



HAMPDEN COUNTY RETIREMENT BOARD

PRESENTED BY

Francesco Daniele, Director of Client Services

OCTOBER 1, 2025

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

All figures as of 6/30/2025 unless otherwise noted

PRIT Fund Snapshot

As of June 30, 2025

PRIT FUND FACTS

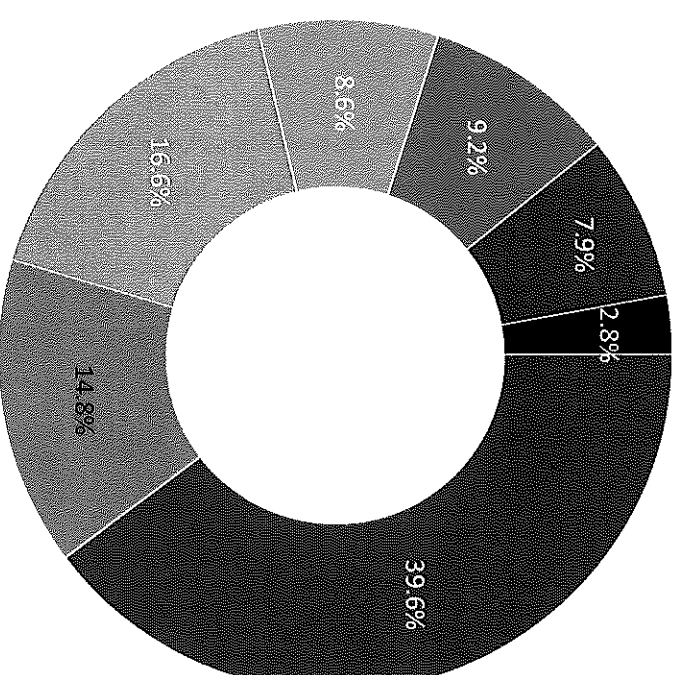
- \$115.4 billion AUM
- 45+ Public Markets investment managers
- 17 Real Estate and Timberland investment managers
- 100+ private equity managers (400+ partnerships)
- 25+ portfolio completion strategies managers

OVERSIGHT AND STAFFING

- 9 appointed and elected Board of Trustees
- 5 advisory committees, consisting of 42 industry professionals and Board of Trustees
- Staff of over 60 professionals
 - 31 Masters, 18 CFAs, 6 CPAs, 3 CAIAs, 3 JDs
 - 1 FRM, 1 CRE
- 14 CFA Investment Foundations Program Certificate Holders
- 2 CFA Private Markets and Alternative Investment Certificate Holders
- Audited by KMPG, PERAC, State Auditor

ASSET ALLOCATION

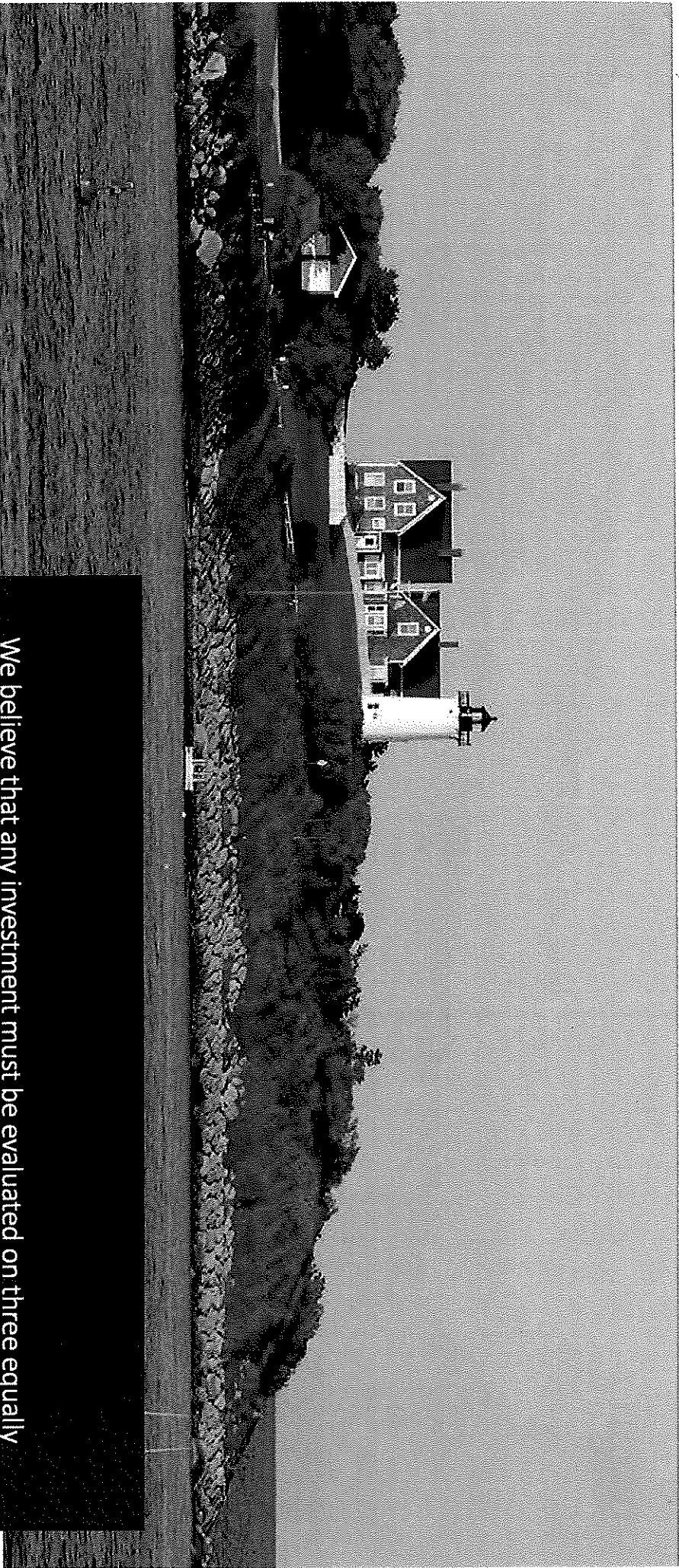
(as of 6/30/25)



TARGET RANGES

(approved 2/27/2025)

- 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%



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 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
2. Joseph C. Bonfiglio, Massachusetts & Northern New England Laborers' District Council
3. C. LaRoy Brantley, Investment Consultant
4. Catherine D'Annato, Board Member, 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, Former Partner, Clough Capital
9. Mark Lapman, Ph.D., CFA, Board Member
10. Peter Monaco, Managing Director, Raptor Group
11. Phillip H. Pereimuter, Former Managing Partner, Wellington Management
12. Philip Rotner, Chief Investment Officer, Boston Children's Hospital
13. Glenn P. Strehle, CFA, Treasurer Emeritus, MIT
14. Timothy L. Vail, Former Chairman and CEO, Boston Private Holdings



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
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
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



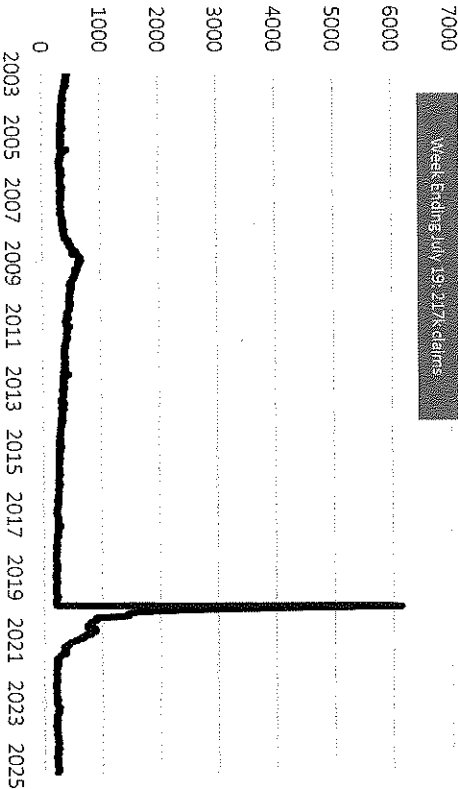
ECONOMIC BACKDROP

**Mass
PRIM**

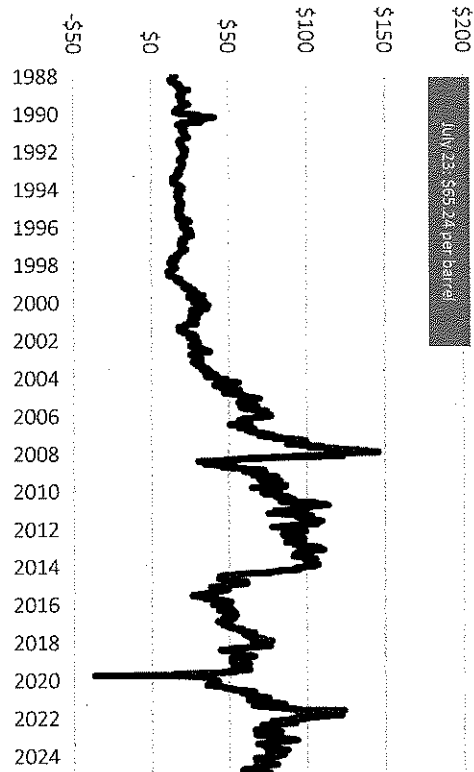
AS OF JUNE 30, 2025

U.S. Economic Data

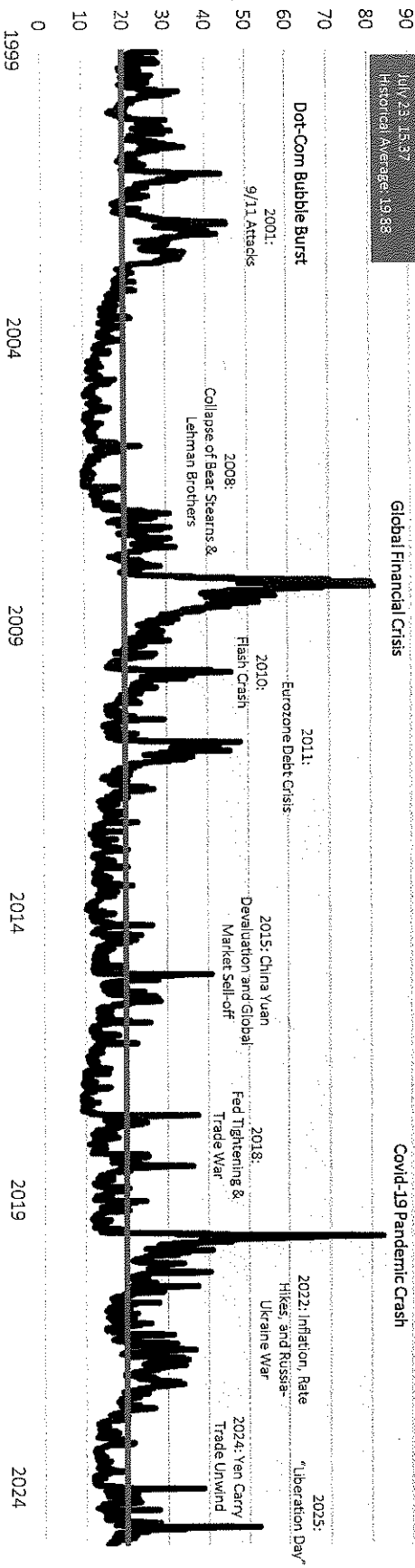
WEEKLY INITIAL JOBLESS CLAIMS (IN MILLIONS)



