



Administration and Audit Committee Meeting Agenda

Thursday, November 17, 2022, 10:00 a.m.*

- I. **Consent Agenda (Voting Item)**
- II. **Executive Director/Chief Investment Officer Report**
- III. **Equal Pay Audit Results and Presentation**
- IV. **Legislative Update**
- V. **Other Matters**
 - A. September 2022 PRIM Budget
 - B. Travel Report
 - C. Client Service
 - D. Global Investment Performance Standards (GIPS)

VI. **Fiscal Year 2022 Audit Results (Voting item)**

Appendices

- A. Minutes of the PRIM Administration and Audit Committee Meeting of May 5, 2022
- B. Minutes of the PRIM Administration and Audit Committee Meeting of July 19, 2022
- C. Minutes of the PRIM Administration and Audit Committee Meeting of August 4, 2022
- D. Draft Fiscal Year 2022 Annual Comprehensive Financial Report
- E. PERAC Examination Report
- F. Proposed 2023 PRIM Board and Committee Meeting Schedule
- G. Evaluation Committee's Report for Investment Legal Services RFQ
- H. PRIT Fund Performance Report (September 30, 2022)
- I. BNY Mellon Gross of Fees Performance Report (September 30, 2022)
- J. Aon (McLagan) Equal Pay Audit Presentation
- K. September 2022 PRIM Operating Budget
- L. Travel Report
- M. Fiscal Year 2022 PRIT Fund GIPS Compliant Presentation
- N. KPMG 2022 Audit Results Report

*This meeting will be held in accordance with the provisions of Massachusetts, "Chapter 22 of the Acts of 2022" which was signed into law on February 15, 2022, and most recently amended on July 16, 2022, that includes an extension until March 31, 2023, of the remote meeting provisions of the March 12, 2020, Executive Order "Suspending Certain Provisions of the Open Meeting Law", and all members of the Committee will participate remotely via audio/video conferencing, and public access to the deliberations of the Committee will likewise be provided via telephone.

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I. Consent Agenda (Voting Item)

In April of 2014, the Board approved the implementation of a consent agenda to best utilize meeting time to focus on deliberation on the most substantive matters. A consent agenda is a meeting practice whereby routine and other non-controversial voting items that do not require discussion are presented and approved as a single agenda item in a single motion.

If one or more members identify an item from the consent agenda that they wish to discuss, it will be removed as a single item and voted on separately. Certain items are not authorized to be included in a consent agenda, including asset allocation decisions, approval to hire investment managers, and significant changes to PRIM's organizational structure or policies.

The PRIM Administration and Audit Committee's November 17, 2022, meeting includes the following proposed consent agenda items:

1. Approval of the Administration and Audit Committee minutes of its May 5, 2022, July 19, 2022, and August 4, 2022, meetings
2. Approval of the Draft Fiscal Year 2022 Annual Comprehensive Financial Report
3. Approval of the PERAC Examination Report for the Period July 1, 2014 – June 30, 2019
4. Approval of the Proposed 2023 PRIM Board and Committee Meeting Schedule
5. Approval of the Information Technology Consulting Services Recommendation
6. Approval of the Investment Legal Services Request for Qualification (RFQ) Recommendation

Below is additional information regarding these consent agenda items.

1. Approval of the minutes of the May 5, 2022, July 19, 2022, and August 4, 2022, Administration and Audit Committee meetings are attached as **Appendices A, B and C**, respectively.
2. Approval of Draft Fiscal Year 2022 Annual Comprehensive Financial Report

PRIM staff is recommending that the Administration & Audit Committee make a recommendation to the PRIM Board that it approve the draft Fiscal Year 2022 PRIT Fund Annual Comprehensive Financial Report, attached as **Appendix D**.

PRIM staff has completed its 18th PRIT Fund Annual Comprehensive Financial Report. The primary purpose of this document is to provide a thorough, detailed and transparent presentation of PRIT's financial position and results of operations.

The report has four sections – Introductory, Financial, Investment, and Statistical. PRIM submits its Annual Comprehensive Financial Report for a comprehensive review by the Government Finance Officers Association (GFOA) each year, and the GFOA determines if the report continues to qualify for the organization's prestigious Certificate of Achievement for Excellence in Financial Reporting, which recognizes and encourages excellence in financial reporting by state and local governments. PRIM staff, with KPMG's assistance, prepared this report based upon the GFOA's checklist, and is optimistic that its submission will result in an 18th certificate.

3. Approval of the PERAC Examination Report for the Period July 1, 2014 – June 30, 2019

In 2022, the Commonwealth of Massachusetts Public Employees Retirement Administration Commission (PERAC) conducted an examination of PRIM's accounting and management records according to standards established by PERAC in regulation 840 CMR 25.00. This examination covered the period July 1, 2014-June 30, 2019.

There were no findings or recommendations as a result of the PERAC examination. On August 10, 2022, PERAC issued a report commending PRIM for its exemplary operations. The PERAC report is contained in **Appendix E**.

4. Approval of the Proposed 2023 PRIM Board and Committee Meeting Schedule

PRIM staff is recommending that the Administration and Audit Committee make a recommendation to the PRIM Board to adopt the proposed 2023 Board and Committee Meeting Schedule attached as **Appendix F**.

5. Approval of the Information Technology Consulting Services Recommendation

PRIM staff is recommending that the Administration and Audit Committee make a recommendation to the PRIM Board to approve a six-month contract extension for PRIM's current Information Technology Consultant, Edge-Tech.

6. Approval of the Investment Legal Services Request for Qualification (RFQ) Recommendation

On August 1, 2022, this Committee recommended, and the Board approved, the issuance of an RFQ for Investment Legal Services.

The Evaluation committee is recommending that the following firms be added to the PRIM Board's list of approved legal services providers.

- Faegre Drinker Biddle & Reath LLP
- Seyfarth Shaw LLP
- Kramer Levin Naftalis & Frankel LLP
- Kirby McInerney LLP
- Foley Hoag LLP
- Scott + Scott
- Venable LLP

The Evaluation Committee's report is attached as **Appendix G**.

II. Executive Director/Chief Investment Officer Report

PRIT Core Fund Performance Reports:

- The PRIT Fund Performance Report is attached as **Appendix H**.
- The BNY Mellon Gross of Fees Performance Report is attached as **Appendix I**.

III. Equal Pay Audit Results and Presentation

Maureen Reilly, Director, Aon (McLagan), will present the results of PRIM's equal pay audit. A presentation of McLagan's audit is attached as **Appendix J**.

Aon conducted the audit at PRIM's request as part of PRIM's continuing efforts to promote workplace diversity and attract and retain the best employees in the industry. Conducting a pay equity audit is one of many strategies outlined in PRIM's Diversity, Equity and Inclusion Framework created and implemented in collaboration with PRIM's Diversity Equity and Inclusion consultant IBIS Consulting Group.

IV. Legislative Update

The Committee will receive an update on legislative matters.

V. Other Matters

A. September 2022 PRIM Operating Budget (Appendix K)

Global Equity

Fee Type	Actual	Budget	Variance	Percent
Base Fees	14,820,206	19,592,500	4,772,294	24%
Performance Fees	(764,919)	-	764,919	N/A
Total:	14,055,287	19,592,500	5,537,213	28%

Base fees variance is due to lower than projected assets. Performance fees variance is due to one manager who is earning a fee and a claw-back for another manager. Note, no performance fees are budgeted.

Core Fixed Income

Fee Type	Actual	Budget	Variance	Percent
Base Fees	1,963,461	2,440,500	477,039	20%
Performance Fees	566,307	-	(566,307)	N/A
Total:	2,529,768	2,440,500	(89,268)	-4%

Base fees variance is due to lower than projected assets. Performance fees variance is due to one manager who is earning a fee. Note, no performance fees are budgeted.

Value Added Fixed Income

Fee Type	Actual	Budget	Variance	Percent
Base Fees	10,378,898	12,675,000	2,296,102	18%

Base fees variance is due to lower than projected assets.

Real Estate

Fee Type	Actual	Budget	Variance	Percent
Base Fees	9,438,487	10,908,750	1,470,263	13%
Performance Fees	1,655,665	-	(1,655,665)	N/A
Total:	11,094,152	10,908,750	(185,402)	-2%

Base fees variance is due to lower than projected assets. Performance fees variance is due to one manager who is earning a fee. Note, no performance fees are budgeted.

Timberland

Fee Type	Actual	Budget	Variance	Percent
Base Fees	1,848,223	2,062,500	214,277	10%
Performance Fees	(1,940,723)	-	1,940,723	N/A
Total:	(92,500)	2,062,500	2,155,000	104%

Base fees variance is due to lower than projected assets. Performance fees variance is due to a claw-back for one manager. Note, no performance fees are budgeted.

Private Equity

Fee Type	Actual	Budget	Variance	Percent
Base Fees	48,428,777	46,400,000	(2,028,777)	-4%

Base fees variance is within expectations.

Portfolio Completion Strategies

Fee Type	Actual	Budget	Variance	Percent
Base Fees	19,046,910	22,254,500	3,207,590	14%

Base fees variance is due to lower than projected assets.

**Overlay & Foreign
Currency**

Fee Type	Actual	Budget	Variance	Percent
Transaction	211,344	301,250	89,906	30%

Foreign currency transactions lower than budgeted.

Third Party Service Providers and Operations

Fee Type	Actual	Budget	Variance	Percent
Operations and Contractual	9,913,078	12,862,625	2,949,547	23%

Variance is due primarily to lower-than-budgeted PCS and Research Third-Party service provider fees and lower compensation expense due to open positions.

B. Travel Report

A detailed schedule of expenses associated with travel (including for due diligence and fiduciary education/professional development) that have been reimbursed for the fiscal year is attached as **Appendix L**.

C. Client Services

Currently 100 entities, including the State Retiree Benefits Trust Fund (SRBTF – the Commonwealth’s Other Post-Employment Benefits (OPEB) liability fund), invest in the PRIT Fund. PRIM serves as an investment manager for approximately 90% of all state and local retirement systems. PRIM has 38 clients (38%) that are classified as “Participating Systems,” or systems that invest their total pension assets in the PRIT Fund and 62 clients (62%) that are classified as “Purchasing Systems,” or systems that may choose to invest their total assets in the PRIT Fund or participate in the Segmentation Program. Segmentation allows systems to invest in individual asset classes, or “segments,” of the PRIT Fund as an alternative to investing in the aggregate Fund. Among the 62 Purchasing Systems, 44 invest in segments of the PRIT Fund; the remaining 18 Purchasing Systems invest their total pension assets in the PRIT Fund. Participating Retirement Systems have a mandatory five-year participation period, while Purchasing Retirement Systems do not have a minimum investment period.

Client and Other Meetings

The Client Services team continues to meet virtually and in person with many of PRIM’s member retirement systems. The Client Services team also meets with professional organizations and government entities interested in learning more about the State Retiree Benefits Trust Fund (SRBTF). The following is a list of completed and upcoming meetings since we updated the PRIM Board on August 17, 2022.

Date	Name of Retirement System/Entity
8/18/2022	Chelsea Retirement Board
8/18/2022	Quincy Retirement Board
8/18/2022	Manchester-by-the-Sea
8/23/2022	Hull Retirement Board
8/23/2022	Montague Retirement Board
8/25/2022	Peabody Retirement Board
8/25/2022	Lowell Retirement Board
8/30/2022	Medford Retirement Board
8/31/2022	Berkshire County Retirement Board
8/31/2022	Lawrence Retirement Board
9/7/2022	Milford Retirement Board

9/8/2022	Concord Area Special Education Collaborative
9/14/2022	Attleboro Retirement Board
9/12/2022	SRBTF Board
9/13/2022	Town of Franklin
9/14/2022	Needham Retirement Board
9/14/2022	Attleboro Retirement Board
9/14/2022	Shawsheen Valley Vocational Regional Technical School
9/15/2022	PERAC Emerging issues Forum
9/16/2022	MBTA RF Board
9/20/2022	Saugus Retirement Board
9/21/2022	Hampshire Country Retirement Board
9/22/2022	Falmouth Retirement Board
9/22/2022	Braintree Retirement Board
9/27/2022	Fairhaven Retirement Board
9/27/2022	Worcester Regional Retirement Board
9/28/2022	Chicopee Retirement Board
9/28/2022	Woburn Retirement Board
9/29/2022	Pittsfield Retirement Board
9/29/2022	Andover Retirement Board
10/11/2022	Haverhill Retirement Board
10/12/2022	Town of Wayland
10/19/2022	Waltham Retirement Board
10/20/2022	Webster Retirement Board
10/21/2022	Town of Bellingham
10/24/2022	Belmont Retirement Board
10/25/2022	Barnstable Retirement Board
10/25/2022	Winthrop Retirement Board
10/25/2022	Natick Retirement Board
10/26/2022	Fall River Retirement Board
10/26/2022	Revere Retirement Board
10/26/2022	Gloucester Retirement Board
10/27/2022	Lexington Retirement Board
10/27/2022	Amesbury Retirement Board
11/1/2022	Town of Lenox
11/2/2022	Hampden County Retirement Board
11/2/2022	Springfield Retirement Board
11/7/2022	Massachusetts State College Building Authority
11/18/2022	MTRS Board
11/18/2022	Plymouth Retirement Board
11/18/2022	MBTA RF Board
11/22/2022	Hull Retirement Board
11/22/2022	Newton Retirement Board
11/29/2022	Wellesley Retirement Board
11/30/2022	Franklin Regional Retirement System
11/30/2022	Danvers Retirement Board
11/30/2022	Clinton Retirement Board
12/7/2022	PRIM Investor Advisory Council
12/7/2022	Norfolk County Retirement Board
12/7/2022	MWRA
12/8/2022	SRBTF Board
12/14/2022	Chicopee Retirement Board

12/14/2022	Middlesex County Retirement Board
12/15/2022	Taunton Retirement Board
12/19/2022	Reading Retirement Board
12/20/2022	Winchester Retirement Board
12/20/2022	Watertown Retirement Board
1/31/2023	Adams Retirement Board

State Retiree Benefits Trust Fund (SRBTF) Update

The SRBTF Board met on September 12, 2022, and approved two new governmental unit submissions to invest in the SRBTF, the Dracut Water Supply District and the Somerset Berkley Regional School District. As of September 30, 2022, the total market value of the SRBTF assets was \$2.7 billion, of which approximately \$862 million were “local” governmental unit assets. There are currently 83 governmental units, including MA Retirees, that invest in the SRBTF.

Private Equity Vintage Year 2023 (PEVY 2023)

On October 14, 2022 eligible retirement systems received notice of the availability to commit to PEVY 2023 from the Client Services team via email. Boards that wish to participate must provide a written response on letterhead by December 15, 2022, informing PRIM of the decision, stating that the Board has voted and including the specific dollar amount.

D. Global Investment Performance Standard (GIPS)

The CFA Institute’s Global Investment Performance Standards (GIPS) is a common set of ethical guidelines for calculating and presenting investment performance that was adopted by PRIM as voluntary standards for the PRIT Fund in Fiscal Year 2018. It is considered a best practice to provide a GIPS presentation to the PRIM Board annually. The Fiscal Year 2022 PRIT Fund GIPS compliant presentation is attached at **Appendix M**.

VI. Fiscal Year 2022 Audit Results (Voting Item)

PRIM and PRIT’s annual audits and the Agreed-Upon Procedures review of PRIM’s Procurement Process for Investment Management and Other Professional Services and the PRIT Fund’s Benchmark Calculations (the AUP reviews) have been completed. The PRIM and PRIT annual audits have resulted in unmodified opinions. KPMG Partners Brock Romano and Christine St. Hilaire and Senior Manager William Belden will present the results of the Fiscal Year 2022 (FY2022) PRIM and PRIT audits and the AUP reviews.

KPMG’s report is attached as **Appendix N** and includes an overview of the audit processes employed, copies of the draft audit opinion letters, KPMG’s report on the AUP reviews, and PRIM and PRIT Audited Financial Statements. The Committee will have an opportunity to meet with the KPMG auditors without PRIM staff present, consistent with audit committee best practices.

PRIM staff is recommending that the Administration and Audit Committee make a recommendation to the PRIM Board to accept the FY2022 PRIM and PRIT financial statements and the Agreed-Upon Procedures reports on PRIM’s Procurement Process for Investment Management and Other Professional Services and the PRIT Fund’s Benchmark Calculations.

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Appendix A

Minutes of the PRIM Administration and Audit Committee Meeting of May 5, 2022

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Minutes of the PRIM Administration and Audit Committee Remote Meeting
Thursday, May 5, 2022

Committee members attending:

- Robert Brousseau, Chair
- Treasurer Deborah Goldberg
- Patrick Brock
- James Hearty
- Theresa McGoldrick, Esq.
- Dennis Naughton (arrived at 10:30 AM)

Committee members not attending:

- Karen Gershman, CPA
- Michele Whitham, Esq.

The PRIM Administration and Audit Committee meeting was called to order at 10:01 a.m. Chair Robert Brousseau announced that the meeting was being held in accordance with the provisions of Massachusetts, “Chapter 22 of the Acts of 2022” which was signed into law on February 15, 2022, which includes an extension, until July 15, 2022, of the remote meeting provisions of the March 12, 2020, Executive Order “Suspending Certain Provisions of the Open Meeting Law”. Accordingly, all members of the Committee participated remotely via telephone and/or internet enabled audio and video conferencing, and public access to the deliberations of the Committee was likewise provided via telephone, with presentation materials made available on PRIM’s website (www.mapension.com). At the start of the meeting the names of the members participating remotely were announced.

I. Approval of the Minutes (Voting Item)

The PRIM Administration and Audit Committee approved by roll call vote the minutes of its February 3, 2022, meeting.

II. Executive Director / Chief Investment Officer Report

Michael G. Trotsky, CFA, Executive Director, and Chief Investment Officer, made comments to the Committee, including:

Mr. Trotsky informed the Committee that conditions had changed since they met in February. At the last meeting, they met to discuss and even briefly celebrate PRIM’s very strong calendar year 2021 performance: a 20% investment gain and record outperformance over our benchmark and reviewed the adjustment to PRIM’s asset allocation. Also discussed was a very strong global economy and strong financial markets. Mr. Trotsky mentioned that it seemed like ancient history. The Russian invasion of Ukraine on February 24th turned the world upside down. In addition to the humanitarian catastrophe which has caused thousands of war casualties and displaced more than 8 million Ukrainian citizens, the largest refugee crisis since World War II, global financial markets and world economies have been dealt a substantial setback.

Mr. Trotsky continued by describing that the war, combined with new COVID flare-ups, rising inflation and interest rates, and continued supply chain disruptions are expected to cause global economic growth to slow significantly. In late April, the International Monetary Fund reduced its world economic growth forecast for 2022 to 3.6%, down from a projection of 6.1% only a few months ago. The IMF expects US growth to slow from 5.7% in 2021 to 3.7% in 2022, and 2.3% in 2023. GDP contracted 1.4% in the first three months of 2022. Any projections seem to be a moving target, and the situation is expected to last

for years, not weeks or months. At a meeting in late April, International Monetary Fund Managing Director, Kristalina Georgieva said that the Russian invasion is “sending shock waves throughout the globe.... We are facing crisis on top of crisis”. Moreover, referring to multilateral efforts to end the war, curtail the pandemic, reduce inflation, and secure expensive energy and food supplies for the future, Ms. Georgieva said “This is the most universally complex policy environment or our lifetime, posing tremendously difficult choices.”

Mr. Trotsky relayed that PRIM is still performing at a very high level and expressed how very grateful he was to the entire staff at PRIM. He described the environment at PRIM as “all hands on deck.” Mr. Trotsky said that the team is paying attention to every detail in the portfolio, and that he has asked the team to examine and re-examine every strategy and to increase communications with every manager.

Mr. Trotsky mentioned that for the quarter ending in March, the PRIT Fund was down only 2.1% (net) and for the trailing 12 months, the fund was up 12.6%, outperforming the benchmark by 5.5%. The 2.1% decline in the quarter compares very favorable to US stocks which declined 4.6%, Developed International stocks declined 5.9%, and Emerging Markets stocks declined 7%. Bonds were down 6% in the quarter and a 60/40 mix of stocks and bonds, a common comparison for a diversified portfolio, was down 5.6% for the quarter. He believed that the PRIT Fund decline of 2.1% was a good outcome for such a turbulent quarter.

Mr. Trotsky promised to provide more information on performance later but shared that at a time when staff obviously must concentrate its efforts on the investment program, never have we had so many non-investment initiatives underway. Some of these initiatives were planned, but many of them were not. All are important, but we are a lean organization and although we have been growing our employees by approximately 10-20% each year we still find ourselves resource constrained in nearly every aspect of our business.

Mr. Trotsky mentioned a common theme of this Board meeting cycle will be RESOURCES. He mentioned that PRIM has been very successful hiring in this environment with 15 new employees alone in the last 14 months, and that is during the COVID pandemic when hiring and onboarding were more difficult. It is becoming more difficult to hire, the employment market is very tight, and additionally, we are nearly out of office space. He mentioned Anthony Falzone, Deputy Executive Director and Chief Operating Officer, and Deborah Coulter, Chief Financial Officer and Chief Administration Officer would be introducing the 2023 PRIM budget which requests resources to grow. He continued by stating the punchline in the budget remains very positive: even with the proposed increases in the budget, the expense ratio will remain constant at 50 basis points of assets under management. Mr. Trotsky believed this is astounding, especially considering that PRIM has deployed more assets to higher performing, but higher cost strategies like private equity over the years.

Mr. Trotsky provided the following list of non-investment projects the team are working on:

1. In addition to the regular PRIM and PRIT Fund audits conducted by KPMG, staff are currently supporting two additional audits from both PERAC, the state’s pension system regulator, and the State Auditor. These were not anticipated audits even though they occur regularly. It is difficult to plan or schedule for them, they usually arrive unannounced and then we staff a response team with both operations and investment professionals.
2. Staff began a comprehensive IT Audit and a simultaneous effort to enhance PRIM’s IT security. As you may have read in the news, both the Federal Government and the Governor have advised all companies to expect more cyber security breach attempts. We have worked to ensure the safety of our digital data and have developed and provided trainings to our clients to inform their cyber security needs. We are also simultaneously evaluating new methods to further enhance our own cash transfer protocols.

3. PRIM expects to receive a subpoena in support of the Attorney General's lawsuit against Exxon Mobile. Renee LeFevre, Chief Legal Officer, and several operations and investment staff members will be involved; support of this case will take a lot of time and effort – collecting records, preparing, responding, etc.
4. Similarly, Ms. LeFevre is coordinating the deposition of several current and former PRIM employees in support of a securities class action case on Foreign Exchange trading. The FX trading problems happened a long time ago and the preparation will also take a lot of time and effort.
5. Success and innovation generate a lot of outside attention, and as a result, PRIM is receiving an unprecedented level of media requests and public information requests for matters related to our investment program, proxy voting policies, diversity and inclusion, ESG matters, and very recently Russian divestment.
6. PRIM continues to build the FUTURE Initiative – that's the effort to deploy more capital to diverse and emerging managers in support of last year's legislation. The program is sophisticated and requires substantial partnering, contracting, and due diligence, along with new monitoring and reporting requirements.
7. PRIM is nearing completion of a draft ESG Committee charter and framework in support of the Board vote last cycle to create a new ESG Committee. We are working closely with the Treasurer's office and with our outside governance consultant. We have made a lot of progress, but there is much more left to do.
8. Like others across the financial, governmental, and diplomatic sectors, we had to assess our Russia exposures in the aftermath of the invasion. PRIM staff spent approximately 6 weeks providing technical assistance to the Legislature, the Governor, and the Treasurer's team in support of the newly passed Russian divestment law. Now that the law has passed, staff is busy implementing the divestment requirements and its associated reporting requirements. It is no small undertaking.
9. PRIM is expanding staff as quickly as possible, which is difficult in the current strong employment environment, and we have also begun our search to expand our office space requirements for the expected growth. PRIM takes great care in its hiring practices. If done right, hiring and onboarding new employees is very time consuming. There is a lot to learn here at PRIM and it takes a lot of time, training, and mentorship for new employees to become productive.

Mr. Trotsky reiterated that all these projects are vitally important and impactful, some known and planned for, others were somewhat unexpected. The focus and efforts of our team are nothing short of remarkable under these circumstances. PRIM will be successful in meeting the requirements of every one of these initiatives, but given the market environment, staff is at its limit, and may be forced to temporarily postpone or prioritize any additional non-core projects until the financial markets stabilize and our resources grow. He asked for the Committee's understanding in the coming months and for support to increase the PRIM 2023 budget to support PRIM's needs.

Organizational Update

Mr. Trotsky congratulated Vivian Liang on her transition from Research Intern to Investment Analyst – Research, reporting to Maria Garrahan. Vivian joined as a Research Intern in July 2021 where she worked within multiple areas of research: Asset Allocation, PE Replication, Manager Selection tools, and more. In March, Vivian graduated with an MS degree from the Computational Finance and Risk Management graduate program at the University of Washington.

Mr. Trotsky announced that Tim Doyle started in February as an Investment Analyst on the Private Equity team and will report to Alyssa Fiore. He joined PRIM from the Mass General Brigham investment office.

Tim began his career at Cambridge Associates in their pension practice and earned a Bachelor of Science in Finance from Boston College.

Mr. Trotsky introduced Amy MacKay who also joined PRIM in February as an Administrative Coordinator for the Real Estate and Timberland team, reporting to Tim Schlitzer. Amy previously worked in the Finance Department at Meredith & Grew (now Colliers) and the Downtown Leasing Group at Whittier Partners (now CBRE). Amy grew up in Dorchester and is a graduate of Assumption College.

Mr. Trotsky shared that in late March, PRIM became a founding signatory to the CFA Institute's first-ever Diversity, Equity, and Inclusion Code for the investment profession. He added that it was a very proud personal accomplishment for him because he worked very hard as a member of the DEI Code Steering Committee for more than two years to help persuade the CFA Institute to develop this important initiative for the industry. He has also lobbied the fifteen other founding signatories to join the effort. Mr. Trotsky added that this work follows his advocacy many years ago for the CFA's Asset Manager Code of Conduct (AMCC) for which PRIM was a founding sponsor. PRIM has always advocated strongly for all investment managers to adhere to its core principles.

Mr. Trotsky added that by becoming a founding signatory of the DEI Code, PRIM cements its position as an industry leading advocate for a new and better investment industry that more closely represents the make-up of our entire society. He believes that commitment to diversity and inclusion, just like ethics, must come from the top. He added that Treasurer Goldberg shares his passion to make a difference. Many years ago, Mr. Trotsky and Treasurer Goldberg decided to make cultural changes at PRIM to foster a diverse and inclusive environment. They believe that an industry that embraces many voices and perspectives will produce better investment outcomes and a more inclusive future for the investment profession. Mr. Trotsky mentioned that signing the DEI Code means that PRIM is committed to embracing its seven core principles to improve its workplace and its industry. PRIM's human resources policies already capture these principles, and with the implementation of the FUTURE Initiative following Treasurer Goldberg's advocacy for investment equity legislation, PRIM is positioned to continue to lead in this area. While PRIM is proud of its progress there is still more to do.

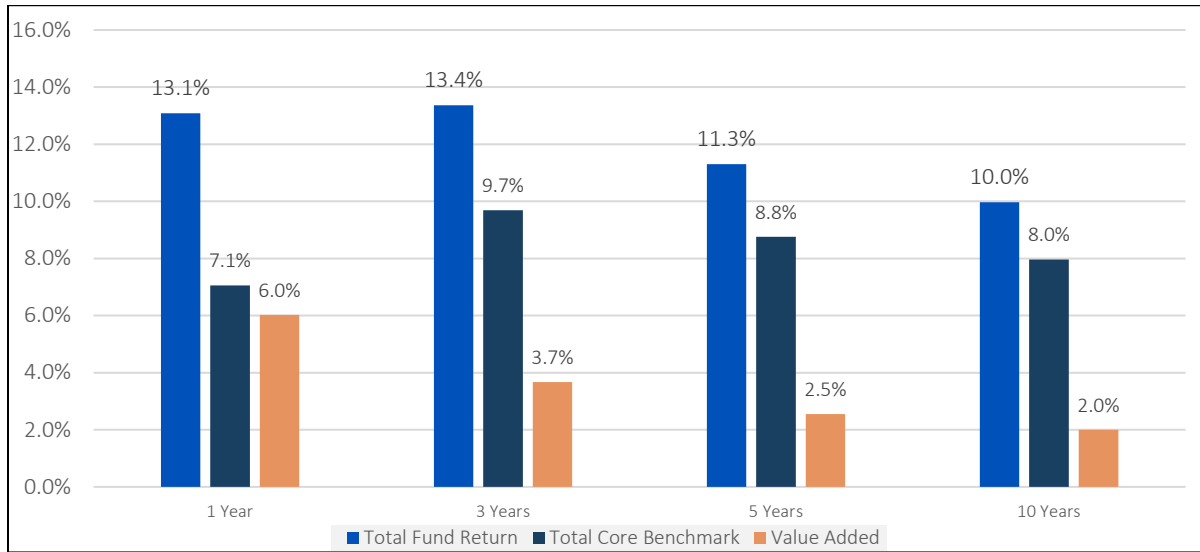
Mr. Trotsky mentioned that in its February 14th, 2022, issue, Pensions & Investments reported that PRIM was ranked seventh among the largest 200 funds in the nation for assets managed by diverse managers. This is an indication that PRIM's ongoing efforts over the years, combined with its new FUTURE initiative is putting PRIM at the very top of the heap in terms of progress – and many of the funds that have more allocated are far larger than the PRIT Fund. Dave Gurtz, Deputy Chief Investment Officer, and the entire team are doing a terrific job.

Mr. Trotsky completed his organizational update by reporting that for the 6th straight year, PRIM was nominated for Public Plan of the Year for Institutional Investor's annual HF Industry Awards ceremony. He reminded the Committee that PRIM won the award in 2016 in recognition of our groundbreaking work in separately managed accounts, which is now becoming the industry standard.

PRIT Fund Performance

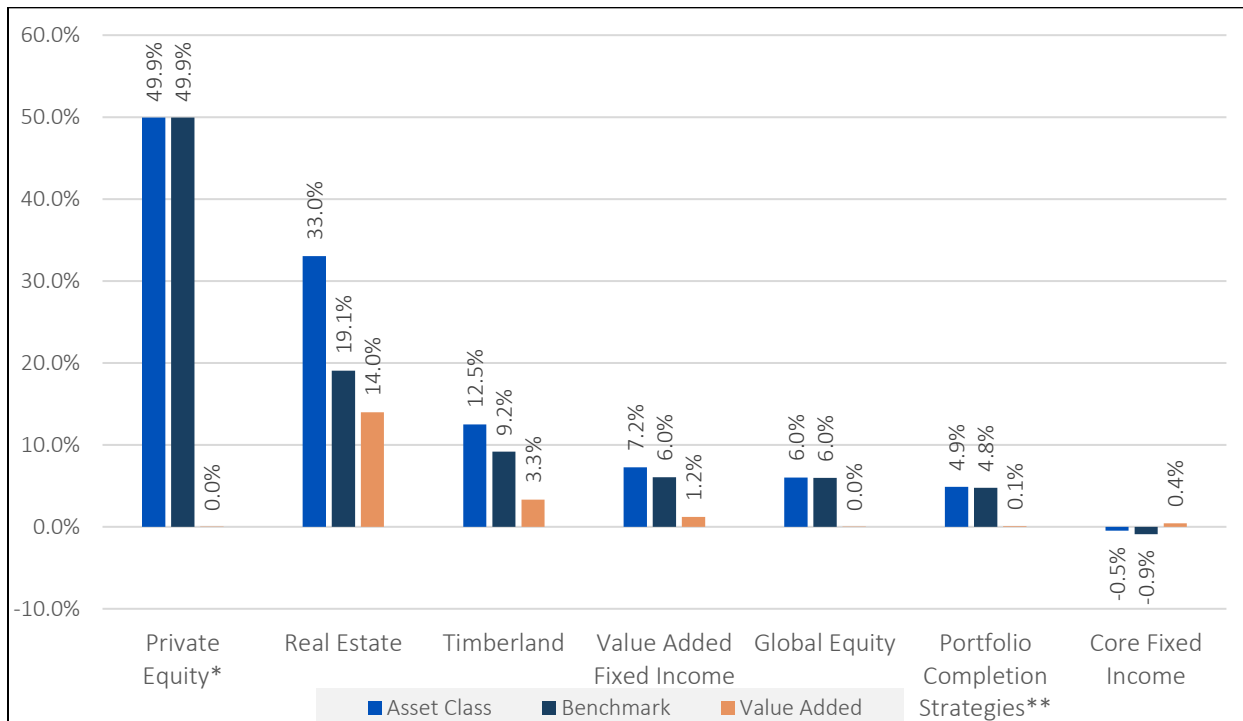
Mr. Trotsky discussed March 2022 PRIT Fund performance in more detail referencing the following performance charts:

Total PRIT Fund Returns (Gross of Fees) Annualized Returns as of March 31, 2022



Source: BNY Mellon. Total Core Benchmark includes private equity benchmark.

PRIT Performance by Asset Class (Gross of Fees) Annualized Returns as of March 31, 2022



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

PRIT Fund Periodic Table of Returns

(Gross of Fees) as of March 31, 2022

1 Year	3 Year	5 Year	10 Year
PRIVATE EQUITY 49.9%	PRIVATE EQUITY 35.8%	PRIVATE EQUITY 29.3%	PRIVATE EQUITY 23.3%
REAL ESTATE 33.0%	REAL ESTATE 14.0%	REAL ESTATE 11.9%	REAL ESTATE 11.6%
TIMBER 12.5%	GLOBAL EQUITY 13.7%	GLOBAL EQUITY 11.7%	GLOBAL EQUITY 10.3%
VALUE-ADDED FIXED INCOME 7.2%	VALUE-ADDED FIXED INCOME 6.6%	VALUE-ADDED FIXED INCOME 5.9%	TIMBER 6.1%
GLOBAL EQUITY 6.0%	TIMBER 5.3%	TIMBER 5.3%	VALUE-ADDED FIXED INCOME 5.5%
PORTFOLIO COMPLETION STRATEGIES 4.9%	PORTFOLIO COMPLETION STRATEGIES 4.8%	PORTFOLIO COMPLETION STRATEGIES 4.3%	PORTFOLIO COMPLETION STRATEGIES 4.8%
CORE FIXED INCOME (0.5%)	CORE FIXED INCOME 4.1%	CORE FIXED INCOME 3.9%	CORE FIXED INCOME 4.0%

Source: BNY Mellon

III. ESG Committee Status Update

Anthony Falzone, Deputy Executive Director, and Chief Operating Officer reminded the Committee that a few months back, during the February meeting cycle, the Board approved the recommendation to establish an environmental, social, and governance (ESG) Committee for the purpose of advising the Board on ESG-related matters, and to engage with Funston Advisory Services to assist in developing a proposal for the ESG Committee structure and charter.

Mr. Falzone reiterated that this project is a very important and staff is committed to keeping the Committee and the Board up to date on the process start to finish. This includes the progress in terms of what has been completed, and importantly what is left to be done and in what timeframe. He expressed a desire to keep the project moving.

Mr. Falzone mentioned that much progress has been made, but there is still much more work to do. He told the Committee that the timeline and additional information on page 3 of the expanded agenda provides both the Committee and Board with transparency on the process and shows the progress that has been made.

Treasurer Deborah Goldberg mentioned that there is much interest across the country in the work PRIM is doing, how it will evolve, its mandate and specifically the work with MIT on the Aggregate Confusion Project and that there may be opportunities to meet with some of the interested parties to share ideas.

Theresa McGoldrick mentioned that the organization she represents (SEIU) is applauding the work PRIM is doing and would like to use PRIM as a resource for other retirement systems for union employees.

Mr. Trotsky mentioned that PRIM would take the Treasurer's lead if she wanted to make introductions or plan any meetings.

IV. Interim Meeting with PRIM Board Auditors

Mr. Brousseau introduced Brock Romano, KPMG's Lead Audit Engagement Partner, Christine St. Hilaire, KPMG's Lead Audit Managing Director, and Will Belden, KPMG's Senior Audit Manager.

Mr. Falzone stated that KPMG was mainly present to discuss the audit plan for the Fiscal Year 2022 PRIM and PRIT Audits, and the plan for the agreed upon procedures review of PRIM's procurement processes and performance benchmarks.

Mr. Falzone provided an overview of the December 31, 2021, year-end audits for the following alternative asset classes.

- The entire PRIT real estate portfolio
 - Six core private real estate accounts, non-core real estate, and REIT's
- PRIT's two timberland portfolios
- PRIT's 20 directly managed separate accounts
 - 17 directly managed hedge fund portfolios
 - 3 other credit opportunities portfolio
- PRIT's sole agricultural portfolio

Mr. Falzone mentioned that these audits are required due to the Real Estate Leverage program along with the counter party requirements for PRIM's direct hedge fund program. Mr. Falzone also mentioned that the audit process is quite a bit of work and thanked his team for their diligence. He concluded his remarks by stating that that approximately 17% of the PRIT Fund was audited off cycle at 12/31/2021.

Deborah Coulter, CPA, Chief Financial Officer, and Chief Administration Officer provided an update that included audit results mentioning all audits with the exception of the Timber portfolio had concluded with clean unmodified opinions. She added that the Timber audits were expected to be completed by June, which is consistent with years past, and staff expects them to be issued with no findings. Ms. Coulter added that there is an increasing amount of complexity involved in auditing these separate accounts, particularly the separately managed hedge fund account, and thanked the KPMG team for their work.

Ms. Coulter also provided the Committee with a brief update on the Massachusetts State Auditor's audit along with an update on the PERAC audit. She mentioned things are progressing and PRIM may have audit reports by the next meeting cycle in August.

Ms. St. Hilaire provided an audit overview that included the following:

- An overview of the KPMG audit engagement team;
- The roles and responsibilities of management, the Administration and Audit Committee and KPMG as it relates to the fiscal 2022 audits of the PRIM Board and the PRIT Fund;
- A review of the audit approach and risk assessment, and
- The audit and agreed upon procedures timeline.

Mr. Belden summarized the audit process and the areas of emphasis highlighting that the majority of the audit effort is related to investment valuations, testing of manager fees, and review of internal controls.

Ms. St. Hilaire summarized the agreed upon procedure services (procurement and performance measurement) as well as summarized the audit approach to fraud and the two-way communications between auditor and auditee.

Mr. Romano discussed how the presentation of audit opinions are changing due to changing GAAP standards and concluded by reviewing several new GASB auditing standards around leasing and technology subscriptions and their impact on the financial statements.

V. Draft Fiscal Year 2023 Operating Budget (Voting Item)

Mr. Falzone and Ms. Coulter presented the Draft Fiscal Year 2023 PRIM Operating Budget. Mr. Falzone and Ms. Coulter thanked Daniel Eckman, CPA, Director of Finance & Administration, Sara Coelho, Senior Corporate Accountant, and the rest of the team for its work on the proposed budget.

Mr. Falzone stated that the total Fiscal Year 2023 Budget is projected to be \$518 million, or 50 basis points (bps), of the projected average PRIT Fund assets of \$103 billion. PRIM's fees and expenses relate directly to PRIT Fund assets, and that higher average asset levels, and/or a larger allocation to more complex/costly assets, results in higher costs. Additionally, he mentioned many of the important new initiatives require resources and that PRIM is nearly out of office space, and as a result, the Fiscal Year 2023 Operating Budget is 9.3% (\$43.9 million) larger than last year. He reiterated Mr. Trotsky's comments stating it is a testament to the manner with which the organization manages expenses that the fee ratio has and continues to stay flat at around 50 basis points which is an excellent deal for PRIM's clients.

Mr. Falzone spoke to the allocation of budget that covers the investment program at 95%. He mentioned the addition of two new charts in the first few pages of the budget that should help demonstrate where PRIM is spending. He said that staff continues to look for ways to add transparency and detail that will help communicate where PRIM is allocating budget, and helps staff perform analytics that can aid in measuring where PRIM spends.

Mr. Falzone explained the budget is comprised of 3 sections: Investment Management Fees, Third-Party Service Providers, and Operations. Investment Management Fees account for approximately 91% of the total budget. These fees are paid to investment managers to invest the assets of the PRIT Fund. These fees are grouped by asset class. The PRIT Fund's asset allocation mainly drives the cost allocation.

Mr. Falzone described the relationship between PRIM's asset allocation and PRIM's budget allocation. He noted that the size of any one asset class does not directly relate to the size of the expense. For example, the Global Equities target asset allocation range is 33-44% of the PRIT Fund--the largest asset class--yet is ranked third in budget expenses. This is due to the use of passive management within the Global Equities portfolio, which is relatively inexpensive to implement. Contrast that with Private Equity, PRIM's highest-returning and nationally recognized asset class, with an allocation range of 12-18% it is expensive, and management fees for Private Equity requires more of the FY 2023 budget to implement that strategy successfully.

Mr. Falzone went on to explain that this budget projection is based on continued projected asset growth, using NEPC's 10-year growth assumptions (5.7%), however future performance is not predictable, so PRIM's actual fees will likely vary, but PRIM's budget projection provides a very good approximation of projected expenses. He also mentioned that no performance fees, incentive fees or carried interest are projected in this budget, as it is extremely difficult to estimate future performance.

Ms. Coulter discussed the three sections of the budget in more detail, highlighting key changes year-over-year. She explained that the Investment Management Fees section is increasing 8.3%, but the estimated basis points for this section is actually decreasing. She noted that PRIM is constantly looking for ways to save money and the Fiscal Year 2023 budget reflects many of those cost saving measures, such as no-fee co-investments in Private Equity and direct investments in Real Estate. She noted that the Third-Party Service Providers section of the budget was increasing due to an increase in fees for OCO platform providers and additional fees for operational due diligence and information technology consultants. The last section of the budget, Operations Expenses, increased mainly due to changes in the Compensation and Occupancy section because of projected new hires needed to support the PRIT Fund's growth and PRIM's many new initiatives as well as a review of the existing office space and either the acquisition of additional office space or a potential move to more suitable office space.

Mr. Brousseau commented that he is happy to see the basis point fee load so low especially considering the new initiatives. He then asked about the staffing levels at other public funds.

Mr. Falzone mentioned that having talked with other pension fund leaders and conversations internally that staffing levels are all over the map. He said many factors determine staffing from asset allocation to ratio of passive vs active management. He also mentioned that doing the recent ESG work and speaking with public fund peers has confirmed for him that there is no one size fits all because all the peer funds are so different. He did reiterate that PRIM is one of the leanest funds in the country.

Dennis Naughton thanked the PRIM team for such a thorough presentation on the budget and mentioned he supports and looks forward to the expansion and growth needed to support PRIM's many initiatives.

The Administration and Audit Committee voted (unanimously) by roll call vote to recommend to the PRIM Board that the Board approve the Draft Fiscal Year 2023 PRIM Operating Budget, as set forth at Appendix E of the Expanded Agenda, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

VI. Legal/Legislative Update

Before providing the Committee with a legislative update, Mr. Brousseau introduced the legal voting item which was presented by Mr. Falzone.

A. Legal Services Request for Qualifications (RFQ) (Voting Item)

Mr. Falzone told the Committee that the Board last approved a roster of law firms with a variety of legal specialties in April and June of 2016. The requested RFQ for legal services will focus on investment only, as PRIM has a smaller roster of legal services providers for investment to choose from. Currently, PRIM is well served for other legal services including securities litigation, governance, and labor and human resources matters, but there is a need to build the roster of law firms for investment legal services as the ones that PRIM uses are now all at full capacity. Additionally, since 2016, the billing and business structure for how law firms provide investment legal services has changed.

The Administration and Audit Committee voted (unanimously) by roll call vote to recommend to the PRIM Board that the Board approve the issuance for a Request for Qualifications (RFQ) for investment legal services, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

Treasurer Goldberg then mentioned that later in the year she would be proposing a proxy voting guideline that would address the impact for women and companies due to the end of Roe. The guideline would put into place the support both financially and emotionally of the healthcare that women and their families deserve. The workforce has an enormous number of women, and she will encourage the Committee and the Board to consider their fiduciary duty and look at the negative business and economic impact of what is happening.

Ms. McGoldrick echoed Treasurer Goldberg's comments and expressed her concern.

Mr. Brousseau also expressed his dismay in what is taking place and expressed his concern.

Mr. Naughton expressed similar concerns and commented that this could include a range of other issues or impact other areas.

Emily Kowtoniuk, Director of Policy & Legislative Affairs in Treasurer Goldberg's office, provided a legislative update. Ms. Kowtoniuk commented that her team is monitoring several items they continue to track. Ms. Kowtoniuk mentioned the recent House budget did include by way of amendment the language that could alter the PRIM Board membership by requiring the public safety union representative on the PRIM Board to be chosen from a list of three nominees submitted by MACRS. Ms. Kowtoniuk also mentioned that a FY 2023 budget proposal for a supplemental transfer to the PRIT Fund of \$250,000,000 did not make it through, and other divestment bills (fossil fuels, etc.) have been sent to study. Ms. Kowtoniuk also mentioned her team was watching for potential legislation regarding the open meeting law as the provision allowing remote participation ends on July 15th.

Treasurer Goldberg expressed her support for the current public safety union representative Carly Rose and would not want to see such a tremendous and deserving Board member be removed from the Board.

James Hearty mentioned he would like to look at ways to improve the communication and efficiency on the Investment Committee and wanted to discuss if the Administration and Audit Committee, which covers the administrative function, needs to be involved in assisting with potentially creating a sub-committee or working group. He added that all members are very impressive, but he would like the communication to improve.

Mr. Hearty offered a motion to appoint a sub-committee to explore how the Board might better improve the function of the Investment Committee and Bob Brousseau seconded the motion so it could be discussed.

Treasurer Goldberg mentioned that there are channels that exist for feedback and discussion and perhaps this request may be more appropriate to take up during a charter review and reminded the Committee that PRIM staff will be issuing an RFP for governance services shortly.

Mr. Falzone mentioned that once the ESG Committee work is completed the RFP will be issued.

Ms. McGoldrick mentioned she felt that this issue would be better handled by the Investment Committee directly.

Mr. Trotsky suggested a survey be taken of Investment Committee members to provide a forum for them to express their opinions and suggestions to improve the communication or efficiency of future Investment Committee meetings.

Mr. Hearty withdrew his motion and the Administration and Audit Committee voted (unanimously) by roll call vote to accept the withdrawal.

Mr. Brousseau and Mr. Naughton requested that the Administration and Audit Committee be updated on what actions are taken.

VII. Other Matters:

The Committee members briefly discussed the following topics:

- A. March 2021 PRIM Operating Budget
- B. Travel Report
- C. Client Services Update

Francesco Daniele, Director of Client Service provided a brief update to the Committee and mentioned PRIM had hosted two informational webinars for clients that were very well received. He also mentioned PRIM staff would be attending the upcoming local MACRS and MCTA conferences.

The PRIM Administration and Audit Committee meeting adjourned at 12:14 p.m.

List of documents and exhibits used during the meeting:

- *Minutes of the PRIM Administration and Audit Committee Meeting of February 3, 2022*
- *PRIT Fund Performance Report (March 31, 2022)*
- *BNY Mellon Gross of Fees Performance Report (March 31, 2022)*
- *KPMG's Fiscal Year 2022 Audit Plan*
- *Draft Fiscal Year 2023 Operating Budget*
- *PRIM Operating Budget (March 31, 2022)*
- *Travel Report*

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Appendix B

Minutes of the PRIM Administration and Audit Committee Meeting of July 19, 2022

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Minutes of the PRIM Administration and Audit Committee Remote Meeting
Tuesday, July 19, 2022

Committee members attending:

- Robert Brousseau, Chair
- Treasurer Deborah Goldberg
- Patrick Brock
- James Hearty
- Theresa McGoldrick, Esq.
- Dennis Naughton

Committee members not attending:

- Karen Gershman, CPA
- Michele Whitham, Esq.

The PRIM Administration and Audit Committee meeting was called to order at 2:02 p.m. Chair Robert Brousseau announced that the meeting was being held in accordance with the provisions of Massachusetts, “Chapter 22 of the Acts of 2022” which was amended on July 16, 2022, which includes an extension, until March 31, 2023, of the remote meeting provisions of the March 12, 2020, Executive Order “Suspending Certain Provisions of the Open Meeting Law”. Accordingly, all members of the Committee participated remotely via telephone and/or internet enabled audio and video conferencing, and public access to the deliberations of the Committee was likewise provided via telephone, with presentation materials made available on PRIM’s website (www.mapension.com). At the start of the meeting the names of the members participating remotely were announced.

I. ESG Committee Status Update

Frederick (Rick) Funston, Managing Partner/Chief Executive Officer and Randall (Randy) Miller, Principal/Chief Operating Officer of Funston Advisory Services (FAS) walked through their presentation for the Committee.

Mr. Funston reminded the Committee that his firm issued an online survey to all PRIM Board and committee members seeking feedback on a draft ESG Committee charter and added that several Board and committee members requested follow-up telephone conversations to discuss their survey responses.

Mr. Funston added that FAS heard from several trustees and advisors the need for the ESG charter to illustrate leading governance (the G in ESG) practices. Accordingly, FAS made recommendations in several areas in which existing charters are silent, e.g., chair, the appointment process, terms, etc., and that FAS would not strongly object if the Committee wished to reserve opinion on those areas as part of a broader charter review.

Mr. Miller presented a summary of the feedback FAS received from the survey responses and telephone conversations. Additionally, Mr. Miller walked through their revised draft of the ESG Committee charter based on Board and committee members’ feedback and their recommended leading practices.

Treasurer Goldberg mentioned that some of the proposed changes including but not limited to composition, term limits, and committee size were inconsistent with existing charters. Treasurer Goldberg added that it is conceivable that given the breadth of E, S, and G, PRIM may need the flexibility of having more advisors than Funston had recommended and not limiting the number of advisors has worked in PRIM’s favor, allowing many bright people to be added to PRIM’s committees adding valuable expertise.

Mr. Miller responded by telling the Committee that FAS was engaged to advise PRIM on the ESG charter project and felt compelled to provide PRIM with leading practice of many of PRIM's peers, admitting that there may be some conflict, and would not strongly object if the Committee decided to table these specific changes until a review of the governance manual as a whole was to take place.

Dennis Naughton mentioned he would like to propose a motion to amend Funston's recommendation to remove certain components in section 6, feeling that they would be better addressed during a larger scope review of PRIM's governance manual.

Theresa McGoldrick mentioned that injecting term limits and conditions on how committee members are appointed seems appropriate for a review of PRIM's entire governance manual, not when formulating a committee, and would agree with Mr. Naughton, and Treasurer Goldberg that these components in question should be removed from the proposal.

Mr. Brousseau mentioned that there is merit in taking up these issues now, but he was comfortable waiting until PRIM can perform a larger scale review of its charters.

The Administration and Audit Committee voted (unanimously) by roll call vote to recommend to the PRIM Board that the Board amend the PRIM Board Governance Manual to include the Draft ESG Committee Charter as set forth at Appendix C of the Expanded Agenda, amended per Mr. Naughton's motion and after the Committee's discussion as follows;

"Committee Composition

1. ESG Committee members shall include:

- a) Four trustees, including at least one from each standing committee, appointed by the Board Chair in consultation with each trustee and ratified by the Board.
- b) ~~Three~~ independent advisors selected by the Board that must have qualifications and experience relevant to ESG policy making, engagement, and/or education, including advocacy, finance, investment management, corporate governance, and business management.
 - ~~i. Must have qualifications and experience relevant to ESG policy making, engagement, and/or education, including advocacy, finance, investment management, corporate governance, and business management.~~
 - ~~ii. Elected by the Board from a list of candidates developed with recommendations from trustees and advisors, with input from the Executive Director/CIO.~~
- ~~c) The ESG Committee Chair shall be elected by ESG Committee members.~~
- ~~d) Each ESG Committee member shall be elected for a term of three years.~~

"

and to amend the Administration and Audit Committee Charter to reflect the corresponding changes in proxy voting policy responsibilities, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

The PRIM Administration and Audit Committee meeting adjourned at 2:48 p.m.

List of documents and exhibits used during the meeting:

- *Funston Advisory Services – ESG Committee Charter Presentation*
- *ESG Committee Charter – Redline Version*
- *ESG Committee Charter – Clean Version*



Appendix C

Minutes of the PRIM Administration and Audit Committee Meeting of August 4, 2022

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Minutes of the PRIM Administration and Audit Committee
Thursday, August 4, 2022

Committee members present:

- Robert Brousseau, Chair
- Emily Kowtoniuk, Treasurer Deborah Goldberg’s designee
- Patrick Brock
- James Hearty

Committee members not present:

- Karen Gershman, CPA
- Michele Whitham, Esq.
- Dennis Naughton
- Theresa McGoldrick, Esq.

The PRIM Administration and Audit Committee meeting was called to order at 10:09 a.m. Chair Robert Brousseau announced that the meeting was being held in accordance with the provisions of Massachusetts, “Chapter 22 of the Acts of 2022” which was signed into law on February 15, 2022, and most recently amended on July 16, 2022, that includes an extension, until March 31, 2023, of the remote meeting provisions of the March 12, 2020, Executive Order “Suspending Certain Provisions of the Open Meeting Law”. Accordingly, all members of the Committee participated remotely via telephone and/or internet enabled audio and video conferencing, and public access to the deliberations of the Committee was likewise provided via telephone, with presentation materials made available on PRIM’s website (www.mapension.com). At the start of the meeting the names of the members participating remotely were announced.

The meeting was properly noticed as an open meeting but was without a full quorum.

I. Approval of the Minutes

The approval of the minutes of the May 5, 2022, Administration and Audit Committee meeting and the July 19, 2022, Administration and Audit Committee meeting were postponed due to the lack of a quorum.

II. Executive Director / Chief Investment Officer Comments

Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, made comments to the Committee, including:

Markets and Performance

Mr. Trotsky began by acknowledging that the Committee members in attendance virtually had also attended the Investment and Real Estate Committee meetings earlier in the week and had heard his report multiple times, so he planned to provide a shortened version of his comments at this meeting.

Mr. Trotsky mentioned that PRIM’s internally-developed investment tools have allowed staff to construct a portfolio that performs well in both strong and weak markets, and the heightened volatility of the markets over the last two fiscal years has provided an extraordinary test. Last year, in the strong markets of fiscal year 2021, the PRIT Fund recorded its best performance in PRIM’s entire history with a return of 30% (29.5%, net) and was at the top of PRIM’s peer group. The Fund also outperformed its benchmark by a record-setting 8.9%. This year, in fiscal year 2022 (FY 2022), during the weakest market since the Global Financial Crisis (GFC) more than thirteen years ago, the PRIT Fund also performed very strongly and was down only 3% (-3.4%, net), outperforming broad market indices by a wide margin and its benchmark by 1.5% (net). Mr. Trotsky believed that the PRIT Fund results for FY 2022 will similarly rank PRIM at the

top of the peer group. Performing strongly in both up and down markets is the hallmark of a well-constructed portfolio with proven, skillful managers.

Organizational Update

Mr. Trotsky mentioned that operationally, even while navigating the difficult investment environment, PRIM had an extremely productive year. PRIM hired and onboarded eleven new full-time employees, an increase from seven the prior year, and eight are diverse; promoted four of our highest-performing staff members (five last year), and all are female; and sponsored ten interns, all of whom are diverse. PRIM also became a founding signatory to the new CFA Institute Diversity, Equity, and Inclusion (DEI) Code for the Investment Profession.

PRIM successfully launched the FUTURE Initiative, a plan to increase the diversity of PRIM's investment managers and vendors to at least 20% by increasing access for minorities, women, disabled investment managers, and business partners. He mentioned the organization is proud of its fast progress. PRIM invested approximately \$3.4 billion with diverse managers over five asset classes during the fiscal year, and an additional \$1 billion to a new Emerging-Diverse Manager Program utilizing five new expert advisors.

Mr. Trotsky concluded his report by mentioning that on Environmental, Social and Governance (ESG) issues, PRIM began work on creating the structure and charter of the new and unique ESG advisory committee. This new ESG Committee will advise the Board on ESG-related matters.

III. Executive Director's Fiscal Year 2023 goals and Objectives (Voting Item)

Robert Brousseau, Chair, noted that the Administration and Audit Committee, pursuant to the PRIM Charters, is tasked with reviewing and potentially revising the Executive Director's proposed goals and objectives, and recommending them to the PRIM Board for approval. Mr. Trotsky noted that his fiscal year 2023 Goals and Objectives are largely consistent with prior years. Mr. Trotsky highlighted a few of his new fiscal year 2023 goals and objectives, including the support of the newly formed ESG Committee, continued implementation of the FUTURE Initiative and a Pay Equity Study.

The Administration and Audit Committee by consensus of those in attendance agreed to recommend to the PRIM Board that the Board approve the Executive Director's Fiscal Year 2023 Goals and Objectives, as set forth at Appendix D of the Expanded Agenda, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

IV. Proposed 2023 PRIM Board and Committee Meeting Schedule

Anthony Falzone, PRIM's Deputy Executive Director and Chief Operating Officer, mentioned to the Committee that the proposed 2023 PRIM Board and committee meeting schedule was not a voting item and that a final draft would be included in the November Administration and Audit Committee meeting materials for a recommendation to the Board at its December meeting.

V. Legislative Update

Emily Kowtoniuk, Treasury's Director of Policy & Legislative Affairs, provided a legislative update to the Committee. Ms. Kowtoniuk told the Committee that the language in the budget amendment that would alter the composition of the PRIM Board by having the public safety seat chosen by the Governor from a list of three candidates nominated by MACRS had been returned by the Governor to the legislature removing the MACRS designation and the House rejected the language and approved alternate language that the Senate would need to agree to before going before the Governor. She concluded her remarks by explaining there was uncertainty if the legislature would come back for a formal session in the fall.

VI. Other Matters:

The Committee members briefly discussed the following topics:

- a. June 2022 PRIM budget
- b. Travel
- c. Client Service

The PRIM Administration and Audit Committee meeting adjourned at 10:33 a.m.

List of documents and exhibits used during the meeting:

- Minutes of the PRIM Administration and Audit Committee Meeting of May 5, 2022
- Minutes of the PRIM Administration and Audit Committee Meeting of July 19, 2022
- PRIT Fund Performance Report (June 30, 2022)
- BNY Mellon Gross of Fees Performance Report (June 30, 2022)
- Executive Director and Chief Investment Officer's Draft Fiscal Year 2023 Goals and Objectives
- Proposed 2023 PRIM Board and Committee Meeting Schedule
- June 2022 PRIM Operating Budget
- Travel Report

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Appendix D

Draft Fiscal Year 2022 Annual Comprehensive Financial Report

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Annual Comprehensive Financial Report

Fiscal Years Ended June 30, 2022 and 2021

Pension Reserves Investment Trust Fund

(A Component Unit of the Commonwealth of Massachusetts)



Deborah B. Goldberg, Treasurer and Receiver General, Chair

Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer

Annual Comprehensive Financial Report

For the Years Ended June 30, 2022 and 2021

Pension Reserves Investment Trust Fund

(A Component Unit of the Commonwealth of Massachusetts)

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Prepared By

Pension Reserves Investment Management Board Staff

For More Information

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Introductory Section

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Pension Reserves Investment Management Board

December 1, 2022

To Chair Goldberg, the Trustees of the Pension Reserves Investment Management Board (the PRIM Board), Committee members, Participants and Beneficiaries:

I am pleased to transmit the *Annual Comprehensive Financial Report (ACFR)* of the Massachusetts Pension Reserves Investment Trust Fund (the PRIT Fund) for the fiscal year ending June 30, 2022. The document that follows is the 18th consecutive ACFR produced in the PRIM Board's 38-year history. We hope that you will find the ACFR useful in understanding the performance and financial position of the PRIT Fund as of and for the fiscal year ended June 30, 2022.

The ACFR contains the basic financial statements presented in accordance with U.S. generally accepted accounting principles (GAAP) and the standards applicable to financial audits set forth by *Government Auditing Standards*. The ACFR and the basic financial statements are the responsibility of the PRIM Board. The fiscal year 2022 audit was conducted by KPMG LLP, a firm of licensed certified public accountants.

The ACFR is divided into four major sections:

Introductory Section: This section contains the letter of transmittal, the *Certificate of Achievement for Excellence in Financial Reporting* and outlines the PRIM Board's organizational structure.

Financial Section: This section contains the report of the independent auditors, Management's Discussion and Analysis (MD&A), the financial statements of the PRIT Fund, the notes to the financial statements and supporting schedules.

Investment Section: This section contains a summary of the PRIT Fund's investment strategy, investment policies, investment holdings, investment results and supporting tables and schedules.

Statistical Section: This section contains information regarding financial ratios of the PRIT Fund.

Within the financial section, the MD&A follows the independent auditors' report and provides an overview of the PRIT Fund's financial statements and financial results. The MD&A complements this letter of transmittal and should be read in conjunction with this letter. Responsibility for both the accuracy and completeness of the data and the contents of this report rests with the PRIM Board. The PRIM Board has implemented a system of internal controls designed to provide reasonable assurance that the financial statements are free from material misstatements, that all assets will be properly safeguarded and that transactions will be properly executed. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits to be derived. The objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Profile of the PRIT Fund

The PRIT Fund is a pooled investment trust fund established to invest the assets of the Massachusetts State Teachers' and Employees' Retirement Systems, and the assets of county, authority, district, and municipal retirement systems. The PRIT Fund was created by the Legislature in 1983 (Chapter 661 of the Acts of 1983) with a mandate to accumulate assets through investment earnings to reduce the Commonwealth's unfunded pension liability, and to assist local participating retirement systems in meeting future pension obligations. The PRIT Fund merged with the Massachusetts State Teachers' and Employees' Retirement Systems (MASTERS) Trust in 1997, in accordance with Chapter 315 of the Acts of 1996.

The Massachusetts State Teachers', State Employees' and State-Boston/Teachers' Retirement Systems, and the State Retiree Benefits Trust Fund (SRBTF), are mandated by statute to invest all of their assets in the PRIT Fund. Other retirement systems may voluntarily invest all or part of their assets in the PRIT Fund.

Furthermore, Chapter 84 of the Acts of 1996 explicitly granted retirement boards the ability to invest only in individual asset classes of the PRIT Fund through a segmentation program. See Note 1 of the financial statements for more information on the profile and background of the PRIT Fund.

The most recent Commonwealth Actuarial Valuation Report, dated **October 21, 2021**, calculated the Commonwealth's unfunded actuarial pension liability at **\$45.6** billion. The Commonwealth Actuarial Valuation Report estimates that, as of **January 1, 2021**, the pension liability is **58.2%** funded. It should be noted that the unfunded actuarial pension liability is calculated on a calendar year basis and is used for funding purposes.

The PRIM Board seeks to maximize the return on the PRIT Fund investments within acceptable levels of risk and cost for an approximately 60% funded public pension fund, by broadly diversifying its investment portfolio, capitalizing on economies of scale to achieve cost-effective operations, and gaining access to high quality, innovative investment management firms. The PRIT Fund's Investment Policy Statement establishes investment objectives and policies designed to provide a framework for implementing investment strategy and oversight. A summary of the Investment Policy Statement is included in the Investment Section.

As of June 30, 2022, the PRIT Fund had approximately \$92.4 billion in net position compared to \$95.7 billion at the end of fiscal year 2021. The PRIM Board contracts with a custodian bank to safeguard investment holdings and to ensure the proper settlement and recording of investment and cash transactions.

Executive Director/ Chief Investment Officer Discussion

The PRIM Board's internally-developed investment tools have allowed us to construct a portfolio that performs well in both strong and weak markets, and the heightened volatility of the markets over the last two fiscal years has provided an extraordinary test. This year, in fiscal year 2022 (FY 2022), during the weakest market since the Global Financial Crisis (GFC) more than thirteen years ago, the PRIT Fund performed very strongly and was down only 3.0% (-3.4%, net of fees), outperforming broad market indices by a wide margin and its benchmark by 1.5% (net of fees). The PRIT Fund's trailing 3-, 5-, and 10-year returns remain strong, above benchmark, and above the Actuarial Rate of Return, which is currently 7.00%.

We have assembled a group of highly trained and talented professionals and we are extremely proud that they are attentive to every detail in the portfolio. We believe market downturns, while painful, also create opportunities to improve the portfolio and we continue to identify compelling new investment opportunities. In fact, our deployment of \$6.9 billion of capital to new investments in FY 2022 was a 58% increase over the prior year. Additionally, during times of increased volatility, we adhere to our monthly rebalancing discipline, which enables us to redeploy capital to areas hit hardest, while maintaining our commitment to staying within our long-term strategic allocation, which we believe has and will continue to serve us well.

We successfully launched the FUTURE Initiative, a plan to increase the diversity of the PRIM Board's investment managers and vendors to at least 20% by increasing access for minorities, women, and disabled investment managers, and business partners. We are proud of our progress. The PRIT Fund invested approximately \$3.4 billion with diverse managers over five asset classes during the fiscal year. Additionally, the PRIT Fund committed \$1.0 billion to a new Emerging-Diverse Manager Program utilizing five advisors, and more than \$200 million has already been deployed. The PRIT Fund currently invests more than \$7.7 billion, or more than 8% of the PRIT Fund, with diverse investment managers.

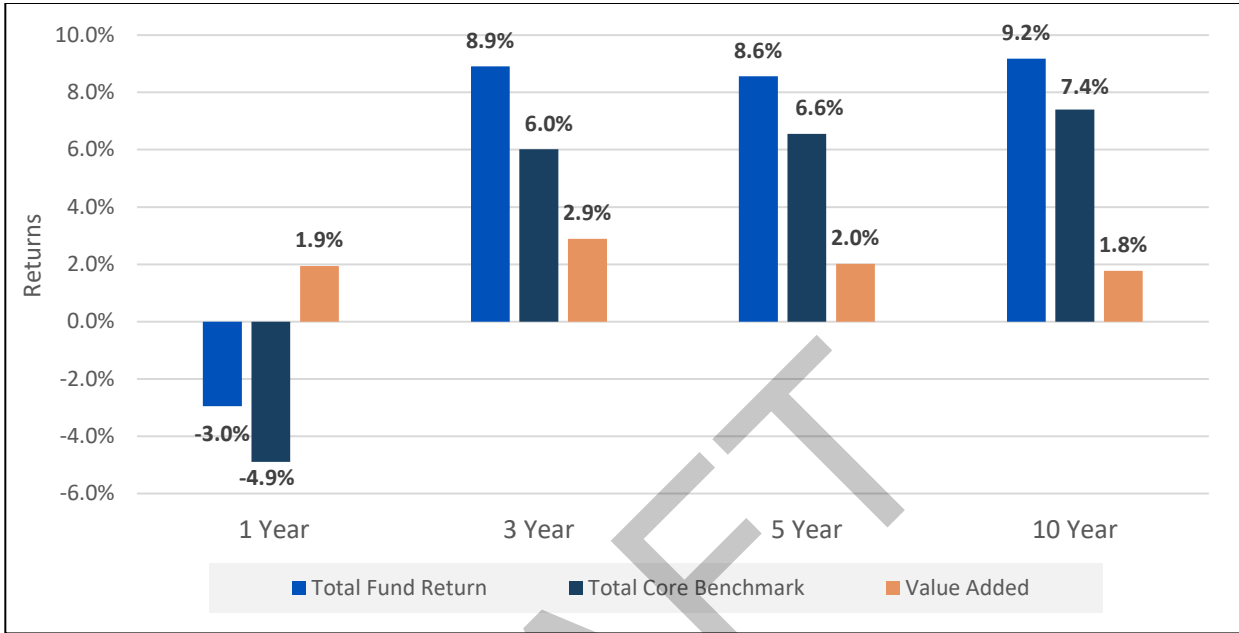
Operationally, while navigating the difficult investment environment, the PRIM Board had an extremely productive year. We hired and onboarded eleven new full-time employees, an increase from seven the prior year, and eight are diverse in regard to gender, race, or both; promoted four of our highest-performing staff members (five last year) and sponsored ten interns. The PRIM Board also became a founding signatory to the new CFA Institute Diversity, Equity, and Inclusion (DEI) Code for the Investment Profession.

On Environmental, Social and Governance (ESG) issues, we began work on creating the structure and charter of the new and unique ESG advisory committee. This new ESG Committee will advise the Board on ESG-related matters. The PRIM Board continues to support the MIT Sloan School of Management's Aggregate Confusion Project (ACP) as its first founding member. The goal of ACP is to develop tools to address inconsistencies in the measurement of ESG data, which has become widely recognized as an obstacle in ESG investing.

We are proud of how our staff overcame the challenging environment in FY 2022 to deliver not only strong investment performance, but also extraordinary non-investment innovation and responsiveness. We are thankful to the entire PRIM Board staff and to our Board and committee members, for their support, dedication, and hard work over the past year.

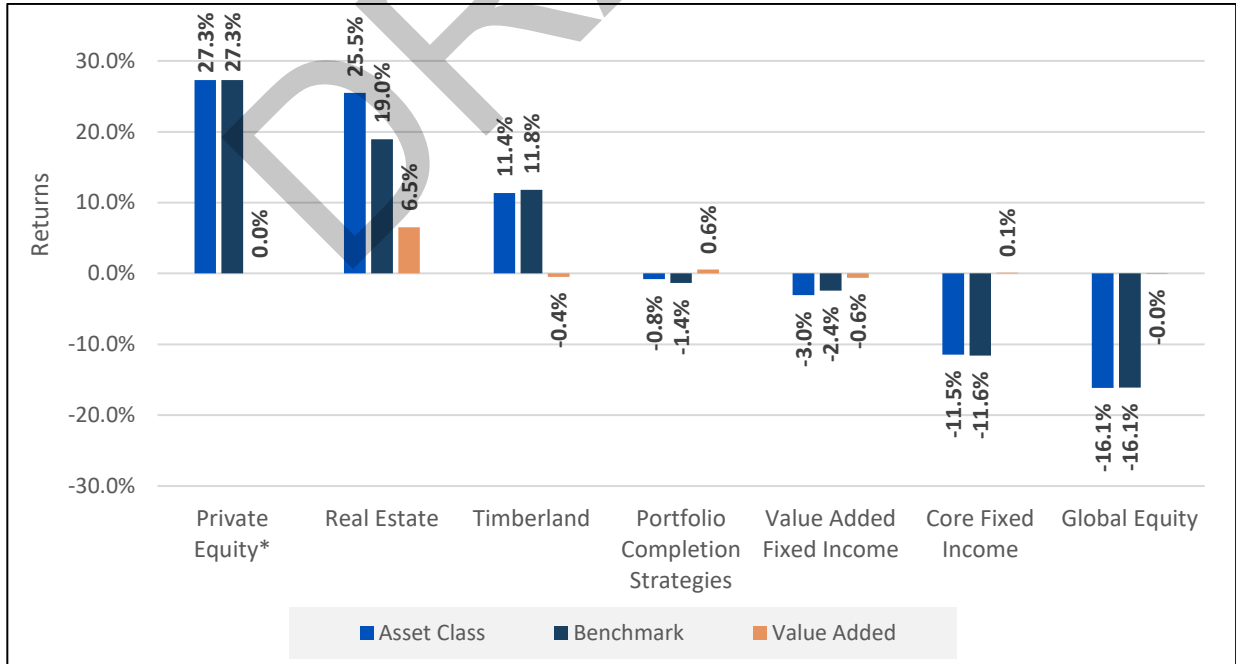
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PRIT Total Core Fund Returns (Gross of Fees) Annualized Returns as of June 30, 2022



Source: BNY Mellon. Total Core Benchmark includes private equity benchmark.

PRIT Performance by Asset Class (Gross of Fees) Annualized Returns as of June 30, 2022



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

PRIT Fund Periodic Table of Returns

(Gross of Fees) as of June 30, 2022

1 Year	3 Year	5 Year	10 Year
PRIVATE EQUITY 27.3%	PRIVATE EQUITY 31.9%	PRIVATE EQUITY 27.1%	PRIVATE EQUITY 22.4%
REAL ESTATE 25.5%	REAL ESTATE 14.1%	REAL ESTATE 11.5%	REAL ESTATE 11.5%
TIMBER 11.4%	GLOBAL EQUITY 6.3%	GLOBAL EQUITY 7.0%	GLOBAL EQUITY 9.1%
PORTFOLIO COMPLETION STRATEGIES (0.8%)	TIMBER 5.8%	TIMBER 5.4%	TIMBER 6.4%
VALUE-ADDED FIXED INCOME (3.0%)	VALUE-ADDED FIXED INCOME 3.6%	VALUE-ADDED FIXED INCOME 4.2%	VALUE-ADDED FIXED INCOME 4.7%
CORE FIXED INCOME (11.5%)	PORTFOLIO COMPLETION STRATEGIES 2.9%	PORTFOLIO COMPLETION STRATEGIES 3.5%	PORTFOLIO COMPLETION STRATEGIES 4.6%
GLOBAL EQUITY (16.1%)	CORE FIXED INCOME 0.0%	CORE FIXED INCOME 1.9%	CORE FIXED INCOME 2.9%

Source: BNY Mellon

Fiscal Year 2022 Highlights

1. **PRIM Private Equity ranked #3** in private equity returns among nearly 200 U.S. public pension funds based on 10-year performance. The PRIT Fund is the only fund that has been in the top 5 of all private equity portfolios in every year the *American Investment Council* has performed the study – including #1 rankings in 2019, 2018, 2015 and 2013.
2. For the 17th consecutive year, the PRIT Fund was awarded the Government Finance Officer Association's **Certificate of Achievement for Excellence in Financial Reporting** for the completeness and timeliness of our Annual Comprehensive Financial Report.
3. The PRIM Board became a founding signatory to the CFA Institute's first-ever Diversity, Equity, and Inclusion (DEI) Code for the Investment Profession. DEI Code signatories commit to six metrics-based Principles and to accelerate and amplify the impact of their commitment by making the economic, business, and moral case for diversity, equity, and inclusion.

