



PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD

Presentation to the
City of Newton
OPEB Trust Board

Tuesday, September 13, 2016

Presented by
Paul W. Todisco, Senior Client Services Officer, PRIM

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



Composition of the State Retiree Benefits Trust Fund Board

- ❑ Secretary of Administration & Finance, or designee
Kristen Lepore, Secretary of Administration & Finance
-Lauren Peters serves as Secretary Lepore's Designee
- ❑ State Treasurer, or designee
Deborah B. Goldberg, State Treasurer & Receiver-General
-Nicola Favorito serves as Treasurer Goldberg's Designee and is SRBTF Board Chair
- ❑ State Comptroller, or designee
Thomas G. Shack III, Esq., State Comptroller
- ❑ Executive Director, Group Insurance Commission, or designee
Dolores L. Mitchell, Executive Director, GIC
- ❑ Executive Director, Public Employee Retirement Administration Commission, or designee
Joseph E. Connarton, Executive Director, PERAC
- ❑ Treasurer's appointee
Michael Tow, President & Founder, New Boston Financial
- ❑ Governor's appointee
Terrence Finn, Edwards Angell Palmer & Dodge LLP

Five of the seven Trustees are Ex Officio Members. The two appointed Trustees serve five-year terms.



Governmental Entities Participating in the SRBTF

1. Town of Acton	31. Town of Marblehead
2. Town of Amherst	32. Marblehead Municipal Light Department
3. Town of Ayer	33. Massachusetts School Building Authority
4. Town of Bedford	34. Mass State Retirees
5. BiCounty Educational Collaborative, Franklin, MA	35. Mass Water Resources Authority
6. Town of Blackstone	36. Town of Medfield
7. Boston Redevelopment Authority	37. Town of Middleton
8. Town of Boxford	38. Town of Milton
9. Town of Braintree	39. Town of Montague
10. Town of Brewster	40. Town of Needham
11. Town of Brookline	41. City of New Bedford
12. Town of Burlington	42. City of Newburyport
13. Town of Chelmsford	43. City of Newton
14. Concord Area Special Education (CASE) Collaborative	44. Town of North Andover
15. Town of Cohasset	45. Town of Northborough
16. Town of Dedham	46. Town of Orleans
17. City of Fitchburg	47. Pilgrim Area Collaborative (PAC), Pembroke, MA
18. Town of Franklin	48. Town of Provincetown
19. Town of Harvard	49. Shawsheen Valley Technical High School, Billerica, MA
20. Town of Hingham	50. Town of Sherborn
21. Town of Holliston	51. Town of Stockbridge
22. Town of Ipswich	52. Town of Tewksbury
23. Town of Lancaster	53. Town of Wakefield
24. Lawrence Housing Authority	54. Wakefield Municipal Gas & Light Department
25. Town of Lenox	55. Town of Wayland
26. City of Leominster	56. Town of Wellesley
27. Town of Lincoln	57. Town of Westwood
28. Lowell Regional Transit Authority (LRTA)	58. Town of Wilmington
29. Lower Pioneer Valley Educational Collaborative	
30. Town of Manchester-By-The-Sea	





PENSION RESERVES
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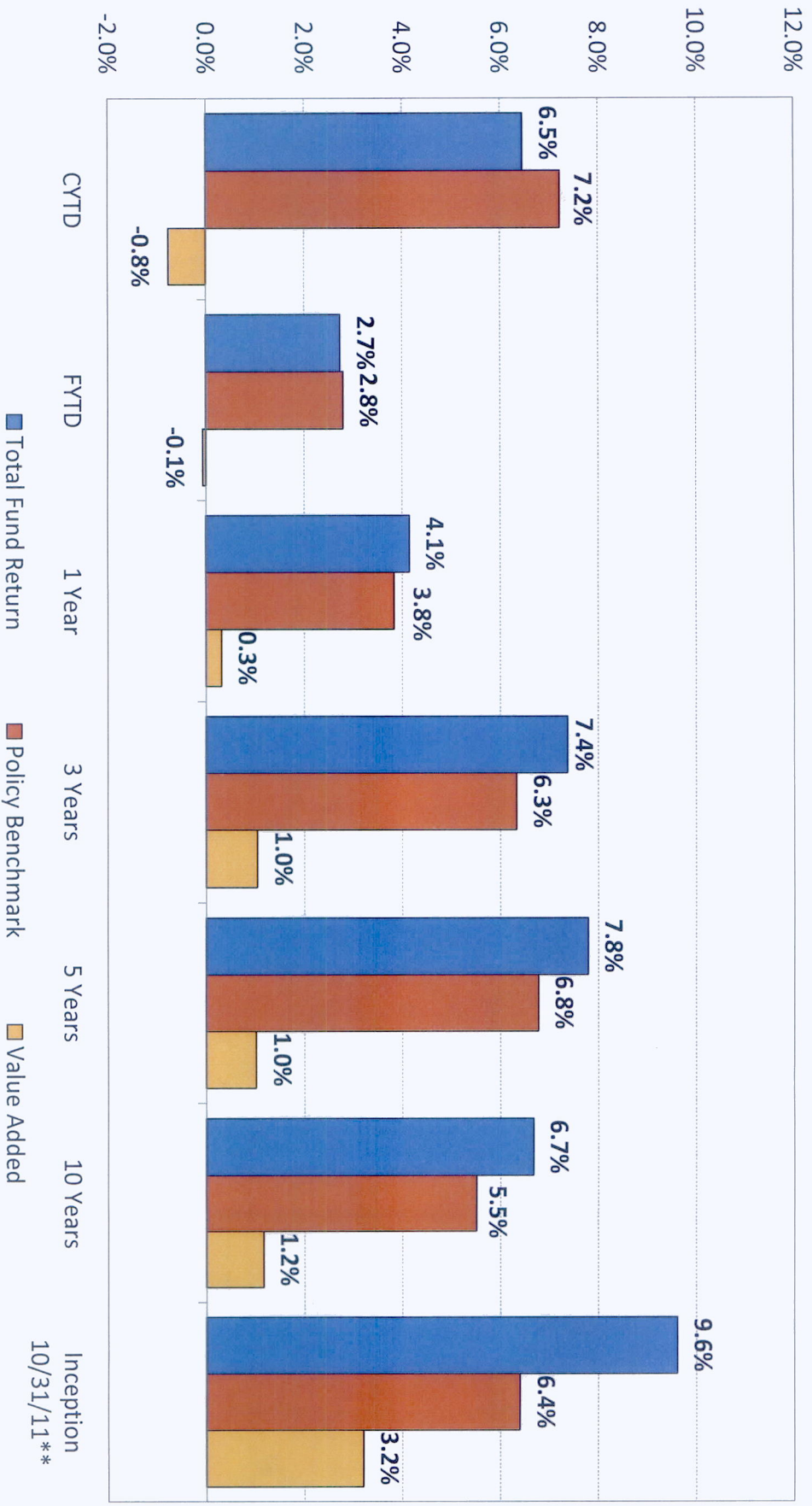
SRBT Fund Performance

As of July 31, 2016



Total SRBT Fund Returns (Net of Fees) - \$1.082 Billion *

Annualized Returns as of July 31, 2016



*Participant assets, excluding Mass State Retirees, were \$273 million as of July 31, 2016.