WTI CRUDE OIL (\$/BBL)

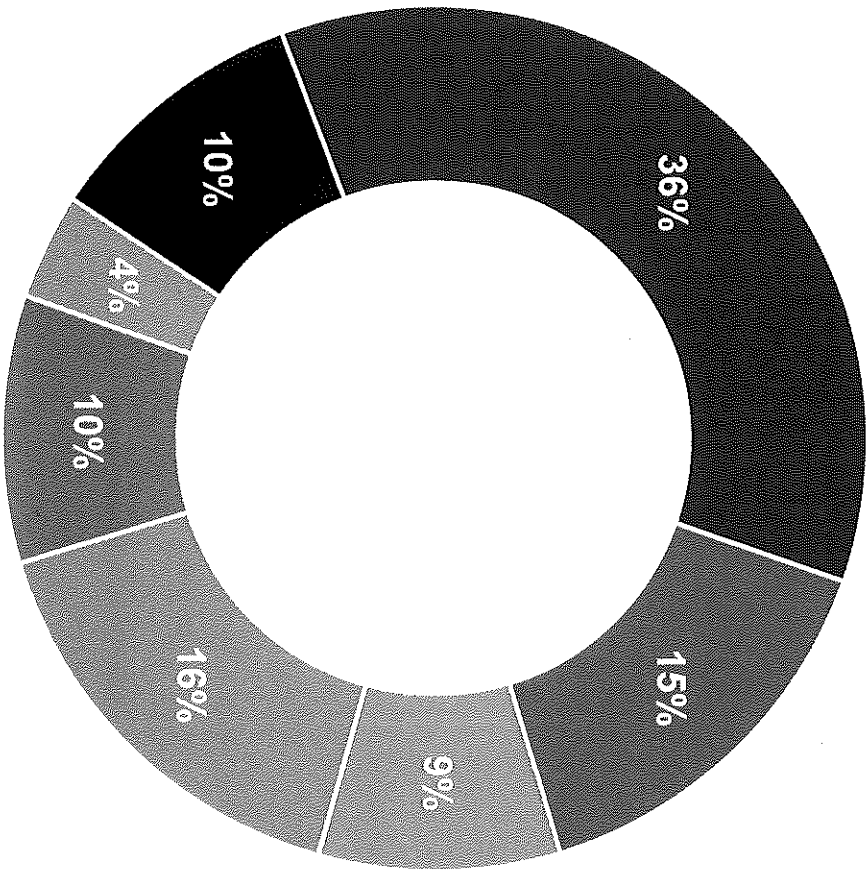


CBOE MARKET VOLATILITY INDEX (VIX)



PRIT Asset Allocation

Approved February 27, 2025



	AA 2024 Approved Range	AA 2025 Approved Range
Global Equity	31 – 41%	No Change
Core Fixed Income	12% - 18%	No Change
Value-Added Fixed Income	6% - 12%	No Change
Private Equity	13% - 19%	No Change
Real Estate	7% - 13%	No Change
Timberland	1% - 7%	No Change
Portfolio Completion Strategies	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.