4. For the 4th consecutive year, the PRIM Board has completed the CFA Institute's Global Investment Performance Standards (GIPS®) of integrity and transparency. Additionally, Matt Liposky, the PRIM Board's Chief Investment Operations Officer, was selected to the CFA Institute's GIPS® Asset Owner Subcommittee.
5. The PRIM Board was nominated for two awards by *Institutional Investor*, as nominated by industry peers and colleagues.
 - a. The PRIM Board's Portfolio Completion Strategies team was one of six finalists for "Plan of the Year" at *Institutional Investor's* 19th Annual Hedge Fund Industry Awards. The PRIM Board won this award in 2016 and has been nominated every year since, in 2017, 2018, 2019, 2020, and once again in 2021.
 - b. The PRIM Board was honored as the "Partnership of the Year" at the 5th Annual Allocator's Choice Awards for the MIT Sloan Sustainability Initiative's Aggregate Confusion Project, along with MIT, MFS Investment Management, AQR Capital Management, and Asset Management One for "working to reduce the level of noise in ESG measurement by improving data available to managers and allocators."
6. *Pensions & Investments* ranked the PRIM Board seventh among the largest 200 funds in the U.S. for assets managed by diverse managers.
7. The PRIM Board deployed \$6.9 billion in new investments during fiscal year 2022.
8. The FUTURE Initiative, a plan to increase the diversity of the PRIM Board's investment managers and vendors to at least 20%, has made great progress with the PRIT Fund investing \$3.4 billion with diverse investment managers over five asset classes during fiscal year 2022.
9. Treasurer Deborah B. Goldberg was honored by the National Association of State Treasurers (NAST) with the Harlon Bayles/Edward T. Alter Distinguished Service Award, presented to a dedicated and committed public servant whose outstanding career in government has provided a respected voice for NAST at all levels of government.
10. Deborah Coulter, CPA, the PRIM Board's Chief Financial Officer and Chief Administration Officer, and Matt Liposky, Chief Investment Operating Officer, were awarded the Treasurer's 2021 Citation for Outstanding Performance. Those selected for this honor have made notable contributions to the office of the Treasurer, its agencies, and the citizens of MA.
11. The PRIM Board recruited and on-boarded eleven new full-time employees, eight diverse in regard to gender, race, or both.

Acknowledgements

The PRIM Board's success is inextricably linked to the diligence of our Board and its Chair, Treasurer Deborah B. Goldberg. We are truly privileged to have volunteers of such high caliber and professional achievement on the Board and its committees, and we recognize that our success is due in large part to their dedication, hard work, and expert oversight.

Very respectfully,



Michael G. Trotsky, CFA
Executive Director and Chief Investment Officer

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Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

**Pension Reserves Investment Trust Fund
Massachusetts**

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morill

Executive Director/CEO

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the PRIM Board for its annual comprehensive financial report for the fiscal year ended June 30, 2021. This was the 17th consecutive year that the PRIM Board has achieved this prestigious award. In order to be awarded a Certificate of Achievement, an entity must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both U.S. generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

PRIM Board Trustees
June 30, 2022

Deborah B. Goldberg, Chair, Ex Officio Member
State Treasurer & Receiver General, Commonwealth of Massachusetts

Robert L. Brousseau, Elected Representative, Teachers' Retirement System
Retired Teacher, Town of Wareham Public School System

Ruth Ellen Fitch, Esq., Appointee of the State Treasurer
Retired President and CEO, The Dimock Center

James B. G. Hearty, Designee of the Governor
Retired Partner, Clough Capital

Theresa F. McGoldrick, Esq., Elected Member, State Employees' Retirement Board
National Executive Vice President, National Association of Government Employees

Peter Monaco, Appointee of the Governor
Managing Director, Raptor Group Holdings

Dennis J. Naughton, Elected Member, Teachers' Retirement Board
Retired Educator, Millis Public Schools

Carly Rose, Appointee of the Governor
Public Safety Union Member

Paul E. Shanley, Esq., Elected Representative, State Employees' Retirement System
Director of Professional Liability, Amity Insurance, Quincy, MA

Advisory Committees to the PRIM Board

June 30, 2022

Investment Committee

Deborah B. Goldberg, Chair

Ex Officio Board Member

Joseph C. Bonfiglio

Massachusetts & Northern New England Laborers' District Council

C. LaRoy Brantley

Principal, Meketa Investment Group

Michael Even

Former President and CEO, Numeric Investors

Constance M. Everson, CFA

Managing Director, Capital Markets Outlook Group

Ruth Ellen Fitch, Esq.

Board Member

James B. G. Hearty

Board Member

Peter Monaco

Board Member

Phillip H. Perelmuter

Former Managing Partner, Wellington Management

Philip Rotner

Chief Investment Officer, Boston Children's Hospital

Paul E. Shanley, Esq.

Board Member

Glenn P. Strehle, CFA

Treasurer Emeritus, MIT

Timothy L. Vaill

Former Chairman & CEO, Boston Private Financial

Current CFO, Anbaric Energy

Real Estate and Timberland Committee

Jill S. Hatton, CRE, Chair

Real Estate Investment Professional

Deborah B. Goldberg

Ex Officio Board Member

Lydia Chesnick, Esq.

Partner, Bernkopf Goodman LLP

Robert Gifford

RGA Corp

Anthony E. Hubbard, Esq.

CVS Health

Dr. Jack Lutz, PhD.

Forest Research Group

William F. McCall, Jr., CRE

McCall & Almy, Inc.

Garlan Morse, Jr., CRE

Morris and Morse Company, Inc.

Peter F. O'Connell

Marina Bay Company

Carly Rose

Board Member

Advisory Committees to the PRIM Board, continued
June 30, 2022

Administration and Audit Committee

Robert L. Brousseau, Chair

Board Member

Deborah B. Goldberg

Ex Officio Board Member

Patrick E. Brock

Chairman, Hampshire County Retirement Board

Karen E. Gershman, CPA

Retired Partner and Chief Operating Officer, Health Advances

James B. G. Hearty

Board Member

Theresa F. McGoldrick, Esq.

Board Member

Dennis J. Naughton

Board Member

Michele A. Whitham, Esq.

Founder & Principal, Whitham Law LLC

Compensation Committee

Michele A. Whitham, Esq., Chair

Founder & Principal, Whitham Law LLC

Deborah B. Goldberg

Ex Officio Board Member

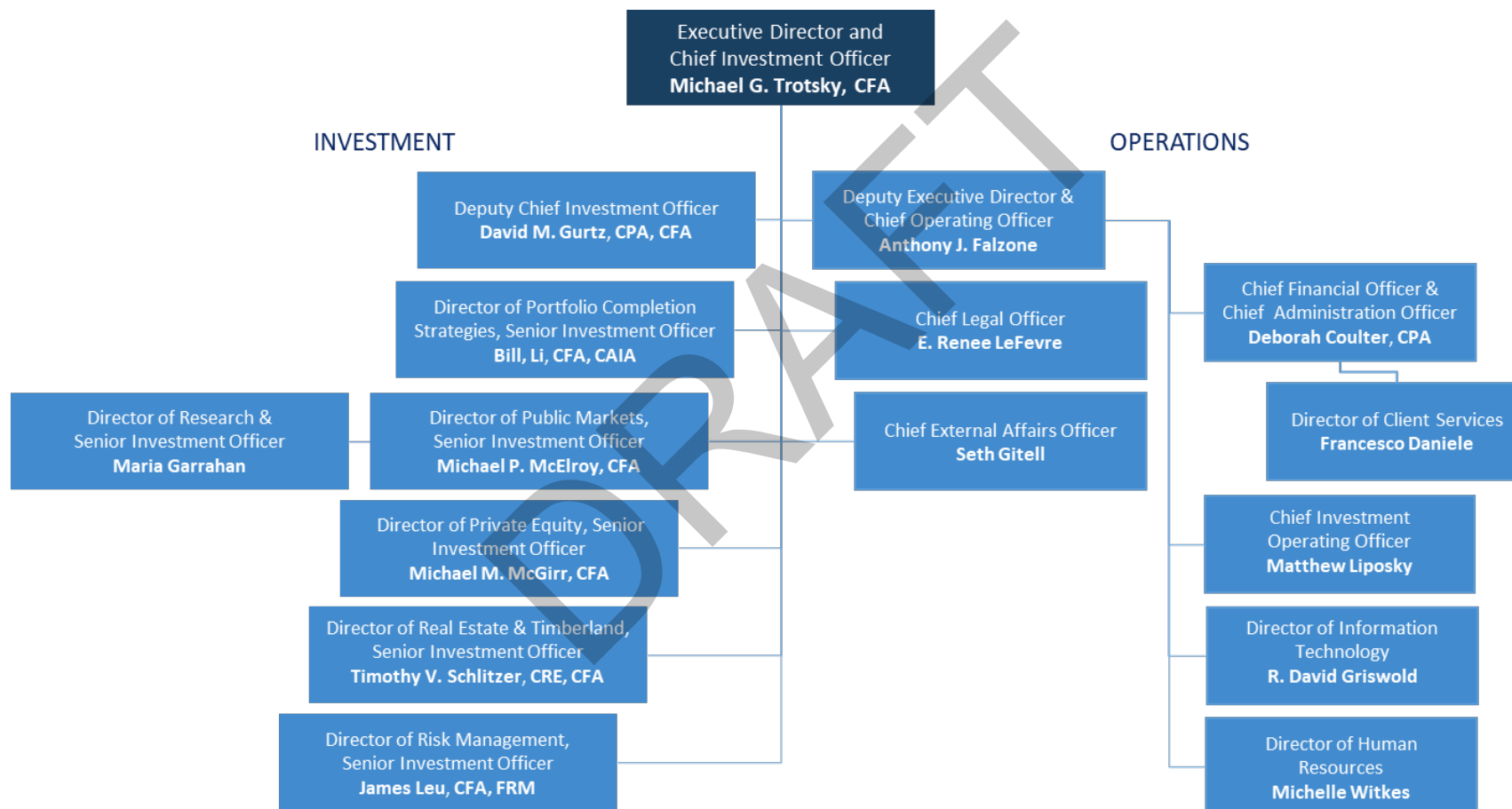
Robert L. Brousseau

Board Member

Patrick E. Brock

Chairman, Hampshire County Retirement Board

PRIM Board Management Organizational Chart



PRIM Board Investment Advisors*

Aberdeen Asset Management Inc.
Portfolio Completion Strategies Advisory Services

Callan Associates
Public Market Advisory Services

Hamilton Lane
Private Equity Advisory Services

International Woodland Company
Timberland Advisory Services

NEPC, LLC
Asset Allocation Advisory Services

NewAlpha Asset Management
Portfolio Completion Strategies Advisory Services

* List of investment managers is provided for each investment portfolio in the Investment Section on pages 66–88. See Schedule of Management Fees on page 92 in the Investment Section for investment management fees by asset class.

Summary Schedule of Broker Commissions listed by brokerage firms is in the Investment Section on page 91.

Financial Section

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Independent Auditors' Report

The Administration and Audit Committee and Trustees,
Pension Reserves Investment Management Board:

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the PRIT Fund's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the pooled net position of the PRIT Fund as of June 30, 2022 and 2021, and the changes in its pooled net position for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the PRIT Fund and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the PRIT Fund's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material

misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the PRIT Fund's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the PRIT Fund's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit for the year ended June 30, 2022 was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the PRIT Fund's basic financial statements for the year ended June 30, 2022. The schedule of pooled net position – capital fund and cash fund and schedule of changes in pooled net position – capital fund and cash fund for the year ended June 30, 2022 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements for the year ended June 30, 2022 and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2022.

Other Information

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the introductory, investment, and statistical sections but does not include the basic financial statements and our auditors' report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 1, 2022 on our consideration of the PRIT Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the PRIT Fund's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIT Fund's internal control over financial reporting and compliance.

[(signed) KPMG LLP]

Boston, Massachusetts
December 1, 2022

Required Supplementary Information –
Management’s Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

This section presents management’s discussion and analysis of the Pension Reserves Investment Trust Fund’s (the PRIT Fund’s) financial performance for the fiscal years ended June 30, 2022 and 2021 and should be read in conjunction with the financial statements, which follow this section.

The PRIT Fund is a pooled investment fund, created in 1983 through Massachusetts legislation, that invests the assets of the State Teachers’ and State Employees’ Retirement Systems and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund, as well as the assets of the State Retiree Benefits Trust (SRBT) Fund.

The investment return percentages reported in management’s discussion and analysis are presented gross of management fees.

Overview of the Financial Statements

The financial statements include the statements of pooled net position and the statements of changes in pooled net position. They present the financial position of the PRIT Fund as of June 30, 2022 and 2021 and its financial activities for the years then ended. The notes to the financial statements provide further information that is essential to a full understanding of the financial statements. The notes describe the significant accounting policies of the PRIT Fund and provide detailed disclosures on certain account balances. The supplementary schedules of pooled net position and changes in pooled net position separately display the balances and activities of the Capital Fund and Cash Fund of the PRIT Fund.

The financial statements of the PRIT Fund are reported using the economic resources measurement focus and the accrual basis of accounting. They are prepared in conformity with U.S. generally accepted accounting principles, as promulgated by the Governmental Accounting Standards Board (GASB).

Financial Highlights*Fiscal Year 2022*

- The net position of the PRIT Fund Decreased \$3.3 billion during the year ended June 30, 2022. Total net position was \$92.4 billion at June 30, 2022, compared to \$95.7 billion at June 30, 2021.
- Net investment loss for fiscal year 2022 was \$3.2 billion, compared to net investment income of \$21.9 billion for the prior fiscal year. The PRIT Fund returned -2.95%, gross of fees, in fiscal year 2022, compared to 29.91% in fiscal year 2021.
- Contributions to the PRIT Fund totaled \$4.3 billion during the year ended June 30, 2022, compared to \$2.9 billion during the year ended June 30, 2021.
- Redemptions from the PRIT Fund totaled \$4.4 billion during the year ended June 30, 2022, compared to \$4.1 billion during the year ended June 30, 2021.

(Continued)

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

Fiscal Year 2021

- The net position of the PRIT Fund increased \$20.7 billion during the year ended June 30, 2021. Total net position was \$95.7 billion at June 30, 2021, compared to \$75.0 billion at June 30, 2020.
- Net investment income for fiscal year 2021 was \$21.9 billion, compared to net investment income of \$1.4 billion for the prior fiscal year. The PRIT Fund returned 29.91%, gross of fees, in fiscal year 2021, compared to 2.38% in fiscal year 2020.
- Contributions to the PRIT Fund totaled \$2.9 billion during the year ended June 30, 2021, compared to \$3.0 billion during the year ended June 30, 2020.
- Redemptions from the PRIT Fund totaled \$4.1 billion during the year ended June 30, 2021, compared to \$4.3 billion during the year ended June 30, 2020.

Condensed Financial Information

Summary balances and activities of the PRIT Fund as of and for the years ended June 30, 2022, 2021, and 2020 are presented below:

	<u>2022</u>	<u>June 30</u> <u>2021</u>	<u>2020</u>
	(Dollars in thousands)		
Summary of pooled net position:			
Assets:			
Investments	\$ 96,805,918	99,813,545	79,568,987
Cash	254,404	219,795	177,151
Securities lending collateral	121,946	201,581	475,937
Receivables and other assets	1,494,813	2,169,161	1,397,891
Total assets	<u>98,677,081</u>	<u>102,404,082</u>	<u>81,619,966</u>
Liabilities:			
Other liabilities	5,258,318	6,202,728	5,876,067
Securities lending obligations	872,820	451,560	725,946
Management fees payable to PRIM	116,888	50,949	32,194
Total liabilities	<u>6,248,026</u>	<u>6,705,237</u>	<u>6,634,207</u>
Net position held in trust for pool participants	<u>\$ 92,429,055</u>	<u>95,698,845</u>	<u>74,985,759</u>

(Continued)

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

	<u>2022</u>	<u>June 30 2021</u>	<u>2020</u>
	(Dollars in thousands)		
Summary of changes in pooled net position:			
Additions:			
Contributions	\$ 4,342,091	2,910,244	3,023,314
Net investment (loss) income	(3,239,745)	21,944,914	1,448,873
Total additions	1,102,346	24,855,158	4,472,187
Deductions:			
Redemptions	4,372,136	4,142,072	4,322,066
Change in pooled net position	(3,269,790)	20,713,086	150,121
Net position held in trust for pool participants:			
Balance, beginning of year	95,698,845	74,985,759	74,835,638
Balance, end of year	\$ 92,429,055	95,698,845	74,985,759

The PRIT Fund Performance during the year ended June 30, 2022

The PRIT Fund began fiscal year 2022 with net position of \$95.7 billion and ended the fiscal year with a net position of \$92.4 billion, representing a 3.42% decrease. Net investment loss for the year ended June 30, 2022 was \$3.2 billion, which when added to net participant redemptions (contributions less redemptions) of \$30.0 million, resulted in an overall decrease in net position of \$3.3 billion.

For the year ended June 30, 2022, the PRIT Fund returned -2.95% gross of fees, outperforming its benchmark of -4.90% by 195 basis points. The benchmark provides a measure of how well the PRIT Fund has implemented its asset allocation plan.

The asset classes of the PRIT Fund and related investment returns, gross of fees, for the year ended June 30, 2022 are as follows: Global Equity -16.14%; Core Fixed Income -11.46%; Value-Added Fixed Income -3.04%; Private Equity 27.29%; Real Estate 25.48%; Timberland 11.37%; Portfolio Completion Strategies -0.80%; and Overlay -10.68%.

The PRIT Fund outperformed its benchmarks for the fiscal year ended June 30, 2022 and over the three-year, five-year, and ten-year periods and has returned an average of 9.37%, gross of fees, annually since January 1, 1985. According to the Trust Universe Comparison Service (TUCS) for Public Pension Funds, a widely accepted peer ranking of public pension funds performance, the PRIT Fund ranked in the top quartile of public pension plans with net position in excess of \$25 billion for the ten-year period ended June 30, 2022.

(Continued)

Required Supplementary Information –
Management’s Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

The PRIT Fund Performance during the year ended June 30, 2021

The PRIT Fund began fiscal year 2021 with net position of \$75.0 billion and ended the fiscal year with a net position of \$95.7 billion, representing a 27.62% increase. Net investment income for the year ended June 30, 2021 was \$21.9 billion, which when added to net participant redemptions (contributions less redemptions) of \$1.2 billion, resulted in an overall increase in net position of \$20.7 billion.

For the year ended June 30, 2021, the PRIT Fund returned 29.91% gross of fees, outperforming its benchmark of 20.58% by 933 basis points. The benchmark provides a measure of how well the PRIT Fund has implemented its asset allocation plan.

The asset classes of the PRIT Fund and related investment returns, gross of fees, for the year ended June 30, 2021 are as follows: Global Equity 42.45%; Core Fixed Income -0.76%; Value-Added Fixed Income 18.47%; Private Equity 72.67%; Real Estate 17.03%; Timberland 7.99%; Portfolio Completion Strategies 15.57%; and Overlay 17.27%.

Other Information

This financial report is designed to provide a general overview of the PRIT Fund’s financial results. Additional information can be found on the PRIM Board’s website at www.mapension.com. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Pension Reserves Investment Management Board, 84 State Street, Boston, Massachusetts 02109.

Statements of Pooled Net Position

June 30, 2022 and 2021

(Dollars in thousands)

	2022	2021
Assets:		
Investments, at fair value:		
Short-term	\$ 1,635,564	2,572,722
Fixed income	20,686,408	22,445,081
Equity	33,243,865	39,712,411
Timberland	2,904,110	2,798,749
Private equity funds	16,837,964	13,590,807
Real estate:		
Real estate properties	9,796,738	7,702,060
Equity	1,336,488	1,512,207
Real estate funds	481,793	270,007
Other	75,973	29,476
Total real estate	11,690,992	9,513,750
Portfolio completion strategies:		
Investment funds	2,303,551	2,219,600
Equity	2,285,915	2,403,242
Fixed income	3,518,563	2,781,967
Cash and cash equivalents	1,106,108	1,169,968
Agricultural investments	592,878	579,862
Other	—	25,386
Total portfolio completion strategies	9,807,015	9,180,025
Total investments	96,805,918	99,813,545
Cash	254,404	219,795
Securities lending collateral	121,946	201,581
Interest and dividends receivable	234,231	209,022
Receivable for investments sold and other assets	727,187	1,323,811
Securities sold on a when-issued basis	398,418	547,456
Foreign currency forward contracts	134,977	88,872
Total assets	98,677,081	102,404,082
Liabilities:		
Securities sold short and other liabilities, at fair value:		
Portfolio completion strategies	2,172,680	1,817,428
Fixed income	14,747	112,606
Total securities sold short and other liabilities	2,187,427	1,930,034
Payable for investments purchased and other liabilities	1,198,502	1,516,901
Real estate debt and other liabilities	875,298	1,457,519
Securities lending obligations	872,820	451,560
Securities purchased on a when-issued basis	915,314	1,210,290
Foreign currency forward contracts	81,777	87,984
Management fees payable to PRIM	116,888	50,949
Total liabilities	6,248,026	6,705,237
Net position held in trust for pool participants	\$ 92,429,055	95,698,845

See accompanying notes to financial statements.

Statements of Changes in Pooled Net Position
Years ended June 30, 2022 and 2021
(Dollars in thousands)

	2022	2021
Additions:		
Contributions:		
State employees	\$ 858,181	698,282
State teachers	1,058,832	898,722
Other participants	2,425,078	1,313,240
Total contributions	<u>4,342,091</u>	<u>2,910,244</u>
Net investment income (loss):		
From investment activities:		
Net realized gain on investments and foreign currency transactions	4,831,600	6,839,826
Net change in unrealized (depreciation) appreciation on investments and foreign currency translations	(9,901,811)	13,543,569
Interest	622,086	475,341
Dividends	910,551	719,579
Timberland	41,557	67,491
Private equity	134,138	139,664
Portfolio completion strategies	50,980	44,492
Real estate:		
Income	594,530	541,807
Expenses	(231,520)	(233,459)
Total real estate	<u>363,010</u>	<u>308,348</u>
(Loss) Income from investment activities	<u>(2,947,889)</u>	<u>22,138,310</u>
Investment management and other management fees	(295,929)	(198,944)
Net (loss) income from investment activities	<u>(3,243,818)</u>	<u>21,939,366</u>
From securities lending activities:		
Securities lending income	6,359	6,381
Securities lending expenses	(2,286)	(833)
Net income from securities lending activities	<u>4,073</u>	<u>5,548</u>
Total net investment (loss) income	<u>(3,239,745)</u>	<u>21,944,914</u>
Total additions	<u>1,102,346</u>	<u>24,855,158</u>
Deductions:		
Redemptions:		
State employees	1,509,113	1,450,024
State teachers	1,507,198	1,579,435
Other participants	1,355,825	1,112,613
Total deductions	<u>4,372,136</u>	<u>4,142,072</u>
Net (decrease) increase in pooled net position	<u>(3,269,790)</u>	<u>20,713,086</u>
Net position held in trust for pool participants:		
Balance, beginning of year	<u>95,698,845</u>	<u>74,985,759</u>
Balance, end of year	<u>\$ 92,429,055</u>	<u>95,698,845</u>

See accompanying notes to financial statements.

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(1) Description of the Pension Reserves Investment Trust Fund**(a) General**

The Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, was created in 1983 under Chapter 661 of the Acts of 1983, as amended by Chapter 315 of the Acts of 1996. The PRIT Fund is a pooled investment fund that invests the assets of the State Teachers' and State Employees' Retirement Systems of Massachusetts and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund, as well as the assets of the State Retiree Benefits Trust (SRBT) Fund. The PRIT Fund is not registered with the Securities and Exchange Commission, but is subject to oversight provided by the Pension Reserves Investment Management Board (the PRIM Board). The PRIM Board was created by legislation to provide general supervision of the investments and management of the PRIT Fund. The PRIM Board is a separate legal entity that issues its own financial statements, which are not included in the accompanying financial statements of the PRIT Fund.

A nine-member Board of Trustees governs the PRIM Board. The Trustees include: (1) the Governor, ex officio, or his designee; (2) the State Treasurer, ex officio, or his designee who shall serve as Chair of the PRIM Board; (3) a private citizen experienced in the field of financial management appointed by the State Treasurer; (4) an employee or retiree who is a member of the State Teachers' Retirement System, elected by the members of such system for a term of three years; (5) an employee or retiree who is a member of the State Employees' Retirement System, elected by the members of such system for a term of three years; (6) the elected member of the State Retirement Board; (7) one of the elected members of the Teachers' Retirement Board chosen by the members of the Teachers' Retirement Board; (8) a person who is not an employee or official of the Commonwealth appointed by the Governor; and (9) a representative of a public safety union appointed by the Governor. Appointed members serve for a term of four years. The Board of Trustees has the authority to employ an Executive Director, outside investment managers, custodians, consultants, and others as it deems necessary; to formulate policies and procedures; and to take such other actions as necessary and appropriate to manage the assets of the PRIT Fund.

The PRIM Board seeks to manage the PRIT Fund to ensure that pension assets are well invested so that current and future benefit obligations are adequately funded in a cost-effective manner. The PRIM Board therefore seeks to maximize the total return on investment within acceptable levels of risk and cost for an approximately 60% funded public pension fund. Under current law, by the year 2040, the PRIT Fund plans to have grown, through annual payments in accordance with a legislatively approved funding schedule and through total return of the PRIT Fund, to an amount sufficient to meet the then-existing pension obligations of the Commonwealth. The Commonwealth has adopted

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

a schedule of state pension appropriations that assumes a long-term actuarial rate of return for the PRIT Fund of 7.0%.

The State Teachers' and State Employees' Retirement Systems and the SRBT Fund are mandated by statute to invest all of their assets in the PRIT Fund and are, therefore, considered involuntary participants. The assets of the State-Boston Retirement System attributable to teachers who are members of that system are also mandated to be held in the PRIT Fund. Other retirement systems have the option to become Participating or Purchasing System participants in the PRIT Fund. Participating Systems must transfer all of their assets to the PRIT Fund, commit to remain invested for five years, and are entitled to share in appropriations made to the PRIT Fund by the Commonwealth in accordance with Massachusetts General Laws, Chapter 32, Section 22B. The Commonwealth has made no such appropriation to the PRIT Fund on behalf of Participating Systems since fiscal year 2000.

Purchasing Systems may invest all or a portion of their assets in the PRIT Fund and retain the ability to contribute and withdraw funds at their discretion; however, they are not entitled to state appropriations. Participating and Purchasing Systems share in the investment earnings of the PRIT Fund based on their proportionate share of net position. As of June 30, 2022, there were 38 Participating Systems and 62 Purchasing Systems invested in the PRIT Fund.

(b) Investment Funds

The PRIT Fund consists of two investment funds, the Capital Fund and the Cash Fund. Each of these funds is managed, accounted for, and held separately by the PRIT Fund's custodian.

The Cash Fund consists of short-term investments, which are used to meet the liquidity requirements of Participating and Purchasing Systems. All Cash Fund earnings are reinvested. The State Teachers' Retirement System and the State Employees' Retirement System make daily deposits into the Cash Fund, which is their source of funds for benefit payments and operating expenses. The Cash Fund maintains a stable net position value of \$1.00 per unit.

Assets contributed by retirement systems are initially deposited in the Cash Fund and then transferred to the Capital Fund. Funds transferred into the Capital Fund are generally invested in the General Allocation Account, which invests in all asset classes of the PRIT Fund in accordance with the PRIM Board's asset allocation plan and investment policy guidelines. The Capital Fund serves as the investment portfolio of the PRIT Fund and consists of the following accounts: General Allocation (holds units of all other accounts), Domestic Equity, International Equity, Emerging Markets Equity, Global Equity Emerging-Diverse Manager Program, Core Fixed Income, Public Value-Added Fixed Income, Real Estate, Timberland, Hedge Funds, Private Debt, Overlay, Real Assets, Other Credit

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

Opportunities, Liquidating Portfolios, Private Equity Investments, and Private Equity Investments Vintage Years 2000-2022. Vintage Year refers to the calendar year in which the PRIT Fund made a commitment to invest in a private equity investment.

Upon deposit by a Participating or Purchasing System into the accounts of the Capital Fund, units of participation equal to the total value of the contribution are issued. The value of a unit of each account is determined monthly by dividing the value of the net position of the account by the number of units outstanding at each month-end valuation date. The unit price fluctuates with the performance of the Capital Fund. The number of units generally changes only when a retirement system makes a contribution or redemption.

Chapter 84 of the Acts of 1996 permits Massachusetts retirement boards to purchase units in the individual investment accounts of the PRIT Fund as an alternative to investing in its General Allocation Account. This investment option, also referred to as "segmentation," was established by an amendment to the PRIM Board's Operating Trust Agreement in 1994 in response to requests from retirement boards wishing to invest in certain asset classes of the PRIT Fund. Purchasing Systems, as "segmented investors," may invest in one or more of the following accounts of the Capital Fund: Domestic Equity, International Equity, Emerging Markets, Core Fixed Income, Public Value-Added Fixed Income, Real Estate, Hedge Funds, and Private Equity Vintage Year accounts. At June 30, 2022 and 2021, there were 44 segmented investors in the PRIT Fund. The remaining Purchasing Systems invested in the General Allocation Account.

(2) Summary of Significant Accounting Policies**(a) Basis of Accounting and Financial Statement Presentation**

The financial statements of the PRIT Fund are reported using the economic resources measurement focus and the accrual basis of accounting. They are prepared in conformity with U.S. generally accepted accounting principles, which require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the dates of the financial statements and the reported amounts of additions and deductions during the reporting periods. Actual results could differ from those estimates.

The PRIT Fund follows Governmental Accounting Standards Board (GASB) guidance as applicable to external investment pools.

The PRIT Fund consolidates assets and liabilities of its single-member limited liability corporations.

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(b) Investments

The PRIM Board recognizes that over the long term, asset allocation is the single greatest contributor of return and risk to the PRIT Fund. The PRIM Board's asset allocation plan embodies its decisions to invest portions of the Capital Fund in global equity securities, core fixed income securities, value-added fixed income, real estate, timberland, private equity, portfolio completion strategies and, where appropriate, the various sub asset classes of each asset class. Statutes prohibit the PRIT Fund from investing in certain securities. The PRIM Board ensures that investment managers adhere to the requirements of Massachusetts General Laws.

Security transactions are recorded on the date the securities are purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to the PRIT Fund by a Participating or Purchasing System, the fair value of the securities on the transfer date. The calculation of realized gains (losses) is independent of the calculation of the net change in unrealized appreciation (depreciation) on investments. Realized gains and losses on investments sold in the current year include previously recorded unrealized amounts and are included in net realized gain on investments in the accompanying statements of changes in pooled net position.

The PRIM Board values investments in fixed income, money market, other short-term investments, and U.S. government agency obligations using independent pricing services. In determining the price, the services may reflect such factors as market prices, yields, maturities, and ratings, supplemented by dealer quotations. Investments in equity securities, including exchange-traded funds, traded on national securities exchanges are valued at the last daily sale price or, if no sale price is available, at the closing bid price. Securities traded on any other exchange are valued in the same manner or, if not so traded, on the basis of closing over-the-counter (OTC) bid prices. If no bid price exists, valuation is determined either by establishing the mean between the most recent published bid and asked prices or averaging quotations obtained from dealers, brokers, or investment bankers. Securities for which such valuations are unavailable are reported at their fair value as estimated in good faith by the PRIM Board based on information provided by the investment managers responsible for such investments. Fair values for investments in pooled investment vehicles (commingled funds), such as mutual and similar funds with a readily determinable fair value, are based on the commingled fund's published net asset value (NAV) which are valued based on the underlying marketable securities or, in the absence of readily ascertainable fair values, the price of similar securities or other observable or unobservable inputs.

The PRIT Fund invests a portion of its assets in emerging capital markets. These investments may involve greater risks than investments in more developed markets, and the prices of such investments may be volatile. The consequences of political, social, or economic changes in these

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

markets may have disruptive effects on the market prices of these investments and the income they generate, as well as the PRIT Fund's ability to repatriate such amounts.

As described further below, certain qualifying investments may be measured using NAV as a practical expedient to estimate fair value unless as of the measurement date it is probable that the PRIT Fund's interest will be sold at an amount different than NAV. As of June 30, 2022 and 2021, the PRIT Fund had no plans or intentions to sell such investments at amounts other than NAV.

Investments in real estate represent the PRIT Fund's ownership interest in PRIT Core Realty Holdings LLC (the LLC). On October 19, 2001, the LLC was formed and was governed by an operating agreement entered into by the PRIM Board, as trustee of the PRIT Fund, as the sole member. The principal purpose of the LLC is to conduct the investment activities of the real estate program in a manner consistent with the PRIT Fund Declaration of Trust and any business or activities incidental to or in support of such investment activities.

The LLC holds investments in real estate properties, real estate fund investments, and Real Estate Investment Trust (REIT) securities. Investments in real estate properties are stated at fair value based on appraisals prepared by independent real estate appraisers or on estimated valuations determined by the PRIM Board assuming highest and best use of the assets. These estimated valuations are based on valuations prepared by the real estate investment managers under the general supervision of the PRIM Board. Generally, third-party appraisals are performed on each real estate property within 18 months of the date of acquisition and at least annually thereafter. Determination of fair value involves judgment because the actual fair value of a real estate investment can be determined only by negotiation between parties in a sales transaction. Due to the inherent uncertainty of valuation, fair values used may differ significantly from values that would have been determined had a ready market for the investments existed, and the differences could be material. Real estate fund investments are invested through limited partnerships and are recorded at fair value estimated by the PRIM Board, generally using the NAVs provided by general partners as a practical expedient. The NAVs provided by general partners are generally based on appraised value of underlying real estate investments, which considers inputs such as comparable sales, projected income, discount rate, and capitalization rates. REIT securities are publicly traded securities and are valued in the same manner as the PRIT Fund's traded equity securities.

Investments in timberland are valued similarly to investments made by the LLC in real estate properties. Independent appraisals of timberland investments are performed annually.

Portfolio completion strategies investments represent the PRIT Fund's ownership in direct hedge funds, hedge fund-of-funds, a distressed loan fund, and real assets funds (collectively, the funds),

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

managed accounts, and agricultural investments. The fair values of the PRIT Fund's interest in funds are estimated by the PRIM Board, generally using NAVs provided by fund managers as a practical expedient. NAVs for direct hedge funds, distressed loan, and real assets funds generally are based on the value of the underlying marketable securities or assets, or in the absence of readily ascertainable fair values, the price of identical or similar securities or assets. NAVs for hedge fund-of-funds are generally based on the value of the NAVs of the underlying funds which value their investments similar to direct hedge funds. Managed account investments in equity securities, fixed income, and other investments are valued using independent pricing services. In the event that pricing information is not available, then the investment is reported at fair value as estimated in good faith by the PRIM Board based on information provided by the investment manager responsible for such investment. Cash and cash equivalents held in managed accounts consist of cash and highly liquid investments that are readily convertible into cash. The carrying amount of these investments approximates fair value. Agricultural investments are valued similarly to investments made by the LLC in real estate properties and are generally appraised annually.

Private equity investments are typically made through limited partnerships that invest in venture capital, leveraged buyouts, private placements, and other investments whose structure, risk profile, and return potential differ from traditional equity and fixed income investments. These investments are recorded at fair values estimated by the PRIM Board, generally using the NAVs provided by general partners as a practical expedient. The NAVs generally are based on the value of underlying investment holdings, which are determined by investment managers and consider variables such as operating results, earnings of the underlying holdings, projected cash flows, recent sales prices, and other pertinent information. These estimated fair values are determined in good faith by investment managers or general partners using consistently applied procedures.

(c) Investment Income

Dividend income is recorded on the ex-dividend date, and interest income is accrued as earned. For the years ended June 30, 2022 and 2021, foreign taxes withheld of \$28,994 and \$21,984, respectively, have been netted against dividend income in the statements of changes in pooled net position. Real estate income includes dividends earned on REIT securities as well as cash distributions of operating income from investments in real estate properties. Timberland income includes cash distributions of operating income from investments in timberland properties. Private equity income is recorded on a cash distribution basis. Portfolio completion strategies income includes cash distributions of operating income from agricultural investments as well as investment income from managed accounts.

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(d) Foreign Currency Translation and Transactions

The accounting records of the PRIT Fund are maintained in U.S. dollars. Investment securities and other assets and liabilities denominated in a foreign currency are translated into U.S. dollars at the prevailing rates of exchange at month-end. Purchases and sales of securities, income receipts, and expense payments are translated into U.S. dollars at the prevailing exchange rate on the respective dates of the transactions.

Unrealized net currency gains and losses from valuing foreign currency-denominated assets and liabilities at month-end exchange rates are reflected within net unrealized appreciation (depreciation) on investments.

Net realized gains and losses on foreign currency transactions represent principally gains and losses from sales and maturities of forward foreign currency contracts, disposition of foreign currencies, and currency gains and losses realized between the trade and settlement dates on securities transactions.

(e) Derivative Instruments

In accordance with GASB Statement No. 53, *Accounting and Financial Reporting of Derivative Instruments*, the PRIT Fund has recorded all of its derivative activity at fair value as investment instruments within equity, fixed income, portfolio completion strategies, and real estate investments and the related change in such instruments within the net change in unrealized appreciation (depreciation) on investments and foreign currency translations in the accompanying financial statements. As described in GASB Statement No. 72, *Fair Value Measurement and Application* (GASB 72), a credit valuation adjustment should be applied, when applicable, for nonperformance risk using the PRIT Fund's credit risk (liability) in determining fair value.

The PRIT Fund regularly trades derivative financial instruments with off-balance sheet risk in the normal course of its investing activities to manage exposure to certain risks within the fund. The PRIT Fund also enters into derivative transactions to gain exposure to currencies and markets where derivatives are the most effective instrument. The PRIT Fund's derivative financial instruments include contracts for differences, foreign currency exchange contracts, financial and commodity futures contracts, and customized swap agreements (see note 7 for more detail). These derivative instruments can be exchange-traded or OTC contracts. The primary difference in risk associated with OTC contracts and exchange-traded contracts is credit and liquidity risks. For exchange-traded contracts, credit risk is limited to the role of the exchange or clearing corporation. OTC contracts contain credit risk for unrealized gains from various counterparties for the duration of the contract.

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(f) When-Issued Securities Transactions

The PRIT Fund may purchase or sell securities on a “when-issued” or delayed-delivery basis. Delivery and payment for such securities may take place a month or more after the trade date. Normally, settlement occurs within three months. The price of the underlying securities and the date when the securities will be delivered and paid for are fixed at trade date. During the time a delayed delivery sell transaction is outstanding, the contract is marked to market daily and substantially equivalent deliverable securities are held by the PRIT Fund for the transaction to the extent available. For delayed delivery purchase transactions, the PRIT Fund maintains segregated assets with a fair value equal to or greater than the amount of its purchase commitments. The receivables and payables associated with the sale and purchase of delayed delivery securities are reflected in the accompanying statements of pooled net position as securities sold and purchased on a when-issued basis. Losses may arise due to changes in the value of the underlying securities, if the counterparty does not perform under the contract, or if the issuer does not issue the securities due to political, economic, or other factors.

The PRIT Fund may also enter into mortgage dollar-roll and reverse mortgage dollar-roll agreements on a when-issued basis. A mortgage dollar-roll is an agreement in which the PRIT Fund sells securities on a when-issued basis and simultaneously contracts with the same counterparty to repurchase similar (same type, coupon, and maturity) but not identical securities on a specified future date. During the roll period, principal and interest on these securities are not received. The PRIT Fund is compensated by the difference between the current sales price and the forward price for the future purchase. A reverse mortgage dollar-roll is an agreement to buy securities and to sell substantially similar securities on a specified future date. During the roll period, the PRIT Fund receives the principal and interest on the securities purchased. The receivables and payables associated with mortgage dollar-rolls and reverse mortgage dollar-rolls are also reflected in the accompanying statements of pooled net position as securities sold and purchased on a when-issued basis.

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(3) Fair Value Measurements of Investments

In accordance with GASB 72, except for investments measured using NAV as a practical expedient to estimate fair value, the PRIT Fund categorizes the fair value measurements of its investments within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

- Level 1 – Inputs that reflect quoted prices (unadjusted) in active markets for identical assets or liabilities that the fund has the ability to access at the measurement date. Most of the PRIT Fund's directly held marketable securities, mutual funds and exchange traded funds would be examples of Level 1 investments.
- Level 2 – Inputs other than quoted prices that are observable for an asset or liability either directly or indirectly, including inputs in markets that are not considered to be active. Fair values are primarily obtained from third-party pricing services for identical or comparable assets or liabilities, such as interest rates, foreign exchange rates, and yield curves that are observable at commonly quoted intervals. Because they must often be priced on the basis of transactions involving similar but not identical securities or do not trade with sufficient frequency, certain directly held fixed income securities are categorized in Level 2.
- Level 3 – Unobservable inputs based on the best information available, using assumptions in determining the fair value of investments and derivative financial instruments. Generally, the PRIT Fund's directly held investments in real estate and timberland will be categorized in Level 3 because a preponderance of inputs used to estimate fair value are not observable. For similar reasons, certain fixed income securities may also be categorized in Level 3.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. In certain instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

(Continued)

Notes to Financial Statements
June 30, 2022 and 2021
(Dollars in thousands)

The following tables present a summary of the fair value hierarchy of investments that are measured at fair value on a recurring basis at June 30, 2022 and 2021:

Investments at fair value	2022					Unfunded commitments
	Fair value measurements using				Net asset value (NAV)	
	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs or not redeemable (Level 3)		
Short-term:						
Money market investments	\$ 1,635,564	—	1,635,564	—	—	
Fixed income:						
U.S. government obligations (1)	8,413,831	8,413,831	—	—	—	
Domestic fixed income (2)	7,622,270	5,434	7,578,712	38,124	—	
International fixed income (3)	2,334,432	160,437	2,122,135	51,860	—	
Private debt (4)	1,287,209	—	—	—	1,287,209	571,459
Other credit opportunities (5)	1,028,666	128,363	344,697	424,881	130,725	583,375
	<u>20,686,408</u>	<u>8,708,065</u>	<u>10,045,544</u>	<u>514,865</u>	<u>1,417,934</u>	
Equity:						
Domestic equity securities	18,632,240	18,603,880	27,554	806	—	
International equity securities	14,611,625	14,610,935	—	690	—	
	<u>33,243,865</u>	<u>33,214,815</u>	<u>27,554</u>	<u>1,496</u>	<u>—</u>	
Timberland	2,904,110	—	—	2,904,110	—	
Private equity funds (6)	16,837,964	—	—	—	16,837,964	6,274,745
Real estate:						
Real estate properties	9,796,738	—	—	9,796,738	—	
Real estate equity securities	1,336,488	1,329,261	7,227	—	—	
Real estate funds (7)	481,793	—	—	—	481,793	251,847
Other	75,973	—	—	75,973	—	
	<u>11,690,992</u>	<u>1,329,261</u>	<u>7,227</u>	<u>9,872,711</u>	<u>481,793</u>	
Portfolio completion strategies:						
Event-driven hedge funds (8)	890,751	—	—	—	890,751	
Relative value hedge funds (9)	388,591	—	—	—	388,591	
Fund of funds (11)	632,346	—	—	—	632,346	
Distressed loan fund (12)	83,361	—	—	—	83,361	52,724
Real assets funds (13)	308,502	—	—	—	308,502	675,748
Investment funds	2,303,551	—	—	—	2,303,551	
Equity securities	2,285,915	1,980,501	27,906	277,508	—	
Fixed income securities	3,518,563	938,159	2,116,424	463,980	—	39,500
Cash and cash equivalents	1,106,108	459,066	647,042	—	—	
Agricultural investments	592,878	—	—	592,878	—	
	<u>9,807,015</u>	<u>3,377,726</u>	<u>2,791,372</u>	<u>1,334,366</u>	<u>2,303,551</u>	
Total investments	<u>\$ 96,805,918</u>	<u>46,629,867</u>	<u>14,507,261</u>	<u>14,627,548</u>	<u>21,041,242</u>	

(Continued)

Notes to Financial Statements
 June 30, 2022 and 2021
 (Dollars in thousands)

Investments at fair value	2022					Unfunded commitments
	Fair value measurements using				Net asset value (NAV)	
	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs or not redeemable (Level 3)		
Securities lending collateral:						
Money market investments	\$ 121,946	—	121,946	—	—	
Total securities lending collateral	\$ 121,946	—	121,946	—	—	
Securities sold short and other liabilities at fair value:						
Portfolio completion strategies:						
Equity securities	\$ 600,730	581,311	18,605	814	—	
Cash and cash equivalents	951,437	2,283	949,154	—	—	
Fixed income securities	563,101	180,038	356,398	26,665	—	
Other	57,412	—	—	57,412	—	
	2,172,680	763,632	1,324,157	84,891	—	
Fixed income:						
Cash and cash equivalents	14,747	—	14,747	—	—	
Total securities sold short and other liabilities	\$ 2,187,427	763,632	1,338,904	84,891	—	

(Continued)

Notes to Financial Statements
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(Dollars in thousands)

Investments at fair value	2021					Unfunded commitments
	Fair value measurements using					
	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs or not redeemable (Level 3)	Net asset value (NAV)	
Short-term:						
Money market investments	\$ 2,572,722	—	2,572,722	—	—	
Fixed income:						
U.S. government obligations (1)	9,658,756	9,658,756	—	—	—	
Domestic fixed income (2)	7,528,546	23,451	7,490,552	14,543	—	
International fixed income (3)	2,832,540	202,861	2,574,775	54,904	—	
Private debt (4)	1,277,804	—	—	—	1,277,804	691,571
Other credit opportunities (5)	1,147,435	80,696	667,041	357,834	41,864	303,461
	<u>22,445,081</u>	<u>9,965,764</u>	<u>10,732,368</u>	<u>427,281</u>	<u>1,319,668</u>	
Equity:						
Domestic equity securities	22,316,534	22,304,272	11,772	490	—	
International equity securities	17,395,877	17,393,781	1,456	640	—	
	<u>39,712,411</u>	<u>39,698,053</u>	<u>13,228</u>	<u>1,130</u>	<u>—</u>	
Timberland	2,798,749	—	—	2,798,749	—	
Private equity funds (6)	13,590,807	—	—	—	13,590,807	5,268,266
Real estate:						
Real estate properties	7,702,060	—	—	7,702,060	—	
Real estate equity securities	1,512,207	1,500,965	11,242	—	—	
Real estate funds (7)	270,007	—	—	—	270,007	268,652
Other	29,476	—	—	29,476	—	
	<u>9,513,750</u>	<u>1,500,965</u>	<u>11,242</u>	<u>7,731,536</u>	<u>270,007</u>	
Portfolio completion strategies:						
Event-driven hedge funds (8)	832,531	—	—	—	832,531	
Relative value hedge funds (9)	366,099	—	—	—	366,099	
Equity long/short hedge funds (10)	751	—	—	—	751	
Fund of funds (11)	639,521	—	—	—	639,521	
Distressed loan fund (12)	55,028	—	—	—	55,028	76,049
Real assets funds (13)	325,670	—	—	—	325,670	706,346
Investment funds	2,219,600	—	—	—	2,219,600	
Equity securities	2,403,242	2,121,689	43,602	237,951	—	
Fixed income securities	2,781,967	46,451	2,513,895	221,621	—	130,000
Cash and cash equivalents	1,169,968	785,131	384,837	—	—	
Agricultural investments	579,862	—	—	579,862	—	
Other	25,386	—	—	25,386	—	
	<u>9,180,025</u>	<u>2,953,271</u>	<u>2,942,334</u>	<u>1,064,820</u>	<u>2,219,600</u>	
Total investments	<u>\$ 99,813,545</u>	<u>54,118,053</u>	<u>16,271,894</u>	<u>12,023,516</u>	<u>17,400,082</u>	

(Continued)

Notes to Financial Statements
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(Dollars in thousands)

Investments at fair value	2021					Unfunded commitments
	Fair value measurements using				Net asset value (NAV)	
	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs or not redeemable (Level 3)		
Securities lending collateral:						
Money market investments	\$ 176,581	—	176,581	—	—	—
Repurchase agreements	25,000	—	25,000	—	—	—
Total securities lending collateral	\$ 201,581	—	201,581	—	—	—
Securities sold short and other liabilities at fair value:						
Portfolio completion strategies:						
Equity securities	\$ 784,772	775,930	8,478	364	—	—
Cash and cash equivalents	635,756	15,850	619,906	—	—	—
Fixed income securities	337,770	91,780	227,231	18,759	—	—
Other	59,130	—	—	59,130	—	—
	1,817,428	883,560	855,615	78,253	—	—
Fixed income:						
Cash and cash equivalents	112,606	—	112,606	—	—	—
Total securities sold short and other liabilities	\$ 1,930,034	883,560	968,221	78,253	—	—

- (1) Fiscal year 2022 rates range from 0.00% to 7.50%, and maturities range from 2022 to 2052. Fiscal year 2021 rates range from 0.00% to 7.50%, and maturities range from 2021 to 2051.
- (2) Fiscal year 2022 rates range from 0.00% to 17.50%, and maturities range from 2022 to 2115. Fiscal year 2021 rates range from 0.00% to 24.91%, and maturities range from 2021 to 2115.
- (3) Fiscal year 2022 rates range from -0.36% to 49.10%, and maturities range from 2022 to 2121. Fiscal year 2021 rates range from -0.33% to 37.88%, and maturities range from 2021 to 2115.
- (4) This represents investments in private partnerships that invest directly in distressed debt investment opportunities. The life cycles of the private partnerships are typically 10 to 15 years during which limited partners are unable to redeem their positions. Distributions are received as the partnerships liquidate the underlying assets of the funds.
- (5) This includes managed accounts and private partnerships that makes credit investments. Private partnerships typically have 10 to 15-year life cycles during which limited partners are unable to redeem

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Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

their positions, but instead, receive distributions as the partnerships liquidate the underlying assets of the funds.

- (6) This includes private partnerships that invest in venture capital, leverage buyouts, private placements, and other investments. The private partnerships typically have a life cycle of 10 to 15 years during which limited partners are unable to redeem their positions. Distributions are received as the partnerships liquidate the underlying assets of the funds.
- (7) This includes ten and seven closed-end real estate funds that invest in U.S. real estate at June 30, 2022 and 2021. The funds generally have initial terms of eight to ten years during which limited partners are unable to redeem their positions. Distributions are received as the funds liquidate the underlying assets.
- (8) This includes four and five hedge funds that invest in event-driven strategies such as credit-event, equity-event, multi-event driven, and stressed/distressed credit positions at June 30, 2022 and 2021, respectively. Redemption frequency for these investments ranged from quarterly to semi-annually with 60 to 65 days' notice.
- (9) This includes one hedge fund that invest in relative value strategies such as fixed income relative value positions at June 30, 2022 and 2021. Redemption frequency for this investment is quarterly with 45 days' notice.
- (10) This includes one liquidating hedge fund that invested in equity long/short strategies at June 30, 2021. Distributions are received as the funds liquidate the underlying assets.
- (11) This includes one active hedge fund of funds manager, valued at \$619,099 and \$625,587, at June 30, 2022 and 2021, respectively, which invests in emerging hedge fund managers. Redemption frequency for this fund is monthly with 30 days' notice. The remaining balance represents investments in five liquidating portfolios in which distributions are received as the funds liquidate the underlying assets.
- (12) This includes one fund that is invested in distressed loans at June 30, 2022 and 2021. Limited partners in this fund are unable to redeem their positions and distributions are received as the fund liquidates the underlying assets.
- (13) This includes ten funds that seek to make investments in real assets at June 30, 2022 and 2021. Limited partners in these funds are generally unable to redeem their positions and distributions are received as the funds liquidate the underlying assets.

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Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(4) Deposits and Investments Risks**(a) Custodial Credit Risk**

Custodial credit risk is the risk that in the event of bank failure, the PRIT Fund's deposits and investments may not be returned. The PRIM Board manages the PRIT Fund's exposure to custodial credit risk by requiring all relevant investment managers to hold investments in separate accounts with the PRIM Board's custodian (see note 8). The PRIM Board has not adopted a formal custodial credit risk policy.

Cash balances represent amounts held in bank depository accounts that may be subject to custodial credit risk. The PRIT Fund maintains cash and cash equivalents with various major financial institutions. The combined account balances at a specific financial institution may periodically exceed federally insured limits. No losses have been incurred during the years ended June 30, 2022 and 2021.

(b) Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of fixed income investments will adversely affect the fair value of an investment. While the PRIM Board does not have a formal policy relating to interest rate risk, the PRIM Board manages the PRIT Fund's exposure to fair value loss arising from movements in interest rates by establishing duration guidelines with its fixed income investment managers. The guidelines with each individual manager require that the effective duration of the domestic fixed income investment portfolio be within a specified percentage or number of years of the effective duration band of the appropriate benchmark index. For emerging markets fixed income investments, the portfolio must have duration with a band ranging from three to eight years. Effective duration is a measure of a fixed income investment's exposure to fair value changes arising from changes in interest rates. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows. These assumptions take into consideration factors indicative of investments highly sensitive to interest rate changes, including callable options, prepayments, and other factors. These factors are reflected in the effective duration numbers provided in the following table. The PRIM Board compares the effective duration of a manager's portfolio to their relevant benchmark including Bloomberg Aggregate Bond index, US Treasury STRIPS 20+ Year index, Bloomberg Treasury 1-3 Year index, Bloomberg US TIPS index, Bloomberg Inflation Linked Bonds index, S&P LSTA Leveraged Loan index, JP Morgan Emerging Markets Bond index, and the Intercontinental Exchange Bank of America High Yield index.

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Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

The following table shows the debt investments by investment type, fair value, and effective weighted duration rate at June 30:

Investment	2022		2021	
	Fair value	Effective weighted duration rate (Years)	Fair value	Effective weighted duration rate (Years)
Asset-backed securities	\$ 651,727	3.10	598,095	1.33
Commercial mortgage – backed securities	342,068	2.33	293,683	2.93
Corporate bonds and other credits	8,524,904	3.93	8,305,066	6.08
U.S. government bonds	5,622,597	14.64	6,337,438	15.12
U.S. government agencies	73,356	1.98	65,497	2.78
U.S. government TIPS	3,028,434	6.94	3,367,749	7.56
U.S. government mortgage – backed securities	1,571,083	6.25	1,630,294	4.90
Global inflation linked bonds	221,162	8.04	302,040	8.01
Municipal bonds	52,931	9.86	75,183	8.75
Pooled money market fund (1)	1,671,652	N/A	2,636,783	N/A
Other pooled funds (2)	4,080,621	N/A	4,187,942	N/A
Total fixed income and short-term investments	\$ 25,840,535		27,799,770	
Securities lending collateral investments:				
Pooled money market fund (1)	121,946	N/A	176,581	N/A
Repurchase agreements (1)	—	N/A	25,000	N/A
Total securities lending collateral investments	\$ 121,946		201,581	

(1) Short-term investments with maturities of less than three months.

(2) Other pooled funds have a weighted average maturity of approximately two years at June 30, 2022 and 2021.

(c) Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will fail to meet its debt obligations.

The PRIM Board does not have a formal investment policy governing credit risk; each fixed income securities investment manager is given a specific set of guidelines to invest within based on the mandate for which it was hired. These guidelines vary depending on the manager's strategy and the

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Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

role of its portfolio to the overall diversification of the PRIT Fund. The guidelines for the PRIT Fund's core fixed income portfolio establish the minimum credit rating for any security in the portfolio and the overall weighted average credit rating of the portfolio. For example, all securities held must generally be investment grade. The guidelines for the PRIT Fund's high yield fixed income portfolio establish a fair value range of securities to be held with a specific minimum credit rating and the overall weighted average credit rating of the portfolio.

Credit risk for derivative instruments held by the PRIT Fund results from counterparty risk. The PRIT Fund is exposed to credit risk resulting from counterparties being unable to meet their obligations under the terms of the derivative agreements. See note 7 for more information on the PRIT Fund's derivative instruments.

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Notes to Financial Statements

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(Dollars in thousands)

The weighted average quality rating of the debt securities portfolio, excluding pooled investments, investments explicitly backed by the U.S. government and other nonrated investments was BBB and BBB- at June 30, 2022 and 2021, respectively. The following tables present the PRIT Fund's fixed-income securities credit ratings at June 30:

Investment	Total fair value	2022					
		Investment grade			Noninvestment grade		
		AAA	AA+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Not rated
Asset-backed securities	\$ 651,727	30,610	106,494	6,987	15,731	230,178	261,727
Commercial mortgage-backed securities	342,068	190,083	28,213	932	18,900	34,621	69,319
Corporate bonds and other credits	8,524,904	371,400	1,163,529	1,597,478	1,647,554	431,205	3,313,738
U.S. government agencies	73,356	—	25,683	—	—	—	47,673
U.S. government mortgage-backed securities	1,398,808	125,098	729,757	19	—	—	543,934
Global inflation linked bonds	221,162	31,776	117,027	62,211	543	—	9,605
Municipal bonds	52,931	2,536	46,351	3,574	470	—	—
Pooled money market fund	1,671,652	—	—	—	—	—	1,671,652
Other pooled funds	4,080,621	—	—	—	—	—	4,080,621
Total credit risk, fixed income, and short-term investments	17,017,229	\$ 751,503	2,217,054	1,671,201	1,683,198	696,004	9,998,269
Fixed income investments explicitly backed by the U.S. government	8,823,306	—	—	—	—	—	—
Total fixed income and short-term investments	\$ 25,840,535	—	—	—	—	—	—
Securities lending collateral investments:							
Pooled money market fund	\$ 121,946	121,946	—	—	—	—	—
Total securities lending collateral investments	\$ 121,946	121,946	—	—	—	—	—

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June 30, 2022 and 2021

(Dollars in thousands)

Investment	Total fair value	2021					
		Investment grade			Noninvestment grade		
		AAA	AA+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Not rated
Asset-backed securities	\$ 598,095	32,591	71,363	20,637	27,988	262,094	183,422
Commercial mortgage-backed securities	293,683	155,376	16,729	844	15,267	71,990	33,477
Corporate bonds and other credits	8,305,066	331,475	1,178,428	1,673,162	1,962,627	586,938	2,572,436
U.S. government agencies	65,497	—	23,375	—	—	—	42,122
U.S. government mortgage-backed securities	1,347,668	4,242	662,026	27,657	39,843	426	613,474
Global inflation linked bonds	302,040	36,922	182,061	78,829	—	—	4,228
Municipal bonds	75,183	2,418	67,433	4,178	593	—	561
Pooled money market fund	2,636,783	—	—	—	—	—	2,636,783
Other pooled funds	4,187,942	—	—	—	—	—	4,187,942
Total credit risk, fixed income, and short-term investments	17,811,957	\$ 563,024	2,201,415	1,805,307	2,046,318	921,448	10,274,445
Fixed income investments explicitly backed by the U.S. government	9,987,813						
Total fixed income and short-term investments	\$ 27,799,770						
Securities lending collateral investments:							
Pooled money market fund	\$ 176,581	176,581	—	—	—	—	—
Repurchase agreements	25,000	—	25,000	—	—	—	—
Total securities lending collateral investments	\$ 201,581	176,581	25,000	—	—	—	—

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Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(d) Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of investments. Although the PRIM Board has no overall policy regarding foreign currency risk, the PRIM Board does manage the PRIT Fund's exposure to foreign currencies by establishing investment guidelines with each of its managers who invest in securities not denominated in U.S. dollars. These guidelines set maximum investment balances for any currency and/or country holdings must be within a certain percentage of predefined benchmarks. In addition, the PRIM Board's investment managers may actively manage exposure to foreign currencies through the use of forward foreign currency contracts. The following tables present the PRIT Fund's foreign currency exposures at June 30 (stated in U.S. dollars in thousands):

	2022						Total
	Cash and short-term investments	Equity	Fixed income	Portfolio completion strategies	Private equity investments	Timberland investments	
Australian Dollar	\$ 4,187	550,285	8,757	(4,358)	—	395,566	954,437
Brazilian Real	2,364	133,824	89,987	106,701	—	—	332,876
British Pound	10,014	1,710,668	216,163	104,517	80,413	—	2,121,775
Canadian Dollar	13,685	886,788	21,741	26,466	4,374	—	953,054
Chinese Yuan	355	166,412	—	172,868	—	—	339,635
Euro	50,939	2,565,328	254,010	140,502	1,802,466	—	4,813,245
Hong Kong Dollar	4,887	1,222,456	—	(2,000)	—	—	1,225,343
Indian Rupee	970	449,475	—	759	—	—	451,204
Japanese Yen	30,660	2,294,051	24,427	159,646	—	—	2,508,784
New Taiwan Dollar	941	416,779	24	227	—	—	417,971
South Korean Won	3,768	503,287	11,002	16,188	—	—	534,245
Swedish Krona	6,078	378,498	5,516	510	—	—	390,602
Swiss Franc	19,490	704,040	—	(3,260)	—	—	720,270
Other foreign currencies	45,559	1,274,592	17,261	13,360	—	—	1,350,772
Total securities subject to foreign currency risk	193,897	13,256,483	648,888	732,126	1,887,253	395,566	17,114,213
International investments denominated in U.S. dollars	—	1,355,142	1,709,439	—	—	226,040	3,290,621
Total international investments and cash deposits	\$ 193,897	14,611,625	2,358,327	732,126	1,887,253	621,606	20,404,834

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	2021						Total
	Cash and short-term investments	Equity	Fixed income	Portfolio completion strategies	Private equity investments	Timberland investments	
Australian Dollar	\$ 3,220	674,761	11,036	(2,866)	—	388,831	1,074,982
Brazilian Real	1,757	194,804	91,275	69,999	—	—	357,835
British Pound	13,628	1,998,978	275,142	79,193	22,706	—	2,389,647
Canadian Dollar	9,006	802,156	28,693	36,199	2,690	—	878,744
Euro	62,618	3,102,714	354,487	136,418	1,687,673	—	5,343,910
Hong Kong Dollar	7,582	1,370,654	173	38	—	—	1,378,447
Indian Rupee	1,519	494,771	1,132	2,761	—	—	500,183
Japanese Yen	35,195	2,670,752	29,169	66,538	—	—	2,801,654
New Taiwan Dollar	1,063	631,233	—	42	—	—	632,338
South Korean Won	4,952	710,211	19,795	51,839	—	—	786,797
Swedish Krona	3,897	619,012	5,731	1,701	—	—	630,341
Swiss Franc	13,372	676,357	—	(778)	—	—	688,951
Other foreign currencies	32,654	1,300,021	33,817	158,399	—	—	1,524,891
Total securities subject to foreign currency risk	190,463	15,246,424	850,450	599,483	1,713,069	388,831	18,988,720
International investments denominated in U.S. dollars	—	2,149,453	1,982,090	—	—	217,641	4,349,184
Total international investments and cash deposits	\$ 190,463	17,395,877	2,832,540	599,483	1,713,069	606,472	23,337,904

(e) Concentration of Credit Risk

The PRIM Board manages the PRIT Fund's exposure to concentration of credit risk by establishing guidelines with each investment manager that limit the percentage of investment in any single issue or issuer. The PRIT Fund has no investments, at fair value, that exceed 5% of the PRIT Fund's total investments as of June 30, 2022 and 2021.

(f) Financial Instruments with Off-Balance-Sheet Risk

In the normal course of business, the PRIT Fund enters into financial instrument transactions with off-balance-sheet risk. These financial instruments involve varying degrees and type of risks, including credit and market risks, which may be in excess of the amounts recognized in the Statements of Pooled Net Position. Futures and foreign currency exchange contracts represent commitments to purchase or sell foreign currencies at a future date and at a specified price. The PRIT Fund could be exposed to risks if the counterparties to the contracts are unable to meet the terms of their contracts or if the value of the foreign currency changes unfavorably.

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(5) Securities Lending Program

The PRIM Board uses a third-party securities lending agent to manage its securities lending program. The program loans domestic and international equity, REIT, and fixed income securities for collateral with a simultaneous agreement to return the collateral for the same securities in the future. Securities on loan are secured with collateral ranging from 102% to 105% determined by the type of securities lent. Securities on loan are valued daily to maintain the collateral requirement and, where applicable, additional collateral is delivered. At June 30, 2022 and 2021, the PRIT Fund has no credit risk exposure to borrowers because the borrowers provided collateralization greater than 100% of the fair value of the securities on loan. The PRIT Fund cannot pledge or sell the collateral securities unless the lending agent defaults. The PRIT Fund is indemnified in the event that the lending agent fails to return the securities on loan (and if the collateral is inadequate to replace the securities on loan) or if the lending agent fails to perform its obligations as stipulated in the agreement. There was no lending agent default during the years ended June 30, 2022 and 2021.

Securities loans are terminable on demand therefore maturities of the securities loans do not generally match the maturities of investments made with cash collateral. Investments made with cash collateral are primarily in short-term investments with maximum maturity of three months from the date of purchase.

Securities on loan are included in investments at fair value in the accompanying statements of pooled net position. As of June 30, 2022 and 2021, the fair value of securities on loan was \$841,435 and \$415,901, respectively, and the associated collateral received in cash was \$872,820 and \$451,560, respectively. Securities lending obligations to repay the collateral are reported in the accompanying statements of pooled net position. There was no security collateral or noncash collateral at June 30, 2022 and 2021.

For the years ended June 30, 2022 and 2021, in accordance with the Securities Lending Agency Agreement, the PRIT Fund loaned \$750,000 of the cash collateral to the LLC to invest in real estate investments. \$250,000 of the loans mature on March 10, 2027 and can be prepaid at any time. Interest is paid monthly in arrears at a per annum rate equal to LIBOR. \$500,000 of the loans mature on November 18, 2031 and can be prepaid at any time. Interest is paid monthly in arrears at a per annum rate as agreed to by the parties. As these are inter-entity loans, they have been eliminated in consolidation in the accompanying financial statements. The fair value of the remaining cash collateral reinvested was \$121,946 and \$201,581 at June 30, 2022 and 2021, respectively, and is reported as securities lending collateral in the accompanying statements of pooled net position.

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(Dollars in thousands)

(6) Real Estate Debt**(a) Notes Payable**

The LLC's notes payable obligations consisted of the following as of June 30:

	<u>2022</u>	<u>2021</u>
Senior unsecured term loan	\$ —	500,000
Senior unsecured notes	525,000	525,000
Total	<u>\$ 525,000</u>	<u>1,025,000</u>

Scheduled long-term maturities of existing indebtedness at June 30, 2022 in each of the next five years and in the aggregate thereafter are as follows:

	<u>Amount</u>
Year ending June 30:	
2023	\$ 175,000
2024	—
2025	150,000
2026	—
2027	—
2028–2032	<u>200,000</u>
	<u>\$ 525,000</u>

(i) Senior Unsecured Term Loan

On November 21, 2016, the LLC issued Senior Unsecured Term Loans with aggregate principal amounts of \$300,000 and \$200,000, which matured on November 21, 2021. Interest was payable monthly based on LIBOR plus an applicable rate based upon the range into which the Total Leverage Ratio falls as outlined in the Term Loan agreements. As of June 30, 2021, the applicable rate was 1.15%.

(ii) Senior Unsecured Notes

On February 14, 2013, the LLC issued 3.85% Series B Senior Notes in the aggregate principal amount of \$175,000 maturing February 14, 2023 and 4.00% Series C Senior Notes in the

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aggregate principal amount of \$150,000 maturing February 14, 2025. Interest on the notes is payable semi-annually.

On February 12, 2020, the LLC issued 3.07% Series D Senior Notes in the aggregate principal amount of \$200,000 maturing February 12, 2030. Interest on the notes is payable semi-annually.

Both the Senior Unsecured Term Loans and Senior Unsecured Notes contain certain financial covenants as outlined in the respective agreements. The LLC was in compliance with such covenants at June 30, 2022 and 2021.

(b) Mortgage Loans Payable

The LLC had six and nine property-level mortgage loans payable as of June 30, 2022 and 2021, respectively. The mortgages have a weighted average interest rate of 3.57% and 3.50% and a weighted average maturity of 6.0 and 4.6 years at June 30, 2022 and 2021, respectively. The following table presents the face value of mortgage loans payable at June 30:

	<u>2022</u>	<u>2021</u>
Mortgage loans payable	\$ 343,387	381,686
Total	<u>\$ 343,387</u>	<u>381,686</u>

(c) Other Liabilities:

The LLC had other liabilities of \$6,911 and \$50,833 as of June 30, 2022 and 2021, respectively.

(7) Derivative Investments

The PRIT Fund regularly trades financial instruments with off-balance-sheet risk in the normal course of its investing activities to assist in managing exposure to market risks. These financial instruments include contracts for differences, foreign currency exchange contracts, futures contracts, and swap contracts.

(a) Contracts for differences

A contract for differences is an instrument whose value is based on the price movement of the underlying asset. It allows for gain or losses to be realized when the underlying asset moves in relation to the position taken, although the actual underlying asset is not owned by the PRIT Fund. The fair value of these instruments is generally recorded at the contract's net equity value. The net equity value is calculated by determining the change in value of the underlying asset less the cost of

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any leverage. The changes in fair value are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed.

Contracts for differences held at June 30 were as follows:

Description	Number of contracts	2022		
		Gross notional amount	Fair value of contracts	Unrealized appreciation (depreciation)
Long exposure	21,677,450	\$ 85,327	82,381	(2,946)
Short exposure	(1,283,209)	(44,548)	(39,198)	5,350
Total exposure		\$ 40,779	43,183	2,404

Description	Number of contracts	2021		
		Gross notional amount	Fair value of contracts	Unrealized appreciation (depreciation)
Long exposure	20,256,186	\$ 95,935	101,570	5,635
Short exposure	(1,086,481)	(77,489)	(81,243)	(3,754)
Total exposure		\$ 18,446	20,327	1,881

For the years ended June 30, 2022 and 2021, the change in net unrealized appreciation (depreciation) on contracts for differences was \$523 and \$(151), respectively.

(b) Foreign Currency Exchange Contracts

A foreign currency exchange contract is an agreement between two parties to buy or sell a fixed quantity of currency at a set price on a future date. The PRIT Fund may enter into foreign currency exchange contracts to hedge its exposure to the effect of changes in foreign currency exchange rates upon its non-U.S. dollar-denominated investments. The fair value of such contracts will fluctuate with changes in currency exchange rates. The contracts are valued daily, and the changes in fair value are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the cost of the contract at the time it was opened and the value at the time it was closed.

