. **Glenn P. Strehle**, CFA, Treasurer Emeritus, MIT
14. **Timothy L. Vaill**, Former Chairman and CEO, Boston Private Holdings





# PRIM Advisory Committees

## Real Estate Committee

The Committee advises the Board in setting investment policy within the real estate and timber portfolios and assist the Board in overseeing these portfolios. Members include:

1. **Jill S. Hatton**, CRE, Chair, Real Estate Investment Professional
2. **Deborah B. Goldberg**, Treasurer and Receiver General of Massachusetts, PRIM Board Chair (Ex Officio)
3. **Lydia Chesnick**, Esq., Partner, Bernkopf Goodman LLP
4. **Robert Gifford**, RGA Corp.
5. **Jack Lutz**, PhD., Forest Research Group
6. **William F. (Bill) McCall, Jr.**, CRE, McCall & Almy, Inc.
7. **Garlan Morse, Jr.**, CRE, Morris and Morse Company, Inc.
8. **Peter F. O'Connell**, Marina Bay Company
9. **Carly Rose**, Board Member, Public Safety Union Member

## Administration and Audit Committee

The Committee assists the Board in overseeing all issues related to the governance, administration, and audit functions of PRIM, and to provide recommendations for the Board's consideration. Members include:

1. **Robert L. Brousseau**, Chair, Board Member, Retired Teacher, Town of Wareham School System
2. **Deborah B. Goldberg**, Treasurer and Receiver General of Massachusetts, PRIM Board Chair (Ex Officio)
3. **Patrick E. Brock**, Chairman, Hampshire County Retirement Board
4. **Catherine D'Amato**, President and CEO, The Greater Boston Food Bank
5. **James B. G. Hearty**, Board Member, Former Partner, Clough Capital (Ex Officio)
6. **Theresa F. McGoldrick**, Esq., Board Member, National Executive Vice President, National Association of Government Employees (NAGE)
7. **Dennis J. Naughton**, Board Member, Retired Educator, Millis Public Schools



# PRIM Advisory Committees

## Stewardship and Sustainability Committee

The Committee assists the Board in overseeing all issues related to the development and ongoing implementation of an ESG framework and related engagement activities, and to provide recommendations for the Board's approval. Members include:

1. **Deborah B. Goldberg**, Treasurer and Receiver General of Massachusetts, PRIM Board Chair (Ex Officio)
2. **Ruth Ellen Fitch**, Esq., Board Member, Former President and CEO, the Dimock Center
3. **Theresa F. McGoldrick**, Esq., Board Member, National Executive Vice President, National Association of Government Employees (NAGE)
4. **Dennis J. Naughton**, Board Member, Retired Educator, Millis Public Schools
5. **Michael Even**, Former President and CEO, Numeric Investors
6. **Poonam Patidar**, Member, Mintz
7. **Mary Cerulli**, Founder, Climate Finance Action
8. **Marcela Pinilla**, Director of Sustainable Investing, Zevin Asset Management

## Compensation Committee

The Committee assists the Board in overseeing staff compensation and benefit policies. The Administration and Audit Committee is responsible for assisting the Board on other human resource matters. Members include:

1. **Deborah B. Goldberg**, Chair, Treasurer and Receiver General of Massachusetts, PRIM Board Chair (Ex Officio)
2. **Robert L. Brousseau**, Board Member, Retired Teacher, Town of Wareham School System
3. **Patrick E. Brock**, Chairman, Hampshire County Retirement Board
4. **Catherine D'Amato**, President and CEO, The Greater Boston Food Bank
5. **Marian A. Tse**, Retired Partner, Goodwin Procter

# Recent Recognition

## 2023 Chief Investment Officer Power 100 List

Michael G. Trotsky, CFA, PRIM's Executive Director and Chief Investment Officer, was named to the 2023 CIO Power 10 List by the publication, Chief Investment Officer. The designation honors leaders "who continue to guide their funds through volatile times and are disciplined enough to navigate whatever is ahead." (November 2023)

## Commonwealth Citations for Outstanding Performance

PRIM was awarded two Commonwealth Citations for Outstanding Performance by Treasurer Deborah B. Goldberg. Eliza Haynes, Investment Analyst, was recognized as a key individual on PRIM's Private Equity Team for her sourcing and underwriting work. The PRIM Real Estate Leverage Team was recognized for an innovative program that works across asset classes to save the Commonwealth in borrowing costs while bolstering the returns of the Real Estate Portfolio. Recipients included Melissa Ng, Matt Liposky, and George Tsipakis from the Finance Team, Jay Leu from the Risk Team, and David Gurtz, John LaCara, and Chuck LaPosta from the Investment Team. (October 2023)

## GIPS® Compliance

For the 6<sup>th</sup> consecutive year, PRIM has completed the CFA Institute's Global Investment Performance Standards (GIPS®) of integrity and transparency.\* PRIM is one of only a handful of large public pension plans to comply with the GIPS® standards. Additionally, Matt Liposky, PRIM's Chief Investment Operations Officer, was appointed by the CFA Institute to chair the GIPS® Standards Asset Owner Subcommittee. (August 2023)

## Certificate of Achievement for Excellence in Financial Reporting – Government Finance Officer Association

PRIM was awarded the Government Finance Officer Association's Certificate of Achievement for Excellence in Financial Reporting for the 18<sup>th</sup> consecutive year. (June 2023)

## PRIM Ranked #8 For Assets Managed by Diverse Managers by Pensions & Investments

PRIM was ranked eighth among the largest 200 funds in the U.S. for assets managed by diverse managers. This is an indication that PRIM's ongoing efforts over the years, combined with the new FUTURE initiative are putting PRIM at the top of the rankings in terms of progress. (February 2023)

## PRIM FUTURE Initiative Awarded Commonwealth Equity in Governance Award

PRIM received the Commonwealth's 'Equity in Governance Award' for the FUTURE Initiative. The award recognizes "an employee or group of employees who have demonstrated commitment to and attainment of the principles of equity" for activity that "promotes the participation of minority business enterprises and women business enterprises," among other things. (December 2022)

## Institutional Investor's Partnership of the Year Award

PRIM's role with the Aggregate Confusion Project was awarded "Partnership of the Year" at the fifth annual Allocators' Choice Awards. PRIM is a founding partner with MIT Sloan School of Management in this project to "reduce the level of noise in ESG management" by improving data available to managers and allocators. (September 2022)

## Institutional Investor's Alpha Edge Award

PRIM's Private Equity team won Alpha Edge recognition for Alpha Generation from Institutional Investor, which cited PRIM's strong leadership culture, collaboration, and thesis-driven approach to manager selection as well as PRIM's annual commitment modeling process and strong long-term performance in the asset class. (July 2023)

## Private Equity Women Investor Network Limited Partner of the Year

Private Equity Women Investment Network (PE-WIN), which is the preeminent organization for senior-level women investment professionals in private equity, recognized PRIM as "Limited Partner of the Year" for "empowering women in private equity." The award reflected both PRIM's work on investing with women and diverse managers via the FUTURE Initiative and the strong leadership presence of women on PRIM's Private Equity team. (July 2023)

## PRIM's Private Equity Portfolio Ranked #3 by the American Investment Council

PRIM's Private Equity Portfolio was ranked 3<sup>rd</sup> among 176 U.S. public pension funds based on 10-year performance by the American Investment Council's Public Pension Study. PRIM is the only fund that has been in the top five every year the study has been conducted, including #1 rankings in 2019, 2018, 2015, and 2013. (June 2022)

\*PRIM claims compliance with the Global Investment Performance Standards (GIPS®). GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. You may obtain GIPS® compliant performance information by emailing



# PRIM'S FUTURE INITIATIVE



# PRIM's FUTURE Initiative

PRIM believes that diversity of thought and investment equity is critical to the FUTURE success of PRIM and the asset management industry. To successfully implement and accomplish these goals, PRIM must plan for the FUTURE:

F U T U R E

**Firmwide  
Commitment**

Continuation of PRIM's firmwide commitment to diversity and inclusion and diversity of thought.

**Unbiased**

PRIM will remain unbiased when evaluating and selecting investment managers or other vendors.

**Transparent**

PRIM will be fully transparent as to the progress toward our goals, as well as our successes and challenges.

**Utilize  
Technology**

PRIM will utilize technology to successfully track and manage the amount of data this initiative requires.

**Resources**

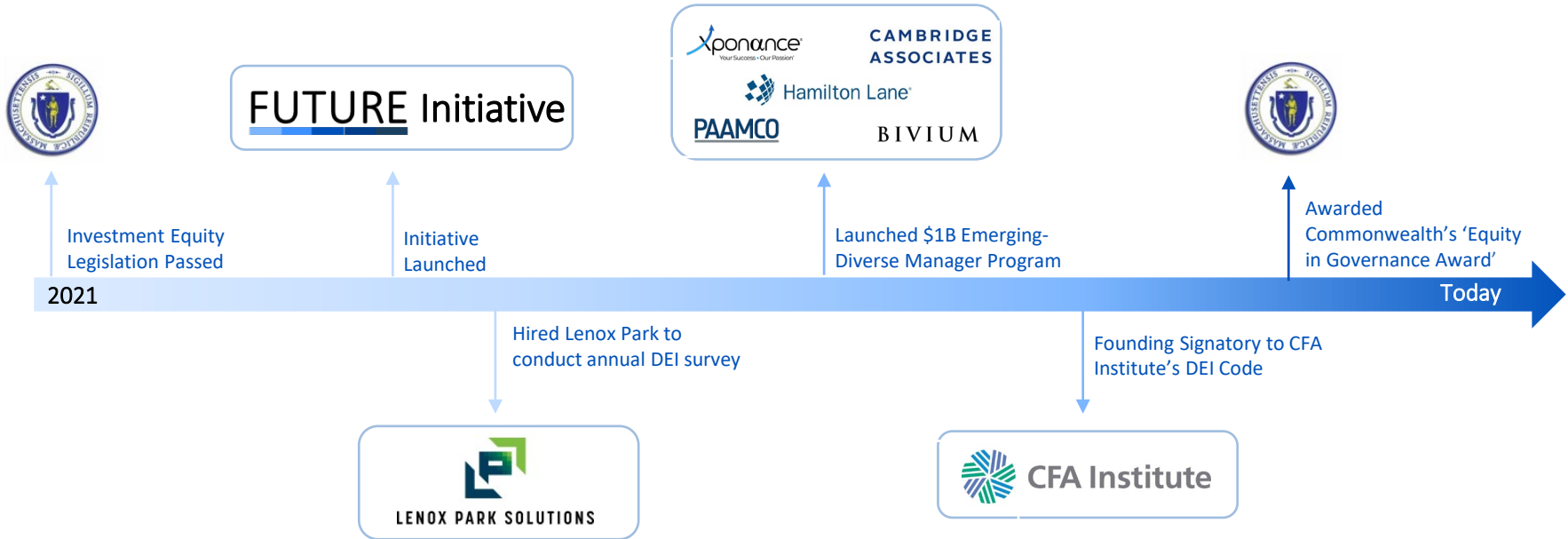
PRIM will employ additional internal and external resources as required to accomplish our goals.

**Expand**

PRIM will expand the conversation about diversity and inclusion in the asset management industry by being at the forefront of meaningful change.

# FUTURE Initiative

PRIM's FUTURE Initiative is our strategic plan to achieve the goals set forth by the Investment Equity Legislation as well as position PRIM to be a leader on improving diversity in the asset management industry.



## PRIM continues to make progress on the keys to FUTURE Initiative:

1. Continue to Allocate Capital to Diverse Managers
2. Enhance Diversity, Equity & Inclusion (DEI) Reporting
3. Reduce Barriers
4. Improve Sourcing



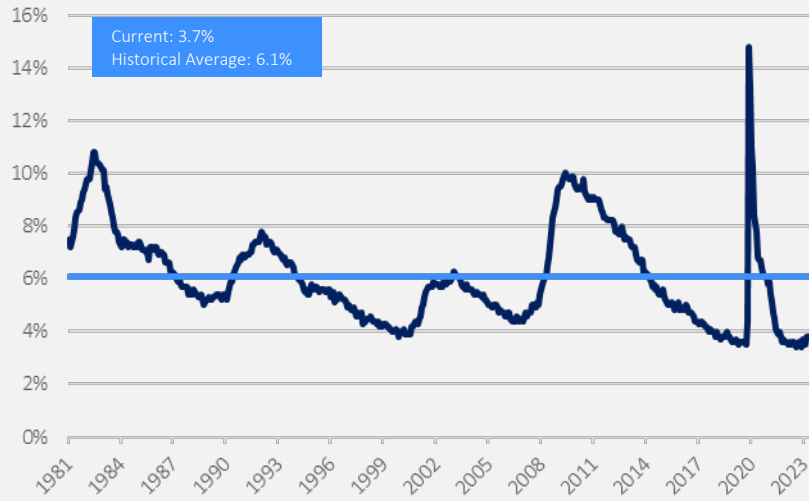
# ECONOMIC BACKDROP

Mass  
PRIM

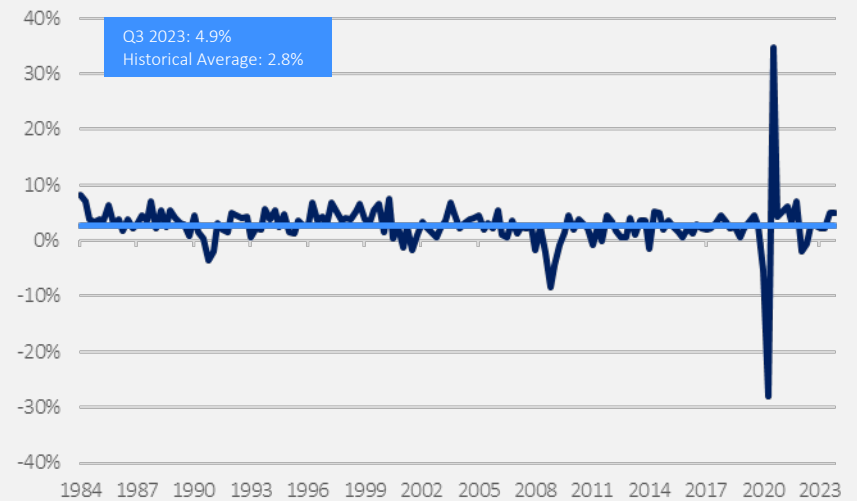
AS OF DECEMBER 31, 2023

# U.S. Economic Data

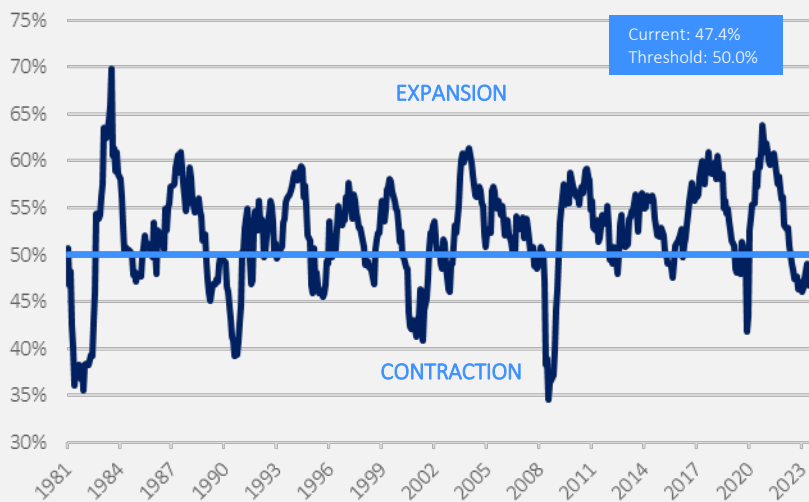
## UNEMPLOYMENT RATE



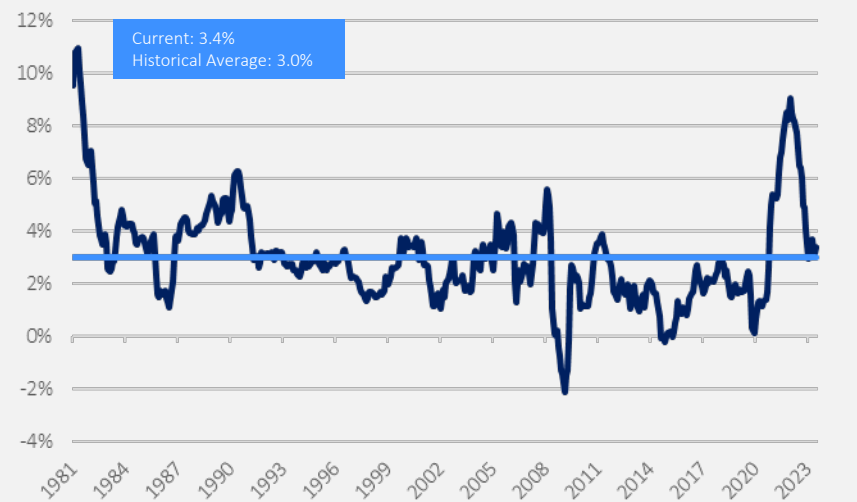
## GDP GROWTH RATE



## MANUFACTURING PMI



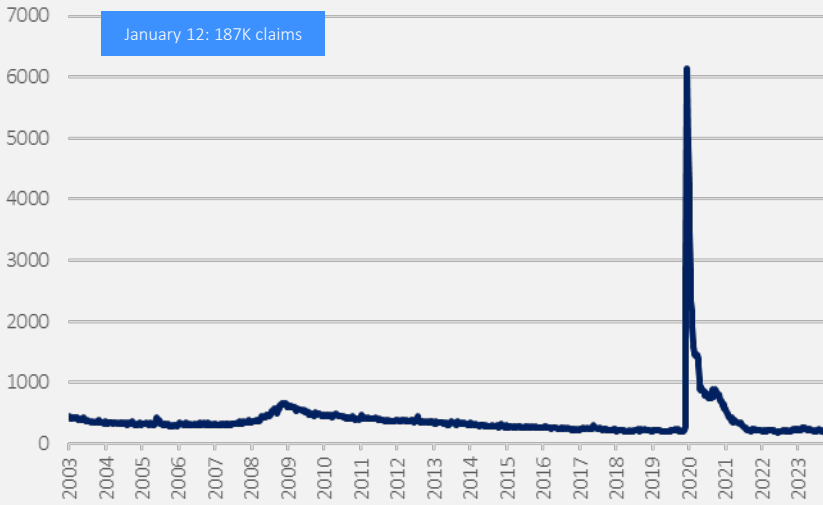
## CONSUMER PRICE INDEX



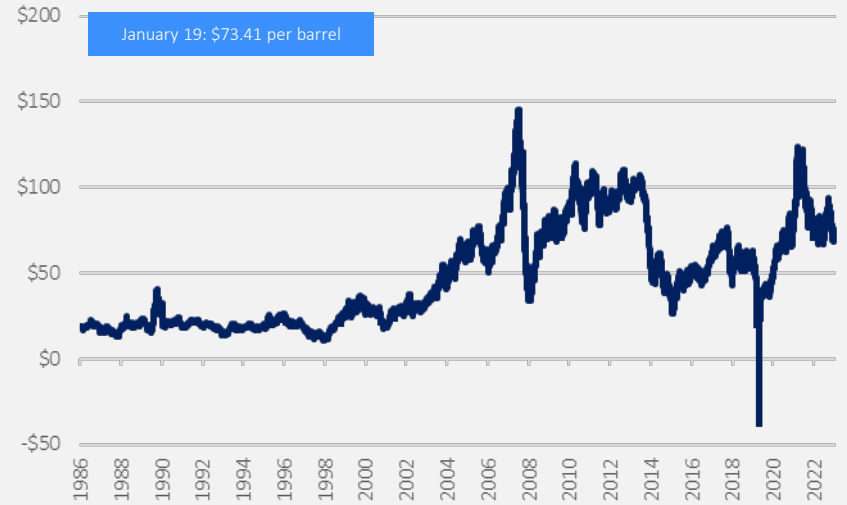


# U.S. Economic Data

## WEEKLY INITIAL JOBLESS CLAIMS (IN MILLIONS)



## WTI CRUDE OIL (\$/BBL)



## CBOE MARKET VOLATILITY INDEX (VIX)





# PRIT FUND ASSET ALLOCATION TARGETS

Mass  
PRIM

# Changes to Target Ranges – PRIT Fund Asset Allocation

Approved February 15, 2024

## Increase in Allocation Range

**Value-Added Fixed Income:**  
Target Band moves up 1%

## Same Allocation Range

**Core Fixed Income:**  
Target Band stays the same

**Private Equity:**  
Target Band stays the same

**Real Estate:**  
Target Band stays the same

**Timberland:**  
Target Band stays the same

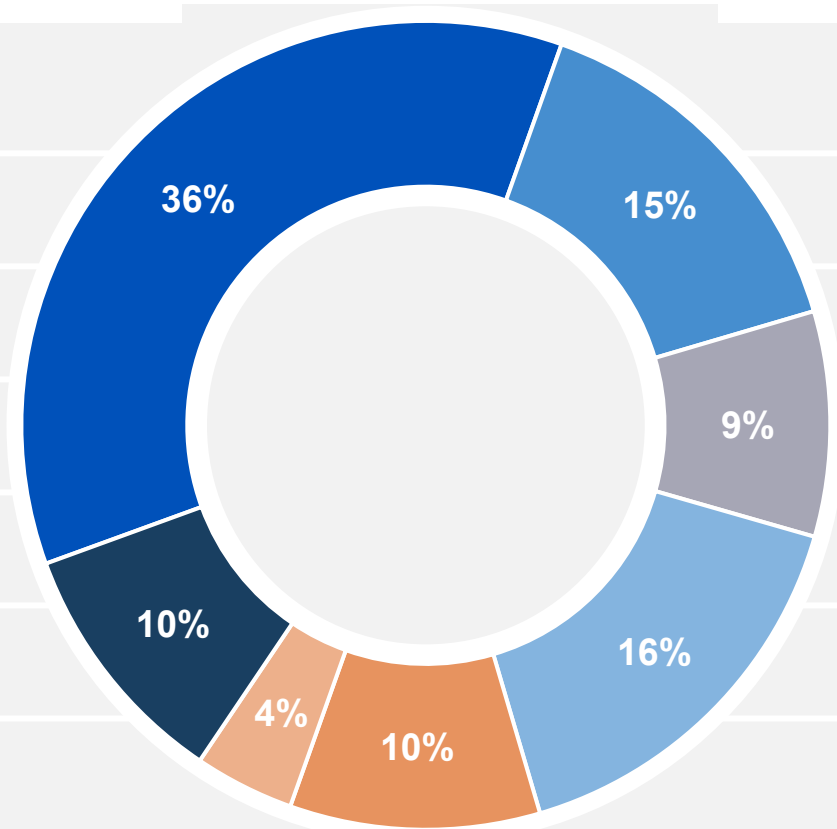
**Portfolio Completion Strategies:**  
Target Band stays the same

## Decrease in Allocation Range

**Global Equity:**  
Target Band moves down 1%

# PRIT Asset Allocation

Approved February 15, 2024



	AA 2023 Approved Range	AA 2024 Approved Range
<b>Global Equity</b>	32 – 42%	31% - 41%
<b>Core Fixed Income</b>	12% - 18%	No Change
<b>Value-Added Fixed Income</b>	5% - 11%	6% - 12%
<b>Private Equity</b>	13% - 19%	No Change
<b>Real Estate</b>	7% - 13%	No Change
<b>Timberland</b>	1% - 7%	No Change
<b>Portfolio Completion Strategies</b>	7% - 13%	No Change

The ranges in the PRIM asset allocation reflect the long-standing use of bands around a midpoint. Managing the asset allocation to a particular midpoint in the range is not always possible, practical or advisable.