**The inception date for the SRBT's investment in the PRT Fund General Allocation Account (PRT GA) was 10/31/2011, when 82% of the fund was transitioned from separate accounts to PRT GA. The remaining 18% of separate account assets were transitioned over the following 14 months with 100% of assets invested in PRT GA by 12/31/2012. This ITD value reflects the inception-to-date return for PRT GA assets only.



City of Newton OPEB

NET of Fees Rates of Return July 31, 2016

	MKT \$ (000)	%	Month	QTD	FY '17	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Inception
NEWTON	3,759	100%	2.73	2.73	2.73	6.45	4.12				4.21
SRBTF CASH	91	2%	0.00	0.00	0.00	0.20	0.30				
SRBTF OPEB MASTER TRUST	3,668	98%	2.74	2.74	2.74	6.45	4.12				
POLICY BENCHMARK			2.79	2.79	2.79	7.22	3.83				

Inception date is July 1, 2014, when the City of Newton made an initial contribution of \$1.1 million to the SRBTF. From August 29, 2014 through August 1, 2016, the City made 24 subsequent contributions totaling \$2.4 million.





PENSION RESERVES
INVESTMENT
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The PRIM Board and PRIT Fund

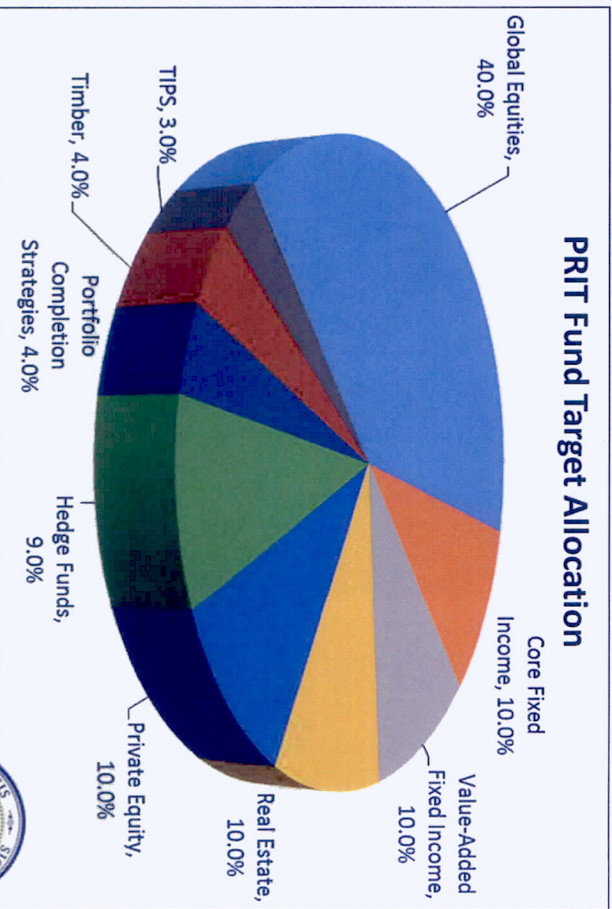


PRIT Fund Overview (July 31, 2016)

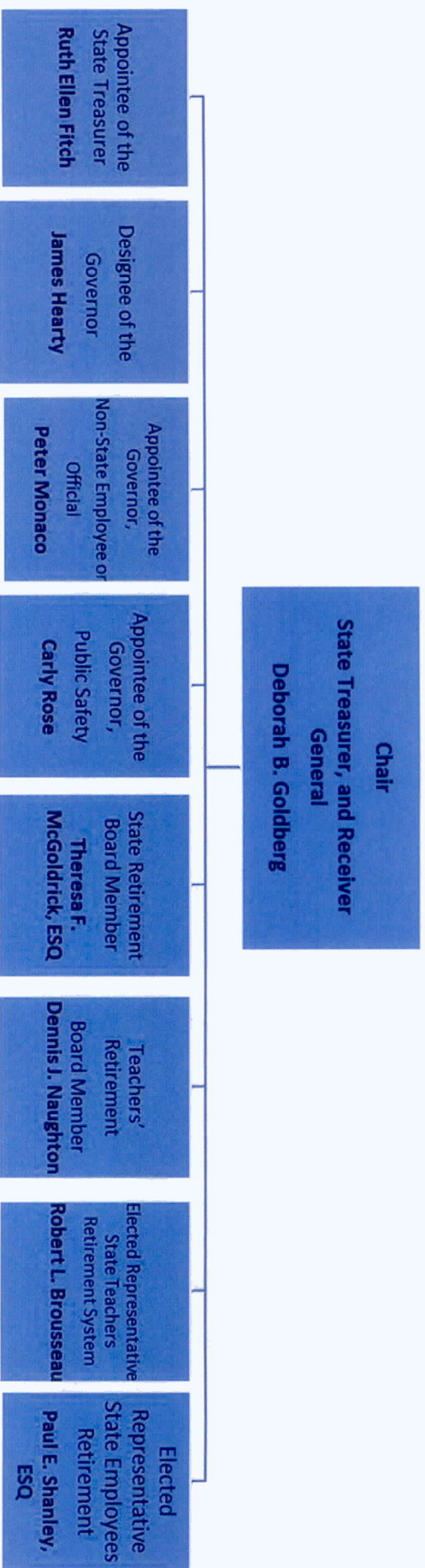
- ❑ **Oversight and staffing:**
 - 9 appointed and elected trustees
 - 4 advisory committees consisting of 36 industry professionals and board members
 - Staff of 40 professionals
- ❑ **Core Fund Facts**
 - \$62.3 billion AUM as of 7/31/2016
 - 40 public markets portfolios
 - 14 real estate, timber and REIT managers
 - 100+ private equity managers; 200+ partnerships
 - 25 direct hedge fund managers

- ❑ **11 asset classes:**
 - U.S. Large Cap Equity
 - U.S. SMID Cap Equity
 - Developed International Equity
 - Emerging Markets Equity
 - Core Bonds
 - 20+ Year STRIPS
 - U.S. TIPS
 - Global Inflation-Linked Bonds
 - High Yield
 - Bank Loans
 - Emerging Markets Debt

- ❑ **Key PRIM Initiatives:**
 - Project SAVE: More than \$100 million in annual fee savings realized; honored as a national model of public fund innovation. Next phase is exploration of internal management.
 - Bold and timely move to de-risk portfolio
 - Improved manager selection focusing on alpha
 - Hedge fund replication and managed accounts – we pay fees only for alpha
 - Portfolio completion strategies seeking equities-like return and fixed income-level risk
 - Private equity repeatedly #1 or #2 in U.S.
 - Michael Trotsky, CFA, Executive Director and Chief Investment Officer, awarded *Chief Investment Officer Magazine's "CIO Innovation Award."* (Dec. 2015)



Board Membership



Committee Membership

Investment Committee (12 Members)

1. Deborah B. Goldberg, Chair
2. Joseph Bonfiglio
3. C. LaRoy Brantley
4. Michael Even, CFA
5. Constance M. Everson, CFA
6. Ruth Ellen Fitch
7. James B.G. Hearty
8. Edward W. Kane
9. Peter Monaco
10. Paul E. Shanley, Esq.
11. Glenn P. Strehle, CFA
12. Timothy L. Vaill

Real Estate & Timberland Committee (8 Members)

1. Jill S. Hatton, CRE, Chair
2. Deborah B. Goldberg
3. Anthony E. Hubbard, Esq.
4. Dennis Kanin
5. Jack Lutz, Ph.D.
6. William F. McCall, Jr., CRE
7. Garlan Morse, Jr., CRE
8. Peter F. O'Connell

Administration & Audit Committee (11 Members)

1. Robert L. Brousseau, Chair
2. Ted C. Alexiades, CFPO
3. Patrick E. Brock
4. Joseph Connolly
5. Karen E. Gershman, CPA
6. Eileen Glovsky
7. Deborah B. Goldberg
8. James B.G. Hearty
9. Theresa F. McGoldrick, Esq.
10. Dennis J. Naughton
11. Michele A. Whitman, Esq.