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Foreign currency exchange contracts open at June 30 (in U.S. dollars) were as follows:

	2022				
	Fair value	Aggregate face value	Delivery date(s)	Unrealized gains	Unrealized losses
Foreign currency exchange contracts purchased:					
Australian Dollar	122,589	125,995	7/1/22-3/15/23	\$ 3,406	—
Brazilian Real	170,398	173,102	7/1/22-3/30/23	2,704	—
Chilean Peso	20,491	22,887	9/21/22	2,396	—
British Pound	700,800	715,032	7/1/22-3/15/23	14,232	—
Chinese Yuan	1,231,776	1,247,559	7/5/22-6/21/23	15,783	—
Euro	841,136	854,022	7/1/22-4/5/23	12,886	—
Israeli Shekel	107,118	111,211	7/1/22-5/3/23	4,093	—
Indian Rupee	284,605	288,796	7/5/22-6/26/23	4,191	—
Japanese Yen	379,939	410,715	7/1/22-5/23/23	30,776	—
New Taiwan Dollar	130,266	132,928	7/1/22-2/7/24	2,662	—
Philippines Peso	358,675	373,030	7/1/22-4/12/23	14,355	—
Singapore Dollar	488,427	496,346	7/1/22-9/25/23	7,919	—
South Korean Won	172,623	180,806	7/5/22-8/10/23	8,183	—
Other foreign currencies	1,874,911	1,884,878	7/1/22-6/21/23	10,983	(1,016)
Foreign currency exchange contracts sold:					
Australian Dollar	104,407	106,791	7/1/22-12/21/22	—	(2,384)
Brazilian Real	125,486	132,049	7/1/22-11/9/22	—	(6,563)
Chilean Peso	34,229	37,885	9/21/22	—	(3,656)
Chinese Yuan	1,125,990	1,142,410	7/5/22-6/21/23	—	(16,420)
Euro	496,264	499,751	7/1/22-4/5/23	—	(3,487)
Indian Rupee	328,091	332,754	7/5/22-3/20/24	—	(4,663)
Japanese Yen	193,214	196,299	7/1/22-5/23/23	—	(3,085)
New Taiwan Dollar	74,236	76,889	7/1/22-2/7/24	—	(2,653)
Philippines Peso	331,016	344,178	7/1/22-3/22/23	—	(13,162)
Singapore Dollar	665,745	670,881	7/1/22-9/25/23	—	(5,136)
South African Rand	149,973	154,205	7/5/22-5/31/23	—	(4,232)
Other foreign currencies	2,300,675	2,315,587	7/1/22-8/10/23	408	(15,320)
Total				\$ 134,977	(81,777)

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	2021				
	Fair value	Aggregate face value	Delivery date(s)	Unrealized gains	Unrealized losses
Foreign currency exchange contracts purchased:					
Brazilian Real	108,604	102,555	7/1/21-10/29/21	\$ —	(6,049)
British Pound	808,834	819,650	7/1/21-12/15/21	10,816	—
Chinese Yuan	1,040,908	1,031,484	7/2/21-6/30/22	—	(9,424)
Euro	958,783	970,272	7/1/21-3/8/22	11,489	—
Gold oz	—	18,622	7/1/21-6/1/22	18,622	—
Japanese Yen	498,958	503,405	7/1/21-12/16/21	4,447	—
Mexican Peso	175,462	171,724	7/1/21-12/21/21	—	(3,738)
Silver oz	4	2,915	12/6/21	2,911	—
Singapore Dollar	241,001	243,174	7/1/21-12/15/21	2,173	—
Other foreign currencies	2,948,710	2,965,919	7/1/21-8/22/22	18,018	(809)
Foreign currency exchange contracts sold:					
Australian Dollar	134,847	137,066	7/1/21-3/16/22	—	(2,219)
Brazilian Real	168,776	162,027	7/1/21-10/29/21	6,749	—
British Pound	442,659	445,741	7/1/21-12/15/21	—	(3,082)
Chinese Yuan	916,299	907,965	7/2/21-6/28/22	8,334	—
Euro	424,196	427,164	7/21/21-3/8/22	—	(2,968)
Gold oz	—	34,311	7/1/21-6/6/22	—	(34,311)
New Taiwan Dollar	310,308	313,490	6/30/21-6/2/23	—	(3,182)
South African Rand	144,582	142,233	7/1/21-2/22/22	2,349	—
South Korean Won	267,059	269,148	7/1/21-3/16/22	—	(2,089)
Turkish Lira	125,483	128,335	7/1/21-6/17/22	—	(2,852)
Silver oz	5	3,297	9/15/21-12/6/21	—	(3,292)
Other foreign currencies	2,432,504	2,443,509	7/1/21-11/30/22	2,964	(13,969)
Total				\$ 88,872	(87,984)

For the years ended June 30, 2022 and 2021, the change in net unrealized appreciation (depreciation) on foreign currency exchange contracts was \$52,312 and \$879, respectively.

(c) Futures Contracts

The PRIT Fund enters into financial and commodity futures on various exchanges. A futures contract is an agreement between two parties to buy or sell units of a particular index, security, or commodity at a set price on a future date. Upon entering into financial and commodity futures contracts, the PRIT Fund is required to pledge to the broker an amount of cash or securities equal to a certain percentage of the contract amount (initial margin deposit). Pursuant to the contract, the PRIT Fund agrees to receive from, or pay to, the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as “variation margin” and are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed. The potential risk to the PRIT Fund is that the change in value of

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futures contracts primarily corresponds with the value of underlying instruments, which may not correspond to the change in value of the hedged instruments. The PRIT Fund is also subject to credit risk should its clearing brokers be unable to meet their obligations to the PRIT Fund.

Futures contracts held at June 30 were as follows:

Description	Number of contracts	Expiration date	2022		
			Gross notional amount	Fair value of contracts	Unrealized appreciation (depreciation)
Short cash and cash equivalents:					
Euro FX currency	(315)	9/22	\$ (41,493)	(40,495)	998
90-Day Eurodollar	(871)	12/22-9/25	(210,967)	(211,768)	(801)
Other short cash and cash equivalents	(2,789)	7/22-3/25	(692,477)	(692,342)	135
Long cash and cash equivalents:					
3-Month Euribor	837	12/23-6/24	214,620	215,531	911
Euro FX currency	288	9/22	38,881	37,937	(944)
Other long cash and cash equivalents	2,853	6/22-12/24	512,517	510,986	(1,531)
Short fixed income:					
Australian 3-Yr Treasury Bond	(1,255)	9/22	(92,738)	(93,912)	(1,174)
Euro-BOBL	(174)	9/22	(23,511)	(22,591)	920
Euro-BUND	(193)	9/22	(31,393)	(30,020)	1,373
US 2-Yr Treasury Notes	(2,818)	9/22	(591,839)	(589,455)	2,384
US 5-Yr Treasury Notes	(2,487)	9/22	(279,124)	(277,331)	1,793
US 10-Yr Treasury Notes	(2,124)	9/22	(251,731)	(248,930)	2,801
Other short fixed income	(2,283)	8/22-3/24	(368,929)	(368,742)	187
Long fixed income:					
Euro-BTP	169	9/22	22,945	21,753	(1,192)
US 2-Yr Treasury Notes	746	9/22	157,380	156,586	(794)
US 10-Yr Treasury Notes	1,738	9/22	207,165	206,007	(1,158)
Ultra US 10-Yr Treasury Notes	527	9/22	67,879	67,127	(752)
Ultra US Treasury Bond	633	9/22	98,494	97,723	(771)
Other long fixed income	5,335	8/22-3/23	623,958	625,141	1,183
Short equity and commodities:					
Metal	(323)	7/22-10/22	(31,924)	(28,718)	3,206
Other short equity and commodities	(1,626)	6/22-10/22	(77,804)	(76,131)	1,673
Long equity and commodities:					
Agriculture	585	7/22-12/22	29,022	28,001	(1,021)
Metal	248	7/22-9/22	26,174	21,843	(4,331)
Oil and gas	343	7/22-11/22	34,637	30,562	(4,075)
MSCI EAFE Index	1,949	9/22	183,940	180,926	(3,014)
MSCI Emerging Markets Index	2,807	9/22	142,025	140,729	(1,296)
Russell 2000 Mini Index	412	9/22	36,836	35,185	(1,651)
S&P 500 E-mini Index	3,621	9/22	680,258	686,089	5,831
S&P Midcap 400 E-mini Index	154	9/22	36,650	34,927	(1,723)
S&P/TSX 60 Index	227	9/22	42,802	40,210	(2,592)
TOPIX Index	219	8/22-9/22	32,003	30,057	(1,946)
Other long equity and commodities	3,872	7/22-12/22	145,509	143,563	(1,946)
Total futures exposure			\$ 639,765	630,448	(9,317)

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Description	Number of contracts	Expiration date	2021		
			Gross notional amount	Fair value of contracts	Unrealized appreciation (depreciation)
Short cash and cash equivalents:					
Euro FX currency	(381)	9/21	\$ (58,087)	(56,507)	1,580
Other short cash and cash equivalents	(5,533)	8/21-12/27	(1,356,045)	(1,355,276)	769
Long cash and cash equivalents:					
90-Day Bank Bill	269	9/21-12/22	202,831	201,718	(1,113)
Canadian Dollar currency	447	9/21	36,914	36,037	(877)
Euro FX currency	368	9/21	56,081	54,579	(1,502)
Other long cash and cash equivalents	4,896	7/21-12/26	1,119,885	1,117,804	(2,081)
Short fixed income:					
Australian 3-Yr Treasury Bond	(908)	9/21	(81,773)	(79,407)	2,366
Euro-BOBL	(217)	9/21	(35,611)	(34,522)	1,089
Euro-BTP	(309)	9/21	(64,579)	(63,251)	1,328
Korea 3-Yr Treasury Bond	(615)	9/21	(60,933)	(60,056)	877
US 10-Yr Treasury Notes	(2,066)	9/21	(272,827)	(273,745)	(918)
Ultra US 10-Yr Treasury Note	(375)	9/21	(54,226)	(55,202)	(976)
Other short fixed income	(3,180)	9/21-6/23	(567,973)	(566,606)	1,367
Long fixed income:					
Euro-BTP	366	9/21	63,896	63,041	(855)
Euro-Schatz	347	9/21	47,043	46,146	(897)
Japan 10-Yr Government Bond	68	9/21	93,692	92,936	(756)
US Long Bond	686	9/21	108,006	110,275	2,269
Ultra US Treasury Bond	621	9/21	115,275	119,659	4,384
Other long fixed income	4,542	9/21	645,502	644,565	(937)
Short equity and commodities:					
Metal	(87)	8/21	(16,603)	(15,413)	1,190
S&P 500 E-mini Index	(1,844)	9/21	(389,906)	(395,409)	(5,503)
Other short equity and commodities	(3,058)	7/21-10/21	(52,143)	(52,109)	34
Long equity and commodities:					
Agriculture	720	8/21-12/21	26,124	27,342	1,218
Oil and gas	792	7/21-9/21	49,783	51,384	1,601
Euro STOXX 50 Index	1,448	9/21	72,282	69,640	(2,642)
FTSE 100 Index	514	9/21	51,190	49,566	(1,624)
MSCI EAFE Index	2,234	9/21	263,059	257,368	(5,691)
S&P 500 E-mini Index	1,321	9/21	279,672	283,262	3,590
S&P Midcap 400 E-mini Index	221	9/21	60,401	59,502	(899)
S&P/TSX 60 Index	332	9/21	65,215	64,491	(724)
TOPIX Index	223	9/21	39,949	39,039	(910)
Other long equity and commodities	1,006,777	7/21-12/21	509,186	506,488	(2,698)
Total futures exposure			\$ 895,280	887,339	(7,941)

For the years ended June 30, 2022 and 2021, the change in net unrealized appreciation (depreciation) on futures contracts was \$(1,376) and \$(14,194), respectively.

(d) Swaps

The PRIT Fund enters into swap agreements to gain exposure to certain markets and actively hedge other exposures to market and credit risks. The PRIT Fund utilizes interest rate, credit default,

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currency, inflation, and total return swaps within the portfolio. The PRIT Fund's OTC swap agreements are recorded at fair value as estimated by the PRIM Board. These estimated fair values are determined in good faith by using information from the PRIT Fund's investment managers, including methods and assumptions considering market conditions and risks existing at the date of the statements of pooled net position. Such methods and assumptions incorporate standard valuation conventions and techniques, such as discounted cash flow analysis and option pricing models. All methods utilized to estimate fair values result only in general approximations of value, and such values may or may not actually be realized.

Upon entering into centrally cleared swap contracts, the PRIT Fund is required to deposit an initial margin with the broker an amount of cash or securities. Pursuant to the contract, the PRIT Fund agrees to receive from, or pay to, the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as "variation margin" and are recorded by the PRIT Fund as unrealized gains or losses. Payments received from or paid to the counterparty, including at termination, are recorded by the PRIT fund as realized gains or losses.

Open swap contracts at June 30 were as follows:

Description	2022				
	PRIT pays/receives interest rate	PRIT pays/receives index/ protection	Maturity date	Gross notional amount	Net unrealized appreciation (depreciation)
Interest rate swaps	-0.45%–13.54%	Various*	7/22-6/57	\$ 27,118,880	57,637
Credit default swaps	0.11%–16.20%	Credit default protection	7/22-12/72	4,018,177	(126,939)
Total return and other swaps	Variable	Various*	7/22-6/52	413,860	(21,458)
Total swaps				\$ 31,550,917	(90,760)

* PRIT pays/receives counterparty based on 1-Week CNY, 1-Month AUD Fixing Rate, 1-Month HKD, 1-Month USD LIBOR, 3-Month AUD Fixing Rate, 3-Month CDOR, 3-Month HKD, 3-Month JIBAR, 3-Month JPY DTIBOR, 3-Month KRW CD Rate, 3-Month MYR, 3-Month NZD Bank Bill, 3-Month NZD Fixing Rate, 3-Month PRIBOR, 3-Month TELBOR, 3-Month TWD TWCPBA, 3-Month USD LIBOR, 3-Month WIBOR, 6-Month AUD Fixing Rate, 6-Month BUBOR, 6-Month Euribor, 6-Month JPY LIBOR, 6-Month PRIBOR, 6-Month SGD, 6-Month WIBOR, AUD O/N OIS Rate, Brazil CDI rate, CPI inflation rate, Euro short-term rate, Eurozone HICP rate, INR OIS ON, JPY ON, Mexican TIE rate, MIBOR, NZD ON OIS Rate, NZDOND, SOFR, SONIA, SORA, THB ON Repo Rate, UK RPI rate, USD FED Fund rate.

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Description	2021				
	PRIT pays/receives interest rate	PRIT pays/receives index/ protection	Maturity date	Gross notional amount	Net unrealized appreciation (depreciation)
Interest rate swaps	-0.45%–17.94%	Various*	7/21-12/56	\$ 14,912,028	(18,474)
Credit default swaps	0.00%–16.20%	Credit default protection	7/21-12/72	3,690,046	(80,434)
Total return and other swaps	Variable	Various*	7/21-9/50	4,449,490	15,156
Total swaps				\$ 23,051,564	(83,752)

* PRIT pays/receives counterparty based on 1-Month Euribor, 1-Month MIBOR, 1-Month USD LIBOR, 3-Month AUD-BBR-BBSW, 3-Month Aonia, 3-Month Euribor, 3-Month HIBOR, 3-Month JIBAR, 3-Month JPY LIBOR, 3-Month KLIBOR, 3-Month KWDC, 3-Month MosPrime rate, 3-Month NZD BBR, 3-Month SOR, 3-Month USD LIBOR, 6-Month AUD-BBR-BBSW, 6-Month Euro LIBOR, 6-Month Euribor, 6-Month KWDC, 6-Month JPY LIBOR, 6-Month MIBOR, 6-Month PRIBOR, 6-Month SIBOR, 6-Month SOR, 6-Month THBFX, 6-Month USD LIBOR, 6-Month WIBOR, 12-Month MIBOR, 7-Day CNY Repo Fixing Rate, CPI inflation rate, Federal Funds Rate, Reserve Bank of New Zealand Official Cash Rate, SOFR, THB Semi-annual Swap rate, TLREF, TWD Semi-annual Swap rate.

For the years ended June 30, 2022 and 2021, the change in net unrealized appreciation (depreciation) on swap contracts was \$(7,008) and \$(879), respectively.

The PRIT Fund's exposures in the event of nonperformance by counterparties at June 30 were as follows:

Counterparty	Credit rating	2022					
		Interest rate swaps		Credit default swaps		Total return and other swaps	
		Gross notional	Fair value	Gross notional	Fair value	Gross notional	Fair value
Barclays Bank PLC	A	\$ 65,406	331	616,832	2,285	—	—
BNP Paribas SA	A+	—	—	40,963	(23,534)	—	—
CME Group	AA-	148,902	(6,094)	—	—	—	—
Goldman Sachs & Co	A+	686,689	46,530	2,634,224	(10,925)	—	—
Goldman Sachs International	A+	—	—	97,459	(17,951)	25,524	375
Intercontinental Exchange	A-	—	—	112,104	(3,654)	—	—
JMP Securities LLC	A+	—	—	49,527	(17,979)	—	—
JPMorgan Chase Bank NA	A+	317,506	18,490	54,557	(13,579)	269,137	(18,298)
JP Morgan Securities LLC	A+	24,461,829	(8,060)	62,239	4,951	1,531	(39)
LCH Ltd	AA-	198,982	(2,448)	—	—	90,425	(644)
Morgan Stanley & Co Intl PLC	A+	20,011	451	91,580	(22,181)	415	(29)
Morgan Stanley Capital Services	A+	—	—	203,155	(24,796)	12,500	178
SMBC Capital Markets Inc.	A+	250,000	6,640	—	—	—	—
All others	Various	969,555	1,797	55,537	424	14,328	(3,001)
		\$ 27,118,880	57,637	4,018,177	(126,939)	413,860	(21,458)

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Counterparty	Credit rating	2021					
		Interest rate swaps		Credit default swaps		Total return and other swaps	
		Gross notional	Fair value	Gross notional	Fair value	Gross notional	Fair value
BNP Paribas Securities Corp	A+	\$ —	—	184,739	1,966	—	—
Citibank NA	A+	—	—	3,600	18	597,477	8,489
CME Group	AA-	344,867	(1,429)	—	—	—	—
Goldman Sachs	A+	43,358	37	1,867,722	(46,786)	—	—
Intercontinental Exchange	BBB+	—	—	100,582	1,950	—	—
LCH Ltd	AA-	130,262	(1,050)	—	—	249,751	1,935
Merrill Lynch International	A+	—	—	4,800	48	229,799	2,838
Morgan Stanley	A+	431,123	(31)	493,122	(5,294)	188,635	(221)
SMBBC Capital Markets Inc.	A+	250,000	(18,429)	—	—	—	—
U.S. Bank National Association	A+	500,000	(3,255)	—	—	—	—
All others (1)	Various	13,212,418	5,683	1,035,481	(32,336)	3,183,828	2,115
		\$ 14,912,028	(18,474)	3,690,046	(80,434)	4,449,490	15,156

(1) A majority of these swaps are centrally cleared and are settled daily.

(8) Investment Management and Other Management Fees

In accordance with the PRIM Board's Operating Trust Agreement, expenses incurred by the PRIM Board in managing the PRIT Fund are charged to the PRIT Fund in the form of management fees. These expenses consist of investment management fees, investment advisory fees, custodian fees and professional fees, as well as staff salaries and other administrative expenses of the PRIM Board.

(a) Investment Management Fees

Investment management fees are paid to discretionary managers pursuant to executed contracts. Total investment management fees were \$257,331 and \$164,076 for the years ended June 30, 2022 and 2021, respectively. \$183,403 and \$114,034 were incurred by the PRIM Board for the years ended June 30, 2022 and 2021, respectively, and the remaining investment management fees were incurred by the single-member limited liability corporations that are consolidated into the PRIT Fund.

All domestic, international, and emerging market equity managers are paid a base fee calculated as a percentage of either current net position under management or an agreed-upon funded amount, typically equal to the amount of original and subsequent funding. In certain cases, this is subject to periodic revision. Base fees are paid quarterly. In addition, some active (nonindexed) equity managers are eligible to receive a performance fee.

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Fixed income managers are generally paid a quarterly asset-based fee. Certain managers are eligible for a performance fee.

Fees for private equity investments are typically a percentage of committed capital with the fee percentage decreasing over time. In addition, the general partners (investment managers) of private equity limited partnerships are allocated additional profit, known as carried interests, based on the net gains generally above a specified hurdle rate, on realized partnership investments.

The LLC's investment management fees generally consist of a base fee and a performance fee. Base fees are calculated and paid monthly. Performance fees are paid to managers who out-perform their respective hurdle rates, as defined in the investment management agreements.

Timberland investment management fees consist of a base fee and a performance fee component and are calculated and paid similar to the LLC's investment management fees.

Hedge fund-of-funds investment managers are paid base fees, which are calculated and paid quarterly.

Fees for portfolio completion strategies investments generally consist of a base fee and a performance fee based on return.

The majority of investment management fees for private equity and private debt investments are charged by the general partners to the investment partnerships and not to the limited partner investors directly. Investment management fees for portfolio completion strategies investments and commingled account investments are charged to the respective investments. Most base investment management fees for investments in real estate properties and timberland are charged against the respective investments. Therefore, the fair values of these investments are reported net of investment management fees and these investment management fees are not included in the accompanying statements of changes in pooled net position.

(b) Investment Advisory Fees

NEPC, LLC, Callan Associates, Aberdeen Asset Management Inc., Hamilton Lane, International Woodland Company, and NewAlpha Asset Management served as the PRIM Board's principal investment advisors in fiscal year 2022. NEPC, LLC served as the asset allocation advisor, Callan Associates served as the public markets advisor, Aberdeen Asset Management Inc. and NewAlpha Asset Management provided portfolio completion strategies advisory services, Hamilton Lane served as the private equity advisor, and International Woodland Company provided timberland advisory services. These investment advisors, among others, provided the PRIM Board with comprehensive

(Continued)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

investment advisory services, including recommendations on asset allocation, selection of investment managers, and the monitoring of performance of the PRIT Fund and its individual investment managers.

For the years ended June 30, 2022 and 2021, investment advisory fees were \$15,059 and \$13,049, respectively, which are included in investment management and other management fees in the accompanying statements of changes in pooled net position.

(c) Custodian Fees

BNY Mellon is the investment custodian and record keeper for the PRIT Fund. BNY Mellon records all daily transactions, including investment purchases and sales, investment income, expenses, and all participant activity for the PRIT Fund. BNY Mellon also provides portfolio performance analysis each month for the PRIT Fund.

For the years ended June 30, 2022 and 2021, custodian fees were \$936 and \$1,672, respectively, and are included in investment management and other management fees in the accompanying statements of changes in pooled net position.

(d) Other Administrative Fees

For the years ended June 30, 2022 and 2021, other administrative expenses of the PRIM Board, including employee compensation, professional fees and occupancy costs, charged to the PRIT Fund totaled \$22,603 and \$20,147, respectively, which are included in investment management and other management fees in the accompanying statements of changes in pooled net position.

(9) Commitments

As of June 30, 2022 and 2021, the PRIT Fund had outstanding unfunded commitments to invest \$8,449,398 and \$7,444,345, respectively, in private debt, other credit opportunities investments, private equity funds, portfolio completion strategies investments, and real estate investments.

(10) Subsequent Events

For purposes of determining the effects of subsequent events on the financial statements, management has evaluated subsequent events after June 30, 2022 through December 1, 2022, the date on which the financial statements were available to be issued.

Schedule of Pooled Net Position – Capital Fund and Cash Fund

June 30, 2022

(Dollars in thousands)

	Capital Fund	Cash Fund	Total
Assets:			
Investments, at fair value:			
Short-term	\$ 1,467,244	168,320	1,635,564
Fixed income	20,686,408	—	20,686,408
Equity	33,243,865	—	33,243,865
Timberland	2,904,110	—	2,904,110
Private equity funds	16,837,964	—	16,837,964
Real estate:			
Real estate properties	9,796,738	—	9,796,738
Equity	1,336,488	—	1,336,488
Real estate funds	481,793	—	481,793
Other	75,973	—	75,973
Total real estate	11,690,992	—	11,690,992
Portfolio completion strategies:			
Investment funds	2,303,551	—	2,303,551
Equity	2,285,915	—	2,285,915
Fixed income	3,518,563	—	3,518,563
Cash and cash equivalents	1,106,108	—	1,106,108
Agricultural investments	592,878	—	592,878
Total portfolio completion strategies	9,807,015	—	9,807,015
Total investments	96,637,598	168,320	96,805,918
Cash	254,297	107	254,404
Securities lending collateral	121,946	—	121,946
Interest and dividends receivable	233,962	269	234,231
Receivable for investments sold and other assets	727,187	—	727,187
Securities sold on a when-issued basis	398,418	—	398,418
Foreign currency forward contracts	134,977	—	134,977
Total assets	98,508,385	168,696	98,677,081
Liabilities:			
Securities sold short and other liabilities, at fair value:			
Portfolio completion strategies liabilities	2,172,680	—	2,172,680
Fixed income	14,747	—	14,747
Total securities sold short and other liabilities	2,187,427	—	2,187,427
Payable for investments purchased and other liabilities	1,198,502	—	1,198,502
Real estate debt and other liabilities	875,298	—	875,298
Securities lending obligations	872,820	—	872,820
Securities purchased on a when-issued basis	915,314	—	915,314
Foreign currency forward contracts	81,777	—	81,777
Management fees payable to PRIM	116,888	—	116,888
Total liabilities	6,248,026	—	6,248,026
Net position held in trust for pool participants	\$ 92,260,359	168,696	92,429,055

See accompanying independent auditors' report.

Schedule of Changes in Pooled Net Position – Capital Fund and Cash Fund
Year ended June 30, 2022
(Dollars in thousands)

	Capital Fund	Cash Fund	Total
Additions:			
Contributions:			
State employees	\$ —	858,181	858,181
State teachers	—	1,058,832	1,058,832
Other participants	—	2,425,078	2,425,078
Total contributions	<u>—</u>	<u>4,342,091</u>	<u>4,342,091</u>
Net investment income (loss):			
From investment activities:			
Net realized gain on investments and foreign currency transactions	4,831,600	—	4,831,600
Net change in unrealized depreciation on investments and foreign currency translations	(9,901,811)	—	(9,901,811)
Interest	621,361	725	622,086
Dividends	910,551	—	910,551
Timberland	41,557	—	41,557
Private equity	134,138	—	134,138
Portfolio completion strategies	50,980	—	50,980
Real estate:			
Income	594,530	—	594,530
Expenses	(231,520)	—	(231,520)
Total real estate	<u>363,010</u>	<u>—</u>	<u>363,010</u>
(Loss) Income from investment activities	<u>(2,948,614)</u>	<u>725</u>	<u>(2,947,889)</u>
Investment management and other management fees	(295,929)	—	(295,929)
Net (loss) income from investment activities	<u>(3,244,543)</u>	<u>725</u>	<u>(3,243,818)</u>
From securities lending activities:			
Securities lending income	6,359	—	6,359
Securities lending expenses	(2,286)	—	(2,286)
Net income from securities lending activities	<u>4,073</u>	<u>—</u>	<u>4,073</u>
Total net investment (loss) income	<u>(3,240,470)</u>	<u>725</u>	<u>(3,239,745)</u>
Total (deductions) additions	<u>(3,240,470)</u>	<u>4,342,816</u>	<u>1,102,346</u>
Deductions:			
Redemptions:			
State employees	—	1,509,113	1,509,113
State teachers	—	1,507,198	1,507,198
Other participants	—	1,355,825	1,355,825
Total deductions	<u>—</u>	<u>4,372,136</u>	<u>4,372,136</u>
Interfund transfers (out) in, net	(56,249)	56,249	—
Net (decrease) increase in pooled net position	<u>(3,296,719)</u>	<u>26,929</u>	<u>(3,269,790)</u>
Net position held in trust for pool participants:			
Balance, beginning of year	95,557,078	141,767	95,698,845
Balance, end of year	<u>\$ 92,260,359</u>	<u>168,696</u>	<u>92,429,055</u>

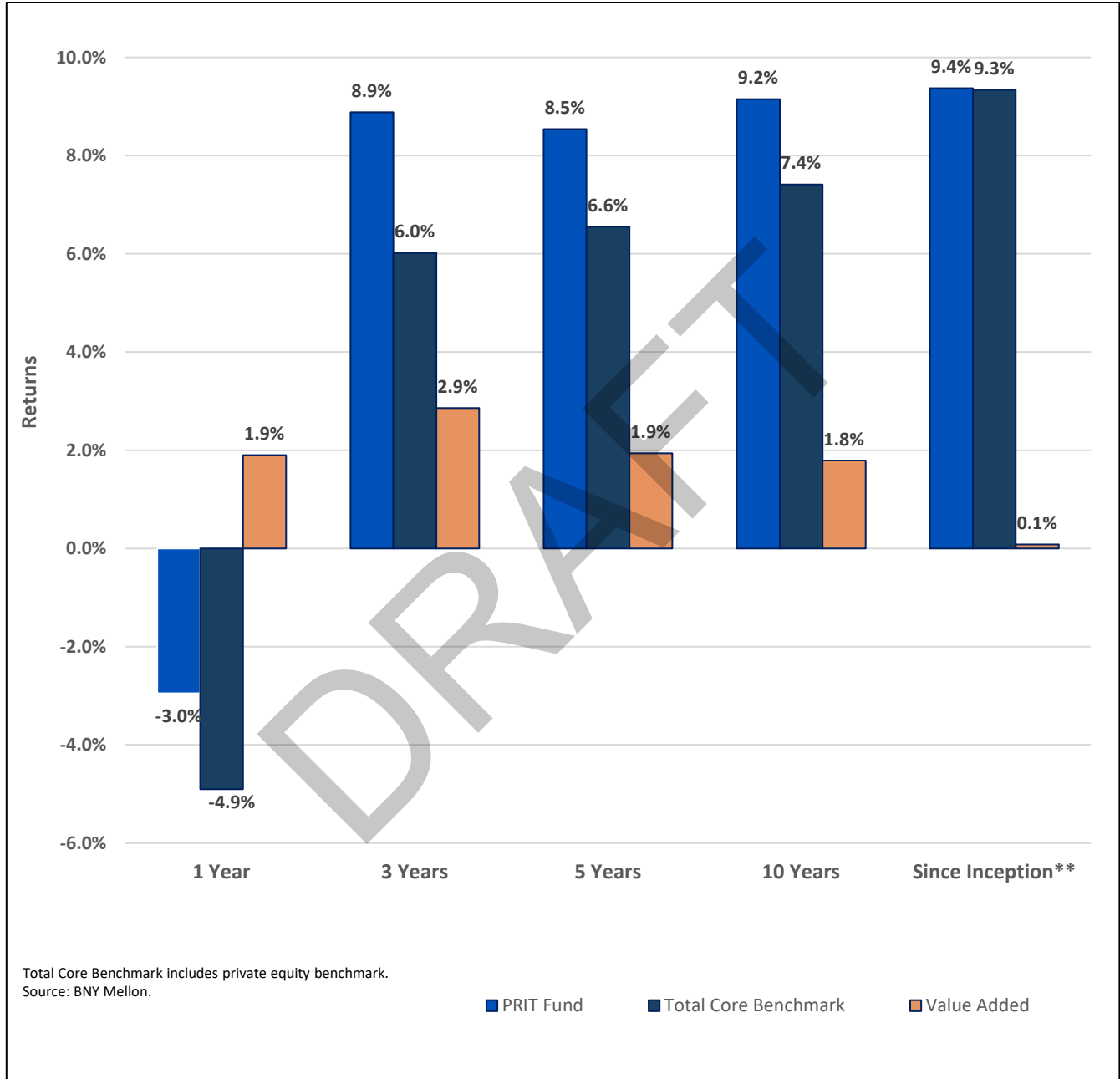
See accompanying independent auditors' report.

Investment Section

DRAFT

Total PRIT Fund Performance Summary*

For the periods ended June 30, 2022



* Gross of Fees. Total PRIT Fund includes the Core Fund and Cash Fund. Returns are annualized and calculated based on a time-weighted rate of return methodology.

** Performance inception date of January 1, 1985

Investment Strategy Overview

The PRIT Fund was formed in December 1983 with a mandate to accumulate assets through investment earnings to reduce the Commonwealth of Massachusetts' unfunded pension liability and, further on, to assist local participating retirement systems in meeting their future pension obligations. The PRIM Board is charged with the general oversight of the PRIT Fund. The PRIM Board seeks to maximize the return on investments within acceptable levels of risk and cost for a public pension fund, by broadly diversifying its investment portfolio, capitalizing on economies of scale to achieve cost-effective operations, and gaining access to high quality, innovative investment management firms, all under the management of a professional staff and members of the PRIM Board. The PRIM Board's overall investment performance goal is to achieve an annual rate of return that exceeds the targeted actuarial rate of return used in determining the Commonwealth of Massachusetts' pension obligations (currently 7.0%). A summary of other investment objectives is provided in the Investment Policy Statement at the end of this section.

As of June 30, 2022, the PRIM Board employed thirty-two public markets investment managers, ninety-seven private equity markets managers, nine real estate and timberland managers, thirty-six portfolio completion strategies managers, and six external investment advisors. The PRIT Fund had approximately \$92.4 billion in assets under management at June 30, 2022. Each investment manager operates within guidelines that are established by the PRIM Board and are delineated in a detailed investment management agreement or partnership agreement.

The PRIT Fund's net investment portfolio fair values reported in this section and used as a basis for calculating investment returns differ from those shown in the Financial Section and the Financial Highlights in the Statistical Section of this report. The values used in this section are the appropriate industry standard basis for investment return calculations and are net of all investment receivables and payables. Unless otherwise noted, all return information provided is gross of fees. In addition, "PRIT Core" return information refers to returns for the PRIT Capital Fund. PRIT Core return information excludes the impact of the Cash Fund on the total PRIT Fund return.

Asset Allocation and Diversification Discussion

The Investment Policy Statement adopted by the PRIM Board in September 1998 with subsequent updates, most recently in February 2022, states that over the long-term, asset allocation is the single greatest contributor of return and risk to the PRIT Fund. At reasonable intervals of not more than three to five years, the PRIM Board will complete a comprehensive review of its Asset Allocation Plan and its underlying assumptions, including: the Commonwealth's current and projected pension assets and liabilities; long-term capital markets rate of return assumptions; and the PRIM Board's risk tolerances. The PRIM Board shall examine the Asset Allocation Plan annually and shall consider adjustments to the Plan as may be appropriate given the Plan's long-term nature and objectives.

The PRIM Board approved the current Asset Allocation Plan on February 17, 2022, as follows:

Asset Class	6/30/2022 Allocation % (3)	Target Range % (1)
Global Equity	37.3	33 - 43
Core Fixed Income	14.5	12 - 18
Value-Added Fixed Income	6.8	5 - 11
Real Estate	10.6	7 - 13
Private Equity	18.4	12 - 18
Timberland	3.2	1 - 7
Portfolio Completion Strategies	8.6	7 - 13
Overlay (2)	0.6	-

(1) Asset Allocation Plan approved February 17, 2022.

(2) This asset class does not have target range % because it's not a component of the long-term policy target asset allocation.

(3) Totals may not add due to rounding.

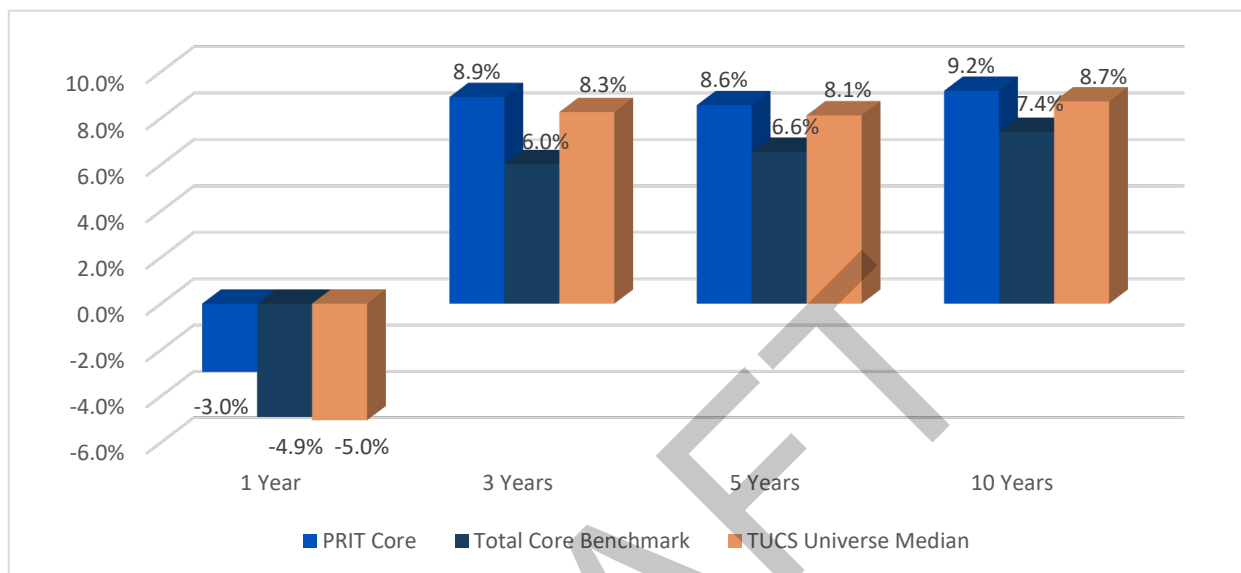
In addition to asset allocation, the PRIM Board seeks to diversify the PRIT Fund through a complementary diversification of investment styles within various asset classes. The PRIM Board requires detailed investment guidelines with each investment manager to ensure portfolios are managed with appropriate diversification and risk control.

Income and Expense Allocation

Income earned and expenses incurred in each investment account are allocated to retirement systems based on each individual retirement system's share of ownership in each investment account. Expenses are classified in three categories for purposes of allocation to retirement systems: 1) investment management fees, 2) investment advisory fees, and 3) operational fees. Investment management fees are those directly associated with the investment management of a certain account. Investment advisory fees are fees that are either directly associated with an individual asset class, or, for general advisors, are allocated pro-rata based on net asset values of each asset class. Operational fees are custodian and other administrative expenses incurred by the PRIM Board in managing the PRIT Fund and are allocated pro-rata based on net asset values of each asset class.

PRIT Core Performance: Fiscal Year 2022

Returns are calculated based on a time-weighted rate of return methodology. PRIT Core Returns (gross of fees) and benchmarks for the periods ended June 30, 2022:



In the fiscal year 2022, the PRIT Core Fund returned -2.95% compared to the Total Core benchmark return of -4.90%. The PRIT Fund began fiscal year 2022 with net position of \$95.7 billion and ended with \$92.4 billion. On a gross basis the fund decreased \$3.3 billion, which is the result of \$3.2 billion in net investment loss along with \$30 million in net redemptions from the State Employees, State Teachers' and Participant accounts.

The quarterly returns of the PRIT Core Fund in fiscal year 2022 were as follows:

- 2.48% for September 30, 2021 – versus a benchmark return of 0.44%.
- 5.53% for December 31, 2021 – versus a benchmark return of 4.02%.
- -2.11% for March 31, 2022 – versus a benchmark return of -2.09%.
- -8.33% for June 30, 2022 – versus a benchmark return of -7.02%.

The PRIT Fund seeks to outperform its three benchmarks in both up and down markets. In order of priority, these benchmarks are as follows: 1) beating the actuarial rate of return assumption (currently 7.00%); 2) exceeding the long-term Total Core Benchmark, which measures how well the PRIT Fund has implemented its asset allocation; and 3) achieving top quartile rankings in the Wilshire Trust Universe Comparison Service (TUCS) report, which measures the PRIT Fund's investment performance against its peers nationwide. Through June 30, 2022, the PRIT Core Fund returned 9.33% since inception, outperforming the actuarial rate of return of 7.00% by 233 basis points. The PRIT Core Fund outperforms its benchmark over the one-year, three-year, five-year, and ten-year periods. According to the TUCS ranking, the PRIT Fund's performance ranked in the top quartile of all U.S. Public Pension Funds over \$25 billion in size for the ten-year period ending June 30, 2022.

Management Costs

Expenses incurred by the PRIM Board in managing the PRIT Fund are charged to the PRIT Fund. These expenses consist of investment management fees, advisory fees, custodian fees, professional fees, salaries, and administrative expenses of the PRIM Board.

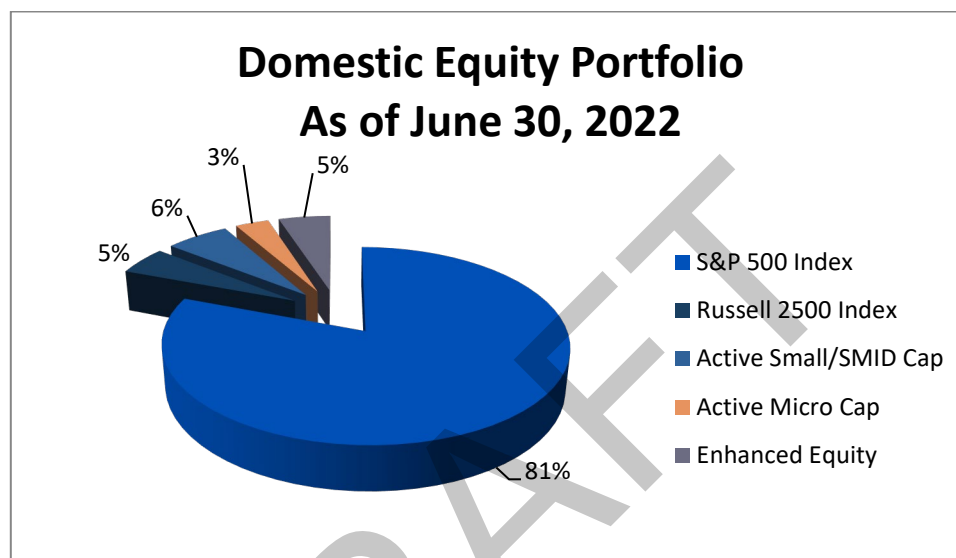
The PRIM Board tracks two types of fees: 1) direct fees and 2) indirect fees. Direct fees are fees the PRIM Board pays directly to vendors for services rendered. These fees include most investment management fees, advisory fees, custodian fees, and salaries and administrative expenses of the PRIM Board. Indirect fees are expenses typically incurred when investing in partnerships or other commingled investment vehicle structures, such as private equity funds, portfolio completion strategies, real estate, timberland, and other commingled funds. Indirect management fees incurred in these funds are charged to the respective investments. The fair value of these investments is reported net of indirect management fees.

The PRIM Board's investment managers operate with formal contracts. Investment management fees accounted for approximately 81.8% of the PRIM Board's total direct expenses for fiscal 2022. The PRIM Board also contracts with a custodian and investment advisors. Fees to these providers were approximately 7.1% of the PRIM Board's total expense for fiscal year 2022.

The total cost of managing the PRIT Fund for fiscal year 2022, *inclusive* of investment management (direct and indirect), advisory, custodial, and overhead charges was 52 basis points of the average net position of the PRIT Fund compared to 49 basis points in fiscal year 2021. For information on expense ratios for each investment account, refer to the *Financial Highlights and Financial Highlights Ratios* on pages 98-107 included in the Statistical Section of this report.

Domestic Equity Portfolio

As of June 30, 2022, the Domestic Equity portfolio had approximately \$19.7 billion in net position, representing 21.3% of the PRIT Fund. As highlighted below, the Domestic Equity portfolio allocation is approximately 81% invested in passively managed large capitalization equity strategies (S&P500), 11% invested in small and mid-capitalization equity strategies (Russell 2500, small/SMID cap), 5% invested in a put-spread-collar enhanced equity strategy (Enhanced Equity) and 3% invested in micro-capitalization equity strategies (Micro Cap).



Portfolio Risks. Although historically and recently long-term returns in equity investments have exceeded all other public market asset classes (i.e., fixed income and cash), there is no guarantee that this trend will continue or that investment in the short-term or long-term will produce positive results. Prices may fluctuate based on changes in a company's financial condition and on overall market and economic conditions. Smaller companies are especially sensitive to these factors. There is a significant risk of loss of principal due to market and economic conditions.

Portfolio Returns. For the fiscal year, the Domestic Equity portfolio returned -12.28% compared to -13.21% for the portfolio benchmark. The PRIT Fund's large cap managers returned -10.67% compared to the -10.69% return of its benchmark, the customized S&P 500 index (which excludes legislatively restricted securities in tobacco, Iran, and Sudan). The PRIT Fund's Small/SMID/Micro-cap managers returned -22.30% compared to the -27.96% return of the benchmark, which is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the Small/SMID/Micro-cap equity portfolio. The PRIT Fund's enhanced equity manager returned -9.15% compared to the -8.32% return of the enhanced equity benchmark (80% S&P 500 index/20% LIBOR as of June 30, 2022).

On a three-, five-, and 10-year basis through June 30, 2022, the PRIT Fund's Domestic Equity portfolio has returned 9.55%, 10.52%, and 12.46%, respectively, compared to the benchmark, which returned 9.57%, 10.40%, and 12.46%, respectively.

The top ten holdings in the Domestic Equity portfolio at June 30, 2022 are illustrated below. A complete listing of holdings is available upon request.

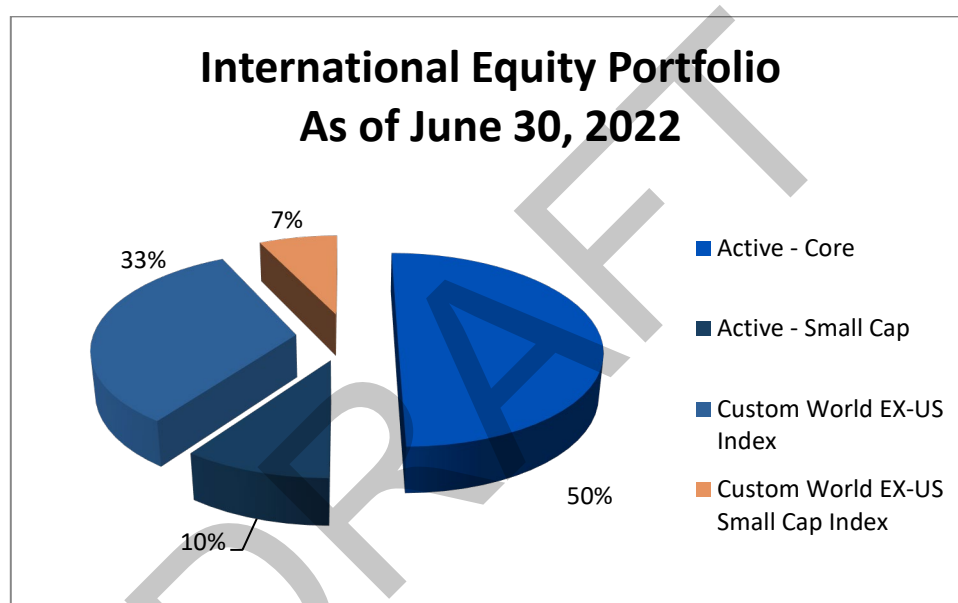
#	Issue Name	Fair Value (\$000s)	% of Account	
			Fair Value	
1	Apple Inc.	\$ 1,095,283	5.56%	
2	Microsoft Corp.	1,000,795	5.08%	
3	Amazon.com Inc.	484,198	2.46%	
4	Alphabet Inc - CL A	341,586	1.74%	
5	Alphabet Inc - CL C	314,256	1.60%	
6	Tesla Inc	294,427	1.50%	
7	Berkshire Hathaway Inc	257,352	1.31%	
8	UnitedHealth Group Inc	251,067	1.28%	
9	Johnson & Johnson	243,373	1.24%	
10	Nvidia Corp	197,837	1.01%	
	TOTAL	\$ 4,480,174	22.78%	

The PRIT Fund's Domestic Equity managers at June 30, 2022 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2022 (\$000s)
State Street Global Advisors	Custom S&P 500 Index	\$ 14,861,372
RhumbLine Advisers, LP	Custom S&P 500 Index	1,030,616
Goldman Sachs Asset Management	Enhanced Equity	985,503
State Street Global Advisors	Custom Russell 2500 Index	965,994
Frontier Capital Management	Small Cap Value	428,469
Riverbridge Partners	SMID Cap Growth	341,594
Summit Creek Advisors	Small Cap Growth	436,389
Acadian Asset Management	Micro Cap Core	194,437
Brandywine Investment Management	Micro Cap Value	161,797
Lord, Abnett & Company	Micro Cap Growth	139,420
Driehaus Capital Management	Micro Cap Growth	142,937
Other portfolio net assets		(5,608)
Total Portfolio Fair Value		\$ 19,682,920

International Equity Portfolio

As of June 30, 2022, the International Equity portfolio had approximately \$10.6 billion in net position, representing 11.5% of the PRIT Fund. The international core equity accounts are benchmarked against the Custom MSCI World ex-U.S. index – Net Dividends (Custom MSCI World ex-U.S. – customized to exclude legislatively restricted securities in tobacco, Iran, and Sudan). The international small cap equity accounts are benchmarked against the Custom World ex-U.S. Small Cap index – Net Dividends (Custom World ex-U.S. Small Cap – customized to exclude legislatively restricted securities in tobacco, Iran, and Sudan). The International Equity portfolio is allocated to one passive core equity account (33% of the portfolio), five active core equity accounts (50% of the portfolio), one passive small cap equity account (7% of the portfolio), and four active small cap equity accounts (10% of the 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. As of fiscal year-end, the weighting of International Equity was 30.7% of the Global Equity portfolio.

Portfolio Risks. Investing in developed markets outside of the United States carries additional risks as compared to U.S. domestic investments. The added risks are primarily associated with currency, higher trading and settlement cost, and less stringent investor protections and disclosure standards.

Portfolio Returns. For the fiscal year ending June 30, 2022, the International Equity portfolio returned -19.81% compared to the benchmark return of -17.81%. Two of the PRIT Fund's five active international equity managers outperformed the Custom MSCI World ex-U.S. index for the fiscal year. Two of the PRIT Fund's four active international small cap equity managers outperformed the Custom World ex-U.S. Small Cap index. The passive manager performed in-line with the benchmark for the fiscal year. On a three-, five-, and 10-year basis through June 30, 2022, the PRIT Fund's international equity managers posted returns of 2.04%, 2.94%, and 6.38%,

respectively, ahead of the benchmark, which returned 1.42%, 2.48%, and 5.51%, respectively, over the same periods.

The top ten holdings in the International Equity portfolio at June 30, 2022 are illustrated below. A complete listing of holdings is available upon request.

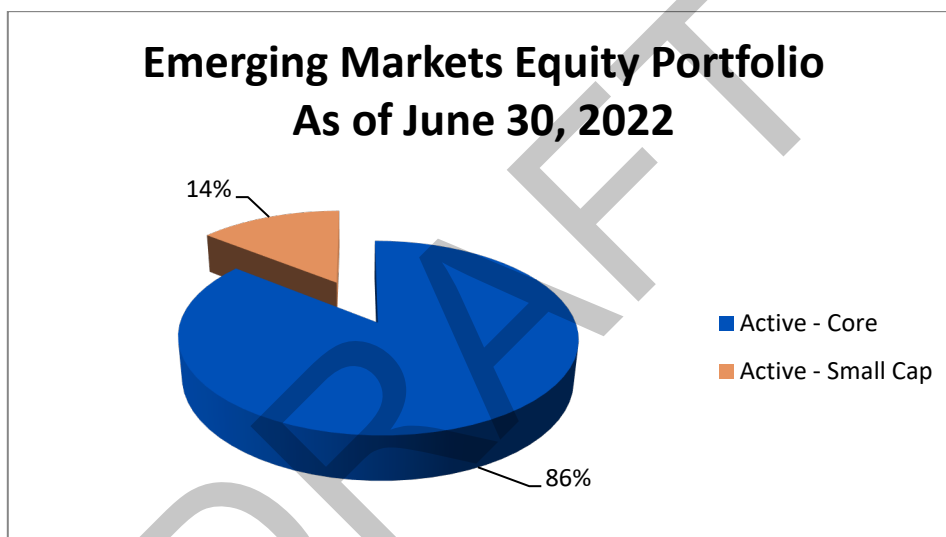
#	Issue Name	Fair Value (\$000s)	% of Account Fair	
			Value	
1	ASML Holding N.V.	\$ 105,801		1.00%
2	AIA Group Ltd	94,694		0.90%
3	Roche Holding AG	93,935		0.89%
4	BP PLC	90,717		0.86%
5	United Overseas Bank Ltd	90,115		0.85%
6	Novo Nordisk	86,164		0.81%
7	Nestle SA	80,610		0.76%
8	Novartis AG	79,572		0.75%
9	LVMH	79,407		0.75%
10	GSK PLC	76,964		0.73%
	TOTAL	\$ 877,979		8.30%

The PRIT Fund's International Equity managers at June 30, 2022 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2022 (\$000s)
<i>State Street Global Advisors</i>	Custom World ex-US Index	\$ 3,480,253
<i>Marathon-London</i>	EAFE Core	2,006,652
<i>Baillie Gifford</i>	EAFE Core	1,450,897
<i>Mondrian Investment</i>	EAFE Core	953,739
<i>ARGA Investment Management</i>	EAFE Core	573,747
<i>Xponance</i>	EAFE Core	298,597
<i>State Street Global Advisors</i>	Custom World ex-US Small Cap Index	762,921
<i>Acadian Asset Management</i>	EAFE Small Cap	321,590
<i>AQR Capital Management</i>	EAFE Small Cap	200,028
<i>Artisan Partners</i>	EAFE Small Cap	114,228
<i>Driehaus Capital Management</i>	EAFE Small Cap	112,015
<i>Other portfolio net assets</i>		301,987
Total Portfolio Fair Value		\$ 10,576,654

Emerging Markets Portfolio

As of June 30, 2022, the Emerging Markets Equity portfolio had approximately \$4.1 billion in net position, representing 4.4% of the PRIT Fund. The active emerging markets core equity managers are benchmarked against the Custom MSCI Emerging Markets Standard Index – Net Dividends (Custom MSCI Emerging Markets Standard – customized to exclude legislatively restricted securities in tobacco, Iran, and Sudan). The active emerging markets small cap equity managers are benchmarked against the Custom MSCI Emerging Markets Small Cap Net Dividends Index (Custom MSCI Emerging Markets Small Cap – customized to exclude legislatively restricted securities in tobacco, Iran, and Sudan). The emerging markets equity portfolio is allocated to five active core equity managers (which comprise about 86% of the emerging market portfolio) and two active small cap equity managers (14% of the portfolio). The PRIM Board maintains a target weighting of 100% active for the 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, and India. These countries typically have less efficient securities markets, and thus there is opportunity for returns above benchmarks. As of fiscal year end, the weighting of Emerging Markets Equity was 11.9% of the Global Equity portfolio.

Portfolio Risks. Investing in emerging markets carries risks above and beyond those inherent to domestic and developed international equity markets. Emerging markets tend to be less efficient than both U.S. and non-U.S. developed markets, and therefore, are more volatile. In addition to the added volatility, and those risks mentioned in association with investments in developed international equity markets, emerging market investments are subject to economic and political risks, exchange control regulation, expropriation, confiscatory taxation, and social instability.

Portfolio Returns. For the fiscal year, the Emerging Markets Equity portfolio returned -24.39% compared to the benchmark return of -24.64%. Three of the PRIT Fund's five active emerging markets core equity managers outperformed the benchmark. One of the PRIT Fund's two active emerging markets small cap equity managers outperformed the MSCI Emerging Markets Small Cap index for the fiscal year. On a three-, five-, and 10-year

basis through June 30, 2022, the PRIT Fund's emerging markets equity managers posted returns of 3.04%, 4.01%, and 4.81%, respectively, compared to the asset class benchmark, which returned 1.23%, 2.37%, and 3.37% over the same periods.

The top ten holdings in the Emerging Markets Equity portfolio at June 30, 2022 are illustrated below. A complete listing of holdings is available upon request.

#	Issue Name	% of Account	
		Fair Value (\$000s)	Fair Value
1	Samsung Electronics	\$ 134,231	3.27%
2	Tawain Semiconductor Mfg. Co.	120,264	2.93%
3	Alibaba Group Holding Ltd HK	109,804	2.67%
4	Tencent Holdings Ltd	106,606	2.60%
5	Tawain Semiconductor Mfg. Co. Ltd. ADR	85,427	2.08%
6	Meituan	57,929	1.41%
7	Reliance Industries Ltd	54,227	1.32%
8	Hon Hai Precision Industry Co.	50,095	1.22%
9	Housing Development Finance Co.	41,139	1.00%
10	Trip.com Group Ltd	40,410	0.98%
	TOTAL	\$ 800,132	19.48%

The PRIT Fund's Emerging Markets Equity managers at June 30, 2022 are presented in the following table:

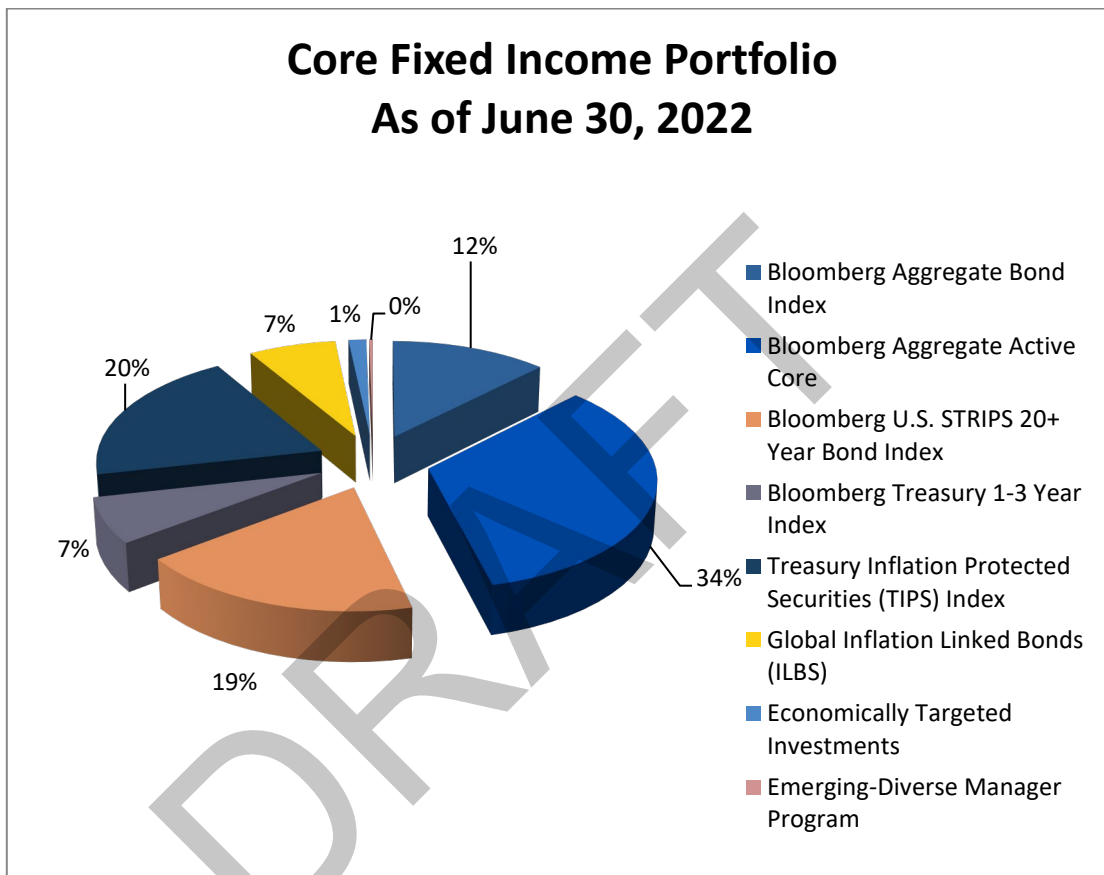
Manager	Investment Mandate	Portfolio Fair Value at June 30, 2022 (\$000s)
AQR Emerging	EM Core	\$ 689,886
Baillie Gifford	EM Core	690,689
Driehaus Capital	EM Core	780,963
Pzena Investment Management, LLC	EM Core	1,007,228
T. Rowe Price	EM Core	345,039
Acadian	EM Small Cap	432,650
Wasatch	EM Small Cap	150,058
Other portfolio net assets		8,648
Total Portfolio Fair Value		\$ 4,105,161

Global Equity Emerging-Diverse Manager Program

As of June 30, 2022, the Global Equity Emerging-Diverse Manager Program (inception in May 2022), managed by Xpounce (manager-of-managers), had \$93.7 million in net position, representing 0.3% of the Global Equity portfolio and 0.1% of the PRIT Fund.

Core Fixed Income Portfolio

As of June 30, 2022, the Core Fixed Income Portfolio had approximately \$13.3 billion invested in investment grade Core Fixed Income positions, representing 14.5% of the PRIT Fund. The Core Fixed Income Portfolio is invested using the following strategies:



The Core Fixed Income portfolio is benchmarked to the Bloomberg Aggregate Bond Index for core fixed income securities, the Bloomberg U.S. STRIPS 20+ Year Bond Index for STRIPS securities, the Bloomberg Treasury 1-3 Year Index for short term fixed income securities, the Bloomberg US TIPS Index for U.S. TIPS securities, and the Bloomberg Inflation Linked Bond US\$ Hedged Index for the Global Inflation Linked Bonds (ILBs).

The Bloomberg Aggregate Bond Index replicates the investment grade bond market. The index is comprised of corporate, government, and mortgage-backed securities. The index portfolio is designed to approximate the performance of the Bloomberg Aggregate Bond Index, while the active managers’ mandate is to exceed the index return. The Core Fixed Income portfolio is designed to reduce the long-term volatility of the total PRIT Fund.

The Core Fixed Income portfolio also contains investment with a manager under the PRIM Board’s Economically Targeted Investment (ETI) program, which are benchmarked against the Bloomberg Aggregate Bond Index. The allocations to TIPS and to the ILBs strategy are designed to provide hedges against rises in inflation. The STRIPS

portfolio is designed to approximate the performance of the Bloomberg U.S. STRIPS 20+ Year Bond Index and to lower overall volatility of the total PRIT Fund. The allocation to short term fixed income securities is designed to approximate the performance of the Bloomberg Treasury 1-3 Year Index and to reduce volatility while increasing liquidity within the Core Fixed Income portfolio. Less than 0.1% of the PRIT Fund, represents investments with diverse managers. There is one manager-of-managers in the PRIT Fund Core Fixed Income Emerging-Diverse Manager Program.

Portfolio Risks. As in the case of equities, the prices of fixed income securities increase and decrease in value. Price fluctuations in bonds result from rising and falling interest rates, changes in market conditions, and other economic and political developments. The portfolio is subject to credit risk through defaults on bonds and other fixed income securities. Erosion in principal value can result from credit risk and price fluctuations and can adversely affect portfolio returns.

Portfolio Returns. For the fiscal year 2022, the Core Fixed Income composite returned -11.46% compared to the -11.57% return of the benchmark (46.6% Bloomberg Aggregate/20% Bloomberg U.S. STRIPS 20+ Year Bond Index /20% Bloomberg US TIPS/6.7% Bloomberg ILB US\$ Hedged/6.7% Bloomberg US Treasury 1-3 Year Index as of June 30, 2022). The Bloomberg Aggregate mandates returned -10.37%, compared to the Bloomberg Aggregate Bond Index return of -10.29%. The STRIPS mandate returned -24.31%, compared to the Bloomberg U.S. STRIPS 20+ Year Bond Index return of -24.38%. The passively managed TIPS mandate returned -5.14%, compared to the Bloomberg US TIPS Index which returned -5.14%. The actively managed ILBs mandate returned -7.75%, compared to the Bloomberg ILB US\$ Hedged Index return of -7.66%. The passively managed short-term fixed income securities mandate returned -3.48%, compared to the Bloomberg Treasury 1-3 Year Index return of -3.51%. Since its inception in June 2022, the Core Fixed Income Emerging-Diverse Manager Program had a return of -1.36% compared to the custom benchmark return of -1.57%.

On a three-, five-, and 10-year basis through June 30, 2022, the PRIT Fund's Core Fixed Income portfolio has returned 0.03%, 1.92%, and 2.90%, respectively, compared to the benchmark, which returned -0.28%, 1.70%, and 2.62%, respectively.

The top ten Core Fixed Income holdings as of June 30, 2022, excluding certain pooled funds and repurchase agreements, are illustrated below. A complete listing of holdings is available upon request.

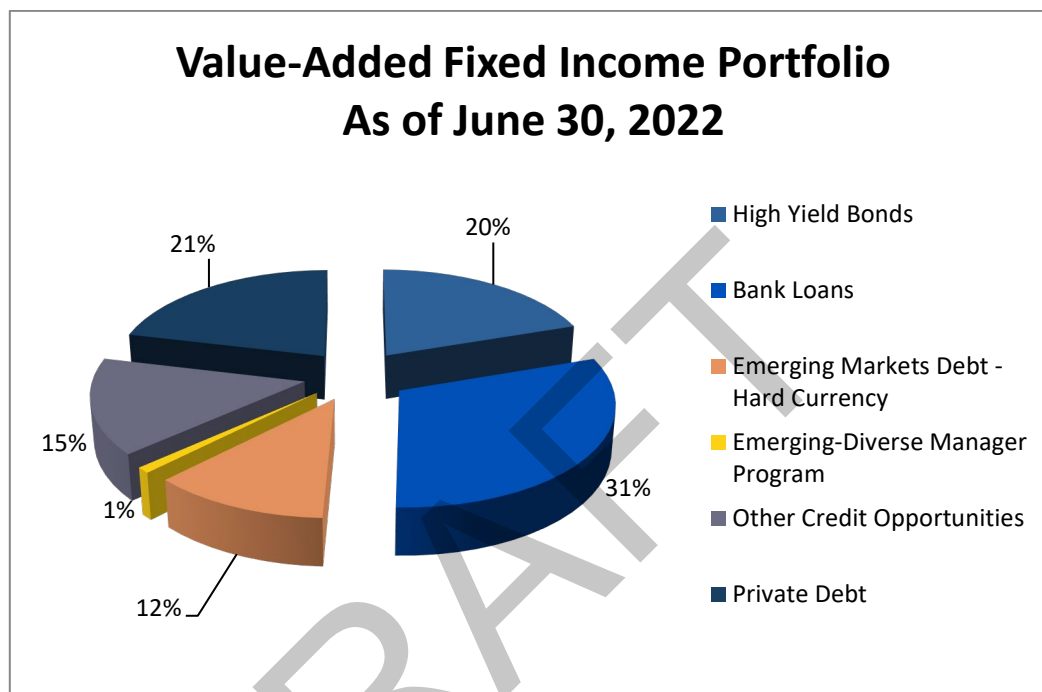
#	Issue Name	Fair Value (\$000s)	% of Account	
			Fair Value	Fair Value
1	U.S. Treasury Bond Principal STRIP 0.000% November 2050	\$ 423,521		3.17%
2	U.S. Treasury Bond Principal STRIP 0.000% February 2051	192,786		1.44%
3	U.S. Treasury Bond Principal STRIP 0.000% February 2048	183,669		1.38%
4	U.S. Treasury-CPI Inflation 0.125% July 2030	158,239		1.19%
5	U.S. Treasury Bond Principal STRIP 0.000% August 2048	148,823		1.11%
6	U.S. Treasury Bond Principal STRIP 0.000% May 2048	138,778		1.04%
7	U.S. Treasury Bond Principal STRIP 0.000% August 2050	137,823		1.03%
8	U.S. Treasury Bond Principal STRIP 0.000% August 2049	132,758		0.99%
9	U.S. Treasury-CPI Inflation 0.500% January 2028	126,799		0.95%
10	Commit to Purchase FNMA 2.500% August 2052	125,280		0.94%
	TOTAL	\$ 1,768,476		13.24%

The PRIT Fund's Core Fixed Income portfolio managers at June 30, 2022 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2022 (\$000s)
<i>Blackrock Financial Management</i>	Core Index	\$ 1,671,450
<i>Loomis, Sayles & Co., LP</i>	Active Core	1,765,947
<i>PIMCO</i>	Active Core	1,419,123
<i>Pugh Capital Management</i>	Active Core	462,580
<i>New Century Advisors</i>	Active Core	401,020
<i>Longfellow Investment Management</i>	Active Core	472,943
<i>Blackrock Financial Management</i>	Inflation Link Bonds	926,982
<i>Blackrock Financial Management</i>	STRIPS Index	2,480,683
<i>Blackrock Financial Management</i>	TIPS Index	2,659,752
<i>Blackrock Financial Management</i>	Short-Term Fixed Income	909,719
<i>AFL - CIO Housing Investment</i>	ETI - Active Core	134,841
<i>Bivium Capital Partners</i>	Emerging-Diverse	39,442
<i>Other portfolio net assets</i>		3,517
Total Portfolio Fair Value		\$ 13,347,999

Value-Added Fixed Income Portfolio

As of June 30, 2022, the Value-Added Fixed Income portfolio had approximately \$6.2 billion in net position, representing 6.8% of the PRIT Fund. The Value-Added Fixed Income portfolio is invested using the following strategies:



High Yield Bonds, which represent 1.3% of the PRIT Fund, are securities that are typically rated below Investment Grade by Standard & Poor's, Fitch, or Moody's. There are three managers in the PRIT Fund high yield bond program, all through separate accounts. Each manager's mandate is to exceed the index return.

Bank Loans, 2.1% of the PRIT Fund, represents investments in senior secured bank loans. There are two managers in the PRIT Fund bank loan program; both invest through commingled funds. Each manager's mandate is to exceed the index return.

Emerging Markets Debt, 0.8% of the PRIT Fund, represents investments in debt issued within the emerging marketplace. There are two managers in the PRIT Fund emerging debt program, representing Hard Currency strategies; one is through a commingled emerging debt investment vehicle while the other is through a separate account. Each manager's mandate is to exceed the index return.

Emerging-Diverse Manager Program, 0.1% of the PRIT Fund, represents investments with diverse managers. There is one manager-of-managers in the PRIT Fund Value-Added Fixed Income Emerging-Diverse Manager Program.

Other Credit Opportunities, 1.0% of the PRIT Fund, represents investments in other credit strategies whose risk, return and liquidity characteristics lie between the public market strategies of high yield bonds, bank loans and

emerging markets debt and the private partnerships in the private debt strategies. There are six managers in the PRIT Fund Other Credit Opportunities program; two are through private partnerships while the rest are through separate accounts.

Private Debt, 1.4% of the PRIT Fund, represents investments in private partnerships that invest directly in distressed debt investment opportunities. As of June 30, 2022, the PRIT Fund had approximately \$1.3 billion in distressed debt investments with twelve investment managers.

Portfolio Risks. As in the core fixed income portfolio, the prices of these securities increase and decrease in value. Price fluctuations in bonds result from rising and falling interest rates, changes in market conditions, and other economic and political developments. Lower-quality securities typically offer higher yields, but also carry more credit risk. The allocation of investments to emerging markets and distressed debt expose the portfolio to additional risks. Investments in emerging markets are subject to higher settlement, trading and management costs and greater economic, regulatory, and political risk, as well as currency risk. Investments in private distressed debt funds subject the portfolio to liquidity, valuation and other risks associated with private investments.

Portfolio Returns: In fiscal year 2022, the Value-Added Fixed Income composite returned -3.04% compared to -2.44% for the asset class benchmark. The PRIT Fund's three high yield bond managers returned -11.98%, while the Intercontinental Exchange Bank of America High Yield index returned -12.67%. The Emerging Markets Debt portfolio returned -25.55% during the fiscal year, compared to the JP Morgan Emerging Markets Bond Index, which returned -19.25%. The two bank loan managers, returned -3.08%, compared to the S&P LSTA Leveraged Loan index return of -2.78%. Since its inception in June 2022, the Value-Added Fixed Income Emerging-Diverse Manager Program returned -2.66% compared to the custom benchmark of -5.72%. The Other Credit Opportunities portfolio returned 6.41% compared to the custom benchmark of 0.85%. The Private Debt portfolio returned 19.56% compared to the index return of -0.09%. The benchmark for the Private Debt portfolio at June 30, 2022 is the Burgiss Distressed Debt Universe Lagged Index.

On a three-, five-, and 10-year basis through June 30, 2022, the PRIT Fund's Value-Added Fixed Income portfolio has returned 3.60%, 4.23%, and 4.68%, respectively, compared to the benchmark, which returned 3.18%, 3.90%, and 3.56%, respectively.

The top ten holdings in the Value-Added Fixed Income portfolio at June 30, 2022, excluding investments in emerging debt pooled funds, bank loan funds, private debt and other credit opportunities partnerships, and other pooled funds, are illustrated below. A complete listing of holdings is available upon request.

