



Commonwealth of Massachusetts
Office of the State Auditor
Suzanne M. Bump

Making government work better

Official Audit Report – Issued April 23, 2018

Pension Reserves Investment Management Board

For the period July 1, 2015 through June 30, 2017





Commonwealth of Massachusetts
Office of the State Auditor
Suzanne M. Bump

Making government work better

April 23, 2018

Ms. Deborah B. Goldberg, Chair
Pension Reserves Investment Management Board
84 State Street, Suite 250
Boston, MA 02109

Dear Ms. Goldberg:

I am pleased to provide this performance audit of the Pension Reserves Investment Management Board. This report details the audit objectives, scope, and methodology for the audit period, July 1, 2015 through June 30, 2017. My audit staff discussed the contents of this report with management of the agency.

I would also like to express my appreciation to the Pension Reserves Investment Management Board for the cooperation and assistance provided to my staff during the audit.

Sincerely,

A handwritten signature in blue ink, appearing to read "SMB", written over a light blue circular background.

Suzanne M. Bump
Auditor of the Commonwealth

cc: Michael G. Trotsky, Executive Director and Chief Investment Officer, Pension Reserves
Investment Management Board

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EXECUTIVE SUMMARY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of the Pension Reserves Investment Management Board (PRIM) for the period July 1, 2015 through June 30, 2017.

In this performance audit, we examined PRIM's compliance with its policies and procedures for procurement of investment management and professional services, as well as the reasonableness of certain travel expenses incurred by PRIM staff members.

Our audit revealed no significant instances of noncompliance by PRIM that must be reported under generally accepted government auditing standards.

OVERVIEW OF AUDITED ENTITY

The Pension Reserves Investment Management Board (PRIM) was established through Chapter 661 of the Acts of 1983, and later amended by Chapter 315 of the Acts of 1996, to provide general supervision of the investments and management of the Pension Reserves Investment Trust (PRIT) Fund. The PRIT Fund, established by the same legislation, is the investment portfolio for the assets of the Massachusetts State Employees' Retirement System, the Massachusetts Teachers' Retirement System, the State Retiree Benefits Trust Fund, and other Massachusetts retirement systems that elect to invest in the fund.

According to its website,

The Pension Reserves Investment Management Board's mission is to provide a professional investment service that maximizes the return on investment within acceptable levels of risk by broadly diversifying its 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 investment staff and members of the PRIM Board and its committees.

PRIM is governed by a nine-member board of trustees. The board includes the State Treasurer, ex officio, or her designee, who is the board chair; the Governor, ex officio, or his designee; a private citizen who is experienced in the field of investment or financial management, appointed by the State Treasurer; an employee or retiree who is a member of the Massachusetts Teachers' Retirement System and is elected to this board by the members of that system; an employee or retiree who is a member of the Massachusetts State Employees' Retirement System and is elected to this board by the members of that system; an elected member of the Massachusetts State Retirement Board; an elected member of the Massachusetts Teachers' Retirement Board who is elected to this board by the members of the Massachusetts Teachers' Retirement Board; a person who is not an employee or official of the Commonwealth and is appointed by the Governor; and a representative of a public safety union who is appointed by the Governor.

PRIM has also established four advisory committees: an administration and audit committee, a compensation committee, an investment committee, and a real estate and timberland committee. The purpose of these committees is to help PRIM carry out its duties, as well as to offer counsel on investment decisions and PRIM's general operations.

The members of the PRIM board of trustees, as trustees for each retirement system that invests in the PRIT Fund, have the authority to employ an executive director, outside investment managers, custodians, and consultants to develop policies and procedures needed to manage the assets of the PRIT Fund. The executive director, with the assistance of the staff, has a duty to assist the board of trustees and its committees in creating investment and administrative policy, implement the policies and programs created by the PRIM board of trustees, and report to the PRIM board of trustees on the status of the PRIT Fund and the operations of PRIM.

As of June 30, 2017, PRIM employed 41 people. PRIM's staff is divided between two groups: an investment management group of 16 employees and an administrative group of 25 employees. The investment management group works on the management of the PRIT Fund, while the administrative group works on financial reporting for the PRIT Fund and on all other administrative support.