Compensation Committee (5 Members)

1. Michele A. Whitman, Esq., Chair
2. Patrick E. Brock
3. Robert L. Brousseau
4. Joseph Connolly
5. Deborah B. Goldberg



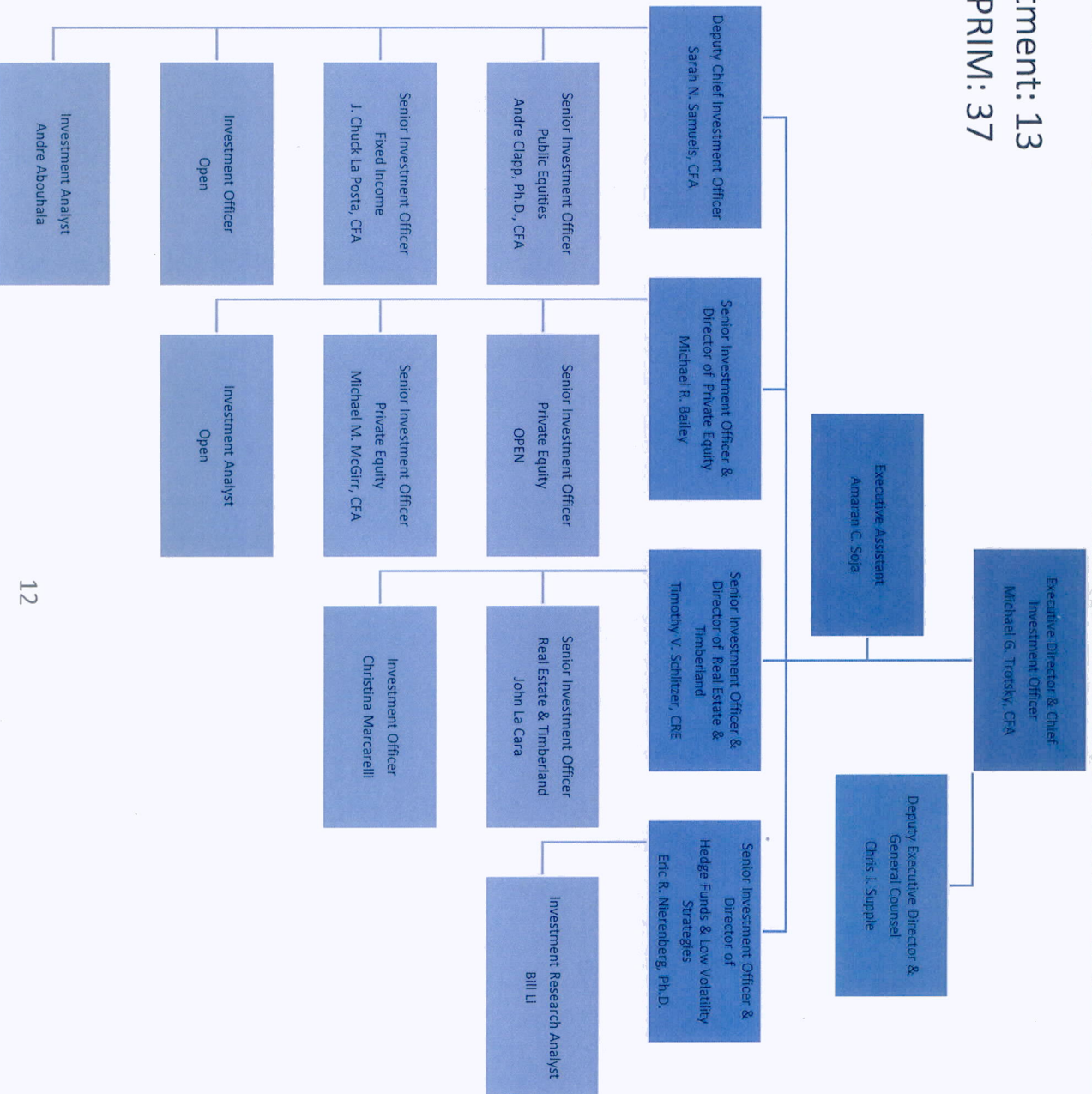
Organizational Update

- ❑ **PRIM New Hires and Promotions**
 - George Tsipakis, Manager of Real Estate & Timberland Reporting – July 2016
 - Christina Marcarelli, Investment Officer, Real Estate and Timberland – May 2016
 - Bill Li, Investment Analyst, Hedge Funds and Low Volatility Strategies – May 2016
 - Deb Coulter, CPA, Director of HR and Special Projects – March 2016
 - Eric Convey, Communications Director – January 2016
 - David M. Gurtz, CPA, CFA to Chief Operating Officer & Chief Financial Officer, October 2015
 - Sarah N. Samuels, CFA to Deputy Chief Investment Officer, April 2015
 - Hired 6 highly qualified interns for Summer 2016
- ❑ **Maintained low employee turnover**
 - Only one senior member of team departed in fiscal year 2015 (for personal reasons)
 - PRIM staff and advisors at PRIM are considered to be the best they have ever been
- ❑ **Implemented PRIM Professional Development Program**
 - A cross-training and career development program
 - Designed to develop employee interdisciplinary skills and to reduce organizational silos
 - Allows high-performing employees to grow their expertise beyond their core responsibilities
 - Participants will rotate through private equity, real estate, hedge funds, and risk management for four month intervals to learn, contribute, and encourage cross fertilization of ideas and initiatives
- ❑ **Creation of PRIM Investor Advisory Council**
 - Consist of Representatives from around the state who will serve two-year term
 - Good forum to provide regular feedback to report back to the Board