#	Issue Name	Fair Value (\$000s)	% of Account	
			Fair Value	
1	Altice France Holding SA 8.125% February 2027	\$ 9,581	0.15%	
2	U.S. Treasury Note 0.125% February 2023	9,108	0.15%	
3	Petroleos Mexicanos 7.690% January 2050	7,612	0.12%	
4	U.S. Treasury Bill 0.000% July 2022	7,586	0.12%	
5	CSC ServiceWorks 0.000% March 2028	7,406	0.12%	
6	Dish Network Corp 3.375% August 2026	7,329	0.12%	
7	U.S. Treasury Bill 0.000% July 2022	7,086	0.11%	
8	CCO Holdings LLC 5.125% May 2027	6,484	0.10%	
9	CSC Holdings LLC 4.625% December 2030	6,470	0.10%	
10	Albertsons Companies Inc 4.875% February 2030	6,328	0.10%	
	TOTAL	\$ 74,990	1.19%	

The PRIT Fund's Value-Added Fixed Income portfolio managers at June 30, 2022 are presented in the following table:

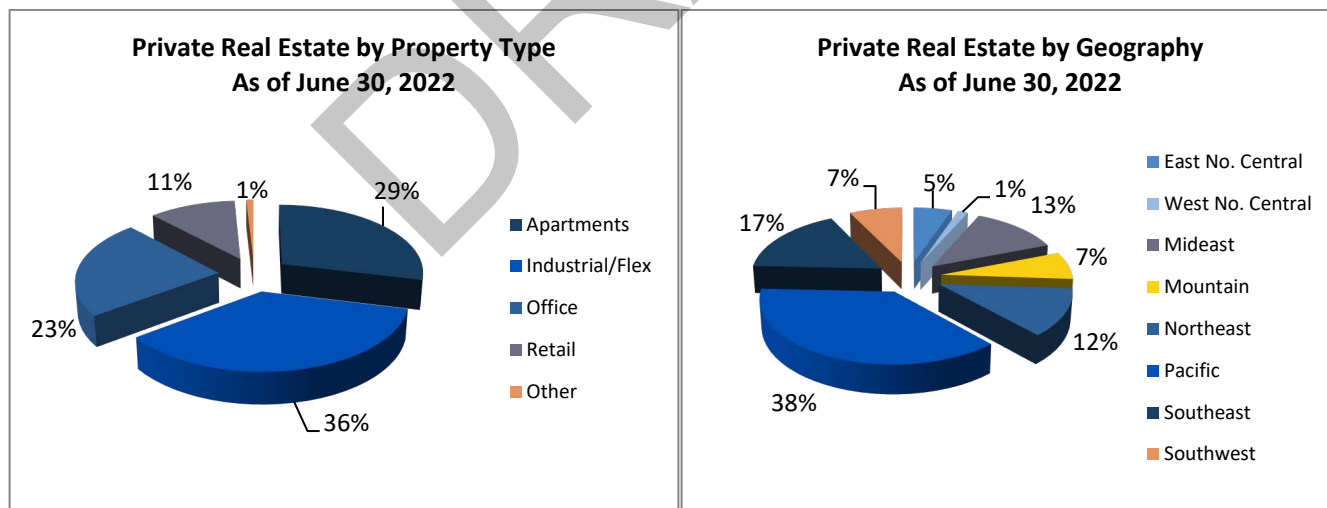
Manager	Investment Mandate	Portfolio Fair Value at June 30, 2022 (\$000s)
<i>Fidelity Management Trust</i>	High Yield Bond	\$ 441,892
<i>Loomis, Sayles & Co., LP</i>	High Yield Bond	413,780
<i>Shenkman Capital Management</i>	High Yield Bond	382,961
<i>Ashmore Investment Management</i>	Emerging Markets Debt Hard Currency	382,724
<i>PIMCO</i>	Emerging Markets Debt Hard Currency	361,138
<i>Eaton Vance</i>	Bank Loans	967,088
<i>Voya</i>	Bank Loans	950,182
<i>Bivium Capital Partners</i>	Emerging-Diverse	58,375
<i>Various accounts and partnerships</i>	Other Credit Opportunities	951,732
<i>Various partnerships</i>	Private Debt	1,287,209
<i>Other portfolio net assets</i>		41,180
Total Portfolio Fair Value		\$ 6,238,261

Real Estate Portfolio

As of June 30, 2022, the PRIM Board had \$9.8 billion invested in real estate through the PRIT Fund’s ownership interest in PRIT Core Realty Holdings LLC (the LLC), representing 10.6% of the PRIT Fund. Real estate holdings consist of directly-owned properties, REITs, and investments in real estate funds. The PRIT Fund invests in real estate because it provides diversification and attractive returns. Real estate returns typically do not have a strong correlation with stock and bond returns, therefore offering an element of diversification to reduce volatility. Real estate can also offer attractive current returns as a portfolio of well-leased assets provides consistent cash flows from rental income.

Approximately 88% of the real estate allocation is dedicated to direct investments and private partnerships (the “Private Real Estate Investments”). The Private Real Estate Investments are subsequently broken down into Core and Non-Core real estate investments. As of June 30, 2022, \$8.2 billion (net of portfolio debt) of Core real estate investments and \$492 million of Non-Core real estate investments comprise PRIT’s Private Real Estate Investments, which represents 9.4% of the PRIT Fund. Typically, Core real estate investments are relatively low risk and substantially leased (80% or greater occupancy at the time of investment) institutional quality real estate. Non-Core real estate investments offer higher potential returns at a higher risk profile. The PRIM Board’s Non-Core program targets opportunities associated with development, vacancy and tenant exposure or the potential to physically or financially reposition an investment. Public REITs comprise the remainder of the investments in the PRIT Fund real estate portfolio. As of June 30, 2022, the PRIM Board had approximately \$1.3 billion allocated to public REITs. The public REIT portfolio represents 1.5% of the PRIT Fund.

The following charts display the property type and geographic diversification of the PRIM Board’s directly-owned real estate assets, at June 30, 2022:



The PRIM Board's strategies utilize a disciplined portfolio approach to real estate investing that is focused on investments in equity interests in institutional quality real estate. The PRIM Board has established separate accounts with capable real estate investment managers under terms that are beneficial to the PRIM Board. Because the PRIM Board is typically the sole owner of the real estate in each such account, the managers operate under clear policies and guidelines most appropriate to the PRIM Board's investment needs.

Leverage. The PRIM Board approved the Real Estate Portfolio Level Leverage Policy at its February 26, 2020 Board meeting. This policy permits portfolio level debt to be incurred subject to the following policy guidelines: (i) **Debt Service Coverage:** The ratio of i) portfolio EBITDA to ii) debt service on total indebtedness should be no lower than 1.5x at the time debt is placed, assuming actual debt service. (ii) **Spread of Operating Yield over Borrowing Rate:** PRIM will target a spread of 100 basis points between the property portfolio operating yield (EBITDA/portfolio value at cost) and the weighted average borrowing interest rate on total unsecured indebtedness at the time debt is placed. When acquiring Core Real Estate that requires an assumption of debt or placement of new debt, the property NOI Yield shall be at least 100 basis points, greater than the borrowing interest rate of the assumed or new debt. (iii) **Total Leverage Ratio:** The ratio should be no more than 40% of the total real estate property portfolio. This ratio includes any property-level financing in place as well as the portfolio level facility. The calculation of the loan to value ratio will be: total debt/gross asset value of the real estate property portfolio. (iv) **Financing Characteristics:** PRIM may consider all sources of financing options that are available. Leverage may utilize fixed or floating interest rates and may utilize derivatives to achieve these rates. The decision to use fixed or floating rates will be determined at the time of borrowing and will be a function of availability, rate, and risk. Fixed rate financing will be the preferred method.

The LLC had portfolio level notes payable of \$525 million at June 30, 2022. In addition, the LLC utilized internal securities lending capabilities to increase portfolio leverage by \$750 million. By utilizing the securities lending financing capabilities, the LLC is able to achieve lower borrowing costs for the Real Estate portfolio and allow more flexibility within the real estate debt program. As the \$750 million loan is an inter-entity loan, it has been eliminated in consolidation from the financial statements presented in the *Financial Section*.

Portfolio Risks. Investments in real estate are subject to various risks, including adverse changes in economic conditions and in the capital markets, financial conditions of tenants, interest of buyers and sellers in real estate properties, environmental laws and regulations, zoning laws, governmental rules, uninsurable losses, and other factors beyond the control of the property owner. In addition, while diversification is an important tool used by the PRIM Board for mitigating risk, there is no assurance that diversification, either by geographic region or asset type, will consistently be maintained in the Core Real Estate Portfolio because of the illiquid nature of real estate. In addition, the portfolio is subject to valuation risk, as the valuation of the assets in this portfolio is based on estimates made by the PRIM Board in coordination with external appraisers and the investment managers. Furthermore, there can be no assurance that the fair value of the portfolio will ultimately correspond to the realized value of the underlying properties. Public REITs face risks similar to the risks of public equities both domestically and internationally since they are traded on public exchanges. They can experience corrections and price movements that are much more rapid than those experienced by private real estate portfolios and the share price can vary significantly from underlying net asset value.

Performance. During the fiscal year, the PRIM Board's private real estate portfolio outperformed relatively to benchmark. The private real estate sector benefitted from a low interest rate environment and strong demand for quality industrial and multifamily real estate in core markets, two property types where PRIM has a relative overweight.

For the fiscal year 2022, the real estate portfolio returned 25.48% compared to the 18.95% return of the asset class benchmark. The Private Real Estate Investments portfolio returned 34.34% for the year ended June 30, 2022, comparing to the NCREIF NFI-ODCE Index (one quarter lag), which returned 25.73% over the same period. REIT investments returned -11.32%, comparing to its benchmark return of -12.86%.

On a three-, five-, and 10-year basis through June 30, 2022, the PRIT Fund's Real Estate portfolio has returned 14.07%, 11.49%, and 11.46%, respectively, compared to the benchmark, which returned 9.40%, 8.51%, and 9.41%, respectively.

The PRIT Fund's real estate investment managers at June 30, 2022 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2022 (\$000s)
<i>Invesco Realty Advisors</i>	Separate Accounts - Core	\$ 2,528,018
<i>LaSalle Investment Management</i>	Separate Accounts - Core	2,483,624
<i>AEW</i>	Separate Accounts - Core	2,692,185
<i>CBRE</i>	Separate Accounts - Core	640,101
<i>Stockbridge</i>	Separate Accounts - Core	402,214
<i>PRIM Board</i>	Separate Accounts - Core	436,165
<i>Invesco Realty Advisors - Transition Portfolio</i>	Separate Accounts - Core	62,537
<i>AEW - Transition Portfolio</i>	Separate Accounts - Core	74,461
<i>Various Partnerships</i>	Non-Core	491,930
<i>CenterSquare Investment Management</i>	Global REITs	879,759
<i>Brookfield Investment Management</i>	Global REITs	463,257
<i>Other portfolio net assets (portfolio debt included)</i>		(1,335,050)
Total Portfolio Fair Value		\$ 9,819,201

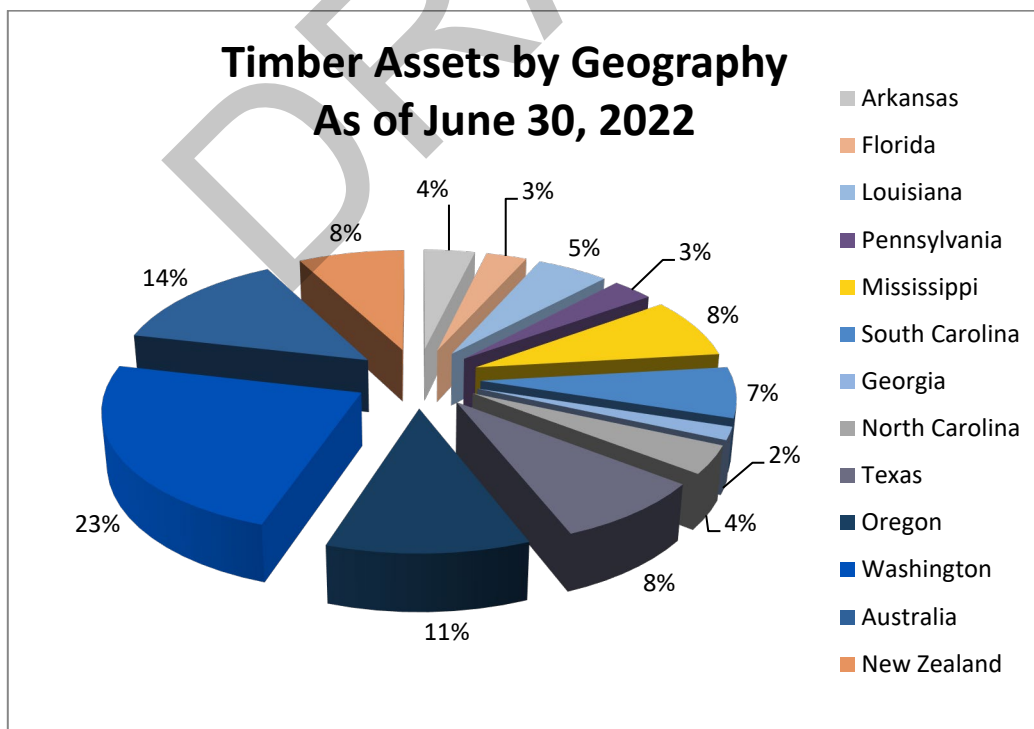
Timberland Portfolio

As of June 30, 2022, the PRIM Board had \$2.9 billion invested in timberland, representing 3.2% of the PRIT Fund. The PRIT Fund’s allocation to timberland is through two external timberland investment managers, Forest Investment Associates (FIA) and The Campbell Group (Campbell).

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. The high value tree in this region is Douglas Fir, which is used primarily to produce high quality dimensional and structural lumber. The timber growing cycle in the Southeast is much shorter, in the range of twenty-five years. Southern pine is the dominant species and it is used typically to make pulp for the paper industry or lower quality framing lumber. The Northeast market is much smaller than the other two markets and consists of a wider range of trees, including high value specialty woods such as cherry and oak.

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. Australia is a net importer of forest products, with limited domestic supply and high demand. With increasing fiber demand from China, export opportunities exist for plantations with close proximity to ports. There are approximately 2 million hectares of timberland plantations in New Zealand, comprised primarily of softwood (radiata pine). The country produces significantly more logs than it consumes, relying heavily on export markets, particularly China.

The geographical diversification of the PRIT Fund’s timberland portfolio at June 30, 2022 is presented below.



Investment returns from timberland investments are derived from the net cash flow generated from the sale of trees (referred to as stumpage sales) combined with capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest product commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland and from the conversion of timberland into higher and better uses, such as vacation property sales.

Portfolio Risks. Investments in timberland assets are subject to various risks, including adverse changes in general economic conditions, fluctuations in the market price of timber, damage to timber properties due to infestation and weather-related events, changes in regulatory conditions and other governmental rules. In addition, the portfolio is subject to valuation risk, as the valuation of the assets in this segment are based on estimates made by the PRIM Board through coordination with external appraisers and the PRIM Board's timberland investment managers. Accordingly, there can be no assurance that the fair value of investments will correspond to the ultimate realized value of the properties. International timberland investments are also subject to currency fluctuations that can result in unpredictable gains or losses when foreign currency is converted into U.S. dollars.

Performance. As of June 30, 2022, the one-year Timberland return was 11.37% as compared to the NCREIF Timberland Index (one quarter lag) of 11.82%. On a three-, five-, and 10-year basis through June 30, 2022, the PRIT Fund's Timberland portfolio has returned 5.75%, 5.39%, and 6.36%, respectively, compared to the benchmark return of 4.75%, 4.08%, and 5.60%, respectively.

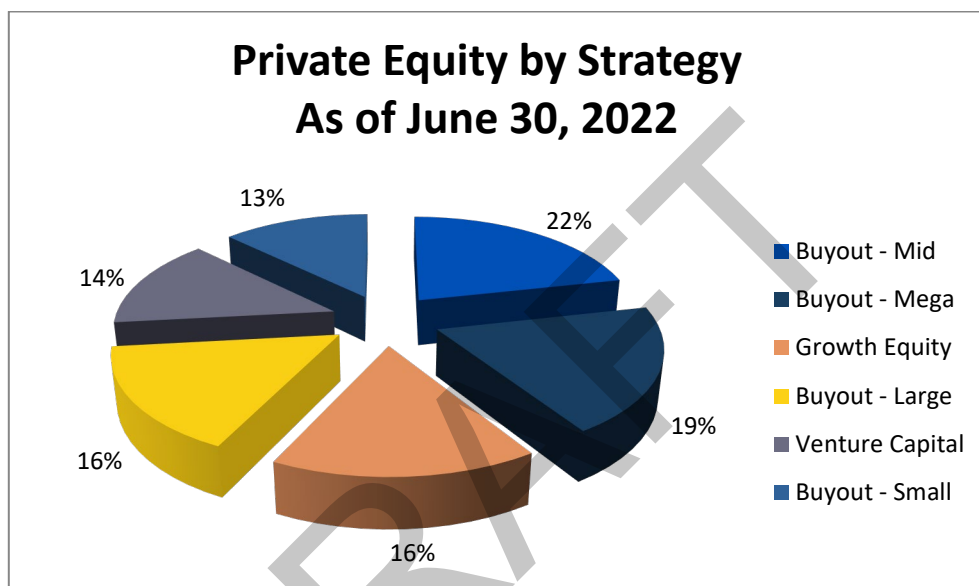
The PRIT Fund's Timberland investment managers at June 30, 2022 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2022 (\$000s)	
<i>Forest Investments Associates</i>	Separate Accounts - Timberland	\$	1,276,717
<i>The Campbell Group</i>	Separate Accounts - Timberland		1,615,310
<i>Other portfolio net assets</i>			27,948
Total Portfolio Fair Value		\$	2,919,975

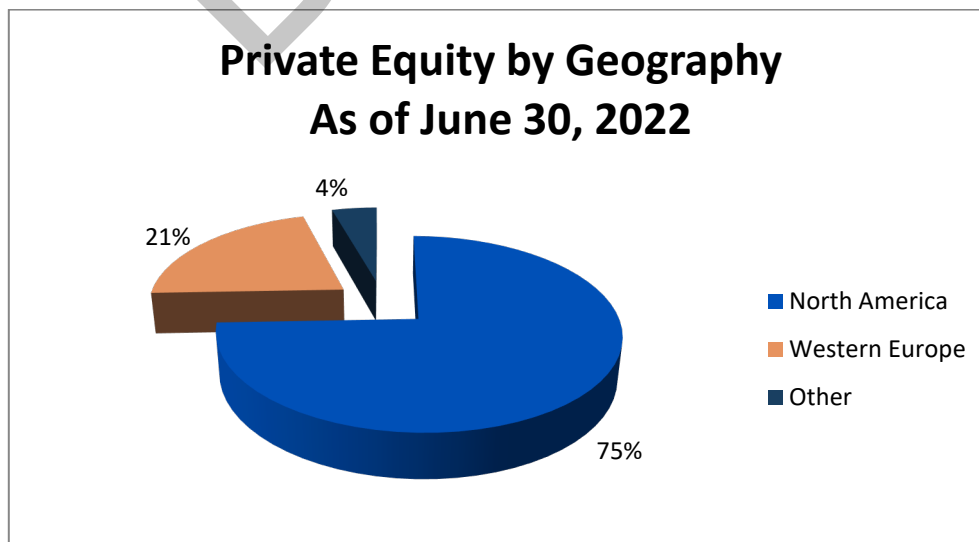
Private Equity Portfolio

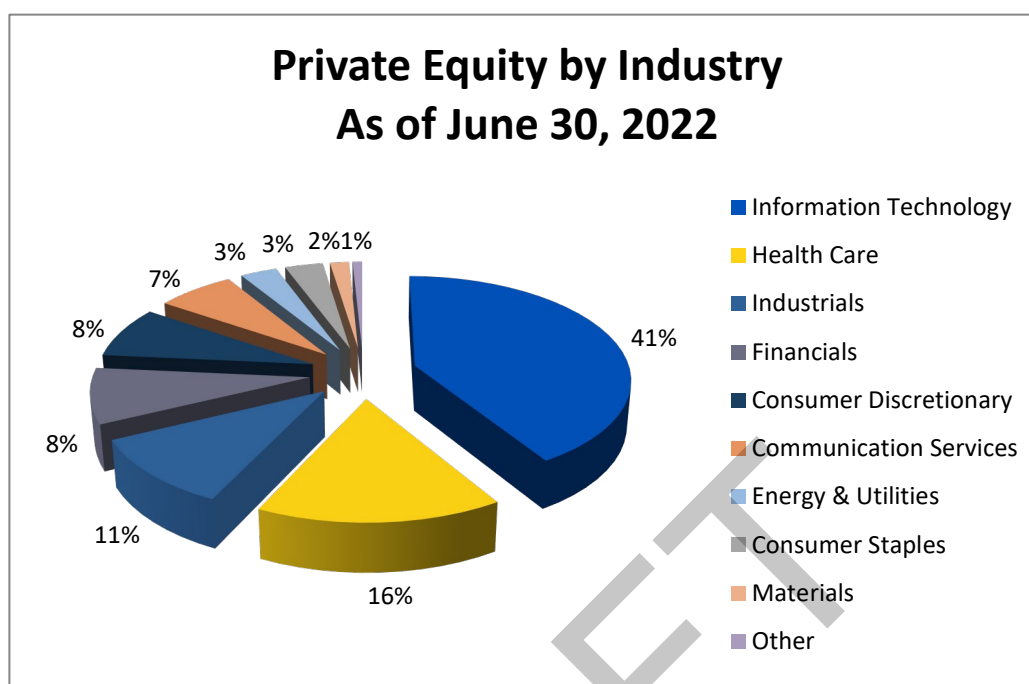
As of June 30, 2022, the fair value of the Private Equity portfolio was \$16.9 billion, representing 18.4% of the PRIT Fund. Unlike public equities, where investors have the ability to liquidate investments generally at any time, private equity investments are illiquid. Therefore, an investment in this category is a long-term commitment.

The Private Equity portfolio is well-diversified by strategy and the allocation as of June 30, 2022, is presented below.



The Private Equity portfolio is diversified at the partnership level by strategy as well as at the underlying portfolio company level by industry and geography. The portfolio’s current geographical and industry allocations are presented below.





Capital invested in private equity partnerships is subject to a relatively high degree of risk as compared to other potential investments, with the assumption that the investor will be rewarded with higher returns for that assumption of risk, i.e., the “risk/return trade-off”. This risk/return trade-off is the key consideration in determining if this asset is appropriate for a particular portfolio. These risks are highlighted below.

Portfolio Risks. Risks associated with investing in private equity limited partnerships include, but are not limited to:

- ***Liquidity:*** Limited partnership vehicles typically have 10-15-year life cycles during which limited partners are unable to liquidate their entire positions, but instead, will receive the cash flow from successful investments. A defined secondary market such as the New York Stock Exchange does not exist for private equity.
- ***Volatility:*** Volatility, as measured by standard deviation from a mean return, has historically been greater for private equity investing than many other assets.
- ***Management Fee Effect:*** Typically, general partners’ fees range from 150 to 250 basis points annually. This is usually drawn down against committed capital, although it may not be invested, and may result in negative returns until investments are realized successfully.
- ***Valuation of investments:*** Investment valuation at any time may not be reflective of fair market value. Private equity investments are generally valued at fair value. However, because of the inherent uncertainty of the valuation of the portfolio companies, the estimated value may differ significantly from the value that would have been used had a ready market for these investments existed.

- **General Partner Discretion:** Investors lack control over the general partner's investment decisions. The general partner is provided capital to manage at its discretion and investors are provided limited rights, such as termination of the partnership in certain instances. (These rights may not prove practical except in extreme circumstances.)
- **Binding Commitments:** There is limited ability to reduce or terminate investments. Under the contractual terms of the partnership, investments may be terminated in some cases by super-majority vote of the investors and after the occurrence of certain events. (These rights may not prove practical except in extreme circumstances.)
- **Risk of Loss:** There is risk of losing 100% of the investment. Investments in partnerships are usually equity and their risk nature could result in loss of the entire investment.

Performance. The PRIT Fund's Private Equity portfolio delivered a one-year return of 27.29% through June 30, 2022. The PRIT Fund's Private Equity managers were active in making new investments as well as in generating liquidity in the year ending June 30, 2022. The PRIT Fund's managers called \$2.9 billion of capital for additional investments, management fees, and partnership expenses, which compares to the \$2.5 billion called during the prior fiscal year. From a liquidity standpoint, the portfolio generated total distributions of \$3.3 billion which compares to \$3.4 billion of distributions for the 2021 fiscal year.

While there is not currently a widely used or conventional benchmark in this asset class, the PRIM Board staff targets investment opportunities with the ability to generate a long-term rate of return equal to or greater than a custom benchmark (7-year annualized return of a blend of the 87.5% Russell 3000 + 3%/12.5% MSCI Europe IMI + 3% as of June 30, 2022). As of June 30, 2022, the PRIT Fund's Private Equity portfolio returned 27.29% compared to the custom benchmark return of 15.17%. On a three-, five-, and 10-year basis through June 30, 2022, the PRIT Fund's Private Equity portfolio has returned 31.91%, 27.08%, and 22.38%, respectively, compared to the custom benchmark return of 14.70%, 14.99%, and 13.62%, respectively. It is important to remember that there is a one quarter lag inherent in private equity valuations.

Since inception to June 30, 2022, the PRIT Fund has committed \$29.8 billion to 519 partnerships (348 active) of which \$25.6 billion has been invested. The program has generated \$31.0 billion in distributions. The net IRR since inception for the program is 14.39%.

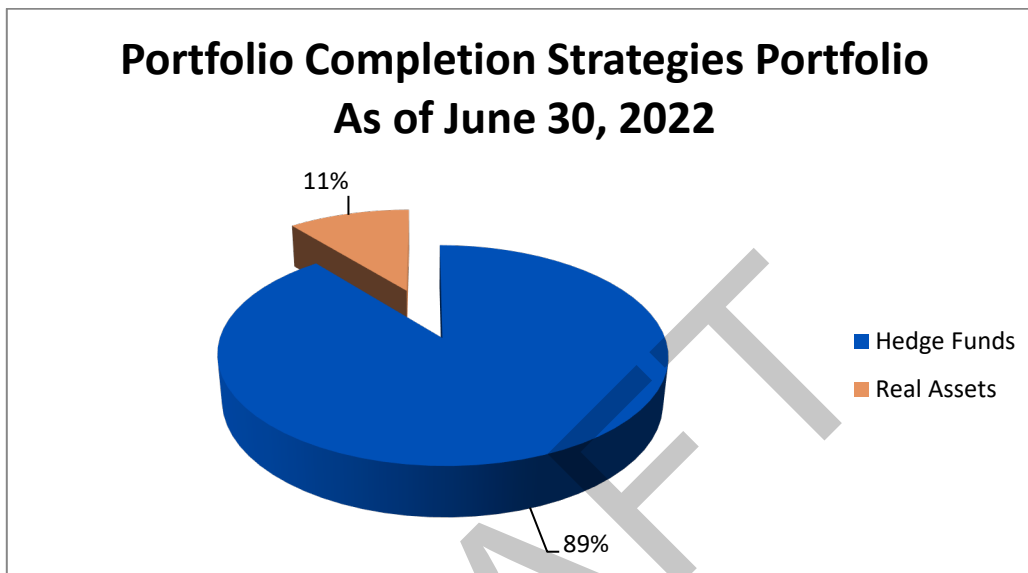
PRIVATE EQUITY EXTERNAL MANAGERS

As of June 30, 2022

Partnership	Location	Partnership	Location		
1	Acon Investments	Washington, DC	50	Lovell Minnick Partners	Radnor, PA
2	Advent International	Boston, MA	51	M/C Venture Partners	Boston, MA
3	Alta Communications	Boston, MA	52	Madison Dearborn Capital Partners	Chicago, IL
4	American Industrial Partners	New York, NY	53	Medicxi Ventures	London, UK
5	American Securities	New York, NY	54	Menlo Ventures	Menlo Park, CA
6	Apollo Management Co.	New York, NY	55	Montagu Private Equity	London, UK
7	Ascent Venture Partners	Boston, MA	56	Montreux Equity Partners	Menlo, CA
8	Austin Ventures	Austin, TX	57	Nautic Partners	Providence, RI
9	Bain Capital	Boston, MA	58	New Enterprise Associates	Baltimore, MD
10	Battery Ventures	Boston, MA	59	Nordic Capital	Stockholm, Sweden
11	Berkshire Partners	Boston, MA	60	Odyssey Investment Partners	New York, NY
12	Blackstone Capital Partners	New York, NY	61	Olympus Growth Fund	Stamford, CT
13	Bridgepoint Capital Limited	London, UK	62	Onex Corporation	Toronto, Canada
14	Carlyle Partners	Washington, DC	63	Permira	London, UK
15	Castile Ventures	Waltham, MA	64	Polaris Partners	Boston, MA
16	Catalyst Investors	New York, NY	65	Providence Equity Partners	Providence, RI
17	Centerbridge Capital	New York, NY	66	Providence Strategic Growth	Boston, MA
18	Charlesbank Capital Partners	Boston, MA	67	Quad-C Management	Charlottesville, VA
19	Charterhouse Capital Partners	London, UK	68	Quantum Energy Partners	Houston, TX
20	Chequers Partenaires	Paris, France	69	Rembrandt Venture Partners	Menlo Park, CA
21	CVC Capital	London, UK	70	Rhône Group LLC	New York, NY
22	Cypress Group	New York, NY	71	SAIF Partners	Hong Kong, China
23	Denham Capital Management	Boston, MA	72	SCP Vitalife	Wayne, PA
24	Elysian Capital	London, UK	73	Sherbrooke Capital	Newton, MA
25	El Dorado Ventures	Menlo Park, CA	74	Sofinnova Ventures, Inc.	Menlo Park, CA
26	EW Healthcare Partners	New York, NY	75	Spark Capital	Boston, MA
27	Ethos Private Equity	Johannesburg, South Africa	76	Stone Point Capital	Greenwich, CT
28	Exponent Private Equity Partners	London, UK	77	Summit Partners	Boston, MA
29	First Reserve Corporation	Greenwich, CT	78	SV Health Investors	Boston, MA
30	Flagship Pioneering	Cambridge, MA	79	TA Associates	Boston, MA
31	Genstar Capital	San Francisco, CA	80	Technology Crossover Ventures	Menlo Park, CA
32	Georgian Partners	Toronto, Canada	81	Tenaska Capital Management	Omaha, NE
33	Gilde Buy Out Partners	Utrecht, Netherlands	82	Thoma Bravo	San Francisco, CA
34	Gores Group	Los Angeles, CA	83	Thoma Cressey Partners	Chicago, IL
35	GTCR Golder Rauner	Chicago, IL	84	Thomas H. Lee Partners	Boston, MA
36	Hellman & Friedman	San Francisco, CA	85	Thompson Street Capital Partners	St. Louis, MO
37	H.I.G. Capital	Miami, FL	86	Tidemark	Menlo Park, CA
38	Highland Capital Partners	Lexington, MA	87	Torquest Partners	Toronto, Canada
39	Hony Capital	Beijing, China	88	TowerBrook Capital Partners	New York, NY
40	Index Ventures	London, UK	89	TPG Capital	San Francisco, CA
41	Insight Partners	New York, NY	90	Trident Capital	Los Angeles, CA
42	Institutional Venture Partners	Menlo Park, CA	91	Union Square Ventures	New York, NY
43	InterWest Partners	Menlo Park, CA	92	VantagePoint Partners	San Bruno, CA
44	JMI Equity	Baltimore, MD	93	Vestar Capital Partners	New York, NY
45	Kelso & Company	New York, NY	94	Vista Equity Partners	San Francisco, CA
46	Kepha Partners	Waltham, MA	95	Waterland Private Equity	Amsterdam, Netherlands
47	Keytone Ventures	Beijing, China	96	WestView Capital Partners	Boston, MA
48	Kohlberg Kravis Roberts & Co.	New York, NY	97	Xenon Private Equity, LTD.	Jersey, UK
49	KPS Capital Partners	New York, NY			

Portfolio Completion Strategies (PCS) Portfolio

As of June 30, 2022, the PCS portfolio had approximately \$7.9 billion in net position, representing 8.6% of the PRIT Fund. The PCS portfolio is invested in the following strategies:



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.

Each investment within the PCS portfolio is compared against an appropriate benchmark. The overall PCS portfolio benchmark is the weighted-average of each of the underlying investment benchmarks.

Portfolio Risks. The PCS portfolio is subject to the various risks of underlying investments. The portfolio is subject to market risk through a general downturn in market conditions and a general reversal of the risk premia that the strategies are trying to capture, as well as credit risk inherent in fixed income strategies. The portfolio is also exposed to liquidity risk in unwinding underlying illiquid positions. In addition, the PCS portfolio is exposed to operational risks in executing investment strategies and valuing investment positions. The PRIM Board has developed a detailed PCS investment plan to manage these risks and ensure appropriate diversification within the asset class.

Performance. For the fiscal year, the PCS portfolio returned -0.80% compared to the asset class benchmark return of -1.36%. On a three-, five-, and 10-year basis through June 30, 2022, the PRIT Fund's PCS portfolio has returned 2.92%, 3.45%, and 4.62%, respectively, compared to the benchmark return of 4.10%, 4.21%, and 4.08%, respectively.

The PRIT Fund's PCS managers at June 30, 2022 are presented in the following table:

Manager	Strategy Focus	Location
1 400 Capital Management	Hedge Fund	New York, NY
2 Aeolus Capital Management Ltd	Real Assets	Hamilton, Bermuda
3 Basswood Capital Management, LLC	Hedge Fund	New York, NY
4 BlackRock Financial Management	Real Assets	New York, NY
5 Breakout Funds, LLC	Hedge Fund	Chicago, IL
6 Bridgade Capital Management	Hedge Fund	New York, NY
7 Cantab Capital Partners	Hedge Fund	Cambridge, UK
8 Canvas Capital	Hedge Fund	Rio de Janeiro, Brazil
9 Capula Investment Management	Hedge Fund	Greenwich, CT
10 Cirera Capital Ltd	Hedge Fund	London, UK
11 CKC Capital	Hedge Fund	New York, NY
12 Complus Asset Management Limited	Hedge Fund	Hong Kong, China
13 Contrarian Capital Management	Hedge Fund	Greenwich, CT
14 Davidson Kempner Capital Management	Hedge Fund	New York, NY
15 DLD Asset Management	Hedge Fund	New York, NY
16 East Lodge Capital	Hedge Fund	London, UK
17 Elliot Management Corporation	Hedge Fund	New York, NY
18 Fir Tree Partners	Hedge Fund	New York, NY
19 GaoTeng Global Asset Management Limited	Hedge Fund	Hong Kong, China
20 Investcorp Investment Advisers	Hedge Fund	New York, NY
21 JEN Partners	Real Assets	New York, NY
22 Land and Buildings Investment Management	Hedge Fund	Stamford, CT
23 LMCG Serenitas	Hedge Fund	New York, NY
24 Markel CATCo Investment Management	Real Assets	Hamilton, Bermuda
25 Mudrick Capital Management	Hedge Fund	New York, NY
26 Mygale	Hedge Fund	London, UK
27 North Peak Capital Management	Hedge Fund	New York, NY
28 PAAMCO	Hedge Fund	Newport Beach, CA
29 PGIM	Real Assets	Newark, NJ
30 Power Pacific Investment Management	Hedge Fund	Montreal, Canada
31 RV Capital Management	Hedge Fund	Singapore
32 Sightway Capital	Real Assets	New York, NY
33 Silver Creek Advisory Partners	Real Assets	Seattle, WA
34 Summit Partners Public Asset Management, LLC	Hedge Fund	Boston, MA
35 Tabor Asset Management	Hedge Fund	New York, NY
36 Valent Asset Management	Hedge Fund	New York, NY

Overlay

As of June 30, 2022, the Overlay portfolio, managed in part by Parametric Portfolio Associates, had \$539.3 million in net position, representing 0.6% of the PRIT Fund. The Overlay portfolio returned -10.68% for the fiscal year, 3.88% over the three-year period, 3.24% over the five-year period, and 4.13% since its inception in October 2013.

The objective of the overlay program is to reduce performance drag by earning market returns on cash which is not invested. Investments are made through the futures market.

SCHEDULE OF TIME-WEIGHTED RETURNS BY ASSET CLASS*

For the Periods Ended June 30, 2022

Asset Class	1 Year	3 Year	5 Year	10 Year
<i>Benchmark as of June 30, 2022</i>				
Global Equity	-16.14%	6.29%	6.98%	9.11%
<i>56.9% Domestic Equity BM/43.1% Custom ACWI EX-US IMI NET DIVS</i>	-16.09%	5.78%	6.47%	8.53%
Domestic Equity	-12.28%	9.55%	10.52%	12.46%
<i>Asset Class BM (1)</i>	-13.21%	9.57%	10.40%	12.46%
International Equity	-19.81%	2.04%	2.94%	6.38%
<i>Custom MSCI World EX-US IMI NET DIVS</i>	-17.81%	1.42%	2.48%	5.51%
Emerging Markets Equity	-24.39%	3.04%	4.01%	4.81%
<i>Custom MSCI Emerging Markets IMI NET DIVS</i>	-24.64%	1.23%	2.37%	3.37%
Core Fixed Income	-11.46%	0.03%	1.92%	2.90%
<i>46.6% Bloomberg Agg/20% Bloomberg US TIPS/6.7% Bloomberg ILB US\$ Hedged/20% Bloomberg US STRIPS 20+ Year/6.7% Bloomberg US Treasury 1-3</i>				
<i>Year Index</i>	-11.57%	-0.28%	1.70%	2.62%
Value-Added Fixed Income	-3.04%	3.60%	4.23%	4.68%
<i>Asset Class BM (2)</i>	-2.44%	3.18%	3.90%	3.56%
Real Estate	25.48%	14.07%	11.49%	11.46%
<i>Asset Class BM (3)</i>	18.95%	9.40%	8.51%	9.41%
Private Equity	27.29%	31.91%	27.08%	22.38%
<i>No Benchmark</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>
Timberland	11.37%	5.75%	5.39%	6.36%
<i>NCREIF Timberland Index (one quarter lag)</i>	11.82%	4.75%	4.08%	5.60%
Portfolio Completion Strategies	-0.80%	2.92%	3.45%	4.62%
<i>Total Portfolio Completion Strategies Composite Index (4)</i>	-1.36%	4.10%	4.21%	4.08%
Overlay (5)	-10.68%	3.88%	3.24%	na
<i>No Benchmark</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>
	1 Year	3 Year	5 Year	10 Year
Total PRIT Core Fund	-2.95%	8.91%	8.56%	9.18%
<i>Policy Benchmark</i>	-4.90%	6.02%	6.55%	7.41%
<i>TUCS Universe Median</i>	-5.04%	8.26%	8.12%	8.72%
<i>TUCS Universe Ranking</i>	46th	32nd	28th	25th

- (1) Domestic Equity benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the domestic equity portfolio.
- (2) Value-Added Fixed Income 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 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.
- (3) Real Estate benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the real estate portfolio.
- (4) Total Portfolio Completion Strategies Composite Index benchmark was formed on April 1, 2017 by combining the prior Portfolio Completion Strategies with Total Hedge Funds. Total Portfolio Completion Strategies Composite Index benchmark 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.
- (5) The Overlay Account's inception date was October 31, 2013.

* All return information is gross of fees. Returns are calculated based on a time-weighted rate of return methodology.

Investment Summary at Fair Value

As of June 30, 2022

	Fair Value (\$000s)	% of Fair Value
Short-term:		
Money market investments	\$ 1,635,564	1.69%
Fixed income:		
U.S. government obligations	8,413,831	8.69%
Domestic fixed income	7,622,270	7.88%
International fixed income	2,334,432	2.41%
Private debt	1,287,209	1.33%
Other credit opportunities	1,028,666	1.06%
	<u>20,686,408</u>	<u>21.37%</u>
Equity:		
Domestic equity securities	18,632,240	19.25%
International equity securities	14,611,625	15.09%
	<u>33,243,865</u>	<u>34.34%</u>
Timberland	2,904,110	3.00%
Private equity	16,837,964	17.39%
Real estate:		
Real estate properties	9,796,738	10.12%
Real estate equity securities	1,336,488	1.38%
Real estate funds	481,793	0.50%
Other	75,973	0.08%
	<u>11,690,992</u>	<u>12.08%</u>
Portfolio completion strategies:		
Event-driven hedge funds	890,751	0.92%
Relative value hedge funds	388,591	0.40%
Fund of funds	632,346	0.65%
Distressed loan fund	83,361	0.09%
Real assets fund	308,502	0.32%
Equity securities	2,285,915	2.36%
Fixed income securities	3,518,563	3.64%
Cash and cash equivalent	1,106,108	1.14%
Agricultural investments	592,878	0.61%
	<u>9,807,015</u>	<u>10.13%</u>
Total investments	<u>\$ 96,805,918</u>	<u>100.00%</u>

SUMMARY SCHEDULE OF BROKER COMMISSIONS

(Top 25 Brokers and Cumulative Fees Paid to Others)

Fiscal Year Ended June 30, 2022

Brokerage Firms	Fees Paid (\$)	% Total	Average \$ per share
Morgan Stanley	\$ 1,014,120	9.9%	0.0039
JP Morgan	985,392	9.6%	0.0031
Goldman Sachs	854,884	8.3%	0.0028
Merrill Lynch	682,233	6.6%	0.0022
UBS	642,527	6.3%	0.0021
HSBC	429,117	4.2%	0.0029
Jefferies	392,757	3.8%	0.0055
Citigroup	390,527	3.8%	0.0043
Credit Suisse	378,078	3.7%	0.0016
Macquarie	348,548	3.4%	0.0043
Instinet	342,708	3.3%	0.0017
Pershing	306,747	3.0%	0.0084
Sanford C. Bernstein & Co	247,108	2.4%	0.0033
RBC	188,635	1.8%	0.0129
National Financial Services	182,874	1.8%	0.0235
Credit Lyonnais	174,215	1.7%	0.0020
Liquidnet	163,276	1.6%	0.0203
Daiwa Securities	160,375	1.6%	0.0062
William Blair & Co	154,541	1.5%	0.0335
Virtu Americas LLC	123,967	1.2%	0.0157
CLSA	105,525	1.0%	0.0021
Cowen	103,221	1.0%	0.0310
JonesTrading	90,834	0.9%	0.0341
Banco BTG Pactual	65,603	0.6%	0.0045
Piper Sandler	60,308	0.6%	0.0102
Others	1,679,533	16.4%	0.0064
Totals	\$ 10,267,653	100.0%	0.0035

SCHEDULE OF MANAGEMENT FEES

Fiscal Year Ended June 30, 2022

Investment Management Fees by Asset Class:	(\$000s)
Global Equity	\$ 89,062
Core Fixed Income	9,817
Value-Added Fixed Income	12,512
Real Estate	90,759
Timberland	6,246
Private Equity	8,923
Portfolio Completion Strategies	38,992
Overlay	1,020
Total Investment Management Fees	257,331
Investment Advisory Fees	15,059
Custodian Fees	936
Other Administrative Fees	22,603
Total Management Fees charged to the PRIT Fund	\$ 295,929

SCHEDULE OF RETIREMENT SYSTEMS BY INVESTMENT

Segmentation Accounts invested as of June 30, 2022

Retirement System	Net Asset Values (\$000s) 6/30/22	General Allocation	Domestic Equity	International Equity	Emerging Markets	Core Fixed Income	Real Estate	Private Equity	Hedge Funds	Public Value Added Fixed Income
Adams	\$ 38,569	X								
Amesbury	\$ 65,191	X								
Andover	\$ 309,919	X	X	X	X	X	X			X
Arlington	\$ 190,533	X								
Attleboro	\$ 15,762							X		
Barnstable	\$ 1,434,605	X								
Belmont	\$ 60,594	X		X	X		X	X	X	
Berkshire	\$ 312,782	X								
Beverly	\$ 168,465	X								
Blue Hills	\$ 13,679	X								
Boston Teachers	\$ 2,016,308	X								
Braintree	\$ 17,145							X	X	
Bristol County	\$ 137,378							X	X	
Brookline	\$ 404,263	X						X		
Cambridge	\$ 328,821						X	X	X	
Chelsea	\$ 240,331	X								
Chicopee	\$ 76,516						X	X	X	
Clinton	\$ 67,282	X			X			X		
Concord	\$ 91,695	X			X		X	X	X	
Danvers	\$ 55,485			X	X		X	X	X	
Dedham	\$ 176,256	X								
Dukes County	\$ 113,559	X		X			X	X		
Easthampton	\$ 68,131	X								
Essex	\$ 602,838	X								
Everett	\$ 231,823	X								
Fairhaven	\$ 81,254	X								
Fall River	\$ 333,410	X								
Falmouth	\$ 38,565						X	X	X	
Fitchburg	\$ 150,896	X								
Framingham	\$ 397,001	X								
Franklin County	\$ 107,634	X		X	X		X			X
Gardner	\$ 67,846	X								
Gloucester	\$ 136,640	X								
Greenfield	\$ 88,433	X								
Hampden County	\$ 457,353	X								
Hampshire County	\$ 403,979		X	X	X	X	X	X		X
Haverhill	\$ 201,496	X		X	X	X	X	X	X	X
Hingham	\$ 151,845	X								
Holliston	\$ 315	X								
Holyoke	\$ 34,735						X	X	X	
Hull	\$ 64,115	X								
Lawrence	\$ 295,321	X								
Leominster	\$ 265,127	X								
Lexington	\$ 25,963						X		X	
Lowell	\$ 460,047	X								
Lynn	\$ 449,747	X								
Marblehead	\$ 115,782	X								
Mass Turnpike	\$ 160,710	X								
Massport	\$ 169,228						X	X		
Maynard	\$ 26,111					X	X	X	X	X
MBTA	\$ 139,973				X		X	X	X	
Medford	\$ 72,083						X	X	X	

SCHEDULE OF RETIREMENT SYSTEMS BY INVESTMENT, continued

Retirement System	Net Asset Vaules (\$000s) 6/30/22	Segmentation Accounts invested as of June 30, 2022								
		General Allocation	Domestic Equity	International Equity	Emerging Markets	Core Fixed Income	Real Estate	Private Equity	Hedge Funds	Public Value Added Fixed Income
Melrose	\$ 100,162	X								
Methuen	\$ 207,182	X								
Middlesex	\$ 1,798,587	X								
Milford	\$ 119,579	X								
Milton	\$ 177,365	X								
Minuteman	\$ 15,373	X								
Montague	\$ 53,777	X								
MSCBA	\$ 5,587	X								
MWRA	\$ 34,047	X						X	X	
Natick	\$ 66,358	X						X	X	
Needham	\$ 207,026	X								
Newburyport	\$ 108,392	X								
Newton	\$ 448,219	X								
Norfolk	\$ 272,652					X		X	X	
North Adams	\$ 187								X	
Northbridge	\$ 47,287	X								
Northampton	\$ 345								X	
Norwood	\$ 36,406				X		X			
Peabody	\$ 183,818	X								
Pittsfield	\$ 168,042	X								
Plymouth	\$ 75,484	X						X	X	X
Quincy	\$ 414,087	X				X			X	
Reading	\$ 172,222	X							X	
Revere	\$ 213,611	X								
Salem	\$ 235,166	X								
Saugus	\$ 80,396	X						X	X	X
Shrewsbury	\$ 126,500	X	X	X	X	X	X			X
Somerville	\$ 10,904								X	
Southbridge	\$ 72,074	X								
Springfield	\$ 460,435	X								
State Employees'	\$ 33,713,733	X								
State Retiree Benefits Trust	\$ 2,705,796	X								
State Teachers'	\$ 35,120,964	X								
Stoneham	\$ 56,541	X						X	X	X
Swampscott	\$ 52,907	X	X	X	X	X				X
Taunton	\$ 6,448								X	
Wakefield	\$ 151,039	X								
Waltham	\$ 83,830	X						X	X	X
Watertown	\$ 87,050		X					X	X	X
Webster	\$ 51,184	X							X	
Wellesley	\$ 252,389	X								
Westfield	\$ 19,802							X	X	X
Weymouth	\$ 35,706							X		X
Winchester	\$ 154,378	X								
Winthrop	\$ 92,360	X								
Woburn	\$ 174,505	X								
Worcester	\$ 689,426	X			X			X	X	
Worcester Regional	\$ 936,188	X								
	\$ 92,429,055									

INVESTMENT POLICY STATEMENT

The following are significant elements and related excerpts from the PRIM Board's investment policy statement. The purpose of the statement is to delineate the investment policy and guidelines and to establish the overall investment strategies and discipline of the PRIM Board. This policy is intended to allow for sufficient flexibility to capture investment opportunities yet provide parameters that ensure prudence and care in the execution of the investment program. This policy is issued for the guidance of fiduciaries, including Trustees, staff professionals, investment managers, custodians, and investment consultants, for managing the assets of the PRIT Fund. The policy is intended to provide a foundation from which to oversee the management of the PRIT Fund in a prudent manner.

A. Investment Objectives

PRIM's overall objective is to achieve the highest level of investment performance that is compatible with its risk tolerance and prudent investment practices. Because of the long-term nature of the Commonwealth's pension liabilities, PRIM maintains a long-term perspective in formulating and implementing its investment policies, and in evaluating its investment performance. Investment performance is measured by three integrated long-term objectives as described below:

- (a) The actuarial target rate of return is the key actuarial assumption affecting future Commonwealth funding rates and pension liabilities. Investment performance that exceeds or underperforms the target rate may materially impact future funding rates and liabilities. The PRIM Board seeks to have a long-term investment performance that will meet or exceed its actuarial target rate of return.
- (b) The investment policy benchmark is calculated by applying the investment performance of the asset class benchmarks to the PRIT Fund's asset allocation targets. The investment policy benchmark enables PRIM to compare the PRIT Fund's actual performance to a passively managed proxy and to measure the contribution of active investment management and policy implementation.
- (c) PRIM also compares its total fund performance to an appropriate public plan sponsor comparison universe. A peer universe comparison permits PRIM to compare its performance to large public and other pension plans. While PRIM seeks to rank consistently in the top half of comparable public pension funds, PRIM recognizes that other funds may have investment objectives and risk tolerances that differ substantially from PRIM's.

PRIM expects to meet or exceed these objectives over its long-term investment horizon. The expected volatility of markets and unique objectives of PRIM relative to other pension plans may not favor, over shorter periods, PRIM's strategic investment policies.

B. Asset Allocation Plan

PRIM recognizes that over the long-term, asset allocation is the single greatest contributor of return and risk to the PRIT Fund. At reasonable intervals of not more than three to five years, PRIM will complete a comprehensive review of its Asset Allocation Plan and its underlying assumptions, including: the Commonwealth's current and projected pension assets and liabilities; long-term capital markets rate of return assumptions; and PRIM's risk

tolerances. The PRIM Board shall examine the Asset Allocation Plan annually and shall consider adjustments to the Plan as may be appropriate given the Plan's long-term nature and objectives.

C. Rebalancing Policy

The actual asset allocation mix will deviate from the Asset Allocation Plan's target due to market movement, cash flows, and manager performance. Material deviations from the asset allocation targets can alter the expected return and risk of the PRIT Fund. Accordingly, the PRIM Board has adopted asset class ranges for each asset class, and positioning within a specified asset class range is acceptable and constitutes compliance with the Asset Allocation Plan. It is the responsibility of PRIM staff to keep actual asset class allocations within the asset allocation ranges. It is anticipated that the PRIM Board will make periodic revisions to the Asset Allocation Plan, and it is recognized that in some cases it may be prudent to allow an extended period of time to fully implement revisions to the Asset Allocation Plan. The spirit of this policy is to implement the investment strategy within the asset class ranges at a reasonable cost, recognizing that overly precise management of asset exposures can result in transactions costs that are not economically justified. In the circumstance that a rebalancing is warranted, staff shall have the discretion to instruct public securities managers (including an overlay manager) to use futures as a short-term tool to rebalance the PRIT Fund. The PRIM Board acknowledges that market conditions or circumstances beyond PRIM's control may lead to asset class weightings being temporarily out of their target ranges, especially as those ranges relate to illiquid asset classes.

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Statistical Section

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Schedules of Changes in Pooled Net Position

For Fiscal Years Ending June 30

(Dollars in thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions										
State Employees contributions	\$ 858,181	\$ 698,282	\$ 705,315	\$ 733,289	\$ 727,625	\$ 855,586	\$ 727,147	\$ 580,527	\$ 547,627	\$ 529,031
State teachers contributions	1,058,832	898,722	851,798	860,223	804,171	761,753	752,835	721,148	709,114	669,815
Other participants contributions	2,425,078	1,313,240	1,466,201	1,579,329	1,218,193	1,071,727	922,092	877,252	793,507	613,345
Net investment income (loss)	(3,239,745)	21,944,914	1,448,873	4,046,225	6,354,624	7,655,016	1,091,671	2,073,376	8,991,375	5,922,932
Total additions to pooled net position	1,102,346	24,855,158	4,472,187	7,219,066	9,104,613	10,344,082	3,493,745	4,252,303	11,041,623	7,735,123
Deductions										
State employees warrants	617,937	561,407	542,457	516,014	486,526	458,340	444,166	381,565	357,089	347,330
State teachers warrants	729,006	708,768	680,135	656,099	621,701	596,815	569,054	544,646	494,363	496,987
Participants redemptions	1,355,825	1,112,613	1,218,278	1,073,298	996,520	1,055,203	924,710	768,507	739,175	683,279
State appropriation funding	1,639,792	1,723,567	1,844,875	1,910,459	2,014,583	2,034,579	2,066,264	1,954,853	1,973,058	1,815,315
Operating expenses	29,576	35,717	36,321	29,200	34,082	41,509	40,491	35,761	30,789	30,394
Total deductions to pooled net position	4,372,136	4,142,072	4,322,066	4,185,070	4,153,412	4,186,446	4,044,685	3,685,332	3,594,474	3,373,305
Changes in pooled net position	\$ (3,269,790)	\$ 20,713,086	\$ 150,121	\$ 3,033,996	\$ 4,951,201	\$ 6,157,636	\$ (550,940)	\$ 566,971	\$ 7,447,149	\$ 4,361,818

The above table provides additional information regarding changes in pooled net position from that presented in the Statement of Changes in Pooled Net Position in the *Financial Section* of the ACFR. Deductions represent redemptions from the PRIT fund by state employees, state teachers and other participant retirement systems. Deductions also include redemptions for state appropriation funding and reimbursement of MASTERS operating expenses. State appropriation funding represents funds withdrawn to cover the shortfall in the pension appropriation of the Commonwealth of Massachusetts. Operating expenses represent redemptions made by state employees and state teachers for certain operating expenses. This information is derived from the same information used for the basic financial statements. Current fiscal year-end information should be read in conjunction with the Schedule of Changes in Pooled Net Position - Capital Fund and Cash Fund provided in the Financial Section.

Financial Highlights and Financial Highlights Ratios

Pages 99-101 provide the financial highlights of the PRIT Fund for the year ended June 30, 2022. In addition, pages 102-107 provide additional financial highlights ratios for the nine previous fiscal year ends. Together, these tables provide additional information regarding important ratios to assist the reader of the ACFR in understanding the financial position of the PRIT Fund. This information includes important return and expense ratios for the entire PRIT Fund as well as the various accounts that comprise the PRIT Fund. This information should be read in conjunction with the description of the investment program highlighted in the *Investment Section* of the ACFR.

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Financial Highlights

For the year ended June 30, 2022

	General Allocation Account	Domestic Equity Account	International Equity Account	Emerging Markets Account	Core Fixed Income Account	Public Value- Added Fixed Income Account	Private Debt Account	Hedge Funds Account	Liquidating Portfolios Account	Private Equity Account	Private Equity Vintage Year 2000 Account	Private Equity Vintage Year 2001 Account	Private Equity Vintage Year 2002 Account	Private Equity Vintage Year 2003 Account
Net position per unit, beginning of year	\$ 518.50	583.42	434.40	741.92	337.64	364.44	187.71	102.41	54.84	450.72	235.44	842.54	278.44	495.46
Investment operations:														
Net investment income (loss)(1)	10.28	7.46	10.91	18.06	10.27	16.63	3.79	0.12	(0.14)	2.19	11.51	(0.30)	118.05	(0.17)
Net realized and unrealized gain (loss) on investments and foreign currency	(29.71)	(80.94)	(97.81)	(202.97)	(49.24)	(58.15)	30.25	(1.43)	21.91	(1.52)	(23.80)	194.89	299.84	7.07
Total from investment operations	(19.43)	(73.48)	(86.90)	(184.91)	(38.97)	(41.52)	34.04	(1.31)	21.77	0.67	(12.29)	194.59	417.89	6.90
Net position per unit, end of year	\$ 499.07	509.94	347.50	557.01	298.67	322.92	221.75	101.10	76.61	451.39	223.15	1,037.13	696.33	502.36
Ratios and supplementary data:														
Total net return(2)	(3.75)%	(12.59)%	(20.00)%	(24.92)%	(11.54)%	(11.39)%	18.13%	(1.28)%	39.70%	0.15%	(5.22)%	23.10%	150.08%	1.39%
Net position, end of year (\$'000s)	\$ 89,306,605	18,697,417	10,576,654	4,105,161	13,347,999	3,958,023	1,328,505	7,088,137	55,009	168,818	12,273	16,594	2,089	14,066
Units outstanding, end of year ('000s)	178,945	36,666	30,436	7,370	44,691	12,257	5,991	70,113	718	374	55	16	3	28
Ratios to average net assets:														
Ratio of expenses, including indirect management fees	0.52%	0.16%	0.24%	0.63%	0.09%	0.33%	1.20%	1.05%	0.11%	0.08%	0.04%	0.03%	0.03%	0.03%
Ratio of expenses, excluding indirect management fees	0.24%	0.16%	0.24%	0.63%	0.09%	0.14%	0.10%	0.19%	0.11%	0.08%	0.04%	0.04%	0.03%	0.03%

Note: Financial Highlights include only the Core Fund and does not include the Cash Fund which maintains a stable net asset value of \$1.00 per unit.

(1) Based on weighted average units outstanding.

(2) Total net return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

Financial Highlights, continued

For the year ended June 30, 2022

	Private Equity Vintage Year 2004 Account	Private Equity Vintage Year 2005 Account	Private Equity Vintage Year 2006 Account	Private Equity Vintage Year 2007 Account	Private Equity Vintage Year 2008 Account	Private Equity Vintage Year 2009 Account	Private Equity Vintage Year 2010 Account	Private Equity Vintage Year 2011 Account	Private Equity Vintage Year 2012 Account	Private Equity Vintage Year 2013 Account	Private Equity Vintage Year 2014 Account	Private Equity Vintage Year 2015 Account	Private Equity Vintage Year 2016 Account	Private Equity Vintage Year 2017 Account
Net position per unit, beginning of year	\$ 225.11	254.35	171.32	76.28	276.61	475.99	399.96	236.13	46.10	351.92	215.73	311.06	118.15	182.16
Investment operations:														
Net investment income (loss)(1)	(0.09)	(0.33)	2.73	0.83	9.54	1.03	3.36	1.54	0.05	3.46	1.61	1.75	2.61	0.78
Net realized and unrealized gain (loss) on investments and foreign currency	41.58	7.36	20.80	2.76	66.39	194.22	21.82	93.51	(2.36)	68.67	66.04	52.33	32.02	58.07
Total from investment operations	41.49	7.03	23.53	3.59	75.93	195.25	25.18	95.05	(2.31)	72.13	67.65	54.08	34.63	58.85
Net position per unit, end of year	\$ 266.60	261.38	194.85	79.87	352.54	671.24	425.14	331.18	43.79	424.05	283.38	365.14	152.78	241.01
Ratios and supplementary data:														
Total net return(2)	18.43%	2.76%	13.73%	4.71%	27.45%	41.02%	6.30%	40.25%	(5.01)%	20.50%	31.36%	17.39%	29.31%	32.31%
Net position, end of year (\$'000s)	\$ 6,665	18,819	130,548	198,489	431,504	188,619	595,619	666,661	588,923	1,008,811	1,674,473	2,132,407	940,692	1,867,792
Units outstanding, end of year ('000s)	25	72	670	2,485	1,224	281	1,401	2,013	13,449	2,379	5,909	5,840	6,157	7,750
Ratios to average net assets:														
Ratio of expenses, including indirect management fees	(0.02)%	0.29%	(0.11)%	0.44%	0.16%	0.20%	0.37%	0.76%	0.84%	0.64%	0.59%	0.73%	1.10%	1.03%
Ratio of expenses, excluding indirect management fees	0.04%	0.04%	(0.14)%	0.14%	0.06%	0.03%	0.06%	0.08%	0.04%	0.04%	0.07%	0.13%	0.03%	0.12%

Note: Financial Highlights include only the Core Fund and does not include the Cash Fund which maintains a stable net asset value of \$1.00 per unit.

(1) Based on weighted average units outstanding.

(2) Total net return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

Financial Highlights, continued
For the year ended June 30, 2022

	Private Equity Vintage Year 2018 Account	Private Equity Vintage Year 2019 Account	Private Equity Vintage Year 2020 Account	Private Equity Vintage Year 2021 Account	Private Equity Vintage Year 2022 Account	Real Estate Account	Timberland Account	Cash Overlay Account	Real Assets Account	Enhanced Equity Account	Other Credit Opportunities Account	Global Equity Emerging Diverse Account
Net position per unit, beginning of year	\$ 129.05	153.92	131.20	97.74	100.00	790.97	300.90	293.51	89.50	158.22	134.31	100.00
Investment operations:												
Net investment income (loss)(1)	0.57	(0.66)	0.23	(0.07)	(0.85)	26.99	6.48	0.37	(0.36)	4.29	(0.16)	0.70
Net realized and unrealized gain (loss) on investments and foreign currency	45.18	73.20	31.38	9.72	(4.54)	164.75	26.37	(53.53)	1.82	(19.41)	8.47	(7.02)
Total from investment operations	45.75	72.54	31.61	9.65	(5.39)	191.74	32.85	(53.16)	1.46	(15.12)	8.31	(6.32)
Net position per unit, end of year	\$ 174.80	226.46	162.81	107.39	94.61	982.71	333.75	240.35	90.96	143.10	142.62	93.68
Ratios and supplementary data:												
Total net return(2)	35.45%	47.13%	24.09%	9.87%	(5.39)% (3)	24.24%	10.92%	(18.11)%	1.63%	(9.56)%	6.19%	(6.32)% (3)
Net position, end of year (\$'000s)	\$ 2,007,542	1,659,513	1,303,273	1,138,431	163,587	9,819,201	2,919,996	539,337	857,795	985,503	951,732	93,678
Units outstanding, end of year ('000s)	11,485	7,328	8,005	10,601	1,729	9,992	8,749	2,244	9,430	6,887	6,673	1,000
Ratios to average net assets:												
Ratio of expenses, including indirect management fees	1.24%	1.23%	2.98%	3.16%	0.31% (3)	1.06%	0.45%	0.06%	1.04%	0.43%	1.33%	0.21% (3)
Ratio of expenses, excluding indirect management fees	0.03%	0.29%	0.04%	0.06%	0.31% (3)	0.72%	0.19%	0.06%	0.03%	0.43%	1.33%	0.21% (3)

Note: Financial Highlights include only the Core Fund and does not include the Cash Fund which maintains a stable net asset value of \$1.00 per unit.

(1) Based on weighted average units

(2) Total net return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

(3) Denotes account commenced operations subsequent to the beginning of the fiscal year. Total net return and ratios not annualized.

Financial Highlights Ratios

For the years ended June 30, 2021-2013

	General Allocation Account	Domestic Equity Account	International Equity Account	Emerging Markets Account	Core Fixed Income Account	Public Value-Added Fixed Income Account	Private Debt Account	Hedge Funds Account	Liquidating Portfolios Account (2)	Private Equity Account	Vintage Year 2000 Account	Vintage Year 2001 Account	Vintage Year 2002 Account	Vintage Year 2003 Account	Vintage Year 2004 Account
Ratios and supplementary data:															
2021															
Total net return (1)	29.43%	45.07%	36.68%	47.71%	(0.83)%	13.30%	29.76%	17.27%	36.89%	(0.34)%	32.19%	9.32%	72.59%	(5.50)%	25.28%
Net position, end of year (\$'000s)	93,212,189	22,011,373	12,437,174	5,273,588	14,605,575	4,395,888	1,317,931	7,081,240	72,548	213,642	18,835	20,221	2,506	13,873	8,104
Units outstanding, end of year ('000s)	179,774	37,728	28,631	7,108	43,258	12,062	7,021	69,146	1,323	474	80	24	9	28	36
2020															
Total net return (1)	1.99%	5.49%	(3.51)%	(3.23)%	13.82%	(2.50)%	(7.70)%	(5.51)%	(45.46)%	1.34%	(29.66)%	0.89%	(29.91)%	(12.07)%	20.89%
Net position, end of year (\$'000s)	73,216,082	12,066,835	10,383,531	4,461,293	11,759,338	3,873,573	1,201,948	6,419,650	70,224	88,643	17,099	21,579	2,420	16,254	7,187
Units outstanding, end of year ('000s)	182,766	30,004	32,671	8,882	34,539	12,042	8,309	73,511	1,753	196	96	28	15	31	40
2019															
Total net return (1)	5.68%	8.66%	(0.13)%	1.42%	8.22%	6.44%	4.08%	2.79%	(18.07)%	3.53%	(13.15)%	0.06%	19.20%	20.65%	26.18%
Net position, end of year (\$'000s)	73,116,815	11,763,882	11,264,739	4,652,110	10,162,275	4,376,086	1,249,573	6,029,787	162,686	160,219	26,334	26,737	4,373	20,869	22,889
Units outstanding, end of year ('000s)	186,154	30,858	34,200	8,963	33,974	13,264	7,973	65,240	2,215	359	104	35	19	35	154
2018															
Total net return (1)	9.55%	15.50%	8.47%	8.62%	1.29%	1.47%	9.27%	6.06%	4.04%	6.02%	(0.51)%	3.54%	(10.09)%	27.26%	(2.24)%
Net position, end of year (\$'000s)	70,145,449	13,695,898	11,831,052	4,537,474	9,153,731	4,441,960	1,153,692	5,999,629	203,319	137,947	35,279	46,571	4,827	42,008	22,851
Units outstanding, end of year ('000s)	188,731	39,037	35,873	8,867	33,118	14,331	7,661	66,727	2,268	320	121	61	25	85	194
2017															
Total net return (1)	12.80%	18.49%	19.98%	27.49%	(4.48)%	7.67%	15.40%	9.32%	16.35%	2.00%	2.08%	18.17%	(7.69)%	2.31%	25.85%
Net position, end of year (\$'000s)	65,460,073	13,216,006	12,038,165	5,243,481	7,984,311	4,176,825	1,225,906	5,579,937	250,843	67,900	43,665	60,463	9,019	55,921	41,088
Units outstanding, end of year ('000s)	192,948	43,507	39,591	11,130	29,261	13,674	8,895	65,823	2,911	167	149	82	42	144	341
2016															
Total net return (1)	1.87%	1.51%	(7.86)%	(9.91)%	14.58%	2.79%	(6.84)%	(5.43)%	(20.30)%	(0.94)%	(6.12)%	(3.72)%	6.54%	(4.22)%	(4.63)%
Net position, end of year (\$'000s)	59,382,003	11,359,746	10,018,446	4,264,286	8,404,125	3,868,726	1,251,421	5,192,238	195,445	66,569	56,265	77,994	13,493	69,465	80,997
Units outstanding, end of year ('000s)	197,436	44,312	39,533	11,540	29,419	13,636	10,478	66,965	2,639	167	196	125	58	183	846
2015															
Total net return (1)	3.41%	6.60%	(2.94)%	(6.14)%	4.58%	(5.14)%	1.96%	3.64%	(4.25)%	5.03%	5.97%	7.56%	4.11%	13.06%	5.97%
Net position, end of year (\$'000s)	59,982,623	11,745,353	10,341,307	4,011,292	8,377,734	3,702,871	1,350,323	5,575,153	32,057	52,713	103,656	102,397	20,089	145,442	119,669
Units outstanding, end of year ('000s)	203,159	46,508	37,600	9,780	33,603	13,416	10,533	67,998	345	131	339	158	92	367	1,192
2014															
Total net return (1)	17.18%	24.78%	24.23%	13.76%	5.66%	6.90%	15.18%	10.72%	(5.88)%	8.25%	23.80%	27.29%	8.97%	21.56%	52.79%
Net position, end of year (\$'000s)	59,507,530	11,478,177	10,382,202	4,263,167	8,398,309	3,787,240	1,360,006	5,845,587	49,684	94,631	137,922	133,764	35,025	197,688	257,109
Units outstanding, end of year ('000s)	208,428	48,451	36,639	9,756	35,228	13,017	10,817	73,892	512	247	478	222	167	564	2,714
2013															
Total net return (1)	12.28%	21.98%	19.34%	5.10%	(0.45)%	3.07%	9.16%	(3)	12.20%	3.28%	8.68%	10.18%	11.79%	4.52%	8.87%
Net position, end of year (\$'000s)	52,274,725	11,066,413	9,531,557	3,438,125	6,712,701	3,444,265	1,269,546	4,903,178	72,275	160,679	173,402	189,340	58,316	270,764	265,784
Units outstanding, end of year ('000s)	214,541	58,286	41,787	8,951	29,751	12,655	11,630	68,628	701	454	744	400	303	939	4,287
Ratios to average net assets:															
2021															
Ratio of expenses, including indirect management fees	0.49%	0.14%	0.23%	0.69%	0.08%	0.37%	2.94%	1.06%	0.37%	0.03%	0.04%	0.07%	0.04%	0.04%	0.38%
Ratio of expenses, excluding indirect management fees	0.20%	0.14%	0.23%	0.69%	0.08%	0.15%	0.07%	0.18%	0.03%	0.03%	0.04%	0.04%	0.04%	0.04%	0.03%
2020															
Ratio of expenses, including indirect management fees	0.51%	0.11%	0.24%	0.58%	0.08%	0.43%	1.57%	1.11%	0.75%	0.04%	0.04%	—	0.05%	0.04%	0.24%
Ratio of expenses, excluding indirect management fees	0.20%	0.11%	0.24%	0.58%	0.08%	0.19%	0.04%	0.13%	0.04%	0.04%	0.04%	0.04%	0.05%	0.04%	0.05%
2019															
Ratio of expenses, including indirect management fees	0.52%	0.11%	0.23%	0.57%	0.11%	0.44%	1.59%	1.11%	0.89%	0.06%	0.04%	0.03%	0.09%	0.04%	0.31%
Ratio of expenses, excluding indirect management fees	0.20%	0.11%	0.23%	0.57%	0.11%	0.22%	0.04%	0.12%	0.03%	0.06%	0.04%	0.04%	0.04%	0.04%	0.04%
2018															
Ratio of expenses, including indirect management fees	0.52%	0.11%	0.23%	0.47%	0.10%	0.44%	1.76%	1.17%	0.92%	0.05%	0.04%	0.01%	0.68%	0.04%	0.21%
Ratio of expenses, excluding indirect management fees	0.18%	0.11%	0.23%	0.47%	0.10%	0.23%	0.04%	0.09%	0.03%	0.05%	0.04%	0.04%	0.05%	0.04%	0.04%
2017															
Ratio of expenses, including indirect management fees	0.54%	0.10%	0.20%	0.58%	0.10%	0.47%	1.91%	1.25%	1.02%	0.06%	0.04%	0.15%	0.77%	0.15%	0.20%
Ratio of expenses, excluding indirect management fees	0.18%	0.10%	0.20%	0.58%	0.09%	0.29%	0.04%	0.09%	1.02%	0.06%	0.04%	0.09%	0.04%	0.04%	0.04%

Financial Highlights Ratios, continued

For the years ended June 30, 2021-2013

	General Allocation Account	Domestic Equity Account	International Equity Account	Emerging Markets Account	Core Fixed Income Account	Public Value-Added Fixed Income Account	Private Debt Account	Hedge Funds Account	Liquidating Portfolios Account (2)	Private Equity Account	Vintage Year 2000 Account	Vintage Year 2001 Account	Vintage Year 2002 Account	Vintage Year 2003 Account	Vintage Year 2004 Account	
2016																
Ratio of expenses, including indirect management fees	0.53%	0.13%	0.19%	0.44%	0.09%	0.47%	1.76%	1.42%	1.41%	0.08%	0.18%	0.17%	0.79%	0.28%	0.43%	
Ratio of expenses, excluding indirect management fees	0.14%	0.13%	0.19%	0.44%	0.08%	0.30%	0.04%	0.06%	1.40%	0.08%	0.04%	0.07%	0.04%	0.04%	0.06%	
2015																
Ratio of expenses, including indirect management fees	0.53%	0.14%	0.18%	0.31%	0.10%	0.47%	1.55%	1.40%	0.04%	0.04%	0.25%	0.22%	0.76%	0.38%	0.90%	
Ratio of expenses, excluding indirect management fees	0.16%	0.14%	0.18%	0.31%	0.09%	0.30%	0.04%	0.04%	0.02%	0.04%	0.04%	0.05%	0.04%	0.04%	0.05%	
2014																
Ratio of expenses, including indirect management fees	0.55%	0.14%	0.19%	0.27%	0.11%	0.49%	1.90%	1.50%	0.10%	0.03%	0.25%	0.59%	0.49%	0.59%	0.88%	
Ratio of expenses, excluding indirect management fees	0.15%	0.14%	0.19%	0.24%	0.10%	0.31%	0.04%	0.05%	0.02%	0.03%	0.05%	0.07%	0.05%	0.04%	0.08%	
2013																
Ratio of expenses, including indirect management fees	0.55%	0.08%	0.19%	0.33%	0.14%	0.85%	0.92%	(3)	1.33%	0.13%	—%	0.39%	0.59%	0.77%	0.90%	0.94%
Ratio of expenses, excluding indirect management fees	0.14%	0.08%	0.19%	0.32%	0.12%	0.34%	0.01%	(3)	0.05%	0.02%	(0.03)%	0.07%	0.09%	0.05%	0.05%	0.12%

(1) Total net return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

(2) Includes Portable Alpha Wind Down, Hedge Funds closed portfolios, and Natural Resources Private Wind Down. Prior to January 31, 2016, Natural Resources Private assets were reflected in the Timberland portfolio.