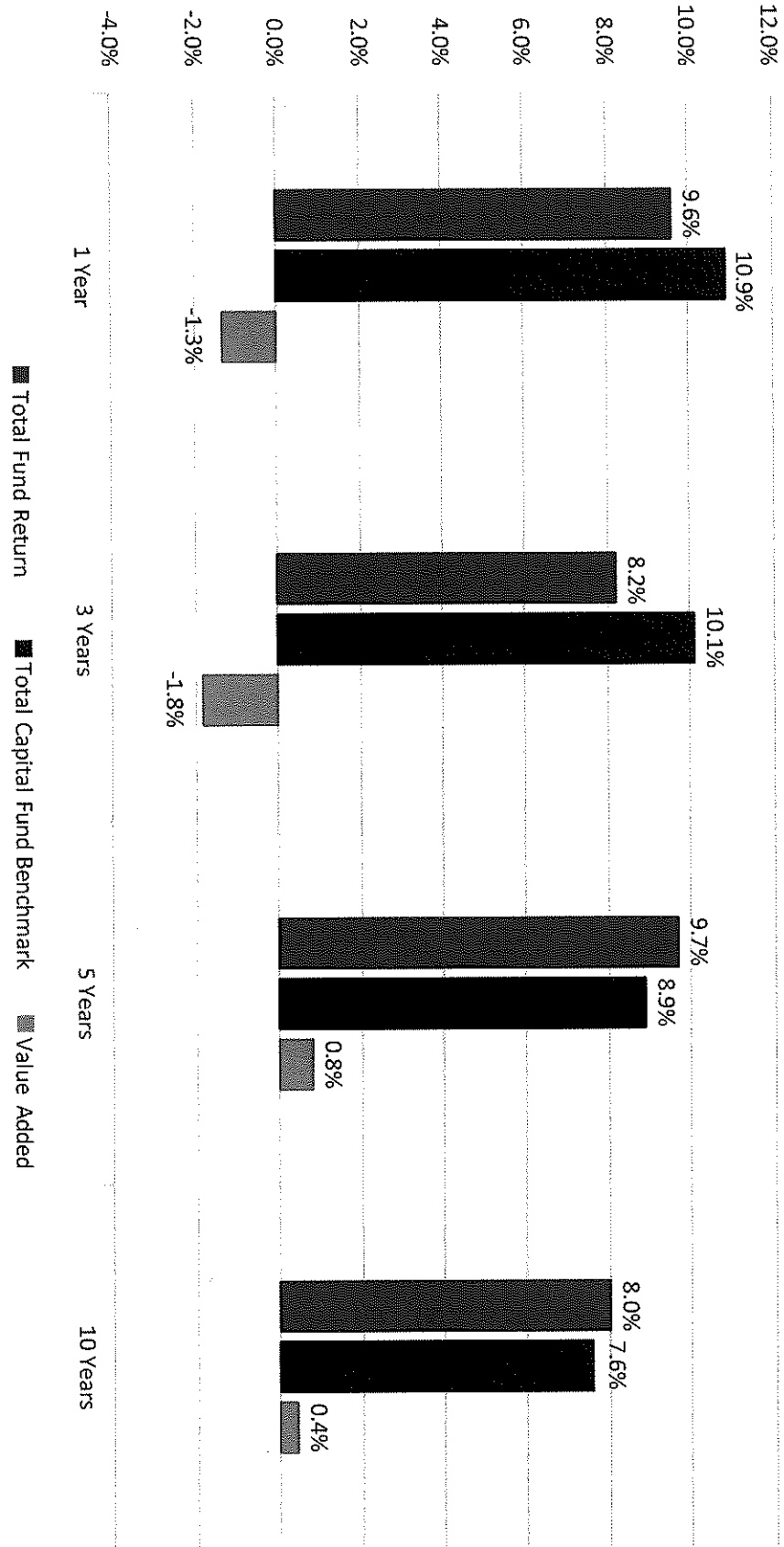
PRIT FUND PERFORMANCE

**Mass
PRIM**

AS OF JUNE 30, 2025

PRIT Fund Total Returns

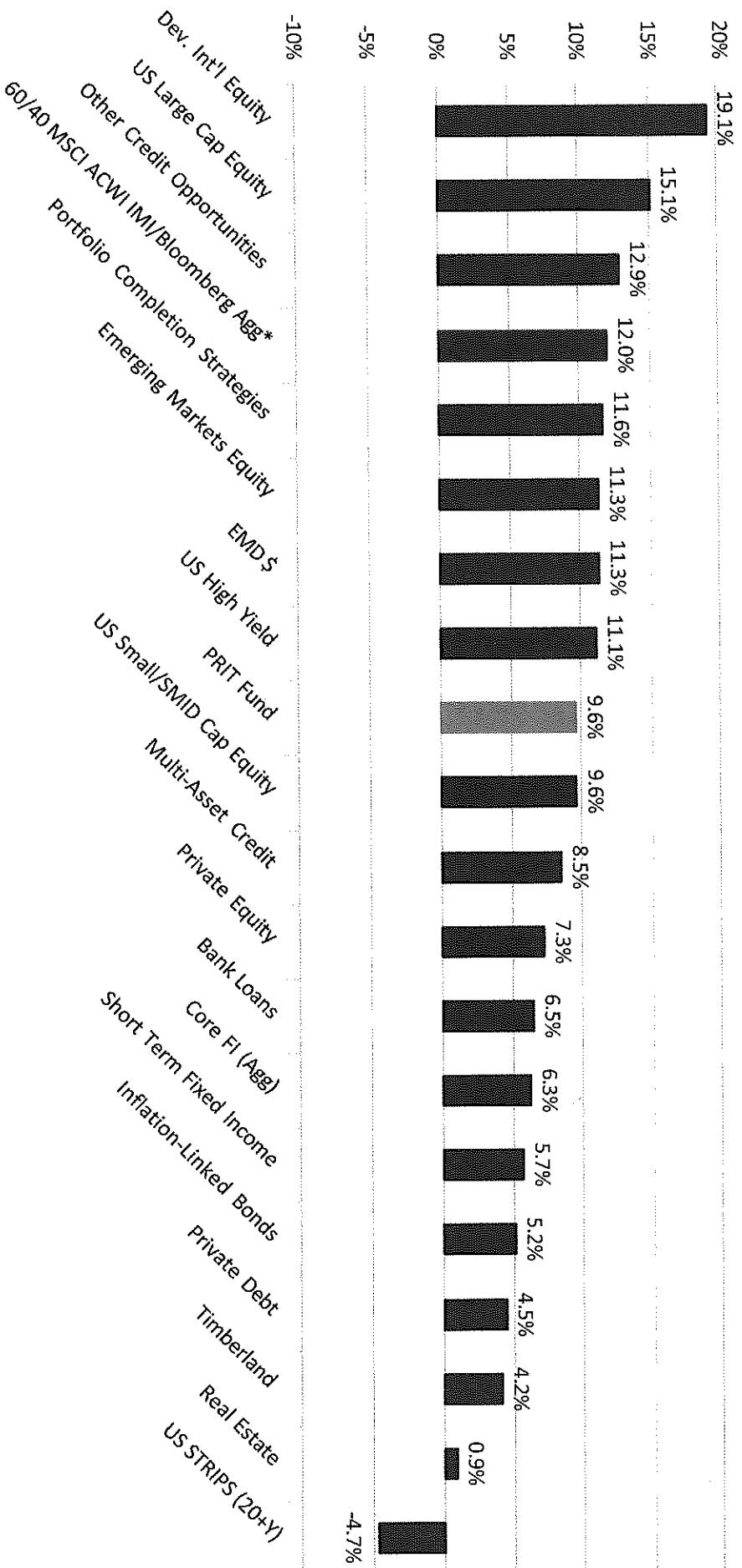
Annualized Returns as of June 30, 2025 (Net of Fees)



Source: BNY. Totals may not add due to rounding. Total Capital Fund Benchmark includes private equity benchmark.
PRIT Fund Fiscal Year 10-year average ratio of expenses is 0.51%

PRIT Performance By Strategy – One Year

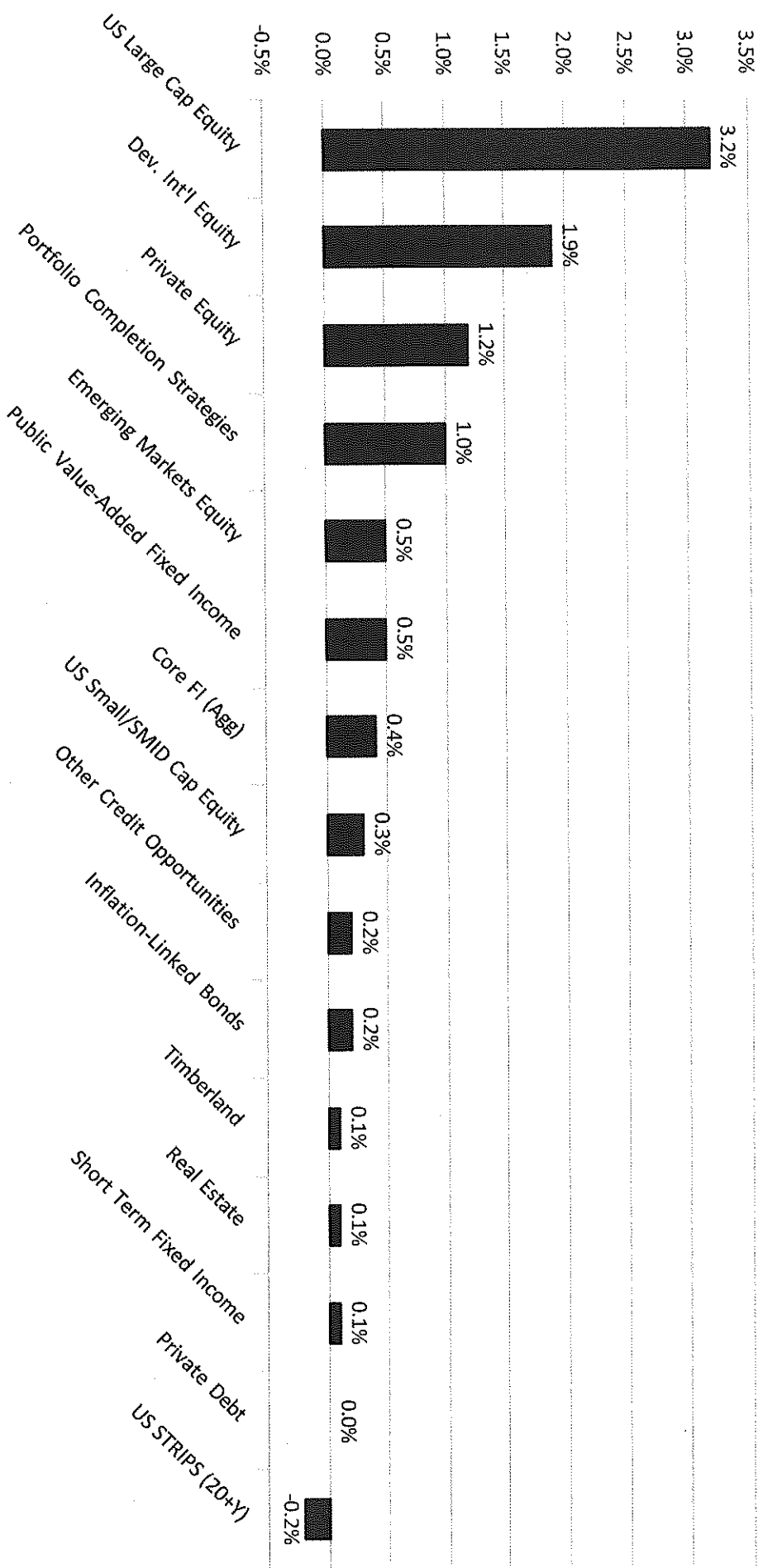
One-Year Ended June 30, 2025 (Net of Fees)



Source: BNY, Solovis. 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 Contribution to Return by Strategy

One-Year Ended June 30, 2025 (Net of Fees)



Source: BNY. Totals may not add due to rounding.

Hampden County Retirement System

Net of Fees Returns as of June 30, 2025

	MKT \$	%	Month	QTR	FYTD	CYTD	1 Year	3 Year	5 Year	10 Year	ITD
<u>Hampden County Retirement System</u>	<u>578,937,656</u>	<u>100%</u>	<u>2.49</u>	<u>5.45</u>	<u>9.64</u>	<u>5.58</u>	<u>9.64</u>	<u>8.29</u>	<u>9.60</u>	<u>7.93</u>	<u>8.90</u>
GENERAL ALLOCATION	578,937,656	100%	2.49	5.45	9.64	5.58	9.64	8.29	9.61	7.94	
TOTAL CAPITAL FUND BENCHMARK			2.59	5.57	10.93	6.40	10.93	10.05	8.86	7.59	

Inception date: November 1, 2004

Segmentation Program

Products Currently Available to Local Retirement Systems

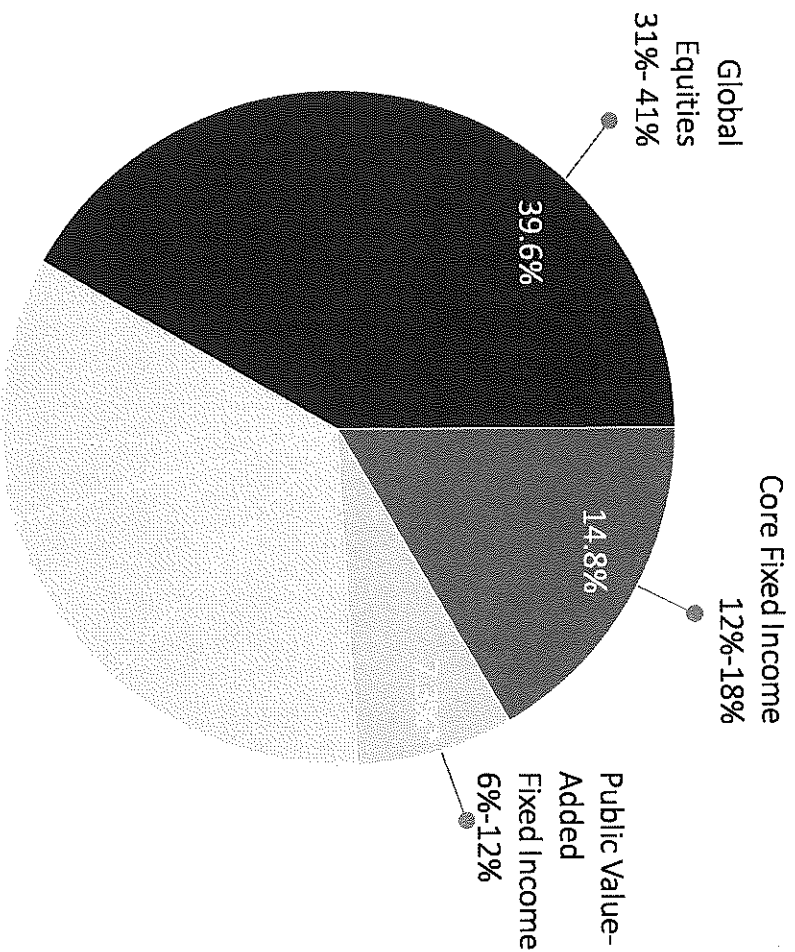
- General Allocation Account (PRIT Core Fund)*
 - Public Value-Added Fixed Income
 - High Yield Bonds, Bank Loans, Multi-Asset Credit, Emerging Markets Debt
- Domestic Equity
 - Real Estate
- International Equity
 - Private Equity Vintage Year
- Emerging Markets Equity
 - Hedge Funds
- Core Fixed Income
 - Core Bonds, Long Duration Treasuries-STRIPS, US TIPS, Inflation-Linked Bonds, Short-Term Fixed Income

*The Other Credit Opportunities and Private Debt components of the Value-Added Fixed Income Portfolio, the Real Assets component of the Portfolio Completion Strategies Portfolio, the Future Initiative Managers component of Global Equity, and the Timberland Portfolio, are currently only available to investors in the General Allocation Account.