# PRIM 2024 Asset Allocation Recommendations

NEPC Capital Market Assumptions with Value-Added Fixed Income and Global Equity Changes

		12/31/23 Asset Class Assumptions	
Asset Classes	Target Range	10 Yr. Expected Return	30 Yr. Expected Return
US Equity <sup>1</sup>		4.7%	6.9%
International Equities <sup>2</sup>		4.9%	6.6%
Emerging International Equities <sup>3</sup>		8.6%	9.2%
<b>Global Equity</b>	<b>31% - 41%</b>		
Core Bonds		4.6%	4.9%
Short-Term Fixed Income <sup>4</sup>		4.4%	4.2%
20+ Yr. Treasury STRIPS		3.3%	4.2%
TIPS/ILBs		4.3%	4.3%
<b>Core Fixed Income</b>	<b>12% - 18%</b>		
Value-Added Fixed Income <sup>5</sup>	<b>6% - 12%</b>	7.5%	7.8%
Private Equity	<b>13% - 19%</b>	9.1%	10.2%
Real Estate <sup>6</sup>	<b>7% - 13%</b>	5.8%	6.6%
Timberland <sup>7</sup>	<b>1% - 7%</b>	6.8%	7.1%
Portfolio Completion (PCS) <sup>8</sup>	<b>7% - 13%</b>	6.0%	6.4%
<b>Total Fund Expected Return<sup>9</sup></b>		<b>6.6%</b>	<b>7.7%</b>

1. Blended allocation to large-cap equity, small-cap equity, micro-cap equity
2. Blended allocation to large-cap equity and small-cap equity
3. Blended allocation to large-cap equity and small-cap equity
4. Modeled as Short-Term Treasury
5. Blended allocation to high yield, bank loans, EMD, private debt

6. Blended allocation to Private Real Estate and REITs
7. Timberland is modeled as Private Real Assets Infrastructure/Land
8. Modeled as equal weighted blend of Hedge Fund Equity, Credit, and Macro
9. Asset classes modeled at the midpoint of the asset allocation range



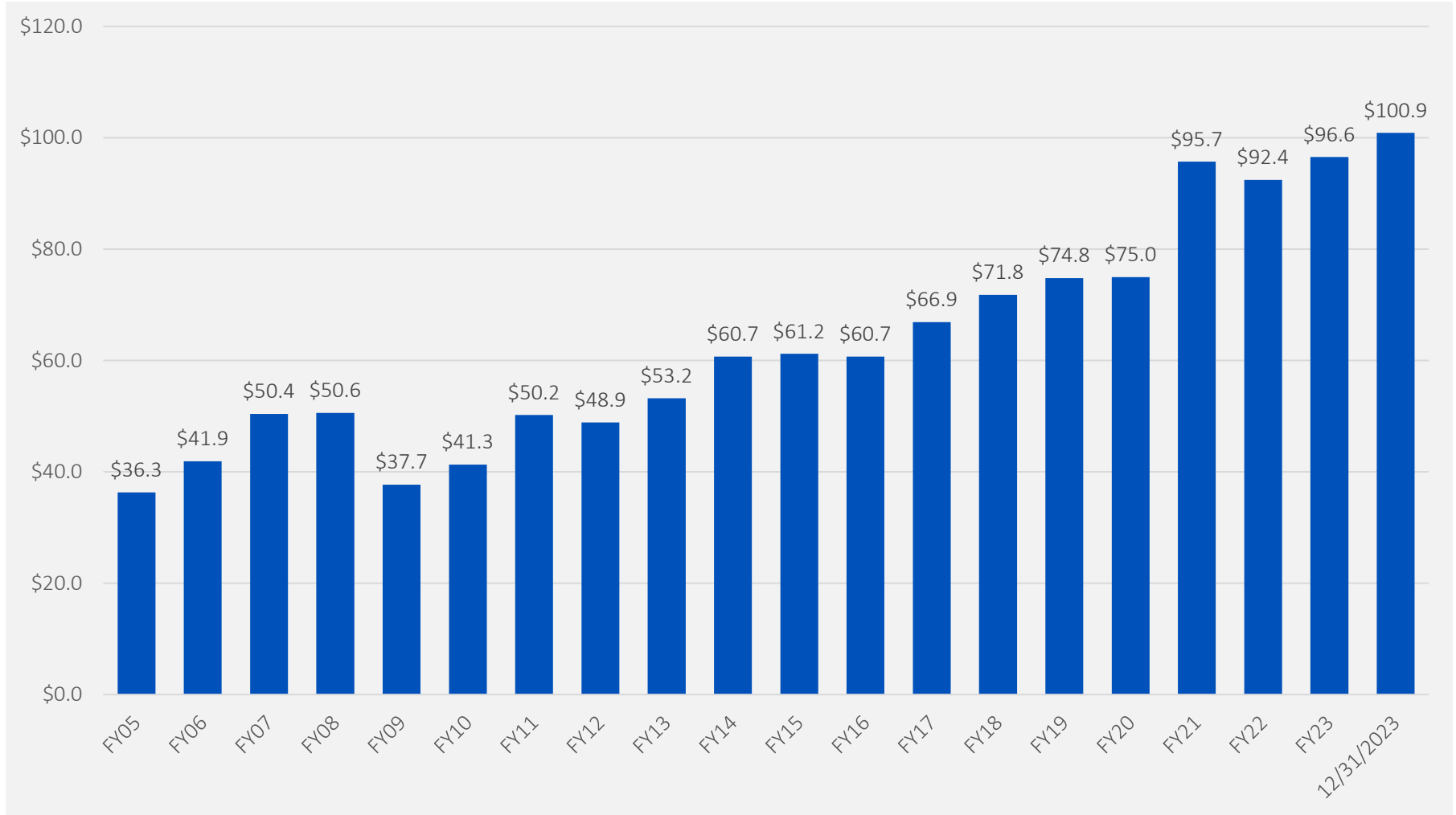
# PRIT FUND PERFORMANCE

Mass  
PRIM

AS OF DECEMBER 31, 2023

# Total PRIT Fund Market Value

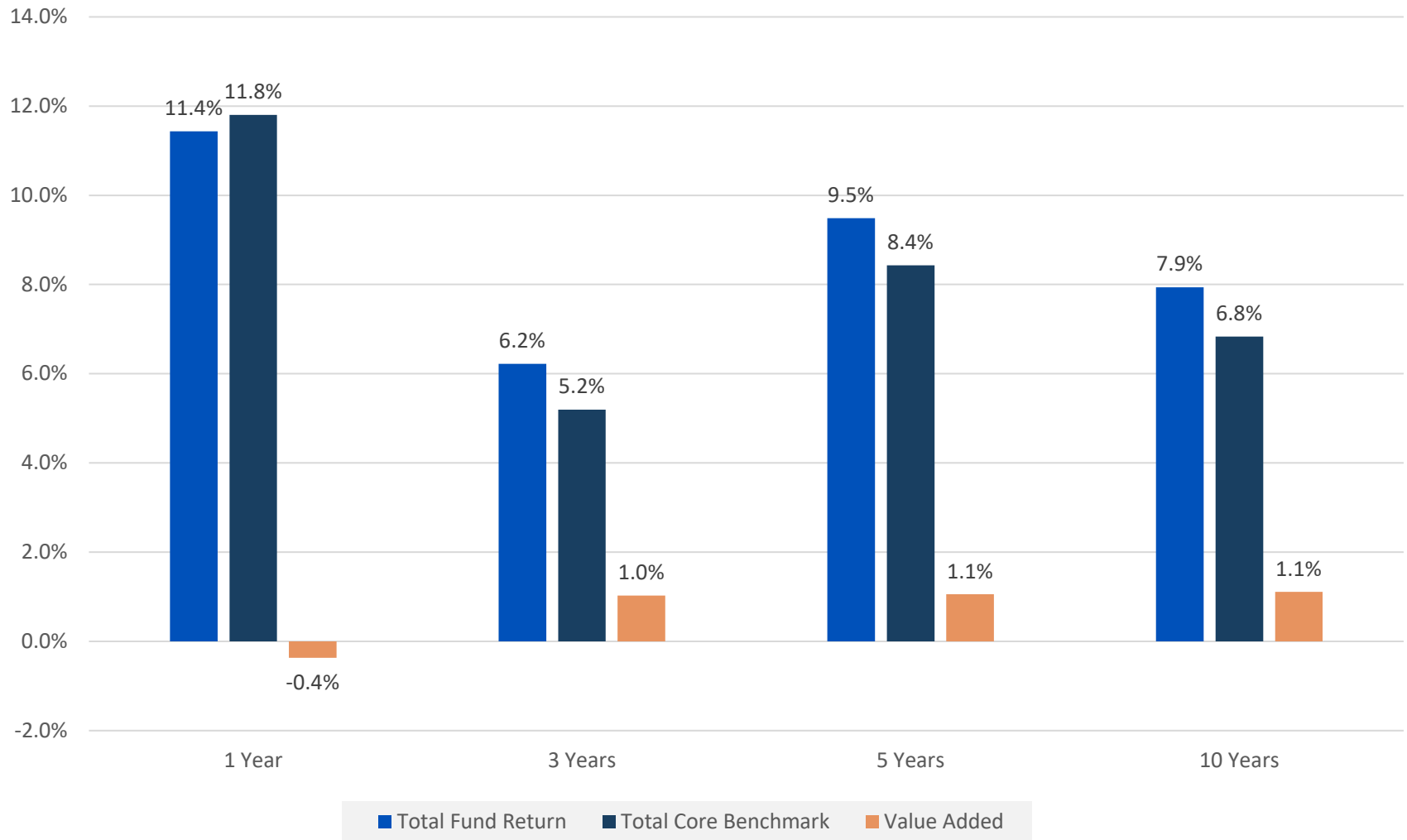
Value (\$Billions)



Source: BNY Mellon. As of December 31, 2023.

# PRIT Fund Total Returns

Annualized Returns as of December 31, 2023 (Gross of Fees)

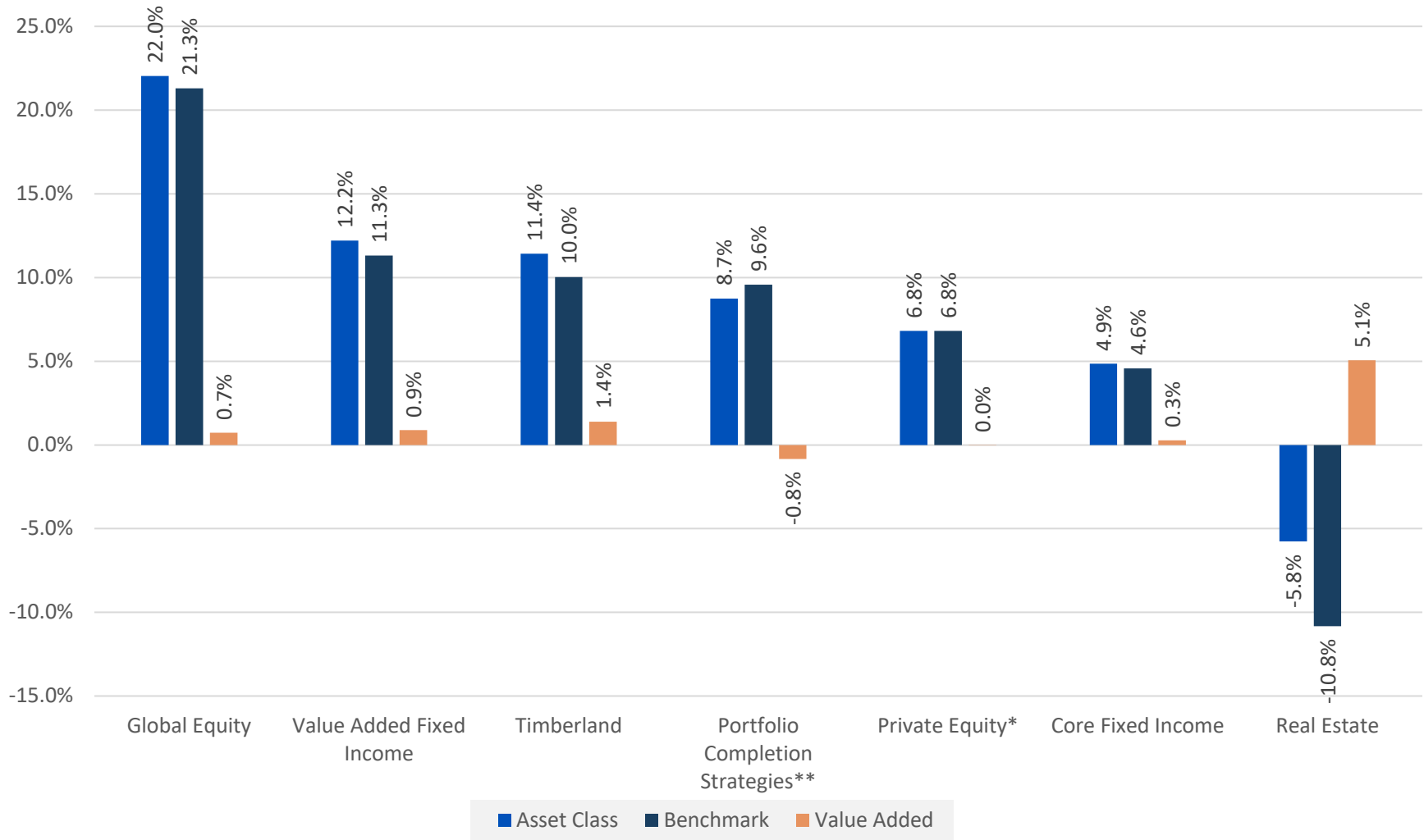


Source: BNY Mellon. Totals may not add due to rounding. Total Core Benchmark includes private equity benchmark.  
PRIT Fund Fiscal Year 10-year average ratio of expenses is 0.52%



# PRIT Asset Class Performance Summary

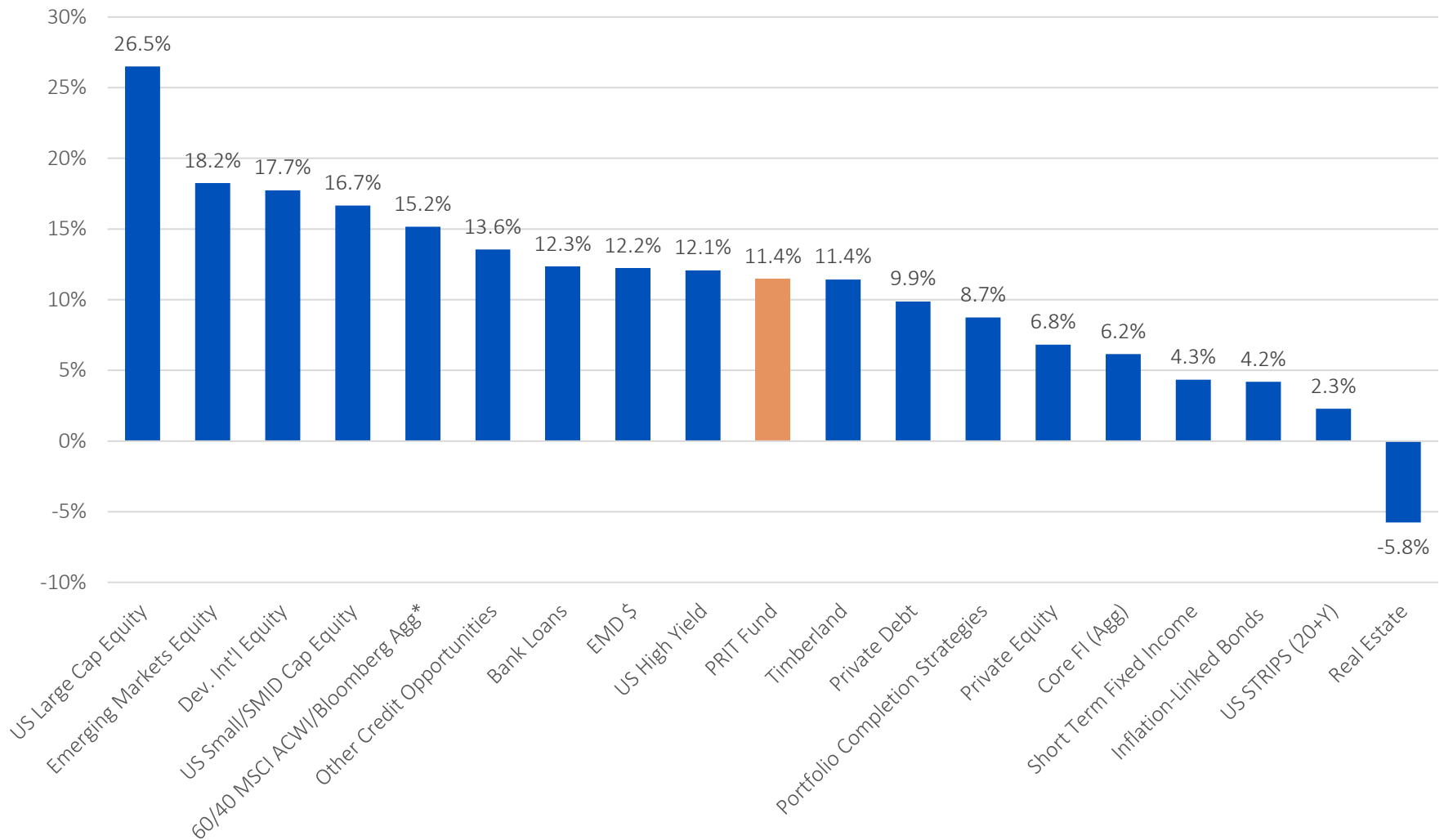
One-Year Ended December 31, 2023 (Gross of Fees)



Source: BNY Mellon. Totals may not add due to rounding. \*Benchmark is actual performance. \*\*Hedge Fund returns are net of fees.

# PRIT Performance By Strategy – One-Year

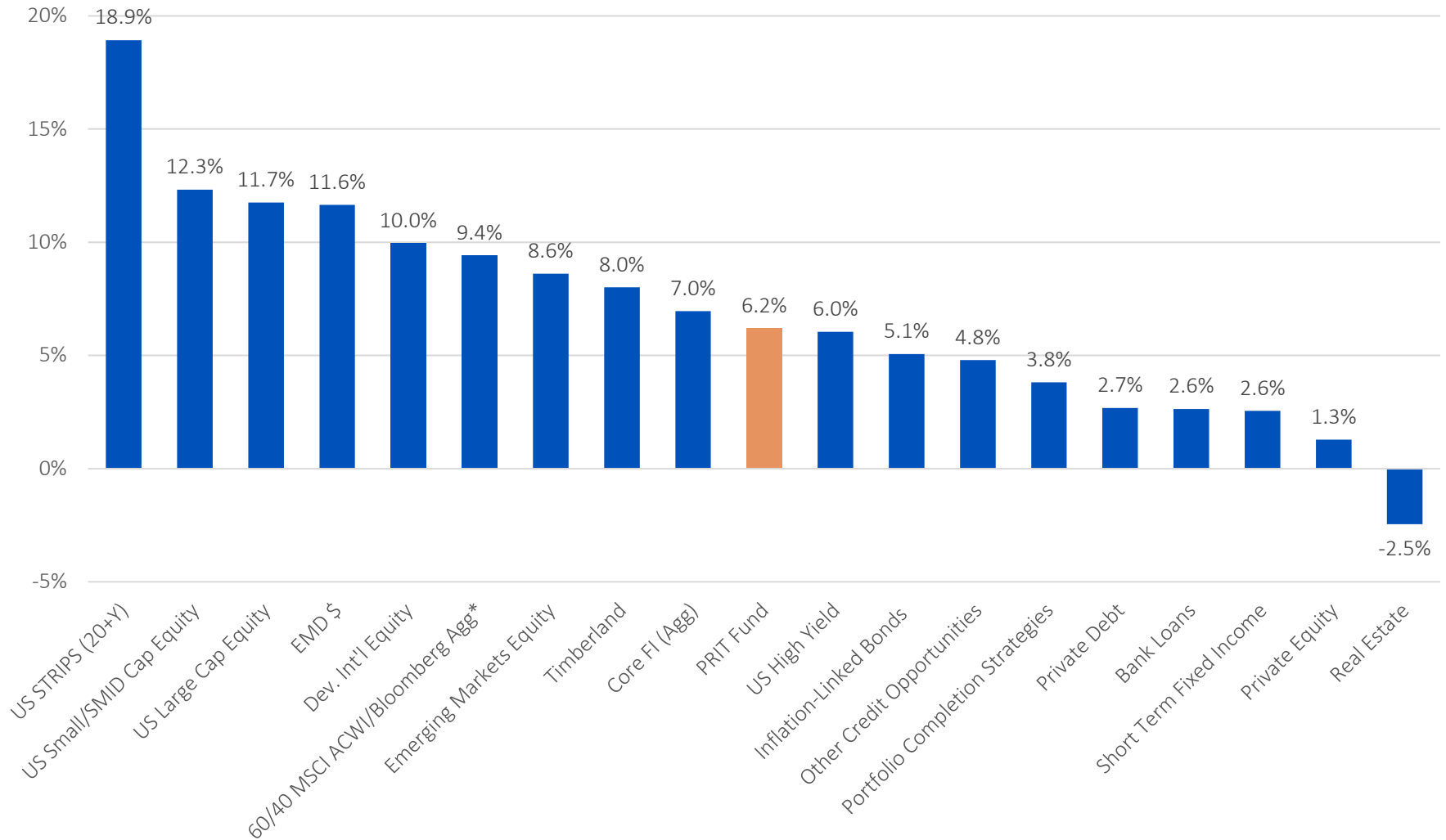
One-Year Ended December 31, 2023 (Gross of Fees)



Source: BNY Mellon, FactSet. All performance figures reflected are PRIT Fund Asset Class returns. \*MSCI ACWI/Bloomberg Aggregate is derived from a 60/40 combination of index returns.

# PRIT Performance By Strategy – Fourth Quarter 2023

Quarter Ended December 31, 2023 (Gross of Fees)



Source: BNY Mellon, FactSet. All performance figures reflected are PRIT Fund Asset Class returns. \*MSCI ACWI/Bloomberg Aggregate is derived from a 60/40 combination of index returns.