(3) Denotes account commenced operations subsequent to the beginning of the fiscal year. Total net return and ratios not annualized.

Financial Highlights Ratios, continued

For the years ended June 30, 2021-2013

	Vintage Year 2005 Account	Vintage Year 2006 Account	Vintage Year 2007 Account	Vintage Year 2008 Account	Vintage Year 2009 Account	Vintage Year 2010 Account	Vintage Year 2011 Account	Vintage Year 2012 Account	Vintage Year 2013 Account	Vintage Year 2014 Account	Vintage Year 2015 Account	Vintage Year 2016 Account	Vintage Year 2017 Account	Vintage Year 2018 Account	Vintage Year 2019 Account
Ratios and supplementary data:															
2021															
Total net return (1)	37.60%	52.84%	51.17%	49.24%	139.68%	108.80%	79.58%	79.10%	109.95%	57.44%	75.06%	64.51%	64.17%	65.15%	68.00%
Net position, end of year (\$'000s)	39,678	138,429	305,643	524,998	276,548	705,125	869,212	869,212	1,025,485	1,557,125	2,359,373	872,298	1,332,666	1,398,299	994,786
Units outstanding, end of year ('000s)	156	808	4,007	1,898	581	1,763	2,705	18,855	2,914	7,218	7,585	7,383	7,316	10,835	6,463
2020															
Total net return (1)	(14.41)%	(7.06)%	0.20%	(12.99)%	1.22%	(7.30)%	(1.55)%	6.80%	15.47%	5.34%	13.21%	7.87%	(1.83)%	(6.56)%	(7.67)%
Net position, end of year (\$'000s)	48,247	146,274	249,451	431,299	192,827	482,128	628,788	607,363	675,522	1,175,774	1,539,669	562,258	680,492	572,418	354,096
Units outstanding, end of year ('000s)	261	1,305	4,944	2,327	971	2,517	4,782	23,595	4,080	8,581	8,665	7,829	6,133	7,326	3,865
2019															
Total net return (1)	8.66%	9.35%	14.14%	13.88%	26.97%	18.09%	20.06%	12.46%	16.72%	23.83%	23.40%	4.10%	7.47%	(15.53)%	(0.77)% (2)
Net position, end of year (\$'000s)	84,655	236,036	443,048	574,946	262,119	611,034	759,937	645,784	711,849	1,214,210	1,467,994	503,055	389,158	245,699	57,257
Units outstanding, end of year ('000s)	392	1,957	8,798	2,699	1,336	2,957	5,690	26,792	4,904	9,335	9,353	7,556	3,443	2,938	577
2018															
Total net return (1)	10.58%	4.94%	16.60%	24.15%	20.66%	24.74%	18.83%	19.25%	14.10%	25.68%	29.69%	7.73%	5.21%	(0.99)% (2)	N/A
Net position, end of year (\$'000s)	135,744	306,512	538,342	726,311	343,201	701,188	866,997	739,683	623,594	1,087,916	941,586	290,614	127,993	15,842	N/A
Units outstanding, end of year ('000s)	683	2,779	12,203	3,883	2,221	4,007	7,794	34,520	5,014	10,357	7,403	4,544	1,217	160	N/A
2017															
Total net return (1)	19.15%	9.31%	23.14%	28.78%	16.27%	16.58%	23.76%	21.34%	19.87%	17.62%	15.25%	(28.04)%	(0.04)% (2)	N/A	N/A
Net position, end of year (\$'000s)	196,987	440,532	769,225	882,880	379,849	791,761	919,627	623,043	493,966	659,809	520,540	108,285	27,388	N/A	N/A
Units outstanding, end of year ('000s)	1,096	4,191	20,328	5,660	2,966	5,644	9,824	34,669	4,532	7,894	5,308	1,824	274	N/A	N/A
2016															
Total net return (1)	8.56%	2.52%	9.87%	12.84%	20.05%	15.08%	22.91%	8.34%	5.06%	5.15%	(9.23)% (2)	N/A	N/A	N/A	N/A
Net position, end of year (\$'000s)	430,797	612,037	912,296	904,434	443,570	806,666	796,339	542,987	308,790	399,073	184,978	165	N/A	N/A	N/A
Units outstanding, end of year ('000s)	2,856	6,365	29,691	7,731	4,027	6,704	10,528	36,668	3,396	5,616	2,174	2	N/A	N/A	N/A
2015															
Total net return (1)	15.15%	11.51%	9.04%	16.66%	24.02%	19.09%	24.07%	11.77%	(5.24)%	(13.53)%	(6.26)% (2)	N/A	N/A	N/A	N/A
Net position, end of year (\$'000s)	594,274	848,797	1,154,470	1,017,713	494,545	762,278	704,428	425,548	170,840	177,995	40,871	N/A	N/A	N/A	N/A
Units outstanding, end of year ('000s)	4,277	9,049	41,282	9,816	5,390	7,290	11,447	31,126	1,974	2,634	436	N/A	N/A	N/A	N/A
2014															
Total net return (1)	20.33%	23.18%	22.67%	30.63%	27.66%	27.52%	17.90%	16.81%	(8.66)%	(21.85)% (2)	N/A	N/A	N/A	N/A	N/A
Net position, end of year (\$'000s)	703,977	1,098,091	1,319,704	1,050,050	401,949	597,679	435,298	215,895	52,887	3,204	N/A	N/A	N/A	N/A	N/A
Units outstanding, end of year ('000s)	5,834	13,054	51,443	11,815	5,433	8,777	17,648	8,779	579	41	N/A	N/A	N/A	N/A	N/A
2013															
Total net return (1)	13.07%	13.29%	14.39%	17.96%	15.65%	14.41%	(1.98)%	(21.87)%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net position, end of year (\$'000s)	801,538	1,217,424	1,212,620	895,341	301,492	391,799	201,700	61,569	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Units outstanding, end of year ('000s)	7,993	17,827	57,995	13,161	5,203	5,691	4,794	5,879	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ratios to average net assets:															
2021															
Ratio of expenses, including indirect management fees	0.54%	(0.01)%	0.45%	0.35%	0.66%	0.61%	1.07%	0.99%	0.94%	0.97%	1.05%	1.69%	2.23%	2.66%	3.00%
Ratio of expenses, excluding indirect management fees	0.04%	(0.04)%	0.04%	0.08%	0.03%	0.03%	0.09%	0.04%	0.03%	0.03%	0.16%	0.03%	0.03%	0.03%	0.50%
2020															
Ratio of expenses, including indirect management fees	0.67%	0.42%	0.50%	0.46%	1.57%	0.93%	1.04%	1.28%	1.15%	1.02%	1.35%	2.37%	3.95%	6.23%	3.86%
Ratio of expenses, excluding indirect management fees	0.04%	0.07%	0.05%	0.09%	0.04%	0.04%	0.06%	0.04%	0.04%	0.04%	0.24%	0.08%	0.05%	0.08%	0.12%
2019															
Ratio of expenses, including indirect management fees	0.56%	0.55%	0.45%	0.56%	1.63%	0.79%	1.08%	1.39%	1.45%	1.58%	1.89%	3.33%	8.34%	4.39%	0.14% (2)
Ratio of expenses, excluding indirect management fees	0.04%	0.07%	0.04%	0.09%	0.04%	0.04%	0.09%	0.04%	0.04%	0.04%	0.32%	0.04%	0.04%	0.17%	0.14% (2)
2018															
Ratio of expenses, including indirect management fees	0.53%	0.62%	0.92%	0.70%	1.59%	1.25%	1.35%	1.59%	1.77%	2.19%	3.16%	6.59%	10.13%	0.14% (2)	N/A
Ratio of expenses, excluding indirect management fees	0.06%	0.08%	0.04%	0.09%	0.04%	0.04%	0.07%	0.04%	0.04%	0.04%	0.51%	0.04%	0.04%	0.14% (2)	N/A
2017															
Ratio of expenses, including indirect management fees	0.65%	0.74%	0.98%	0.75%	1.47%	1.15%	1.53%	1.82%	2.82%	3.69%	5.87%	10.75%	0.01% (2)	N/A	N/A
Ratio of expenses, excluding indirect management fees	0.06%	0.03%	0.04%	0.08%	0.04%	0.04%	0.15%	0.04%	0.04%	0.04%	0.74%	0.30%	0.01% (2)	N/A	N/A

Financial Highlights Ratios, continued

For the years ended June 30, 2021-2013

	Vintage Year 2005 Account	Vintage Year 2006 Account	Vintage Year 2007 Account	Vintage Year 2008 Account	Vintage Year 2009 Account	Vintage Year 2010 Account	Vintage Year 2011 Account	Vintage Year 2012 Account	Vintage Year 2013 Account	Vintage Year 2014 Account	Vintage Year 2015 Account	Vintage Year 2016 Account
2016												
Ratio of expenses, including indirect management fees	0.73%	0.77%	1.00%	0.98%	1.29%	1.30%	1.74%	2.28%	4.91%	4.71%	9.50%	(21.53)% (2)
Ratio of expenses, excluding indirect management fees	0.04%	0.03%	0.04%	0.14%	0.04%	0.04%	0.16%	0.04%	0.04%	0.05%	0.04%	(21.53)% (2)
2015												
Ratio of expenses, including indirect management fees	0.82%	0.80%	1.01%	0.97%	1.71%	1.61%	2.21%	3.27%	8.83%	9.28%	2.57% (2)	N/A
Ratio of expenses, excluding indirect management fees	0.05%	0.05%	0.04%	0.11%	0.04%	0.04%	0.15%	0.05%	0.04%	0.06%	0.02% (2)	N/A
2014												
Ratio of expenses, including indirect management fees	0.91%	0.84%	1.32%	1.70%	2.59%	2.55%	4.26%	7.53%	14.31%	10.58% (2)	N/A	N/A
Ratio of expenses, excluding indirect management fees	0.08%	0.06%	0.04%	0.15%	0.04%	0.04%	0.41%	0.05%	0.04%	0.11% (2)	N/A	N/A
2013												
Ratio of expenses, including indirect management fees	1.01%	0.97%	1.70%	1.88%	3.26%	3.69%	7.38%	14.26%	N/A	N/A	N/A	N/A
Ratio of expenses, excluding indirect management fees	0.09%	0.10%	0.04%	0.16%	0.04%	0.04%	0.17%	0.08%	N/A	N/A	N/A	N/A

(1) Total return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

(2) Denotes account commenced operations subsequent to the beginning of the fiscal year. Total net return and ratios not annualized.

Financial Highlights Ratios, continued

For the years ended June 30, 2021-2013

	Vintage Year 2020 Account	Vintage Year 2021 Account	Real Estate Account	Timberland Account	Cash Overlay Account	Portfolio Completion Strategies Account (3)	Risk Premia Account (3)	Real Assets Account (3)	Enhanced Equity Account	Other Credit Opportunities Account
Ratios and supplementary data:										
2021										
Total net return (1)	40.10%	(2.26)% (2)	16.44%	7.49%	30.45%	N/A	(100.00)%	1.07%	35.36%	24.40%
Net position, end of year (\$'000s)	333,380	174,180	7,945,278	2,833,009	941,595	N/A	—	837,883	1,083,781	897,070
Units outstanding, end of year ('000s)	2,541	1,782	10,045	9,415	3,208	N/A	—	9,362	6,850	6,679
2020										
Total net return (1)	(6.35)% (2)	N/A	0.56%	(1.74)%	15.21%	N/A	2.94%	(2.90)%	(0.34)%	(1.01)%
Net position, end of year (\$'000s)	51,697	N/A	6,921,152	2,766,226	444,807	N/A	2	832,035	4,589,770	574,855
Units outstanding, end of year ('000s)	552	N/A	10,189	9,882	1,977	N/A	—	9,396	39,267	5,324
2019										
Total net return (1)	N/A	N/A	5.56%	1.57%	1.34%	N/A	(0.60)%	(14.97)%	6.17%	5.95%
Net position, end of year (\$'000s)	N/A	N/A	6,992,131	2,888,192	465,349	N/A	615,528	804,725	4,586,863	257,835
Units outstanding, end of year ('000s)	N/A	N/A	10,351	10,138	2,383	N/A	6,005	8,825	39,107	2,364
2018										
Total net return (1)	N/A	N/A	8.86%	7.38%	2.64%	N/A	5.49%	5.95%	10.47%	2.94% (2)
Net position, end of year (\$'000s)	N/A	N/A	6,454,777	2,433,762	304,443	N/A	618,533	631,406	2,372,889	164,184
Units outstanding, end of year ('000s)	N/A	N/A	10,087	8,677	1,580	N/A	5,998	5,888	21,480	1,595
2017										
Total net return (1)	N/A	N/A	6.27%	7.65%	14.55%	N/A	(5.06)%	1.22%	N/A	N/A
Net position, end of year (\$'000s)	N/A	N/A	6,047,656	2,483,085	682,197	N/A	585,639	153,348	N/A	N/A
Units outstanding, end of year ('000s)	N/A	N/A	10,288	9,506	3,634	N/A	5,991	1,515	N/A	N/A
2016										
Total net return (1)	N/A	N/A	11.70%	(3.31)%	5.65%	8.62%	N/A	N/A	N/A	N/A
Net position, end of year (\$'000s)	N/A	N/A	6,302,436	2,012,000	286,627	736,581	N/A	N/A	N/A	N/A
Units outstanding, end of year ('000s)	N/A	N/A	11,394	8,292	1,749	7,154	N/A	N/A	N/A	N/A
2015										
Total net return (1)	N/A	N/A	11.30%	(2.04)%	5.19%	(5.21)% (2)	N/A	N/A	N/A	N/A
Net position, end of year (\$'000s)	N/A	N/A	6,093,142	2,347,050	567,427	94,882	N/A	N/A	N/A	N/A
Units outstanding, end of year ('000s)	N/A	N/A	12,305	9,353	3,658	1,001	N/A	N/A	N/A	N/A
2014										
Total net return (1)	N/A	N/A	12.91%	12.81%	47.46% (2)	N/A	N/A	N/A	N/A	N/A
Net position, end of year (\$'000s)	N/A	N/A	5,380,022	2,374,863	549,427	N/A	N/A	N/A	N/A	N/A
Units outstanding, end of year ('000s)	N/A	N/A	12,093	9,271	3,726	N/A	N/A	N/A	N/A	N/A
2013										
Total net return (1)	N/A	N/A	12.28%	6.27%	N/A	N/A	N/A	N/A	N/A	N/A
Net position, end of year (\$'000s)	N/A	N/A	4,382,052	2,129,694	N/A	N/A	N/A	N/A	N/A	N/A
Units outstanding, end of year ('000s)	N/A	N/A	11,121	9,379	N/A	N/A	N/A	N/A	N/A	N/A
Ratios to average net assets:										
2021										
Ratio of expenses, including indirect management fees	5.65%	0.09% (2)	0.52%	0.46%	0.07%	N/A	—	1.04%	0.42%	1.14%
Ratio of expenses, excluding indirect management fees	0.04%	0.09% (2)	0.17%	0.19%	0.07%	N/A	—	0.04%	0.42%	1.14%
2020										
Ratio of expenses, including indirect management fees	4.22% (2)	N/A	0.49%	0.09%	0.07%	N/A	0.52%	1.23%	0.37%	1.14%
Ratio of expenses, excluding indirect management fees	1.91% (2)	N/A	0.15%	0.30%	0.07%	N/A	0.14%	0.05%	0.37%	1.14%
2019										
Ratio of expenses, including indirect management fees	N/A	N/A	0.49%	0.26%	0.08%	N/A	0.89%	1.48%	0.43%	0.92%
Ratio of expenses, excluding indirect management fees	N/A	N/A	0.15%	0.26%	0.08%	N/A	0.12%	0.07%	0.43%	0.92%
2018										
Ratio of expenses, including indirect management fees	N/A	N/A	0.50%	0.55%	0.06%	N/A	0.90%	1.37%	0.42%	0.62% (2)
Ratio of expenses, excluding indirect management fees	N/A	N/A	0.14%	0.21%	0.06%	N/A	0.11%	0.03%	0.03%	0.62% (2)
2017										
Ratio of expenses, including indirect management fees	N/A	N/A	0.46%	0.67%	0.07%	N/A	1.27%	0.04%	N/A	N/A
Ratio of expenses, excluding indirect management fees	N/A	N/A	0.09%	0.34%	0.07%	N/A	0.15%	0.04%	N/A	N/A

Financial Highlights Ratios, continued

For the years ended June 30, 2021-2013

	Real Estate Account	Timberland Account	Cash Overlay Account	Portfolio Completion Strategies Account
2016				
Ratio of expenses, including indirect management fees	0.47%	0.23%	0.07%	0.90%
Ratio of expenses, excluding indirect management fees	0.09%	(0.11)%	0.07%	0.16%
2015				
Ratio of expenses, including indirect management fees	0.64%	0.70%	0.07%	0.29% (2)
Ratio of expenses, excluding indirect management fees	0.27%	0.40%	0.07%	0.10% (2)
2014				
Ratio of expenses, including indirect management fees	0.56%	0.55%	0.09% (2)	N/A
Ratio of expenses, excluding indirect management fees	0.17%	0.16%	0.09% (2)	N/A
2013				
Ratio of expenses, including indirect management fees	0.49%	0.67%	N/A	N/A
Ratio of expenses, excluding indirect management fees	0.13%	0.15%	N/A	N/A

- (1) Total return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.
- (2) Denotes account commenced operations subsequent to the beginning of the fiscal year. Total net return and ratios not annualized.
- (3) Prior to July 2016, Risk Premia and Real Assets were reflected in the Portfolio Completion Strategies account.

PRIT Fund Asset Allocation

As of June 30:

The following table is intended to provide readers of this ACFR with further information regarding the financial position of the PRIT Fund over the past ten years. This table provides the change in assets during this time period. This table should be read in conjunction with the discussion on asset allocation in the *Investment Section* of this ACFR.

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Domestic Equity (1)	21.3%	24.2%	22.2%	21.9%	19.1%	19.8%	18.7%	19.2%	19.0%	20.8%
International Equity	11.5%	13.0%	13.9%	15.1%	16.5%	18.0%	16.5%	16.9%	17.1%	18.0%
Emerging Markets	4.4%	5.5%	6.0%	6.2%	6.3%	7.9%	7.0%	6.6%	7.0%	6.5%
Global Equity Emerging-Diverse										
Manager Program	0.1%	-	-	-	-	-	-	-	-	-
Core Fixed Income	14.5%	15.3%	15.7%	13.6%	12.8%	12.0%	13.9%	13.7%	13.9%	12.6%
Value-Added Fixed Income	6.8%	6.9%	7.5%	7.9%	8.0%	8.1%	8.4%	8.3%	8.5%	8.9%
Private Equity	18.4%	14.5%	11.4%	11.3%	10.8%	10.6%	11.1%	11.3%	11.1%	11.7%
Real Estate	10.6%	8.3%	9.2%	9.4%	9.0%	9.1%	10.4%	10.0%	8.9%	8.2%
Timberland	3.2%	3.0%	3.7%	3.9%	3.4%	3.7%	3.3%	3.8%	3.9%	4.0%
Hedge Funds (2)	-	-	-	-	-	-	8.6%	9.1%	9.6%	9.2%
Liquidating Portfolios (3)	0.1%	0.1%	0.1%	0.2%	0.3%	0.4%	0.3%	0.1%	0.1%	0.1%
Overlay	0.6%	1.0%	0.6%	0.6%	0.4%	1.0%	0.5%	0.9%	0.9%	-
Portfolio Completion Strategies (1,2)	8.6%	8.3%	9.7%	10.0%	13.4%	9.5%	1.2%	0.2%	-	-

Totals may not add due to rounding.

- (1) Includes Enhanced Equity. Prior to March 1, 2019, Enhanced Equity assets were reflected in the Portfolio Completion Strategies portfolio.
- (2) At the February 14, 2017 Board meeting, the PRIM Board voted to combine the Hedge Funds and Portfolio Completion Strategies portfolios into a single portfolio (Portfolio Completion Strategies).
- (3) Includes Portable Alpha Wind Down, Hedge Funds closed portfolios, and Natural Resources Private Wind Down. Prior to January 31, 2016, Natural Resources Private assets were reflected in the Timberland portfolio.



Appendix E

PERAC Examination Report

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MASSACHUSETTS PENSION RESERVES INVESTMENT MANAGEMENT BOARD

AUDIT REPORT
JULY 1, 2014 - JUNE 30, 2019



PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION
COMMONWEALTH OF MASSACHUSETTS

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PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., *Chairman*

JOHN W. PARSONS, ESQ., *Executive Director*

Auditor SUZANNE M. BUMP | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES M. MACHADO | RICHARD MacKINNON, Jr. | JENNIFER F. SULLIVAN

August 10, 2022

The Public Employee Retirement Administration Commission has completed an examination of the Massachusetts Pension Reserves Investment Management (PRIM) Board, as Trustee of the Massachusetts Pension Reserves Investment Trust (PRIT) Fund, pursuant to G.L. c. 32, § 21. The examination covered the period from July 1, 2014 to June 30, 2019. This audit was conducted in accordance with the accounting and management standards established by the Public Employee Retirement Administration Commission, in regulation 840 CMR 25.00. There were certain limitations to the scope of work conducted in accordance with an opinion issued by the Attorney General of the Commonwealth of Massachusetts dated May 29, 2001.

In our opinion, within the limitations to the scope referred to above, the financial records are being maintained and the management functions are being performed in conformity with the standards established by the Public Employee Retirement Administration Commission.

We commend the PRIM Board for its exemplary operation.

In closing, I acknowledge the work of PERAC auditors who conducted this examination, and express appreciation to the PRIM Board, its Executive Director and staff for their courtesy and cooperation.

Sincerely,



John W. Parsons, Esq.
Executive Director



STATEMENT OF POOLED NET POSITION
(000s Omitted)

	AS OF JUNE 30,				
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Assets:					
Investments at fair value:					
Short-term	\$1,844,046	\$1,621,234	\$1,676,219	\$1,204,170	\$1,733,529
Fixed Income	17,610,397	15,801,995	14,023,318	14,046,001	14,389,277
Equity	29,954,299	29,214,292	29,392,931	24,907,679	24,642,955
Timberland	2,875,480	2,420,914	2,480,243	2,003,805	1,664,581
Private equity	8,345,095	7,570,364	7,017,326	6,661,690	6,980,423
Real Estate	8,749,584	8,020,036	7,680,623	7,759,075	7,684,335
Hedge funds	0	0	0	6,055,951	5,826,127
Portfolio completion strategies	<u>8,358,389</u>	<u>10,972,357</u>	<u>7,917,016</u>	<u>749,202</u>	<u>98,045</u>
Total Investments	77,737,290	75,621,192	70,187,676	63,387,573	63,019,272
Cash	230,363	169,376	267,019	221,028	282,624
Securities lending collateral	119,541	256,445	306,659	622,640	557,158
Interest and dividends receivable	243,419	202,232	160,624	164,874	139,679
Receivable for investments sold and other assets	400,210	499,162	394,855	101,228	1,281,902
Securities sold on a when-issued basis	383,787	435,489	506,614	295,967	223,685
Foreign currency forward contracts	<u>77,431</u>	<u>51,160</u>	<u>15,410</u>	<u>62,409</u>	<u>13,440</u>
Total Assets	<u>79,192,041</u>	<u>77,235,056</u>	<u>71,838,857</u>	<u>64,855,719</u>	<u>65,517,760</u>
Liabilities:					
Payable for Investments Purchased	452,987	810,099	231,202	170,744	1,010,502
Real Estate debt	1,434,633	1,425,825	1,390,612	1,450,193	1,517,304
Securities lending obligations	368,928	505,746	556,237	622,487	557,135
Securities Purchased on a When-Issued Basis	718,888	949,570	1,029,545	755,796	648,945
Foreign currency forward contracts	90,803	28,659	20,234	36,752	25,810
Management Fees Payable to PRIM	44,498	42,838	39,854	28,887	39,823
Hedge funds Liabilities:	0	0	0	1,098,055	474,496
Portfolio completion strategies liabilities	<u>1,245,666</u>	<u>1,670,677</u>	<u>1,720,732</u>	<u>0</u>	<u>0</u>
Total Liabilities	<u>4,356,403</u>	<u>5,433,414</u>	<u>4,988,416</u>	<u>4,162,914</u>	<u>4,274,015</u>
Net position held in trust for pool participants	<u>\$74,835,638</u>	<u>\$71,801,642</u>	<u>\$66,850,441</u>	<u>\$60,692,805</u>	<u>\$61,243,745</u>

STATEMENT OF CHANGES IN POOLED NET POSITION

(000s Omitted)

	FOR THE PERIOD ENDING JUNE 30,				
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Additions:					
Contributions:					
State Employees	\$733,289	\$727,625	\$855,586	\$727,147	\$580,527
State Teachers	860,223	804,171	761,753	752,835	721,148
Other Participants	<u>1,579,329</u>	<u>1,218,193</u>	<u>1,071,727</u>	<u>922,092</u>	<u>877,252</u>
Total contributions	<u>3,172,841</u>	<u>2,749,989</u>	<u>2,689,066</u>	<u>2,402,074</u>	<u>2,178,927</u>
Net Investment Income:					
From Investment Activities:					
Net realized gain on investments and foreign currency transactions	3,148,833	3,859,853	2,577,447	1,420,910	2,527,856
Net change in unrealized appreciation/(depreciation) on investments and foreign currency translations	(516,330)	991,372	3,619,175	(1,668,459)	(1,699,446)
Interest Income	437,885	357,027	311,988	288,535	270,131
Dividend Income	815,586	791,098	735,490	688,955	650,996
Real Estate Income, Net	294,845	287,978	304,144	298,922	281,518
Timber Income	35,701	48,301	25,147	684	11,854
Private equity Income	99,730	122,014	197,368	147,228	151,001
Hedge funds Income (Loss)	0	0	0	12,136	(4,438)
Portfolio completion strategies Income (Loss)	<u>(110,407)</u>	<u>46,046</u>	<u>18,295</u>	<u>3,537</u>	<u>(241)</u>
Total Income from investment activities	<u>4,205,843</u>	<u>6,503,689</u>	<u>7,789,054</u>	<u>1,192,448</u>	<u>2,189,231</u>
Management Fees	<u>(167,867)</u>	<u>(159,459)</u>	<u>(144,004)</u>	<u>(112,129)</u>	<u>(120,781)</u>
Total Net Investment Income	<u>4,037,976</u>	<u>6,344,230</u>	<u>7,645,050</u>	<u>1,080,319</u>	<u>2,068,450</u>
From Securities Lending Activities:					
Securities lending income	9,510	12,030	11,374	12,927	5,624
Securities lending expenses	<u>(1,261)</u>	<u>(1,636)</u>	<u>(1,408)</u>	<u>(1,575)</u>	<u>(698)</u>
Total Net Income from securities lending activities	<u>8,249</u>	<u>10,394</u>	<u>9,966</u>	<u>11,352</u>	<u>4,926</u>
Total Additions	<u>7,219,066</u>	<u>9,104,613</u>	<u>10,344,082</u>	<u>3,493,745</u>	<u>4,252,303</u>
Deductions:					
Redemptions:					
State Employees	1,445,514	1,442,808	1,459,041	1,452,096	1,266,799
State Teachers	1,666,258	1,714,084	1,672,202	1,667,879	1,650,026
Other Participants	<u>1,073,298</u>	<u>996,520</u>	<u>1,055,203</u>	<u>924,710</u>	<u>768,507</u>
Total Deductions:	<u>4,185,070</u>	<u>4,153,412</u>	<u>4,186,446</u>	<u>4,044,685</u>	<u>3,685,332</u>
Net Increase (Decrease) in Pooled Net Position	3,033,996	4,951,201	6,157,636	(550,940)	566,971
Net position held in trust for pool participants:					
Balance, Beginning of Fiscal Year	<u>71,801,642</u>	<u>66,850,441</u>	<u>60,692,805</u>	<u>61,243,745</u>	<u>60,676,774</u>
Balance, End of Fiscal Year	<u>\$74,835,638</u>	<u>\$71,801,642</u>	<u>\$66,850,441</u>	<u>\$60,692,805</u>	<u>\$61,243,745</u>

NOTES TO FINANCIAL STATEMENTS

PRIM BOARD OVERVIEW

The Pension Reserves Investment Management (PRIM) Board was created by the state legislature (Chapter 66I of the Acts of 1983). The PRIM Board consists of nine members: the State Treasurer, the State Treasurer's appointee, the Governor (or his designee), the Governor's two appointees, and two representatives each from the State Employees' and Mass Teachers' Systems. The Treasurer serves as its chair. The Board is charged with the general supervision of the Pension Reserves Investment Trust (PRIT) Fund, which was established by the same act of the legislature and is governed by a declaration of trust adopted by the Board and subject to approval of the legislature.

The PRIT Fund was created with a mandate to accumulate assets through investment earnings and other revenue sources in order to reduce the Commonwealth's unfunded pension liability, and to assist local participating retirement systems in meeting their future pension obligations. The PRIT Fund merged with the Massachusetts State Teachers' and Employees' Retirement System (MASTERS) Trust on January 1, 1997, in accordance with Chapter 315 of the Acts of 1996.

Pursuant to G.L. c. 32, § 23(2A)(e), the Board has authority to employ an Executive Director, outside investment managers, custodians, consultants, and other professionals to formulate policies and procedures and to take other actions necessary and appropriate to manage the assets of the Fund. The Board acts as trustee for each retirement system that invests in the PRIT Fund and is therefore a fiduciary. Accordingly, under G.L. c. 32 § 23 and 840 CMR 1.00, it is required to:

1. Act solely in the interest of the participating retirement systems' members and beneficiaries, for the exclusive purpose of providing benefits and defraying the reasonable costs of managing the systems' assets.
2. Act with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.
3. Diversify the investments of the PRIT Fund in order to minimize the risks of large losses unless under the circumstances it is clearly prudent not to do so.
4. Act in accordance with the PRIT Fund's authorizing statute and governing documents.

NOTES TO FINANCIAL STATEMENTS (Continued)

Pursuant to G.L. c. 32 § 1, fiduciary standards of conduct also apply to PRIM's staff, investment managers, custodians, investment consultants, and others who exercise discretionary authority or discretionary control over the management or disposition of PRIT Fund assets. The Board is responsible for establishing the policies and guidelines by which the PRIT Fund is managed and PRIM is operated. To assist the Board in carrying out its duties, it has established four standing committees as described below. Pursuant to the By-Laws of the Massachusetts PRIM Board, Article II, § 8, the role of each committee is to make recommendations to the Board within its stated area of responsibility. Members of the committees shall be appointed by the chairperson after consultation with other Board members and shall be ratified by Board vote. Such committees may include, at the option of the Board, representatives from PRIM's participating or purchasing systems or from the investment or business community.

Administration and Audit Committee: The Committee reviews all issues related to the administration of PRIM. As such, its responsibilities include but are not limited to: recommending amendments to the PRIT Fund's Operating Trust and the By-Laws of PRIM; authorizing and eliminating staff positions; conducting Executive Director evaluations; overseeing the custodian of the PRIT Fund's assets; the PRIM operating budget and financial statements; staff and Board member travel; and office management. The Committee also oversees the annual audits of the PRIT Fund and PRIM, including the selection and hiring of auditors, the review of the completed audits, and the PRIM staff's responses to auditors' findings.

Investment Committee: The Investment Committee reviews all investment-related policy, performance, and management issues. The Investment Committee reviews and recommends the broad asset allocation among various asset classes. For all asset classes other than real estate/timber, the committee also reviews and recommends investment structure, recommends hiring and terminating investment managers and consultants, and monitors investment performance.

Real Estate and Timber Committee: The Real Estate and Timber Committee reviews all policy, performance and management issues related to investment in real estate and timber. The Real Estate and Timber Committee reviews and recommends the structure of the real estate and timber asset class, hiring and terminating those investment managers and consultants, and acquiring or disposing of properties where this authority is not delegated to another fiduciary. The committee also monitors investment results and manager performance.

Compensation Committee: The Compensation Committee reviews all issues related to staff compensation and benefit policies.

The Executive Director, with the assistance of PRIM staff, has the responsibility and authority to assist the Board and its committees in establishing investment and administrative policy, to implement the policies and programs established by the Board, and to report to the Board on the status of the PRIT Fund and the operations of PRIM.

NOTES TO FINANCIAL STATEMENTS (Continued)

The Board employs professional investment managers and gives them discretion, consistent with specified objectives and guidelines, to manage the PRIT Fund's assets. The Board and PRIM staff do not directly manage any PRIT Fund portfolios, except the Project Save Initiative. Each investment manager operates under a formal contract that delineates responsibilities and performance expectations, including formal investment guidelines and administrative requirements for each portfolio. The Board reviews the investment performance of all managers against their stated objectives at least quarterly.

The Board utilizes the services of seven investment management consultants to assist the Board and PRIM staff in performance review, asset allocation studies, investment structure analyses, manager screening and selection, investment research and other matters of investment policy, procedures, and implementation. The analysis and recommendations of the consultants may be considered by the Board in conjunction with other available information for the purpose of making decisions.

The Board retains a custodian bank to hold the assets of the PRIT Fund. The custodian accounts for and assists in the settlement of all transactions executed by PRIM's investment managers and makes available to the Board and to PRIM staff information with respect to the holdings, transactions, and performance of the PRIT Fund. Currently, custodian services are provided by BNY Mellon Corp.

The Board may utilize the services of independent auditors, appraisers and other third parties, as needed. Currently, the annual audit is provided by KPMG LLP.

PRIM's mission is to maximize the return on investment within acceptable levels of risk by broadly diversifying the PRIT Fund's investment portfolio, capitalizing on economies of scale to achieve cost-effective operations, and providing access to high quality, innovative investment management firms, all under the management of a professional staff and members of the Board.

PRIT FUND OVERVIEW

The PRIT Fund is a pooled investment vehicle which invests not only the assets of the Teachers' and State Employees' Retirement Systems, but also the assets of various Massachusetts retirement systems that choose to or are mandated to invest in the Fund. The Teachers' and State Employees' Retirement Systems are required by statute to participate. Chapter 68 of the Acts of 2007 required the Public Employee Retirement Administration Commission to assess the investment performance and funded ratio of retirement systems as of January 1st of each year. This law provided that any other public retirement system which underperforms relative to the PRIT Fund by at least 2% on an annualized basis over 10 years and is less than 65% funded must transfer its assets into the PRIT Fund permanently. If any system deemed underperforming had voluntarily transferred its assets to the Fund by October 1, 2007, that system retains the right to revoke its participation after five years.

NOTES TO FINANCIAL STATEMENTS (Continued)

Systems not required to be in the PRIT Fund can invest as either a purchasing or participating system. Participating systems invest all their assets in PRIT and must remain for at least five years; they are entitled to share in appropriations made to PRIT by the Commonwealth in accordance with Massachusetts General Laws, Chapter 32, Section 22B. Purchasing systems may invest all or a portion of their assets in PRIT and retain the ability to contribute and withdraw funds at their discretion. These systems are not entitled to share in appropriations made to PRIT by the Commonwealth in accordance with Massachusetts General Laws, Chapter 32, Section 22B. (The Commonwealth has made no such appropriations since fiscal year 2000.) Both the participating and purchasing systems share in the investment earnings of PRIT based on their proportionate share of the net assets of the fund. These systems rely upon the investment strategy of the PRIM Board to maintain their progress toward full funding of the system. That strategy seeks to balance the exposure to common deposit and investment risks related to custody, credit concentrations, interest rate and foreign currency fluctuations.

PRIT consists of two separate investment funds, the Cash Fund and the General Allocation Fund.

The Cash Fund is a short-term investment fund that is used to satisfy the liquidity requirements of both participating and purchasing systems. The Cash Fund investments consist of short term liquid cash equivalents. Systems may withdraw funds on the first business day of the month to meet their demands for funding benefit payments and operating expenses. Investment earnings consist primarily of interest and are reinvested daily.

The General Allocation Fund invests in all the asset classes of PRIT in accordance with the current asset allocation strategy. This portfolio spans a widely diversified investment spectrum. Each participating and purchasing system shares in the investment results of this portfolio in proportion to its contribution. Redemptions are permitted based on established guidelines at specific intervals usually at month end.

Purchasing systems are allowed to specify their contributions to certain segments of the PRIT investment spectrum. This option was provided as an alternative to investing in the General Allocation Fund. The investment risk assumed is commensurate with the ordinary exposure inherent to the particular segment they participate and invest in.

On May 29, 2001, the Attorney General of the Commonwealth of Massachusetts issued an opinion stating “that PERAC lacks authority to review the process adopted by the PRIM Board for the selection of particular investment managers or advisors, or to assess the results of such selections.” The Attorney General’s decision was the result of a request in November 2000 by PERAC to clarify its authority with respect to PRIM’s selection process for its investments and investment managers. In light of the Attorney General’s decision, the scope of this PERAC audit is limited in reviewing the investment practices of the Board.



COMMONWEALTH OF MASSACHUSETTS

Public Employee Retirement Administration Commission

Five Middlesex Avenue, Suite 304 | Somerville, MA 02145

Phone: 617-666-4446 | Fax: 617-628-4002

TTY: 617-591-8917 | Web: www.mass.gov/perac



Appendix F

Proposed 2023 PRIM Board and Committee Meeting Schedule

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Proposed 2023 PRIM Board and Committee Meeting Dates

Board Meeting	Thursday	February 16, 2023	9:30 a.m.
Investment Committee	Tuesday	January 31, 2023	9:30 a.m.
Real Estate and Timberland Committee	Wednesday	February 1, 2023	9:30 a.m.
Administration and Audit Committee	Thursday	February 2, 2023	10:00 a.m.
Board Meeting	Thursday	May 18, 2023	9:30 a.m.
Investment Committee	Tuesday	May 2, 2023	9:30 a.m.
Real Estate and Timberland Committee	Wednesday	May 3, 2023	9:30 a.m.
Administration and Audit Committee	Thursday	May 4, 2023	10:00 a.m.
Board Meeting	Tuesday	August 15, 2023	9:30 a.m.
Investment Committee	Tuesday	August 1, 2023	9:30 a.m.
Real Estate and Timberland Committee	Wednesday	August 2, 2023	9:30 a.m.
Administration and Audit Committee	Thursday	August 3, 2023	10:00 a.m.
Board Education Retreat	T.B.D.	T.B.D.	T.B.D.
Board Meeting	Thursday	November 30, 2023	9:30 a.m.
Investment Committee	Tuesday	November 14, 2023	9:30 a.m.
Real Estate and Timberland Committee	Wednesday	November 15, 2023	9:30 a.m.
Administration and Audit Committee	Thursday	November 16, 2023	9:30 a.m.
Compensation Committee	Thursday	November 16, 2023	11:30 a.m.

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Appendix G

Evaluation Committee's Report for Investment Legal Services RFQ

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<p style="text-align: center;">PENSION RESERVES INVESTMENT MANAGEMENT BOARD Investment Legal Services Request for Qualifications (“RFQ”) Evaluation Committee Report</p>
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Responses to RFQ

PRIM issued a Request for Qualifications (“RFQ”) for investment legal services on August 1, 2022. The purpose of the RFQ was to expand PRIM’s list of approved law firms, particularly for transactional legal services. The search was advertised in Pension & Investments and was posted on PRIM’s website. Responses to the RFQ were due by 3:00 p.m. ET on September 16, 2022. Seven responses were submitted by the deadline. In addition, two law firms that are already on PRIM’s approved Legal Services providers list also responded to the RFQ.

Evaluation Committee and Process

The Evaluation Committee consists of PRIM’s Chief Legal Officer and Chief Investment Operating Officer, in consultation with each asset class head. The Evaluation Committee finds all respondents to be qualified. The responses were thoroughly reviewed, and all respondents were selected based on criteria detailed in the RFQ. The criteria included relative qualifications and experience, knowledge of subject matter, quality of response, proposed team, and references.

The Evaluation Committee held remote and in-person interviews with all respondents on October 17, 21, 28, 31, 2022, and on November 1, 2022, including four respondents with whom PRIM does not currently have a business relationship.

Recommendation

The Evaluation Committee recommends that all seven firms be placed on PRIM’s list of approved Legal Services providers. Each firm will be eligible to provide legal services to PRIM based upon executing engagement letters. The firms are as follows:

- Faegre Drinker Biddle & Reath LLP
- Seyfarth Shaw LLP
- Kramer Levin Naftalis & Frankel LLP
- Kirby McInerney LLP
- Foley Hoag LLP
- Scott + Scott
- Venable LLP
- Nossaman LLP (Already on PRIM’s approved Legal Services providers list)
- Robinson Bradshaw and Hinson P.A. (Already on PRIM’s approved Legal Services providers list)

Summary of Respondents

1. Faegre Drinker Biddle & Reath LLP:

Faegre Drinker Biddle & Reath LLP (Faegre Drinker”) consists of over 1,200 legal and consulting professionals located in 21 locations across the United States, London, and Shanghai. Faegre Drinker has capabilities in all areas relevant to investment transactions, across all types of vehicles and entity structures, advising on fund formation, private equity, real estate, tax, corporate transactional work including mergers, divestitures, and acquisitions. The law firm includes over 60 professionals focused on investment management and has represented numerous public pension fund and state investment boards. PRIM staff has worked with one of the attorneys at Faegre Drinker who would become PRIM’s dedicated point of contact for firm services.

2. Seyfarth Shaw LLP (“Seyfarth”):

Seyfarth Shaw LLP (“Seyfarth”) includes almost 900 attorneys located in 17 offices in the United States, London, and Shanghai, Hong Kong, Melbourne, and Sydney. Seyfarth has represented government plans for almost 30 years and its Institutional Investor team includes more than 60 attorneys in corporate, benefits, tax, fiduciary, derivatives, real estate, litigation, and bankruptcy. Seyfarth relevant experience includes representing institutional investors in connection with their private equity and co-investments, hedge funds, joint ventures, investment management agreements, secondary market transactions, and real estate investments. PRIM staff have worked with two of the attorneys at Seyfarth who will become PRIM’s dedicated point of contact for firm services.

3. Kramer Levin Naftalis & Frankel LLP (“Kramer Levin”):

Kramer Levin Naftalis & Frankel LLP (“Kramer Levin”) is headquartered in New York City with offices in the Silicon Valley (CA), Washington, D.C., and Paris. Kramer Levin has approximately 400 lawyers with extensive experience handling private equity co-investments, private funds, public funds, private equity sponsor led transactions, ESG, financial services litigation, tax, real estate, derivatives and structured products, bankruptcy, and securitization. Kramer Levin has regularly advised other governmental bodies and public pensions in connection with their investments in private equity funds and hedge funds.

4. Kirby McInerney LLP (“KM”):

Kirby McInerney LLP (“KM”) was founded 75 years ago and today employs 26 attorneys, including 10 partners, located across three offices in New York City, Chicago, and San Diego. KM’s main practice focuses on securities litigation across a broad array of industries and all related securities and corporate governance matters. representing major public and private institutional investors. Particularly, KM has extensive experience advising and representing state and local government pension funds as well as other major institutional investors.

5. Foley Hoag LLP (“Foley Hoag”):

Foley Hoag LLP (“Foley Hoag”) is a firm of 330 attorneys with offices located in Boston, New York, Paris, and Washington, D.C. Over the course of four decades, Foley Hoag has developed a strong private funds team with broad experience and expertise. Foley Hoag advises on hedge funds and tangible asset funds (including forestry, clean energy and infrastructure), as well as venture capital, private equity, real estate, and debt fund spaces. Foley Hoag has extensive experience working with other Massachusetts agencies advising on governance related matters. PRIM staff have worked with a number of Foley Hoag attorneys, three of which will become PRIM’s point of contacts.

6. Scott + Scott Attorneys at Law LLP (“Scott + Scott”):

Scott + Scott Attorneys at Law LLP (“Scott + Scott”) consists of over 100 experienced attorneys providing advice, litigation and recovery services in connection with securities class actions, corporate and investment matters across the United States and in the United Kingdom and Dutch courts. Scott + Scott’s proposed comprehensive approach to providing legal services to PRIM would help identify any fraudulent activity, recovery options, and implementation of best practices. Scott + Scott’s experience includes working with other Massachusetts government entities.

7. Venable LLP (“Venable”):

Venable LLP (“Venable”) was established in 1907 and today includes 850 professionals delivering services around the world. Venable has one of the leading real estate practices in the nation, capable of handling all types of transactions for PRIM. Lawyers at Venable have worked on PRIM matters for over 25 years and are intimately familiar with PRIM’s fiduciary requirements and protocols. Venable’s relevant capabilities include advising on ESG, real estate, acquisitions and dispositions, development and leasing, financing transactions, joint ventures and investment transactions, REITs, and tax. PRIM staff have worked with a number of Venable attorneys, two of which will become PRIM’s point of contacts.



Appendix H

PRIT Fund Performance Report (September 30, 2022)

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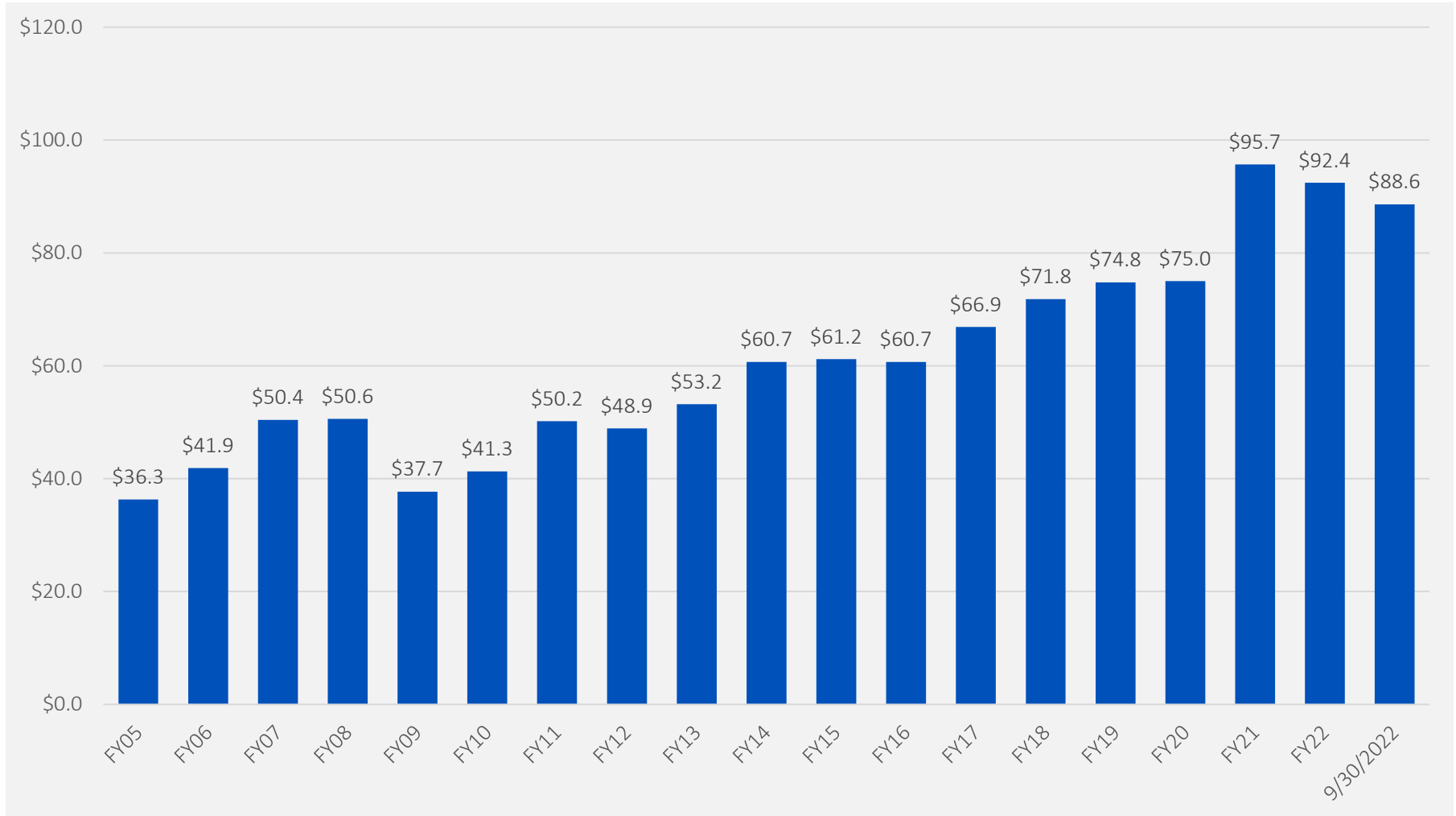
PRIT FUND PERFORMANCE

**Mass
PRIM**

AS OF SEPTEMBER 30, 2022
GROSS OF FEES

Total PRIT Fund Fiscal Year Market Value

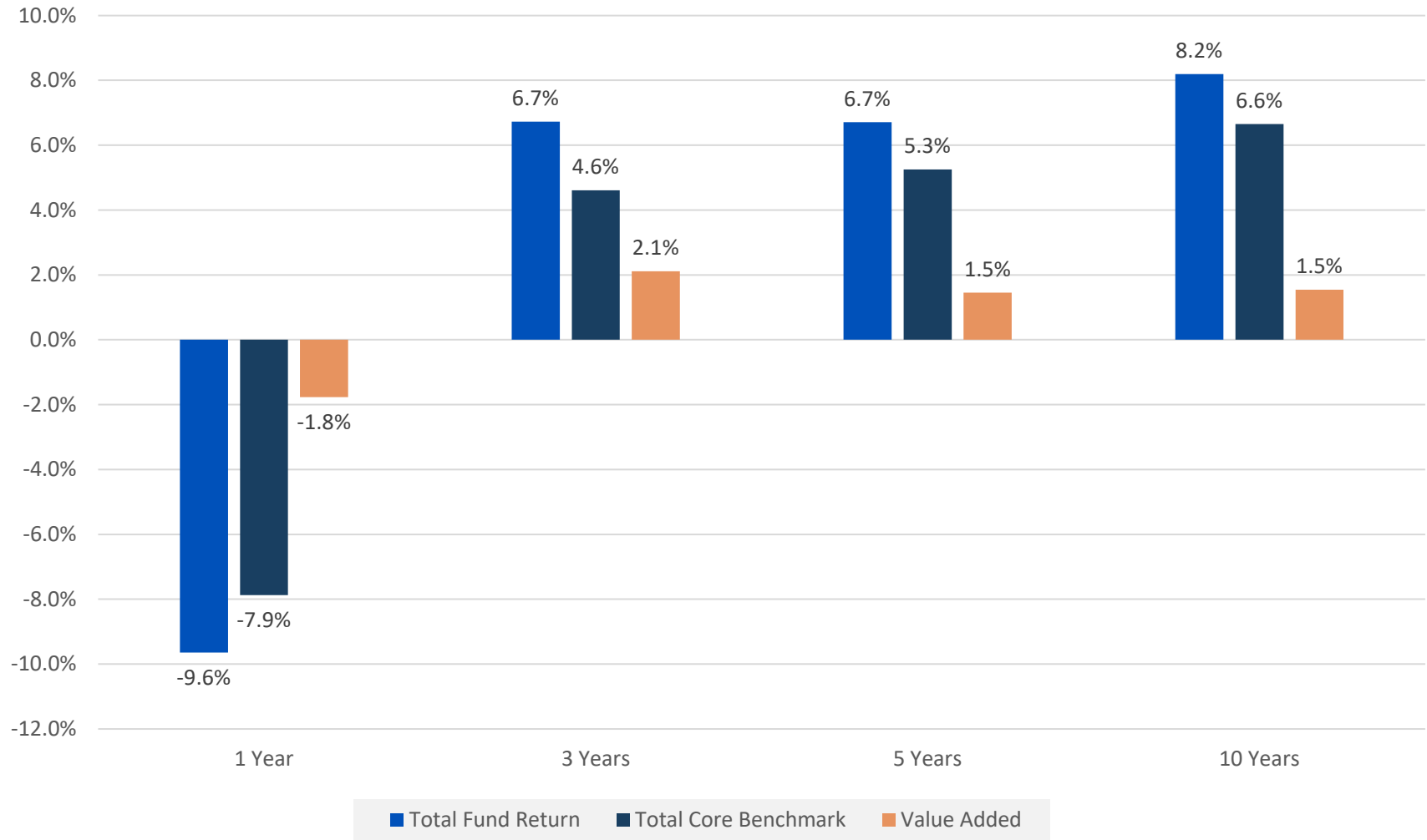
Value (\$Billions)



Source: BNY Mellon. As of September 30, 2022.

PRIT Fund Total Returns

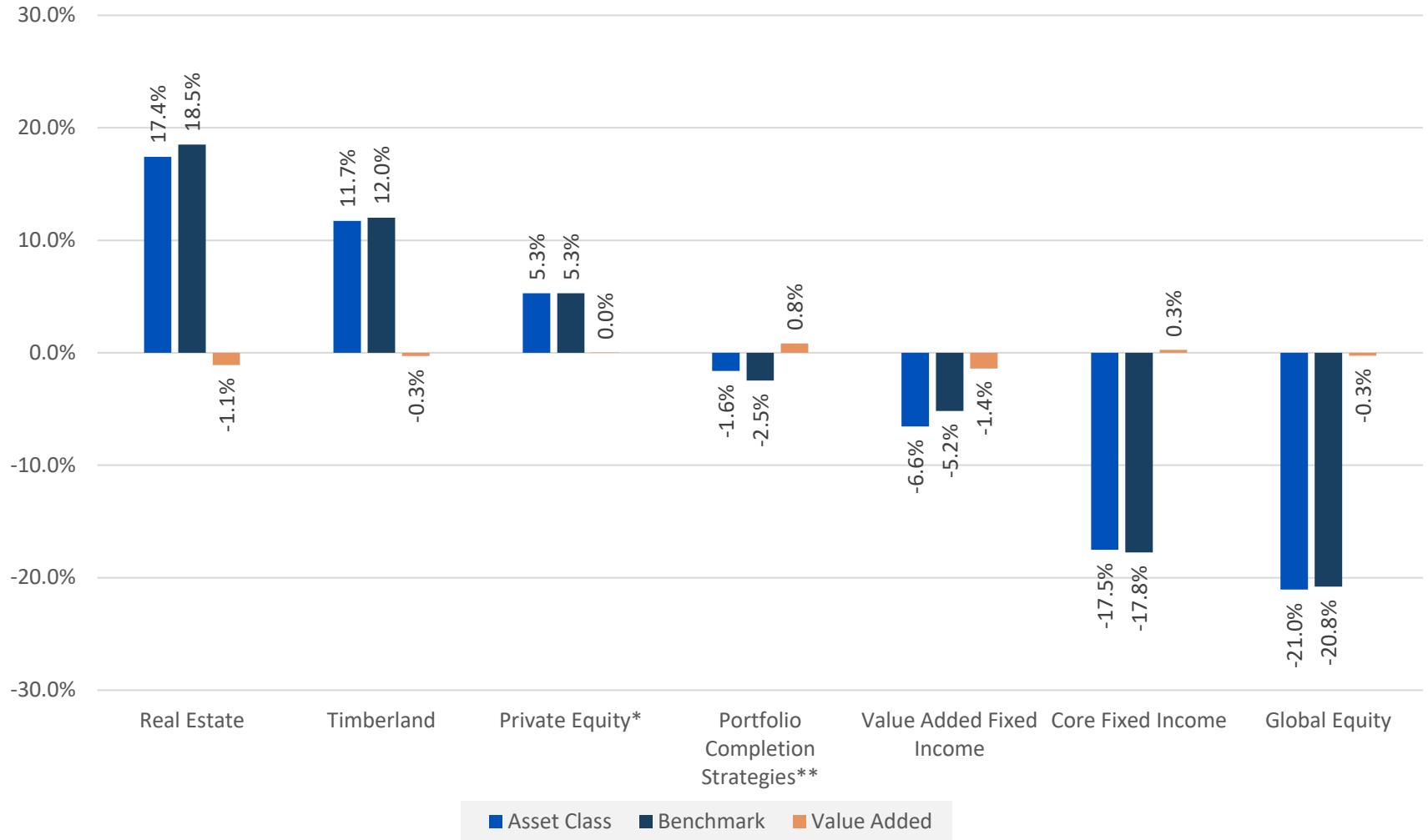
Annualized Returns as of September 30, 2022 (Gross of Fees)



Source: BNY Mellon. Totals may not add due to rounding. Total Core Benchmark includes private equity benchmark.

PRIT Asset Class Performance Summary

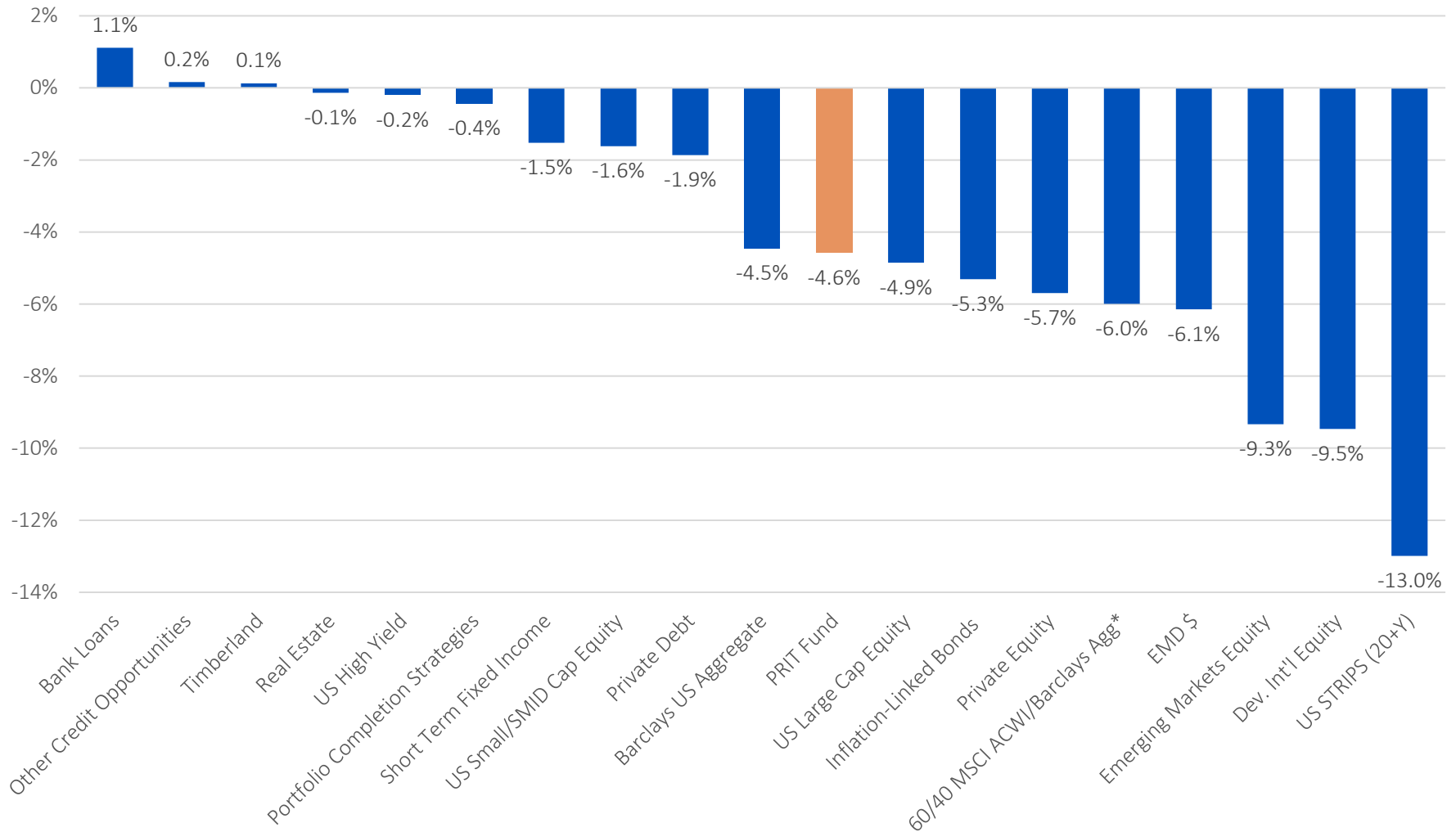
One-Year Ended September 30, 2022 (Gross of Fees)



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 – Third Quarter 2022

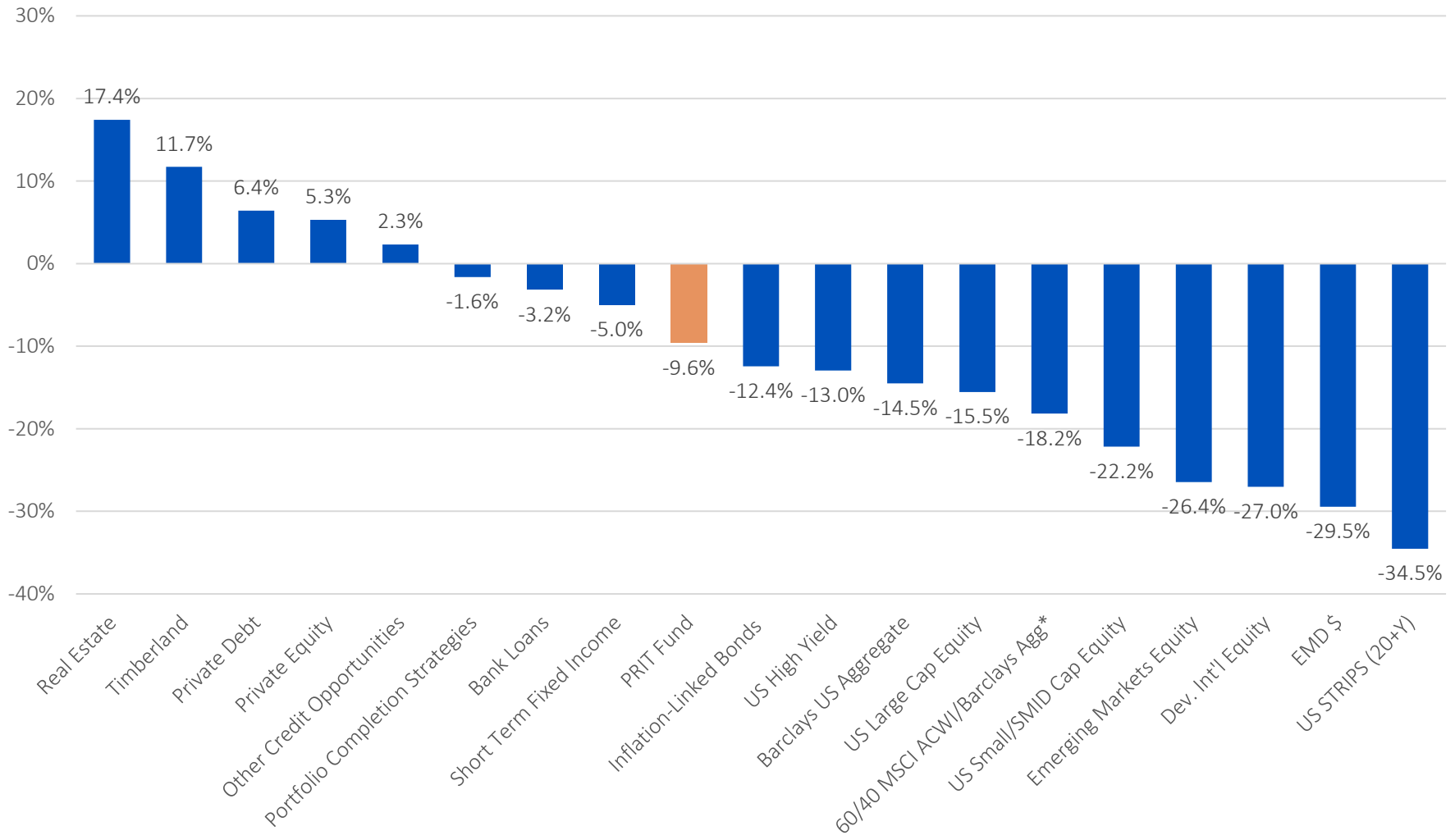
Quarter Ended September 30, 2022 (Gross of Fees)



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

PRIT Performance By Strategy – One-Year

One-Year Ended September 30, 2022 (Gross of Fees)



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

PRIT Fund Annualized Returns By Asset Class

As of September 30, 2022 (Gross of Fees)

1 Year	3 Year	5 Year	10 Year
REAL ESTATE 17.4%	PRIVATE EQUITY 27.4%	PRIVATE EQUITY 24.1%	PRIVATE EQUITY 21.5%
TIMBER 11.7%	REAL ESTATE 13.0%	REAL ESTATE 11.1%	REAL ESTATE 11.1%
PRIVATE EQUITY 5.3%	TIMBER 5.7%	TIMBER 5.1%	GLOBAL EQUITY 7.6%
PORTFOLIO COMPLETION STRATEGIES (1.6%)	GLOBAL EQUITY 4.0%	GLOBAL EQUITY 4.3%	TIMBER 6.3%
VALUE-ADDED FIXED INCOME (6.6%)	VALUE-ADDED FIXED INCOME 3.0%	VALUE-ADDED FIXED INCOME 3.6%	PORTFOLIO COMPLETION STRATEGIES 4.3%
CORE FIXED INCOME (17.5%)	PORTFOLIO COMPLETION STRATEGIES 2.6%	PORTFOLIO COMPLETION STRATEGIES 2.9%	VALUE-ADDED FIXED INCOME 4.2%
GLOBAL EQUITY (21.0%)	CORE FIXED INCOME (3.4%)	CORE FIXED INCOME 0.5%	CORE FIXED INCOME 2.0%

Source: BNY Mellon.

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Appendix J

Aon (McLagan) Equal Pay Audit Presentation

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AON

Massachusetts PRIM

**Equal Pay Audit
2022**

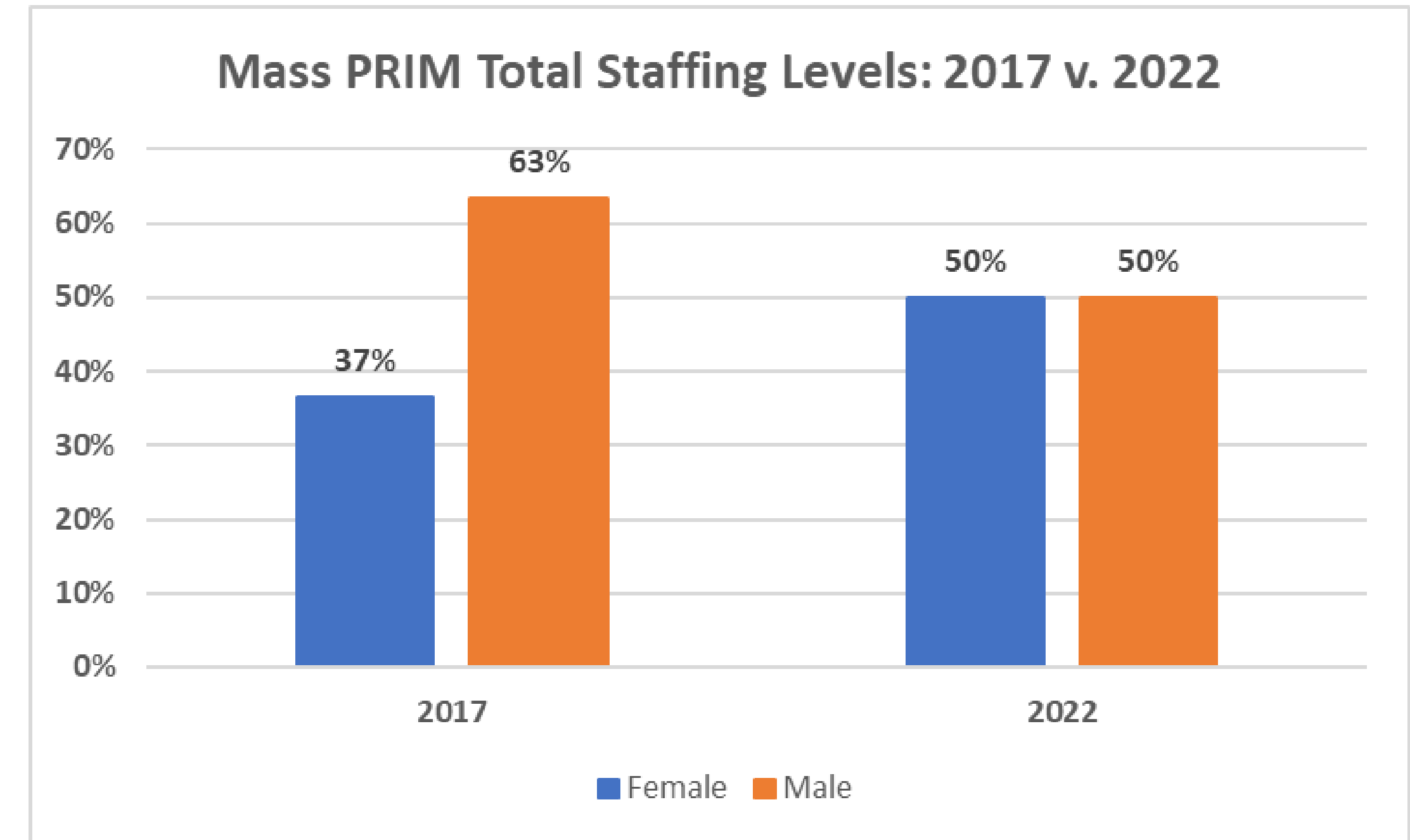


Overview

- Massachusetts PRIM asked McLagan to update the analysis completed in 2017 that reviewed its employees' salaries to ensure that its employees are paid fairly and competitively, without regard to gender.
- PRIM provided McLagan with all PRIM employees and their: current salaries, salary ranges, internal titles, performance rating, tenure, and gender. Only PRIM employees with performance ratings are included in this analysis (i.e., all new hires have been excluded).
- To help assess gender pay equity, McLagan:
 1. Assessed how PRIM has adjusted their employee gender mix over the last five years.
 2. Compared the salary range placement of all PRIM employees. We attempted to answer the question: Is there a gender bias in salary range placement?
 3. Assessed salary range placement, factoring in individual employees' performance and tenure. That is, our analysis addressed the question: On a performance- and tenure-adjusted basis, is there a gender bias?
- In conducting this analysis, McLagan found that:
 - For employees at the same job level and/or position at PRIM, we do not observe a gender bias.
 - Of the female population, more than half (60%) are paid at or above their predicted salary range midpoint, compared to 40% of the male population.

1. How has PRIM Adjusted their Employee Mix Over the Last Five Years?

- McLagan last conducted this analysis in 2017, and found that PRIM's overall staffing levels were predominantly male (i.e., 63% of staff were male vs. 37% female).
 - Digging a bit further, 89% of staff in the top-four salary ranges were male.
- However, within the past five years, PRIM has made a concerted effort to not only hire more female staff, but also focus on hiring more senior female staff. Through these efforts, PRIM's overall staffing is currently split 50% female and 50% male.
 - Importantly, within the top-four salary ranges, females make up 30% of the population (previously 11% in 2017).
- Note, compared to 2017, PRIM's male employee population has stayed largely flat, both in total headcount (+4%) and within the top-four salary bands (+0%). PRIM has increased its female population by +80% in total headcount and +250% within the top-four salary bands.



2. Does Placement within PRIM's Salary Range Reflect Gender Bias?

- PRIM's Board-approved salary structure is designed to reflect competitive market norms and help PRIM manage its overall compensation costs.
- In general, PRIM employees that fully satisfy the experience and knowledge requirements of their position and who meet expectations for performance, are expected to be paid around the salary structure's midpoint.
- To assess whether placement within PRIM's salary ranges reflects gender bias (i.e., with men paid more than women or women paid more than men), McLagan mapped the salary range placement of each PRIM employee.
- Unadjusted for performance and tenure, PRIM's male and female employees are both positioned ~4% to 6%, on average, above their salary midpoints.

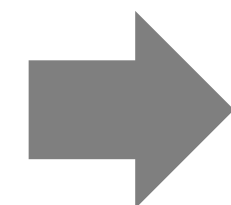
Avg CY Salary Variance to PRIM Salary Midpoint			
	Males	Females	Overall
Total	6%	4%	5%

3. Factoring in Performance & Tenure, is there a Gender Bias?

- Placement within PRIM's salary ranges is expected to be impacted by an individual incumbent's:
 - Time in current position: Incumbents that are long tenured within their current position are expected to be paid higher within their respective salary ranges (i.e., likely between the midpoint and the maximum salary range).
 - Performance: Higher-performing incumbents are expected to be paid higher in their respective salary ranges (i.e., likely between the midpoint and the maximum salary range).
- To account for differences in incumbent experience and performance, McLagan developed incumbent-specific predicted salaries above or below range midpoints based on individual incumbent's time in position and performance. These predicted salaries provide a potentially more useful basis for understanding relative differences in pay between males and females, factoring in each incumbent's performance and tenure in position.
- We used the following matrix to determine these performance- and tenure-adjusted predicted salaries.