Public Market Portfolios

PRIT FUND TARGET ASSET ALLOCATION

Actual Allocation as of June 30, 2025



\$71.2 billion 61.7% of PRIT Fund

- Global Equities: \$45.7 billion, 39.6% of PRIT Fund
- Public Fixed Income: \$25.5 billion, 22.1% of PRIT Fund*

47% Active / 53% Passive

- Global Equities: 39% Active / 61% Passive
- Public Fixed Income: 64% Active / 36% Passive

74 Portfolios

- 34 equity portfolios
- 40 fixed income portfolios

16 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
- Multi-Asset Credit
- EMD \$
- Other Credit Opportunities

4 Team Members

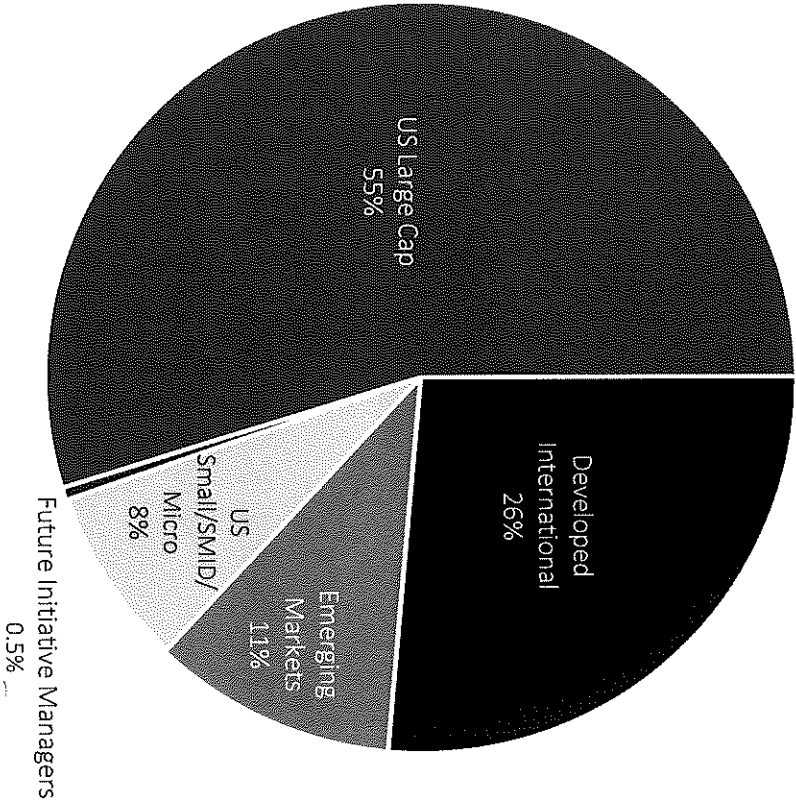
Source: BNY and PRIM Staff.
*Excludes Private Debt allocation.

Global Equity

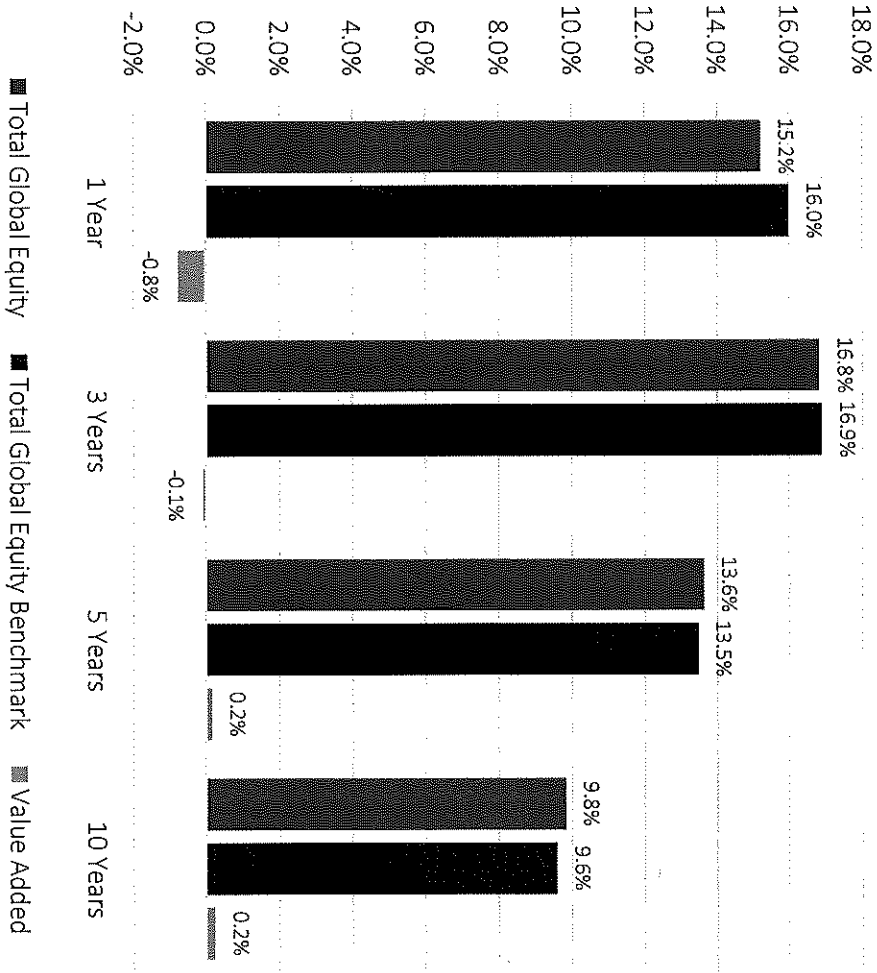
As of June 30, 2025, \$45.7 Billion – 39.6% of PRIT Fund (Target 31%-41%)

ASSET ALLOCATION

39% ACTIVE/61% PASSIVE



NET OF FEES PERFORMANCE



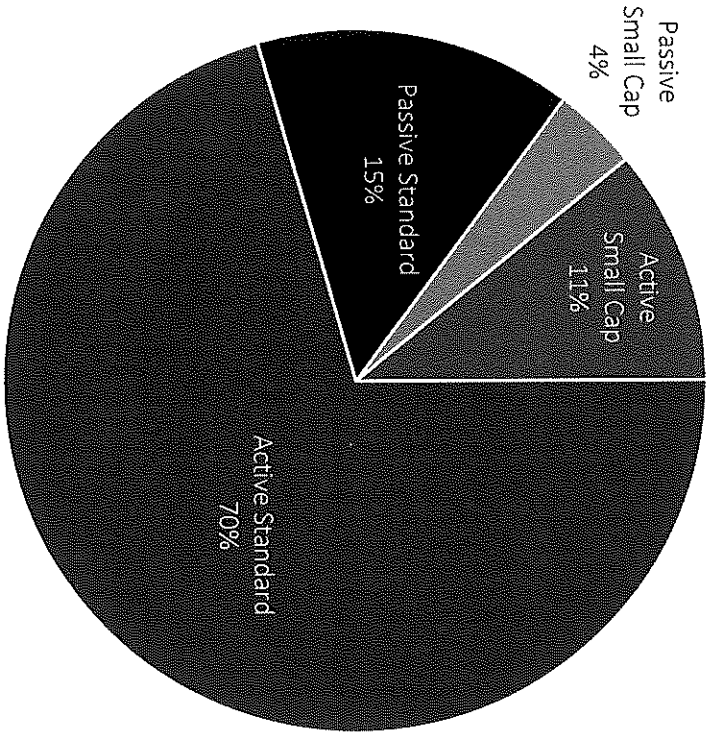
*Total Global Equity Benchmark: 100% MSCI ACWI IMI with USA Gross Custom Exclusion Index (Net Variant), customized to exclude legislatively prohibited tobacco, Sudan, Iran and Russian securities.
Source: BNY and Solovis.

International Equity

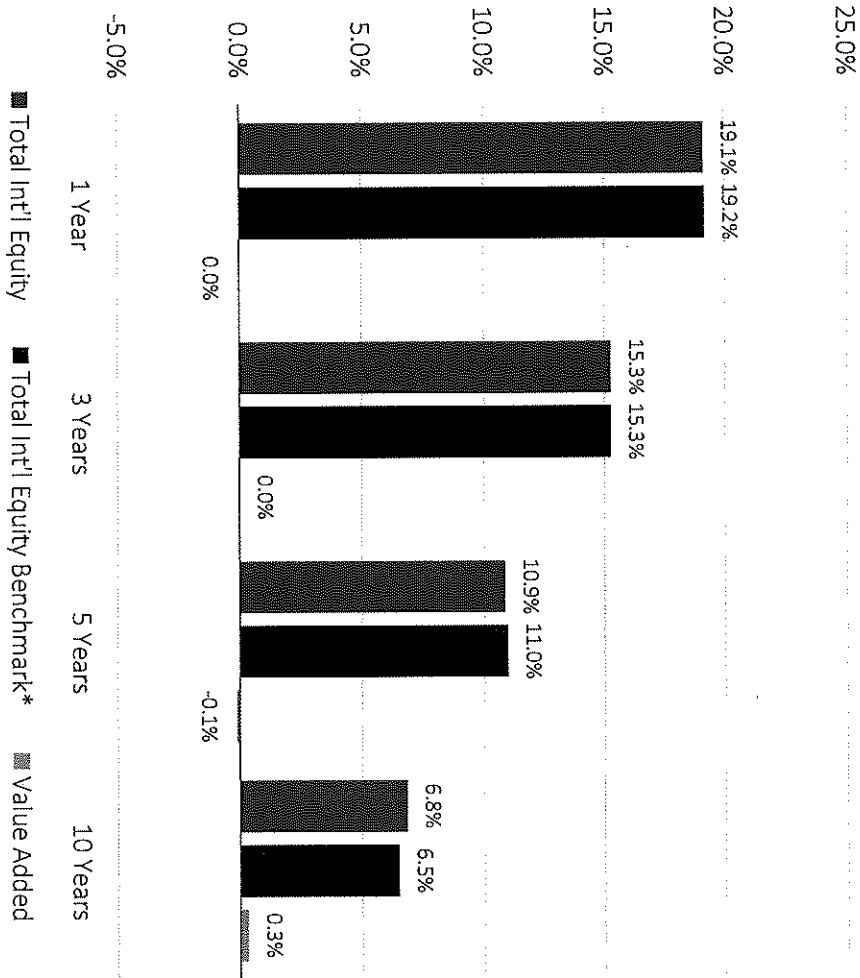
As of June 30, 2025, \$12.1 Billion – 10.5% of PRIT Fund