# PRIT Fund Annualized Returns By Asset Class

As of December 31, 2023 (Gross of Fees)

1 Year	3 Year	5 Year	10 Year
GLOBAL EQUITY 22.0%	PRIVATE EQUITY 19.2%	PRIVATE EQUITY 19.2%	PRIVATE EQUITY 19.5%
VALUE-ADDED FIXED INCOME 12.2%	TIMBER 10.4%	GLOBAL EQUITY 12.0%	REAL ESTATE 8.8%
TIMBER 11.4%	REAL ESTATE 9.1%	REAL ESTATE 7.9%	GLOBAL EQUITY 8.2%
PORTFOLIO COMPLETION STRATEGIES 8.7%	GLOBAL EQUITY 6.1%	TIMBER 7.0%	TIMBER 6.3%
PRIVATE EQUITY 6.8%	VALUE-ADDED FIXED INCOME 5.8%	VALUE-ADDED FIXED INCOME 6.3%	VALUE-ADDED FIXED INCOME 5.0%
CORE FIXED INCOME 4.9%	PORTFOLIO COMPLETION STRATEGIES 5.0%	PORTFOLIO COMPLETION STRATEGIES 4.7%	PORTFOLIO COMPLETION STRATEGIES 3.7%
REAL ESTATE (5.8%)	CORE FIXED INCOME (5.0%)	CORE FIXED INCOME 1.4%	CORE FIXED INCOME 2.8%

Source: BNY Mellon.

# Hampden County Regional Retirement System

Net of Fees Returns as of December 31, 2023

	MKT \$	%	Month	QTR	FY '24	Calendar					
						YTD	1 Year	3 Year	5 Year	10 Year	Inception
<b>HAMPDEN COUNTY REGIONAL RETIREMENT SYSTEM</b>	<b>522,765,182</b>	<b>100%</b>	<b>3.04</b>	<b>6.17</b>	<b>4.25</b>	<b>11.09</b>	<b>11.09</b>	<b>5.67</b>	<b>8.99</b>	<b>7.46</b>	<b>8.82</b>
CAPITAL FUND	522,765,182	100%	3.04	6.17	4.25	11.10	11.10	5.67	8.99	7.47	
<i>IMPLEMENTATION BENCHMARK (using short term private equity benchmark)</i>			<i>2.99</i>	<i>5.86</i>	<i>3.83</i>	<i>9.82</i>	<i>9.82</i>	<i>5.38</i>	<i>8.84</i>	<i>7.35</i>	
<i>TOTAL CORE BENCHMARK (using long term private equity benchmark)</i>			<i>3.20</i>	<i>6.60</i>	<i>4.83</i>	<i>11.80</i>	<i>11.80</i>	<i>5.20</i>	<i>8.43</i>	<i>6.83</i>	

**Inception date: November 1, 2004**

A nighttime photograph of the Boston waterfront, showing a cobblestone promenade in the foreground, a body of water with reflections, and a dense city skyline with illuminated buildings in the background under a dark blue sky.

# APPENDIX PRIT FUND ASSET CLASS DETAIL

The logo for Mass PRIM, featuring the word "Mass" in a serif font above the word "PRIM" in a bold, sans-serif font. To the left of the text are three vertical bars of increasing height, resembling a bar chart.

AS OF DECEMBER 31, 2023

A blue-tinted photograph of a city skyline, likely New York City, with several tall skyscrapers. In the foreground, a body of water is filled with numerous sailboats. The sky is blue with scattered white clouds.

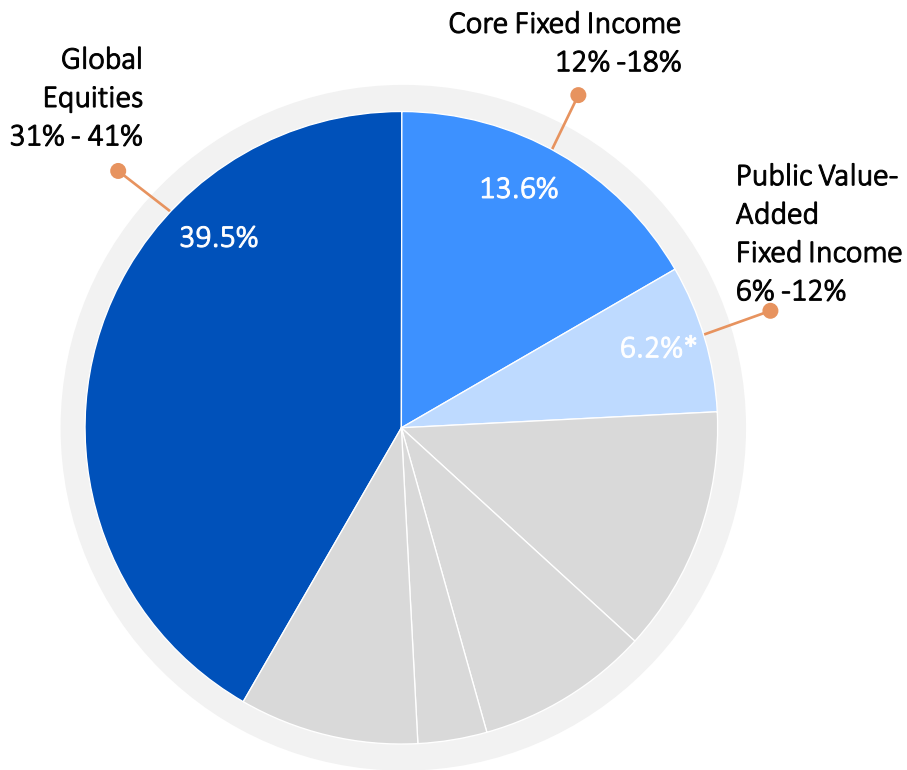
# PUBLIC MARKETS PORTFOLIOS

Mass  
PRIM

# Public Market Portfolios

## PRIT FUND TARGET ASSET ALLOCATION

Actual Allocation as of December 31, 2023



Source: BNY Mellon and PRIM Staff.  
\*Excludes Private Debt allocation.

\$59.7 billion 59.3% of PRIT Fund

- Global Equities: \$39.7 billion, 39.5% of PRIT Fund
- Public Fixed Income: \$19.9 billion, 19.8% of PRIT Fund\*

46% Active / 54% Passive

- Global Equities: 38% Active / 62% Passive
- Public Fixed Income: 62% Active / 38% Passive

63 Portfolios

- 32 equity portfolios
- 31 fixed income portfolios

Emerging-Diverse Managers

15 Asset Classes

- U.S. Large Cap Equity
- U.S. Small/SMID Cap Equity
- Developed International Equity
- Developed International Small Cap Equity
- Emerging Markets Equity
- Emerging Markets Small Cap Equity
- Core Bonds
- 20+ Year STRIPS
- Short Term Fixed Income
- U.S. TIPS
- Global Inflation-Linked Bonds
- High Yield Bonds
- Bank Loans
- EMD \$
- Other Credit Opportunities

4 Team Members



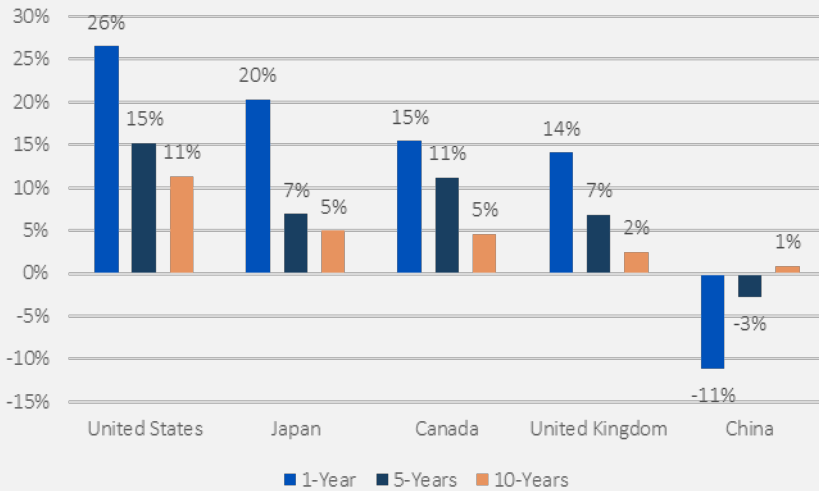
# Public Markets – Key Initiatives



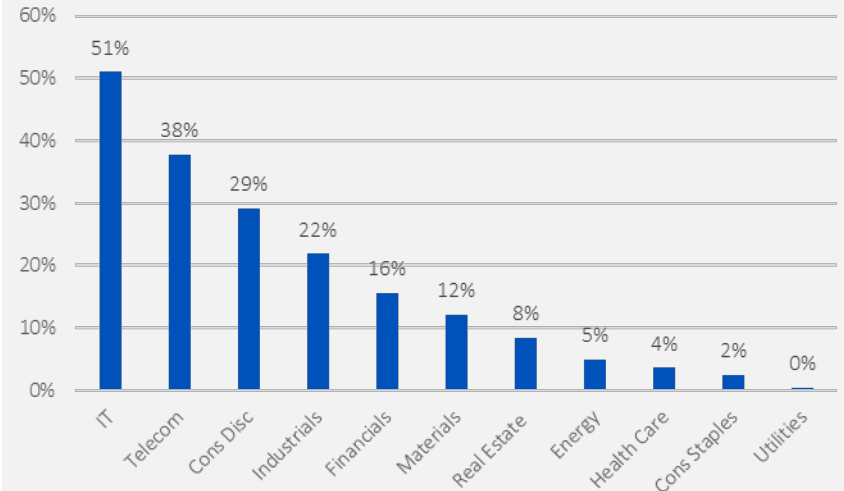
- Research and identify complimentary active U.S. equity managers.
- Research and identify complimentary growth managers in Developed International allocation.
- Continue to identify Other Credit Opportunities investments, including co-investment opportunities.
- Evaluate role of global and specialized (sector or county specific) equity managers within Global Equities structure.
- Collaborate with PRIM Risk Team on manager selection enhancements and analytic tools.
- Continue to source and allocate to diverse investment managers.
- Collaborate with the Director of Stewardship on PRIM's stewardship efforts.
- Explore applications of large language models (AI) in investment analysis/monitoring processes.

# Public Equity Review

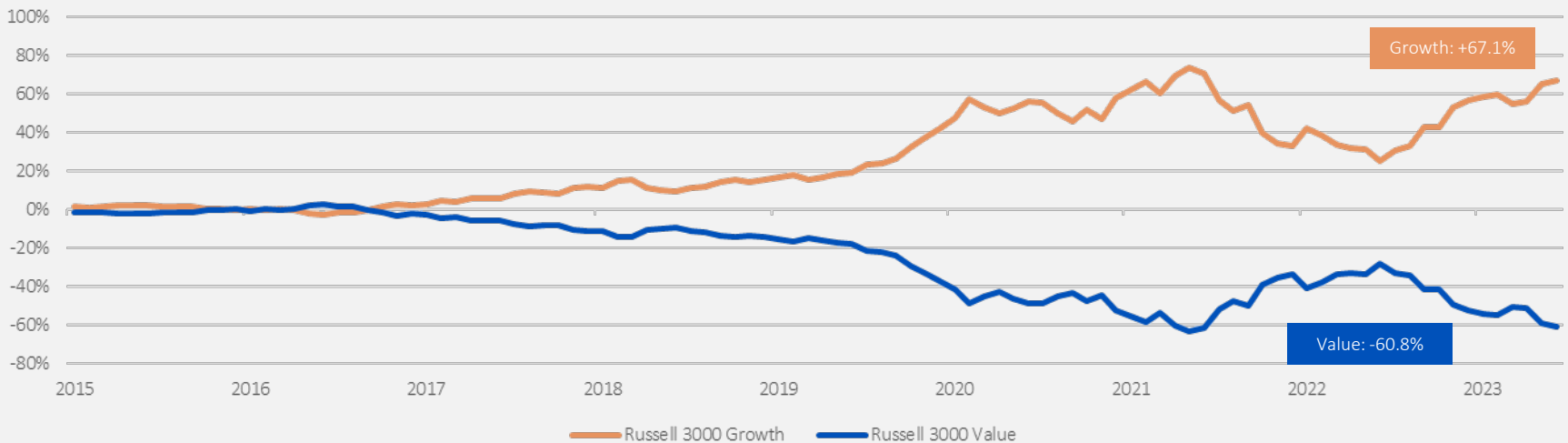
## MAJOR COUNTRY RETURNS (MSCI ACWI)



## GLOBAL ONE-YEAR RETURN BY SECTOR (MSCI ACWI)

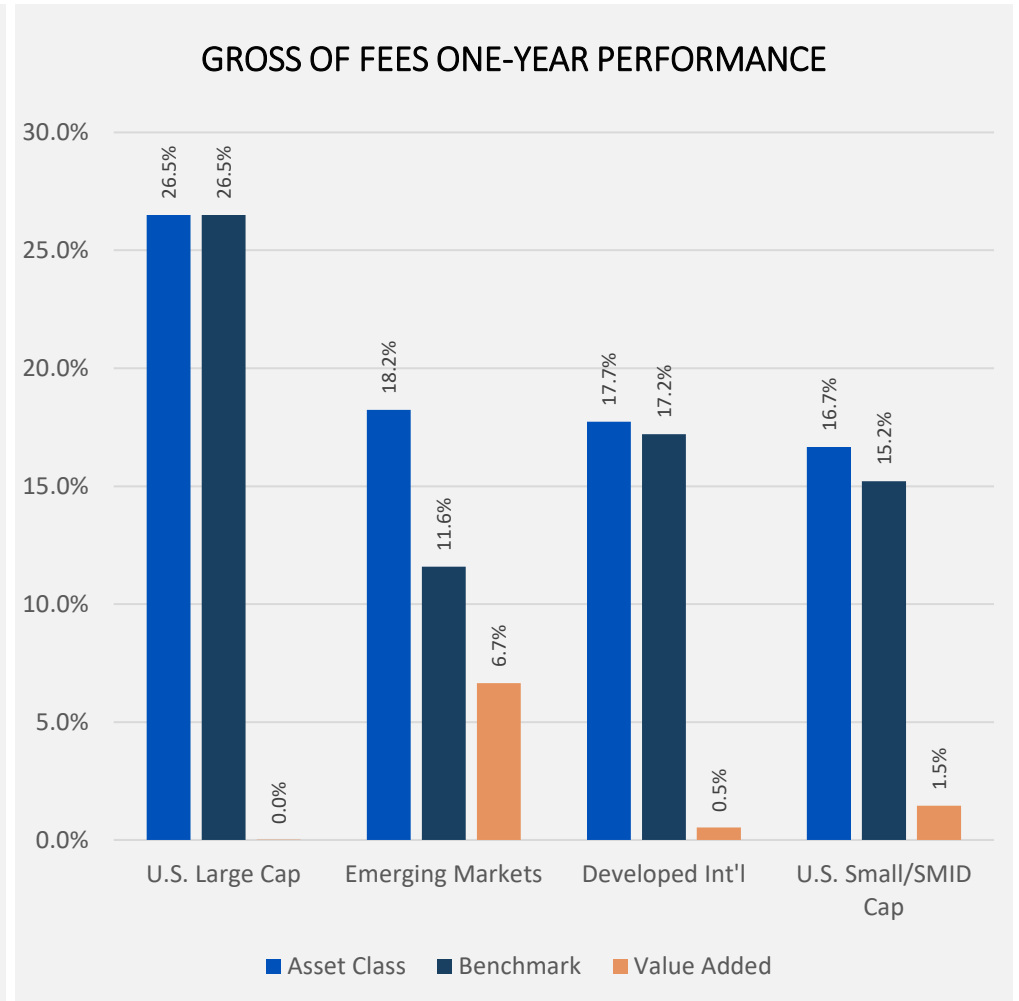
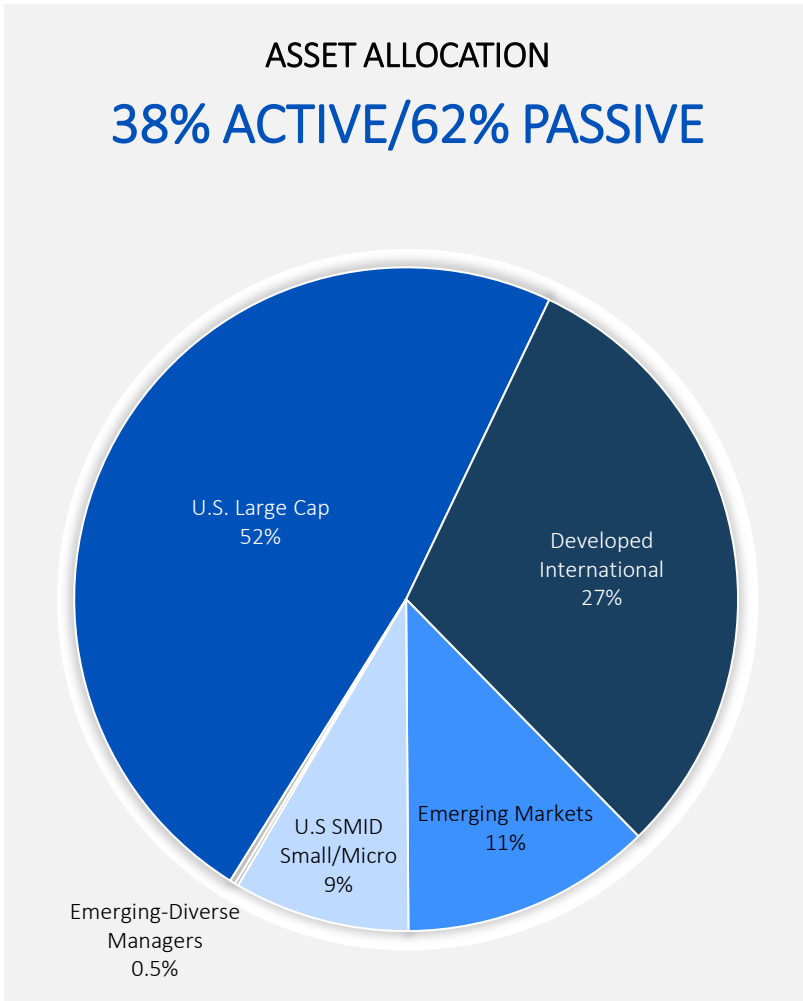


## VALUE VS. GROWTH: RELATIVE RETURNS VS. RUSSELL 3000 (CUMULATIVE)



# Global Equity

As of December 31, 2023, \$39.7 Billion – 39.5% of PRIT FUND (Current Target 31%-41%)

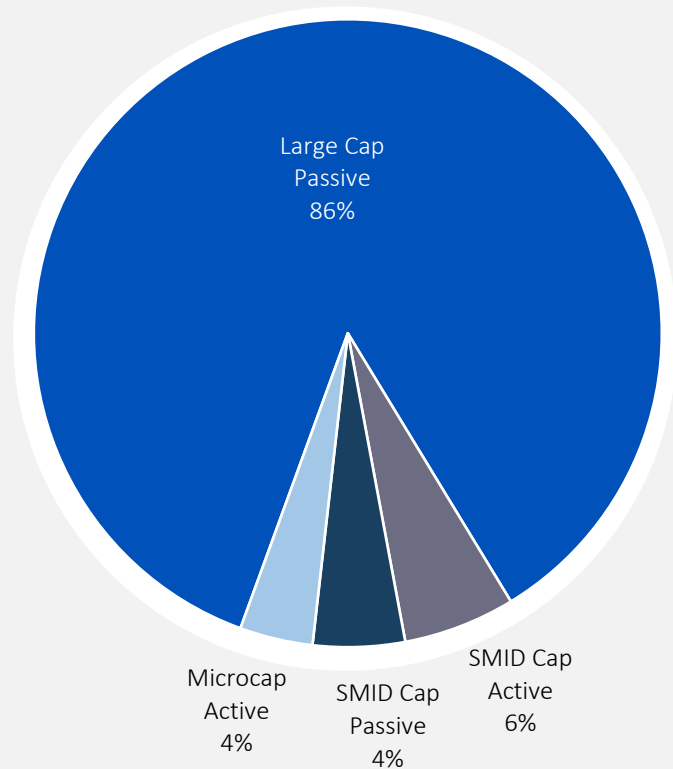


Source: BNY Mellon, PRIM Staff. As of December 31, 2023.