PRIM Organization - Investment

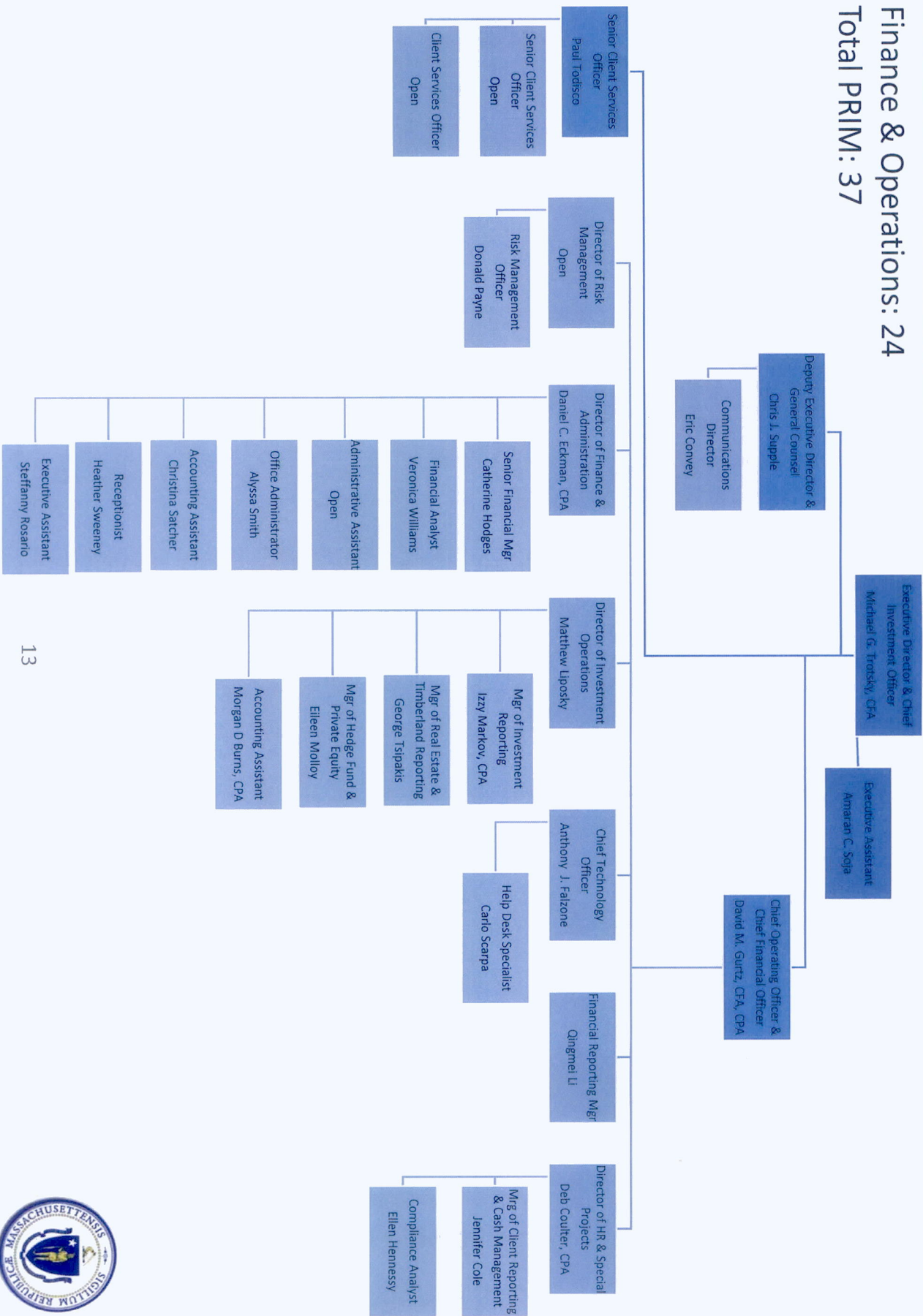
Investment: 13
Total PRIM: 37



PRIM Organization – Finance & Operations

Finance & Operations: 24

Total PRIM: 37



Summary of Recent National Recognition

Recent Recognition and Awards:

- Eric Nierenberg, Ph.D., Director of Hedge Funds & Low Volatility Strategies, was awarded Institutional Investor magazine's **Large Public Fund of the Year Award**. The award recognizes performance innovation, achievements and contributions to the industry in the past year. (June 2016)
- Sarah N. Samuels, CFA, Deputy Chief Investment Officer, was awarded Banker & Tradesman's "**Women of FIRE award**." The award recognizes the most talented, the most ambitious, the most innovative women in key sectors of the economy. (June 2016)
- David Gurtz, CFA, CPA, Chief Financial Officer and Chief Operating Officer, was awarded the **Government Finance Officer Association's Certificate of Achievement for Excellence in Financial Reporting** for the 11th consecutive year. (June 2016)
- Michael Trotsky, CFA, Executive Director and Chief Investment Officer, was awarded **Chief Investment Officer Magazine's "CIO Innovation Award."** (December 2015)
- Sarah Samuels, CFA, Deputy Chief Investment Officer was awarded the **Next Generation Award** by **Chief Investment Officer Magazine**. This is a worldwide award which recognizes up and coming asset owners who have made meaningful contributions to their organizations. (December 2015)
- Michael Bailey, Senior Investment Officer – Director of Private Equity, was nominated for the **Investor Intelligence Award for Excellence in Private Equity**. The award recognizes the most outstanding and innovative public plan sponsors in North America
- Chris Supple, Deputy Executive Director and General Counsel, was awarded the **Commonwealth's Citation for Outstanding Performance**. This citation was awarded for Chris's work on Class Action lawsuits in which PRIMM was lead plaintiff. Chris was also reappointed to a 2nd term as Co-Chair of the Securities Litigation Committee at the National Association of Public Pension Attorneys (NAPPA)



Summary of Recent National Recognition

Past Recognition and Awards:

- Buyouts Magazine** named PRIM as the best-performing private equity portfolio of the 22 largest pensions it evaluates for the 1-year, 3-year, 5-year, and 10-year time periods (February 2015)
- PRIM was awarded its 10th consecutive **Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting**
- Michael Trotsky, CFA, Executive Director & Chief Investment Officer was nominated for the 2014 aICIO Magazine “**Industry Innovation Award**” (September 2014)
- Michael Trotsky, CFA, Executive Director & Chief Investment Officer was named in the 2014 **Sovereign Wealth Institute “Top 100 Public Investor List”** (September 2014)
- PRIM Awarded the **Institutional Investor “Public Pension Plan of the Year”** award (April 24, 2014)
- Michael Trotsky, CFA, Executive Director & Chief Investment Officer was nominated for the **Institutional Investor “Chief Investment Officer of the Year”** Award (April 2014)
- The **Private Equity Growth Capital Council** named PRIM #2 best performing private equity investment portfolio of 153 U.S. public pensions it considered (October 2014)



Top 10 Recent Innovations

1. Risk Management
2. Managers Search
3. Project SAVE
4. HF Revamp
5. Alternative Risk Premia Strategies
6. HF Replication
7. Portfolio Completion Strategies
8. Private Equity Co-Investment
9. Real Estate Co-Investment
10. Portfolio Insurance



Project SAVE: Phase I Progress-to-date

PROJECT SAVE	Annualized Value Target	Annualized Value Realized	% of Target Achieved
<u>INITIAL PROGRAMS</u>			
Hedge Fund-of-Funds Unwind	\$40 mm	\$38.2 mm	96%
Cash Overlay Program	\$20 mm	\$26.5 mm	133%
Public Markets Fee Negotiations	\$1.5 mm	\$1.9mm	129%
Private Equity Co-Investment	\$25 mm	\$0.6mm	2%
Hedge Fund Fee Negotiations	\$7 mm	\$33.7 mm	482%
Hedge Fund Replication	\$7 mm	\$14.8 mm	211%
Securities Litigation	\$0.7mm	\$0.6 mm	82%
<u>INITIAL PROGRAMS TOTALS</u>	<u>\$101.2 mm</u>	<u>\$116.3 mm</u>	<u>115%</u>
<u>FOLLOW-ON PROGRAMS</u>			
Real Estate direct- or co-investment	\$2 mm	\$0	
Securities Lending	\$15.2 mm	\$10.9 mm	
Private Equity Stock Distribution	\$0.3mm	\$0.1mm	
<u>TOTAL PROJECT SAVE PROGRAMS</u>		<u>\$127.3 mm</u>	