ASSET ALLOCATION

81% ACTIVE/19% PASSIVE



NET OF FEES PERFORMANCE



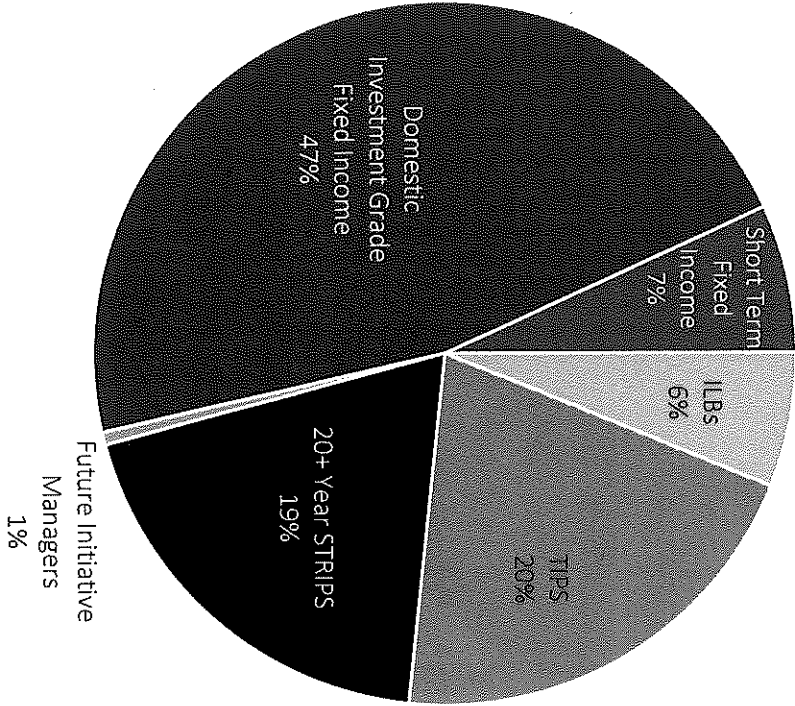
*Total International Equity Benchmark: 100% Custom MSCI World Ex-US IMI Net Divs, customized to exclude legislatively prohibited tobacco, Sudan Iran and Russian securities
Source: BNY and PRIM Staff.

Core Fixed Income

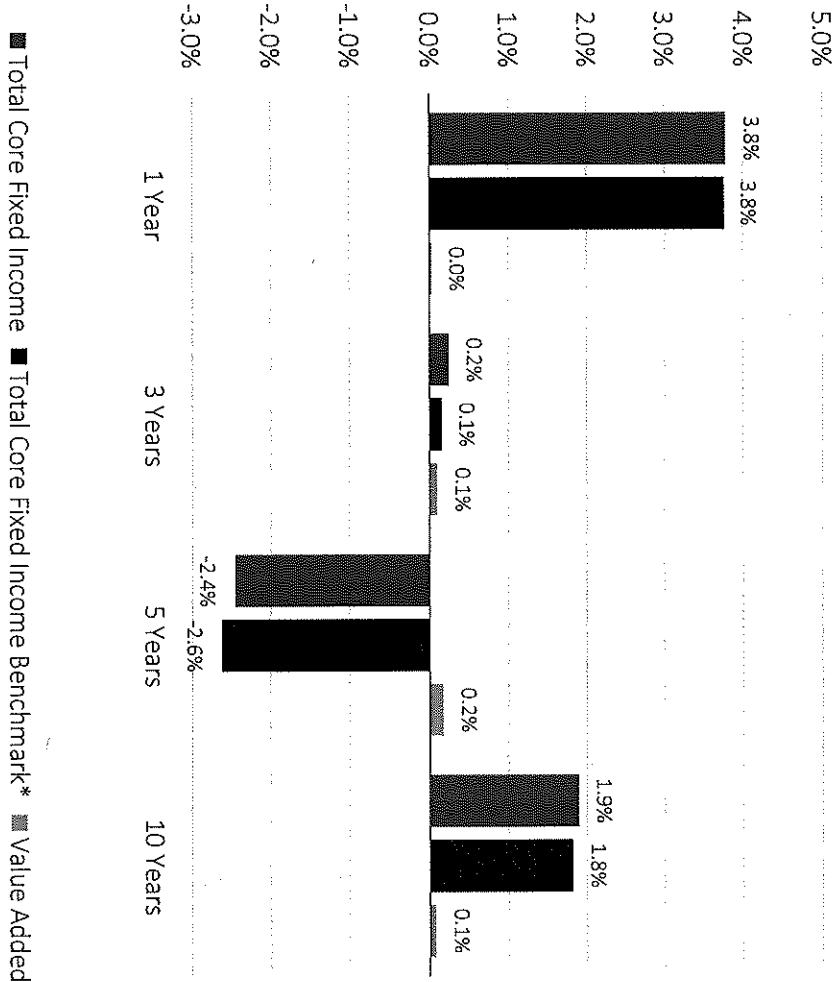
As of June 30, 2025, \$17.1 Billion – 14.8% of PRIT Fund (Target 12%-18%)

ASSET ALLOCATION

46% ACTIVE/54% PASSIVE



NET OF FEES PERFORMANCE

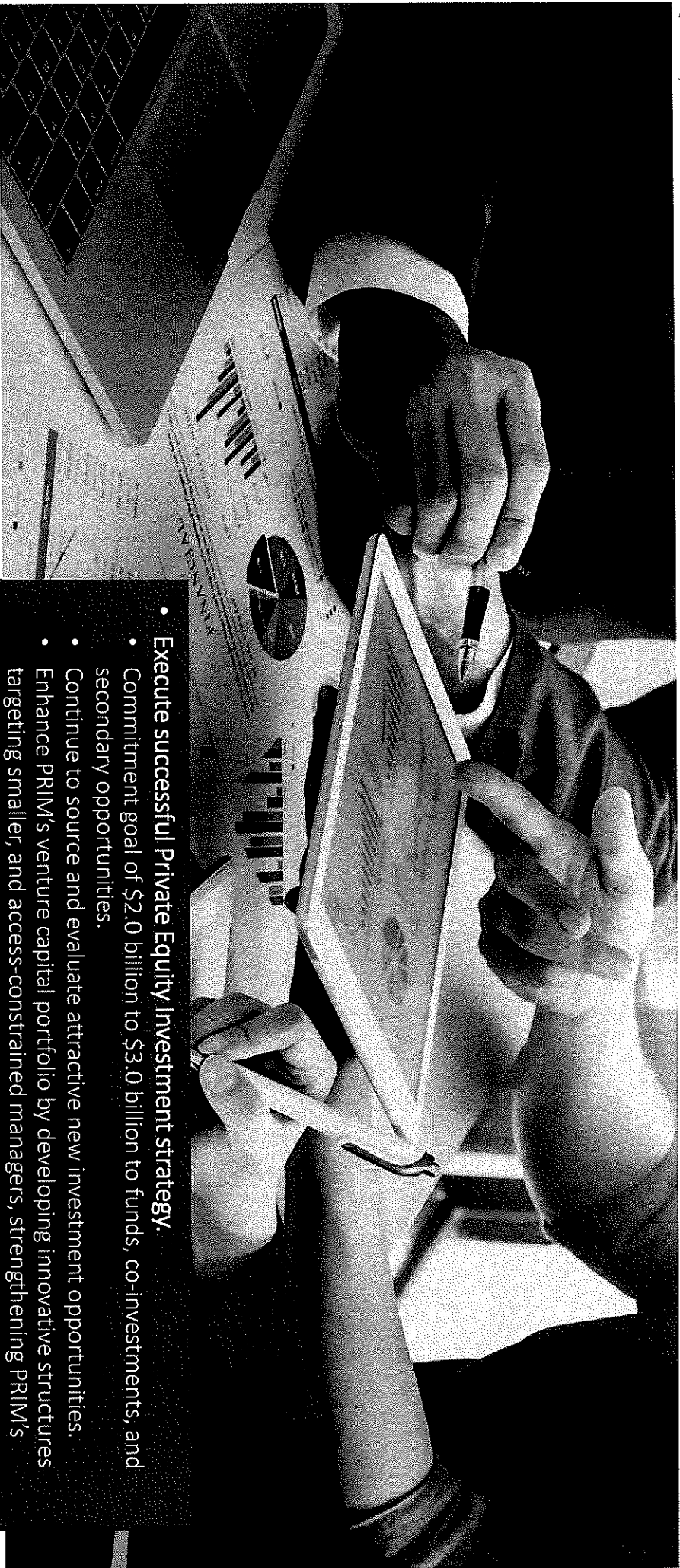


■ Total Core Fixed Income ■ Total Core Fixed Income Benchmark * ■ Value Added

*Total Core Fixed Income Benchmark: 46.67% Bloomberg U.S. Aggregate Bond/20% Bloomberg Global IL U.S. Tips/6.67% Bloomberg World Gov Inflation-Linked USD Hdg/20% Bloomberg US STRIPS 20+ Years/6.67% Bloomberg U.S. Treasury: 1-3 Year
Source: BNY and PRIM Staff.