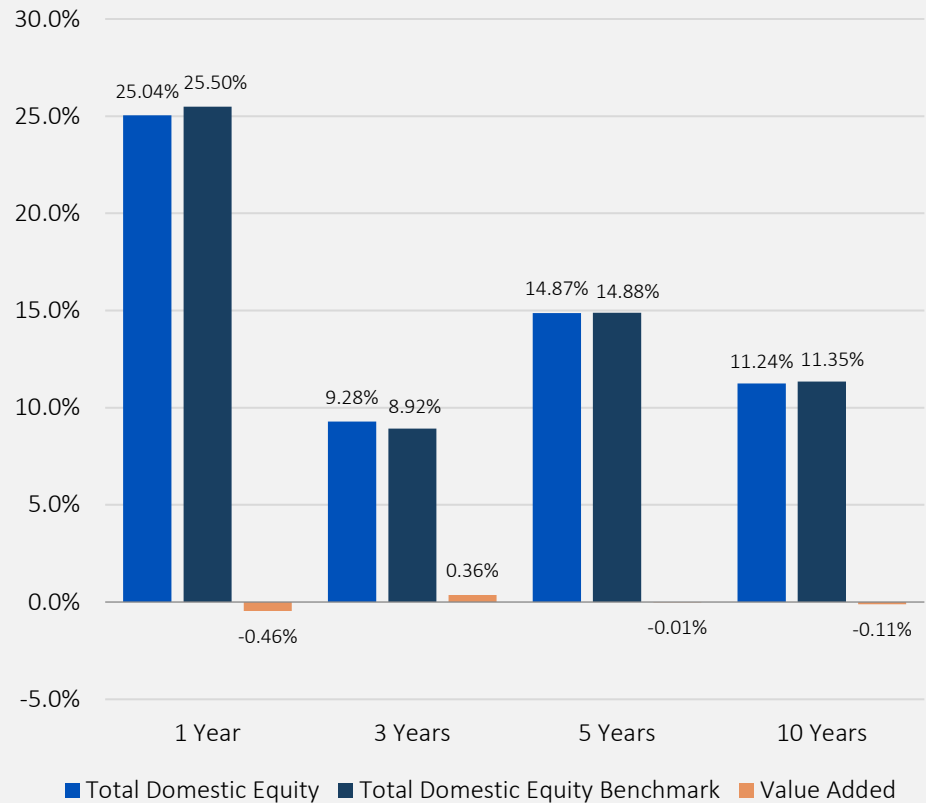
# Domestic Equity

As of December 31, 2023, \$24.2 Billion – 24.1% of PRIT Fund

## ASSET ALLOCATION 10% ACTIVE/90% PASSIVE



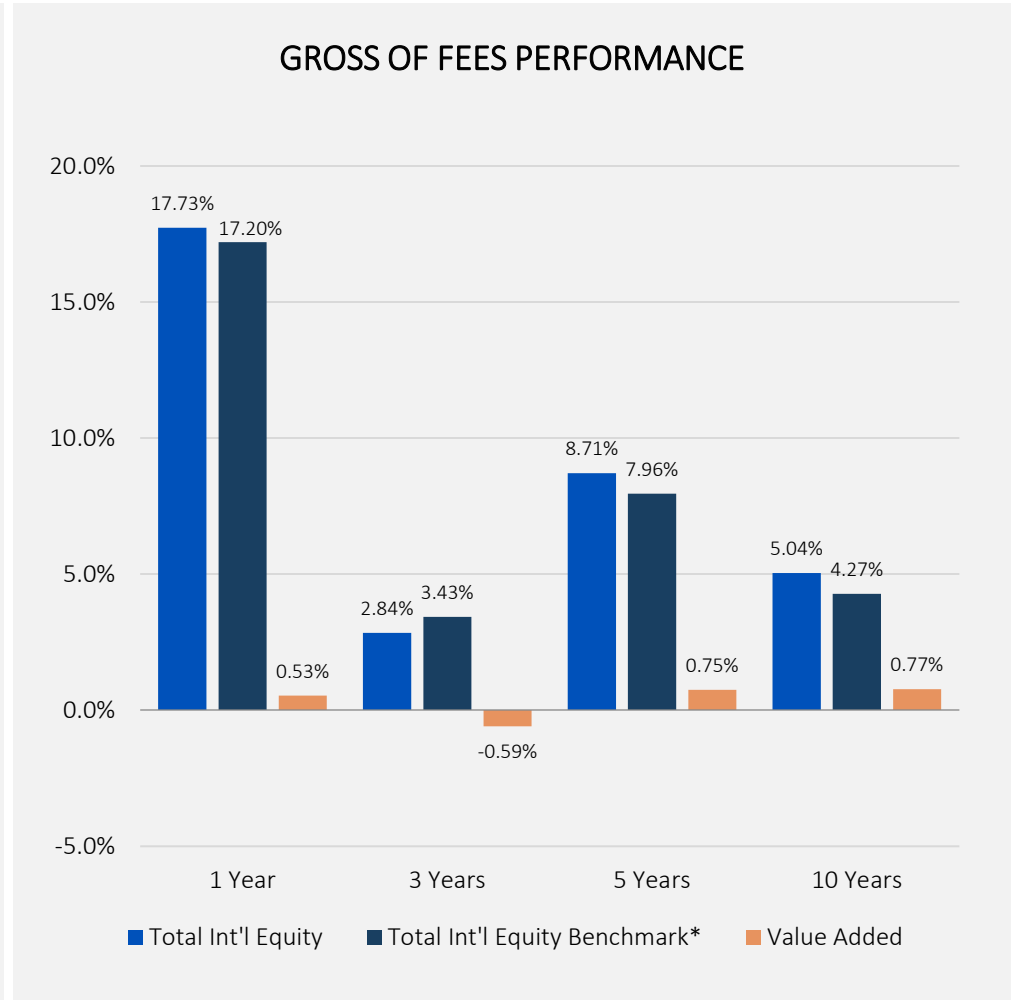
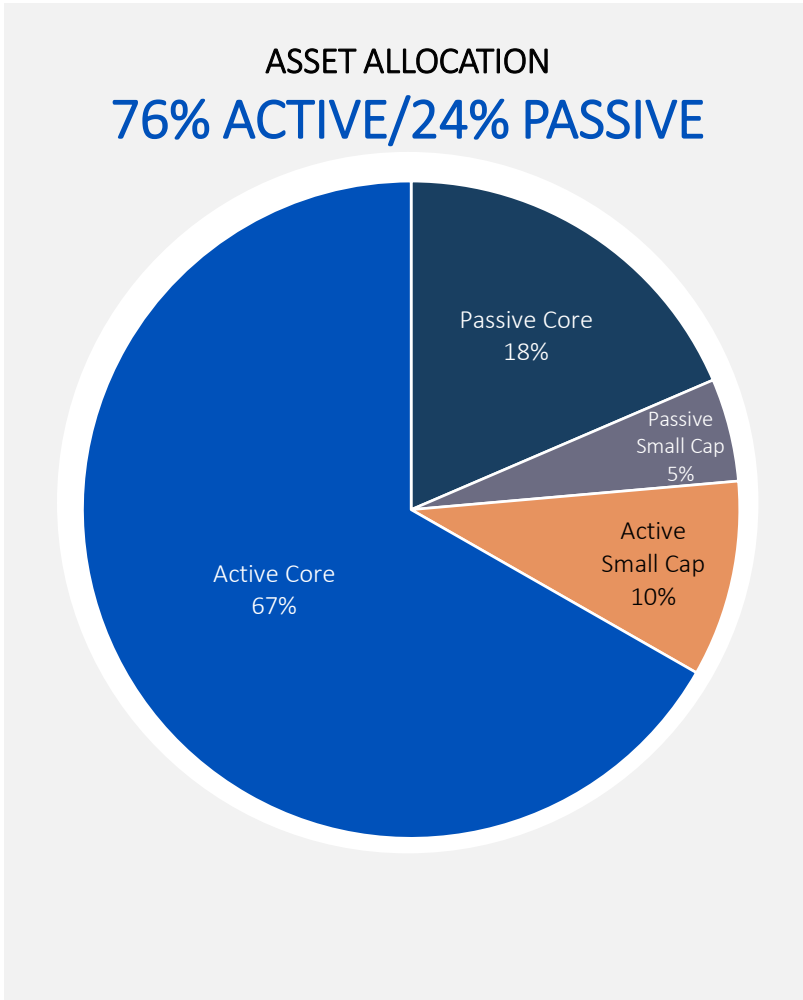
## GROSS OF FEES PERFORMANCE



\*Total Domestic Equity Benchmark: Currently 100% MSCI USA IMI Custom Exclusion Index (Gross), customized to exclude legislatively prohibited tobacco, Sudan, Iran and Russian securities.

# International Equity

As of December 31, 2023, \$10.9 Billion – 10.8% of PRIT Fund

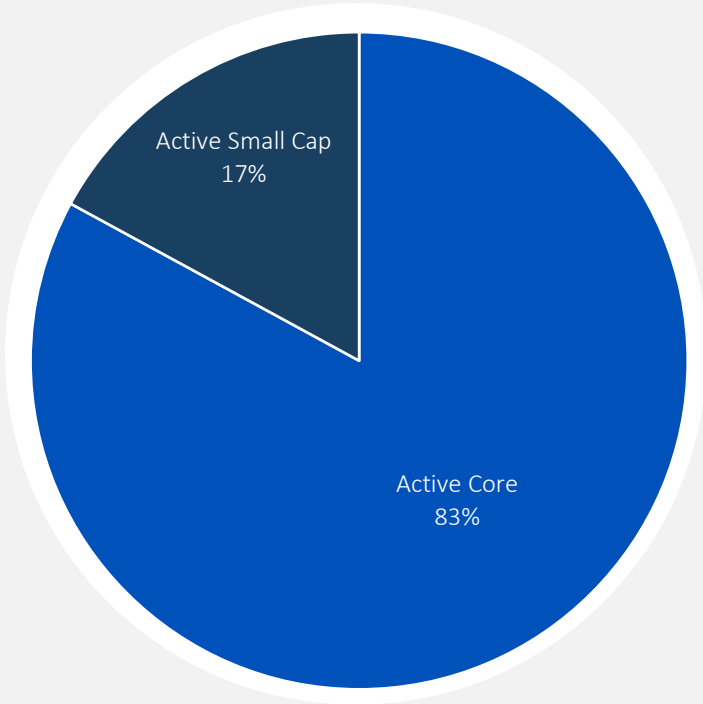


\*Total International Equity Benchmark: Custom MSCI World Ex-US IMI Net Divs, customized to exclude legislatively prohibited tobacco, Sudan Iran and Russian securities (blend is maintained by MSCI).

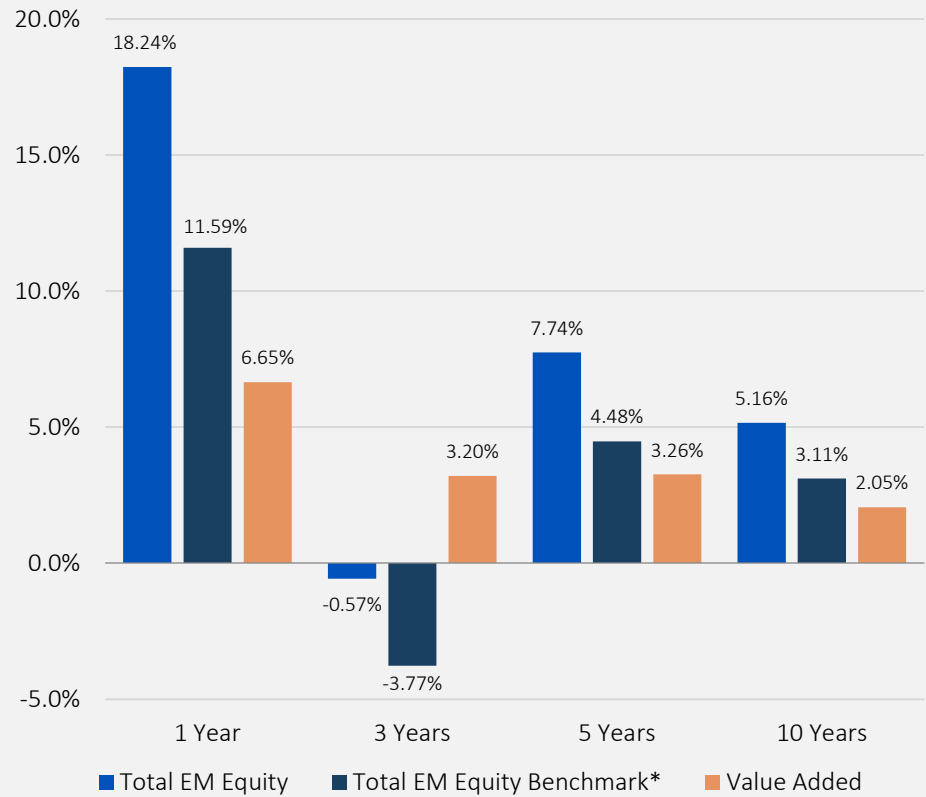
# Emerging Markets Equity

As of December 31, 2023, \$4.5 Billion – 4.4% of PRIT Fund

## ASSET ALLOCATION 100% ACTIVE



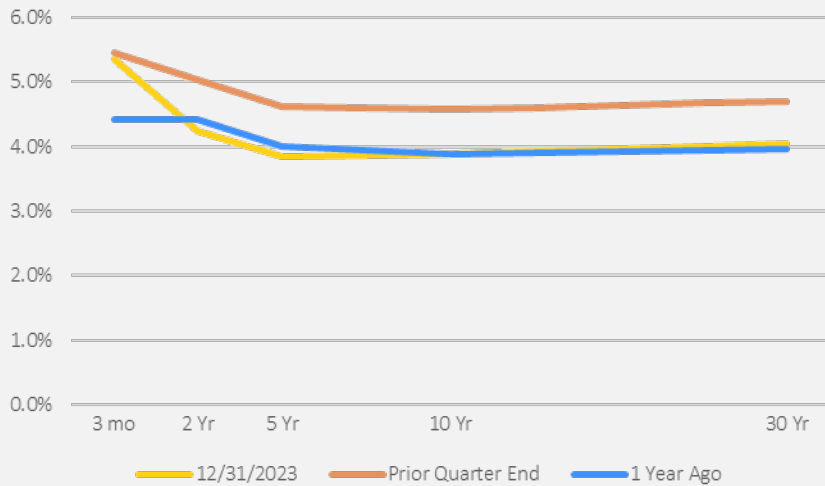
## GROSS OF FEES PERFORMANCE



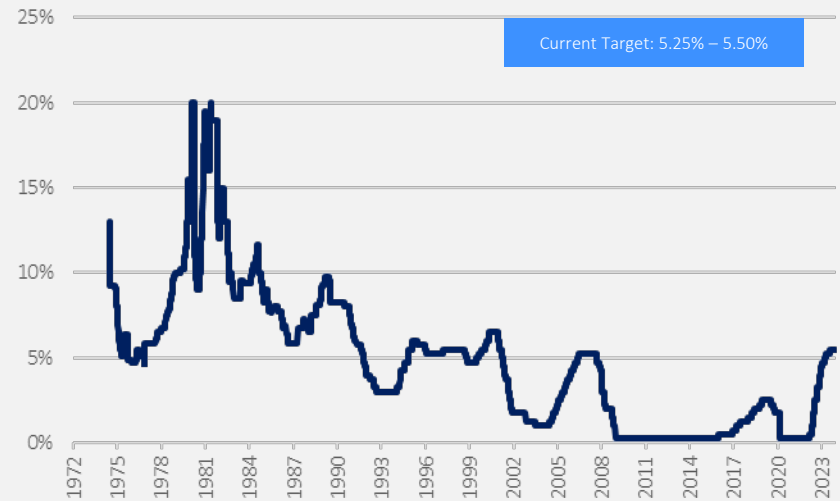
\*Total Emerging Markets Equity Benchmark: currently Custom MSCI Emerging Markets IMI Net Div, customized to exclude legislatively prohibited tobacco, Sudan, Iran and Russian securities (blend is maintained by MSCI).

# Public Fixed Income Review

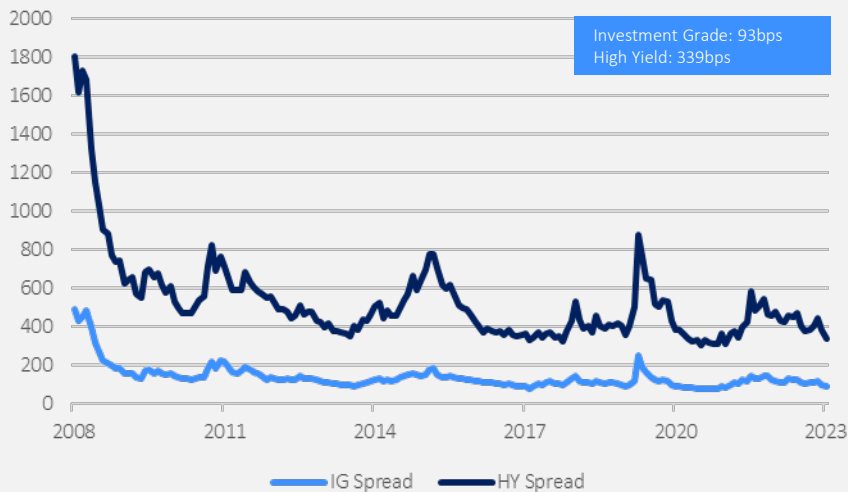
## U.S. TREASURY YIELD CURVE



## TARGET FED FUNDS RATE



## U.S. CREDIT SPREADS

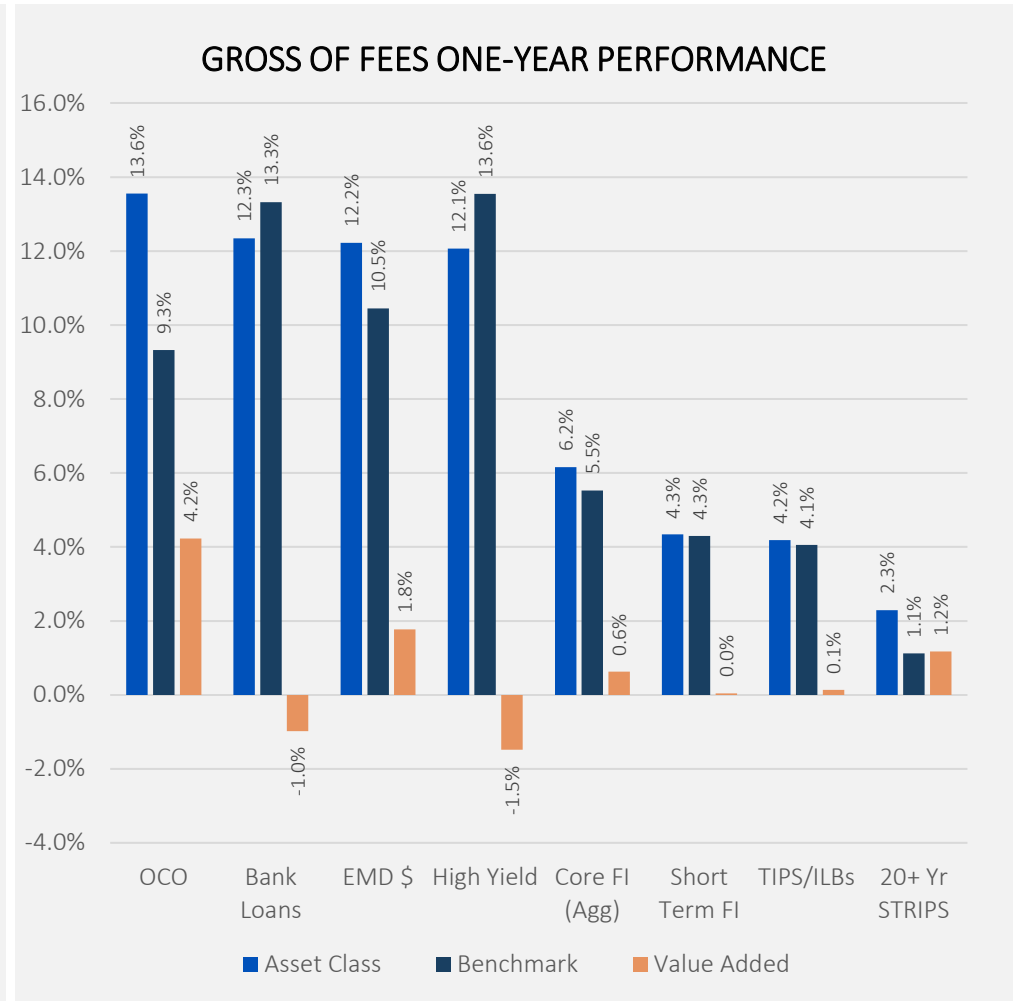
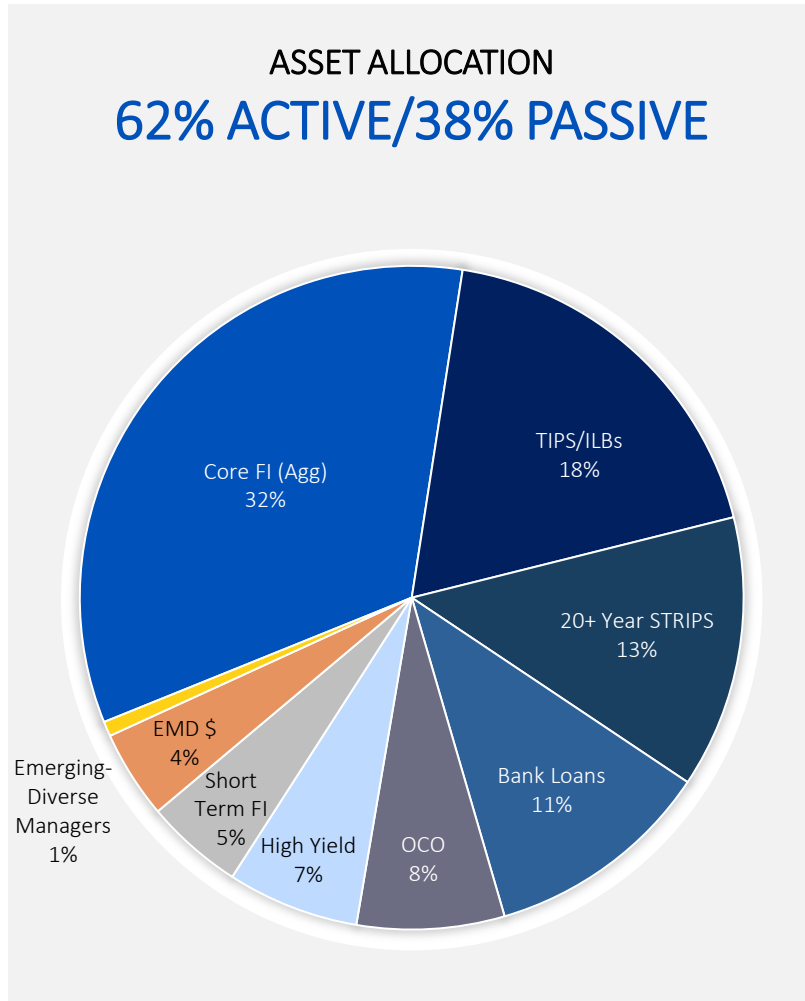


## EMERGING MARKETS DEBT SPREAD



# Core & Value-Added Fixed Income

As of December 31, 2023, \$19.9 Billion – 19.8% of PRIT Fund\* (Target 18%-30%)

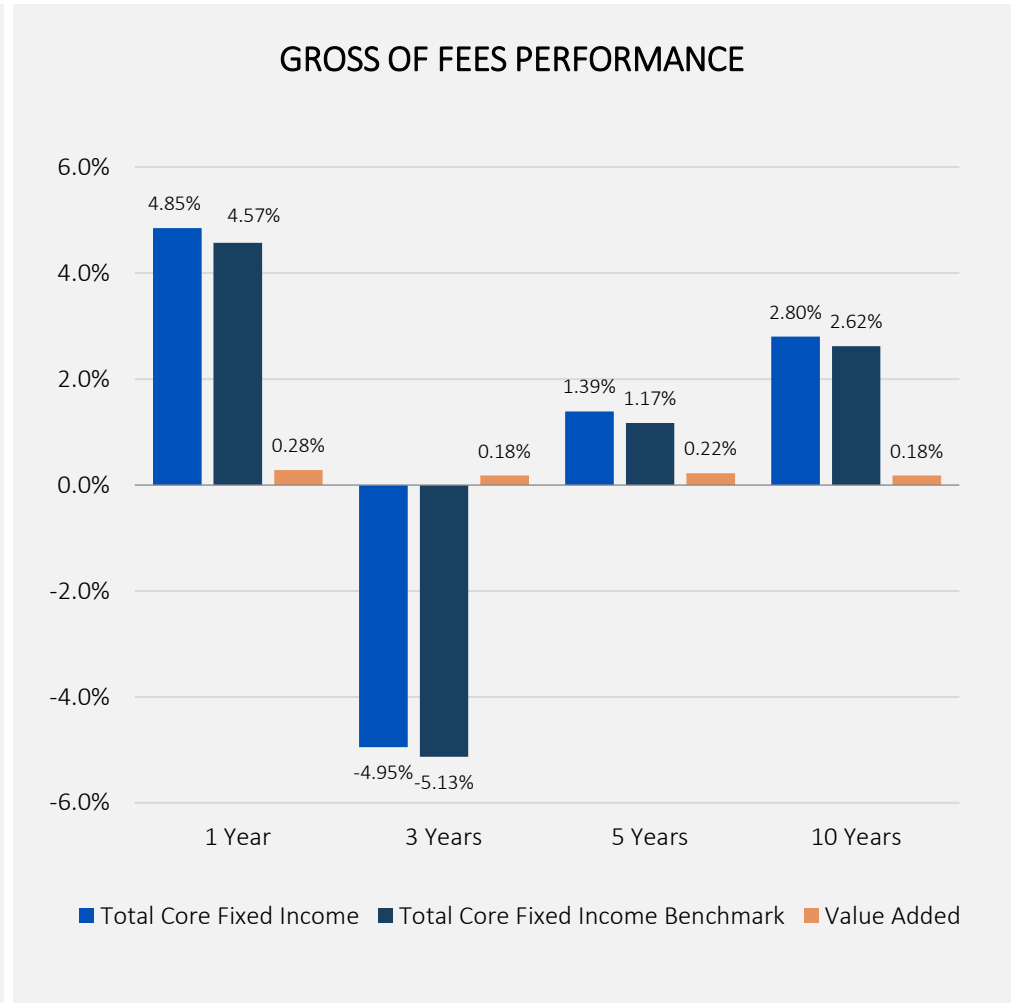
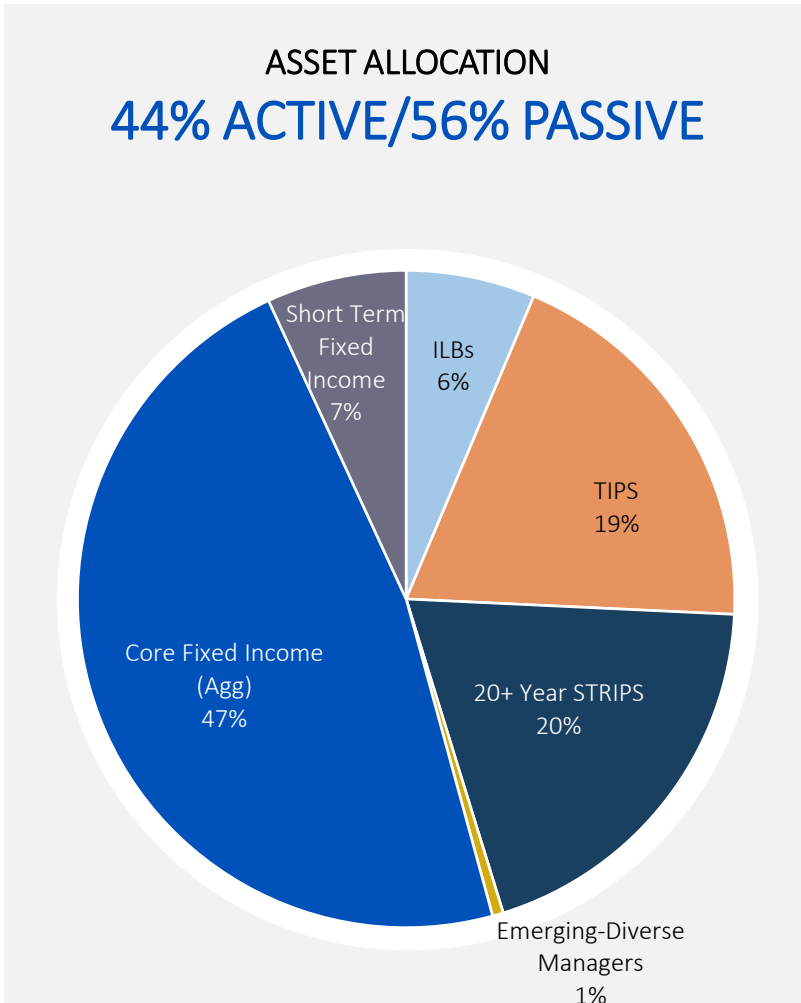


Source: BNY Mellon, PRIM Staff. As of December 31, 2023. \*Excludes Private Debt allocation.