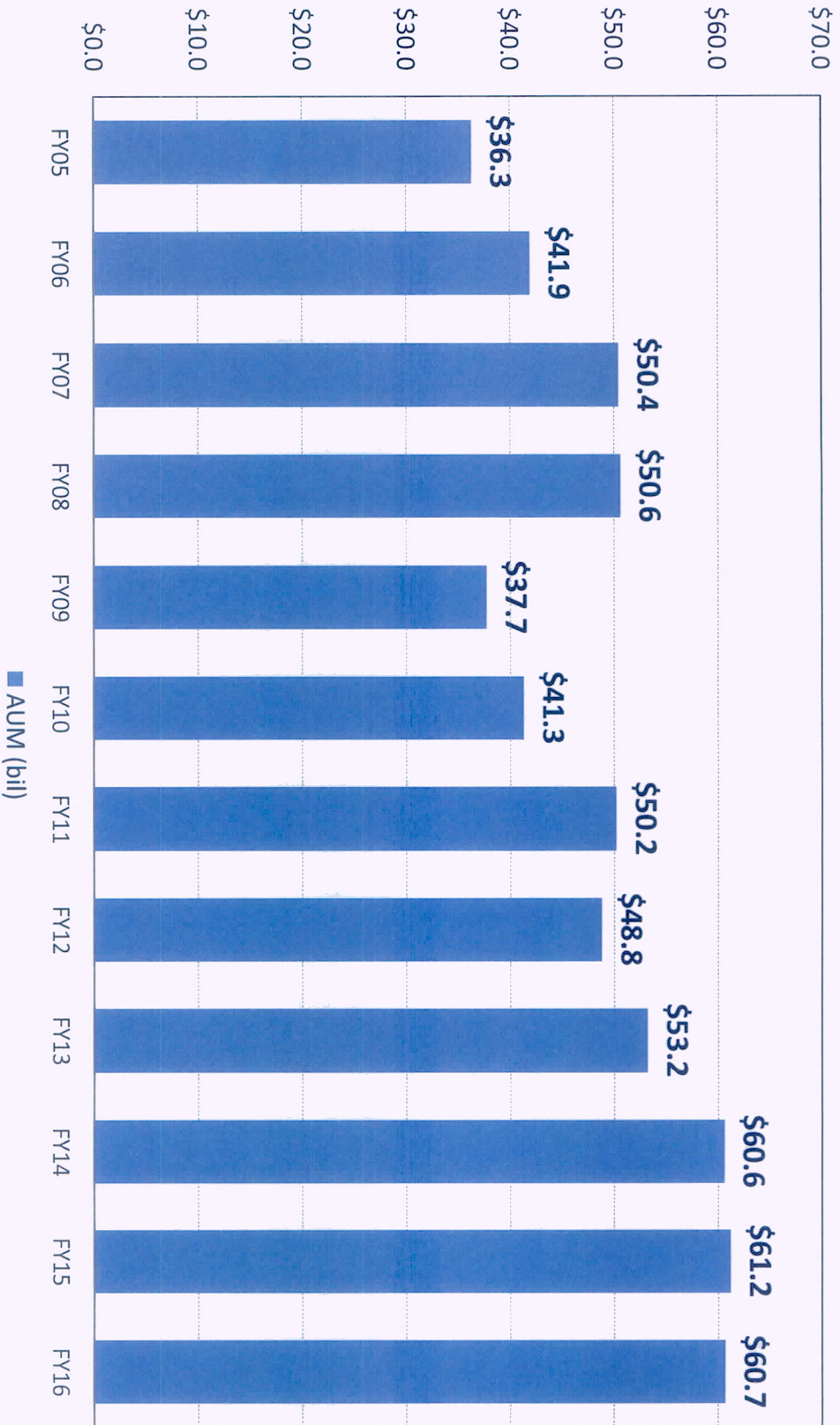


Project SAVE: Phase II “Exploration of Internal Management”

- ❑ Michael Even, CFA, President and CEO of Numeric Investors and member of the PRIM Investment Committee, is leading an internal task force.
- ❑ Seventeen of the top 20 U.S. public pension funds, ranked by AUM, do some internal management.
- ❑ **Potential Benefits:**
 - Additional insight into markets
 - Improved manager selection
 - Improved manager monitoring
 - Expanded ability to hire and retain superb employees
 - Fee savings
- ❑ **Next Steps:**
 - Visits by PRIM staff members leading the inquiry to a small number of funds that are similar to PRIM and do some internal management
 - Ongoing discussions about which asset class or classes at PRIM might be suitable for internal management

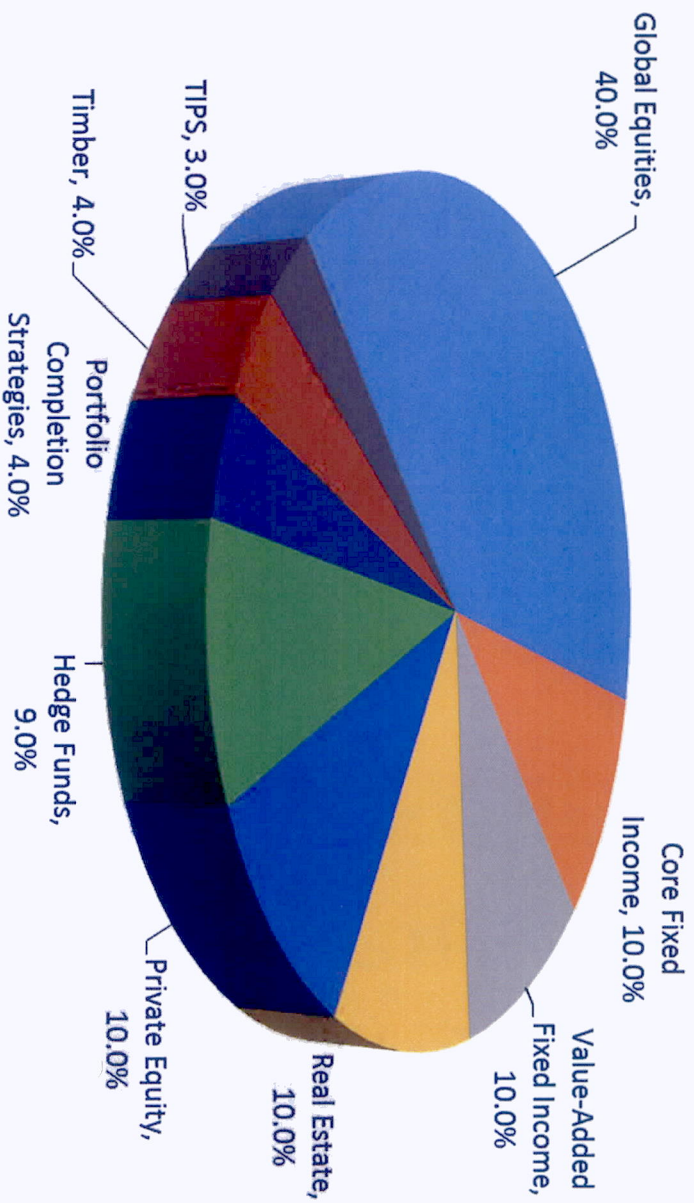


Total PRIT Fund Fiscal Year Market Value (\$Billions)