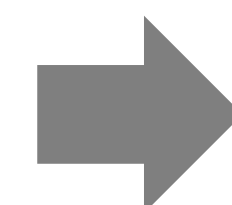
Assumptions for John Smith:

- CY Salary Range Midpt: \$165K
- Time in Current Position: 4yrs
- CY Performance Rating: 5



Predicted Salary Multiplier Matrix

Time in Current Position	Current Year Performance Rating				
	1	2	3	4	5
	<i>Does not Meet Expectations</i>		<i>Meets Expectations</i>		<i>Exceeds Expectations</i>
<1 yr	0.80	0.83	0.87	0.90	0.93
1 to 2 yrs	0.87	0.90	0.93	0.97	1.00
2 to 3 yrs	0.93	0.97	1.00	1.03	1.07
3 to 5 yrs	1.00	1.03	1.07	1.10	1.13
>5 yrs	1.07	1.10	1.13	1.17	1.20



Predicted Salary for John Smith:

\$165K (midpoint)
 x 1.13 (multiplier)
 \$186K (predicted salary)

3. Factoring in Performance & Tenure, is there a Gender Bias?...

- Overall, PRIM's current year salaries fell below the predicted salary levels (average variance of -6%). We found that:
 - Females' current year salaries, on average, were 5% below their predicted salary levels.
 - Males' current year salaries were further below their predicted salaries (on average 7% below).
- Of the female population, 60% are paid at or above their predicted salary level, compared to 40% of the male population.

CY Salaries vs. Predicted Salary Level			
Number of Incumbents Whose Salaries are:			
	More than 5% below	+/- 5%	More than 5% Above
Males	12	4	4
Females	8	10	2
Total	20	14	6



Appendix K

September 2022 PRIM Operating Budget

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PENSION RESERVES INVESTMENT MANAGEMENT BOARD
Budget as of September 30, 2022

<u>FY 2023</u>	<u>Investment Management Fees</u>	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>Variance Under (Over)</u>	<u>%</u>
78,370,000	Global Equity	14,820,206	19,592,500	4,772,294	24.4%
0	Global Equity Performance Fee	(764,919)	0	764,919	N/A
9,762,000	Core Fixed Income	1,963,461	2,440,500	477,039	19.5%
0	Core Fixed Income Performance Fee	566,307	0	(566,307)	N/A
50,700,000	Value Added Fixed Income	10,378,898	12,675,000	2,296,102	18.1%
43,635,000	Real Estate	9,438,487	10,908,750	1,470,263	13.5%
0	Real Estate Performance Fee	1,655,665	0	(1,655,665)	N/A
8,250,000	Timberland	1,848,223	2,062,500	214,277	10.4%
0	Timberland Performance Fee	(1,940,723)	0	1,940,723	N/A
185,600,000	Private Equity	48,428,777	46,400,000	(2,028,777)	-4.4%
89,018,000	Portfolio Completion Strategy	19,046,910	22,254,500	3,207,590	14.4%
1,205,000	Overlay, Foreign Currency	211,344	301,250	89,906	29.8%
466,540,000	Total Investment Management Fees	105,652,636	116,635,000	10,982,364	9.4%

Third-Party Service Providers

935,000	Custodian	233,750	233,750	0	0.0%
2,512,500	General	404,083	628,125	224,042	35.7%
2,900,000	Real Estate & Timberlands	606,676	725,000	118,324	16.3%
2,650,000	Public Markets	438,437	662,500	224,063	33.8%
1,900,000	Private Equity	430,510	475,000	44,490	9.4%
8,955,000	Portfolio Completion Strategies	1,885,125	2,238,750	353,625	15.8%
1,500,000	Research	130,025	375,000	244,975	65.3%
481,000	Audit & Tax	89,314	120,250	30,936	25.7%
475,000	Legal	21,521	118,750	97,229	81.9%
340,000	Governance	58,374	85,000	26,626	31.3%
1,800,000	Risk Measurement & Analytics	427,181	450,000	22,819	5.1%
24,448,500	Total Third-Party Service Providers	4,724,996	6,112,125	1,387,129	22.7%

Operations

22,500,000	Compensation & Benefits	4,523,235	5,625,000	1,101,765	19.6%
1,830,000	Occupancy	308,373	457,500	149,127	32.6%
515,000	Insurance	75,272	128,750	53,478	41.5%
380,000	General Office Expenses	37,749	95,000	57,251	60.3%
1,170,000	Computer & MIS	186,727	292,500	105,773	36.2%
467,000	Travel, Development & Dues	54,790	116,750	61,960	53.1%
55,000	Client Service	1,936	13,750	11,814	85.9%
85,000	Board Elections	0	21,250	21,250	100.0%
27,002,000	Total Operations	5,188,082	6,750,500	1,562,418	23.1%

517,990,500	Total PRIM Direct Operating Budget	115,565,714	129,497,625	13,931,911	10.8%
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**PRIM Board
Budget Detail
September 30, 2022**

Global Equities

<u>FY 2023 Budget</u>	<u>Manager</u>	<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Domestic Equity</u>				
850,000	SSgA (S&P 500 Index)	152,154	212,500	60,346
100,000	Rhumbline (S&P 500 Index)	21,102	25,000	3,898
100,000	SSgA (Russell 2500 Index)	20,957	25,000	4,043
2,500,000	Frontier	517,741	625,000	107,259
3,000,000	Riverbridge	602,479	750,000	147,521
4,700,000	Summit Creek	988,879	1,175,000	186,121
4,800,000	GSAM Domestic Enhanced Equity	493,011	1,200,000	706,989
450,000	Acadian Micro Cap	102,558	112,500	9,942
0	Acadian Micro Cap Performance	2,112,832	0	(2,112,832)
1,500,000	Brandywine Micro Cap	301,711	375,000	73,289
1,400,000	Lord Abbett Micro Cap	290,653	350,000	59,347
1,600,000	Driehaus Micro Cap	322,332	400,000	77,668
<u>21,000,000</u>	Total Domestic Equity	<u>5,926,409</u>	<u>5,250,000</u>	<u>(676,409)</u>
<u>International Equity</u>				
370,000	SSgA (World Ex-US Index)	83,457	92,500	9,043
100,000	SSgA (Small Cap)	17,693	25,000	7,307
8,600,000	Marathon	1,611,167	2,150,000	538,833
5,500,000	Baillie Gifford	996,248	1,375,000	378,752
3,900,000	Mondrian Investment	780,336	975,000	194,664
1,860,000	Xponance	391,616	465,000	73,384
1,700,000	ARGA	578,201	425,000	(153,201)
1,990,000	Acadian	404,915	497,500	92,585
1,700,000	AQR	308,904	425,000	116,096
1,150,000	Driehaus	185,695	287,500	101,805
1,500,000	Artisan	250,957	375,000	124,043
<u>28,370,000</u>	Total International Equity	<u>5,609,189</u>	<u>7,092,500</u>	<u>1,483,311</u>
<u>Emerging Markets Equity</u>				
5,500,000	Baillie Gifford	941,601	1,375,000	433,399
4,400,000	Driehaus	908,519	1,100,000	191,481
8,200,000	Pzena	1,559,633	2,050,000	490,367
0	AQR (Performance Fee)	(2,877,751)	0	2,877,751
2,900,000	T. Rowe Price	439,580	725,000	285,420
4,400,000	Acadian	1,023,389	1,100,000	76,611
2,300,000	Wasatch	385,393	575,000	189,607
<u>27,700,000</u>	Total Emerging Markets	<u>2,380,364</u>	<u>6,925,000</u>	<u>4,544,636</u>
<u>FUTURE Initiative - Emerging Diverse Managers Program</u>				
600,000	Xponance	81,226	150,000	68,774
700,000	Various Emerging - Diverse Managers	58,099	175,000	116,901
<u>1,300,000</u>	Total Diverse Managers	<u>139,325</u>	<u>325,000</u>	<u>185,675</u>
<u>78,370,000</u>	Total Global Equities	<u>14,055,287</u>	<u>19,592,500</u>	<u>5,537,213</u>

**PRIM Board
Budget Detail
September 30, 2022**

Fixed Income

<u>FY 2023 Budget</u>	<u>Manager</u>	<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Core Fixed Income</u>				
170,000	Blackrock (Agg Index)	37,803	42,500	4,697
280,000	Blackrock (TIPS Index)	65,069	70,000	4,931
1,325,000	Blackrock (ILB)	283,410	331,250	47,840
272,000	Blackrock (STRIPS Index)	59,970	68,000	8,030
95,000	Blackrock Short Term FI	21,643	23,750	2,107
1,700,000	PIMCO	359,214	425,000	65,786
0	PIMCO Performance Fee	566,307	0	(566,307)
2,300,000	Loomis Sayles	518,988	575,000	56,012
150,000	AFL-CIO	30,872	37,500	6,628
965,000	Longfellow	176,590	241,250	64,660
935,000	New Century	170,861	233,750	62,889
1,020,000	Pugh	194,496	255,000	60,504
0	Community Capital	(352)	0	352
250,000	FUTURE Initiative - Bivium Core FI	24,441	62,500	38,059
300,000	FUTURE Initiative - Various Emerging-Diverse Managers	20,456	75,000	54,544
<u>9,762,000</u>	Total Core Fixed Income	<u>2,529,768</u>	<u>2,440,500</u>	<u>(89,268)</u>
<u>Value Added Fixed Income</u>				
1,600,000	Fidelity	358,986	400,000	41,014
2,020,000	Loomis Sayles	446,234	505,000	58,766
1,630,000	Shenkman	370,220	407,500	37,280
4,100,000	Eaton Vance*	970,513	1,025,000	54,487
3,400,000	Voya*	786,253	850,000	63,747
1,500,000	PIMCO	308,083	375,000	66,917
3,500,000	Ashmore*	669,584	875,000	205,416
16,400,000	Private Debt*	3,673,281	4,100,000	426,719
16,000,000	Other Credit Strategies	2,700,552	4,000,000	1,299,448
250,000	FUTURE Initiative - Bivium Value Added FI	36,559	62,500	25,941
300,000	FUTURE Initiative - Various Emerging-Diverse Managers	58,633	75,000	16,367
<u>50,700,000</u>	Total Value Added Fixed Income	<u>10,378,898</u>	<u>12,675,000</u>	<u>2,296,102</u>

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**PRIM Board
Budget Detail
September 30, 2022**

Real Estate and Timberland

<u>FY 2023 Budget</u>	<u>Manager</u>	<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>REITs</u>				
3,200,000	CenterSquare	687,688	800,000	112,312
2,900,000	Brookfield	520,006	725,000	204,994
<u>6,100,000</u>	<u>Total REIT</u>	<u>1,207,694</u>	<u>1,525,000</u>	<u>317,306</u>
<u>Core Strategy</u>				
7,100,000	AEW*	1,795,208	1,775,000	(20,208)
9,800,000	Invesco*	2,037,568	2,450,000	412,432
7,400,000	LaSalle*	1,912,453	1,850,000	(62,453)
1,700,000	CBRE Global Investors	476,789	425,000	(51,789)
1,500,000	Stockbridge Advisors	432,314	375,000	(57,314)
1,000,000	DivcoWest Core	0	250,000	250,000
<u>28,500,000</u>	<u>Total Core Strategy</u>	<u>6,654,332</u>	<u>7,125,000</u>	<u>470,668</u>
<u>Non-core Strategy</u>				
<u>7,035,000</u>	<u>Various Managers</u>	<u>1,438,961</u>	<u>1,758,750</u>	<u>319,789</u>
<u>7,035,000</u>	<u>Total Non-Core Strategy</u>	<u>1,438,961</u>	<u>1,758,750</u>	<u>319,789</u>
<u>FUTURE Initiative - Emerging Diverse Managers Program</u>				
700,000	Cambridge Associates	137,500	175,000	37,500
1,300,000	Various Emerging - Diverse Managers	0	325,000	325,000
<u>2,000,000</u>	<u>Total Diverse Managers</u>	<u>137,500</u>	<u>500,000</u>	<u>362,500</u>
<u>Performance Fee</u>				
0	Core Performance Fee	1,745,830	0	(1,745,830)
0	Non-Core Performance Fee	(90,165)	0	90,165
<u>0</u>	<u>Total Performance Fee</u>	<u>1,655,665</u>	<u>0</u>	<u>(1,655,665)</u>
<u>43,635,000</u>	<u>Total Real Estate</u>	<u>11,094,152</u>	<u>10,908,750</u>	<u>(185,402)</u>
<u>Timberland</u>				
3,000,000	Forest Investment Associates*	700,937	750,000	49,063
5,250,000	Campbell Group*	1,147,286	1,312,500	165,214
0	Campbell Performance Fee	(1,940,723)	0	1,940,723
<u>8,250,000</u>	<u>Total Timberland</u>	<u>(92,500)</u>	<u>2,062,500</u>	<u>2,155,000</u>

*Investments are in structures (commingled funds, partnerships, etc.) in which management fees are not directly paid to the investment managers by PRIM, but rather are indirectly paid via a reduction of PRIM's investment.

**PRIM Board
Budget Detail
September 30, 2022**

Private Equity

<u>FY 2023 Budget</u>	<u>Manager</u>	<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Private Equity Managers</u>				
<u>183,000,000</u>	Various Managers	<u>48,278,777</u>	<u>45,750,000</u>	<u>(2,528,777)</u>
<u>183,000,000</u>	Total Private Equity Managers	<u>48,278,777</u>	<u>45,750,000</u>	<u>(2,528,777)</u>
<u>FUTURE Initiative - Emerging - Diverse Managers Program</u>				
600,000	Hamilton Lane	150,000	150,000	0
<u>2,000,000</u>	Various Emerging - Diverse Managers	<u>0</u>	<u>500,000</u>	<u>500,000</u>
<u>2,600,000</u>	Total Diverse Managers	<u>150,000</u>	<u>650,000</u>	<u>500,000</u>
<u>185,600,000</u>	Total Private Equity	<u>48,428,777</u>	<u>46,400,000</u>	<u>(2,028,777)</u>

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**PRIM Board
Budget Detail
September 30, 2022**

Portfolio Completion Strategies

<u>FY 2023 Budget</u>	<u>Manager</u>	<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Portfolio Completion Strategies</u>				
168,000	Replication Strategies	32,319	42,000	9,681
6,500,000	PAAMCO-Hedge Fund of Funds*<	1,358,198	1,625,000	266,802
66,000,000	Direct Hedge Funds*	14,532,231	16,500,000	1,967,769
5,020,000	Emerging Manager Program	1,034,757	1,255,000	220,243
<u>11,330,000</u>	Real Assets*	<u>2,089,405</u>	<u>2,832,500</u>	<u>743,095</u>
<u>89,018,000</u>	Total Portfolio Completion Strategies	<u>19,046,910</u>	<u>22,254,500</u>	<u>3,207,590</u>

*Investments are in structures (commingled funds, partnerships, etc.) in which management fees are not directly paid to the investment managers by PRIM, but rather are indirectly paid via a reduction of PRIM's investment.

<Fees listed here exclude costs of underlying hedge funds, which typically charge fees ranging from 1% to 2% of net assets values, plus performance fees of up to 20% of excess returns. These costs are embedded in net hedge fund performance.

**PRIM Board
Budget Detail
September 30, 2022**

Overlay/Foreign Currency/Other

<u>FY 2023 Budget</u>	<u>Manager</u>	<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Overlay/Foreign Currency & Other</u>				
565,000	Parametric (Overlay)	122,417	141,250	18,833
<u>640,000</u>	Russell (Foreign Currency)	<u>88,927</u>	<u>160,000</u>	<u>71,073</u>
<u>1,205,000</u>	Total	<u>211,344</u>	<u>301,250</u>	<u>89,906</u>

*Investments are in structures (commingled funds, partnerships, etc.) in which management fees are not directly paid to the investment managers by PRIM, but rather are indirectly paid via a reduction of PRIM's investment.

**PRIM Board
Budget Detail
September 30, 2022**

Third Party Service Providers

<u>FY 2023 Budget</u>		<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Custody</u>				
935,000	Master Custody Services	233,750	233,750	0
<u>935,000</u>	Total Custody	<u>233,750</u>	<u>233,750</u>	<u>0</u>
<u>General</u>				
230,000	Asset Allocation	57,500	57,500	0
122,500	Benchmarking Advisory Services	0	30,625	30,625
515,000	Operational Due Diligence	69,167	128,750	59,583
500,000	Information Technology	105,121	125,000	19,879
200,000	Legislative Restrictions & Benchmark	42,812	50,000	7,188
125,000	Communications	26,775	31,250	4,475
120,000	Compensation and Human Resources	6,763	30,000	23,237
100,000	Compliance	39,204	25,000	(14,204)
250,000	Investment Equity Diversity Program	16,250	62,500	46,250
350,000	Misc. Service Providers & Other Initiatives	40,491	87,500	47,009
<u>2,512,500</u>	Total Advisory Services-General	<u>404,083</u>	<u>628,125</u>	<u>224,042</u>
<u>RE and Timberlands</u>				
1,000,000	Real Estate and Timberland Advisors	205,327	250,000	44,673
800,000	Debt Compliance and Reporting	216,751	200,000	(16,751)
1,100,000	Direct Invest. Advisory & Other	184,598	275,000	90,402
<u>2,900,000</u>	Total Real Estate & Timber Advisory	<u>606,676</u>	<u>725,000</u>	<u>118,324</u>
<u>Public Markets</u>				
550,000	Public Markets Advisors	106,301	137,500	31,199
1,500,000	Managed Acct Platform Providers-OCO	274,661	375,000	100,339
600,000	Public Markets - Other	57,475	150,000	92,525
<u>2,650,000</u>	Total Public Markets Advisory	<u>438,437</u>	<u>662,500</u>	<u>224,063</u>
<u>Private Equity</u>				
1,500,000	Private Equity Advisor	375,000	375,000	0
400,000	Private Equity - Other	55,510	100,000	44,490
<u>1,900,000</u>	Total Private Equity Advisory	<u>430,510</u>	<u>475,000</u>	<u>44,490</u>

**PRIM Board
Budget Detail
September 30, 2022**

Third Party Service Providers (continued)

<u>FY 2023 Budget</u>		<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Portfolio Completion Strategies</u>				
1,500,000	Advisor-Portfolio Completion Strategies	319,949	375,000	55,051
7,075,000	Managed Acct Platform Provider	1,525,711	1,768,750	243,039
380,000	PCS Advisor - Other	39,465	95,000	55,535
<u>8,955,000</u>	Total Portfolio Completion Strategies Advisory	<u>1,885,125</u>	<u>2,238,750</u>	<u>353,625</u>
<u>Research</u>				
1,500,000	Research Tools	130,025	375,000	244,975
<u>1,500,000</u>	Total Research	<u>130,025</u>	<u>375,000</u>	<u>244,975</u>
<u>Audit & Tax</u>				
293,000	Annual Finan. Statement Audits	73,250	73,250	0
63,000	Agreed-Upon Procedures	15,662	15,750	88
125,000	Tax Services & Other	402	31,250	30,848
<u>481,000</u>	Total Audit & Tax	<u>89,314</u>	<u>120,250</u>	<u>30,936</u>
<u>Legal</u>				
475,000	Outside Counsel	21,521	118,750	97,229
<u>475,000</u>	Total Outside Counsel	<u>21,521</u>	<u>118,750</u>	<u>97,229</u>
<u>Governance</u>				
210,000	Proxy Voting Services	43,374	52,500	9,126
35,000	Council of Inst. Investors	7,500	8,750	1,250
20,000	Board Education	0	5,000	5,000
75,000	Advisory Services and Other	7,500	18,750	11,250
<u>340,000</u>	Total Governance	<u>58,374</u>	<u>85,000</u>	<u>26,626</u>
<u>Risk Measurement & Analytics</u>				
900,000	Risk Measurement Systems	209,606	225,000	15,394
900,000	Investment Tools and Analytics	217,575	225,000	7,425
<u>1,800,000</u>	Total Risk Measurement	<u>427,181</u>	<u>450,000</u>	<u>22,819</u>
<u>24,448,500</u>	Total Third-Party Providers	<u>4,724,996</u>	<u>6,112,125</u>	<u>1,387,129</u>

**PRIM Board
Budget Detail
September 30, 2022**

Operations

<u>FY 2023 Budget</u>		<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Compensation & Benefits</u>				
22,000,000	Full-Time Staff	4,452,180	5,500,000	1,047,820
9,000	Dental and Vision	2,214	2,250	36
76,000	Disability	22,829	19,000	(3,829)
315,000	Medicare Tax	36,611	78,750	42,139
100,000	Miscellaneous	9,401	25,000	15,599
<u>22,500,000</u>	Total Compensation & Benefits	<u>4,523,235</u>	<u>5,625,000</u>	<u>1,101,765</u>
<u>Occupancy</u>				
1,750,000	Lease	297,589	437,500	139,911
60,000	Utilities	8,383	15,000	6,617
20,000	Leasehold Improvements, Other	2,401	5,000	2,599
<u>1,830,000</u>	Total Occupancy	<u>308,373</u>	<u>457,500</u>	<u>149,127</u>
<u>Insurance</u>				
350,000	Fiduciary	62,612	87,500	24,888
45,000	Business Insurance Policies	10,225	11,250	1,025
20,000	Workers Compensation	2,435	5,000	2,565
100,000	Other	0	25,000	25,000
<u>515,000</u>	Total Insurance	<u>75,272</u>	<u>128,750</u>	<u>53,478</u>

**PRIM Board
Budget Detail
September 30, 2022**

Operations (continued)

<u>FY 2023 Budget</u>		<u>Year to Date</u> <u>Actual</u>	<u>Year to Date</u> <u>Budget</u>	<u>Variance</u> <u>Under (Over)</u>
<u>General Office Expenses</u>				
65,000	Printing, Postage, and Courier	12,296	16,250	3,954
70,000	Payroll / Employee Timesheets	6,255	17,500	11,245
25,000	Meeting Expense & Stenographer	172	6,250	6,078
50,000	Records Storage	6,945	12,500	5,555
120,000	Off. Supplies, Equip and Other	10,558	30,000	19,442
50,000	Temporary Labor	1,523	12,500	10,977
0	Cap Assets-Office Equipment	0	0	0
0	Cap Assets-Leasehold	0	0	0
<hr/>		<hr/>		<hr/>
<u>380,000</u>	Total Office Expense	<u>37,749</u>	<u>95,000</u>	<u>57,251</u>

**PRIM Board
Budget Detail
September 30, 2022**

Operations (continued)

<u>FY 2023 Budget</u>		<u>Year to Date</u> <u>Actual</u>	<u>Year to Date</u> <u>Budget</u>	<u>Variance</u> <u>Under (Over)</u>
<u>Computer MIS Expense</u>				
680,000	Hardware & Software	137,107	170,000	32,893
365,000	Support and Development	23,366	91,250	67,884
125,000	MIS Other/ISP& Remote Access	22,733	31,250	8,517
0	Cap Assets-Computer Equipment	3,521	0	(3,521)
0	Cap Assets-Software Development	0	0	0
<hr/>				
<u>1,170,000</u>	Total Computer & MIS	<u>186,727</u>	<u>292,500</u>	<u>105,773</u>

**PRIM Board
Budget Detail
September 30, 2022**

Operations (continued)

<u>FY 2023 Budget</u>		<u>Year to Date Actual</u>	<u>Year to Date Budget</u>	<u>Variance Under (Over)</u>
<u>Travel, Development, Dues & Subscriptions</u>				
215,000	Due Diligence Travel	23,416	53,750	30,334
132,000	Professional Development	3,187	33,000	29,813
120,000	Professional Dues and Subscrip.	28,187	30,000	1,813
<u>467,000</u>	Total Travel, Development & Dues	<u>54,790</u>	<u>116,750</u>	<u>61,960</u>
<u>Client Services</u>				
20,000	Meetings & Conferences	564	5,000	4,436
15,000	Auto Mileage & Parking	1,372	3,750	2,378
20,000	Printing	0	5,000	5,000
<u>55,000</u>	Total Client Services	<u>1,936</u>	<u>13,750</u>	<u>11,814</u>
<u>Board Elections</u>				
85,000	PRIM Board Members' Elections	0	21,250	21,250
<u>85,000</u>	Total Board Elections	<u>0</u>	<u>21,250</u>	<u>21,250</u>
<u>27,002,000</u>	Total Operations	<u>5,188,082</u>	<u>6,750,500</u>	<u>1,562,418</u>

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Appendix L

Travel Report

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PRIM BOARD
Travel Report
FY 2023

Dates	Name	Organization	Location	Due Diligence	Fiduciary Education/Professional Development
5/24-5/25/22	Tim Doyle	Hellman & Friedman	San Francisco, CA	141.68	
6/6-6/7/22	Tim Doyle	Stonepoint	New York, NY	168.08	
	Total Tim Doyle			309.76	-
9/26-10/1/22	Alyssa Fiore	Aitor, Nordic, CVC Manager Meetings	Stockholm, Sweden	4,973.37	
	Total Alyssa Fiore			4,973.37	-
9/6-9/7/22	Eliza Haynes	Thoma Bravo Advisory Board Meeting	New York, NY	286.70	
9/26-10/1/22	Eliza Haynes	Aitor, Nordic, CVC Manager Meetings	Stockholm, Sweden	4,973.37	
	Total Eliza Haynes			5,260.07	-
4/25-4/28/22	Eleni Klempner	Davidson Kempner, Sightway Two Sigma, Institutional Investor Hedge Fund Forum & 19th Hedge Fund Awards	New York, NY	108.45	108.46
	Total Eleni Klempner			108.45	108.46
6/7/2022	John LaCara	Property and Market Tour with Slate Property Group - 85 East End	New York, NY	59.25	
	Total John LaCara			59.25	-
3/28/2022	Jay Leu	North Peak and Point72 Review	New York, NY	170.10	
	Total Jay Leu			170.10	-
6/23-6/24/22	Bill Li	CKC Capital and Valent Capital	New York, NY	571.20	
6/28-6/30/22	Bill Li	World Bank Pension Investment, TRowe Price, Tabor, and DLD	Washington, DC	1,117.59	
7/13-7/15/22	Bill Li	Valent, Morgan Stanley, Investcorp-Tages, Elliott and Fir Tree	New York, NY	1,801.42	
8/24-8/25/22	Bill Li	Manager Meetings with Dragoneer Investment Group, PGIM, and Woodline Capital	San Francisco, CA	1,857.91	
	Total Bill Li			5,348.12	-
4/26-4/27/22	Liu Liu	Sycalé meeting, Institutional Investor Hedge Fund Forum & 19th Hedge Fund Awards	New York, NY		141.50
6/9/2022	Liu Liu	Jefferies Capital Intelligence Healthcare Forum	New York, NY		118.50
	Total Liu Liu			-	260.00
8/23-8/25/22	Tim Schlitzer	Site visits with Irvine Company	San Francisco, CA	2,794.63	
	Total Timothy Schlitzer			2,794.63	-
6/29-6/30/22	Joy Seth	TRowe Price, Tabor, and DLD	Baltimore, MD & New York, NY	166.90	
7/12-7/15/22	Joy Seth	Valent, Morgan Stanley, Investcorp-Tages, Elliott and Fir Tree	New York, NY	1,636.57	
9/9/2022	Joy Seth	Breakout Funds (Emerging Manager program)	Chicago, IL	607.75	
	Total Joy Seth			2,411.22	-
7/27/2022	Michael Trotsky	AQR and NAIC event	New York, NY	1,910.03	
	Total Michael Trotsky			1,910.03	-
7/17-7/20/22	Paul Shanley	OPAL Group Public Funds Summit	Newport, RI		1,609.07
	Total Paul Shanley			-	1,609.07

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Appendix M

Fiscal Year 2022 PRIT Fund GIPS Compliant Presentation

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**PENSION RESERVES INVESTMENT MANAGEMENT (“PRIM”) BOARD
PENSION RESERVES INVESTMENT TRUST (“PRIT”) TOTAL FUND
GIPS ASSET OWNER REPORT**

1-Year Period Ending	Year End	Total Asset Owner Assets (USD) (Billions)	Total Fund Assets (USD) (Billions)	Annual Performance Net	Total Core Custom Blended Benchmark Returns	Composite 3 Yr Std Dev	Total Core Custom Blended Benchmark 3 Yr Std Dev
30-Jun-22	FY22	\$92	\$92	-3.4%	-4.9%	8.9%	8.5%
30-Jun-21	FY21	\$96	\$96	29.5%	20.6%	8.8%	8.4%
30-Jun-20	FY20	\$75	\$75	2.0%	3.9%	7.7%	7.5%
30-Jun-19	FY19	\$75	\$75	5.7%	6.6%	5.8%	5.3%
30-Jun-18	FY18	\$72	\$72	9.5%	8.1%	5.5%	5.4%
30-Jun-17	FY17	\$67	\$67	12.8%	12.0%	5.3%	5.5%
30-Jun-16	FY16	\$61	\$61	1.9%	1.5%	5.9%	6.0%
30-Jun-15	FY15	\$61	\$61	3.5%	2.8%	4.6%	4.6%
30-Jun-14	FY14	\$61	\$61	17.1%	14.9%	7.7%	7.9%
30-Jun-13	FY13	\$53	\$53	12.3%	10.9%	8.6%	8.8%

PRIM claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. PRIM has been independently verified for the periods July 1, 2008 through June 30, 2022. The verification reports are available upon request.

An asset owner that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the asset owner’s policies and procedures related to total fund and composite maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on an asset owner-wide basis. Verification does not provide assurance on the accuracy of any specific performance report.

PRIT Total Fund Description: *The PRIM Board is charged with the general oversight of the PRIT Fund. The PRIM Board seeks to maximize the return on investments within acceptable levels of risk and cost for an approximately 60% funded public pension fund, by broadly diversifying its investment portfolio, capitalizing on economies of scale to achieve cost-effective operations, and gaining access to high quality, innovative investment management firms, all under the management of a professional staff and members of the PRIM Board. The PRIM Board’s overall investment performance goal is to achieve a time-weighted return that exceeds the targeted actuarial rate of return used in determining the Commonwealth of Massachusetts’ pension obligations. The target actuarial rate for FY22 was 7.0%. The total fund is compared against the Total Core Benchmark, which is custom blended benchmark that is weighted dynamically to match the actual asset class weights of the fund. Prior to April 1, 2020, some benchmark components were weighted based on target weights for the asset class. Details of the custom blended benchmark components, weights, and historical changes can be found in the tables on the final two pages of this report. The PRIT Total Fund was created September 2018 and inception on July 1, 2008.*

For purposes of complying with the GIPS standards, the “Asset Owner” is defined as Pension Reserves Investment Management Board (“PRIM”). PRIM manages the Pension Reserves Investment Trust Fund (“PRIT”), created by legislation (Chapter 661 of the Acts of 1983) to accumulate assets through investment earnings and other revenue sources in order to assist the Commonwealth in reducing its unfunded pension liability. PRIM assists local participating retirement systems to meet their pension obligations. Because the PRIT Total Fund represents 100% of the assets managed by PRIM, this presentation represents PRIM’s list of total fund and composite descriptions.

The U.S. Dollar is the currency used to express performance. Total fund net-of-fee returns are net of transaction costs and actual investment management costs (internal and external). Investment management costs include internal investment department staffing costs, actual external manager fees (both asset-based and performance-based), data valuation fees, investment research services, custodian fees, performance measurement services, consultant advisory fees, administrative fees, and the allocation of technology service and other overhead costs and expenses, such as human resources. Subadvisors have been used for the entire period shown. The PRIT Total Fund includes all individual portfolios that are combined into one aggregate portfolio. The performance of the combined portfolio reflects the overall mandate of the plan. The three-year annualized standard deviation measures the variability of the total fund’s net of fee returns over the preceding 36-month period. Total Fund and benchmark performance are presented net of foreign withholding taxes. Past performance is not indicative of future results. Policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request.

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Custom Blended Benchmark Components and Weightings as of June 30, 2022:

39.2% Global Equities:		10.1% Real Estate*:	
56.9% Total Domestic Equity:		NCREIF Property 1Q in Arrears*†	0.0%
Total Equity Hedge*:	4.9%	FTSE EPRA NAREIT Developed Index Net*	15.1%
· S&P 500	80.0%	Private Real Estate Benchmark*	84.9%
· LIBOR 1M	20.0%	· NCREIF NFI ODCE N 1QA	100.0%
Domestic Equity*:	95.1%	3.0% Timberland:	
· S&P 500‡	85.0%	NCREIF Timberland Index 1Q in Arrears†	100.0%
· Total Small/SMID Cap:	15.0%	8.4% Portfolio Completion Strategies:	
· Russell 2000 Growth Index*‡	14.6%	89.4% Total Hedge Fund*:	
· Russell 2000 Value Index*‡	15.7%	Stable Value Funds*:	61.7%
· Russell 2500 Growth Index*‡	11.8%	HFRI Credit Index*	7.2%
· Russell 2500 Index*‡	34.9%	HFRI EH: Equity Market Neutral Index*	0.1%
· Blended Total US Micro Cap*:	22.9%	HFRI ED: Distressed/Restructuring Index*	5.3%
· Russell Microcap Growth Index*‡	43.8%	HFRI Event-Driven (Total) Index (Asset Weighted)*	18.9%
· Russell Microcap Value Index*‡	25.8%	HFRI Macro: Systematic Diversified Index*	4.9%
· MSCI USA Microcap Net Index*‡	30.4%	HFRI Macro (Total) Index (Asset Weighted)*	8.9%
43.1% Total Non-US Equity:		HFRI RV: Fixed Income-Asset Backed Index*	23.9%
MSCI ACWI Ex-US IMI NET DIVS‡	100.0%	HFRI Relative Value (Total) Index (Asset Weighted)*	12.9%
14.2% Fixed Income:		HFRI Macro (Total) Index*	10.1%
Bloomberg Barclays US Aggregate Bond Index	46.7%	S&P European All Loans USD Total Return Hedged Index*	1.9%
Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Index	20.0%	HFRI RV: Multi-Strategy Index*	5.9%
Bloomberg Barclays World Govt Inflation-Linked All Maturities	6.7%	Directional Funds*:	29.6%
Bloomberg Barclays US Strips 20+ Years Index	20.0%	Russell 3000 Index*0.25*	17.8%
Bloomberg Barclays Treasury 1-3 Year Index	6.7%	HFRI EH: Technology/Healthcare Index*	7.8%
6.7% Value-Added Fixed Income*:		HFRI Equity Hedge Fundamental Value Index*	8.5%
ML Master II High Yield Constrained Index*	20.4%	HFRI ED: Distressed/Restructuring Index*	35.1%
S&P LSTA Leveraged Loan Index*	30.4%	HFRI Event-Driven (Total) Index (Asset Weighted)*	15.5%
JP Morgan Emerging Markets Bond Index Global*	12.7%	MSCI China A Onshore NET Index USD*	7.0%
JP Morgan GBI-Emerging Markets Global Diversified*	0.0%	Investment Manager Custom Benchmark*:	8.3%
3Yr Annualized Altman NYU Solomon Center Combined Defaulted Public Bond & Bank Loan*	20.5%	· ICEML 3 M LIBOR/USD	30.0%
Bivium Public VAFI Benchmark*:	0.9%	· Russell 2500 Growth Index~	70.0%
· ICE BofA Global High Yield Constrained Index*	50.0%	Total PAAMCO*:	8.7%
· JP Morgan 50P EMBI Global 50P CEMBI Broad Diversified Index**	50.0%	· HFRI Fund of Funds Composite Index*	6.3%
OCO*:	15.0%	· HFRI ED: Merger Arbitrage Index*	7.9%
· S&P LSTA US Leveraged Loan 100 Index*	20.9%	· HFRI Equity Hedge (Total) Index*	27.1%
· LIBOR 3M + 3%*	28.2%	· HFRI EH: Equity Market Neutral Index*	6.1%
· S&P LSTA Leveraged Loan Index*	20.9%	· HFRI Relative Value (Total) Index*	40.9%
· NCREIF Apartment Index 1Q in Arrears*†	5.6%	· BB Treasury 1-3 Mo Index + 250*	9.3%
· HFRI RV: Fixed Income-Asset Backed Index*	19.4%	· PAAMCO Cash*	2.4%
· JP Morgan CLOIE Total Return Index**	5.0%	10.6% Real Assets*:	
17.7% Private Equity:		NCREIF Farmland Index 1Q in Arrears*†	63.3%
7YR Annualized Russell 3000 + 3%	87.5%	Eureka Hedge ILS Advisers Insurance Linked Securities*	0.2%
7YR Annualized MSCI EUROPE IMI + 3%	12.5%	50% LIBOR 1M + 3% / 50% ML Master II HY Constrained Index*	11.9%
0.6% Overlay:		Custom Rail Car*:	4.1%
Actual Performance**	100.0%	· CRB BLS Raw Industrials Sub-Index	50.0%
0.1% Liquidating Portfolios:		· US PPI Rail Rolling Stock 2M in Arrears	50.0%
Actual Performance**	100.0%	Custom Aviation*:	15.6%
		· Aircraft Leasing Returns 1M in Arrears	50.0%
		· US PPI Aircraft Manufacturing 2M in Arrears	50.0%
		US PPI Construction Sand, Gravel, and Crushed Stone Index 1M in Arrears	5.0%

*The index is dynamically weighted monthly for all periods. The weightings are determined by BNY Mellon monthly based upon the beginning adjusted market value asset weights within each custom blended benchmark.

† The index experiences a quarter lag.

‡ The index has been customized to exclude Tobacco, Iran, Sudan, and Russia.

**The actual performance of the fund was used for this component since no index is available that offers a meaningful comparison.

Prior to April 1, 2020, all indices other than those footed with "*" are rebalanced to their static weight monthly. Beginning April 1, 2020, these indices are dynamically weighted monthly. The weightings are determined by BNY Mellon monthly based upon the beginning adjusted market value asset weights within each custom blended benchmark.

Historical Custom Blended Benchmark Changes:

Start Date	End Date	Benchmark Name	Start Date	End Date	Benchmark Name
Total Core Benchmark			Real Estate		
July 2008	July 2009	Russell 3000 Index	July 2008	June 2009	FTSE EPRA Nareit Developed USD Index
July 2008	July 2009	MSCI EAFE Net Dividend Index	July 2008	April 2012	FTSE Nareit All Equity REITs Perf Only
July 2008	July 2009	MSCI Emerging Markets Net Dividend Index	July 2008	April 2012	FTSE EPRA Nareit Developed ex US Index
Global Equities			July 2008		NCREIF Property IQ Lag
August 2009	April 2010	MSCI All Country World Net Index	May 2012		FTSE EPRA NA REIT Developed Index Net
May 2010	December 2010	MSCI All Country World Investable Market Net Index	<i>Private Real Estate Benchmark</i>		
January 2011	October 2011	MSCI All Country World IMI Net Dividends [‡]	January 2022		NCREIF NFI ODCE N 1QA
November 2011	June 2014	S&P 500 - Total Return Index	Timberland		
November 2011	August 2014	MSCI World ex US IMI Net Dividends [‡]	July 2008	December 2015	Upper Global Natural Resource Index
November 2011	August 2014	MSCI Emerging Markets IMI Net Dividends [‡]	September 2008	December 2015	PE Natural Resource
November 2011	June 2016	Russell 2500 Index	July 2008		NCREIF Timberland Index IQ In Arrears
Total Equity Hedge			Portfolio Completion Strategies		
March 2019		S&P 500 - Total Return Index	July 2008	December 2009	ICE BofA ML US 3 Month Treasury Bill Index GOO1 + 4%
March 2019		LIBOR 1M	January 2010	February 2011	HFRI Fund of Funds Composite Index
Total Domestic Equity			March 2011	December 2011	HFRI Fund of Funds Composite Index (Flash Update Only)
July 2014	June 2016	Russell 2000 Growth Index	Total Hedge Fund		
July 2014	June 2016	Russell 2000 Value Index	Stable Value Funds		
July 2014	June 2016	Russell 2500 Growth Index	July 2017		HFRI Relative Value (Total) Index (Asset Weighted)
July 2014	June 2016	S&P 500 - Total Return Index	July 2017		HFRI ED: Distressed/Restructuring Index
July 2016		S&P 500 [‡]	July 2017		HFRI EH: Equity Market Neutral Index
Total Small/SMID Cap			July 2017		HFRI Macro-Systematic Diversified Index
July 2016		FTSE Russell Custom PRIM 2000 Growth Index	July 2017		HFRI RV: Fixed Income-Asset Backed Index
July 2016		FTSE Russell Custom PRIM 2000 Value Index	July 2017		HFRI Credit Index
July 2016		FTSE Russell Custom PRIM 2500 Growth Index	July 2017	January 2022	HFRI EH: Multi-Strategy Index
July 2016		FTSE Russell Custom PRIM 2500 Index	July 2017		HFRI Macro (Total) Index (Asset Weighted)
April 2019		FTSE Russell Microcap Growth Index [‡]	July 2017	April 2022	HFRI Equity Hedge (Total) Index (Asset Weighted)
April 2019		FTSE Russell Microcap Value Index [‡]	July 2017		HFRI Event-Driven (Total) Index (Asset Weighted)
May 2019		MSCI USA Microcap Net Index [‡]	October 2019		S&P European All Loans USD Total Return Hedged Index
Total International Equity			December 2019	December 2020	HFRI RV: Fi-Convertible Arbitrage Index
September 2014	July 2021	MSCI WORLD EX-US IMI Net DIVS [‡]	August 2019		HFRI RV: Multi-Strategy Index
September 2014	July 2021	MSCI EAFE Net DIVS [‡]	September 2018		HFRI Macro (Total) Index
September 2014	July 2021	EAFE SMALL CAP Net DIVS [‡]	Directional Funds		
Total Emerging Markets Equity			July 2017		Russell 3000 Index*0.25
September 2014	March 2020	MSCI EM IMI Net DIVS [‡]	July 2017		HFRI ED: Distressed/Restructuring Index
September 2014	July 2021	MSCI EM Net DIVS	September 2018		HFRI EH: Technology/Healthcare Index
September 2014	July 2021	MSCI EM Small Cap Net DIVS [‡]	September 2018		HFRI Equity Hedge Fundamental Value Index
September 2014	October 2020	MSCI FM 15% Country Capped Index Net DIVS [‡]	July 2017		HFRI Event-Driven (Total) Index (Asset Weighted)
September 2014	October 2020	MSCI FM 15% Country Capped Index Net DIVS [‡]	August 2021		MSCI China A Onshore NET Index USD
Total Non-US Equity			June 2022		ICEML3 M LIBOR/USD
July 2021		MSCI ACWI Ex-US/IMI NET DIVS [‡]	June 2022		FTSE Russell Custom PRIM 2500 Growth Index
Fixed Income			Total PAAMCO		
July 2008	July 2009	Bloomberg Barclays World Govt Inflation-Linked All Maturities	January 2012		HFRI Fund of Funds Composite Index
July 2008	July 2009	Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Index	April 2019		HFRI ED: Merger Arbitrage Index
July 2008		Bloomberg Barclays US Aggregate Bond Index	April 2019	April 2020	HFRI ED: Distressed/Restructuring Index
August 2010		Bloomberg Barclays World Govt Inflation-Linked All Maturities	April 2019		HFRI Equity Hedge (Total) Index
August 2010		Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Index	April 2019		HFRI EH: Equity Market Neutral Index
March 2014		Bloomberg Barclays US Strips 20+ Years Index	April 2019	October 2019	HFRI Macro (Total) Index
December 2019		Bloomberg Barclays Treasury 1-3 Year Index	April 2019		HFRI Relative Value (Total) Index
Value-Added Fixed Income			April 2019	July 2020	Societe Generale Multi Alternative Risk Premia Net Index
January 2010	June 2017	Altman Kuehne Combined Bank Loan and Public Bond Index	April 2019	January 2020	PAAMCO Tactical Index (LD12TRU)
July 2008		ML Master II High Yield Constrained Index	April 2019		BB Treasury 1-3 Mo Index + 250
July 2008		JP Morgan Emerging Markets Bond Index Global	April 2019		PAAMCO Cash
July 2008		S&P LSTA Leveraged Loan Index	Total Risk Premia		
May 2012		JP Morgan CBI-Emerging Markets Global Diversified 3yr Annualized Altman NYU Solomon Center Combined Defaulted Public Bond & Bank Loan	January 2015	August 2019	LIBOR 1M + 3%
July 2017		<i>Bvium Public VAFI Benchmark</i>	Real Assets		
June 2022		ICE BofA Global High Yield Constrained Index	April 2017		NCREIF Farmland Index IQ In Arrears
June 2022		JP Morgan 50P EMBI Global 50P CEMBI Broad Diversified Index [‡]	April 2016		Eureka Hedge ILS Advisers Insurance Linked Securities
OCO			June 2016		50% LIBOR 1M + 3% / 50% ML Master II HY Constrained Index
December 2017		S&P LSTA US Leveraged Loan 100 Index	Custom Roll Car		
March 2018		NCREIF Apartment Index IQ In Arrears	May 2019		CRB BLS Raw Industrials Sub-Index
December 2018		LIBOR 3M + 3%	May 2019		US PPI Rail Rolling Stock 2M In Arrears
May 2019		S&P LSTA Leveraged Loan Index	Custom Aviation		
February 2020		HFRI RV: Fixed Income-Asset Backed	May 2019		Aircraft Leasing Returns 1M In Arrears
December 2021		JP Morgan CLOIE Total Return Index [‡]	May 2019		US PPI Aircraft Manufacturing 2M In Arrears
Overlay			September 2019		US PPI Construction Sand, Gravel, and Crushed Stone Index 1M In Arrears
April 2020		Actual Performance	Total Equity Hedge		
Liquidating Portfolios			July 2017	February 2019	S&P 500 - Total Return Index
April 2020		Actual Performance	July 2017	February 2019	LIBOR
			Portable Alpha		
			July 2008	July 2009	Russell 3000 Index
			August 2009	December 2009	ICE BofA ML 3 Month LIBOR Index (LUS3)/USD + 3%
			January 2010	February 2011	HFRI Fund of Funds Composite Index
			March 2011	April 2011	HFRI Fund of Funds Composite Index (Flash Update Only)

‡ The index has been customized to exclude Tobacco, Iran, Sudan, and Russia.

Benchmark Descriptions:

Global Equities:

- **S&P 500:** The S&P 500 is an American stock market index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ.
- **LIBOR:** LIBOR is a benchmark rate that represents the interest rate at which banks offer to lend funds to one another in the international interbank market for short-term loans. LIBOR is an average value of the interest-rate which is calculated from estimates submitted by the leading global banks on a daily basis.
- **FTSE Russell 2000 Growth Index:** The Russell 2000 Growth Index is based on roughly 2,000 small-cap companies located in the United States that exhibit growth properties.
- **FTSE Russell 2000 Value Index:** The Russell 2000 Value Index is based on roughly 2,000 small-cap companies located in the United States that exhibit value properties.
- **FTSE Russell 2500 Growth Index:** The Russell 2500 Growth Index is designed to measure the performance of those Russell 2500 companies with higher price-to-book ratios and higher forecasted growth values.
- **FTSE Russell 2500 Index:** The Russell 2500 Index is a broad index, featuring 2,500 stocks that cover the small- and mid-cap market capitalizations. The Russell 2500 is a market cap-weighted index that includes the smallest 2,500 companies covered in the Russell 3000 universe of United States-based listed equities.
- **FTSE Russell Microcap Indexes:** measures the performance of the microcap segment of the U.S. equity market. It makes up less than 3% of the U.S. equity market. It includes 1,000 of the smallest securities in the Russell 2000 Index based on a combination of their market cap and current index membership and it also includes up to the next 1,000 stocks.
- **MSCI USA Microcap Net Index:** The MSCI USA Microcap Index is designed to measure the performance of the microcap segment of the US equity market. With 1,004 constituents, the index represents approximately 1% of the free float-adjusted market capitalization in the US.
- **MSCI ACWI Ex-US IMI NET DIVS:** The MSCI ACWI ex USA Investable Market Index (IMI) captures large, mid, and small cap representation across 22 of 23 Developed Markets (DM) countries (excluding the United States) and 24 Emerging Markets (EM) countries*. With 6,670 constituents, the index covers approximately 99% of the global equity opportunity set outside the US.

Fixed Income:

- **Barclays Capital US Aggregate Bond Index:** The Barclays Capital US Aggregate Bond Index is a broad bond index covering most US traded bonds and some foreign bonds traded in the US. The index consists of approximately 17,000 bonds.
- **Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Index:** This index measures the performance of the US Treasury Inflation Protected Securities (TIPS) market. Federal Reserve holdings of US TIPS are not index eligible and are excluded from the face amount outstanding of each bond in the index.
- **Bloomberg Barclays World Govt Inflation-Linked All Maturities:** This index measures the performance of investment grade, government inflation-linked debt from 12 different developed market countries.
- **Barclays Capital US Treasury STRIPS 20+ Yr Index:** This index measures the investment return of Treasury STRIPS with maturities of 20+ years.
- **Bloomberg Barclay's Treasury 1-3 Year Index:** This index measures the performance of US Treasury securities with maturities between 1 and up to 3 years.

Value-Added Fixed Income:

- **Merrill Lynch Master II High Yield Constrained Index:** The index is a market value-weighted index of all domestic and yankee high-yield bonds, including deferred interest bonds and payment-in-kind securities.
- **S&P LSTA Leveraged Loan Index:** The index tracks the current outstanding balance and spread over LIBOR for fully funded term loans. The facilities included represent a broad cross section of leveraged loans syndicated in the U.S., including dollar-denominated loans to overseas issuers.
- **JP Morgan EMBI Global Index:** The Index tracks total returns for traded external debt instruments in the emerging markets. The index includes U.S. dollar-denominated Brady Bonds, loans, and Eurobonds with an outstanding face value of at least \$500 million.
- **JP Morgan GBI-EM Global Diversified Index:** The Index tracks total returns for traded external debt instruments in the emerging markets. In addition, it limits the weights of those index countries with larger debt stocks by only including a specified portion of these countries eligible current face amounts of debt outstanding.
- **3Yr Annualized Altman NYU Solomon Center Combined Defaulted Public Bond & Bank Loan Index:** This index includes defaulted bond and bank loan prices on a monthly basis from the default month until last price available (usually emergence from Chapter 11 or liquidation) from 1987 to present. Defaulted bank loan prices on a monthly basis available from 1996 to the present on over 750 bank loan facilities.
- **NCREIF Apartment Index:** This is a sub-index of the NCREIF Property Index, focused specifically on a large pool of apartments acquired in the private market for investment purposes only.
- **S&P LSTA Leveraged Loan 100 Index:** The S&P/LSTA U.S. Leveraged Loan 100 Index is designed to reflect the performance of the largest facilities in the leveraged loan market.
- **HFRI Indices –** Broadly constructed indices designed to capture the breadth of hedge fund performance trends across all strategies and regions. Strategy-based indices are used as a comparison to investments made in similarly managed hedge funds.
- **Bivium Public VAFI Benchmark:** Comprised of the ICE BofA Global High Yield Constrained Index and JP Morgan 50P EMBI Global 50P CEMBI Broad Diversified Index.
- **JP Morgan CLOIE Total Return Index:** CLOIE offers total returns and analytics based on observable pricings of a representative pool of bonds following a stated methodology and is published daily. The index holistically captures the USD-denominated CLO market, representing over 3,000 instruments at a total par value of US \$236.1 billion.

Private Equity:

- **Russell 3000:** The Russell 3000 Index is a capitalization-weighted stock market index, maintained by FTSE Russell, that seeks to be a benchmark of the entire U.S. stock market.
- **MSCI Europe IMI:** The MSCI Europe Investable Market Index (IMI) captures large, mid, and small cap representation across 15 Developed Markets countries in Europe.

Real Estate:

- **NCREIF Property Index:** The NCREIF Property Index (NPI) is a quarterly, unleveraged composite total return for private commercial real estate properties held for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors and held in a fiduciary environment.
- **FTSE EPRA NAREIT Developed Net Total Return Index:** The FTSE EPRA NAREIT Global Real Estate Index Series is designed to represent general trends in eligible real estate equities worldwide. Relevant activities are defined as the ownership, disposal, and development of income-producing real estate. The index series now covers Global, Developed and Emerging indices, as well the UK's AIM market.

- **NCREIF NFI ODCE N 1QA:** An index of investment returns reporting on both a historical and current basis the results of 36 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s. The NFI-ODCE Index is capitalization-weighted and is reported gross of fees. Measurement is time weighted.

Timberland:

- **NCREIF Timber Index:** The NCREIF Timberland Index is a quarterly time series composite return measure of investment performance of a large pool of individual timber properties acquired in the private market for investment purposes only. All properties in the Timberland Index have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment.

Portfolio Completion Strategies:

- **HFRI Indices** – Broadly constructed indices designed to capture the breadth of hedge fund performance trends across all strategies and regions. Strategy-based indices are used as a comparison to investments made in similarly managed hedge funds.
- **SG Multi Alternative Risk Premia Net Index:** The SG Multi Alternative Risk Premia Index represents risk premia managers who employ investment programs diversified across multiple asset classes while utilizing multiple risk premia factors. These managers trade multiple asset classes such as equities, fixed income, currencies, and in many cases commodities, and aim to capture a diversity of discrete risk premia, including most prevalently value, carry, and momentum.
- **PAAMCO Tactical Index:** The Prisma Apex Tactical strategy provides access to concentrated investments in carefully selected, strictly defined, and often hard-to-access, niche and/or tactical themes, with a particular focus on opportunities arising from market dislocations, regulatory shifts, capital imbalances and/or policy changes where an attractive risk reward has been created. Investments are sourced from across our global platform (both internal and external channels) and are diversified across geographies, sectors, and asset class.
- **PAAMCO Cash:** The PAAMCO Cash allocation represents a cash return for the liquidating portion of the PAAMCO portfolio.
- **NCREIF Farmland Index:** The NCREIF Farmland Index is a quarterly time series composite return measure of investment performance of a large pool of individual farmland properties acquired in the private market for investment purposes only. All properties in the Farmland Index have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment.
- **Eurekahedge ILS Advisers Insurance Linked Securities:** The Eurekahedge ILS Advisers Index tracks the performance of participating Insurance Linked Investment funds. It is the first benchmark that allows a comparison between different insurance-linked securities fund managers in the insurance-linked securities, reinsurance and catastrophe bond investment space.
- **CRB BLS Commodity Price Indexes:** The commodity BLS Commodity Price Indexes measure price movements of 22 basic commodities whose markets are among the first to be influenced by changes in economic conditions.
- **US Producer Price Indexes:** The Producer Price Index (PPI) program measures the average change over time in the selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services.
- **Ascend Aircraft Leasing Returns Index:** The Ascend Leasing Returns Index model estimates monthly returns from equity investment in commercial aircraft leasing through detailed analysis of the Flight Global Fleets Analyser and Flight Ascend Values databases.
- **S&P European All Loans USD Total Return Hedged Index:** This index is designed to measure the total return on European senior loans with a hedge to USD.
- **MSCI China A Onshore NET Index USD:** The MSCI China Net Total Return Index measures the performance of global Chinese companies in a net total return form (i.e. reinvestment of net dividend payout into the index portfolio) denominated in USD. market.
- **ICEML 3 M LIBOR/USD:** The 3-month US Dollar (USD) LIBOR interest rate is the average interest rate at which a selection of banks in London are prepared to lend to one another in American dollars with a maturity of 3 months. Alongside the 3-month US Dollar (USD) LIBOR interest rate we also have a large number of other LIBOR interest rates for other maturities and/or in other currencies.
- **FTSE Russell 2500 Growth Index:** The Russell 2500 Growth Index is designed to measure the performance of those Russell 2500 companies with higher price-to-book ratios and higher forecasted growth values.

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Appendix N

KPMG 2022 Audit Results Report

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Pension Reserves Investment Management Board

Presentation of audit results for the year ended June 30, 2022

—

November 17, 2022

We continually assess factors that could impact our independence, considering non-audit services performed and relationships between our firm and the PRIM Board and persons in a financial oversight role at the PRIM Board that may reasonably be thought to bear on independence. Consistent with prior years, in connection with our audits of the PRIM Board and the PRIT Fund, KPMG and relevant KPMG professionals have complied with relevant ethical requirements regarding independence, as that term is defined by the professional standards. We are independent with respect to all professional standards as of the date of our report.

Executive summary

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**Required
Administration &
Audit Committee
communications**

Financial statement audit results, required communications and other matters

		Response																	
Audit Results	Outstanding matters	<ul style="list-style-type: none"> • Legal confirmations: Pending receipt of legal confirmations to be received close to the expected sign off date, as required by our audit process. • Approval/acceptance of the financial statements by the PRIM Board • Evaluate impact of any subsequent events • Obtain management representation letters • Completion 																	
	Significant unusual transactions	No significant unusual transactions identified during the audit.																	
	Uncorrected audit differences	<p>Consistent with prior years, we have quantified the unrecorded amount of unrealized appreciation related to fixed income, private equity, real estate and timberland investments as of June 30, 2022. This difference arises as these investments are recorded using lagged fair values (as of March 31, 2022), in accordance with the PRIM Board’s historical financial reporting policy.</p> <p>The impact on the PRIT Fund financial statements to record this difference would be as follows (in 000's)</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Timberland investments</td> <td style="text-align: right; width: 20%;">\$2,632</td> <td style="width: 20%;"></td> </tr> <tr> <td>Net change in unrealized depreciation on investments and foreign currency translations</td> <td style="text-align: right;">\$986,554</td> <td></td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td style="padding-left: 40px;">Private equity investments</td> <td></td> <td style="text-align: right;">\$920,398</td> </tr> <tr> <td style="padding-left: 40px;">Fixed income investments</td> <td></td> <td style="text-align: right;">\$26,248</td> </tr> <tr> <td style="padding-left: 40px;">Real estate investments</td> <td></td> <td style="text-align: right;">\$42,540</td> </tr> </table>	Timberland investments	\$2,632		Net change in unrealized depreciation on investments and foreign currency translations	\$986,554					Private equity investments		\$920,398	Fixed income investments		\$26,248	Real estate investments	
Timberland investments	\$2,632																		
Net change in unrealized depreciation on investments and foreign currency translations	\$986,554																		
Private equity investments		\$920,398																	
Fixed income investments		\$26,248																	
Real estate investments		\$42,540																	

Financial statement audit results, required communications and other matters (continued)

Audit Results	Response	
	Corrected audit differences	PRIT Fund: Disclosure entry reclassifying the leveling of various Fixed income, PCS – Fixed Income, Equity, PCS – Equity, and PCS – Securities sold short from Level 1 and 2 to Level 3 within the Notes to the Financial Statements. Amounts reclassified (in 000's) total \$18,289, \$364,875, \$1,023, \$11,205, and (27,479), respectively.
	Financial presentation and disclosure omissions	No matters to communicate.
	Non-GAAP policies and practices	<ul style="list-style-type: none"> • PRIT Fund: Management records the investment valuation results for certain investments on a quarter lag, due to the timing of receipt of financial information. See uncorrected audit differences above. • PRIT Fund: Management records net derivative activity in investments, instead of gross derivative activity
	Auditors' report	We expect to issue an unmodified opinion on the financial statements
	Changes to our planned risk assessment and audit strategy	There were no significant changes to our planned risk assessment and audit strategy presented to you on May 5, 2022.
	Significant accounting policies and practices	We annually discuss the acceptability and quality of the PRIM Board and the PRIT Fund's accounting policies. Significant policies are outlined in note 2 to the financial statements.
	Significant accounting estimates	Accounting estimates are an integral part of the financial statements. We have evaluated the key factors and assumptions used to develop management's estimates (such as the valuation of alternative investments) and found them to be reasonable in relation to the financial statements taken as a whole. Our assessment of the risks associated with valuation estimates has not changed significantly from the prior year, as there have been no modifications in the accounting judgments made by management.

Summary

Financial statement audit results, required communications and other matters (continued)

		Response
Audit Results	Related parties	No significant findings or issues related to related party transactions were identified during the audit.
	Going concern	No matters to report.
	Subsequent events	None to report.
	Illegal acts or fraud	No actual or suspected fraud involving management, employees with significant roles in internal control, or where fraud results in a material misstatement in the financial statements were identified during the audit.
	Noncompliance with laws and regulations	No matters to report.
	Significant difficulties encountered during the audit	No matters to report.
	Significant findings or issues discussed, or the subject of correspondence, with management	No matters to report.
	Management's consultation with other accountants	No matters to report.
	Difficult or contentious matters for which the auditor consulted	No matters to report.
	Disagreements with management	No matters to report.
	Other significant matters	No matters to report.
	Independence	See slide 13.

Audit areas of emphasis

Area	Area of emphasis
PRIM Board	<ul style="list-style-type: none"> • Recalculated a sample of management and performance fees • Reviewed other operating results
PRIT Fund	<ul style="list-style-type: none"> • Investments are measured at fair value. Most of the portfolio is comprised of separate accounts with marketable securities or funds holding marketable securities. The PRIT Fund utilizes net asset value (NAV), which is reviewed by management, as a practical expedient to estimate fair value of its alternative investments that are held through commingled funds and limited partnerships. During our audit we: <ul style="list-style-type: none"> - Assessed the design and implementation of custodial controls over directly held marketable investments and management’s user controls. - Performed appropriate procedures to test the relevant assertions (e.g., valuation and existence) of the assets in the investment portfolio, as discussed on the next slide.
Other	<ul style="list-style-type: none"> • Reviewed conformity of presentation and disclosure with GASB standards.
Significant risks	<ul style="list-style-type: none"> • Fraud Risk: Management override of controls – this is an inherent risk in all entities as management is in a position to perpetrate fraud because of management’s ability to manipulate accounting records and prepare fraudulent financial statements by overriding controls that otherwise appear to be operating effectively. Although the level of risk of management override of controls will vary from entity to entity, the risk nevertheless is present in all entities. • In response, the audit team has: <ul style="list-style-type: none"> - Assessed management’s design and implementation of controls over journal entries and post-closing adjustments. - Assessed the appropriateness of changes compared to prior year to the methods and underlying assumptions used to prepare accounting estimates. - Performed risk assessment procedures to determine existence of any high-risk entries. - Performed procedures to assess reasonableness of material manual post-close adjustments - Performed procedures over the completeness, existence, accuracy, and valuation of the investment portfolio, which includes benchmarking comparisons for alternative investments and pricing marketable securities using independence third party vendors.

Audit areas of emphasis – investments

Area	Procedures performed
Securities	<ul style="list-style-type: none"> • Reviewed the process for holding and valuing marketable securities, including reviewing the BNYM Type II SOC 1 report, as well as relevant user controls at the PRIM Board • Independently priced the vast majority of marketable securities using third party vendors
Private Equity	<ul style="list-style-type: none"> • Reviewed process in place over valuation and existence of private equity investments • Confirmed a sample of private equity investments and compared to the PRIT Fund's valuation • Reviewed a sample of December 31, 2021 audited financial statements and performed a rollforward of the NAV to June 30, 2022; tested the reasonableness of private equity investment performance
Portfolio Completion Strategies (PCS)	<ul style="list-style-type: none"> • Reviewed processes in place over valuation and existence of PCS funds and PCS investments • Independently priced the securities held within the Managed Accounts and PCS funds (Boston Patriot Funds) • Confirmed existence of a sample of PCS investment funds and compared to the PRIT Fund valuation • Reviewed selected December 31, 2021 audited financial statements and performed a rollforward of the NAV to June 30, 2022; tested the reasonableness of PCS investment fund performance
Real Estate	<ul style="list-style-type: none"> • Reviewed processes in place over valuation and existence of real estate investments • Tested a sample of real estate valuation statements to the PRIT Fund's records • Reviewed December 31, 2021 audited financial statements of the real estate portfolios and performed a rollforward to the valuation at June 30, 2022, including testing the reasonableness of a sample of real estate properties' performance
Timberland	<ul style="list-style-type: none"> • Reviewed processes in place over valuation and existence of timberland investments • Tested a sample of timberland valuation statements to the PRIT Fund records • Reviewed selected December 31, 2021 audited financial statements and performed a rollforward to the value at June 30, 2022; tested the reasonableness of timberland investment performance

Agreed-upon procedures

Agreed-upon procedures

Results (For the year ended June 30, 2022)

Procurements

- The PRIM Board has controls related to the selection of third parties to provide investment management, investment advisory, custody and recordkeeping, auditing, and other professional services related to the management of the PRIM Board and the PRIT Fund.
- These controls are in place to ensure the PRIM Board's procurement process of professional services is open, competitive, objective, and designed to ensure that the Trustees have access to a broad array of the highest quality service providers.
- KPMG performed agreed-upon procedures on these procurement controls solely to assist specified parties in evaluating PRIM Board's procurement process.
- No findings noted as a result of KPMG's procedures performed.

Benchmarking

- KPMG performed agreed-upon procedures on the Performance Measurement Report as of June 30, 2022 that is prepared by BNY Mellon (BNYM).
- KPMG inquired of BNYM about the nature of the differences identified in Section III, IV, and V. BNYM informed us that the majority of the differences related to the benchmark indices which were revised subsequent to the date of the Performance Measurement Presentation used for testing. These changes were recorded retroactively by BNYM and differ from the data used for the Performance Measurement Presentation. We did not perform any procedures over these index changes. BNYM stated that effective January 1, 2012, the PRIM Board's policy is to update certain asset class benchmarks for any subsequent revisions reported by the benchmark data vendors. These indices are components of the Implementation, Total Core, and Net-of-Fees Adjusted Policy benchmarks; therefore, these benchmarks are subject to the same revisions that the indices themselves are subject to.
- KPMG determined that this revision impacted the benchmark returns for each period identified in our report. BNYM noted that this revision will be captured in the extended period returns presented in the Performance Measurement Presentation going forward; therefore no adjustment is considered necessary as BNYM followed policy and revised the benchmarks for prospective reporting upon receiving the revision reported by the benchmark data vendors.

**Material written
communications
between KPMG
and management**

Written communications

Material written communications

- Draft audit reports (Appendix A)
- Draft reports on internal control over financial reporting in accordance with *Government Auditing Standards* (Appendix B)
- Draft benchmarking agreed-upon procedures report (Appendix C)
- Draft procurement process agreed-upon procedures report (Appendix D)
- Draft management representation letters – audits, benchmarking agreed-upon procedures report, and procurement process agreed-upon procedures report (on file with management)

Independence

Independence communications

We continually assess factors that could impact our independence, considering non-audit services performed and relationships between our firm and the PRIM Board and persons in a financial oversight role at the PRIM Board that may reasonably be thought to bear on independence. Consistent with prior years, in connection with our audits of the PRIM Board and the PRIT Fund, KPMG and relevant KPMG professionals have complied with relevant ethical requirements regarding independence, as that term is defined by the professional standards. We are independent with respect to all professional standards as of the date of our report.

Questions?

For additional information and audit committee resources, including National Audit Committee Peer Exchange series, a Quarterly webcast, and suggested publications, visit KPMG's Audit Committee Institute (ACI) at www.kpmg.com/ACI

Please visit our [Coronavirus Resource Center](https://portal.us.kworld.kpmg.com/scripts/index.aspx/crc/pages/home)
(<https://portal.us.kworld.kpmg.com/scripts/index.aspx/crc/pages/home>)

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Appendix A

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Financial Statements and Required Supplementary and
Other Supplementary Information

June 30, 2022 and 2021

(With Independent Auditors' Report Thereon)

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

June 30, 2022 and 2021

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Independent Auditors' Report

The Administration and Audit Committee and Trustees,
Pension Reserves Investment Management Board:

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the PRIT Fund's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the pooled net position of the PRIT Fund as of June 30, 2022 and 2021, and the changes in its pooled net position for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the PRIT Fund and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the PRIT Fund's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions,

misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the PRIT Fund's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the PRIT Fund's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit for the year ended June 30, 2022 was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the PRIT Fund's basic financial statements for the year ended June 30, 2022. The schedule of pooled net position – capital fund and cash fund and schedule of changes in pooled net position – capital fund and cash fund for the year ended June 30, 2022 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements for the year ended June 30, 2022 and certain

additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2022.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 1, 2022 on our consideration of the PRIT Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the PRIT Fund's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIT Fund's internal control over financial reporting and compliance.

[(signed) KPMG LLP]

Boston, Massachusetts
December 1, 2022

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

This section presents management's discussion and analysis of the Pension Reserves Investment Trust Fund's (the PRIT Fund's) financial performance for the fiscal years ended June 30, 2022 and 2021 and should be read in conjunction with the financial statements, which follow this section.

The PRIT Fund is a pooled investment fund, created in 1983 through Massachusetts legislation, that invests the assets of the State Teachers' and State Employees' Retirement Systems and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund, as well as the assets of the State Retiree Benefits Trust (SRBT) Fund.

The investment return percentages reported in management's discussion and analysis are presented gross of management fees.

Overview of the Financial Statements

The financial statements include the statements of pooled net position and the statements of changes in pooled net position. They present the financial position of the PRIT Fund as of June 30, 2022 and 2021 and its financial activities for the years then ended. The notes to the financial statements provide further information that is essential to a full understanding of the financial statements. The notes describe the significant accounting policies of the PRIT Fund and provide detailed disclosures on certain account balances. The supplementary schedules of pooled net position and changes in pooled net position separately display the balances and activities of the Capital Fund and Cash Fund of the PRIT Fund.

The financial statements of the PRIT Fund are reported using the economic resources measurement focus and the accrual basis of accounting. They are prepared in conformity with U.S. generally accepted accounting principles, as promulgated by the Governmental Accounting Standards Board (GASB).

Financial Highlights

Fiscal Year 2022

- The net position of the PRIT Fund Decreased \$3.3 billion during the year ended June 30, 2022. Total net position was \$92.4 billion at June 30, 2022, compared to \$95.7 billion at June 30, 2021.
- Net investment loss for fiscal year 2022 was \$3.2 billion, compared to net investment income of \$21.9 billion for the prior fiscal year. The PRIT Fund returned -2.95%, gross of fees, in fiscal year 2022, compared to 29.91% in fiscal year 2021.
- Contributions to the PRIT Fund totaled \$4.3 billion during the year ended June 30, 2022, compared to \$2.9 billion during the year ended June 30, 2021.
- Redemptions from the PRIT Fund totaled \$4.4 billion during the year ended June 30, 2022, compared to \$4.1 billion during the year ended June 30, 2021.

Fiscal Year 2021

- The net position of the PRIT Fund increased \$20.7 billion during the year ended June 30, 2021. Total net position was \$95.7 billion at June 30, 2021, compared to \$75.0 billion at June 30, 2020.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

- Net investment income for fiscal year 2021 was \$21.9 billion, compared to net investment income of \$1.4 billion for the prior fiscal year. The PRIT Fund returned 29.91%, gross of fees, in fiscal year 2021, compared to 2.38% in fiscal year 2020.
- Contributions to the PRIT Fund totaled \$2.9 billion during the year ended June 30, 2021, compared to \$3.0 billion during the year ended June 30, 2020.
- Redemptions from the PRIT Fund totaled \$4.1 billion during the year ended June 30, 2021, compared to \$4.3 billion during the year ended June 30, 2020.

Condensed Financial Information

Summary balances and activities of the PRIT Fund as of and for the years ended June 30, 2022, 2021, and 2020 are presented below:

	2022	June 30 2021	2020
	(Dollars in thousands)		
Summary of pooled net position:			
Assets:			
Investments	\$ 96,805,918	99,813,545	79,568,987
Cash	254,404	219,795	177,151
Securities lending collateral	121,946	201,581	475,937
Receivables and other assets	1,494,813	2,169,161	1,397,891
Total assets	98,677,081	102,404,082	81,619,966
Liabilities:			
Other liabilities	5,258,318	6,202,728	5,876,067
Securities lending obligations	872,820	451,560	725,946
Management fees payable to PRIM	116,888	50,949	32,194
Total liabilities	6,248,026	6,705,237	6,634,207
Net position held in trust for pool participants	\$ 92,429,055	95,698,845	74,985,759

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

	June 30		
	2022	2021	2020
	(Dollars in thousands)		
Summary of changes in pooled net position:			
Additions:			
Contributions	\$ 4,342,091	2,910,244	3,023,314
Net investment (loss) income	(3,239,745)	21,944,914	1,448,873
Total additions	1,102,346	24,855,158	4,472,187
Deductions:			
Redemptions	4,372,136	4,142,072	4,322,066
Change in pooled net position	(3,269,790)	20,713,086	150,121
Net position held in trust for pool participants:			
Balance, beginning of year	95,698,845	74,985,759	74,835,638
Balance, end of year	\$ 92,429,055	95,698,845	74,985,759

The PRIT Fund Performance during the year ended June 30, 2022

The PRIT Fund began fiscal year 2022 with net position of \$95.7 billion and ended the fiscal year with a net position of \$92.4 billion, representing a 3.42% decrease. Net investment loss for the year ended June 30, 2022 was \$3.2 billion, which when added to net participant redemptions (contributions less redemptions) of \$30.0 million, resulted in an overall decrease in net position of \$3.3 billion.