According to PRIM's Investment Policy, its investment objective is to manage the PRIT Fund to "achieve the highest level of investment performance that is compatible with its risk tolerance and prudent investment practices." Under Section 22C of Chapter 32 of the Massachusetts General Laws, by 2040, the PRIT Fund should be fully funded to meet the Commonwealth's then-existing pension obligations, through annual payments made to the fund in accordance with a funding schedule approved by the Legislature and through the accumulation of investment returns in the fund. The Commonwealth has adopted a schedule of state pension appropriations that assumes a long-term actuarial rate of return¹ of 7.50% for the PRIT Fund. As of June 30, 2017, the PRIT Fund's five-year annualized return was 9.76% (gross of fees), outpacing the current 7.50% rate of return assumed by the state pension funding schedule.

Massachusetts county, city, and town retirement systems that choose to invest in the PRIT Fund can be either participating retirement systems or purchasing retirement systems. Participating retirement systems are required by Section 22 of Chapter 32 of the General Laws to invest all of their retirement funds in the PRIT Fund and continue doing so for five years. Purchasing retirement systems can allocate part of their funds to the PRIT Fund, with the freedom to contribute and withdraw assets at will. Participating and purchasing retirement systems both share in the investment earnings of the PRIT Fund based on their proportionate share of net assets invested. As of June 30, 2017, there were 39

1. A long-term actuarial rate of return is an estimate of the expected value of gain or loss on investment over a time period, expressed as a percentage of the investment cost.

participating retirement systems (Appendix A) and 55 purchasing retirement systems (Appendix B) with investments in the PRIT Fund.

Chapter 84 of the Acts of 1996 authorizes the retirement boards of Massachusetts authorities, counties, cities, and towns to purchase units in the separate investment accounts of the PRIT Fund as an alternative to investing in the General Allocation Account.² This investment option, also referred to as segmentation,³ was established by an amendment to PRIM's Operating Trust Agreement in 1994 in response to requests from Massachusetts retirement systems wishing to invest in separate asset classes of the PRIT Fund.

PRIM maintains asset allocation targets for the PRIT Fund as way of reducing risk and delivering the highest investment return possible at acceptable risk levels. Below is a table highlighting the PRIT Fund's target allocations and the actual allocations as of June 30, 2017.

Asset Class	June 30, 2017 Actual Allocation*	Target Percentage
Global Equity	45.70%	40.00%
Core Fixed Income	12.00%	12.00%
Value-Added Fixed Income	8.10%	10.00%
Real Estate	9.10%	10.00%
Private Equity	10.60%	11.00%
Timberland	3.70%	4.00%
Portfolio Completion Strategies	9.50%	13.00%
Overlay	1.00%	0.00%
Liquidating Portfolios	0.40%	0.00%

* This column does not equal 100% because of rounding.

Net assets in the PRIT Fund totaled \$60,692,805,000 for fiscal year 2016 and \$66,850,441,000 for fiscal year 2017. The PRIT Fund incurred total management fees of \$112,129,000 for fiscal year 2016 and \$144,004,000 for fiscal year 2017. The PRIT Fund incurred investment management fees of \$94,583,000 for fiscal year 2016 and \$122,848,000 for fiscal year 2017. It incurred investment advisory fees of \$5,935,000 in fiscal year 2016 and \$8,074,000 in fiscal year 2017; custodian fees of \$805,000 in fiscal

2. The term "General Allocation Account" refers to investment units of the PRIT Fund that mirror the performance of all the underlying asset classes of the PRIT Fund.
3. According to PRIM's website, "This 'segmentation' of the PRIT Fund's investment options gives local retirement boards flexibility to pick and choose specific asset classes in whatever proportions they believe are best suited to their needs."

year 2016 and \$707,000 in fiscal year 2017; and other administrative fees of \$10,806,000 in fiscal year 2016 and \$12,375,000 in fiscal year 2017. Overall, the PRIT Fund spent 0.18% on fees as a percentage of net assets in fiscal year 2016; the percentage for fiscal year 2017 was 0.22%.