PRIT Core Fund Asset Allocation Targets

Adopted by the PRIM Board on February 2, 2016

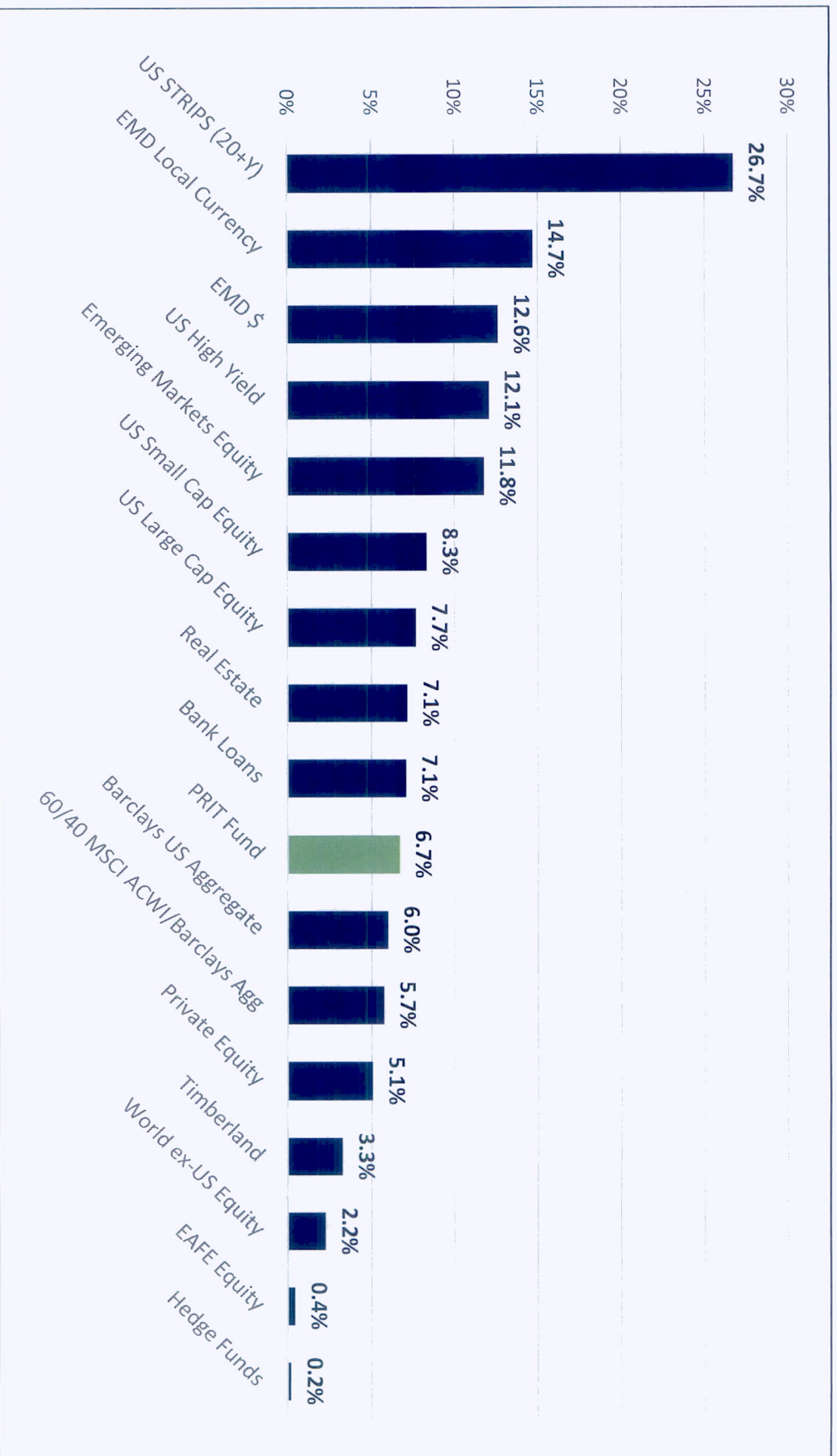


	Return/Risk
5-7 Year Expected Return	6.8%
30-Year Expected Return	7.9%
Risk (Standard Deviation)	12.6%
Sharpe Ratio	0.40