# Core Fixed Income

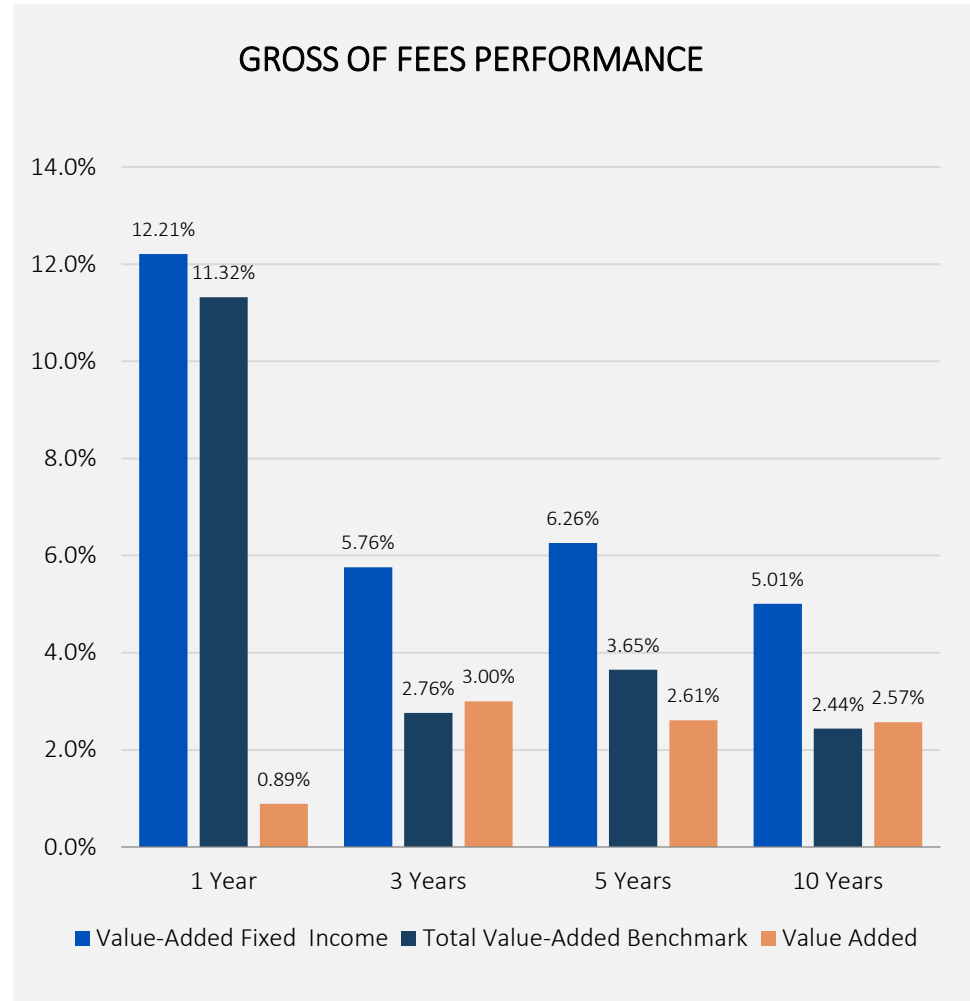
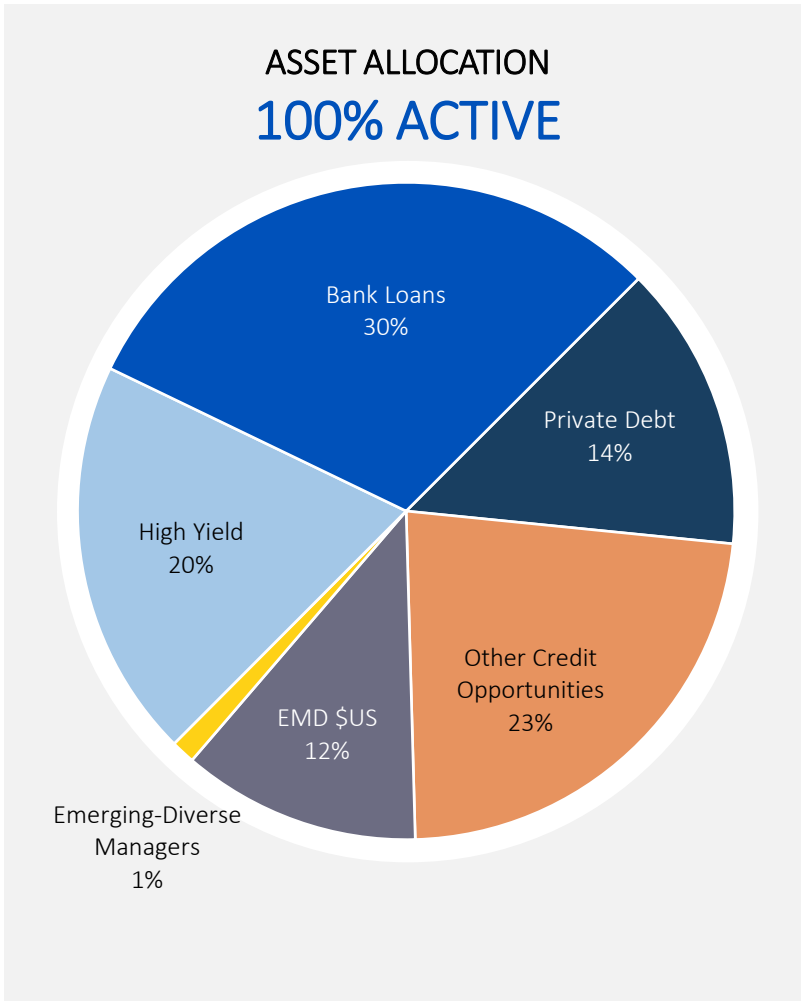
As of December 31, 2023, \$13.7 Billion – 13.6% of PRIT Fund (Target 12%-18%)



\*Core Fixed Income Benchmark: Currently 46.6666% Bloomberg U.S. Aggregate Bond/20% Bloomberg Global IL U.S. Tips/6.6667% Bloomberg World Gov Inflation-Linked USD Hdg/20% Bloomberg US STRIPS 20+ Years/6.6667% Bloomberg U.S. Treasury: 1-3 Year. Formerly labeled 46.6666% BC Aggregate/20% BC US TIPS/6.6667% BC ILB US\$ Hedged/20% BC STRIPS 20+/6.6667% Bloomberg Barclays US Treasury 1-3 Year Index.

# Value-Added Fixed Income

As of December 31, 2023, \$7.3 Billion – 7.3% of PRIT Fund (Current Target 6%-12%)



\*Currently the Value-Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the value-added fixed income portfolio, Private Debt component is using the 3-year annualized return of the Altman NYU Salomon Center Combined Defaulted Public Bond & Bank Loan Index through 12/31/2021; currently Burgiss Distressed Debt Universe Lagged, if the Burgiss return is not available, the actual portfolio net return will be used as a placeholder until the Burgiss Private Debt BM is published. These weightings will be automatically adjusted on a monthly basis.

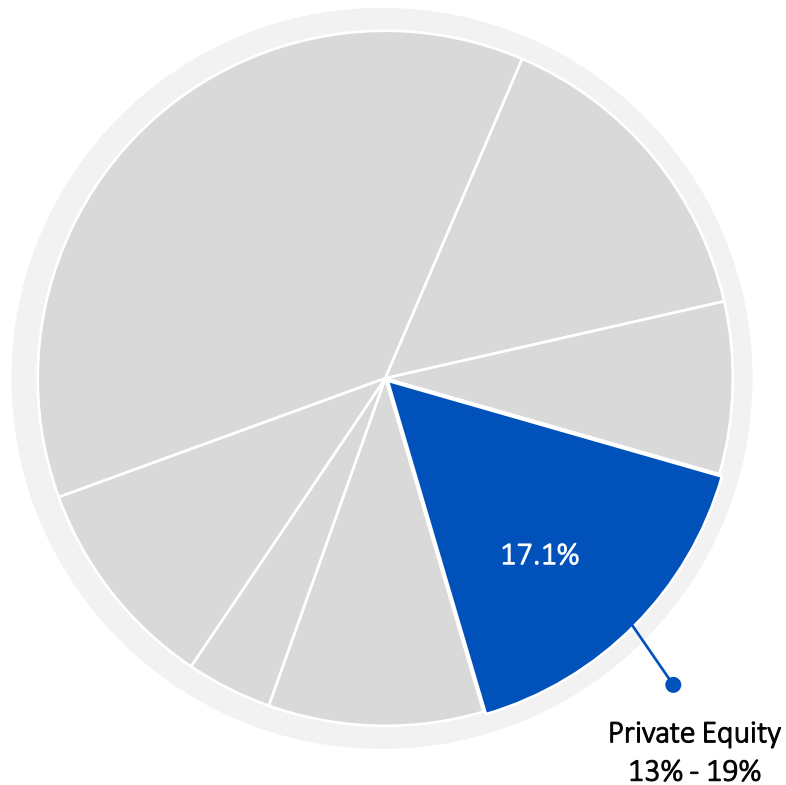
# PRIVATE EQUITY PORTFOLIO



# Private Equity Portfolio

## PRIT FUND TARGET ASSET ALLOCATION

Actual Allocation as of December 31, 2023



\$17.2 billion, 17.1% of PRIT Fund

104 GP Relationships

393 Active Partnerships

- 76 Co-Investment Partnerships

Emerging-Diverse Managers

~ 30 investment decisions/year

5 core investment strategies:

- Large buyouts
- Small and mid cap buyouts
- Growth equity
- Venture capital
- Co-investments

7 team members

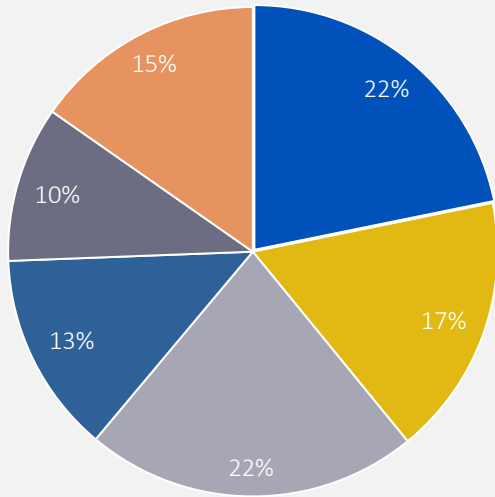


## Private Equity Key Initiatives

- **Execute successful Private Equity Investment strategy.**
  - Commitment goal of \$2.2 billion to \$3.0 billion to funds, co-investments, and secondary opportunities.
  - Continue to source and evaluate attractive new investment opportunities.
  - Continue to scale and improve co-investment program.
  - Further refine frameworks for market mapping and pro-active sourcing.
  - Continue to strengthen private equity portfolio monitoring.
- **Private Equity Research:**
  - Explore new analytic tools to enhance decision making, including AI.
  - Explore applications of large language models (AI) in investment analysis/monitoring processes.
  - Continue to evaluate secondary market opportunity
- **Build the team's expertise and capacity.**
  - Recruit talented team members with complementary skills to existing members.
  - Increase collaboration with other PRIM teams.
  - Collaborate with the Director of Stewardship on PRIM's stewardship efforts.
  - Continue to source and allocate to diverse investment managers.

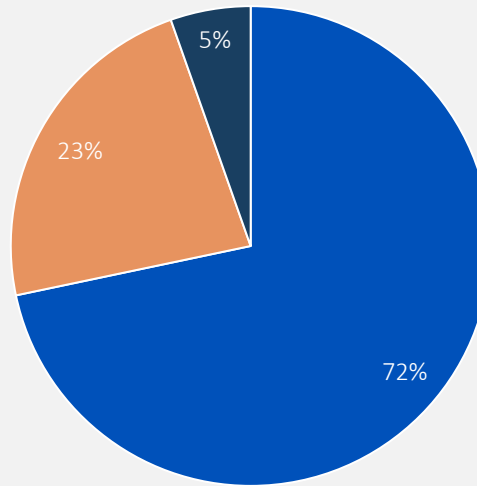
# Private Equity Diversification

## By Strategy



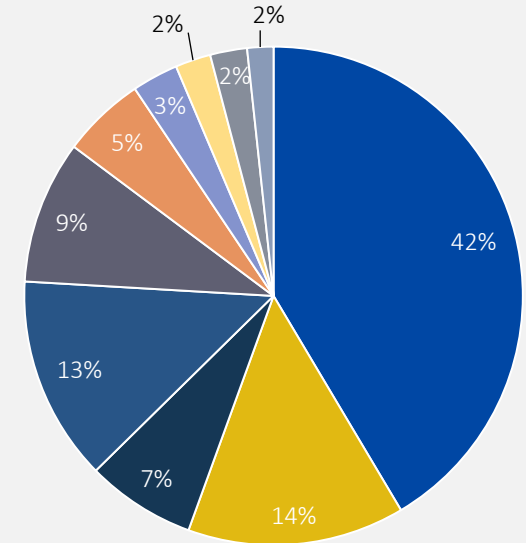
- Buyout - Mid
- Buyout - Large
- Buyout - Mega
- Buyout - Small
- Venture Capital
- Growth Equity

## By Geography



- North America
- Western Europe
- Other

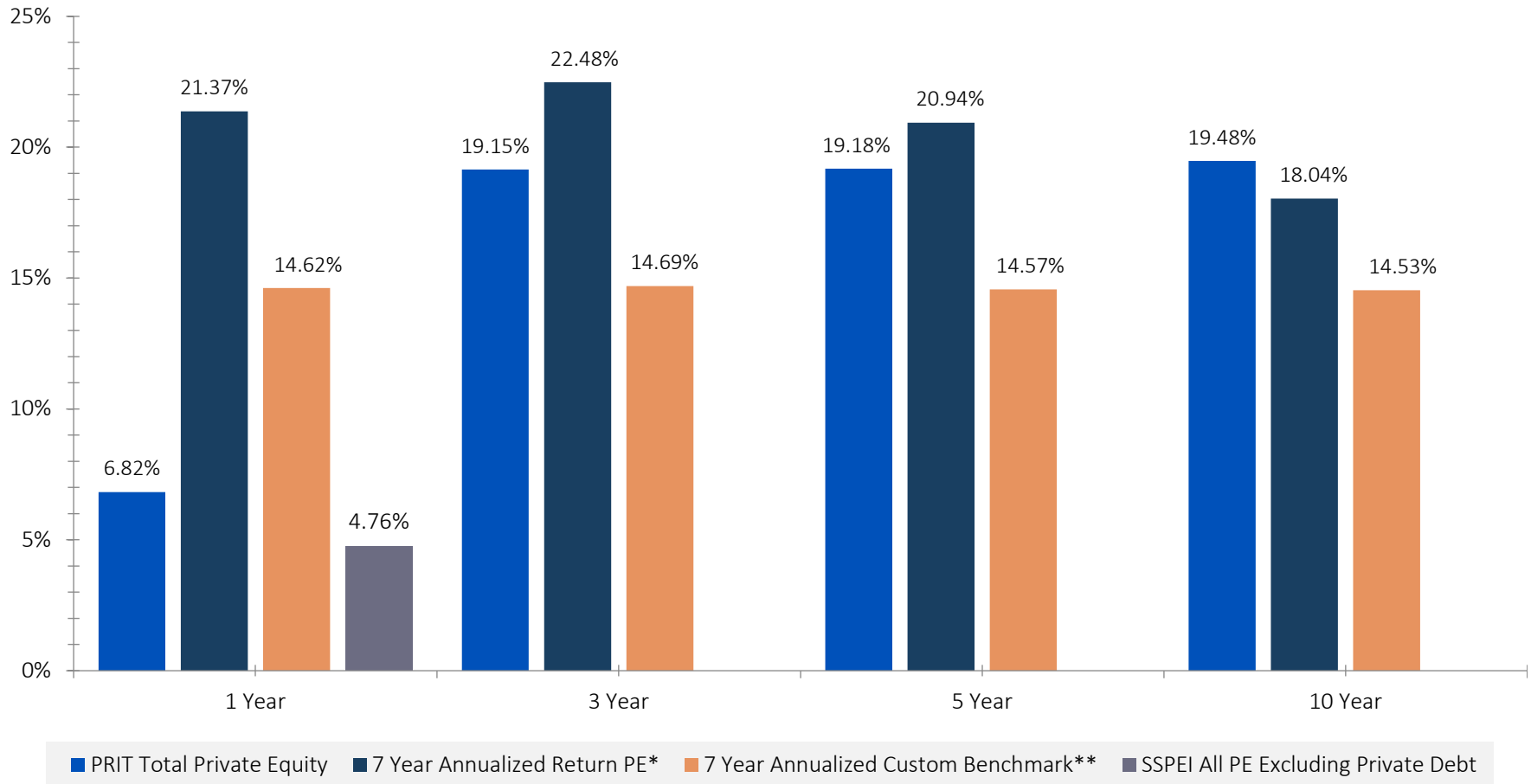
## By Sector



- Information Technology
- Health Care
- Consumer Discretionary
- Industrials
- Financials
- Communication Services
- Energy & Utilities
- Materials
- Consumer Staples
- Other

# Private Equity

Annualized Returns as of December 31, 2023 (Gross of Fees)



\* The 7 Year Annualized performance is used in the Policy Return and Policy Benchmark.

\*\*The 7 Year Annualized Benchmark: Currently year annualized return of a blend of the 88% Russell 3000 + 3% / 12% MSCI Europe IMI + 3%.