PRIVATE EQUITY PORTFOLIO





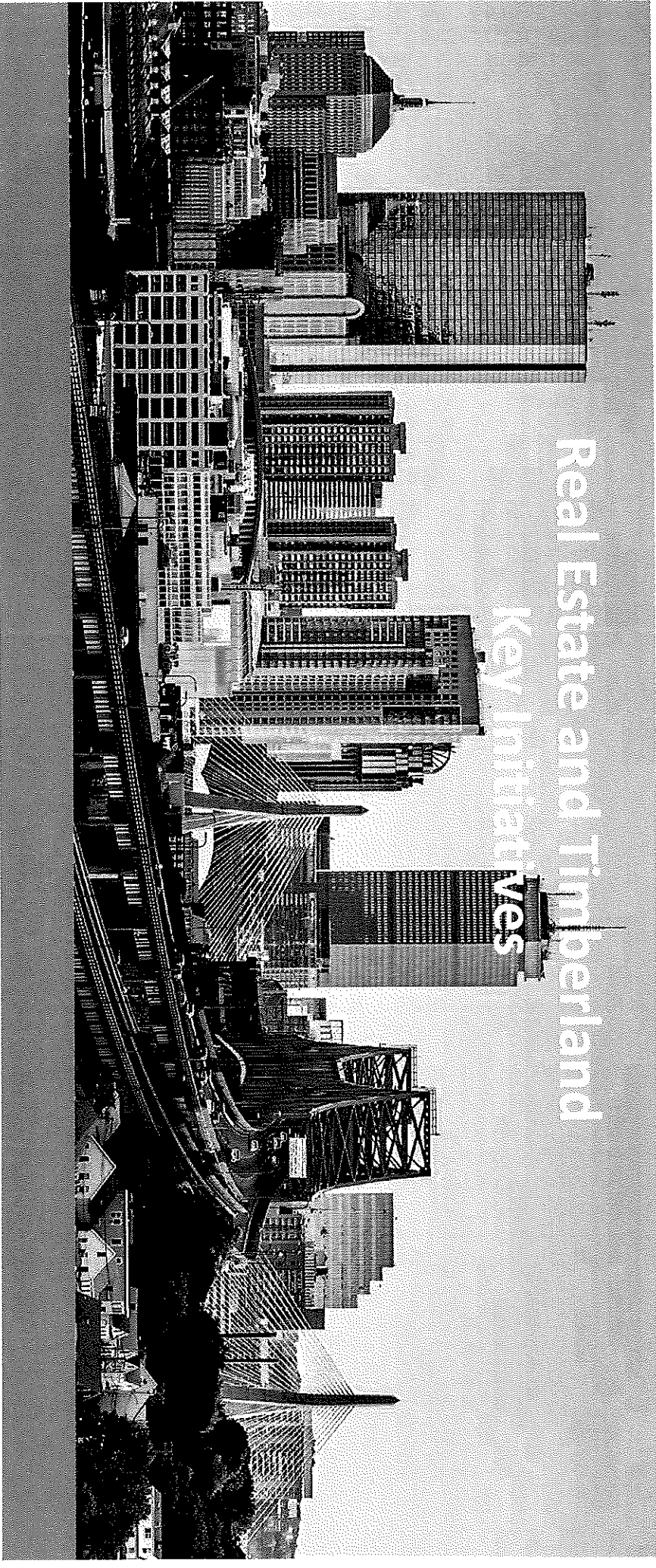
Private Equity Key Initiatives

- **Execute successful Private Equity Investment strategy.**
 - Commitment goal of \$2.0 billion to \$3.0 billion to funds, co-investments, and secondary opportunities.
 - Continue to source and evaluate attractive new investment opportunities.
 - Enhance PRIM's venture capital portfolio by developing innovative structures targeting smaller, and access-constrained managers, strengthening PRIM's capabilities and positioning the portfolio for long-term success.
 - Continue to source and evaluate diverse and emerging investment managers, consistent with the 2021 Investment Equity legislation.
- **Private Equity Research**
 - Expand PRIM's commitment modelling capabilities using AI tools and technology solutions.
 - Continue to evaluate secondary market opportunity.
- **Build the team's expertise and capacity.**
 - Recruit talented investment professionals with complementary skills to existing members.
 - Issue Request for Proposals for private equity advisory services and evaluate providers.
 - Continue to collaborate with other PRIM teams.
 - Continue to collaborate with the Director of Stewardship on PRIM's Stewardship Priorities.

An aerial, black and white photograph of a city grid. A large, prominent building with a grid-like facade is the central focus. The surrounding streets and other buildings create a complex geometric pattern. The image has a high-contrast, almost graphic quality.

REAL ESTATE AND TIMBERLAND PORTFOLIOS

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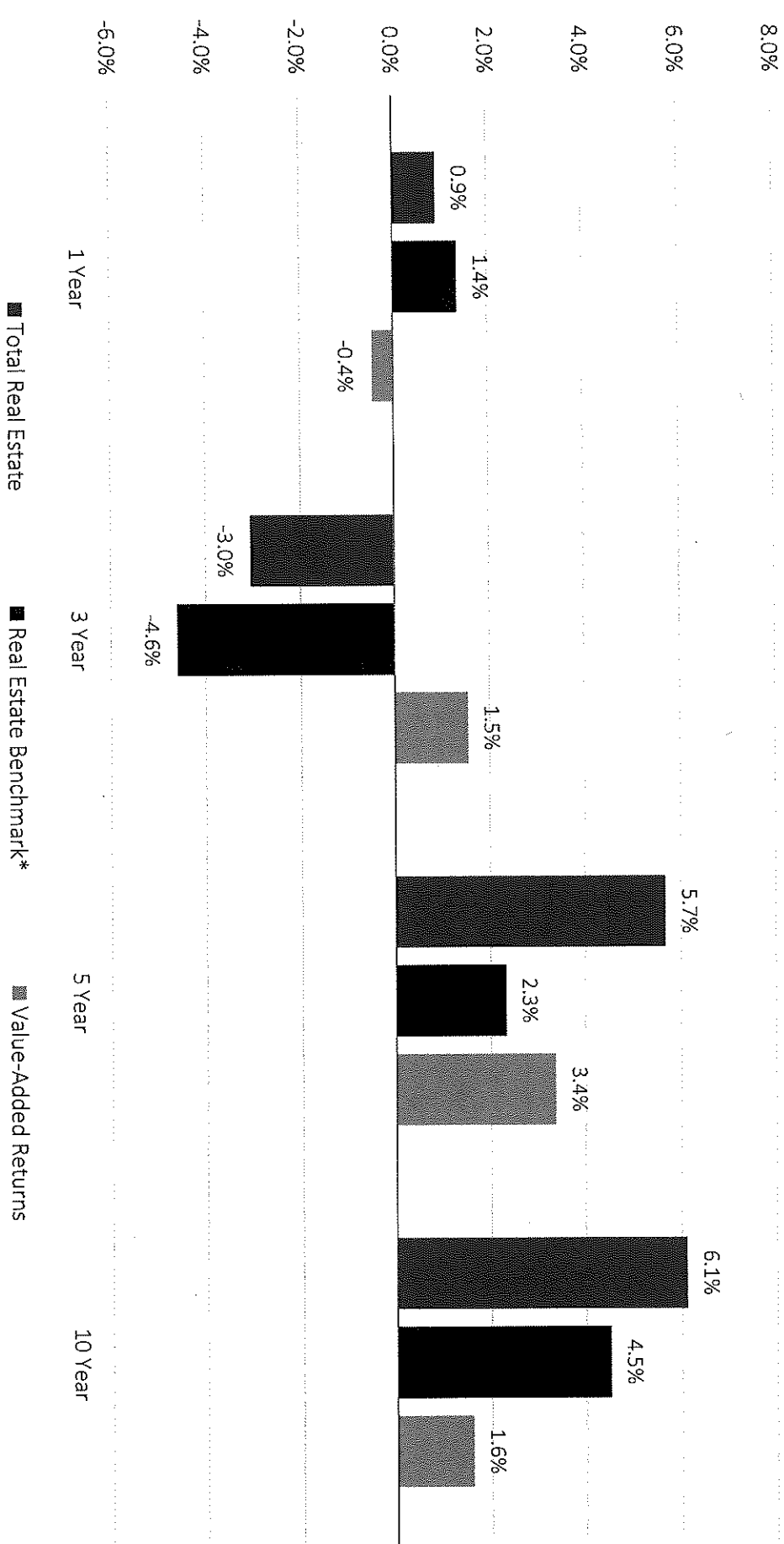


Real Estate and Timberland Key Initiatives

- Continue staff's ongoing portfolio management activities: capital structure management; existing investment manager and asset level business plan monitoring; and idea generation, sourcing, analysis, and implementation.
- Monitor the NCREIF Index sector transition and adapt PRIM's manager benchmarks accordingly.
- Explore enhancements to PRIM's investment manager evaluation and sourcing process.
- Further refine the sector / geography ranking model.
- Maintain high levels of collaboration with colleagues across the organization.
- Collaborate with PRIM's Performance Reporting Team to further develop tools for real estate and timberland performance analysis.
- Finalize new REIT manager implementation process and evaluate future growth strategy.
- Continue to explore applications of large language models (AI) in investment analysis/monitoring processes.
- Continue to collaborate with the Director of Stewardship on PRIM's Stewardship Priorities.
- Continue to source and evaluate diverse and emerging investment managers, consistent with the 2021 Investment Equity legislation.