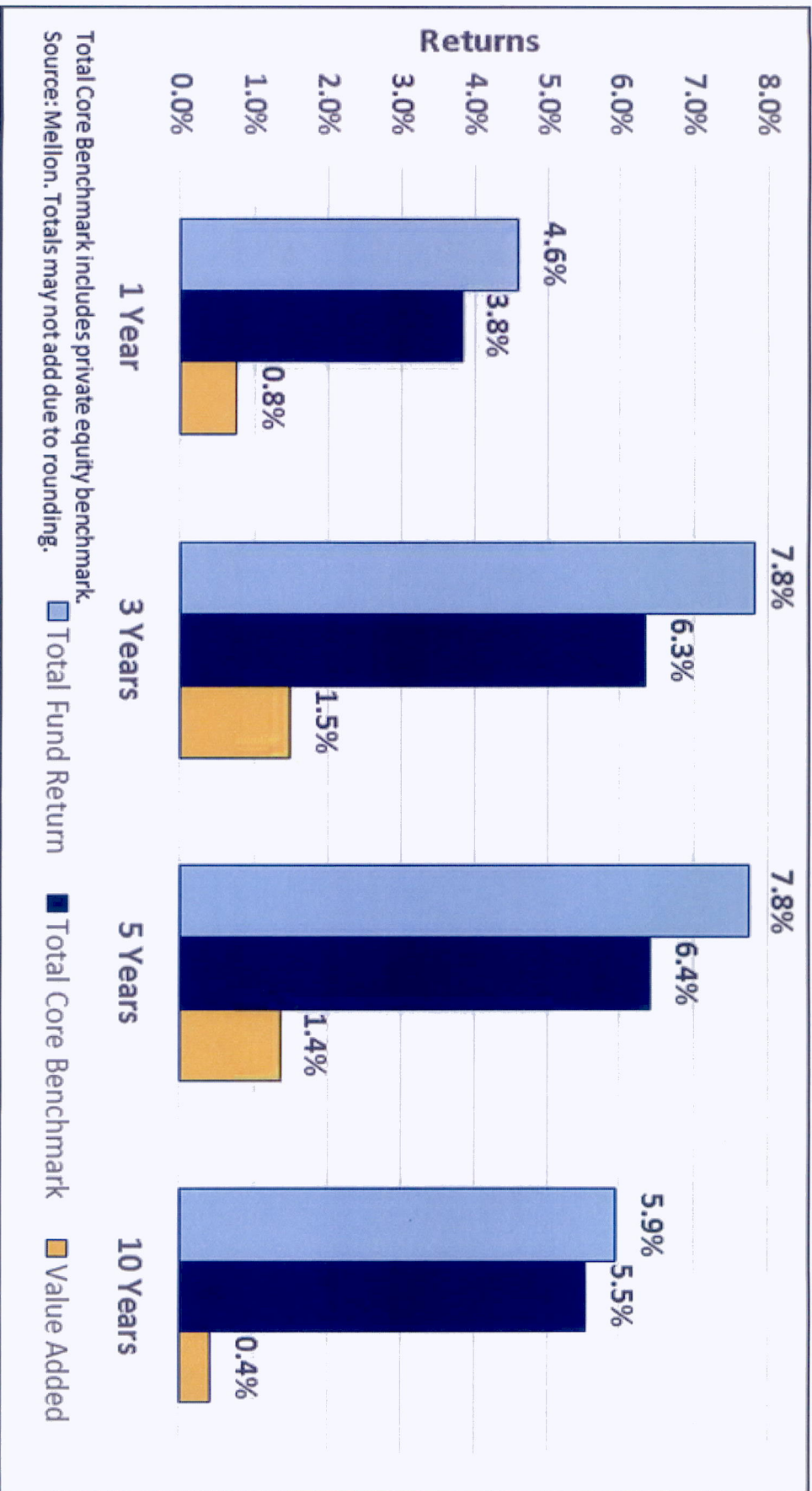
Asset Class Performance Summary

Calendar Year To Date Through July 31, 2016



Total PRIT Fund Returns

Annualized Returns as of July 31, 2016



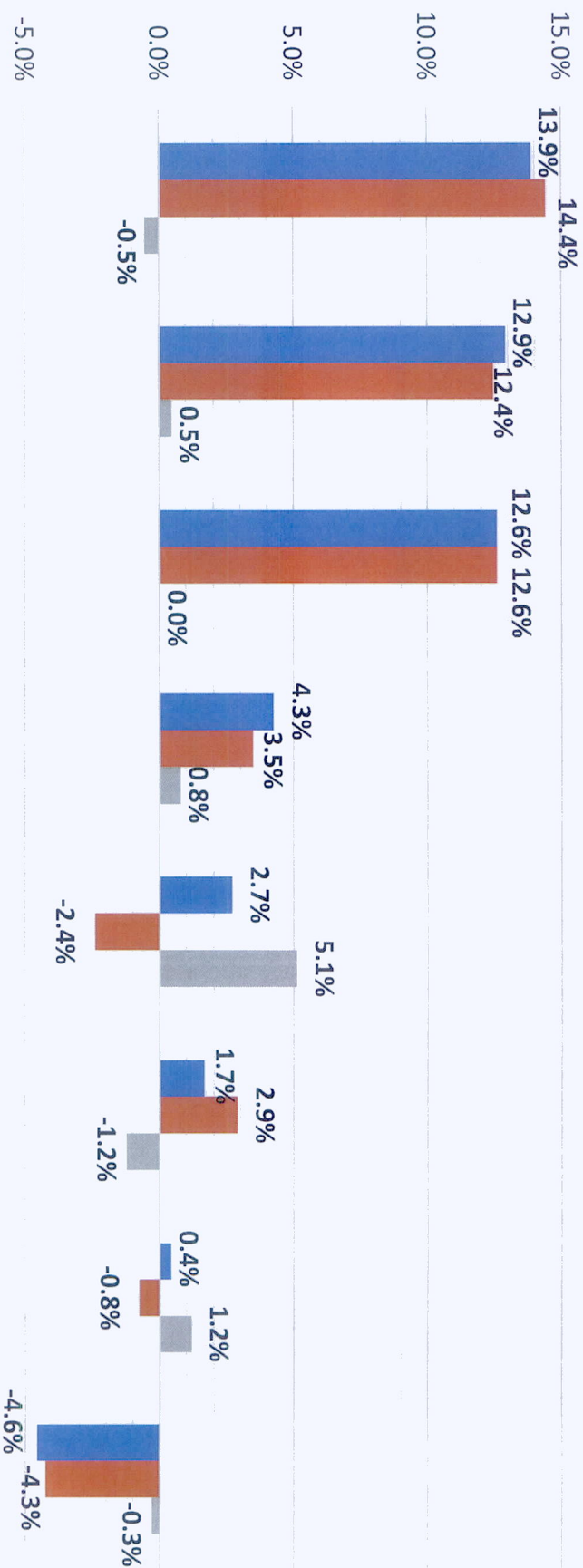
PRIT Asset Class Performance (Gross of Fees)

One-Year Ending July 31, 2016

PRIT Core Fund Asset Class Returns Vs. Portfolio Benchmarks

20.0%

■ Asset Class ■ Benchmark ■ Value Add



-10.0%

Total Core Total Real Estate Total Private Equity* Total Portfolio Completion Strategies Total Value Added Fixed Income Total Timberland Total Global Equity Total Hedge Funds**

*Benchmark is actual performance

**Hedge Fund returns are net of fees

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



PRIT Asset Class Performance

Annualized Returns as of July 31, 2016

Periodic Table of Returns by Asset Class

	1 Year	3 Year	5 Year	10 Year
CORE FIXED INCOME 13.9%	PRIVATE EQUITY 17.9%	PRIVATE EQUITY 15.9%	PRIVATE EQUITY 14.4%	
REAL ESTATE 12.9%	REAL ESTATE 12.9%	REAL ESTATE 12.3%	REAL ESTATE 7.5%	
PRIVATE EQUITY 12.6%	CORE FIXED INCOME 8.9%	GLOBAL EQUITY 7.2%	VALUE-ADDED FIXED INCOME 7.1%	
VALUE-ADDED FIXED INCOME 2.7%	TIMBER 7.4%	CORE FIXED INCOME 6.6%	TIMBER 6.8%	
TIMBER 1.7%	GLOBAL EQUITY 6.1%	TIMBER 5.3%	CORE FIXED INCOME 6.3%	
GLOBAL EQUITY 0.4%	HEDGE FUNDS (NET OF FEES) 3.0%	HEDGE FUNDS (NET OF FEES) 4.0%	GLOBAL EQUITY 5.0%	
HEDGE FUNDS (NET OF FEES) (4.6%)	VALUE-ADDED FIXED INCOME 2.8%	VALUE-ADDED FIXED INCOME 4.0%	HEDGE FUNDS (NET OF FEES) 3.3%	