# Private Equity Performance by Vintage Year

Performance Summary By Vintage Year as of September 30, 2023

Private Equity Vintage Year	Capital Committed	Paid-In Capital	Percentage Contributed	Capital Distributed	Percentage Distributed	Reported Market Value	TVPI	Net IRR 9/30/2023	Cambridge Median IRR
1986	\$77,680,426	\$79,264,625	102.04%	\$238,804,549	301.28%	-	3.01x	15.58%	9.47%
1987	216,385,228	215,372,662	99.53%	420,456,645	195.22%	-	1.95x	11.34%	15.15%
1988	93,451,860	89,954,995	96.26%	184,708,592	205.33%	-	2.05x	14.99%	11.83%
1989	61,340,193	59,296,115	96.67%	126,898,769	214.01%	-	2.14x	20.38%	14.23%
1990	218,931,380	225,129,257	102.83%	516,114,811	229.25%	-	2.29x	13.51%	20.16%
1991	1,000,000	1,000,000	100.00%	796,310	79.63%	-	0.80x	(4.22%)	20.26%
1992	28,010,702	27,694,264	98.87%	51,950,840	187.59%	-	1.88x	23.29%	18.47%
1993	151,028,336	150,975,841	99.97%	282,602,309	187.18%	-	1.87x	18.20%	19.17%
1994	15,000,000	15,024,279	100.16%	28,813,938	191.78%	-	1.92x	19.98%	18.46%
1995	251,102,734	215,034,991	85.64%	414,254,435	192.65%	\$1	1.93x	17.23%	16.66%
1996	68,224,661	67,485,450	98.92%	110,478,819	163.71%	-	1.64x	12.65%	10.33%
1997	386,823,350	399,674,317	103.32%	744,523,311	186.28%	-	1.86x	17.37%	11.08%
1998	570,070,005	550,291,977	96.53%	812,641,641	147.67%	1,932,102	1.48x	7.75%	8.15%
1999	413,881,039	411,151,611	99.34%	373,481,073	90.84%	435,875	0.91x	(1.59%)	(0.27%)
2000	1,084,468,703	1,064,444,562	98.15%	1,802,519,192	169.34%	8,896,867	1.70x	12.65%	3.10%
2001	574,857,762	582,099,003	101.26%	1,217,833,799	209.21%	8,409,597	2.11x	26.08%	8.57%
2002	106,478,000	129,693,101	121.80%	231,655,814	178.62%	8,066,686	1.85x	12.15%	8.31%
2003	502,677,937	534,014,449	106.23%	986,348,329	184.70%	1,097,050	1.85x	17.54%	9.76%
2004	400,000,000	394,951,529	98.74%	930,055,382	235.49%	10,867,489	2.38x	23.30%	7.82%
2005	728,706,234	738,273,113	101.31%	1,177,137,546	159.44%	8,629,928	1.61x	9.52%	7.59%
2006	1,900,892,150	1,968,239,630	103.54%	3,122,120,544	158.63%	50,131,757	1.61x	8.55%	7.33%
2007	943,994,618	1,021,216,851	108.18%	1,682,431,126	164.75%	38,846,960	1.69x	11.56%	8.93%
2008	1,458,393,114	1,533,665,659	105.16%	2,793,216,449	182.13%	70,934,080	1.87x	14.34%	9.39%
2009	570,712,022	597,541,814	104.70%	1,131,398,670	189.34%	37,664,707	1.96x	18.88%	12.95%
2010	381,250,000	407,178,709	106.80%	1,103,020,969	270.89%	146,186,638	3.07x	21.04%	12.68%
2011	1,502,715,720	1,672,337,893	111.29%	3,019,058,337	180.53%	645,837,595	2.19x	17.60%	14.22%
2012	700,110,768	817,549,909	116.77%	1,534,302,045	187.67%	294,135,260	2.24x	21.25%	13.45%
2013	521,901,871	562,212,654	107.72%	833,640,541	148.28%	355,875,166	2.12x	16.54%	14.82%
2014	1,226,202,781	1,271,475,991	103.69%	1,996,016,557	156.98%	1,209,693,852	2.52x	21.69%	17.13%
2015	952,542,916	1,079,654,557	113.34%	1,307,415,674	121.10%	1,150,844,958	2.28x	21.40%	16.68%
2016	1,657,885,644	1,657,907,785	100.00%	1,702,221,735	102.67%	1,639,409,115	2.02x	19.68%	18.08%
2017	697,872,662	703,116,480	100.75%	449,083,097	63.87%	876,506,834	1.89x	19.94%	21.90%
2018	1,870,381,796	1,886,836,153	100.88%	913,416,865	48.41%	2,373,052,858	1.74x	20.90%	19.17%
2019	2,052,233,327	1,898,820,422	92.52%	580,077,984	30.55%	2,430,161,108	1.59x	22.65%	17.08%
2020	2,902,674,511	2,205,060,996	75.97%	144,945,157	6.57%	2,584,343,243	1.24x	11.72%	12.35%
2021	3,029,744,925	1,921,897,159	63.43%	24,001,568	1.25%	2,066,778,014	1.09x	5.96%	(0.33%)
2022	2,918,922,074	851,826,334	29.18%	489,272	0.06%	876,023,351	1.03x	3.31%	(13.03%)
2023	1,994,623,183	172,990,831	8.67%	-	0.00%	173,499,313	1.00x	0.74%	(15.00%)
<b>Total Private Equity:</b>	<b>\$33,233,172,633</b>	<b>\$28,180,355,966</b>	<b>84.80%</b>	<b>\$32,988,932,694</b>	<b>117.06%</b>	<b>\$17,068,260,407</b>	<b>1.78x</b>	<b>14.00%</b>	





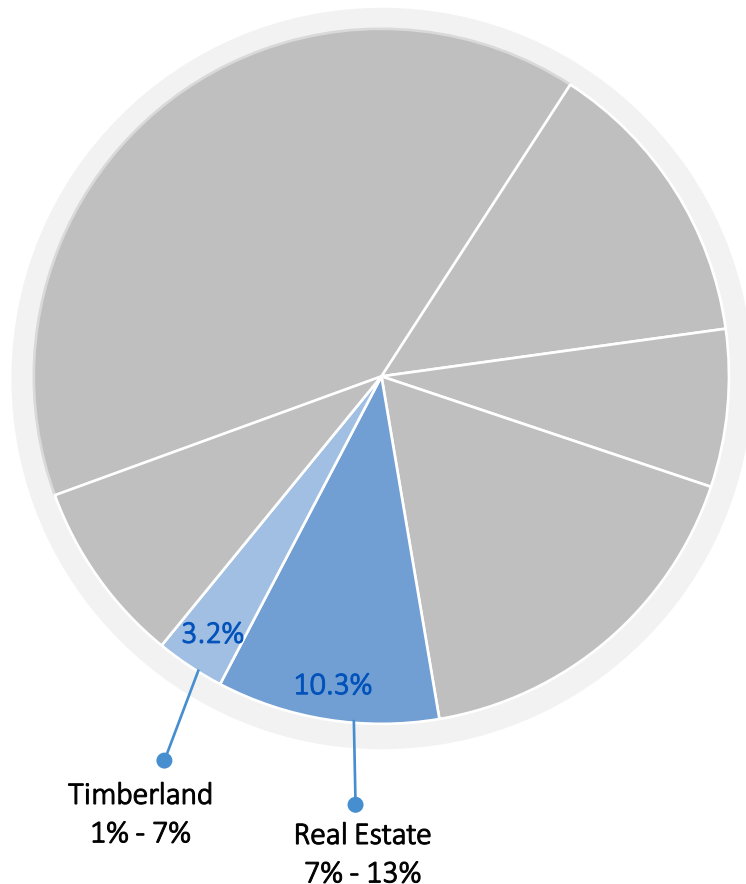
# REAL ESTATE AND TIMBERLAND PORTFOLIO

Mass  
PRIM

# Real Estate and Timberland Portfolios

## PRIT FUND TARGET ASSET ALLOCATION

Actual Allocation as of December 31, 2023



\$13.6 billion, 13.5% of PRIT Fund

- Real Estate: \$10.4 billion, 10.3% of PRIT Fund
- Timberland: \$3.2 billion, 3.2% of PRIT Fund

15 portfolios

- 6 core portfolios
- 5 non-core portfolios
- 1 global REIT portfolios
- 2 timberland portfolios
- 1 direct investment portfolio

Property Investments

- Real Estate – 121 properties
- Timberland – 23 properties

121 Global real estate securities

6 Emerging-Diverse Managers

4 primary strategies

- Core U.S. private real estate
- Non-core U.S. private real estate
- Global real estate securities
- Global timberland

6 team members

# Real Estate and Timberland Key Initiatives

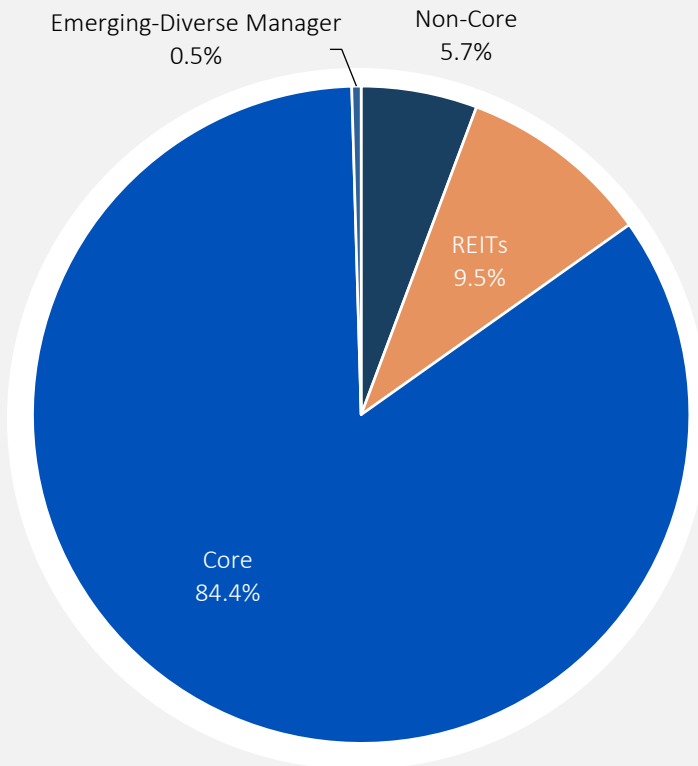


- Continue to source attractive opportunities. Source and grow relationships with high quality real estate and timberland investment managers and operating partners. Grow our view and conviction on emerging sectors and strategies within the real estate and timberland asset classes.
- Collaborate with the Public Markets team to source and conduct due diligence on Other Credit Opportunities investments. Add select core separate account credit exposure as identified.
- Oversee the implementation of the asset business and development plans and hold-sell recommendations in the Real Estate and Timberland portfolios.
- Utilize REITs , PRIM's internal real estate financing facility, and other available capital sources to fund new investment opportunities and maintain PRIM's current leverage structure.
- Continue to source and allocate to diverse investment managers.
- Collaborate with the Director of Stewardship on PRIM's stewardship efforts.
- Explore applications of large language models (AI) in investment analysis/monitoring processes.
- Identify and engage a third-party timberland data research provider.
- Evaluate portfolio management and performance analysis technology solutions.

# Real Estate

As of December 31, 2023, \$10.4 Billion – 10.3% of PRIT Fund (Target 7%-13%)

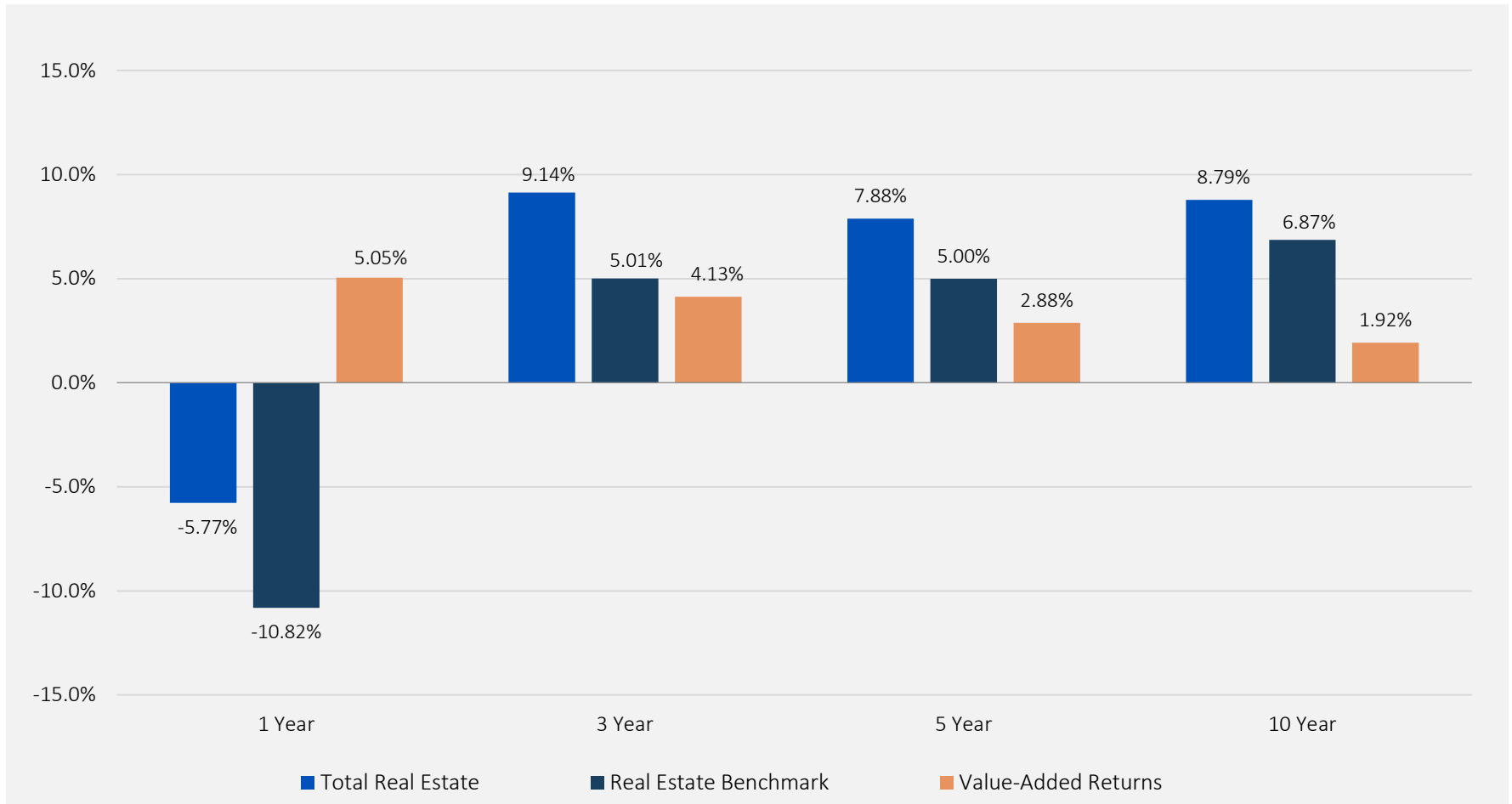
## ASSET ALLOCATION



- Equity investments in both directly-owned properties and **REIT** securities
- Directly-owned **Core** properties make up the majority of the real estate portfolio
  - **Core** properties are typically well-leased, operating properties that provide regular cash flow from rents
- **Non-Core** investments make up approximately 6% of the real estate portfolio
  - **Non-Core** includes properties that are under development

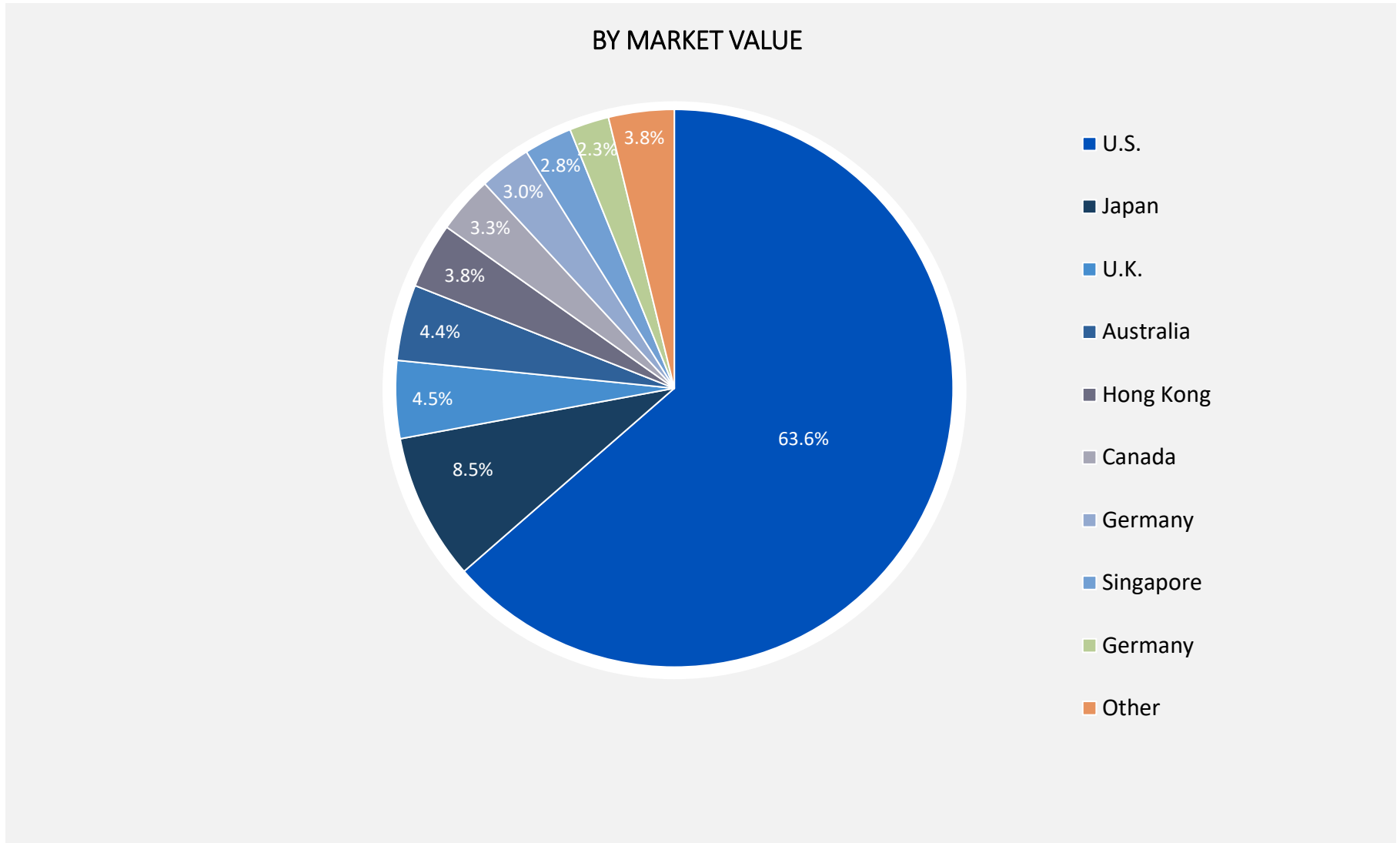
# Total Real Estate Performance

Annualized Returns as of December 31, 2023 (Gross of Fees)

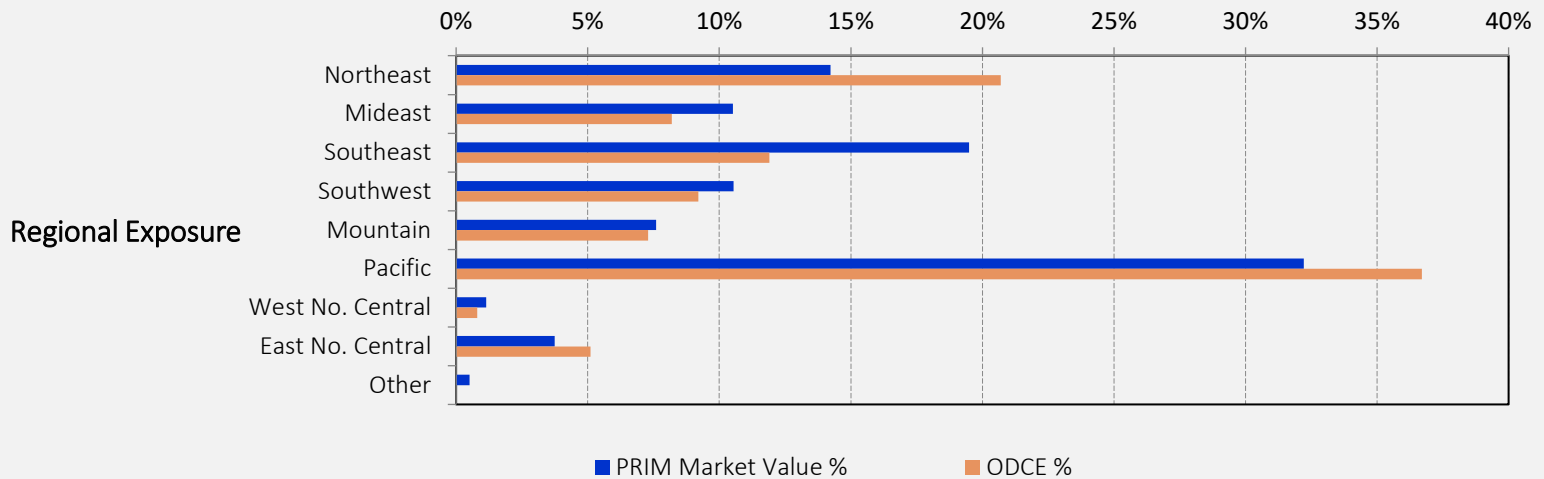
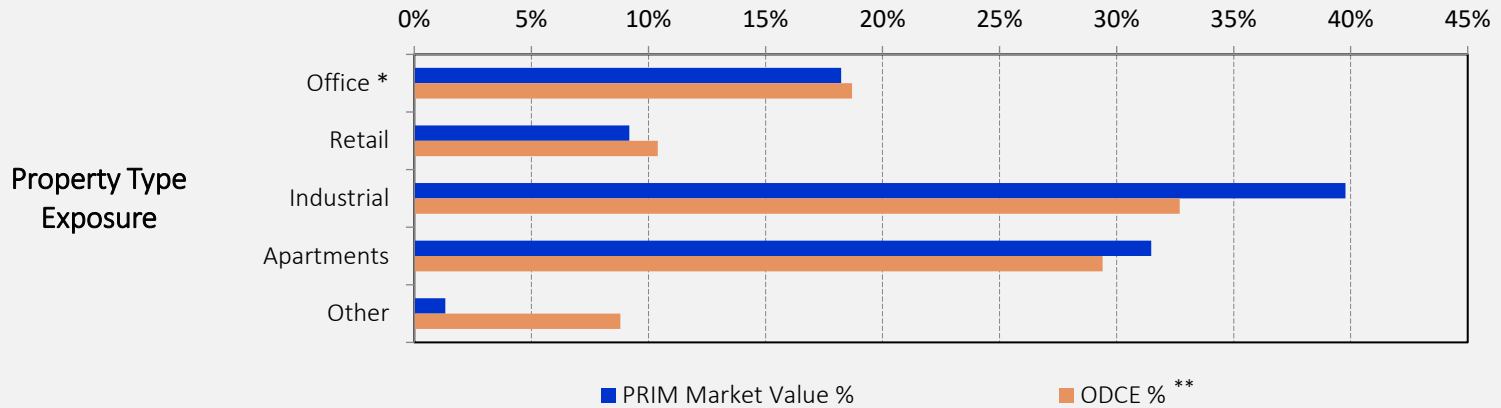


Benchmark: Currently benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the Total RE portfolio. These weights are based on the beginning adjusted monthly market value of each sub asset.