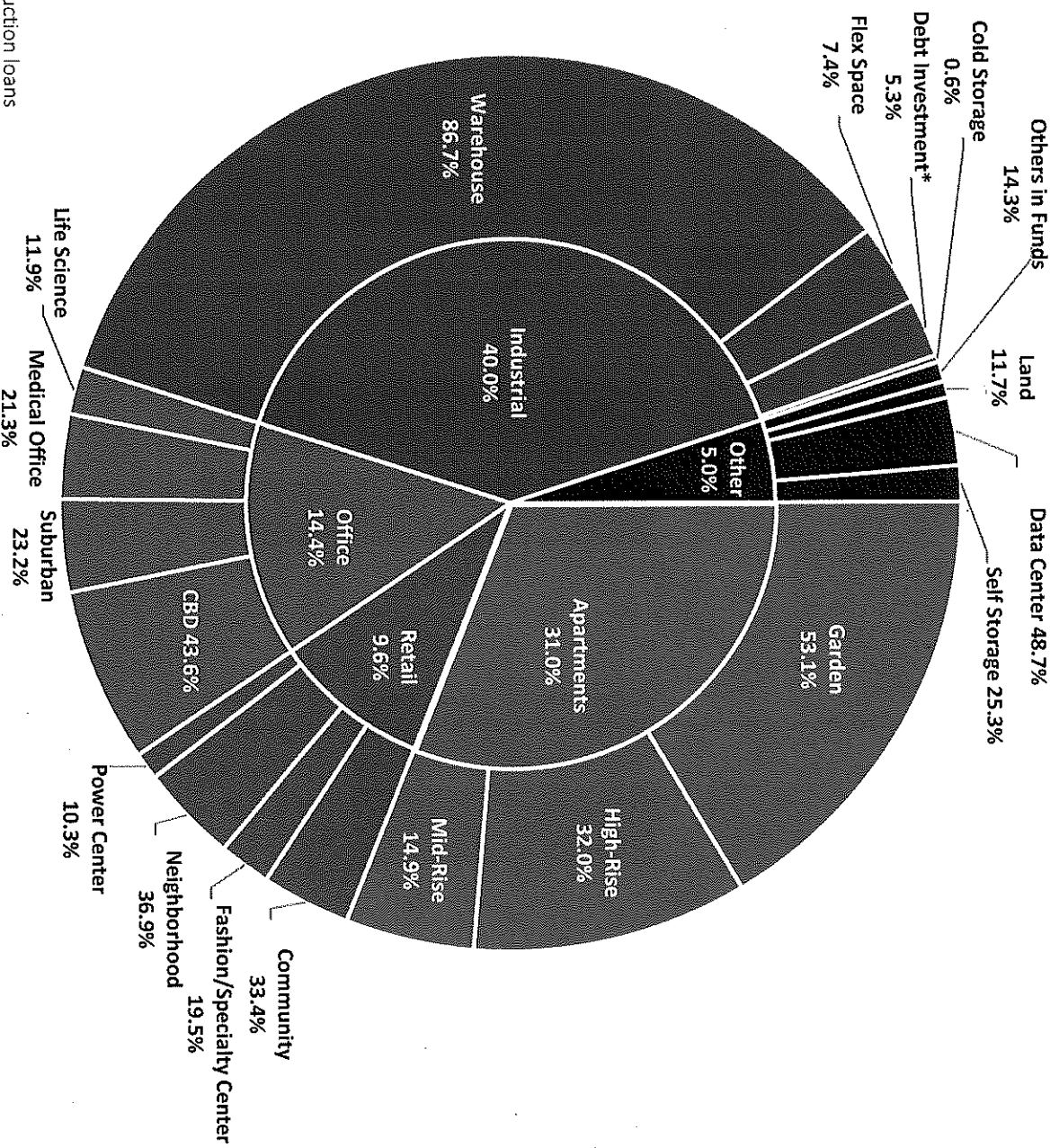
Total Real Estate Performance

Annualized Returns as of June 30, 2025 (Net of Fees)



Total Real Estate Benchmark: The investment performance of the sub asset class benchmarks is applied 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.
Source: BNY.

Property Subtype Breakdown



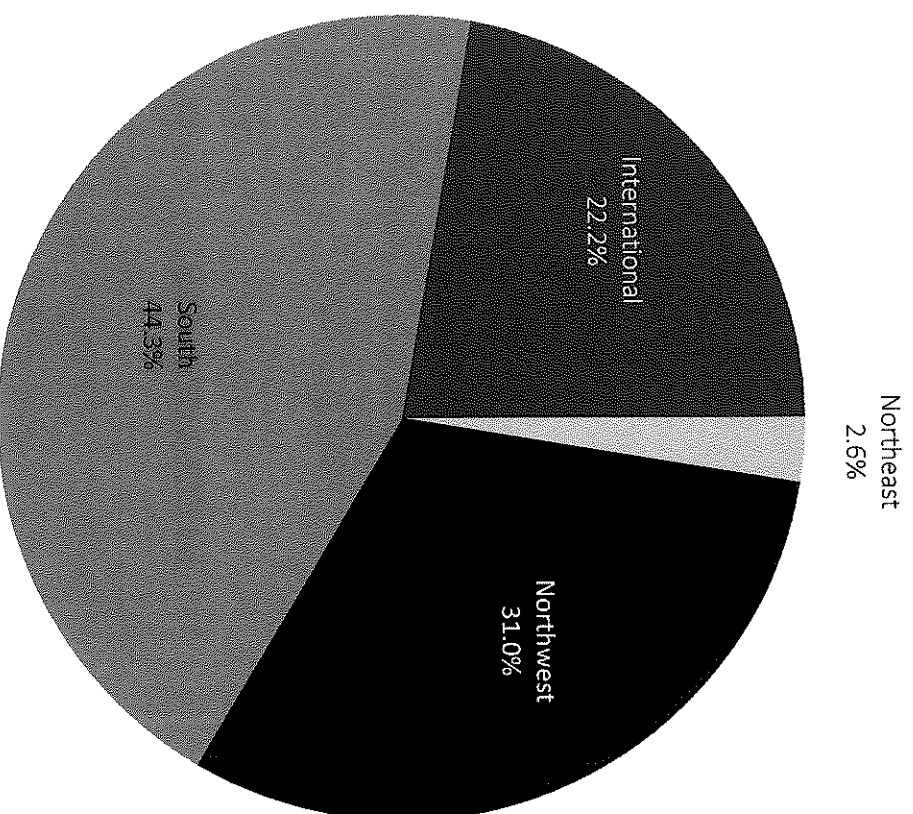
* Debt investments in industrial construction loans

Source: BNY, Chatham, NCREIF, and PRIM Staff. As of June 30, 2025.

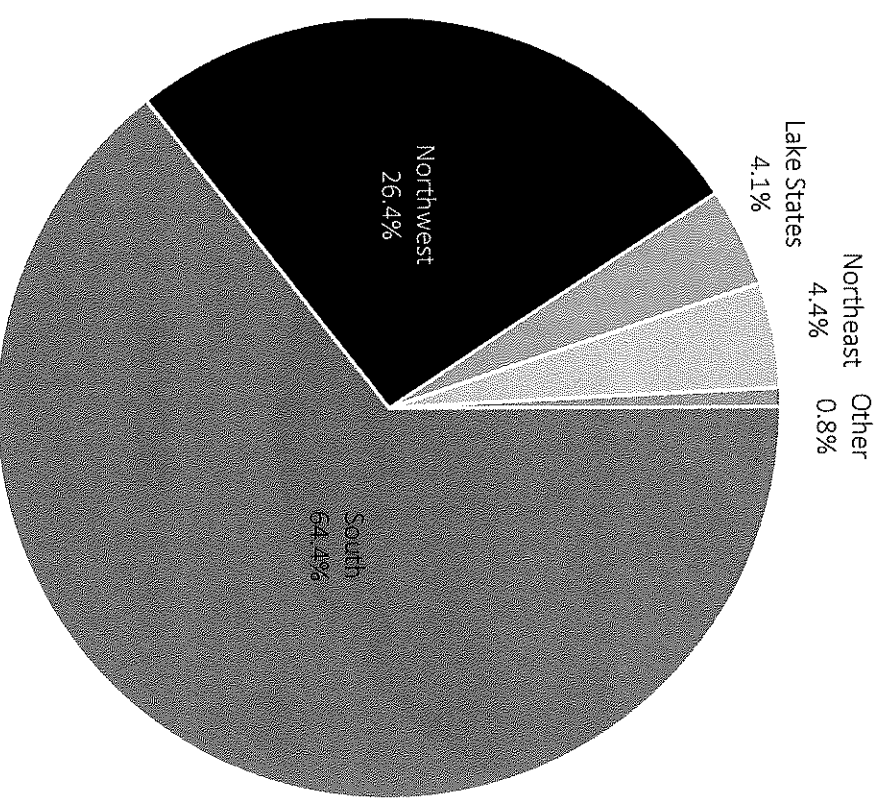
Timberland Exposure by Region vs. Benchmark

As of June 30, 2025, \$3.2 Billion – 2.8% of PRIT Fund (Target 1%-7%)