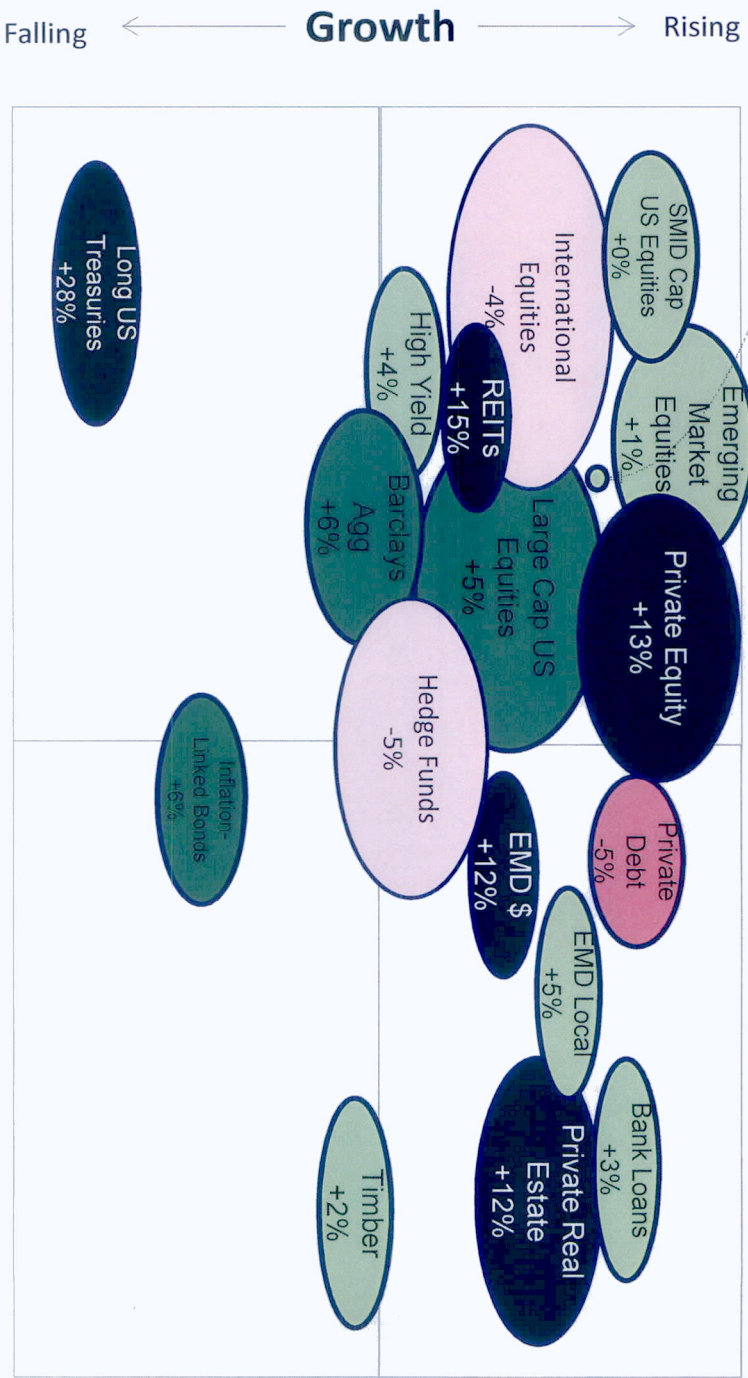
Asset Classes & Regimes – One Year Ended July 31, 2016

- GDP Growth: +1.2%
- Core CPI: +2.2%
- 30yr yields: -73 bps

PRIT Fund
+4.6%

LEGEND: One Year Return Ended July 31, 2016

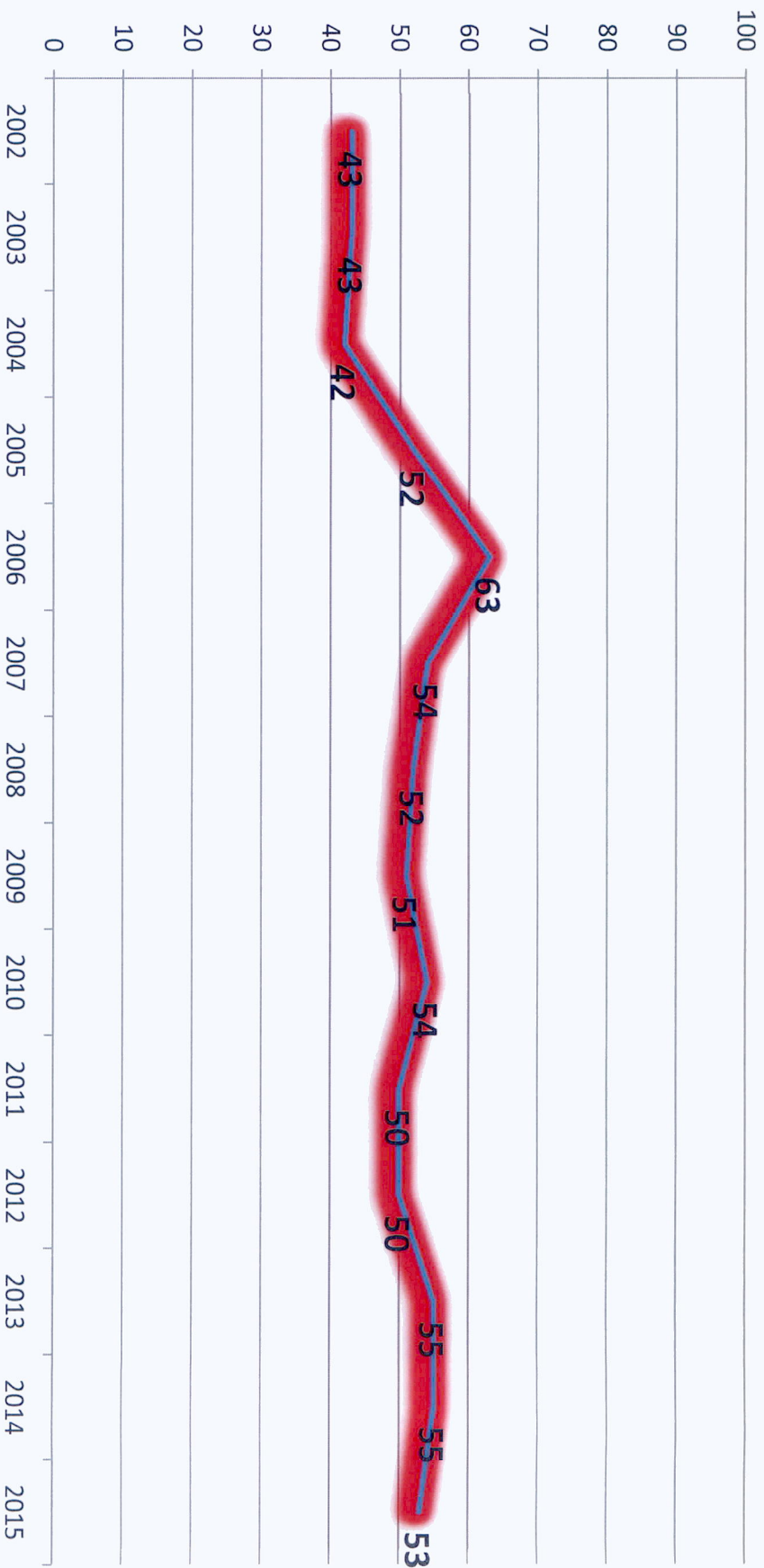
Return <-10%	Return -10%-5%	Return -5%-0%	Return 0%-5%	Return 5%-10%	Return >10%
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Asset class returns represent PRIM's actual returns, gross of management fees (with the exception of hedge funds, which are net of fees).



PRIT Fund Ratio of Expenses in Basis Points



How Are Fees Allocated to SRBTF Participants?

The pro rata share of fees is approximately 53 basis points, which is PRIM's management fee expense and is the combination of the following:

- Direct investment management fees paid to third party managers, paid by PRIM check or wire.
- Consultant and advisory fees paid to third party consultants and advisors, paid by PRIM check or wire.
- Costs for maintaining and operating PRIM's offices, paid by PRIM check or wire.
- Indirect investment management fees which are charged against investments by commingled funds and private investment managers (private equity, real estate Hedge funds, etc.).

Each month-end, a participant in the PRIT Fund or SRBTF is allocated a share of these costs according to the percentage of the PRIT Fund/SRBTF that the participant owns. For example, if a participant owns *one-fifth-of-one-percent* of the PRIT Fund/SRBTF, the management fee shown on the monthly capital account statement will reflect *one-fifth-of-one-percent* of PRIT's monthly costs. In addition to PRIM fees, there is the shared cost among SRBTF participants in funding the operations of the SRBTF Board (the entity that oversees the SRBTF), which equates to less than one basis point. Again, such fee is allocated on a pro rata basis, with the state paying the largest share of that fee, as it is the largest participant in the SRBTF, with assets over \$700 million.