# Public Real Estate (REITs) Exposure by Country



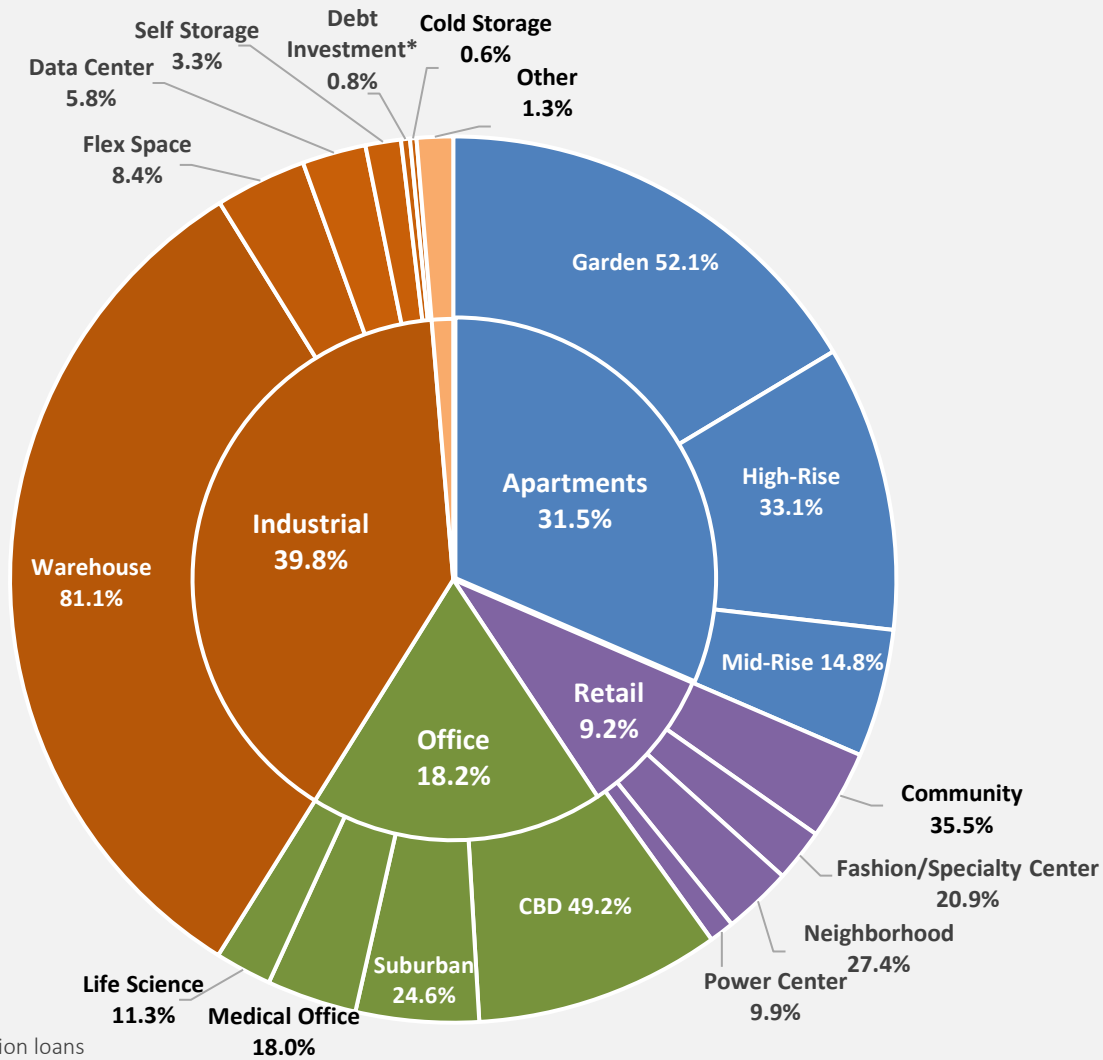
# Private Real Estate Portfolio Exposure



\*Office includes life science assets

\*\*ODCE is one-quarter lagged

# Property Subtype Breakdown

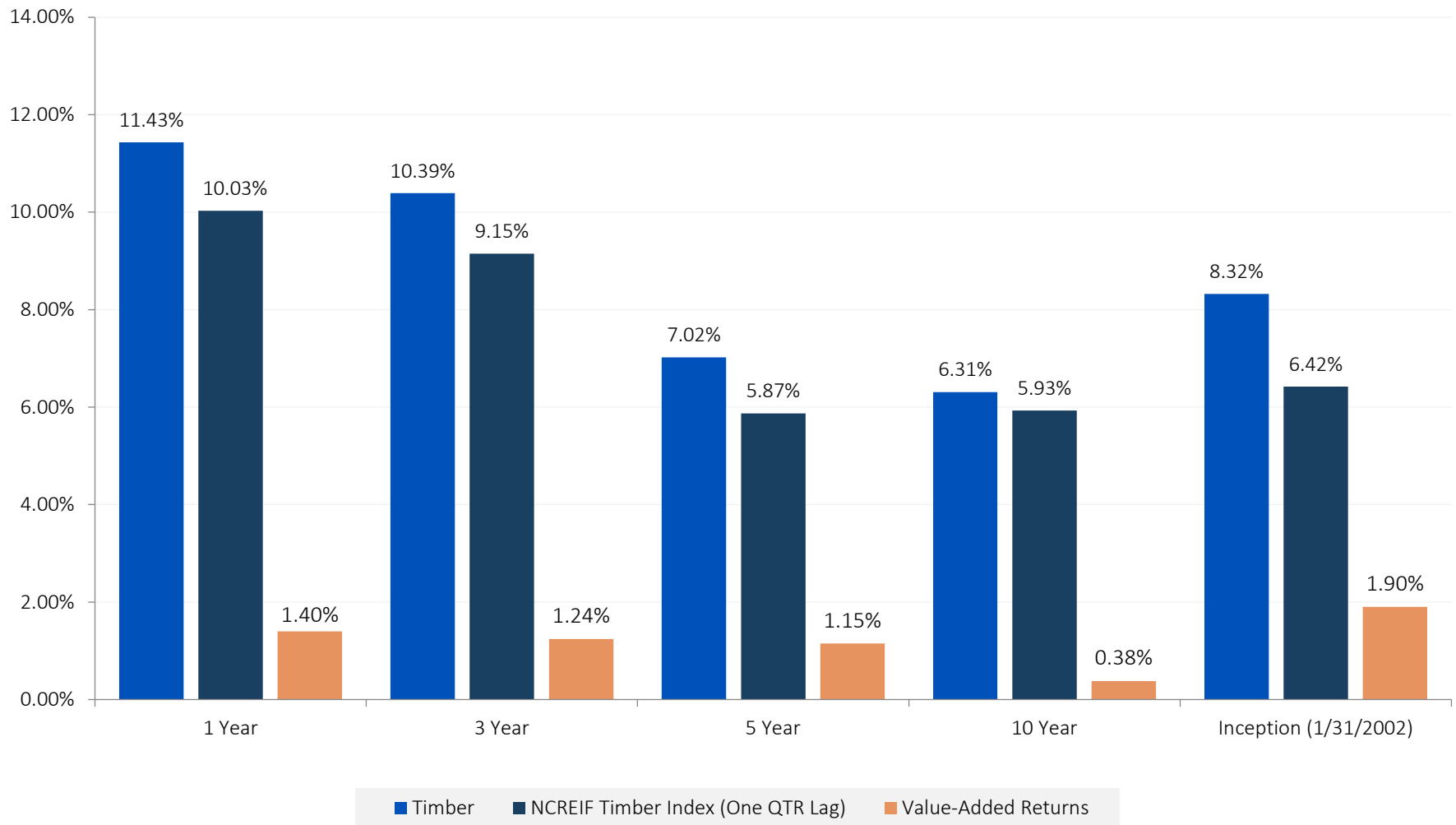


\* Debt investments in industrial construction loans



# Timberland

Annualized Returns as of December 31, 2023 (Gross of Fees)

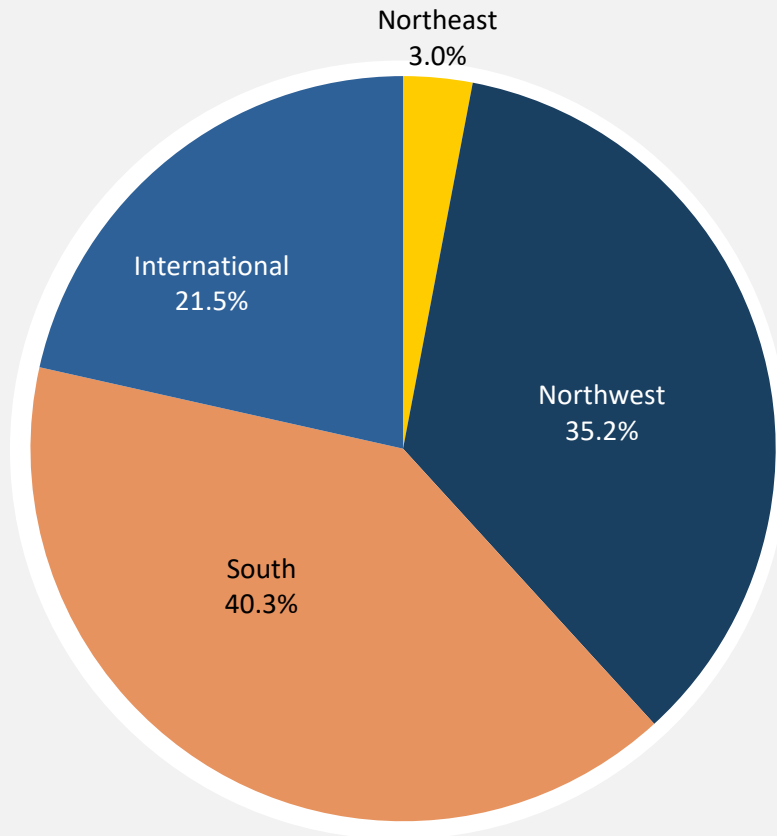


Benchmark: Currently NCREIF Timberland Index one quarter lag.

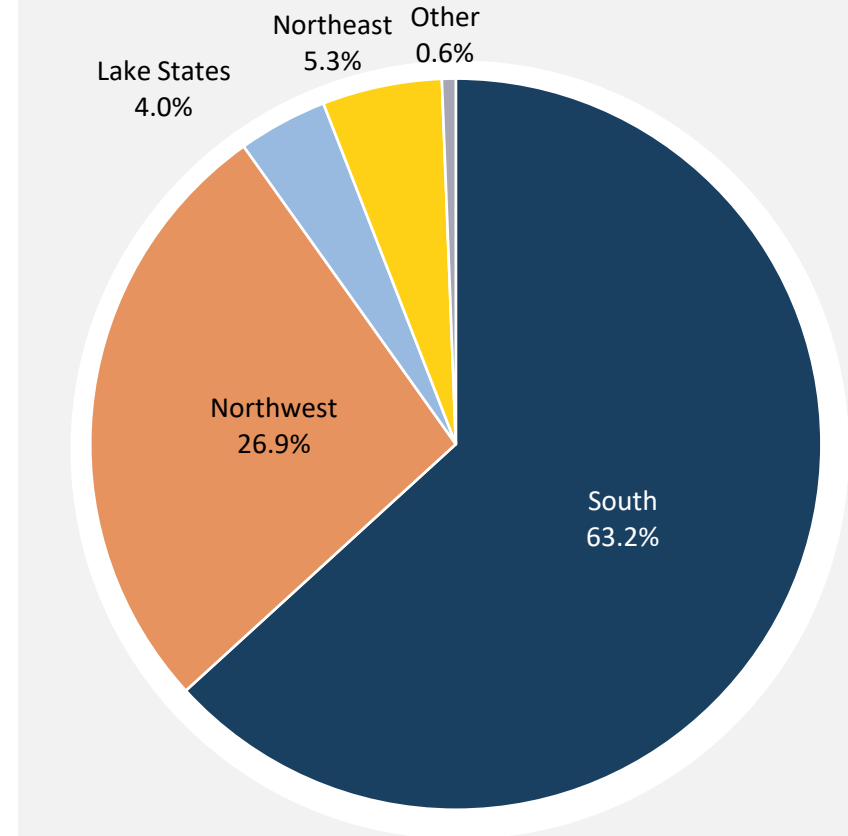
# Timberland Exposure by Region vs. Benchmark

As of December 2023, \$3.2 Billion – 3.2% of PRIT Fund (Target 1%-7%)

## PRIM REGION EXPOSURE



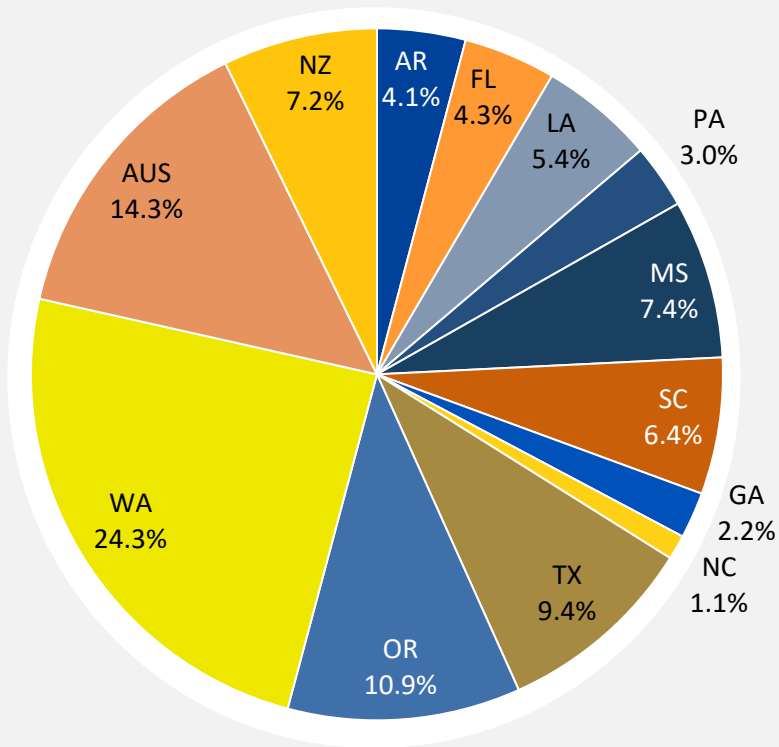
## BENCHMARK



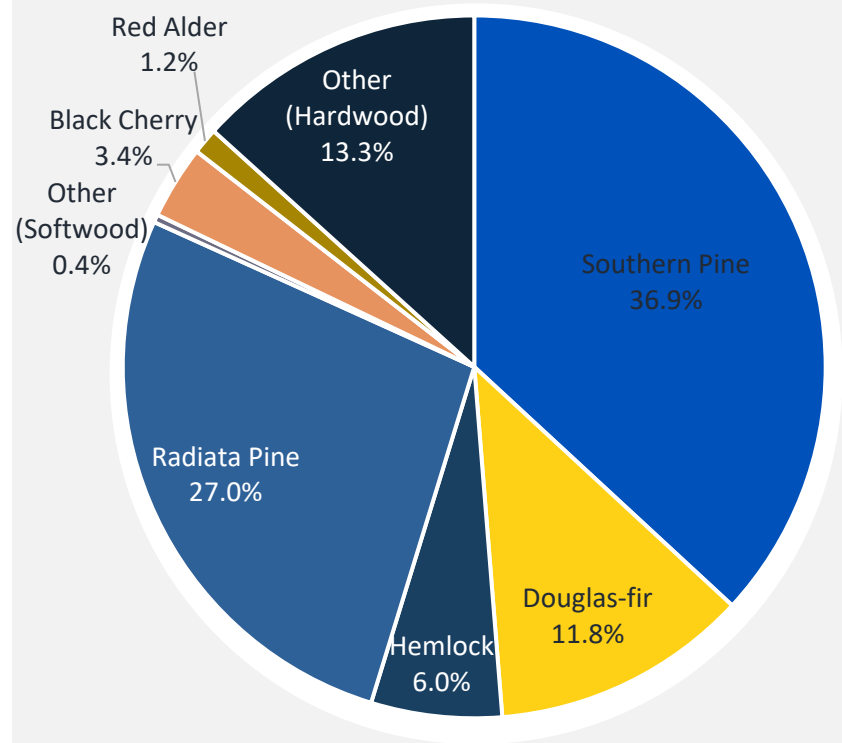
# Timberland Exposure by State/Region

# Timberland Exposure by Species

BY EQUITY VALUE



BY ACRES



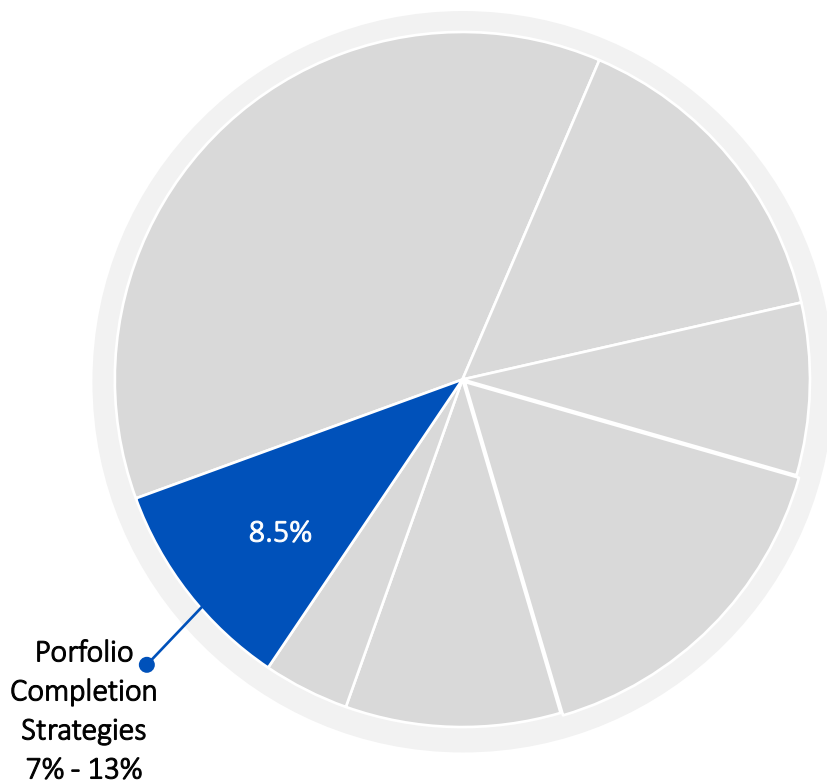
# PORTFOLIO COMPLETION STRATEGIES



# Portfolio Completion Strategies (PCS)

## PRIT FUND TARGET ASSET ALLOCATION

Actual Allocation as of December 31, 2023



PCS \$8.5 billion, 8.5% of PRIT Fund

- Directional Hedge Funds: \$2.4 billion, 28% of PCS
- Stable Value Hedge Funds: \$4.7 billion, 55% of PCS
- Hedge Fund of Funds: \$0.8 billion, 9% of PCS
- Real Assets: \$0.7 billion, 8% of PCS

29 Hedge Fund managers:

- 1 FoHF Manager
- 28 Direct Hedge Fund Managers

6 Real Assets Managers

Emerging-Diverse Managers

5 team members

Collaboration across all PRIM teams

# Portfolio Completion Strategies

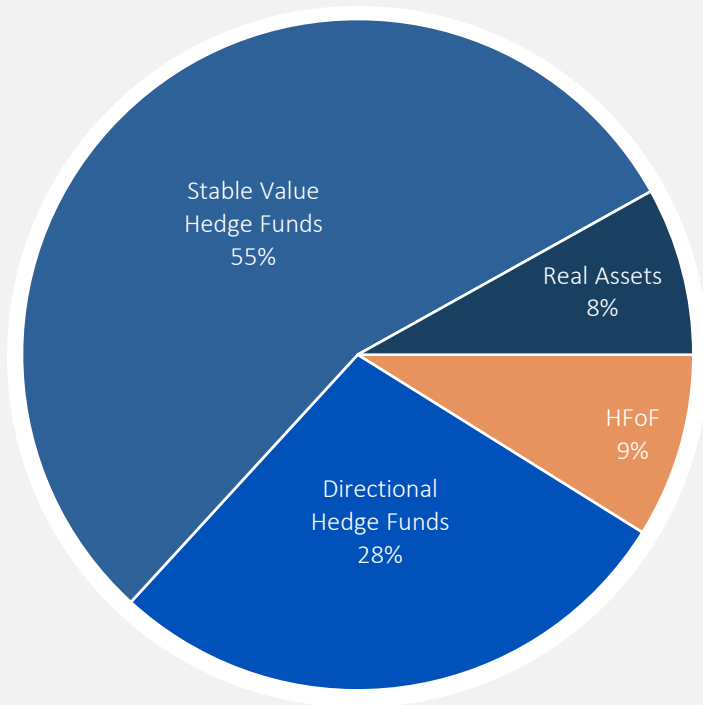
## Key Initiatives

- Hedge Funds:
  - Continue to source high quality partners and investment opportunities pertaining to both Stable Value and Directional Funds.
  - Finish researching the evolving thesis of Special Situation/Distressed investing.
  - Continue to identify and implement other value enhancing initiatives, including innovative fee structure and co-investments.
- Real Assets:
  - Complete market mapping of the Real Assets funds in collaboration with the Real Estate team and the Director of Stewardship.
- Continue to source and allocate to diverse investment managers.
  - Collaborate with the Director of Stewardship on PRIM's stewardship efforts.
- Portfolio/Risk Management:
  - Collaborate with Risk Team to review mandate sizing and concentration limit.
  - Develop a position-based, look-through reporting of the Directional Fund sleeve.
- Organizational:
  - Continue to collaborate and exploit synergies with other asset classes.