PRIM REGION EXPOSURE



BENCHMARK

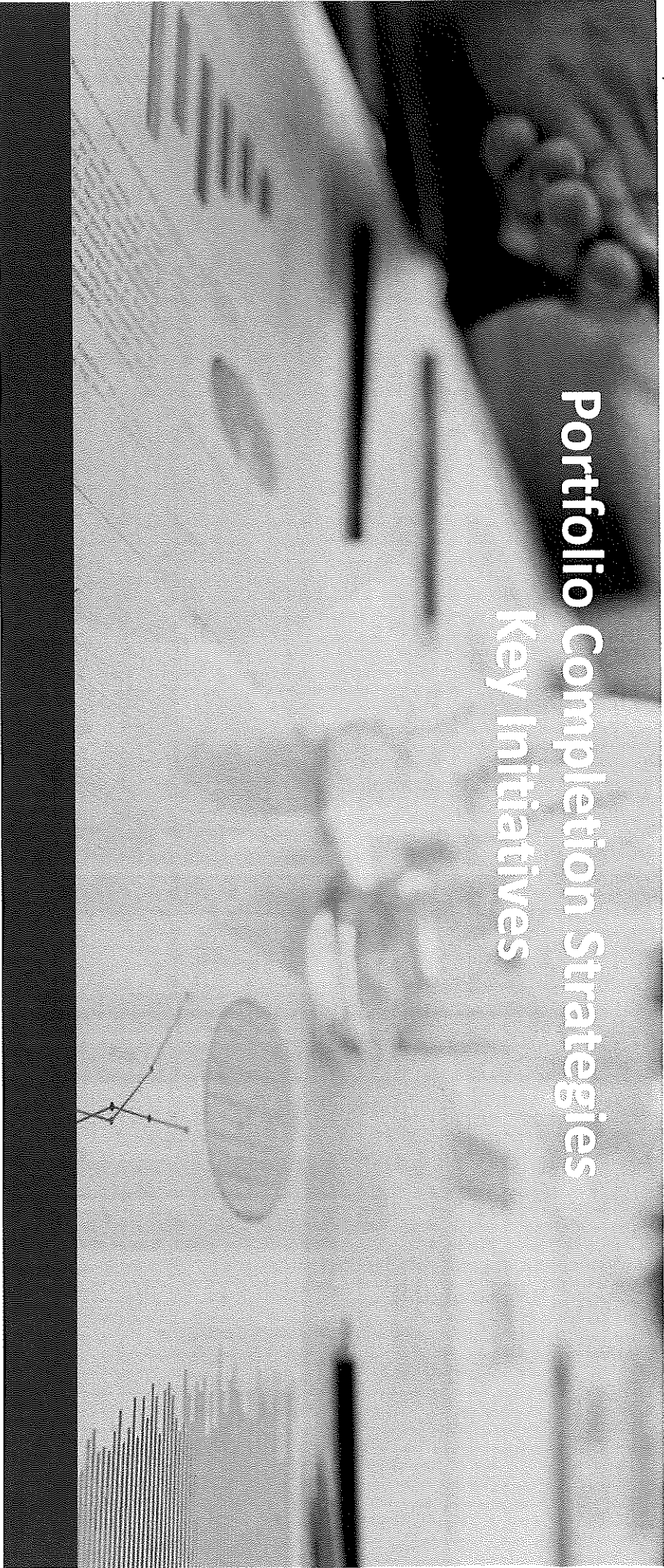


Source: BNY, NCREIF, and PRIM Staff.



PORTFOLIO COMPLETION STRATEGIES

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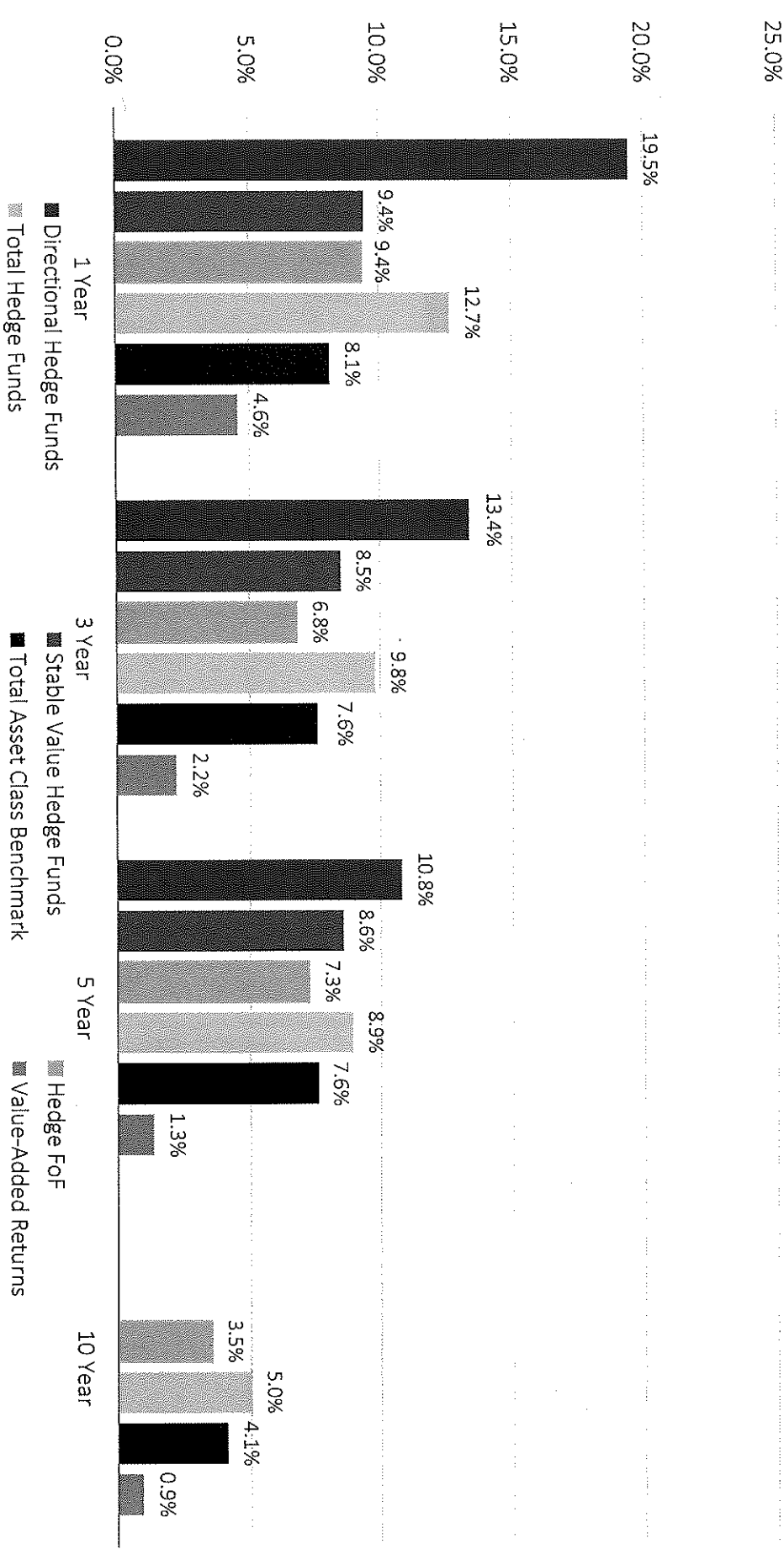
Portfolio Completion Strategies

Key Initiatives

- Continue to source high quality partners and investment opportunities pertaining to both Stable Value and Directional Funds.
- Oversee orderly exit from select legacy investments.
- Research non-US Special Situation/Distressed investing.
- Continue to identify and implement other value enhancing initiatives, including innovative fee structures and co-investments.
- Collaborate with Risk Team to review portfolio liquidity parameters and guidelines.
- Research Global Equity landscape with Public Equity team.
- Explore synergies and possible co-investments with Public Fixed Income and OCO teams.
- Continue to collaborate and exploit synergies with other asset classes.
- Continue to Collaborate with the Director of Stewardship on PRIM's Stewardship Priorities.
- Continue research on public and value add infrastructure opportunities.
- Explore applications of large language models (AI) in investment analysis/monitoring processes.

Hedge Funds Performance

Annualized Returns as of June 30, 2025 (Net of Fees)



Total Hedge Funds: Benchmark 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 class.
Source: BNY.

Risk-Adjusted Return and Market Beta Performance

As of June 30, 2025 (Net of Fees)

Performance by Asset Classes (as of Jun-2025)

	Directional HF	Stable Value HF	Total HF	Total PCS	PRIT Fund	MSCI ACWI	Barclays Agg
1 Year							
Return	19.5%	9.5%	12.7%	11.6%	9.6%	16.7%	6.1%
Volatility	8.7%	1.7%	3.6%	3.5%	5.4%	10.5%	5.2%
Return/Volatility	2.2	5.7	3.5	3.4	1.8	1.6	1.2
EQ Beta	0.5	0.1	0.2	0.2	0.5	1.0	0.2
Bond Beta	(0.0)	0.1	0.0	0.1	0.6	0.8	1.0
Beta vs. PRIT Fund	0.9	0.2	0.4	0.5	1.0	1.9	0.6
3 Year							
Return	13.4%	8.5%	9.8%	8.5%	8.2%	17.9%	2.5%
Volatility	9.7%	2.1%	3.8%	3.4%	7.6%	14.8%	7.3%
Return/Volatility	1.4	4.1	2.6	2.5	1.1	1.2	0.3
EQ Beta	0.5	0.0	0.2	0.2	0.5	1.0	0.4
Bond Beta	0.9	0.1	0.3	0.2	0.9	1.5	1.0
Beta vs. PRIT Fund	1.1	0.1	0.4	0.3	1.0	1.9	0.8
5 Year							
Return	10.8%	8.6%	8.9%	7.8%	9.6%	14.2%	-0.7%
Volatility	9.5%	2.7%	4.0%	3.6%	7.9%	15.4%	6.4%
Return/Volatility	1.1	3.2	2.2	2.2	1.2	0.9	(0.1)
EQ Beta	0.5	0.1	0.2	0.2	0.5	1.0	0.3
Bond Beta	0.8	0.0	0.3	0.2	0.9	1.6	1.0
Beta vs. PRIT Fund	0.9	0.1	0.4	0.3	1.0	1.8	0.6

Note: returns are annualized, net of fees.

- Since 2Q 2020, BNY started separately reporting Stable Value vs. Directional, after Asset Allocation decided to bifurcate their different value propositions.
- Source: BNY, Factset, and PRIM Staff.



STEWARDSHIP & SUSTAINABILITY

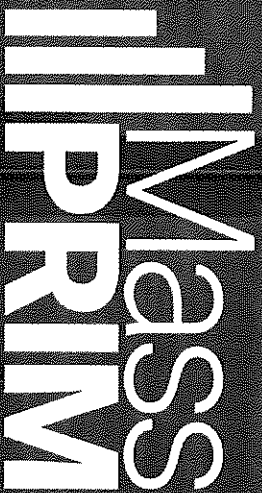


Ambition and Action Steps for Stewardship Priorities

Our ambition with each stewardship priority reflects the maturity of the issue, MassPRIM's expertise and resources, potential to deliver measurable outcomes and opportunities to demonstrate thought leadership in the investment community.

Our actions to operationalize these priorities across the fund will include:

- 1) **Assess impact on risk/return:** Regularly assessing how these priorities improve the risk/return profile of the PRIT Fund.
- 2) **Engagement:** Engaging purposefully with portfolio companies, including through proxy voting.
- 3) **Manager/consultant involvement:** Actively involving investment managers and consultants across all asset classes.
- 4) **Strategic partnerships:** Collaborating strategically with aligned investor groups that share our objectives.
- 5) **Progress assessment:** Systematically tracking and reporting progress.



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THANK YOU

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