For the year ended June 30, 2022, the PRIT Fund returned -2.95% gross of fees, outperforming its benchmark of -4.90% by 195 basis points. The benchmark provides a measure of how well the PRIT Fund has implemented its asset allocation plan.

The asset classes of the PRIT Fund and related investment returns, gross of fees, for the year ended June 30, 2022 are as follows: Global Equity -16.14%; Core Fixed Income -11.46%; Value-Added Fixed Income -3.04%; Private Equity 27.29%; Real Estate 25.48%; Timberland 11.37%; Portfolio Completion Strategies -0.80%; and Overlay -10.68%.

The PRIT Fund outperformed its benchmarks for the fiscal year ended June 30, 2022 and over the three-year, five-year, and ten-year periods and has returned an average of 9.37%, gross of fees, annually since January 1, 1985. According to the Trust Universe Comparison Service (TUCS) for Public Pension Funds, a widely accepted peer ranking of public pension funds performance, the PRIT Fund ranked in the top quartile of public pension plans with net position in excess of \$25 billion for the ten-year period ended June 30, 2022.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

The PRIT Fund Performance during the year ended June 30, 2021

The PRIT Fund began fiscal year 2021 with net position of \$75.0 billion and ended the fiscal year with a net position of \$95.7 billion, representing a 27.62% increase. Net investment income for the year ended June 30, 2021 was \$21.9 billion, which when added to net participant redemptions (contributions less redemptions) of \$1.2 billion, resulted in an overall increase in net position of \$20.7 billion.

For the year ended June 30, 2021, the PRIT Fund returned 29.91% gross of fees, outperforming its benchmark of 20.58% by 933 basis points. The benchmark provides a measure of how well the PRIT Fund has implemented its asset allocation plan.

The asset classes of the PRIT Fund and related investment returns, gross of fees, for the year ended June 30, 2021 are as follows: Global Equity 42.45%; Core Fixed Income -0.76%; Value-Added Fixed Income 18.47%; Private Equity 72.67%; Real Estate 17.03%; Timberland 7.99%; Portfolio Completion Strategies 15.57%; and Overlay 17.27%.

Other Information

This financial report is designed to provide a general overview of the PRIT Fund's financial results. Additional information can be found on the PRIM Board's website at www.mapension.com. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Pension Reserves Investment Management Board, 84 State Street, Boston, Massachusetts 02109.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Statements of Pooled Net Position

June 30, 2022 and 2021

(Dollars in thousands)

	<u>2022</u>	<u>2021</u>
Assets:		
Investments, at fair value:		
Short-term	\$ 1,635,564	2,572,722
Fixed income	20,686,408	22,445,081
Equity	33,243,865	39,712,411
Timberland	2,904,110	2,798,749
Private equity funds	16,837,964	13,590,807
Real estate:		
Real estate properties	9,796,738	7,702,060
Equity	1,336,488	1,512,207
Real estate funds	481,793	270,007
Other	75,973	29,476
Total real estate	<u>11,690,992</u>	<u>9,513,750</u>
Portfolio completion strategies:		
Investment funds	2,303,551	2,219,600
Equity	2,285,915	2,403,242
Fixed income	3,518,563	2,781,967
Cash and cash equivalents	1,106,108	1,169,968
Agricultural investments	592,878	579,862
Other	—	25,386
Total portfolio completion strategies	<u>9,807,015</u>	<u>9,180,025</u>
Total investments	96,805,918	99,813,545
Cash	254,404	219,795
Securities lending collateral	121,946	201,581
Interest and dividends receivable	234,231	209,022
Receivable for investments sold and other assets	727,187	1,323,811
Securities sold on a when-issued basis	398,418	547,456
Foreign currency forward contracts	134,977	88,872
Total assets	<u>98,677,081</u>	<u>102,404,082</u>
Liabilities:		
Securities sold short and other liabilities, at fair value:		
Portfolio completion strategies	2,172,680	1,817,428
Fixed income	14,747	112,606
Total securities sold short and other liabilities	<u>2,187,427</u>	<u>1,930,034</u>
Payable for investments purchased and other liabilities	1,198,502	1,516,901
Real estate debt and other liabilities	875,298	1,457,519
Securities lending obligations	872,820	451,560
Securities purchased on a when-issued basis	915,314	1,210,290
Foreign currency forward contracts	81,777	87,984
Management fees payable to PRIM	116,888	50,949
Total liabilities	<u>6,248,026</u>	<u>6,705,237</u>
Net position held in trust for pool participants	<u>\$ 92,429,055</u>	<u>95,698,845</u>

See accompanying notes to financial statements.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Statements of Changes in Pooled Net Position

Years ended June 30, 2022 and 2021

(Dollars in thousands)

	<u>2022</u>	<u>2021</u>
Additions:		
Contributions:		
State employees	\$ 858,181	698,282
State teachers	1,058,832	898,722
Other participants	<u>2,425,078</u>	<u>1,313,240</u>
Total contributions	<u>4,342,091</u>	<u>2,910,244</u>
Net investment income (loss):		
From investment activities:		
Net realized gain on investments and foreign currency transactions	4,831,600	6,839,826
Net change in unrealized (depreciation) appreciation on investments and foreign currency translations	(9,901,811)	13,543,569
Interest	622,086	475,341
Dividends	910,551	719,579
Timberland	41,557	67,491
Private equity	134,138	139,664
Portfolio completion strategies	50,980	44,492
Real estate:		
Income	594,530	541,807
Expenses	<u>(231,520)</u>	<u>(233,459)</u>
Total real estate	<u>363,010</u>	<u>308,348</u>
(Loss) income from investment activities	(2,947,889)	22,138,310
Investment management and other management fees	<u>(295,929)</u>	<u>(198,944)</u>
Net (loss) income from investment activities	<u>(3,243,818)</u>	<u>21,939,366</u>
From securities lending activities:		
Securities lending income	6,359	6,381
Securities lending expenses	<u>(2,286)</u>	<u>(833)</u>
Net income from securities lending activities	<u>4,073</u>	<u>5,548</u>
Total net investment (loss) income	<u>(3,239,745)</u>	<u>21,944,914</u>
Total additions	<u>1,102,346</u>	<u>24,855,158</u>
Deductions:		
Redemptions:		
State employees	1,509,113	1,450,024
State teachers	1,507,198	1,579,435
Other participants	<u>1,355,825</u>	<u>1,112,613</u>
Total deductions	<u>4,372,136</u>	<u>4,142,072</u>
Net (decrease) increase in pooled net position	(3,269,790)	20,713,086
Net position held in trust for pool participants:		
Balance, beginning of year	<u>95,698,845</u>	<u>74,985,759</u>
Balance, end of year	<u>\$ 92,429,055</u>	<u>95,698,845</u>

See accompanying notes to financial statements.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(1) Description of the Pension Reserves Investment Trust Fund

(a) General

The Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, was created in 1983 under Chapter 661 of the Acts of 1983, as amended by Chapter 315 of the Acts of 1996. The PRIT Fund is a pooled investment fund that invests the assets of the State Teachers' and State Employees' Retirement Systems of Massachusetts and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund, as well as the assets of the State Retiree Benefits Trust (SRBT) Fund. The PRIT Fund is not registered with the Securities and Exchange Commission, but is subject to oversight provided by the Pension Reserves Investment Management Board (the PRIM Board). The PRIM Board was created by legislation to provide general supervision of the investments and management of the PRIT Fund. The PRIM Board is a separate legal entity that issues its own financial statements, which are not included in the accompanying financial statements of the PRIT Fund.

A nine-member Board of Trustees governs the PRIM Board. The Trustees include: (1) the Governor, ex officio, or his designee; (2) the State Treasurer, ex officio, or his designee who shall serve as Chair of the PRIM Board; (3) a private citizen experienced in the field of financial management appointed by the State Treasurer; (4) an employee or retiree who is a member of the State Teachers' Retirement System, elected by the members of such system for a term of three years; (5) an employee or retiree who is a member of the State Employees' Retirement System, elected by the members of such system for a term of three years; (6) the elected member of the State Retirement Board; (7) one of the elected members of the Teachers' Retirement Board chosen by the members of the Teachers' Retirement Board; (8) a person who is not an employee or official of the Commonwealth appointed by the Governor; and (9) a representative of a public safety union appointed by the Governor. Appointed members serve for a term of four years. The Board of Trustees has the authority to employ an Executive Director, outside investment managers, custodians, consultants, and others as it deems necessary; to formulate policies and procedures; and to take such other actions as necessary and appropriate to manage the assets of the PRIT Fund.

The PRIM Board seeks to manage the PRIT Fund to ensure that pension assets are well invested so that current and future benefit obligations are adequately funded in a cost-effective manner. The PRIM Board therefore seeks to maximize the total return on investment within acceptable levels of risk and cost for an approximately 60% funded public pension fund. Under current law, by the year 2040, the PRIT Fund plans to have grown, through annual payments in accordance with a legislatively approved funding schedule and through total return of the PRIT Fund, to an amount sufficient to meet the then-existing pension obligations of the Commonwealth. The Commonwealth has adopted a schedule of state pension appropriations that assumes a long-term actuarial rate of return for the PRIT Fund of 7.0%.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

The State Teachers' and State Employees' Retirement Systems and the SRBT Fund are mandated by statute to invest all of their assets in the PRIT Fund and are, therefore, considered involuntary participants. The assets of the State-Boston Retirement System attributable to teachers who are members of that system are also mandated to be held in the PRIT Fund. Other retirement systems have the option to become Participating or Purchasing System participants in the PRIT Fund. Participating Systems must transfer all of their assets to the PRIT Fund, commit to remain invested for five years, and are entitled to share in appropriations made to the PRIT Fund by the Commonwealth in accordance with Massachusetts General Laws, Chapter 32, Section 22B. The Commonwealth has made no such appropriation to the PRIT Fund on behalf of Participating Systems since fiscal year 2000.

Purchasing Systems may invest all or a portion of their assets in the PRIT Fund and retain the ability to contribute and withdraw funds at their discretion; however, they are not entitled to state appropriations. Participating and Purchasing Systems share in the investment earnings of the PRIT Fund based on their proportionate share of net position. As of June 30, 2022, there were 38 Participating Systems and 62 Purchasing Systems invested in the PRIT Fund.

(b) Investment Funds

The PRIT Fund consists of two investment funds, the Capital Fund and the Cash Fund. Each of these funds is managed, accounted for, and held separately by the PRIT Fund's custodian.

The Cash Fund consists of short-term investments, which are used to meet the liquidity requirements of Participating and Purchasing Systems. All Cash Fund earnings are reinvested. The State Teachers' Retirement System and the State Employees' Retirement System make daily deposits into the Cash Fund, which is their source of funds for benefit payments and operating expenses. The Cash Fund maintains a stable net position value of \$1.00 per unit.

Assets contributed by retirement systems are initially deposited in the Cash Fund and then transferred to the Capital Fund. Funds transferred into the Capital Fund are generally invested in the General Allocation Account, which invests in all asset classes of the PRIT Fund in accordance with the PRIM Board's asset allocation plan and investment policy guidelines. The Capital Fund serves as the investment portfolio of the PRIT Fund and consists of the following accounts: General Allocation (holds units of all other accounts), Domestic Equity, International Equity, Emerging Markets Equity, Global Equity Emerging-Diverse Manager Program, Core Fixed Income, Public Value-Added Fixed Income, Real Estate, Timberland, Hedge Funds, Private Debt, Overlay, Real Assets, Other Credit Opportunities, Liquidating Portfolios, Private Equity Investments, and Private Equity Investments Vintage Years 2000-2022. Vintage Year refers to the calendar year in which the PRIT Fund made a commitment to invest in a private equity investment.

Upon deposit by a Participating or Purchasing System into the accounts of the Capital Fund, units of participation equal to the total value of the contribution are issued. The value of a unit of each account is determined monthly by dividing the value of the net position of the account by the number of units outstanding at each month-end valuation date. The unit price fluctuates with the performance of the

PENSION RESERVES INVESTMENT TRUST FUND
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Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

Capital Fund. The number of units generally changes only when a retirement system makes a contribution or redemption.

Chapter 84 of the Acts of 1996 permits Massachusetts retirement boards to purchase units in the individual investment accounts of the PRIT Fund as an alternative to investing in its General Allocation Account. This investment option, also referred to as “segmentation,” was established by an amendment to the PRIM Board’s Operating Trust Agreement in 1994 in response to requests from retirement boards wishing to invest in certain asset classes of the PRIT Fund. Purchasing Systems, as “segmented investors,” may invest in one or more of the following accounts of the Capital Fund: Domestic Equity, International Equity, Emerging Markets, Core Fixed Income, Public Value-Added Fixed Income, Real Estate, Hedge Funds, and Private Equity Vintage Year accounts. At June 30, 2022 and 2021, there were 44 segmented investors in the PRIT Fund. The remaining Purchasing Systems invested in the General Allocation Account.

(2) Summary of Significant Accounting Policies

(a) Basis of Accounting and Financial Statement Presentation

The financial statements of the PRIT Fund are reported using the economic resources measurement focus and the accrual basis of accounting. They are prepared in conformity with U.S. generally accepted accounting principles, which require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the dates of the financial statements and the reported amounts of additions and deductions during the reporting periods. Actual results could differ from those estimates.

The PRIT Fund follows Governmental Accounting Standards Board (GASB) guidance as applicable to external investment pools.

The PRIT Fund consolidates assets and liabilities of its single-member limited liability corporations.

(b) Investments

The PRIM Board recognizes that over the long term, asset allocation is the single greatest contributor of return and risk to the PRIT Fund. The PRIM Board’s asset allocation plan embodies its decisions to invest portions of the Capital Fund in global equity securities, core fixed income securities, value-added fixed income, real estate, timberland, private equity, portfolio completion strategies and, where appropriate, the various sub asset classes of each asset class. Statutes prohibit the PRIT Fund from investing in certain securities. The PRIM Board ensures that investment managers adhere to the requirements of Massachusetts General Laws.

Security transactions are recorded on the date the securities are purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to the PRIT Fund by a Participating or Purchasing System, the fair value of the securities on the transfer date. The calculation of realized gains (losses) is independent of the calculation of the net change in unrealized appreciation (depreciation) on investments. Realized gains and losses on investments sold in the current year

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

include previously recorded unrealized amounts and are included in net realized gain on investments in the accompanying statements of changes in pooled net position.

The PRIM Board values investments in fixed income, money market, other short-term investments, and U.S. government agency obligations using independent pricing services. In determining the price, the services may reflect such factors as market prices, yields, maturities, and ratings, supplemented by dealer quotations. Investments in equity securities, including exchange-traded funds, traded on national securities exchanges are valued at the last daily sale price or, if no sale price is available, at the closing bid price. Securities traded on any other exchange are valued in the same manner or, if not so traded, on the basis of closing over-the-counter (OTC) bid prices. If no bid price exists, valuation is determined either by establishing the mean between the most recent published bid and asked prices or averaging quotations obtained from dealers, brokers, or investment bankers. Securities for which such valuations are unavailable are reported at their fair value as estimated in good faith by the PRIM Board based on information provided by the investment managers responsible for such investments. Fair values for investments in pooled investment vehicles (commingled funds), such as mutual and similar funds with a readily determinable fair value, are based on the commingled fund's published net asset value (NAV) which are valued based on the underlying marketable securities or, in the absence of readily ascertainable fair values, the price of similar securities or other observable or unobservable inputs.

The PRIT Fund invests a portion of its assets in emerging capital markets. These investments may involve greater risks than investments in more developed markets, and the prices of such investments may be volatile. The consequences of political, social, or economic changes in these markets may have disruptive effects on the market prices of these investments and the income they generate, as well as the PRIT Fund's ability to repatriate such amounts.

As described further below, certain qualifying investments may be measured using NAV as a practical expedient to estimate fair value unless as of the measurement date it is probable that the PRIT Fund's interest will be sold at an amount different than NAV. As of June 30, 2022 and 2021, the PRIT Fund had no plans or intentions to sell such investments at amounts other than NAV.

Investments in real estate represent the PRIT Fund's ownership interest in PRIT Core Realty Holdings LLC (the LLC). On October 19, 2001, the LLC was formed and was governed by an operating agreement entered into by the PRIM Board, as trustee of the PRIT Fund, as the sole member. The principal purpose of the LLC is to conduct the investment activities of the real estate program in a manner consistent with the PRIT Fund Declaration of Trust and any business or activities incidental to or in support of such investment activities.

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(Dollars in thousands)

The LLC holds investments in real estate properties, real estate fund investments, and Real Estate Investment Trust (REIT) securities. Investments in real estate properties are stated at fair value based on appraisals prepared by independent real estate appraisers or on estimated valuations determined by the PRIM Board assuming highest and best use of the assets. These estimated valuations are based on valuations prepared by the real estate investment managers under the general supervision of the PRIM Board. Generally, third-party appraisals are performed on each real estate property within 18 months of the date of acquisition and at least annually thereafter. Determination of fair value involves judgment because the actual fair value of a real estate investment can be determined only by negotiation between parties in a sales transaction. Due to the inherent uncertainty of valuation, fair values used may differ significantly from values that would have been determined had a ready market for the investments existed, and the differences could be material. Real estate fund investments are invested through limited partnerships and are recorded at fair value estimated by the PRIM Board, generally using the NAVs provided by general partners as a practical expedient. The NAVs provided by general partners are generally based on appraised value of underlying real estate investments, which considers inputs such as comparable sales, projected income, discount rate, and capitalization rates. REIT securities are publicly traded securities and are valued in the same manner as the PRIT Fund's traded equity securities.

Investments in timberland are valued similarly to investments made by the LLC in real estate properties. Independent appraisals of timberland investments are performed annually.

Portfolio completion strategies investments represent the PRIT Fund's ownership in direct hedge funds, hedge fund-of-funds, a distressed loan fund, and real assets funds (collectively, the funds), managed accounts, and agricultural investments. The fair values of the PRIT Fund's interest in funds are estimated by the PRIM Board, generally using NAVs provided by fund managers as a practical expedient. NAVs for direct hedge funds, distressed loan, and real assets funds generally are based on the value of the underlying marketable securities or assets, or in the absence of readily ascertainable fair values, the price of identical or similar securities or assets. NAVs for hedge fund-of-funds are generally based on the value of the NAVs of the underlying funds which value their investments similar to direct hedge funds. Managed account investments in equity securities, fixed income, and other investments are valued using independent pricing services. In the event that pricing information is not available, then the investment is reported at fair value as estimated in good faith by the PRIM Board based on information provided by the investment manager responsible for such investment. Cash and cash equivalents held in managed accounts consist of cash and highly liquid investments that are readily convertible into cash. The carrying amount of these investments approximates fair value. Agricultural investments are valued similarly to investments made by the LLC in real estate properties and are generally appraised annually.

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June 30, 2022 and 2021

(Dollars in thousands)

Private equity investments are typically made through limited partnerships that invest in venture capital, leveraged buyouts, private placements, and other investments whose structure, risk profile, and return potential differ from traditional equity and fixed income investments. These investments are recorded at fair values estimated by the PRIM Board, generally using the NAVs provided by general partners as a practical expedient. The NAVs generally are based on the value of underlying investment holdings, which are determined by investment managers and consider variables such as operating results, earnings of the underlying holdings, projected cash flows, recent sales prices, and other pertinent information. These estimated fair values are determined in good faith by investment managers or general partners using consistently applied procedures.

(c) Investment Income

Dividend income is recorded on the ex-dividend date, and interest income is accrued as earned. For the years ended June 30, 2022 and 2021, foreign taxes withheld of \$28,994 and \$21,984, respectively, have been netted against dividend income in the statements of changes in pooled net position. Real estate income includes dividends earned on REIT securities as well as cash distributions of operating income from investments in real estate properties. Timberland income includes cash distributions of operating income from investments in timberland properties. Private equity income is recorded on a cash distribution basis. Portfolio completion strategies income includes cash distributions of operating income from agricultural investments as well as investment income from managed accounts.

(d) Foreign Currency Translation and Transactions

The accounting records of the PRIT Fund are maintained in U.S. dollars. Investment securities and other assets and liabilities denominated in a foreign currency are translated into U.S. dollars at the prevailing rates of exchange at month-end. Purchases and sales of securities, income receipts, and expense payments are translated into U.S. dollars at the prevailing exchange rate on the respective dates of the transactions.

Unrealized net currency gains and losses from valuing foreign currency-denominated assets and liabilities at month-end exchange rates are reflected within net unrealized appreciation (depreciation) on investments.

Net realized gains and losses on foreign currency transactions represent principally gains and losses from sales and maturities of forward foreign currency contracts, disposition of foreign currencies, and currency gains and losses realized between the trade and settlement dates on securities transactions.

(e) Derivative Instruments

In accordance with GASB Statement No. 53, *Accounting and Financial Reporting of Derivative Instruments*, the PRIT Fund has recorded all of its derivative activity at fair value as investment instruments within equity, fixed income, portfolio completion strategies, and real estate investments and the related change in such instruments within the net change in unrealized appreciation (depreciation) on investments and foreign currency translations in the accompanying financial statements. As described in GASB Statement No. 72, *Fair Value Measurement and Application* (GASB 72), a credit

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valuation adjustment should be applied, when applicable, for nonperformance risk using the PRIT Fund's credit risk (liability) in determining fair value.

The PRIT Fund regularly trades derivative financial instruments with off-balance sheet risk in the normal course of its investing activities to manage exposure to certain risks within the fund. The PRIT Fund also enters into derivative transactions to gain exposure to currencies and markets where derivatives are the most effective instrument. The PRIT Fund's derivative financial instruments include contracts for differences, foreign currency exchange contracts, financial and commodity futures contracts, and customized swap agreements (see note 7 for more detail). These derivative instruments can be exchange-traded or OTC contracts. The primary difference in risk associated with OTC contracts and exchange-traded contracts is credit and liquidity risks. For exchange-traded contracts, credit risk is limited to the role of the exchange or clearing corporation. OTC contracts contain credit risk for unrealized gains from various counterparties for the duration of the contract.

(f) When-Issued Securities Transactions

The PRIT Fund may purchase or sell securities on a "when-issued" or delayed-delivery basis. Delivery and payment for such securities may take place a month or more after the trade date. Normally, settlement occurs within three months. The price of the underlying securities and the date when the securities will be delivered and paid for are fixed at trade date. During the time a delayed delivery sell transaction is outstanding, the contract is marked to market daily and substantially equivalent deliverable securities are held by the PRIT Fund for the transaction to the extent available. For delayed delivery purchase transactions, the PRIT Fund maintains segregated assets with a fair value equal to or greater than the amount of its purchase commitments. The receivables and payables associated with the sale and purchase of delayed delivery securities are reflected in the accompanying statements of pooled net position as securities sold and purchased on a when-issued basis. Losses may arise due to changes in the value of the underlying securities, if the counterparty does not perform under the contract, or if the issuer does not issue the securities due to political, economic, or other factors.

The PRIT Fund may also enter into mortgage dollar-roll and reverse mortgage dollar-roll agreements on a when-issued basis. A mortgage dollar-roll is an agreement in which the PRIT Fund sells securities on a when-issued basis and simultaneously contracts with the same counterparty to repurchase similar (same type, coupon, and maturity) but not identical securities on a specified future date. During the roll period, principal and interest on these securities are not received. The PRIT Fund is compensated by the difference between the current sales price and the forward price for the future purchase. A reverse mortgage dollar-roll is an agreement to buy securities and to sell substantially similar securities on a specified future date. During the roll period, the PRIT Fund receives the principal and interest on the securities purchased. The receivables and payables associated with mortgage dollar-rolls and reverse mortgage dollar-rolls are also reflected in the accompanying statements of pooled net position as securities sold and purchased on a when-issued basis.

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(3) Fair Value Measurements of Investments

In accordance with GASB 72, except for investments measured using NAV as a practical expedient to estimate fair value, the PRIT Fund categorizes the fair value measurements of its investments within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

- Level 1 – Inputs that reflect quoted prices (unadjusted) in active markets for identical assets or liabilities that the fund has the ability to access at the measurement date. Most of the PRIT Fund's directly held marketable securities, mutual funds and exchange traded funds would be examples of Level 1 investments.
- Level 2 – Inputs other than quoted prices that are observable for an asset or liability either directly or indirectly, including inputs in markets that are not considered to be active. Fair values are primarily obtained from third-party pricing services for identical or comparable assets or liabilities, such as interest rates, foreign exchange rates, and yield curves that are observable at commonly quoted intervals. Because they must often be priced on the basis of transactions involving similar but not identical securities or do not trade with sufficient frequency, certain directly held fixed income securities are categorized in Level 2.
- Level 3 – Unobservable inputs based on the best information available, using assumptions in determining the fair value of investments and derivative financial instruments. Generally, the PRIT Fund's directly held investments in real estate and timberland will be categorized in Level 3 because a preponderance of inputs used to estimate fair value are not observable. For similar reasons, certain fixed income securities may also be categorized in Level 3.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. In certain instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

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The following tables present a summary of the fair value hierarchy of investments that are measured at fair value on a recurring basis at June 30, 2022 and 2021:

Investments at fair value	2022					Unfunded commitments
	Fair value measurements using					
	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs or not redeemable (Level 3)	Net asset value (NAV)	
Short-term:						
Money market investments	\$ 1,635,564	—	1,635,564	—	—	
Fixed income:						
U.S. government obligations (1)	8,413,831	8,413,831	—	—	—	
Domestic fixed income (2)	7,622,270	5,434	7,578,712	38,124	—	
International fixed income (3)	2,334,432	160,437	2,122,135	51,860	—	
Private debt (4)	1,287,209	—	—	—	1,287,209	571,459
Other credit opportunities (5)	1,028,666	128,363	344,697	424,881	130,725	583,375
	<u>20,686,408</u>	<u>8,708,065</u>	<u>10,045,544</u>	<u>514,865</u>	<u>1,417,934</u>	
Equity:						
Domestic equity securities	18,632,240	18,603,880	27,554	806	—	
International equity securities	14,611,625	14,610,935	—	690	—	
	<u>33,243,865</u>	<u>33,214,815</u>	<u>27,554</u>	<u>1,496</u>	<u>—</u>	
Timberland	2,904,110	—	—	2,904,110	—	
Private equity funds (6)	16,837,964	—	—	—	16,837,964	6,274,745
Real estate:						
Real estate properties	9,796,738	—	—	9,796,738	—	
Real estate equity securities	1,336,488	1,329,261	7,227	—	—	
Real estate funds (7)	481,793	—	—	—	481,793	251,847
Other	75,973	—	—	75,973	—	
	<u>11,690,992</u>	<u>1,329,261</u>	<u>7,227</u>	<u>9,872,711</u>	<u>481,793</u>	
Portfolio completion strategies:						
Event-driven hedge funds (8)	890,751	—	—	—	890,751	
Relative value hedge funds (9)	388,591	—	—	—	388,591	
Fund of funds (11)	632,346	—	—	—	632,346	
Distressed loan fund (12)	83,361	—	—	—	83,361	52,724
Real assets funds (13)	308,502	—	—	—	308,502	675,748
Investment funds	2,303,551	—	—	—	2,303,551	
Equity securities	2,285,915	1,980,501	27,906	277,508	—	
Fixed income securities	3,518,563	938,159	2,116,424	463,980	—	39,500
Cash and cash equivalents	1,106,108	459,066	647,042	—	—	
Agricultural investments	592,878	—	—	592,878	—	
	<u>9,807,015</u>	<u>3,377,726</u>	<u>2,791,372</u>	<u>1,334,366</u>	<u>2,303,551</u>	
Total investments	<u>\$ 96,805,918</u>	<u>46,629,867</u>	<u>14,507,261</u>	<u>14,627,548</u>	<u>21,041,242</u>	

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Investments at fair value	2022					Unfunded commitments
	Fair value measurements using					
	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs or not redeemable (Level 3)	Net asset value (NAV)	
Securities lending collateral:						
Money market investments	\$ 121,946	—	121,946	—	—	
Total securities lending collateral	\$ 121,946	—	121,946	—	—	
Securities sold short and other liabilities at fair value:						
Portfolio completion strategies:						
Equity securities	\$ 600,730	581,311	18,605	814	—	
Cash and cash equivalents	951,437	2,283	949,154	—	—	
Fixed income securities	563,101	180,038	356,398	26,665	—	
Other	57,412	—	—	57,412	—	
	2,172,680	763,632	1,324,157	84,891	—	
Fixed income:						
Cash and cash equivalents	14,747	—	14,747	—	—	
Total securities sold short and other liabilities	\$ 2,187,427	763,632	1,338,904	84,891	—	

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Investments at fair value	2021					Unfunded commitments
	Fair value measurements using					
	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs or not redeemable (Level 3)	Net asset value (NAV)	
Short-term:						
Money market investments	\$ 2,572,722	—	2,572,722	—	—	
Fixed income:						
U.S. government obligations (1)	9,658,756	9,658,756	—	—	—	
Domestic fixed income (2)	7,528,546	23,451	7,490,552	14,543	—	
International fixed income (3)	2,832,540	202,861	2,574,775	54,904	—	
Private debt (4)	1,277,804	—	—	—	1,277,804	691,571
Other credit opportunities (5)	1,147,435	80,696	667,041	357,834	41,864	303,461
	<u>22,445,081</u>	<u>9,965,764</u>	<u>10,732,368</u>	<u>427,281</u>	<u>1,319,668</u>	
Equity:						
Domestic equity securities	22,316,534	22,304,272	11,772	490	—	
International equity securities	17,395,877	17,393,781	1,456	640	—	
	<u>39,712,411</u>	<u>39,698,053</u>	<u>13,228</u>	<u>1,130</u>	<u>—</u>	
Timberland	2,798,749	—	—	2,798,749	—	
Private equity funds (6)	13,590,807	—	—	—	13,590,807	5,268,266
Real estate:						
Real estate properties	7,702,060	—	—	7,702,060	—	
Real estate equity securities	1,512,207	1,500,965	11,242	—	—	
Real estate funds (7)	270,007	—	—	—	270,007	268,652
Other	29,476	—	—	29,476	—	
	<u>9,513,750</u>	<u>1,500,965</u>	<u>11,242</u>	<u>7,731,536</u>	<u>270,007</u>	
Portfolio completion strategies:						
Event-driven hedge funds (8)	832,531	—	—	—	832,531	
Relative value hedge funds (9)	366,099	—	—	—	366,099	
Equity long/short hedge funds (10)	751	—	—	—	751	
Fund of funds (11)	639,521	—	—	—	639,521	
Distressed loan fund (12)	55,028	—	—	—	55,028	76,049
Real assets funds (13)	325,670	—	—	—	325,670	706,346
Investment funds	2,219,600	—	—	—	2,219,600	
Equity securities	2,403,242	2,121,689	43,602	237,951	—	
Fixed income securities	2,781,967	46,451	2,513,895	221,621	—	130,000
Cash and cash equivalents	1,169,968	785,131	384,837	—	—	
Agricultural investments	579,862	—	—	579,862	—	
Other	25,386	—	—	25,386	—	
	<u>9,180,025</u>	<u>2,953,271</u>	<u>2,942,334</u>	<u>1,064,820</u>	<u>2,219,600</u>	
Total investments	<u>\$ 99,813,545</u>	<u>54,118,053</u>	<u>16,271,894</u>	<u>12,023,516</u>	<u>17,400,082</u>	

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Investments at fair value	2021				Net asset value (NAV)	Unfunded commitments
	Fair value measurements using					
	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs or not redeemable (Level 3)		
Securities lending collateral:						
Money market investments	\$ 176,581	—	176,581	—	—	
Repurchase agreements	25,000	—	25,000	—	—	
Total securities lending collateral	<u>\$ 201,581</u>	<u>—</u>	<u>201,581</u>	<u>—</u>	<u>—</u>	
Securities sold short and other liabilities at fair value:						
Portfolio completion strategies:						
Equity securities	\$ 784,772	775,930	8,478	364	—	
Cash and cash equivalents	635,756	15,850	619,906	—	—	
Fixed income securities	337,770	91,780	227,231	18,759	—	
Other	59,130	—	—	59,130	—	
	<u>1,817,428</u>	<u>883,560</u>	<u>855,615</u>	<u>78,253</u>	<u>—</u>	
Fixed income:						
Cash and cash equivalents	112,606	—	112,606	—	—	
Total securities sold short and other liabilities	<u>\$ 1,930,034</u>	<u>883,560</u>	<u>968,221</u>	<u>78,253</u>	<u>—</u>	

- (1) Fiscal year 2022 rates range from 0.00% to 7.50%, and maturities range from 2022 to 2052. Fiscal year 2021 rates range from 0.00% to 7.50%, and maturities range from 2021 to 2051.
- (2) Fiscal year 2022 rates range from 0.00% to 17.50%, and maturities range from 2022 to 2115. Fiscal year 2021 rates range from 0.00% to 24.91%, and maturities range from 2021 to 2115.
- (3) Fiscal year 2022 rates range from -0.36% to 49.10%, and maturities range from 2022 to 2121. Fiscal year 2021 rates range from -0.33% to 37.88%, and maturities range from 2021 to 2115.
- (4) This represents investments in private partnerships that invest directly in distressed debt investment opportunities. The life cycles of the private partnerships are typically 10 to 15 years during which limited partners are unable to redeem their positions. Distributions are received as the partnerships liquidate the underlying assets of the funds.
- (5) This includes managed accounts and private partnerships that makes credit investments. Private partnerships typically have 10 to 15-year life cycles during which limited partners are unable to redeem their positions, but instead, receive distributions as the partnerships liquidate the underlying assets of the funds.

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- (6) This includes private partnerships that invest in venture capital, leverage buyouts, private placements, and other investments. The private partnerships typically have a life cycle of 10 to 15 years during which limited partners are unable to redeem their positions. Distributions are received as the partnerships liquidate the underlying assets of the funds.
- (7) This includes ten and seven closed-end real estate funds that invest in U.S. real estate at June 30, 2022 and 2021. The funds generally have initial terms of eight to ten years during which limited partners are unable to redeem their positions. Distributions are received as the funds liquidate the underlying assets.
- (8) This includes four and five hedge funds that invest in event-driven strategies such as credit-event, equity-event, multi-event driven, and stressed/distressed credit positions at June 30, 2022 and 2021, respectively. Redemption frequency for these investments ranged from quarterly to semi-annually with 60 to 65 days' notice.
- (9) This includes one hedge fund that invest in relative value strategies such as fixed income relative value positions at June 30, 2022 and 2021. Redemption frequency for this investment is quarterly with 45 days' notice.
- (10) This includes one liquidating hedge fund that invested in equity long/short strategies at June 30, 2021. Distributions are received as the funds liquidate the underlying assets.
- (11) This includes one active hedge fund of funds manager, valued at \$619,099 and \$625,587, at June 30, 2022 and 2021, respectively, which invests in emerging hedge fund managers. Redemption frequency for this fund is monthly with 30 days' notice. The remaining balance represents investments in five liquidating portfolios in which distributions are received as the funds liquidate the underlying assets.
- (12) This includes one fund that is invested in distressed loans at June 30, 2022 and 2021. Limited partners in this fund are unable to redeem their positions and distributions are received as the fund liquidates the underlying assets.
- (13) This includes ten funds that seek to make investments in real assets at June 30, 2022 and 2021. Limited partners in these funds are generally unable to redeem their positions and distributions are received as the funds liquidate the underlying assets.

(4) Deposits and Investments Risks

(a) Custodial Credit Risk

Custodial credit risk is the risk that in the event of bank failure, the PRIT Fund's deposits and investments may not be returned. The PRIM Board manages the PRIT Fund's exposure to custodial credit risk by requiring all relevant investment managers to hold investments in separate accounts with the PRIM Board's custodian (see note 8). The PRIM Board has not adopted a formal custodial credit risk policy.

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Cash balances represent amounts held in bank depository accounts that may be subject to custodial credit risk. The PRIT Fund maintains cash and cash equivalents with various major financial institutions. The combined account balances at a specific financial institution may periodically exceed federally insured limits. No losses have been incurred during the years ended June 30, 2022 and 2021.

(b) Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of fixed income investments will adversely affect the fair value of an investment. While the PRIM Board does not have a formal policy relating to interest rate risk, the PRIM Board manages the PRIT Fund's exposure to fair value loss arising from movements in interest rates by establishing duration guidelines with its fixed income investment managers. The guidelines with each individual manager require that the effective duration of the domestic fixed income investment portfolio be within a specified percentage or number of years of the effective duration band of the appropriate benchmark index. For emerging markets fixed income investments, the portfolio must have duration with a band ranging from three to eight years. Effective duration is a measure of a fixed income investment's exposure to fair value changes arising from changes in interest rates. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows. These assumptions take into consideration factors indicative of investments highly sensitive to interest rate changes, including callable options, prepayments, and other factors. These factors are reflected in the effective duration numbers provided in the following table. The PRIM Board compares the effective duration of a manager's portfolio to their relevant benchmark including Bloomberg Aggregate Bond index, US Treasury STRIPS 20+ Year index, Bloomberg Treasury 1-3 Year index, Bloomberg US TIPS index, Bloomberg Inflation Linked Bonds index, S&P LSTA Leveraged Loan index, JP Morgan Emerging Markets Bond index, and the Intercontinental Exchange Bank of America High Yield index.

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The following table shows the debt investments by investment type, fair value, and effective weighted duration rate at June 30:

Investment	2022		2021	
	Fair value	Effective weighted duration rate (Years)	Fair value	Effective weighted duration rate (Years)
Asset-backed securities	\$ 651,727	3.10	598,095	1.33
Commercial mortgage – backed securities	342,068	2.33	293,683	2.93
Corporate bonds and other credits	8,524,904	3.93	8,305,066	6.08
U.S. government bonds	5,622,597	14.64	6,337,438	15.12
U.S. government agencies	73,356	1.98	65,497	2.78
U.S. government TIPS	3,028,434	6.94	3,367,749	7.56
U.S. government mortgage – backed securities	1,571,083	6.25	1,630,294	4.90
Global inflation linked bonds	221,162	8.04	302,040	8.01
Municipal bonds	52,931	9.86	75,183	8.75
Pooled money market fund (1)	1,671,652	N/A	2,636,783	N/A
Other pooled funds (2)	4,080,621	N/A	4,187,942	N/A
Total fixed income and short-term investments	<u>\$ 25,840,535</u>		<u>27,799,770</u>	
Securities lending collateral investments:				
Pooled money market fund (1)	121,946	N/A	176,581	N/A
Repurchase agreements (1)	—	N/A	25,000	N/A
Total securities lending collateral investments	<u>\$ 121,946</u>		<u>201,581</u>	

(1) Short-term investments with maturities of less than three months.

(2) Other pooled funds have a weighted average maturity of approximately two years at June 30, 2022 and 2021.

(c) Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will fail to meet its debt obligations.

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The PRIM Board does not have a formal investment policy governing credit risk; each fixed income securities investment manager is given a specific set of guidelines to invest within based on the mandate for which it was hired. These guidelines vary depending on the manager's strategy and the role of its portfolio to the overall diversification of the PRIT Fund. The guidelines for the PRIT Fund's core fixed income portfolio establish the minimum credit rating for any security in the portfolio and the overall weighted average credit rating of the portfolio. For example, all securities held must generally be investment grade. The guidelines for the PRIT Fund's high yield fixed income portfolio establish a fair value range of securities to be held with a specific minimum credit rating and the overall weighted average credit rating of the portfolio.

Credit risk for derivative instruments held by the PRIT Fund results from counterparty risk. The PRIT Fund is exposed to credit risk resulting from counterparties being unable to meet their obligations under the terms of the derivative agreements. See note 7 for more information on the PRIT Fund's derivative instruments.

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The weighted average quality rating of the debt securities portfolio, excluding pooled investments, investments explicitly backed by the U.S. government and other nonrated investments was BBB and BBB- at June 30, 2022 and 2021, respectively. The following tables present the PRIT Fund's fixed-income securities credit ratings at June 30:

Investment	Total fair value	2022					
		Investment grade			Noninvestment grade		Not rated
		AAA	AA+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	
Asset-backed securities	\$ 651,727	30,610	106,494	6,987	15,731	230,178	261,727
Commercial mortgage-backed securities	342,068	190,083	28,213	932	18,900	34,621	69,319
Corporate bonds and other credits	8,524,904	371,400	1,163,529	1,597,478	1,647,554	431,205	3,313,738
U.S. government agencies	73,356	—	25,683	—	—	—	47,673
U.S. government mortgage-backed securities	1,398,808	125,098	729,757	19	—	—	543,934
Global inflation linked bonds	221,162	31,776	117,027	62,211	543	—	9,605
Municipal bonds	52,931	2,536	46,351	3,574	470	—	—
Pooled money market fund	1,671,652	—	—	—	—	—	1,671,652
Other pooled funds	4,080,621	—	—	—	—	—	4,080,621
Total credit risk, fixed income, and short-term investments	17,017,229	\$ 751,503	2,217,054	1,671,201	1,683,198	696,004	9,998,269
Fixed income investments explicitly backed by the U.S. government	8,823,306						
Total fixed income and short-term investments	\$ 25,840,535						
Securities lending collateral investments:							
Pooled money market fund	\$ 121,946	121,946	—	—	—	—	—
Total securities lending collateral investments	\$ 121,946	121,946	—	—	—	—	—

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Investment	Total fair value	2021					
		Investment grade			Noninvestment grade		Not rated
		AAA	AA+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	
Asset-backed securities	\$ 598,095	32,591	71,363	20,637	27,988	262,094	183,422
Commercial mortgage-backed securities	293,683	155,376	16,729	844	15,267	71,990	33,477
Corporate bonds and other credits	8,305,066	331,475	1,178,428	1,673,162	1,962,627	586,938	2,572,436
U.S. government agencies	65,497	—	23,375	—	—	—	42,122
U.S. government mortgage-backed securities	1,347,668	4,242	662,026	27,657	39,843	426	613,474
Global inflation linked bonds	302,040	36,922	182,061	78,829	—	—	4,228
Municipal bonds	75,183	2,418	67,433	4,178	593	—	561
Pooled money market fund	2,636,783	—	—	—	—	—	2,636,783
Other pooled funds	4,187,942	—	—	—	—	—	4,187,942
Total credit risk, fixed income, and short-term investments	17,811,957	\$ 563,024	2,201,415	1,805,307	2,046,318	921,448	10,274,445
Fixed income investments explicitly backed by the U.S. government	9,987,813						
Total fixed income and short-term investments	\$ 27,799,770						
Securities lending collateral investments:							
Pooled money market fund	\$ 176,581	176,581	—	—	—	—	—
Repurchase agreements	25,000	—	25,000	—	—	—	—
Total securities lending collateral investments	\$ 201,581	176,581	25,000	—	—	—	—

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(d) Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of investments. Although the PRIM Board has no overall policy regarding foreign currency risk, the PRIM Board does manage the PRIT Fund's exposure to foreign currencies by establishing investment guidelines with each of its managers who invest in securities not denominated in U.S. dollars. These guidelines set maximum investment balances for any currency and/or country holdings must be within a certain percentage of predefined benchmarks. In addition, the PRIM Board's investment managers may actively manage exposure to foreign currencies through the use of forward foreign currency contracts. The following tables present the PRIT Fund's foreign currency exposures at June 30 (stated in U.S. dollars in thousands):

	2022						
	Cash and short-term investments	Equity	Fixed income	Portfolio completion strategies	Private equity investments	Timberland investments	Total
Australian Dollar	\$ 4,187	550,285	8,757	(4,358)	—	395,566	954,437
Brazilian Real	2,364	133,824	89,987	106,701	—	—	332,876
British Pound	10,014	1,710,668	216,163	104,517	80,413	—	2,121,775
Canadian Dollar	13,685	886,788	21,741	26,466	4,374	—	953,054
Chinese Yuan	355	166,412	—	172,868	—	—	339,635
Euro	50,939	2,565,328	254,010	140,502	1,802,466	—	4,813,245
Hong Kong Dollar	4,887	1,222,456	—	(2,000)	—	—	1,225,343
Indian Rupee	970	449,475	—	759	—	—	451,204
Japanese Yen	30,660	2,294,051	24,427	159,646	—	—	2,508,784
New Taiwan Dollar	941	416,779	24	227	—	—	417,971
South Korean Won	3,768	503,287	11,002	16,188	—	—	534,245
Swedish Krona	6,078	378,498	5,516	510	—	—	390,602
Swiss Franc	19,490	704,040	—	(3,260)	—	—	720,270
Other foreign currencies	45,559	1,274,592	17,261	13,360	—	—	1,350,772
Total securities subject to foreign currency risk	193,897	13,256,483	648,888	732,126	1,887,253	395,566	17,114,213
International investments denominated in U.S. dollars	—	1,355,142	1,709,439	—	—	226,040	3,290,621
Total international investments and cash deposits	\$ 193,897	14,611,625	2,358,327	732,126	1,887,253	621,606	20,404,834

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	2021						Total
	Cash and short-term investments	Equity	Fixed income	Portfolio completion strategies	Private equity investments	Timberland investments	
Australian Dollar	\$ 3,220	674,761	11,036	(2,866)	—	388,831	1,074,982
Brazilian Real	1,757	194,804	91,275	69,999	—	—	357,835
British Pound	13,628	1,998,978	275,142	79,193	22,706	—	2,389,647
Canadian Dollar	9,006	802,156	28,693	36,199	2,690	—	878,744
Euro	62,618	3,102,714	354,487	136,418	1,687,673	—	5,343,910
Hong Kong Dollar	7,582	1,370,654	173	38	—	—	1,378,447
Indian Rupee	1,519	494,771	1,132	2,761	—	—	500,183
Japanese Yen	35,195	2,670,752	29,169	66,538	—	—	2,801,654
New Taiwan Dollar	1,063	631,233	—	42	—	—	632,338
South Korean Won	4,952	710,211	19,795	51,839	—	—	786,797
Swedish Krona	3,897	619,012	5,731	1,701	—	—	630,341
Swiss Franc	13,372	676,357	—	(778)	—	—	688,951
Other foreign currencies	32,654	1,300,021	33,817	158,399	—	—	1,524,891
Total securities subject to foreign currency risk	190,463	15,246,424	850,450	599,483	1,713,069	388,831	18,988,720
International investments denominated in U.S. dollars	—	2,149,453	1,982,090	—	—	217,641	4,349,184
Total international investments and cash deposits	\$ 190,463	17,395,877	2,832,540	599,483	1,713,069	606,472	23,337,904

(e) Concentration of Credit Risk

The PRIM Board manages the PRIT Fund's exposure to concentration of credit risk by establishing guidelines with each investment manager that limit the percentage of investment in any single issue or issuer. The PRIT Fund has no investments, at fair value, that exceed 5% of the PRIT Fund's total investments as of June 30, 2022 and 2021.

(f) Financial Instruments with Off-Balance-Sheet Risk

In the normal course of business, the PRIT Fund enters into financial instrument transactions with off-balance-sheet risk. These financial instruments involve varying degrees and type of risks, including credit and market risks, which may be in excess of the amounts recognized in the Statements of Pooled Net Position. Futures and foreign currency exchange contracts represent commitments to purchase or sell foreign currencies at a future date and at a specified price. The PRIT Fund could be exposed to risks if the counterparties to the contracts are unable to meet the terms of their contracts or if the value of the foreign currency changes unfavorably.

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(5) Securities Lending Program

The PRIM Board uses a third-party securities lending agent to manage its securities lending program. The program loans domestic and international equity, REIT, and fixed income securities for collateral with a simultaneous agreement to return the collateral for the same securities in the future. Securities on loan are secured with collateral ranging from 102% to 105% determined by the type of securities lent. Securities on loan are valued daily to maintain the collateral requirement and, where applicable, additional collateral is delivered. At June 30, 2022 and 2021, the PRIT Fund has no credit risk exposure to borrowers because the borrowers provided collateralization greater than 100% of the fair value of the securities on loan. The PRIT Fund cannot pledge or sell the collateral securities unless the lending agent defaults. The PRIT Fund is indemnified in the event that the lending agent fails to return the securities on loan (and if the collateral is inadequate to replace the securities on loan) or if the lending agent fails to perform its obligations as stipulated in the agreement. There was no lending agent default during the years ended June 30, 2022 and 2021.

Securities loans are terminable on demand therefore maturities of the securities loans do not generally match the maturities of investments made with cash collateral. Investments made with cash collateral are primarily in short-term investments with maximum maturity of three months from the date of purchase.

Securities on loan are included in investments at fair value in the accompanying statements of pooled net position. As of June 30, 2022 and 2021, the fair value of securities on loan was \$841,435 and \$415,901, respectively, and the associated collateral received in cash was \$872,820 and \$451,560, respectively. Securities lending obligations to repay the collateral are reported in the accompanying statements of pooled net position. There was no security collateral or noncash collateral at June 30, 2022 and 2021.

For the years ended June 30, 2022 and 2021, in accordance with the Securities Lending Agency Agreement, the PRIT Fund loaned \$750,000 of the cash collateral to the LLC to invest in real estate investments. \$250,000 of the loans mature on March 10, 2027 and can be prepaid at any time. Interest is paid monthly in arrears at a per annum rate equal to LIBOR. \$500,000 of the loans mature on November 18, 2031 and can be prepaid at any time. Interest is paid monthly in arrears at a per annum rate as agreed to by the parties. As these are inter-entity loans, they have been eliminated in consolidation in the accompanying financial statements. The fair value of the remaining cash collateral reinvested was \$121,946 and \$201,581 at June 30, 2022 and 2021, respectively, and is reported as securities lending collateral in the accompanying statements of pooled net position.

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(6) Real Estate Debt

(a) Notes Payable

The LLC's notes payable obligations consisted of the following as of June 30:

	2022	2021
Senior unsecured term loan	\$ —	500,000
Senior unsecured notes	525,000	525,000
Total	\$ 525,000	1,025,000

Scheduled long-term maturities of existing indebtedness at June 30, 2022 in each of the next five years and in the aggregate thereafter are as follows:

	Amount
Year ending June 30:	
2023	\$ 175,000
2024	—
2025	150,000
2026	—
2027	—
2028–2032	200,000
	\$ 525,000

(i) Senior Unsecured Term Loan

On November 21, 2016, the LLC issued Senior Unsecured Term Loans with aggregate principal amounts of \$300,000 and \$200,000, which matured on November 21, 2021. Interest was payable monthly based on LIBOR plus an applicable rate based upon the range into which the Total Leverage Ratio falls as outlined in the Term Loan agreements. As of June 30, 2021, the applicable rate was 1.15%.

(ii) Senior Unsecured Notes

On February 14, 2013, the LLC issued 3.85% Series B Senior Notes in the aggregate principal amount of \$175,000 maturing February 14, 2023 and 4.00% Series C Senior Notes in the aggregate principal amount of \$150,000 maturing February 14, 2025. Interest on the notes is payable semi-annually.

On February 12, 2020, the LLC issued 3.07% Series D Senior Notes in the aggregate principal amount of \$200,000 maturing February 12, 2030. Interest on the notes is payable semi-annually.

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Both the Senior Unsecured Term Loans and Senior Unsecured Notes contain certain financial covenants as outlined in the respective agreements. The LLC was in compliance with such covenants at June 30, 2022 and 2021.

(b) Mortgage Loans Payable

The LLC had six and nine property-level mortgage loans payable as of June 30, 2022 and 2021, respectively. The mortgages have a weighted average interest rate of 3.57% and 3.50% and a weighted average maturity of 6.0 and 4.6 years at June 30, 2022 and 2021, respectively. The following table presents the face value of mortgage loans payable at June 30:

	<u>2022</u>	<u>2021</u>
Mortgage loans payable	\$ 343,387	381,686
Total	\$ <u>343,387</u>	<u>381,686</u>

(c) Other Liabilities

The LLC had other liabilities of \$6,911 and \$50,833 as of June 30, 2022 and 2021, respectively.

(7) Derivative Investments

The PRIT Fund regularly trades financial instruments with off-balance-sheet risk in the normal course of its investing activities to assist in managing exposure to market risks. These financial instruments include contracts for differences, foreign currency exchange contracts, futures contracts, and swap contracts.

(a) Contracts for differences

A contract for differences is an instrument whose value is based on the price movement of the underlying asset. It allows for gain or losses to be realized when the underlying asset moves in relation to the position taken, although the actual underlying asset is not owned by the PRIT Fund. The fair value of these instruments is generally recorded at the contract's net equity value. The net equity value is calculated by determining the change in value of the underlying asset less the cost of any leverage. The changes in fair value are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed.

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Contracts for differences held at June 30 were as follows:

Description	2022			
	Number of contracts	Gross notional amount	Fair value of contracts	Unrealized appreciation (depreciation)
Long exposure	21,677,450	\$ 85,327	82,381	(2,946)
Short exposure	(1,283,209)	(44,548)	(39,198)	5,350
Total exposure		\$ 40,779	43,183	2,404

Description	2021			
	Number of contracts	Gross notional amount	Fair value of contracts	Unrealized appreciation (depreciation)
Long exposure	20,256,186	\$ 95,935	101,570	5,635
Short exposure	(1,086,481)	(77,489)	(81,243)	(3,754)
Total exposure		\$ 18,446	20,327	1,881

For the years ended June 30, 2022 and 2021, the change in net unrealized appreciation (depreciation) on contracts for differences was \$523 and \$(151), respectively.

(b) Foreign Currency Exchange Contracts

A foreign currency exchange contract is an agreement between two parties to buy or sell a fixed quantity of currency at a set price on a future date. The PRIT Fund may enter into foreign currency exchange contracts to hedge its exposure to the effect of changes in foreign currency exchange rates upon its non-U.S. dollar-denominated investments. The fair value of such contracts will fluctuate with changes in currency exchange rates. The contracts are valued daily, and the changes in fair value are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the cost of the contract at the time it was opened and the value at the time it was closed.

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Foreign currency exchange contracts open at June 30 (in U.S. dollars) were as follows:

	2022		Delivery date(s)	Unrealized gains	Unrealized losses
	Fair value	Aggregate face value			
Foreign currency exchange contracts purchased:					
Australian Dollar	122,589	125,995	7/1/22-3/15/23	\$ 3,406	—
Brazilian Real	170,398	173,102	7/1/22-3/30/23	2,704	—
Chilean Peso	20,491	22,887	9/21/22	2,396	—
British Pound	700,800	715,032	7/1/22-3/15/23	14,232	—
Chinese Yuan	1,231,776	1,247,559	7/5/22-6/21/23	15,783	—
Euro	841,136	854,022	7/1/22-4/5/23	12,886	—
Israeli Shekel	107,118	111,211	7/1/22-5/3/23	4,093	—
Indian Rupee	284,605	288,796	7/5/22-6/26/23	4,191	—
Japanese Yen	379,939	410,715	7/1/22-5/23/23	30,776	—
New Taiwan Dollar	130,266	132,928	7/1/22-2/7/24	2,662	—
Philippines Peso	358,675	373,030	7/1/22-4/12/23	14,355	—
Singapore Dollar	488,427	496,346	7/1/22-9/25/23	7,919	—
South Korean Won	172,623	180,806	7/5/22-8/10/23	8,183	—
Other foreign currencies	1,874,911	1,884,878	7/1/22-6/21/23	10,983	(1,016)
Foreign currency exchange contracts sold:					
Australian Dollar	104,407	106,791	7/1/22-12/21/22	—	(2,384)
Brazilian Real	125,486	132,049	7/1/22-11/9/22	—	(6,563)
Chilean Peso	34,229	37,885	9/21/22	—	(3,656)
Chinese Yuan	1,125,990	1,142,410	7/5/22-6/21/23	—	(16,420)
Euro	496,264	499,751	7/1/22-4/5/23	—	(3,487)
Indian Rupee	328,091	332,754	7/5/22-3/20/24	—	(4,663)
Japanese Yen	193,214	196,299	7/1/22-5/23/23	—	(3,085)
New Taiwan Dollar	74,236	76,889	7/1/22-2/7/24	—	(2,653)
Philippines Peso	331,016	344,178	7/1/22-3/22/23	—	(13,162)
Singapore Dollar	665,745	670,881	7/1/22-9/25/23	—	(5,136)
South African Rand	149,973	154,205	7/5/22-5/31/23	—	(4,232)
Other foreign currencies	2,300,675	2,315,587	7/1/22-8/10/23	408	(15,320)
Total				\$ 134,977	(81,777)

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	2021				
	Fair value	Aggregate face value	Delivery date(s)	Unrealized gains	Unrealized losses
Foreign currency exchange contracts purchased:					
Brazilian Real	108,604	102,555	7/1/21-10/29/21	\$ —	(6,049)
British Pound	808,834	819,650	7/1/21-12/15/21	10,816	—
Chinese Yuan	1,040,908	1,031,484	7/2/21-6/30/22	—	(9,424)
Euro	958,783	970,272	7/1/21-3/8/22	11,489	—
Gold oz	—	18,622	7/1/21-6/1/22	18,622	—
Japanese Yen	498,958	503,405	7/1/21-12/16/21	4,447	—
Mexican Peso	175,462	171,724	7/1/21-12/21/21	—	(3,738)
Silver oz	4	2,915	12/6/21	2,911	—
Singapore Dollar	241,001	243,174	7/1/21-12/15/21	2,173	—
Other foreign currencies	2,948,710	2,965,919	7/1/21-8/22/22	18,018	(809)
Foreign currency exchange contracts sold:					
Australian Dollar	134,847	137,066	7/1/21-3/16/22	—	(2,219)
Brazilian Real	168,776	162,027	7/1/21-10/29/21	6,749	—
British Pound	442,659	445,741	7/1/21-12/15/21	—	(3,082)
Chinese Yuan	916,299	907,965	7/2/21-6/28/22	8,334	—
Euro	424,196	427,164	7/2/21-3/8/22	—	(2,968)
Gold oz	—	34,311	7/1/21-6/6/22	—	(34,311)
New Taiwan Dollar	310,308	313,490	6/30/21-6/2/23	—	(3,182)
South African Rand	144,582	142,233	7/1/21-2/22/22	2,349	—
South Korean Won	267,059	269,148	7/1/21-3/16/22	—	(2,089)
Turkish Lira	125,483	128,335	7/1/21-6/17/22	—	(2,852)
Silver oz	5	3,297	9/15/21-12/6/21	—	(3,292)
Other foreign currencies	2,432,504	2,443,509	7/1/21-11/30/22	2,964	(13,969)
Total				\$ 88,872	(87,984)

For the years ended June 30, 2022 and 2021, the change in net unrealized appreciation (depreciation) on foreign currency exchange contracts was \$52,312 and \$879, respectively.

(c) Futures Contracts

The PRIT Fund enters into financial and commodity futures on various exchanges. A futures contract is an agreement between two parties to buy or sell units of a particular index, security, or commodity at a set price on a future date. Upon entering into financial and commodity futures contracts, the PRIT Fund is required to pledge to the broker an amount of cash or securities equal to a certain percentage of the contract amount (initial margin deposit). Pursuant to the contract, the PRIT Fund agrees to receive from, or pay to, the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as "variation margin" and are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed. The potential risk to the PRIT Fund is that the change in value of futures contracts primarily corresponds with the value of underlying instruments, which may not correspond to the change in value of the hedged instruments. The PRIT Fund is also subject to credit risk should its clearing brokers be unable to meet their obligations to the PRIT Fund.

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Futures contracts held at June 30 were as follows:

Description	Number of contracts	Expiration date	2022		Unrealized appreciation (depreciation)
			Gross notional amount	Fair value of contracts	
Short cash and cash equivalents:					
Euro FX currency	(315)	9/22	\$ (41,493)	(40,495)	998
90-Day Eurodollar	(871)	12/22-9/25	(210,967)	(211,768)	(801)
Other short cash and cash equivalents	(2,789)	7/22-3/25	(692,477)	(692,342)	135
Long cash and cash equivalents:					
3-Month Euribor	837	12/23-6/24	214,620	215,531	911
Euro FX currency	288	9/22	38,881	37,937	(944)
Other long cash and cash equivalents	2,853	6/22-12/24	512,517	510,986	(1,531)
Short fixed income:					
Australian 3-Yr Treasury Bond	(1,255)	9/22	(92,738)	(93,912)	(1,174)
Euro-BOBL	(174)	9/22	(23,511)	(22,591)	920
Euro-BUND	(193)	9/22	(31,393)	(30,020)	1,373
US 2-Yr Treasury Notes	(2,818)	9/22	(591,839)	(589,455)	2,384
US 5-Yr Treasury Notes	(2,487)	9/22	(279,124)	(277,331)	1,793
US 10-Yr Treasury Notes	(2,124)	9/22	(251,731)	(248,930)	2,801
Other short fixed income	(2,283)	8/22-3/24	(368,929)	(368,742)	187
Long fixed income:					
Euro-BTP	169	9/22	22,945	21,753	(1,192)
US 2-Yr Treasury Notes	746	9/22	157,380	156,586	(794)
US 10-Yr Treasury Notes	1,738	9/22	207,165	206,007	(1,158)
Ultra US 10-Yr Treasury Notes	527	9/22	67,879	67,127	(752)
Ultra US Treasury Bond	633	9/22	98,494	97,723	(771)
Other long fixed income	5,335	8/22-3/23	623,958	625,141	1,183
Short equity and commodities:					
Metal	(323)	7/22-10/22	(31,924)	(28,718)	3,206
Other short equity and commodities	(1,626)	6/22-10/22	(77,804)	(76,131)	1,673
Long equity and commodities:					
Agriculture	585	7/22-12/22	29,022	28,001	(1,021)
Metal	248	7/22-9/22	26,174	21,843	(4,331)
Oil and gas	343	7/22-11/22	34,637	30,562	(4,075)
MSCI EAFE Index	1,949	9/22	183,940	180,926	(3,014)
MSCI Emerging Markets Index	2,807	9/22	142,025	140,729	(1,296)
Russell 2000 Mini Index	412	9/22	36,836	35,185	(1,651)
S&P 500 E-mini Index	3,621	9/22	680,258	686,089	5,831
S&P Midcap 400 E-mini Index	154	9/22	36,650	34,927	(1,723)
S&P/TSX 60 Index	227	9/22	42,802	40,210	(2,592)
TOPIX Index	219	8/22-9/22	32,003	30,057	(1,946)
Other long equity and commodities	3,872	7/22-12/22	145,509	143,563	(1,946)
Total futures exposure			\$ 639,765	630,448	(9,317)

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Description	Number of contracts	Expiration date	2021		
			Gross notional amount	Fair value of contracts	Unrealized appreciation (depreciation)
Short cash and cash equivalents:					
Euro FX currency	(381)	9/21	\$ (58,087)	(56,507)	1,580
Other short cash and cash equivalents	(5,533)	8/21-12/27	(1,356,045)	(1,355,276)	769
Long cash and cash equivalents:					
90-Day Bank Bill	269	9/21-12/22	202,831	201,718	(1,113)
Canadian Dollar currency	447	9/21	36,914	36,037	(877)
Euro FX currency	368	9/21	56,081	54,579	(1,502)
Other long cash and cash equivalents	4,896	7/21-12/26	1,119,885	1,117,804	(2,081)
Short fixed income:					
Australian 3-Yr Treasury Bond	(908)	9/21	(81,773)	(79,407)	2,366
Euro-BOBL	(217)	9/21	(35,611)	(34,522)	1,089
Euro-BTP	(309)	9/21	(64,579)	(63,251)	1,328
Korea 3-Yr Treasury Bond	(615)	9/21	(60,933)	(60,056)	877
US 10-Yr Treasury Notes	(2,066)	9/21	(272,827)	(273,745)	(918)
Ultra US 10-Yr Treasury Note	(375)	9/21	(54,226)	(55,202)	(976)
Other short fixed income	(3,180)	9/21-6/23	(567,973)	(566,606)	1,367
Long fixed income:					
Euro-BTP	366	9/21	63,896	63,041	(855)
Euro-Schatz	347	9/21	47,043	46,146	(897)
Japan 10-Yr Government Bond	68	9/21	93,692	92,936	(756)
US Long Bond	686	9/21	108,006	110,275	2,269
Ultra US Treasury Bond	621	9/21	115,275	119,659	4,384
Other long fixed income	4,542	9/21	645,502	644,565	(937)
Short equity and commodities:					
Metal	(87)	8/21	(16,603)	(15,413)	1,190
S&P 500 E-mini Index	(1,844)	9/21	(389,906)	(395,409)	(5,503)
Other short equity and commodities	(3,058)	7/21-10/21	(52,143)	(52,109)	34
Long equity and commodities:					
Agriculture	720	8/21-12/21	26,124	27,342	1,218
Oil and gas	792	7/21-9/21	49,783	51,384	1,601
Euro STOXX 50 Index	1,448	9/21	72,282	69,640	(2,642)
FTSE 100 Index	514	9/21	51,190	49,566	(1,624)
MSCI EAFE Index	2,234	9/21	263,059	257,368	(5,691)
S&P 500 E-mini Index	1,321	9/21	279,672	283,262	3,590
S&P Midcap 400 E-mini Index	221	9/21	60,401	59,502	(899)
S&P/TSX 60 Index	332	9/21	65,215	64,491	(724)
TOPIX Index	223	9/21	39,949	39,039	(910)
Other long equity and commodities	1,006,777	7/21-12/21	509,186	506,488	(2,698)
Total futures exposure			\$ 895,280	887,339	(7,941)

For the years ended June 30, 2022 and 2021, the change in net unrealized appreciation (depreciation) on futures contracts was \$(1,376) and \$(14,194), respectively.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(d) Swaps

The PRIT Fund enters into swap agreements to gain exposure to certain markets and actively hedge other exposures to market and credit risks. The PRIT Fund utilizes interest rate, credit default, currency, inflation, and total return swaps within the portfolio. The PRIT Fund's OTC swap agreements are recorded at fair value as estimated by the PRIM Board. These estimated fair values are determined in good faith by using information from the PRIT Fund's investment managers, including methods and assumptions considering market conditions and risks existing at the date of the statements of pooled net position. Such methods and assumptions incorporate standard valuation conventions and techniques, such as discounted cash flow analysis and option pricing models. All methods utilized to estimate fair values result only in general approximations of value, and such values may or may not actually be realized.

Upon entering into centrally cleared swap contracts, the PRIT Fund is required to deposit an initial margin with the broker an amount of cash or securities. Pursuant to the contract, the PRIT Fund agrees to receive from, or pay to, the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as "variation margin" and are recorded by the PRIT Fund as unrealized gains or losses. Payments received from or paid to the counterparty, including at termination, are recorded by the PRIT fund as realized gains or losses.

Open swap contracts at June 30 were as follows:

Description	2022				
	PRIT pays/receives interest rate	PRIT pays/receives index/ protection	Maturity date	Gross notional amount	Net unrealized appreciation (depreciation)
Interest rate swaps	-0.45%–13.54%	Various*	7/22-6/57	\$ 27,118,880	57,637
Credit default swaps	0.11%–16.20%	Credit default protection	7/22-12/72	4,018,177	(126,939)
Total return and other swaps	Variable	Various*	7/22-6/52	413,860	(21,458)
Total swaps				<u>\$ 31,550,917</u>	<u>(90,760)</u>

* PRIT pays/receives counterparty based on 1-Week CNY, 1-Month AUD Fixing Rate, 1-Month HKD, 1-Month USD LIBOR, 3-Month AUD Fixing Rate, 3-Month CDOR, 3-Month HKD, 3-Month JIBAR, 3-Month JPY DTIBOR, 3-Month KRW CD Rate, 3-Month MYR, 3-Month NZD Bank Bill, 3-Month NZD Fixing Rate, 3-Month PRIBOR, 3-Month TELBOR, 3-Month TWD TWCPBA, 3-Month USD LIBOR, 3-Month WIBOR, 6-Month AUD Fixing Rate, 6-Month BUBOR, 6-Month Euribor, 6-Month JPY LIBOR, 6-Month PRIBOR, 6-Month SGD, 6-Month WIBOR, AUD O/N OIS Rate, Brazil CDI rate, CPI inflation rate, Euro short-term rate, Eurozone HICP rate, INR OIS ON, JPY ON, Mexican TIIE rate, MIBOR, NZD ON OIS Rate, NZDOND, SOFR, SONIA, SORA, THB ON Repo Rate, UK RPI rate, USD FED Fund rate.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

Description	2021				
	PRIT pays/receives interest rate	PRIT pays/receives index/ protection	Maturity date	Gross notional amount	Net unrealized appreciation (depreciation)
Interest rate swaps	-0.45%–17.94%	Various*	7/21-12/56	\$ 14,912,028	(18,474)
Credit default swaps	0.00%–16.20%	Credit default protection	7/21-12/72	3,690,046	(80,434)
Total return and other swaps	Variable	Various*	7/21-9/50	4,449,490	15,156
Total swaps				\$ 23,051,564	(83,752)

* PRIT pays/receives counterparty based on 1-Month Euribor, 1-Month MIBOR, 1-Month USD LIBOR, 3-Month AUD-BBR-BBSW, 3-Month Aonia, 3-Month Euribor, 3-Month HIBOR, 3-Month JIBAR, 3-Month JPY LIBOR, 3-Month KLIBOR, 3-Month KWCDC, 3-Month MosPrime rate, 3-Month NZD BBR, 3-Month SOR, 3-Month USD LIBOR, 6-Month AUD-BBR-BBSW, 6-Month Euro LIBOR, 6-Month Euribor, 6-Month KWCDC, 6-Month JPY LIBOR, 6-Month MIBOR, 6-Month PRIBOR, 6-Month SIBOR, 6-Month SOR, 6-Month THBFX, 6-Month USD LIBOR, 6-Month WIBOR, 12-Month MIBOR, 7-Day CNY Repo Fixing Rate, CPI inflation rate, Federal Funds Rate, Reserve Bank of New Zealand Official Cash Rate, SOFR, THB Semi-annual Swap rate, TLREF, TWD Semi-annual Swap rate.

For the years ended June 30, 2022 and 2021, the change in net unrealized appreciation (depreciation) on swap contracts was \$(7,008) and \$(879), respectively.

The PRIT Fund's exposures in the event of nonperformance by counterparties at June 30 were as follows:

Counterparty	Credit rating	2022					
		Interest rate swaps		Credit default swaps		Total return and other swaps	
		Gross notional	Fair value	Gross notional	Fair value	Gross notional	Fair value
Barclays Bank PLC	A	\$ 65,406	331	616,832	2,285	—	—
BNP Paribas SA	A+	—	—	40,963	(23,534)	—	—
CME Group	AA-	148,902	(6,094)	—	—	—	—
Goldman Sachs & Co	A+	686,689	46,530	2,634,224	(10,925)	—	—
Goldman Sachs International	A+	—	—	97,459	(17,951)	25,524	375
Intercontinental Exchange	A-	—	—	112,104	(3,654)	—	—
JMP Securities LLC	A+	—	—	49,527	(17,979)	—	—
JPMorgan Chase Bank NA	A+	317,506	18,490	54,557	(13,579)	269,137	(18,298)
JP Morgan Securities LLC	A+	24,461,829	(8,060)	62,239	4,951	1,531	(39)
LCH Ltd	AA-	198,982	(2,448)	—	—	90,425	(644)
Morgan Stanley & Co Intl PLC	A+	20,011	451	91,580	(22,181)	415	(29)
Morgan Stanley Capital Services	A+	—	—	203,155	(24,796)	12,500	178
SMBC Capital Markets Inc.	A+	250,000	6,640	—	—	—	—
All others	Various	969,555	1,797	55,537	424	14,328	(3,001)
		\$ 27,118,880	57,637	4,018,177	(126,939)	413,860	(21,458)

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

Counterparty	Credit rating	2021					
		Interest rate swaps		Credit default swaps		Total return and other swaps	
		Gross notional	Fair value	Gross notional	Fair value	Gross notional	Fair value
BNP Paribas Securities Corp	A+	\$ —	—	184,739	1,966	—	—
Citibank NA	A+	—	—	3,600	18	597,477	8,489
CME Group	AA-	344,867	(1,429)	—	—	—	—
Goldman Sachs	A+	43,358	37	1,867,722	(46,786)	—	—
Intercontinental Exchange	BBB+	—	—	100,582	1,950	—	—
LCH Ltd	AA-	130,262	(1,050)	—	—	249,751	1,935
Merrill Lynch International	A+	—	—	4,800	48	229,799	2,838
Morgan Stanley	A+	431,123	(31)	493,122	(5,294)	188,635	(221)
SMBC Capital Markets Inc.	A+	250,000	(18,429)	—	—	—	—
U.S. Bank National Association	A+	500,000	(3,255)	—	—	—	—
All others (1)	Various	13,212,418	5,683	1,035,481	(32,336)	3,183,828	2,115
		\$ 14,912,028	(18,474)	3,690,046	(80,434)	4,449,490	15,156

(1) A majority of these swaps are centrally cleared and are settled daily.