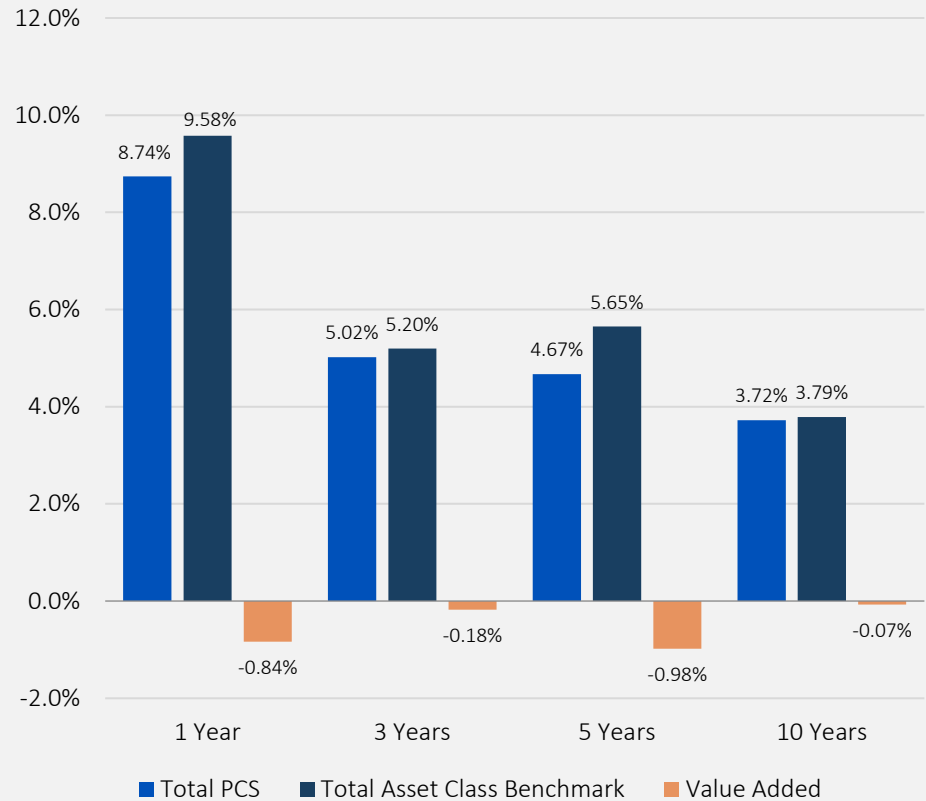
# Portfolio Completion Strategies

As of December 31, 2023, \$8.5 Billion – 8.5% of PRIT Fund (Target 7%-13%)

## ASSET ALLOCATION



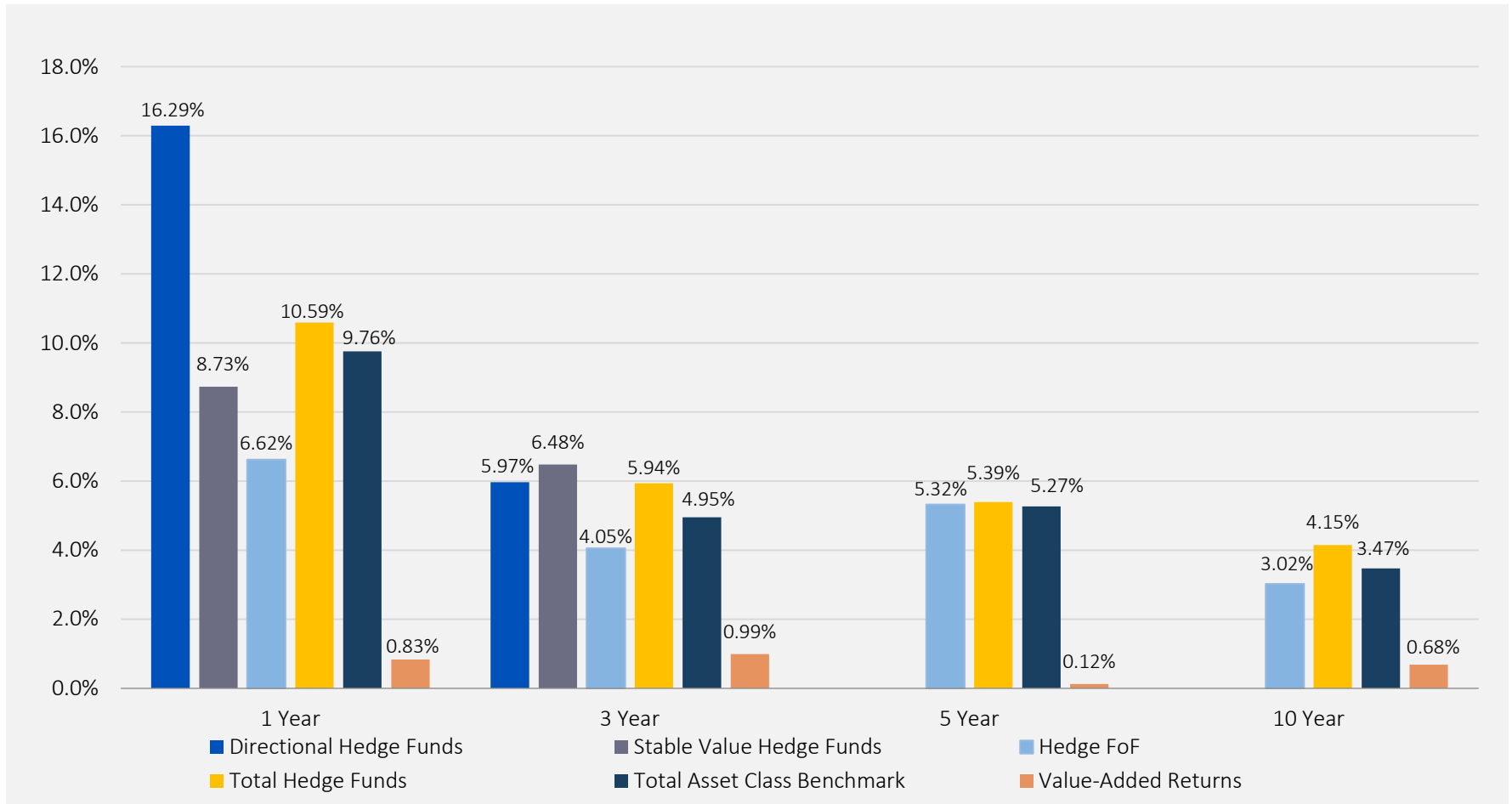
## PERFORMANCE\*



Benchmark: Total Portfolio Completions Composite Index was formed on April 1, 2017 by combining the prior Portfolio Completion Strategies with Total Hedge Funds. Total Portfolio Completion Strategies Composite Index is calculated by applying the underlying benchmark return for each sub asset class to the asset class's weight within the Total Portfolio Completion Strategies Composite. These weights are based on the beginning adjusted monthly market value of each sub asset. \*Hedge Funds returns, 92% of the PCS Portfolio, are net of fees.

# Hedge Funds Performance

Annualized Returns as of December 31, 2023 (Net of Fees)



Benchmark: Currently, Total Hedge Funds benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the Total HF portfolio. These weights are based on the beginning adjusted monthly market value of each sub asset.

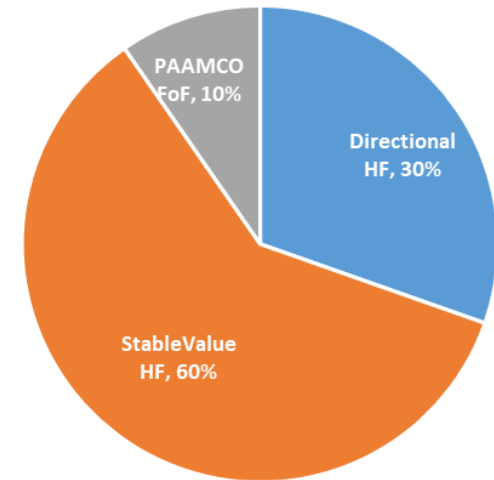


# PRIM Hedge Funds Portfolio Snapshot

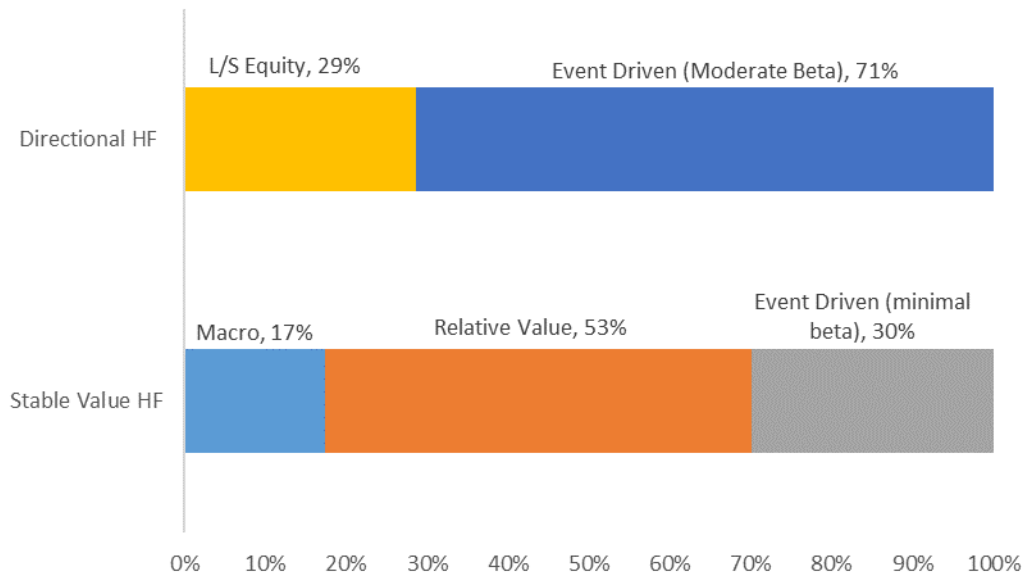
As of December 31, 2023, \$7.8 Billion – 7.8% of PRIT Fund

- Directional Hedge Funds: \$2.4 Billion
- Stable Value Hedge Funds: \$4.7 Billion
- Hedge Fund of Funds: \$0.8 Billion

### Hedge Fund Portfolio Breakdown



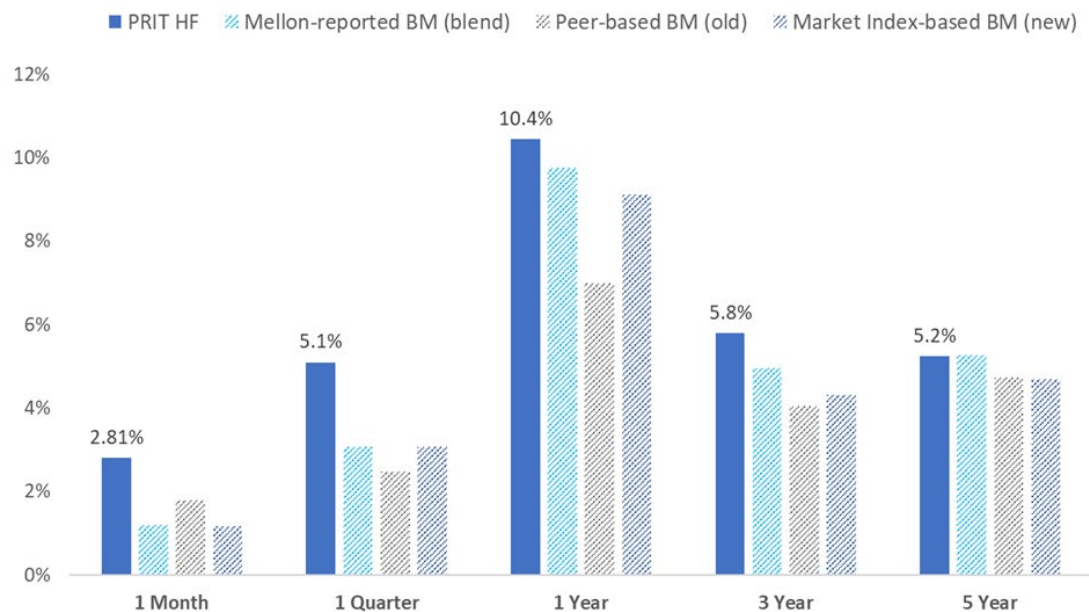
### Sub Strategy Breakdown



# PRIM Hedge Funds Performance Summary

As of December 31, 2023 (Net of Fees)

Performance - PRIT HF (as of 12/2023)



	NAV	1 Month	1 Quarter	1 Year	3 Year	5 Year
<b>PRIT HF</b>	<b>\$7.85 bn</b>	<b>2.81%</b>	<b>5.1%</b>	<b>10.4%</b>	<b>5.8%</b>	<b>5.2%</b>
Mellon-reported BM (blend)		1.19%	3.1%	9.8%	5.0%	5.3%
Peer-based BM (old)		1.80%	2.5%	7.0%	4.1%	4.7%
Market Index-based BM (new)		1.18%	3.1%	9.1%	4.3%	4.7%

- Returns over 1 year are annualized.
- “Peer-based BM” is an aggregate of HFRI strategy indices. It was the benchmark used through 2/2023.
- “Market Index-based BM” is the new benchmark recently approved and implemented starting 3/2023.
- “Mellon-reported BM” blends Peer-based BM through 2/2023 and Market Index-based BM starting 3/2023.

# Risk-Adjusted Return and Market Beta Performance

As of December 31, 2023 (Net of Fees)

## Performance by Asset Classes (as of Dec-2023)

	Directional HF	StableValue HF	Total HF	Total PCS	PRIT Fund	MSCI ACWI	Barclays Agg	
1 Year	Return	16.3%	8.7%	10.4%	8.5%	10.9%	22.8%	5.5%
	Volatility	11.3%	2.5%	4.7%	4.0%	8.3%	15.6%	8.5%
	<b>Return/Volatility</b>	<b>1.4</b>	<b>3.4</b>	<b>2.2</b>	<b>2.1</b>	<b>1.3</b>	<b>1.5</b>	<b>0.7</b>
	<i>EQ Beta</i>	<i>0.7</i>	<i>0.1</i>	<i>0.2</i>	<i>0.2</i>	<i>0.5</i>	<i>1.0</i>	<i>0.5</i>
	<i>Bond Beta</i>	<i>1.1</i>	<i>0.1</i>	<i>0.4</i>	<i>0.3</i>	<i>0.9</i>	<i>1.6</i>	<i>1.0</i>
	<i>Beta vs. PRIT Fund</i>	<i>1.3</i>	<i>0.1</i>	<i>0.5</i>	<i>0.4</i>	<i>1.0</i>	<i>1.9</i>	<i>0.9</i>
3 Year	Return	6.0%	6.5%	5.8%	4.8%	5.8%	6.2%	-3.3%
	Volatility	10.6%	2.8%	4.2%	3.7%	8.6%	16.5%	7.2%
	<b>Return/Volatility</b>	<b>0.6</b>	<b>2.3</b>	<b>1.4</b>	<b>1.3</b>	<b>0.7</b>	<b>0.4</b>	<b>(0.5)</b>
	<i>EQ Beta</i>	<i>0.5</i>	<i>0.0</i>	<i>0.2</i>	<i>0.2</i>	<i>0.5</i>	<i>1.0</i>	<i>0.3</i>
	<i>Bond Beta</i>	<i>1.0</i>	<i>0.0</i>	<i>0.3</i>	<i>0.2</i>	<i>0.9</i>	<i>1.7</i>	<i>1.0</i>
	<i>Beta vs. PRIT Fund</i>	<i>1.0</i>	<i>0.1</i>	<i>0.4</i>	<i>0.3</i>	<i>1.0</i>	<i>1.8</i>	<i>0.6</i>
5 Year	Return			5.2%	4.5%	9.0%	12.3%	1.1%
	Volatility			5.5%	4.9%	9.0%	17.9%	6.2%
	<b>Return/Volatility</b>			<b>0.9</b>	<b>0.9</b>	<b>1.0</b>	<b>0.7</b>	<b>0.2</b>
	<i>EQ Beta</i>			<i>0.2</i>	<i>0.2</i>	<i>0.5</i>	<i>1.0</i>	<i>0.2</i>
	<i>Bond Beta</i>			<i>0.3</i>	<i>0.2</i>	<i>0.8</i>	<i>1.5</i>	<i>1.0</i>
	<i>Beta vs. PRIT Fund</i>			<i>0.5</i>	<i>0.4</i>	<i>1.0</i>	<i>1.9</i>	<i>0.4</i>

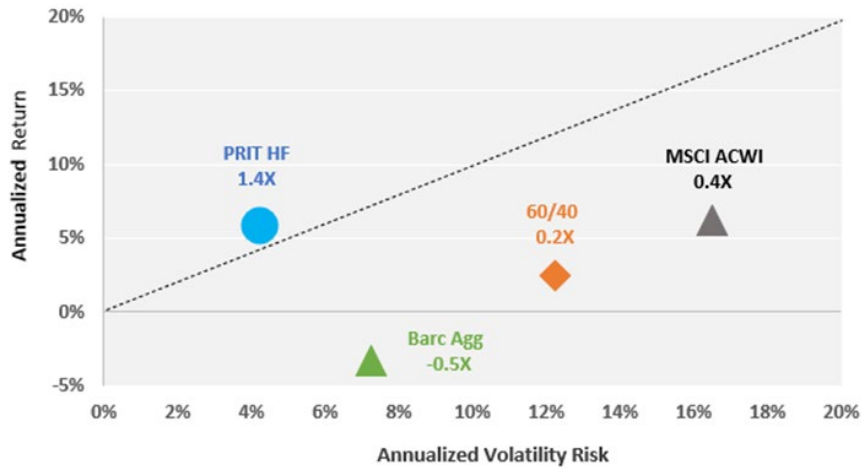
Note: returns are annualized, net of fees.

- Since 2Q 2020, Mellon started separately reporting Stable Value vs. Directional, after Asset Allocation decided to bifurcate their different value propositions.

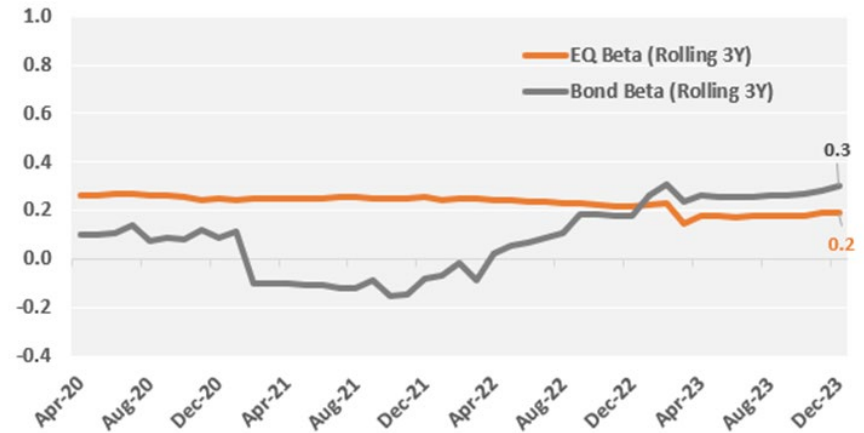
# Risk-Adjusted Return and Market Beta

As of December 31, 2023

### Risk-Adjusted Return : 3 Years



### Diversifying Benefit - PRIT HF's Beta



# PRIM Hedge Funds and PCS Performance Breakdown

As of December 31, 2023 (Net of Fees)

	NAV	as of Total HF	as of Total PCS	1 Quarter	1 Year	3 Year
<b>StableValue HF</b>	\$4.66 bn	59%	55%	<b>3.0%</b>	<b>8.7%</b>	<b>6.5%</b>
Mellon-reported BM (blend)				1.8%	7.8%	5.4%
Peer-based BM (old)				1.2%	5.1%	4.5%
Market Index-based BM (new)				1.9%	7.3%	4.3%
<b>Directional HF</b>	\$2.36 bn	30%	28%	<b>10.4%</b>	<b>16.3%</b>	<b>6.0%</b>
Mellon-reported BM (blend)				6.2%	14.6%	4.6%
Peer-based BM (old)				5.5%	10.7%	3.4%
Market Index-based BM (new)				6.2%	13.7%	4.3%
<b>PAAMCO FoF</b>	\$0.75 bn	10%	9%	<b>3.9%</b>	<b>6.6%</b>	<b>4.0%</b>
Mellon-reported BM (blend)				1.8%	7.9%	3.3%
Peer-based BM (old)				3.2%	7.4%	3.1%
Market Index-based BM (new)				1.9%	7.3%	4.3%
<b>Real Assets</b>	\$0.68 bn	N/A	8%	<b>-9.5%</b>	<b>-9.3%</b>	<b>-4.2%</b>
Mellon-reported BM				0.8%	7.8%	7.2%

- Returns over 1 year are annualized.
- Since 2Q2020, Mellon started separately reporting Stable Value vs. Directional, after Asset Allocation decided to bifurcate their different value propositions.
- “Peer-based BM” is an aggregate of HFRI strategy indices. It was the benchmark used through 2/2023.
- “Market Index-based BM” is the new benchmark recently approved and implemented starting 3/2023.
- “Mellon-reported BM” blends Peer-based BM through 2/2023 and Market Index-based BM starting 3/2023.

# Glossary of PRIT Fund Investment Terms

**Active Management** – Refers to a portfolio management strategy where the manager makes specific investments with the goal of outperforming an investment benchmark index.

**Barclays Capital Aggregate Bond Index** – An index that replicates the U.S. investment-grade bond market. The index is comprised of government and corporate bonds.

**Core Fixed Income Portfolio** – Investments in investment-grade bonds (see definition of Barclays Capital Aggregate Bond Index).

**Domestic Equity Portfolio** – Investments in shares of publicly-traded U.S. companies utilizing a large capitalization (large cap), small and middle capitalization (small/smld cap), and micro capitalization (micro cap) strategies.

**Emerging-Diverse Manager** – Investment managers with less than \$2B of AUM, less than 3 yrs track record, that are minority-owned or women-owned.

**Emerging Markets Equity Portfolio** – The primary strategy for this portfolio is investing in companies in developing countries, including, but not limited to, China, Brazil, Russia, South Korea, Taiwan, India and Turkey. These countries typically have less efficient securities markets, and thus there is opportunity for substantial returns.

**Hedge Fund Research, Inc. (HFRI)** – An organization that specializes in the areas of indexation and analysis of hedge funds.

**International Equity Portfolio** – The primary strategy for this portfolio is investing in companies in developed markets, industrialized nations outside of the United States, including, but not limited to, Japan, Germany, the United Kingdom, France, Italy, Switzerland, Hong Kong, Canada, and Australia.

**MSCI ACWI Index** – Captures large and mid cap representation across 23 Developed Markets and 25 Emerging Markets.

**MSCI Emerging Markets Index** – Captures large and mid cap representation across 25 Emerging Markets.

**MSCI Europe Investable Market Index** – Captures large, mid and small cap representation across 15 Developed Markets

**Passive Management** - An investing strategy that tracks a market-weighted index or portfolio. The most popular method is to mimic the performance of an externally specified index by buying an index fund.

**Portfolio Completion Strategies (PCS)** – The objective of the PCS portfolio is to provide the PRIT Fund access to broader investment opportunities. Investments selected for the PCS portfolio should enhance the risk/return profile of the PRIT Fund. Investments may include long-term strategic investments or short-term opportunistic investments. Some of these strategies include hedge funds and real assets.

**Private Equity Portfolio** – Two components comprise the PRIT Fund’s Private Equity portfolio: venture capital (early-stage and multi-stage) and special equity partnerships (buyout and growth equity). Unlike public markets, where the investor has the ability to “cash out” of positions at any time, these private market investments are illiquid.

**Real Estate Portfolio** – Equity investments in both directly-owned properties and REIT securities. Directly-owned core properties make up most of the portfolio. Core properties are typically well-leased, operating properties that provide regular cash flow from rents. Non-core investments include properties that are under development.

**REIT** – A company that owns, and in most cases operates, income-producing real estate. REITs often trade on major exchanges like other securities and provide investors with a liquid stake in real estate.

**Russell 3000 Index** – A stock market index that measures the performance of the largest 3,000 U.S. companies representing approximately 97% of the investable U.S. equity market.

**Standard & Poor’s (S&P) 500 Index** – A U.S. stock market index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ.

**Timberland Portfolio** – Direct investments in timberland: in the United States timberland markets are divided into three regions, each with distinct economic characteristics: the Pacific Northwest, the Northeast and the Southeast. The Pacific Northwest is a high value softwood market, in which the growing cycle to produce a mature tree is forty to fifty years; in Australia, there is approximately 2 million hectares (4.9 million acres) of plantation timberlands that are almost evenly split between hardwood and softwood species.

**Treasury Inflation-Protected Securities (TIPS)** – Investment grade fixed income investments designed to provide a hedge against rising inflation. The principal of a TIPS increases with inflation and decreases with deflation, as measured by the Consumer Price Index. When a TIPS matures, the investor is paid the adjusted principal or original principal, whichever is greater.

**Treasury Separate Trading of Registered Interest and Principal of Securities (STRIPS)** – Bonds that are sold at a discount to their face value. The investor does not receive interest payments but is repaid the full-face value when the bonds mature. Also called “zero coupon” bonds.

**Value-Added Fixed Income** – A fixed income portfolio consisting of the following strategies: high yield bonds (non-investment grade corporate debt); bank loans (senior secured corporate debt); emerging markets debt (debt issued within the emerging, or developing countries, marketplace, and private debt (investments in private partnerships that invest directly in companies under financial distress).



Massachusetts Pension Reserves  
Investment Management Board  
53 State Street, Suite 600  
Boston, MA 02109  
617-946-8401  
[www.mapension.com](http://www.mapension.com)

THANK YOU

#### CONTACTS

**Francesco Daniele**  
Director of Client Services  
Office 617-946-8416  
E-mail: [fdaniele@mapension.com](mailto:fdaniele@mapension.com)

**Laura Strickland**  
Senior Client Services Officer  
Office 617-946-8490  
E-mail: [lstrickland@mapension.com](mailto:lstrickland@mapension.com)

**Emily Green**  
Senior Client Services Analyst  
Office 617-946-8486  
E-mail: [egreen@mapension.com](mailto:egreen@mapension.com)