(8) Investment Management and Other Management Fees

In accordance with the PRIM Board's Operating Trust Agreement, expenses incurred by the PRIM Board in managing the PRIT Fund are charged to the PRIT Fund in the form of management fees. These expenses consist of investment management fees, investment advisory fees, custodian fees and professional fees, as well as staff salaries and other administrative expenses of the PRIM Board.

(a) Investment Management Fees

Investment management fees are paid to discretionary managers pursuant to executed contracts. Total investment management fees were \$257,331 and \$164,076 for the years ended June 30, 2022 and 2021, respectively. \$183,403 and \$114,034 were incurred by the PRIM Board for the years ended June 30, 2022 and 2021, respectively, and the remaining investment management fees were incurred by the single-member limited liability corporations that are consolidated into the PRIT Fund.

All domestic, international, and emerging market equity managers are paid a base fee calculated as a percentage of either current net position under management or an agreed-upon funded amount, typically equal to the amount of original and subsequent funding. In certain cases, this is subject to periodic revision. Base fees are paid quarterly. In addition, some active (nonindexed) equity managers are eligible to receive a performance fee.

Fixed income managers are generally paid a quarterly asset-based fee. Certain managers are eligible for a performance fee.

Fees for private equity investments are typically a percentage of committed capital with the fee percentage decreasing over time. In addition, the general partners (investment managers) of private

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

equity limited partnerships are allocated additional profit, known as carried interests, based on the net gains generally above a specified hurdle rate, on realized partnership investments.

The LLC's investment management fees generally consist of a base fee and a performance fee. Base fees are calculated and paid monthly. Performance fees are paid to managers who out-perform their respective hurdle rates, as defined in the investment management agreements.

Timberland investment management fees consist of a base fee and a performance fee component and are calculated and paid similar to the LLC's investment management fees.

Hedge fund-of-funds investment managers are paid base fees, which are calculated and paid quarterly.

Fees for portfolio completion strategies investments generally consist of a base fee and a performance fee based on return.

The majority of investment management fees for private equity and private debt investments are charged by the general partners to the investment partnerships and not to the limited partner investors directly. Investment management fees for portfolio completion strategies investments and commingled account investments are charged to the respective investments. Most base investment management fees for investments in real estate properties and timberland are charged against the respective investments. Therefore, the fair values of these investments are reported net of investment management fees and these investment management fees are not included in the accompanying statements of changes in pooled net position.

(b) Investment Advisory Fees

NEPC, LLC, Callan Associates, Aberdeen Asset Management Inc., Hamilton Lane, International Woodland Company, and NewAlpha Asset Management served as the PRIM Board's principal investment advisors in fiscal year 2022. NEPC, LLC served as the asset allocation advisor, Callan Associates served as the public markets advisor, Aberdeen Asset Management Inc. and NewAlpha Asset Management provided portfolio completion strategies advisory services, Hamilton Lane served as the private equity advisor, and International Woodland Company provided timberland advisory services. These investment advisors, among others, provided the PRIM Board with comprehensive investment advisory services, including recommendations on asset allocation, selection of investment managers, and the monitoring of performance of the PRIT Fund and its individual investment managers.

For the years ended June 30, 2022 and 2021, investment advisory fees were \$15,059 and \$13,049, respectively, which are included in investment management and other management fees in the accompanying statements of changes in pooled net position.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(c) Custodian Fees

BNY Mellon is the investment custodian and record keeper for the PRIT Fund. BNY Mellon records all daily transactions, including investment purchases and sales, investment income, expenses, and all participant activity for the PRIT Fund. BNY Mellon also provides portfolio performance analysis each month for the PRIT Fund.

For the years ended June 30, 2022 and 2021, custodian fees were \$936 and \$1,672, respectively, and are included in investment management and other management fees in the accompanying statements of changes in pooled net position.

(d) Other Administrative Fees

For the years ended June 30, 2022 and 2021, other administrative expenses of the PRIM Board, including employee compensation, professional fees and occupancy costs, charged to the PRIT Fund totaled \$22,603 and \$20,147, respectively, which are included in investment management and other management fees in the accompanying statements of changes in pooled net position.

(9) Commitments

As of June 30, 2022 and 2021, the PRIT Fund had outstanding unfunded commitments to invest \$8,449,398 and \$7,444,345, respectively, in private debt, other credit opportunities investments, private equity funds, portfolio completion strategies investments, and real estate investments.

(10) Subsequent Events

For purposes of determining the effects of subsequent events on the financial statements, management has evaluated subsequent events after June 30, 2022 through **December 1, 2022**, the date on which the financial statements were available to be issued.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)
Schedule of Pooled Net Position – Capital Fund and Cash Fund
June 30, 2022
(Dollars in thousands)

	<u>Capital Fund</u>	<u>Cash Fund</u>	<u>Total</u>
Assets:			
Investments, at fair value:			
Short-term	\$ 1,467,244	168,320	1,635,564
Fixed income	20,686,408	—	20,686,408
Equity	33,243,865	—	33,243,865
Timberland	2,904,110	—	2,904,110
Private equity funds	16,837,964	—	16,837,964
Real estate:			
Real estate properties	9,796,738	—	9,796,738
Equity	1,336,488	—	1,336,488
Real estate funds	481,793	—	481,793
Other	75,973	—	75,973
Total real estate	<u>11,690,992</u>	<u>—</u>	<u>11,690,992</u>
Portfolio completion strategies:			
Investment funds	2,303,551	—	2,303,551
Equity	2,285,915	—	2,285,915
Fixed income	3,518,563	—	3,518,563
Cash and cash equivalents	1,106,108	—	1,106,108
Agricultural investments	592,878	—	592,878
Total portfolio completion strategies	<u>9,807,015</u>	<u>—</u>	<u>9,807,015</u>
Total investments	96,637,598	168,320	96,805,918
Cash	254,297	107	254,404
Securities lending collateral	121,946	—	121,946
Interest and dividends receivable	233,962	269	234,231
Receivable for investments sold and other assets	727,187	—	727,187
Securities sold on a when-issued basis	398,418	—	398,418
Foreign currency forward contracts	134,977	—	134,977
Total assets	<u>98,508,385</u>	<u>168,696</u>	<u>98,677,081</u>
Liabilities:			
Securities sold short and other liabilities, at fair value:			
Portfolio completion strategies liabilities	2,172,680	—	2,172,680
Fixed income	14,747	—	14,747
Total securities sold short and other liabilities	<u>2,187,427</u>	<u>—</u>	<u>2,187,427</u>
Payable for investments purchased and other liabilities	1,198,502	—	1,198,502
Real estate debt and other liabilities	875,298	—	875,298
Securities lending obligations	872,820	—	872,820
Securities purchased on a when-issued basis	915,314	—	915,314
Foreign currency forward contracts	81,777	—	81,777
Management fees payable to PRIM	116,888	—	116,888
Total liabilities	<u>6,248,026</u>	<u>—</u>	<u>6,248,026</u>
Net position held in trust for pool participants	<u>\$ 92,260,359</u>	<u>168,696</u>	<u>92,429,055</u>

See accompanying independent auditors' report.

PENSION RESERVES INVESTMENT TRUST FUND
(A Component Unit of the Commonwealth of Massachusetts)

Schedule of Changes in Pooled Net Position – Capital Fund and Cash Fund

Year ended June 30, 2022

(Dollars in thousands)

	<u>Capital Fund</u>	<u>Cash Fund</u>	<u>Total</u>
Additions:			
Contributions:			
State employees	\$ —	858,181	858,181
State teachers	—	1,058,832	1,058,832
Other participants	—	2,425,078	2,425,078
Total contributions	<u>—</u>	<u>4,342,091</u>	<u>4,342,091</u>
Net investment income (loss):			
From investment activities:			
Net realized gain on investments and foreign currency transactions	4,831,600	—	4,831,600
Net change in unrealized depreciation on investments and foreign currency translations	(9,901,811)	—	(9,901,811)
Interest	621,361	725	622,086
Dividends	910,551	—	910,551
Timberland	41,557	—	41,557
Private equity	134,138	—	134,138
Portfolio completion strategies	50,980	—	50,980
Real estate:			
Income	594,530	—	594,530
Expenses	(231,520)	—	(231,520)
Total real estate	<u>363,010</u>	<u>—</u>	<u>363,010</u>
(Loss) income from investment activities	<u>(2,948,614)</u>	<u>725</u>	<u>(2,947,889)</u>
Investment management and other management fees	<u>(295,929)</u>	<u>—</u>	<u>(295,929)</u>
Net (loss) income from investment activities	<u>(3,244,543)</u>	<u>725</u>	<u>(3,243,818)</u>
From securities lending activities:			
Securities lending income	6,359	—	6,359
Securities lending expenses	(2,286)	—	(2,286)
Net income from securities lending activities	<u>4,073</u>	<u>—</u>	<u>4,073</u>
Total net investment (loss) income	<u>(3,240,470)</u>	<u>725</u>	<u>(3,239,745)</u>
Total (deductions) additions	<u>(3,240,470)</u>	<u>4,342,816</u>	<u>1,102,346</u>
Deductions:			
Redemptions:			
State employees	—	1,509,113	1,509,113
State teachers	—	1,507,198	1,507,198
Other participants	—	1,355,825	1,355,825
Total deductions	<u>—</u>	<u>4,372,136</u>	<u>4,372,136</u>
Interfund transfers (out) in, net	<u>(56,249)</u>	<u>56,249</u>	<u>—</u>
Net (decrease) increase in pooled net position	<u>(3,296,719)</u>	<u>26,929</u>	<u>(3,269,790)</u>
Net position held in trust for pool participants:			
Balance, beginning of year	<u>95,557,078</u>	<u>141,767</u>	<u>95,698,845</u>
Balance, end of year	<u>\$ 92,260,359</u>	<u>168,696</u>	<u>92,429,055</u>

See accompanying independent auditors' report.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Financial Statements and Required Supplementary Information

June 30, 2022 and 2021

(With Independent Auditors' Report Thereon)

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Financial Statements and Required Supplementary Information
June 30, 2022 and 2021

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Independent Auditors' Report

The Administration and Audit Committee and Trustees,
Pension Reserves Investment Management Board:

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Pension Reserves Investment Management Board (the PRIM Board) as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the PRIM Board's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the PRIM Board as of June 30, 2022 and 2021, and the changes in its fiduciary net position for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the PRIM Board and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the PRIM Board's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the PRIM Board's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the PRIM Board's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 1, 2022 on our consideration of the PRIM Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the PRIM Board's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIM Board's internal control over financial reporting and compliance.

[(signed) KPMG LLP]

Boston, Massachusetts
December 1, 2022

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

This section presents management's discussion and analysis of the Pension Reserves Investment Management Board's (the PRIM Board's) financial performance for the fiscal years ended June 30, 2022 and 2021 and should be read in conjunction with the financial statements, which follow this section.

The PRIM Board was created by Massachusetts legislation to provide supervision of the management of the investments of the Pension Reserves Investment Trust Fund (the PRIT Fund).

Overview of the Financial Statements

The financial statements include the statements of fiduciary net position, which present the PRIM Board's financial position as of June 30, 2022 and 2021, and the statements of changes in fiduciary net position, which present the PRIM Board's financial activities for the years then ended. The notes to the financial statements provide additional information that is essential to a full understanding of the financial statements. The notes describe the significant accounting policies of the PRIM Board and provide detailed disclosures on certain account balances.

The PRIM Board's financial statements are prepared in conformity with U.S. generally accepted accounting principles using the economic resources measurement focus and the accrual basis of accounting.

Financial Highlights and Analysis

At June 30, 2022, the PRIM Board maintained a fiduciary net position value of zero, consistent with the prior year, because all expenses incurred by the PRIM Board in managing the PRIT Fund are reimbursed by the PRIT Fund. The PRIM Board held no investments (investments are held by the PRIT Fund). Total assets and liabilities increased 116.7% in fiscal year 2022, primarily due to higher accrued investment management fees, which were \$109.4 million and \$43.9 million at June 30, 2022 and 2021, respectively.

Total assets and liabilities increased 60.3% from June 30, 2020 to June 30, 2021, primarily due to higher accrued investment management fees during the fiscal year.

	June 30		
	2022	2021	2020
	(Amounts in thousands)		
Total assets	\$ 121,105	55,896	34,861
Total liabilities	121,105	55,896	34,861
Total fiduciary net position	\$ —	—	—

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

All expenses of the PRIM Board are reimbursed by the PRIT Fund; therefore, additions equaled deductions for the years ended June 30, 2022, 2021, and 2020.

	June 30		
	2022	2021	2020
	(Amounts in thousands)		
Total additions	\$ 224,642	153,601	130,261
Deductions:			
Investment management fees	183,666	114,069	96,083
Investment advisory fees	15,059	12,799	11,563
Custodian fees	936	1,672	1,670
Other expenses	24,981	25,061	20,945
Total deductions	224,642	153,601	130,261
Change in fiduciary net position	—	—	—
Fiduciary net position, beginning of year	—	—	—
Fiduciary net position, end of year	\$ —	—	—

The PRIM Board expenses were \$224.6 million for the year ended June 30, 2022 compared to \$153.6 million for the year ended June 30, 2021, representing a 46.3% increase in total expenses. Investment management fees, which include both base and performance fees, increased by \$69.6 million in fiscal 2022. Base fees increased by \$7.7 million and performance fees increased by \$61.9 million. The base fee increase is attributable to an increase in the PRIT Fund's assets under management during the fiscal year. The performance fee increase was primarily due to outperformance by a U.S. micro cap equity manager and a real estate manager. Investment advisory fees increased 17.7% primarily due to increases in public markets, portfolio completion strategies, and real estate leverage advisory fees. Custodian fees decreased 44.0% in accordance with contractual fee arrangements. Other expenses decreased 0.3%, primarily due to an increase in salaries and employee benefits expenses offset by decreases in pension and postemployment benefits other than pensions expenses.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Required Supplementary Information –
Management's Discussion and Analysis

June 30, 2022 and 2021

(Unaudited)

The PRIM Board expenses were \$153.6 million for the year ended June 30, 2021 compared to \$130.3 million for the year ended June 30, 2020, representing a 17.9% increase in total expenses. Investment management fees, which include both base and performance fees, increased by \$18.0 million in fiscal 2021. Base fees decreased by \$2.0 million and performance fees increased by \$20.0 million. The base fee decrease is attributable to a reduced domestic enhanced equity allocation offset by an increase in the PRIT Fund's assets under management. The performance fee increase was primarily due to outperformance by a U.S. micro cap equity manager, an emerging markets equity manager, and a timberland manager. Investment advisory fees increased 10.7% primarily due to increases in operational due diligence fees and managed accounts advisory fees. Custodian fees remained consistent with contractual fee arrangements. Other expenses increased 19.7%, primarily due to an increase in salaries and employee benefits expenses.

Other Information

This financial report is designed to provide a general overview of the PRIM Board's financial results. Additional information can be found on the PRIM Board's website at www.mapension.com. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Pension Reserves Investment Management Board, 84 State Street, Boston, Massachusetts 02109.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Statements of Fiduciary Net Position

June 30, 2022 and 2021

(Dollars in thousands)

	<u>2022</u>	<u>2021</u>
Assets:		
Cash	\$ 263	173
Receivable from PRIT	116,888	50,986
Right-of-use asset - leased building	4,410	4,410
Right-of-use asset - leased building - accumulated amortization	(2,075)	(1,037)
Net right-of-use asset - leased building	<u>2,335</u>	<u>3,373</u>
Other assets	<u>1,619</u>	<u>1,364</u>
Total assets	<u>121,105</u>	<u>55,896</u>
Liabilities:		
Lease liability	2,370	3,410
Accrued custodian fees	156	146
Accrued investment advisory fees	1,903	1,517
Accrued investment management fees	109,388	43,874
Other accrued expenses	<u>7,288</u>	<u>6,949</u>
Total liabilities	<u>121,105</u>	<u>55,896</u>
Fiduciary net position	<u>\$ —</u>	<u>—</u>

See accompanying notes to financial statements.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Statements of Changes in Fiduciary Net Position

Years ended June 30, 2022 and 2021

(Dollars in thousands)

	<u>2022</u>	<u>2021</u>
Additions:		
Reimbursement of fees and other expenses	\$ 224,642	153,601
Deductions:		
Investment management fees:		
Base fees	105,064	97,384
Performance fees	78,602	16,685
Investment advisory fees	15,059	12,799
Custodian fees	936	1,672
Other expenses:		
Salaries and employee benefits	15,670	14,088
Pension	772	2,734
Postemployment benefits other than pensions	1,606	2,142
Right-of-use amortization expense	1,038	1,037
Interest expense - lease	12	17
Occupancy	207	165
Legal and audit fees	880	840
Research	390	187
Other	4,406	3,851
Total deductions	<u>224,642</u>	<u>153,601</u>
Change in fiduciary net position	—	—
Fiduciary net position, beginning of year	<u>—</u>	<u>—</u>
Fiduciary net position, end of year	<u>\$ —</u>	<u>—</u>

See accompanying notes to financial statements.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(1) Description of the PRIM Board

The Pension Reserves Investment Management Board (the PRIM Board) was created in 1983 by the Commonwealth of Massachusetts (the Commonwealth) through legislation (Chapter 661 of the Acts of 1983, as amended by Chapter 315 of the Acts of 1996), to provide general supervision of the investments and management of the Pension Reserves Investment Trust Fund (the PRIT Fund). The PRIT Fund was created by the same legislation and is the investment portfolio for the assets of the State Employees' and State Teachers' Retirement Systems, the State Retiree Benefit Trust Fund, as well as local retirement systems and authorities that choose to invest in the PRIT Fund.

The PRIM Board is governed by a nine-member board of trustees. The Trustees include: (1) the Governor, ex officio, or his designee; (2) the State Treasurer, ex officio, or his designee, who shall serve as Chair of the PRIM Board; (3) a private citizen, experienced in the field of financial management, appointed by the State Treasurer; (4) an employee or retiree, who is a member of the State Teachers' Retirement System, elected by the members of such system, for a term of three years; (5) an employee or retiree, who is a member of the State Employees' Retirement System, elected by the members of such system for a term of three years; (6) the elected member of the State Retirement Board; (7) one of the elected members of the Teachers' Retirement Board chosen by the members of the Teachers' Retirement Board; (8) a person who is not an employee or official of the Commonwealth appointed by the Governor; and (9) a representative of a public safety union appointed by the Governor. Appointed members serve for a term of four years.

The PRIM Board seeks to manage the PRIT Fund to ensure that pension assets are well invested so that current and future benefit obligations are adequately funded in a cost-effective manner. The PRIM Board therefore seeks to maximize the total return on investment within acceptable levels of risk and cost for an approximately 60% funded public pension fund. Under current law (as amended by Section 45 of Chapter 68 of the Acts of 2011), by the year 2040, the PRIT Fund plans to have grown, through annual payments in accordance with a legislatively approved funding schedule and through total return of the PRIT Fund, to an amount sufficient to meet the then-existing pension obligations of the Commonwealth. The Commonwealth has adopted a schedule of state pension appropriations that assumes a long-term actuarial rate of return for the PRIT Fund of 7.0%.

The nine-member Board of Trustees has the authority to employ an Executive Director, outside investment managers, custodians, consultants, and others as it deems necessary; to formulate policies and procedures; and to take such other actions as necessary and appropriate to manage the assets of the PRIT Fund.

The PRIM Board is the legal custodian of the PRIT Fund and has fiduciary responsibility for the assets transferred to the PRIT Fund. The PRIM Board selects investment managers and advisors, reviews and evaluates performance, and performs various other activities in the daily management of the PRIT Fund. As of June 30, 2022 and 2021, the PRIT Fund had net position totaling approximately \$92.4 billion and \$95.7 billion, respectively. For a copy of the audited financial statements of the PRIT Fund, contact the PRIM Board.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(2) Summary of Significant Accounting Policies

(a) Basis of Accounting and Financial Statement Presentation

The PRIM Board's financial statements are reported using the economic resources measurement focus and the accrual basis of accounting as specified by the Governmental Accounting Standards Board's (GASB's) requirements for fiduciary activities.

(b) Additions and Deductions

In accordance with the PRIM Board's operating trust, all expenses incurred by the PRIM Board in managing the PRIT Fund are reimbursed by the PRIT Fund. These expenses consist of investment management, investment advisory, custodian and other professional fees, salaries, and all other expenses of the PRIM Board.

(c) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the dates of the financial statements and the reported amounts of additions and deductions during the reporting periods. Actual results could differ from those estimates.

(d) Adoption of New Accounting Standard

The PRIM Board adopted the provisions of GASB Standard No. 87 (GASB 87), *Leases*, effective July 1, 2020. The PRIM Board recorded a right-of-use asset – leased building and lease liability of \$4,410 as of July 1, 2020. Because all expenses, including any additional expenses recognized with the adoption of GASB 87, are reimbursed by the PRIT Fund, the effect on the July 1, 2020 fiduciary net position and change in net position as of June 30, 2021 was \$0.

The adoption of GASB 87 also resulted in immaterial restatements to previously reported 2021 amounts including the receivable from PRIT as well as certain additions and deductions in the accompanying financial statements.

(e) Leases

The PRIM Board recognizes an intangible right-to-use asset and corresponding lease liability for its lease arrangement. The lease asset is amortized into amortization expense on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset. At lease commencement, the lease liability is measured at the present value of payments expected to be made during the lease term. Subsequently, the lease liability is reduced by the principal portion of lease payments made. The discount rate used in the present value calculation is an estimate of the interest rate that would be charged for borrowing the lease payment amounts during the lease term.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(3) Receivable from PRIT

The receivable from the PRIT Fund includes amounts due to the PRIM Board for reimbursement of management fees and other expenses incurred as a result of supervising the investments and management of the PRIT Fund. Certain investment management fees and other expenses are paid over a period longer than one year.

(4) Investment Management, Investment Advisory, Custodian, and Other Fees

(a) Investment Management Fees

Investment management fees are paid to managers pursuant to executed contracts.

All domestic, international, and emerging markets equity managers are paid a base fee calculated as a percentage of either current net position under management or an agreed-upon funded amount, typically equal to the amount of original and subsequent funding. In certain cases, this is subject to periodic revision. Base fees are paid quarterly. In addition, some active (nonindexed) equity managers are eligible to receive a performance fee.

Fixed income managers are generally paid a quarterly asset-based fee. Certain managers are eligible for a performance fee.

Fees for private equity investments are typically a percentage of committed capital, with the fee percentage decreasing over time. In addition, the general partners (investment managers) of private equity investment limited partnerships are allocated additional profits, known as carried interests, based on the net gains generally above a specified hurdle rate, on realized partnership investments.

Real estate and timberland investment management fees consist of a base fee and a performance fee. Base fees are calculated and paid monthly. Performance fees are paid to managers who outperform their respective hurdle rates, as defined in the investment management agreements.

Hedge fund of funds investment managers are paid base fees, which are calculated and paid quarterly.

Fees for portfolio completion strategies investments generally consist of a base fee and a performance fee based on return.

The majority of investment management fees for private equity investments and private debt investments are charged by the general partners to the investment partnerships and not to the limited partner investors directly. Investment management fees for portfolio completion strategies investments are charged to the respective investments. Most investment management base fees for investments in real estate properties and timberland are charged against the respective investments. In addition, certain investments are in commingled funds, which charge fees at the fund level. Therefore, these investments are reported net of investment management fees and these investment management fees are not included in the accompanying statements of changes in fiduciary net position.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

(b) Investment Advisory Fees

NEPC, LLC, Callan Associates, Aberdeen Asset Management Inc., Hamilton Lane, International Woodland Company, and NewAlpha Asset Management served as the PRIM Board's principal investment advisors in fiscal year 2022. NEPC, LLC served as the asset allocation advisor, Callan Associates served as the public markets advisor, Aberdeen Asset Management Inc. and NewAlpha Asset Management provided portfolio completion strategies advisory services, Hamilton Lane served as the private equity advisor, and International Woodland Company provided timberland advisory services. These investment advisors, among others, provided the PRIM Board with comprehensive investment advisory services, including recommendations on asset allocation, selection of investment managers, and the monitoring of performance of the PRIT Fund and its individual investment managers.

For the years ended June 30, 2022 and 2021, investment advisory fees were \$15,059 and \$12,799, respectively.

(c) Custodian Fees

BNY Mellon is the custodian and record-keeper for the PRIT Fund. BNY Mellon records all daily transactions, including investment purchases and sales, investment income, expenses, and all participant activity, for the PRIT Fund. BNY Mellon also provides portfolio performance analysis each month for the PRIT Fund. For the years ended June 30, 2022 and 2021, custodian fees were \$936 and \$1,672, respectively.

(d) Other Expenses

For the years ended June 30, 2022 and 2021, other expenses of the PRIM Board, including employee compensation and benefits, professional fees, occupancy, and other costs, totaled \$24,981 and \$25,061, respectively.

(5) Lease Arrangement

The PRIM Board leases office space at 84 State Street in Boston, Massachusetts from a PRIT Fund real estate subsidiary. The lease term, as amended, expires in September 2024. Monthly payments are based on the fixed price per square footage of leased space. The monthly payments range from \$85 to \$92. The PRIM Board used an incremental borrowing rate of 0.43%.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

The right-to-use asset and accumulated amortization for the leased building for the years ended June 30, 2022 and 2021 are as follows:

	<u>Beginning Balance</u>	<u>Additions</u>	<u>Deletions</u>	<u>Ending Balance</u>
June 30, 2022:				
Right-of-use asset - leased building	\$ 4,410	—	—	4,410
Less: Accumulated amortization	(1,037)	(1,038)	—	(2,075)
Net right-of-use asset - leased building	<u>\$ 3,373</u>	<u>(1,038)</u>	<u>—</u>	<u>2,335</u>
June 30, 2021:				
Right-of-use asset - leased building	\$ 4,410	—	—	4,410
Less: Accumulated amortization	—	(1,037)	—	(1,037)
Net right-of-use asset - leased building	<u>\$ 4,410</u>	<u>(1,037)</u>	<u>—</u>	<u>3,373</u>

A summary of changes in the lease liability for the years ended June 30, 2022 and 2021 are as follows:

	<u>Beginning Balance</u>	<u>Additions</u>	<u>Deletions</u>	<u>Ending Balance</u>	<u>Amount due in 1 year</u>
June 30, 2022	\$ 3,410	—	1,040	2,370	1,069
June 30, 2021	\$ 4,410	—	1,000	3,410	1,040

The future annual lease payments as of June 30, 2022 are as follows:

Fiscal year:	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2023	\$ 1,069	8	1,077
2024	1,096	3	1,099
2025	205	—	205
Total	<u>\$ 2,370</u>	<u>11</u>	<u>2,381</u>

(6) Custodial Credit Risk

At June 30, 2022 and 2021, the PRIM Board held no investments (investments are held by the PRIT Fund). As a result, its custodial credit risk was limited to its deposits. Custodial credit risk is the risk that, in the event of bank failure, the PRIM Board's deposits and investments may not be returned to it. The PRIM Board manages its exposure to custodial credit risk by requiring all cash to be held with a major financial institution. The PRIM Board has not adopted a formal custodial credit risk policy.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

Cash balances represent amounts held in bank depository accounts that may be subject to custodial credit risk. The PRIM Board maintains cash and cash equivalents with a major financial institution. The account balance may periodically exceed federally insured limit. No losses have been incurred as of June 30, 2022 and 2021.

(7) Pension Plan

All full-time employees of the PRIM Board must participate in the Massachusetts State Employees' Retirement System (SERS). The percentage rate of contribution is determined by an employee's entry date into the SERS. Such employees become vested after ten years of creditable service. The Commonwealth is legally responsible for making all actuarially determined employer contributions on behalf of the PRIM Board.

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, requires participating employers and nonemployers to recognize their proportionate share of the collective pension liability, deferred outflows and deferred inflows of resources, and pension expense. The collective pension amounts of participating entities in SERS have been allocated based on actual employer contribution and nonemployer contributions made by the Commonwealth.

Because contributions to SERS are the legal responsibility of the Commonwealth and not the PRIM Board, a "special funding" situation under GASB Statement No. 68 exists which requires the Commonwealth, not the PRIM Board, to record the pension liability for the PRIM Board employees in its financial statements.

For the years ended June 30, 2022 and 2021, the PRIM Board recognized pension expense of \$772 and \$2,734, respectively, and a corresponding amount of reimbursement income in the accompanying statements of changes in fiduciary net position. The net pension liability reported by the Commonwealth on behalf of the PRIM Board was \$12,635 and \$18,316 as of June 30, 2022 and 2021, respectively.

The fiscal 2022 net pension liability was measured as of June 30, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2021 rolled forward to June 30, 2021.

The fiscal 2021 net pension liability was measured as of June 30, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2019 rolled forward to June 30, 2020.

(8) Postemployment Benefits Other Than Pensions Plan

Employees of the PRIM Board participate in the Commonwealth's Postemployment Benefits Other Than Pensions (OPEB) Plan (Plan), a singled employer defined benefit OPEB Plan. Under Chapter 32A of the Massachusetts General Laws, the Commonwealth is legally responsible for providing certain health care and life insurance benefits for retired employees of the PRIM Board by making contributions directly to a single employer defined OPEB Plan.

**PENSION RESERVES INVESTMENT
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2022 and 2021

(Dollars in thousands)

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, requires participating employers and nonemployers to recognize, their proportionate share of the collective OPEB liability, deferred outflows and deferred inflows of resources, and OPEB expense. The collective OPEB amounts of participating entities in the OPEB Plan have been allocated based on actual employer contributions and nonemployer contributions made by the Commonwealth.

Because contributions to the Plan are the legal responsibility of the Commonwealth and not the PRIM Board, a “special funding” situation under GASB Statement No. 75 exists which requires the Commonwealth, not the PRIM Board, to record the OPEB liability for the PRIM Board employees in its financial statements.

For the years ended June 30, 2022 and 2021, the PRIM Board has recognized OPEB expense of \$1,606 and \$2,142, respectively, and a corresponding amount of reimbursement income in the accompanying statements of changes in fiduciary net position. The net OPEB liability reported by the Commonwealth on behalf of the PRIM Board was \$20,049 and \$22,878 as of June 30, 2022 and 2021, respectively.

The fiscal 2022 net OPEB liability was measured as of June 30, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2021 rolled forward to June 30, 2021.

The fiscal 2021 net OPEB liability was measured as of June 30, 2020, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2020 rolled forward to June 30, 2020.

(9) Subsequent Events

For purposes of determining the effects of subsequent events on the financial statements, management has evaluated subsequent events after June 30, 2022 through **December 1, 2022**, the date on which the financial statements were available to be issued.

Appendix B

**Independent Auditors' Report on Internal Control Over Financial Reporting and on
Compliance and Other Matters Based on an Audit of Financial Statements Performed in
Accordance With *Government Auditing Standards***

The Administration and Audit Committee and Trustees,
Pension Reserves Investment Management Board:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Pension Reserves Investment Trust Fund (the PRIT Fund), which comprise the PRIT Fund's statement of pooled net position as of June 30, 2022, and the related statement of pooled net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated December 1, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the PRIT Fund's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the PRIT Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of the PRIT Fund's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the PRIT Fund's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the PRIT Fund's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIT Fund's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

[(signed) KPMG LLP]

Boston, Massachusetts
December 1, 2022

**Independent Auditors' Report on Internal Control Over Financial Reporting and on
Compliance and Other Matters Based on an Audit of Financial Statements Performed in
Accordance With Government Auditing Standards**

The Administration and Audit Committee and Trustees,
Pension Reserves Investment Management Board:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of the Pension Reserves Investment Management Board (the PRIM Board), which comprise the PRIM Board's statement of fiduciary net position as of June 30, 2022, and the related statement of fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated December 1, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the PRIM Board's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the PRIM Board's internal control. Accordingly, we do not express an opinion on the effectiveness of the PRIM Board's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the PRIM Board's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the PRIM Board's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIM Board's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

[(signed) KPMG LLP]

Boston, Massachusetts
December 1, 2022

Appendix C

Independent Accountants' Agreed-Upon Procedures Report

Pension Reserves Investment Management Board:

We have performed the procedures enumerated below, which were agreed to by the Pension Reserves Investment Management Board (the PRIM Board), on the accuracy of the following benchmarks (collectively, the Benchmarks) presented in the documents titled "Pension Reserves Investment Management Board, Performance Measurement, June 30, 2022" and "Pension Reserves Investment Management Board, Performance Measurement, Net of Fees, June 30, 2022" (collectively, the Performance Measurement Presentation) as of June 30, 2022:

- Total Core Benchmark,
- Net-of-Fees Adjusted Policy Benchmark,
- Implementation Benchmark, and
- Asset Class Benchmarks (comprised of Domestic Equity, International Equity, Emerging Markets, Global Equity, Core Fixed Income, Value Added Fixed Income, Private Equity, Real Estate, Timberland, Portfolio Completion Strategies (PCS), Overlay, and Liquidating Portfolios) (collectively, the Asset Class Benchmarks).

The PRIM Board's management is responsible for the accuracy of the Benchmarks presented in the Performance Measurement Presentation.

The PRIM Board has agreed to and acknowledged that the procedures performed are appropriate to meet the intended purpose of evaluating the accuracy of the benchmarks identified above in the Performance Measurement Presentation. This report may not be suitable for any other purpose. No other parties have agreed to or acknowledged the appropriateness of these procedures for the intended purpose or any other purpose.

The procedures performed may not address all the items of interest to a user of this report and may not meet the needs of all users of this report and, as such, users are responsible for determining whether the procedures performed are appropriate for their purposes. We make no representation regarding the appropriateness of the procedures either for the intended purpose or for any other purpose.

As agreed with the PRIM Board, any recalculation differences resulting in an impact of less than 0.01% to the amounts presented in the Performance Measurement Presentation are considered immaterial and consequently are not reported herein.

The procedures and the associated findings are as follows:

- I. We obtained the following reports from BNYM:
 - 1) Performance Measurement Presentation as of June 30, 2022.
 - 2) Benchmark List, listing of benchmarks presented in the Performance Measurement Presentation.
 - 3) Master Structure Map, listing the composite benchmark, the benchmarks that make up the composite, start date, end date, segment, category, sector, level, and the weighted percentage of the composite.

- 4) Benchmark Return Streams, for the Total Core Benchmark, Net-of-Fees Adjusted Policy Benchmark, Implementation Benchmark, and the Asset Class Benchmarks for the year ended June 30, 2022 obtained directly from its data vendors. The data in the report was updated through August 30, 2022. We did not independently verify any of the benchmark data BNYM obtained from the data vendors.
- 5) Benchmark Change Letters, prepared by the PRIM Board and periodically sent to BNYM instructing any changes to benchmark calculations of the in-scope benchmarks. Refer to section II.1 for the individual Change Letters and corresponding effective date.
- 6) Benchmark Maintenance Forms for the in-scope benchmarks, prepared and provided by BNYM to document the authorization, execution, and review of the benchmark changes requested in the Benchmark Change Letters. Refer to Section II.2 for each Benchmark Maintenance Form and corresponding effective date.

II. The following procedures were performed for each benchmark:

- 1) We obtained copies of the following Benchmark Changes Letters in order to determine that all Total Core, Net-of-Fees Adjusted Policy, Implementation, and Asset Class Benchmarks included in the scope of our procedures were calculated as described in the following letters:

<u>Benchmark Change Letter Date</u>	<u>Effective Date(s) of Change (period ended)</u>
May 10, 2021	July 1, 2021
December 2, 2021	January 1, 2022

We recalculated Total Core, Net-of-Fees Adjusted Policy, Implementation and Asset Class Benchmarks as described in the letters without exception.

- 2) We obtained the following Benchmark Maintenance Forms in order to determine whether they were completed by BNYM:

<u>Benchmark</u>	<u>Effective Date of Change (period ended)</u>
Implementation Benchmark	July 1, 2021
Private Equity	July 1, 2021
International Equity	July 1, 2021
Emerging Markets	July 1, 2021
Global Equity	July 1, 2021
Implementation Benchmark	January 1, 2022
Adjusted Policy Benchmark	January 1, 2022
Real Estate	January 1, 2022

We determined the benchmark maintenance forms listed above were completed, without exception.

III. For the Asset Class Benchmarks, using the Benchmark Return Streams, we performed procedures 1) to 7) using the following formula:

Step 1:
 Product of Returns (as provided) and Weights (as provided)
 Equals Monthly Return (recalculated)
 Divided by 100
 Plus 1
 Equals Monthly Figure (recalculated)

Step 2:
 Product of the Monthly Figure(s) for the applicable period from Step 1 ^ (1/number of years)
 Less 1
 Equals Return for the applicable period (recalculated)

1) We recalculated the June 30, 2022 Month to Date Return and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Portfolio Completion Strategies	-1.82%	-1.50%	-0.32%

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Value Added Fixed Income	-2.64%	-2.65%	-0.01%

2) We recalculated the June 30, 2022 Quarter to Date Return and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Portfolio Completion Strategies	-3.24%	-2.92%	-0.32%

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Value Added Fixed Income	-4.82%	-4.86%	-0.04%

3) We recalculated the Calendar Year to Date Return (January 1, 2022 – June 30, 2022) and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Portfolio Completion Strategies	-2.77%	-2.46%	-0.31%
Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Value Added Fixed Income	-6.44%	-6.47%	-0.03%

- 4) We recalculated the 1 Year Return (July 1, 2021 – June 30, 2022) and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Portfolio Completion Strategies	-1.68%	-1.36%	-0.32%

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Value Added Fixed Income	-2.40%	-2.44%	0.04%

- 5) We recalculated the trailing 3 Year Return (July 1, 2019 – June 30, 2022) and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Portfolio Completion Strategies	4.0%	4.10%	-0.10 %

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Value Added Fixed Income	3.20%	3.18%	0.02%

- 6) We recalculated the trailing 5 Year Return (July 1, 2017 – June 30, 2022) and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Portfolio Completion Strategies	4.17%	4.21%	-0.04%

- 7) We recalculated the trailing 10 Year Return (July 1, 2012 – June 30, 2022) and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Asset Class Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Portfolio Completion Strategies	4.05%	4.08%	-0.03%

IV. Using the monthly Asset Class Benchmarks recalculated in Section III, we performed procedures 1) to 5) over the Total Core Benchmark and the Implementation Benchmark using the following formula:

Step 1:

Sum of Weight (as provided) multiplied by Monthly Return for each asset class (as recalculated in Step III)
 Equals Custom Benchmark (recalculated)
 Divided by 100
 Plus 1
 Equals Monthly Figure (recalculated)

Step 2:

Product of the Monthly Figure(s) for the applicable period from Step 1 [^] (1/number of years)
 Less 1
 Equals Return for the applicable period (recalculated)

1) We recalculated the June 30, 2022 Month to Date Return and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Total Core Benchmark	-3.26%	-3.20%	-0.06%

2) We recalculated the June 30, 2022 Quarter to Date Return and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Implementation Benchmark	-7.65%	-7.69%	0.04%
Total Core Benchmark	-7.13%	-7.02%	-0.11%

3) We recalculated the Calendar Year to Date Return (January 1, 2022 – June 30, 2022) and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Implementation Benchmark	-9.11%	-9.24%	0.13%
Total Core Benchmark	-8.89%	-8.96%	0.07%

- 4) We recalculated the 1 Year Return (July 1, 2021 – June 30, 2022) and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Implementation Benchmark	-3.57%	-3.47%	-0.10%
Total Core Benchmark	-4.74%	-4.90%	0.16%

- 5) We recalculated the trailing 3 Year Return (July 1, 2019 – June 30, 2022) and agreed it to the Performance Measurement Presentation

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Total Core Benchmark	5.91%	6.02%	-0.11%

- V. Using the Total Core Benchmark recalculated in Section IV, we recalculated and subtracted the percentage impact of the monthly fees, as listed below, related to the illiquid investments (private equity, risk premia, real assets, private debt, real estate, timberland, and natural resources) and performed procedures 1) to 5) over the Net-of-Fees Adjusted Policy Benchmark using the formulas listed below, for purposes of considering gross returns:

Month	Fees Subtracted	Percentage Impact
July 2021	\$ 221,782.99	-0.0002%
August 2021	\$ 1,761,443.25	-0.0018%
September 2021	\$ 53,494,895.86	-0.0545%
October 2021	\$ 4,912,409.57	-0.0050%
November 2021	\$ 31,523,363.41	-0.0312%
December 2021	\$ 45,418,744.62	-0.0453%
January 2022	\$ 172,168.20	-0.0002%
February 2022	\$ 11,304,777.36	-0.0112%
March 2022	\$ 28,963,446.15	-0.0291%
April 2022	\$ 2,690,756.13	-0.0027%
May 2022	\$ 35,059,136.76	-0.0363%
June 2022	\$ 15,577,851.89	-0.0162%

Step 1:

Total Fees (as provided)
 Divided by Beginning Adjusted Market Value (as provided)
 Multiplied by 100
 Equals Basis Point Impact (recalculated)

Step 2:

PRMGX090PBA2 – Actual BM Return (as provided)
 Plus Basis Point Impact (from Step 1)
 Equals New Incentive BM Return – PRMGX0903PBB (recalculated)

Step 3:
 New Incentive BM Return – PRMGX0903PBB (from Step 2)
 Divided by 100
 Plus 1
 Equals Monthly Figure (recalculated)

Step 4:
 Monthly Figure for the last month (from Step 3)
 Less 1
 Equals Monthly Return (recalculated)
 Product of Monthly Figures for the applicable period (from Step 3) ^ (1/number of years)
 Less 1
 Equals Return for the applicable period (recalculated)

- 1) We recalculated the June 30, 2022 Month to Date Return and agreed it to the Performance Measurement Presentation:

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Adjusted Policy Benchmark	-3.24%	-3.22%	-0.02%

- 2) We recalculated the June 30, 2022 Quarter to Date Return and agreed it to the Performance Measurement Presentation:

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Adjusted Policy Benchmark	-7.10%	-7.07%	-0.03%

- 3) We recalculated the June 30, 2022 Calendar Year to Date Return and agreed it to the Performance Measurement Presentation:

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

Benchmark	KPMG Calculation	BNYM Report	Difference⁽¹⁾
Adjusted Policy Benchmark	-9.07%	-9.05%	-0.02%

- 4) We recalculated the 1 year Return (July 1, 2021 – June 30, 2022) and agreed it to the Performance Measurement Presentation:

No exceptions noted, other than those caused by subsequent revisions to industry benchmarks.

<u>Benchmark</u>	<u>KPMG Calculation</u>	<u>BNYM Report</u>	<u>Difference⁽¹⁾</u>
<i>Adjusted Policy Benchmark</i>	<i>-5.14%</i>	<i>-5.12%</i>	<i>-0.02%</i>

- 5) We recalculated the Trailing 3 Year Return (July 1, 2019 – June 30, 2022) and agreed it to the Performance Measurement Presentation:

No exceptions noted.

Information Regarding Calculation Differences Noted

(1) We inquired of BNYM about the nature of the differences identified in Section III, IV, and V. BNYM informed us that the differences related to the benchmark indices which were revised subsequent to the date of the Performance Measurement Presentation used for testing. These changes were recorded retroactively by BNYM and differ from the data used for the Performance Measurement Presentation. We did not perform any procedures over these index changes. BNYM stated that effective January 1, 2012, the PRIM Board’s policy is to update certain asset class benchmarks for any subsequent revisions reported by the benchmark data vendors. These indices are components of the Implementation Benchmark, Total Core Benchmark, and Net-of-Fees Adjusted Policy Benchmark; therefore, these benchmarks are subject to the same revisions as the indices.

* * * * *

We were engaged by the PRIM Board to perform this agreed-upon procedures engagement and conducted our engagement in accordance with attestation standards established by the American Institute of Certified Public Accountants, which involves us performing the specific procedures agreed to and acknowledged above and reporting on findings based on performing those procedures. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the Performance Measurement Presentation as of June 30, 2022. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

We are required to be independent of the PRIM Board and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements related to our agreed-upon procedures engagement.

This report is intended solely for the information and use of the PRIM Board, and is not intended to be, and should not be, used by anyone other than the specified parties.

[(signed) KPMG LLP]

Boston, Massachusetts
December 1, 2022

Appendix D

**PENSION RESERVES INVESTMENT MANAGEMENT BOARD
(THE PRIM BOARD)**

Report on the PRIM Board's
Procurement Process for Investment Management and
Other Professional Services

Year ended June 30, 2022

(With Independent Auditors' Report Thereon)

**PENSION RESERVES INVESTMENT MANAGEMENT BOARD
(THE PRIM BOARD)**

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A. Description

This Section describes the controls of the Pension Reserves Investment Management Board (the PRIM Board) as they relate to the selection of third parties to provide investment management, advisory, custody and recordkeeping, auditing and other professional services related to the management of the PRIM Board and the Pension Reserves Investment Trust Fund (the PRIT Fund). Section II contains the report of agreed-upon procedures applied by KPMG LLP (KPMG). Appendix I details control objectives and related controls prepared by the PRIM Board, a description of the tests of selected controls performed by KPMG, and the results of those tests. Appendix II provides a listing of the services covered by this report that were procured by the PRIM Board during the period from July 1, 2021 to June 30, 2022.

B. PRIM Board/PRIT Fund Overview*Organization*

The PRIT Fund, a component unit of the Commonwealth of Massachusetts, was created in 1983 under Chapter 661 of the Acts of 1983, as amended by Chapter 315 of the Acts of 1996. The PRIT Fund is a pooled investment fund that invests the assets of the State Teachers' and State Employees' Retirement Systems of Massachusetts and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund, as well as the assets of the State Retiree Benefits Trust Fund. The PRIT Fund is not registered with the Securities and Exchange Commission, but is subject to oversight provided by the PRIM Board. The PRIM Board was created by legislation to provide general supervision of the investments and management of the PRIT Fund.

A nine-member Board of Trustees (the Board) governs the PRIM Board. The Board has authority to employ an Executive Director, outside investment managers, custodians, advisors, and others it deems necessary; to formulate policies and procedures; and to take such other actions as necessary and appropriate to manage the assets of the PRIT Fund. See Massachusetts General Laws (M.G.L) ch. 32, sec. 23(2A) (e). To assist them in carrying out their duties, the Board has established four advisory committees which include Board members and non-Board members: Investment; Administration and Audit; Real Estate and Timberland; and Compensation.

As trustees of the PRIT Fund, members of the Board are fiduciaries. The PRIM Board members fiduciary standards are guided by M.G.L ch. 32, sec. 23(3). Fiduciary standards of conduct also apply to the PRIM Board committee members, staff, investment managers, custodians, investment advisors, and others who exercise discretionary authority or discretionary control over the management or disposition of the PRIT Fund assets. See M.G.L. ch. 32, sec. 1.

Specific duties and responsibilities of the Board, Board Chair, Executive Director and Committees are outlined in the Board Governance Manual.

The PRIM Board seeks to manage the PRIT Fund to ensure that pension assets are well invested so that current and future benefit obligations are adequately funded in a cost-effective manner. The PRIM Board therefore seeks to maximize the total return on investment within acceptable levels of risk and cost for an approximately 60% funded public pension fund.

The PRIM Board employs professional investment managers and gives them discretion, consistent with specified objectives and guidelines, to manage the PRIT Fund's assets. Each investment manager operates under a contract that delineates responsibilities and performance expectations, including investment guidelines and administrative requirements.

The PRIM Board may contract with investment management advisors to assist the Board, committees, and staff in performance review, asset allocation studies, investment structure analyses, manager screening and selection, investment research and other matters of investment policy, procedures and implementation.

The PRIM Board may contract with one or more custodian banks or trust institutions to provide the PRIT Fund with comprehensive global custodial services associated with a complex, multi-billion dollar pension investment fund client. The custodian is responsible for the physical retention and administration of property received by the PRIT Fund, the collection of income, disbursement of funds, and the monthly reporting of all transactions in accordance with U.S. generally accepted accounting principles.

The PRIM Board may utilize the services of independent auditors, appraisers and other third parties, as needed.

C. Summary of the PRIM Board's Procurement Practices

The PRIM Board's procurement practices apply to the selection of investment managers, advisors, custodians, auditors and other specific providers of services to the PRIM Board. Procurement procedures are designed to ensure that the PRIM Board has access to a broad array of the highest quality of service providers. The PRIM Board's procurement practices are detailed in its Procurement Policy.

Request for Proposals

The PRIM Board's Request for Proposals (RFP) practice includes the following:

1. The PRIM Board staff, in conjunction with an advisor where appropriate, recommends to the appropriate Committee to recommend to the Board the issuance of an RFP for the specific services. The Board must approve the issuance of all RFPs.
2. The PRIM Board staff, in conjunction with an advisor where appropriate, drafts and issues a RFP. The RFP provides background information on the PRIM Board, outlines the scope of services, minimum criteria (if applicable), selection criteria and process, and requests detailed information on all topics relevant to the services sought. The RFP is advertised in industry and/or local publications.
3. An evaluation committee (typically comprised of the PRIM Board staff, an advisor where appropriate, and potentially representatives of the Trustees and/or their pertinent Committee) reviews the proposals received and makes objective judgments based solely on the selection criteria outlined in the RFP. The evaluation committee may interview finalists, undertake site visits, and conduct such other due diligence as is prudent and warranted under the circumstances. The evaluation committee's recommendation is presented to the pertinent Committee of the Trustees for review. If approved, the Committee presents that recommendation to the Trustees for final approval. If approved, the Trustees delegate to the Executive Director the authority to carry out the recommendation.

*To ensure PRIM can source high performing, institutional quality investment managers, procurement and selection of investment managers may also take place utilizing the "Alternate Procurement for Investment Opportunities" process outlined in the following section.

During the search process, all participants are provided with identical information and judged by the same criteria. The PRIM Board's principal tool to ensure the fairness of the process is an open RFP process. The PRIM Board does not employ "by invitation only" RFPs. The RFP guides participants through the process of offering to manage assets for, or provide other services to, the PRIM Board. It lays out the rules of the RFP process, establishes the selection criteria and provides applicable documents which may influence how participants would manage a portfolio for, or provide other services to, the PRIM Board. Once the search is concluded, all information relevant to the selection process is available to the public.

The most fundamental procurement risk the PRIM Board faces is that of selecting an investment manager or other professional service provider who does not perform up to expectations. When this occurs, the PRIM Board incurs opportunity costs and potential disruption of its investment program.

While it is never possible to predict any future performance, the RFP process is intended to give the PRIM Board the opportunity to engage organizations whose investment skill and/or other capabilities (e.g., client service) will persist. The RFP is a detailed document and seeks to approach each of the principal issues in the selection process from a variety of perspectives. The evaluation committee reviews each proposal and prepares an evaluation committee memorandum summarizing the selection process.

Firms assessed through the RFP process generally are judged on the following criteria: 1) the firm's stability and general experience; 2) the experience of firm personnel; 3) client relations and referrals; 4) philosophy/process; and 5) fees.

If the evaluation committee is seeking to engage an investment manager, it makes a quantitative and qualitative assessment of how the manager will fit into the existing portfolio in the particular asset class or subasset class. Such an assessment is based on many of the same factors used in asset allocation, namely, risk, return, and correlation among managers, as well as a thorough understanding of the types of risk factors the managers use to earn excess return. It is intended to avoid the risk that by hiring a particular manager, the PRIM Board may overweight a particular investment style or factor and thereby create an unintended bias.

If the evaluation committee is seeking to engage an advisor, custodian, auditor or other professional service provider, it makes an assessment of how the firm will meet the needs of the PRIM Board and the PRIT Fund. It will assess which firm can best provide the required services outlined in the RFP, with consideration given to the cost of providing those services.

The Trustees' vote to approve the engagement of investment managers and other professional service providers is made during public board meetings and is subject to the satisfactory outcome of contract and fee negotiations.

Alternate Procurement for Investment Opportunities

Certain investments, such as Private Equity, Alternative Debt, Direct Hedge Fund, Core and Non-Core Real Estate partnerships, Core and Non-Core Real Estate direct property level investments, and Portfolio Completion Strategies (PCS) investments, cannot be sourced through a competitive bidding process (RFP process). Therefore, the Trustees have developed the following process to source, evaluate and select these investment opportunities as they arise.

The Trustees will select investments based on the due diligence and the resulting recommendation of the PRIM Board staff and investment advisor, where appropriate. The following criteria will be considered when selecting investments for recommendation:

- a. Quality and stability of the investment team.
- b. Previous investment track record.
- c. Proposed investment strategy.
- d. Ability of investment manager to demonstrate its capability to generate superior returns.
- e. Alignment of interests.
- f. Operational capabilities.
- g. PRIT Fund portfolio fit.

The Trustees select investments in accordance with the following process:

- a. The PRIM Board staff, along with an investment advisor, where applicable, performs due diligence on investment opportunities that meet the selection criteria and are appropriate for investment.
- b. An Investment Report, which includes the PRIM Board staff's recommendation and an advisor's due diligence report, where applicable, is presented to the Trustees' Investment or Real Estate and Timberland Committee (RE Committee), whichever is appropriate, for review. If approved, the appropriate Committee presents that recommendation to the Trustees for final approval. If approved, the Trustees delegate to the Executive Director the authority to carry out the recommendation.
- c. If the timing of the closing of a private equity or alternative debt investment is expected to occur prior to scheduled PRIM Board's Investment Committee and Board meetings, an interim meeting approval process is followed. This interim meeting approval process may only be used for investment recommendations for existing relationships that the Board has previously approved. Upon completion of due diligence, the PRIM Board staff provides the Investment Committee and Trustees with the Investment Report, which includes the PRIM Board staff's recommendation and an advisor's due diligence report. The Investment Committee and Trustees may present questions and concerns to the PRIM Board staff. In consideration of all discussion with the Investment Committee and Trustees, the Chief Investment Officer has discretion to approve an investment in the recommended vehicle.

Independent Accountants’ Agreed Upon Procedures Report

Pension Reserves Investment Management Board:

We have performed the procedures enumerated below on the PRIM Board’s Procurement Process for the selection of third parties to provide investment management, consulting, custody and record keeping, auditing and other professional services (Procurement Process) related to the management of the PRIM Board and the Pension Reserves Investment Trust Fund (the PRIT Fund) for the year ended June 30, 2022. The PRIM Board is responsible for the Procurement Process.

The PRIM Board has agreed to and acknowledged that the procedures performed are appropriate to meet the intended purpose of assisting the PRIM Board in evaluating the Procurement Process relating to the PRIM Board and the PRIT Fund for the year ended June 30, 2022. This report may not be suitable for any other purpose. No other parties have agreed to or acknowledged the appropriateness of these procedures for the intended purpose or any other purpose.

The procedures performed may not address all the items of interest to a user of this report and may not meet the needs of all users of this report and, as such, users are responsible for determining whether the procedures performed are appropriate for their purposes. We make no representation regarding the appropriateness of the procedures either for the intended purpose or for any other purpose.

The PRIM Board Controls listed in Appendix I are management’s responsibility. The agreed-upon procedures were performed with respect to the Listing of Services Procured through Requests for Proposal (RFP) during the year ended June 30, 2022, as listed in Appendix II. Certain procedures required the following selection methodology, which was approved by the PRIM Board. Use of the selection method is noted where applicable.

Population Size	Selection Size
Less than 13	2
13 to 52	5
53 to 365	15
More than 365	25

No exceptions were noted in the performance of our procedures noted in Appendix I.

We were engaged by the PRIM Board to perform this agreed-upon procedures engagement and conducted our engagement in accordance with attestation standards established by the American Institute of Certified Public Accountants, which involves us performing the specific procedures agreed to and acknowledged above and reporting on findings based on performing those procedures. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the Procurement Process for the year ended June 30, 2022. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

We are required to be independent of the PRIM Board and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements related to our agreed-upon procedures engagement.

This report is intended solely for the information and use of the PRIM Board, and is not intended to be, and should not be, used by anyone other than the specified parties.

(signed) KPMG LLP

Boston, Massachusetts
December 1, 2022

**THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND
AGREED-UPON PROCEDURES PERFORMED BY KPMG
Year ended June 30, 2022**

A. Request for Proposals (RFP)

1. Controls provide reasonable assurance that the Trustees approve the issuance of RFPs.

The PRIM Board Controls

- The PRIM Board staff requests the appropriate Committee to make a recommendation to the Trustees to issue an RFP. If granted, the Committee makes a formal recommendation to the Trustees, which is included in the Board Meeting Agenda package. The Board has the authority to issue an RFP without prior recommendation from the committee.
- The Trustees decide by a majority vote during a public meeting whether to accept or reject the recommendation of the Committee to issue an RFP.

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected the Board Meeting Agenda package and noted an agenda item of the recommendation by the PRIM Board staff and the applicable Committee to request the Trustees to issue the RFP.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected Trustees' meeting minutes and noted whether the minutes reflected that a majority of the Trustees voted to issue the RFP.

2. Controls provide reasonable assurance that pertinent information regarding the RFP process is provided to potential respondents.

The PRIM Board Controls

- Each RFP authorized and issued by the Trustees defines the scope of services to be provided.

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of the RFPs and noted whether there was a Section containing scope of services.

The PRIM Board Controls

- Each RFP authorized and issued by the Trustees includes a copy of The PRIM Board’s standard investment management agreement, if applicable.
- Each RFP authorized and issued by the Trustees describes the selection process.
- Each RFP authorized and issued by the Trustees provides a tentative timetable for the selection process.
- Each RFP authorized and issued by the Trustees defines minimum qualifications (if appropriate) that respondents must meet in order to be granted further consideration.
- Each RFP authorized and issued by the Trustees contains selection criteria that will be used to evaluate respondents’ proposals.

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of the RFPs and noted whether a standard investment management agreement was included, where applicable.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of the RFPs and noted whether the selection process was described.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of the RFPs and noted whether a tentative timetable was included.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of the RFPs and noted whether the minimum qualifications (if applicable) were defined.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of the RFPs and noted whether there were specific selection criteria.

3. Controls provide reasonable assurance that potential respondents are informed about the legal structure of PRIM as well as the overall investment mix of the PRIT Fund (if appropriate).

The PRIM Board Controls

- Each RFP authorized and issued by the Trustees includes summary information on the PRIM Board’s legal structure, the PRIT Fund’s investment allocation (if appropriate), and/or a link referring potential respondents to a website which contains such information.

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of the RFPs and noted whether they included a summary of the PRIM Board’s legal structure, the PRIT Fund’s investment allocation (if applicable), and/or a link referring potential respondents to a website which contains such information.

4. Controls provide reasonable assurance that communication with potential respondents during the search process is organized and controlled.

The PRIM Board Controls

- Each RFP authorized and issued by the Trustees includes the name of the Procurement Officer and clearly states that all communications regarding the RFP and selection process should be directed to the Procurement Officer.
- Each RFP authorized and issued by the Trustees provides an opportunity and means for potential respondents to submit questions and obtain responses from the Procurement Officer prior to the Proposal Deadline.
- Inquiries from potential respondents are answered when received in writing on or before the stated Question Deadline Date. Questions received subsequent to the deadline are not answered.

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of the RFPs and noted whether the name of the Procurement Officer and a statement directing all questions to the Procurement Officer was included.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected the RFPs and noted whether an explanation of the question and answer process and deadline for submission of questions was included.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected the PRIM Board's Responses to Questions, which comprises a listing of questions and responses. In accordance with the selection method on page 5, KPMG selected questions from the list and agreed them to the originating firm's transmittal. KPMG inspected the originating firm's transmittal and noted whether the date and time stamp on the transmittal (or in its absence, the date of the transmittal) was dated before or on the Question Deadline Date. For RFP-3, KPMG selected questions numbered 2, 4, 5, 9, and 18 to perform the above procedures. For RFP-12, KPMG selected questions 1, and 3 to perform the above procedures. For RFP-27, KPMG noted no questions to perform the above procedures.

The PRIM Board Controls

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG selected questions from the population of respondent transmittals. In accordance with the selection method on page 5, KPMG inspected the respondent transmittal and noted whether the date and time stamp on the respondent's transmittal (or in its absence, the date of the transmittal) was dated before or on the Question Deadline Date. KPMG agreed the question(s) from the respondent's transmittal to the PRIM Board's Responses to Questions document. For RFP-3, KPMG selected questions numbered 2, 4, 5, 9, and 18 to perform the above procedures. For RFP-12, KPMG selected questions 1, and 3 to perform the above procedures. For RFP-27, KPMG noted no questions to perform the above procedures.

5. Controls provide reasonable assurance that information regarding the issuance of an RFP is widely disseminated.

The PRIM Board Controls

Agreed-Upon Procedures

- Each RFP issuance is advertised in industry publications, local publications or both, if appropriate.
 - Each RFP is available on the PRIM Board's website (www.mapension.com) until the Proposal Deadline.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of and/or original advertisements.
 - For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected a series of screen shots and/or confirmation from website administrator evidencing that a respondent could download the RFP from the PRIM Board website.

6. Controls provide reasonable assurance that proposals received after the stated deadline are not evaluated.

The PRIM Board Controls

Agreed-Upon Procedures

- Each RFP authorized and issued by the Trustees contains a Proposal Deadline. All responses to RFPs are denoted with date and time of receipt. The Evaluation Committee does not consider proposals received after the Proposal Deadline.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected the date and time stamp on the submitted proposal and noted whether all proposals considered were received prior to or on the Proposal Deadline.

7. Controls provide reasonable assurance that responses to an RFP are reviewed and evaluated objectively.

The PRIM Board Controls

- For each RFP, an Evaluation Committee is established if appropriate.
- The Evaluation Committee initially reviews responses to ensure that respondents meet the minimum qualifications as stipulated in the RFP.
- The Evaluation Committee may invite selected respondents (finalists) to an interview.
- The Evaluation Committee evaluates the respondents and makes objective judgments and recommendations based on the selection criteria outlined in the RFP.

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected the Evaluation Committee Report and noted whether an Evaluation Committee was established, if appropriate.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected a selection of RFP response packages, and verified whether the respondent provided documentation indicating that it met the minimum qualifications as stipulated in the RFP.
- For all RFPs, if applicable, for which services were procured during the period, KPMG inspected the notifications sent to each finalist, and noted whether the time and place of an interview were defined.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected the Evaluation Committee report and noted whether the objective selection criteria outlined in the RFP was used to determine their selections.

8. Controls provide reasonable assurance that an investment advisor, where appropriate, provides insight into the selection process.

The PRIM Board Controls

- For each RFP, an investment advisor (if appropriate) assists the Evaluation Committee in the evaluation of responses and provides the appropriate Committee and Trustees with an independent recommendation (if applicable).

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of Evaluation Committee reports addressed to the applicable Committee and noted whether separate reports of an investment advisor were included, if applicable.

9. Controls provide reasonable assurance that potential conflicts of interest are identified.

The PRIM Board Controls

- For each recommendation, the Evaluation Committee ensures the recommended firms have completed the Disclosure Statement that requires the respondent to disclose relationships with the PRIM Board, the Commonwealth of Massachusetts and its Office of the Treasurer.

Agreed-Upon Procedures

- For each recommendation approved by the Trustees during the period, KPMG inspected copies of the Disclosure Statements and noted whether they were completed.

10. Controls provide reasonable assurance that the appropriate Committee is educated about the search and selection process in order to make an informed recommendation to the Trustees.

The PRIM Board Controls

- The selection process is summarized by the Evaluation Committee in a written recommendation that is included in the appropriate Committee Meeting Agenda package and discussed during the Committee meeting.
- The appropriate Committee decides by a majority vote whether to accept, reject or modify the recommendation of the Evaluation Committee. The Committee then makes a formal recommendation to the Trustees, which is included in the Board Meeting Agenda package.

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected copies of applicable Committee materials, and noted whether reports from Evaluation Committee were included.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected the Board Meeting Agenda package, and noted whether there was a formal recommendation made by the applicable Committee to the Trustees.

11. Controls provide reasonable assurance that the Trustees are informed about the search and selection process prior to accepting, rejecting or modifying the recommendation of the appropriate Committee.

The PRIM Board Controls

- The selection process is summarized by the Evaluation Committee in a written recommendation that is included in the Board Meeting Agenda package and discussed during the Board meeting.
- The Trustees decide by a majority vote whether to accept, reject or modify the recommendation of the appropriate Committee during a public meeting.

Agreed-Upon Procedures

- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected Trustees' meeting agendas and minutes and noted whether there was a presentation by the appropriate Committee to the Trustees, including results of the search and the applicable Committee's recommendation.
- For each RFP listed in Appendix II for which services were procured during the period, KPMG inspected the Trustees' meeting minutes and noted whether the decision to accept, reject or modify the recommendation of the applicable Committee was made by a majority vote of the Trustees.

B. Alternate Procurement for Investment Opportunities

1. Controls provide reasonable assurance that an investment advisor, where appropriate, provides insight into investment opportunities.

The PRIM Board Controls

- An investment advisor provides a detailed Investment Analysis Report for each proposed investment opportunity that concludes with a recommendation which generally considers the following criteria, where applicable:
 - Quality and stability of the investment team.
 - Previous investment track record.
 - Proposed investment strategy.
 - Ability of investment manager to demonstrate its capability to generate superior returns.
 - Legal and economic terms governing the investment structure.
 - Alignment of interests.
 - Operational capabilities.
 - PRIT Fund portfolio fit.

Agreed-Upon Procedures

- For each investment RFP listed in Appendix II, KPMG inspected copies of the investment advisor’s report and noted whether the information specified was included, if applicable.

2. Controls provide reasonable assurance that potential conflicts of interest are identified.

The PRIM Board Controls

- For each investment, the general partner/manager must complete a standard Disclosure Statement. The Disclosure Statement requires the respondent to disclose relationships with the PRIM Board, the Commonwealth of Massachusetts and its Office of the Treasurer.

Agreed-Upon Procedures

- For each investment RFP listed in Appendix II, KPMG inspected copies of the Disclosure Statements and noted whether they were completed.

3. Controls provide reasonable assurance that the appropriate Committee is educated about investment opportunities in order to make an informed recommendation to the Trustees.

The PRIM Board Controls

- Each investment opportunity is summarized by the PRIM Board staff and is included in the appropriate Committee Meeting Agenda package.
- The investment advisor’s Investment Analysis Report for each investment opportunity is provided as an appendix to the appropriate Committee Meeting Agenda package, if applicable.
- The applicable Committee decides by a majority vote whether to accept or reject the recommendation of the PRIM Board staff and the investment advisor, if appropriate. If accepted, the Committee then makes a formal recommendation to the Trustees, which is included in the Board Meeting Agenda package.

Agreed-Up On Procedures

- For each investment RFP listed in Appendix II, KPMG inspected copies of applicable Committee materials and reviewed the PRIM Board staff and the investment advisor recommendations. The investments subject to RFP-19 were approved via interim meeting approval in accordance with the Summary of the PRIM Board’s Procurement Practices in Section I.
- For each investment RFP listed in Appendix II, KPMG inspected the applicable Committee Meeting Agenda package and verified whether the investment advisor’s Investment Analysis Report, if applicable, for each investment opportunity was provided as an appendix. The investments subject to RFP-19 were approved via interim meeting approval in accordance with the Summary of the PRIM Board’s Procurement Practices in Section I.
- For each investment RFP listed in Appendix II, KPMG inspected the Board Meeting Agenda package and noted the Committee’s formal recommendation to the Trustees. The investments subject to RFP-19 were approved via interim meeting approval in accordance with the Summary of the PRIM Board’s Procurement Practices in Section I.

4. Controls provide reasonable assurance that the Trustees are informed about the investment opportunity prior to accepting or rejecting the recommendation of the appropriate Committee.

The PRIM Board Controls

- The investment opportunity is summarized and included in the Board Meeting Agenda package and discussed during the Board meeting.

Agreed-Up On Procedures

- For each investment RFP listed in Appendix II, KPMG inspected Trustees’ meeting agendas and minutes and noted whether there were presentations by the applicable Committee to the Trustees, including recommendation of the investment. The investments subject to RFP-19 were approved via interim meeting approval in accordance with the Summary of the PRIM Board’s Procurement Practices in Section I.

The PRIM Board Controls

- The Trustees decide by a majority vote whether to accept, reject or modify the recommendation of the appropriate Committee during a public meeting.

Agreed-Upon Procedures

- For each investment RFP listed in Appendix II, KPMG inspected the Trustees' meeting minutes and noted whether the decision to accept, reject or modify the recommendation by the applicable Committee was made by a majority vote of the Trustees. The investments subject to RFP-19 were approved via interim meeting approval in accordance with the Summary of the PRIM Board's Procurement Practices in Section I.

Appendix II

Listing of Services Procured
Through RFP
July 1, 2021 – June 30, 2022

RFP No.	Board approval date	Advisory committee	Decision	Type of RFP	Description
1	8/17/2021	Investment	Approval to Invest	Public Markets	Approve an initial allocation of up to \$1 billion to Rhumblin Passive S&P 500 Index
2	8/17/2021	Investment	Approval to Invest	Public Markets - Other Credit Opportunities	Approve an initial allocation of \$150 million to Newmarket IIFC III Fund-of-One LLC
3	8/17/2021	Investment	Approval to Hire	Asset Allocation Advisory Services	Select NEPC to provide asset allocation advisory services
4	8/17/2021	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$150 million to Trident IX, L.P.
5	8/17/2021	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$75 million to Tidemark Fund I, L.P.
6	8/17/2021	Real Estate and Timberland	Approval to Invest	Non-Core Real Estate	Approve a commitment of \$25 million to Berkshire Multifamily Value Fund V, up to \$75 million investment in the Multifamily Co-Investment Opportunity, and up to \$100 million investment in future co-investment opportunities
7	12/2/2021	Investment	Approval to Invest	Emerging-Diverse Manager Program	Approve an initial allocation of up to \$1 billion to the Emerging-Diverse Manager Program and select the following firms to manage the program: Bivium Capital for Fixed Income, Hamilton Lane for Private Equity, Xponance, Inc for Global Equities, and Cambridge Associates for Real Estate. PAAMCO will continue to invest in emerging-diverse Hedge Fund managers.
8	12/2/2021	Investment	Approval to Invest	Public Markets	Approve an initial allocation of up to \$300 million to Arga Investment Management, LP and initial allocations of up to \$150 million to both Artisan Partners LP and Driehaus Capital Management
9	12/2/2021	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$125 million to GTCR Strategic Growth Fund I L.P.
10	12/2/2021	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$100 million to Georgian Growth Fund VI, L.P. and up to \$50 million to Georgian Alignment Fund II, L.P.
11	12/2/2021	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$14 million to Spark Capital VII, L.P. and up to \$28 million to Spark Capital Growth IV, L.P.

12	12/2/2021	Administrati on and Audit	Approval to Hire	Proxy Advisory and Voting Services	Select Institutional Shareholder Services to provide proxy advisory and voting services
13	2/17/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$275 million to Thoma Bravo Fund XV, L.P., up to \$150 million to Thoma Bravo Discover Fund IV, L.P., and up to \$150 million to Thoma Bravo Explore Fund II, L.P.
14	2/17/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to €80 million to Chequers Capital XVIII, SLP
15	2/17/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$40 million to Polaris Growth Fund II, L.P.
16	2/17/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$100 million to JMI Equity Fund XI, L.P.
17	2/17/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$350 million to Advent International GPE X, L.P.
18	2/17/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$22 million to USV 2022, L.P. and up to 32 million to USV Opportunity 2022, L.P.
19	3/28/2022	Investment	Approval to Invest*	Private Equity	Approve a commitment of up to €200 million to Nordic Capital Fund XI
20	5/19/2022	Investment	Approval to Invest	Public Markets - Other Credit Opportunities	Approve an initial commitment of up to \$200 million to ArrowMark PRIM Fund of the One
21	5/19/2022	Investment	Approval to Invest	Portfolio Completion Strategies	Approve an initial allocation of up to \$175 million to North Peak Capital
22	5/19/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$8.2 million to Sequoia Capital China Seed III, L.P., up to \$18.8 million to Sequoia Capital China Venture IX, L.P., up to \$61.5 million to Sequoia Capital China Growth VII, L.P., and up to \$61.5 million to Sequoia Capital China Expansion I, L.P.
23	5/19/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$50 million to Insight Partners Vision Capital II, L.P.
24	5/19/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$20 million to Insight Partners Fund XI Follow-On Fund, L.P.
25	5/19/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to €40 million to Medicxi IV, L.P.
26	5/19/2022	Investment	Approval to Invest	Private Equity	Approve a commitment of up to \$200 million to Technology Crossover Ventures XII, L.P.
27	5/19/2022	Real Estate and Timberland	Approval to Hire	Timberland Appraisal	Approve nine firms be placed on PRIM's list of approved timberland appraisers

*Investment approved by PRIM's Chief Investment Officer in accordance with the PRIM Board's interim alternative investment review procedures.