For calendar year 2016, PRIM's investment returns ranked 70th of the 106 Massachusetts retirement systems. Its five-year annualized returns ranked 56th according to the Public Employee Retirement Administration Commission's 2016 annual report. The PRIT Fund investment return (gross of fees) was 2.30% in fiscal year 2016 and 13.20% in fiscal year 2017.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Pension Reserves Investment Management Board (PRIM) for the period July 1, 2015 through June 30, 2017.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Below is a list of our audit objectives, indicating each question we intended our audit to answer and the conclusion we reached regarding each objective.

Objective	Conclusion
1. Does PRIM procure investment management and professional services in accordance with its policies?	Yes
2. Are travel expenses that are related to investment due diligence and staff development supported and directly related to PRIM's mission?	Yes

To achieve our objectives, we gained an understanding of the internal controls we deemed significant to our audit objectives by reviewing applicable laws, rules, regulations, policies, procedures, and reports, as well as through interviews and observations. We evaluated the design and effectiveness of controls over travel expenses and the procurement of investment management and professional services, and we assessed whether they operated as intended during the audit period.

In addition, we performed the following procedures to obtain sufficient appropriate audit evidence to address our audit objectives.

- We obtained a list of all requests for proposals (RFPs) approved during our audit period from PRIM employees. We identified 9 RFPs for investment management and professional services with a status of Approved to Be Hired. Using a nonstatistical judgmental sampling method, we sampled 5 out of 9 RFPs and reviewed supporting documentation to ensure that the procurement process was conducted in accordance with PRIM's policies.

- We obtained PRIM's accounting records for travel expenditures related to its fiduciary duties with regard to investment opportunities (due diligence) and attending staff development opportunities. We randomly selected 25 (totaling \$17,293) out of 306 (totaling \$222,801) due diligence travel expenses and judgmentally selected 20 (totaling \$13,520) out of the 181 (totaling \$167,170) staff development travel expenses incurred by PRIM during the audit period. For each sample, we reviewed supporting documentation for the travel expense to ensure that it was related to PRIM's mission.

To gain an understanding of the general information system controls in place, we conducted testing of certain general information technology controls through the use of questionnaires, interviews, and observations. To determine the reliability of the data from the Peachtree accounting system, we performed data integrity tests, a vouching test on a sample of expenditures from Peachtree to source documentation, and a tracing test from a sample of expenditure source documents to their corresponding entries in Peachtree. In addition, we obtained spreadsheet lists of RFPs for the audit period. We performed a data integrity test on the data. Additionally, we examined the board meeting minutes and determined that each RFP was discussed at a board meeting in our audit period. We also compared vendors listed on the RFP spreadsheet to activity in Peachtree. We determined that the data were sufficiently reliable for the purposes of this report.

When using nonstatistical sampling methods for testing, we did not project the results of our testing to the population.

APPENDIX A

Participating Retirement Systems as of June 30, 2017

Amesbury Retirement Board	Melrose Retirement Board
Barnstable County Retirement Board	Methuen Retirement Board
Berkshire County Retirement System	Middlesex County Retirement Board
Blue Hills Regional Retirement Board	Milton Retirement Board
Chelsea Retirement Board	Minuteman Regional School District Retirement Board
Dedham Retirement Board	Montague Retirement Board
Easthampton Retirement Board	Needham Retirement Board
Everett Retirement Board	Northbridge Retirement Board
Fairhaven Retirement Board	Peabody Retirement Board
Fall River Retirement Board	Pittsfield Retirement Board
Fitchburg Retirement Board	Reading Retirement Board
Gardner Retirement Board	Salem Retirement Board
Gloucester Retirement Board	Saugus Retirement Board
Lawrence Retirement Board	Southbridge Retirement Board
Lowell Retirement Board	Springfield Retirement Board
Lynn Retirement Board	State—Boston Retirement System/Teachers
Massachusetts State College Building Authority	Wakefield Retirement Board
Massachusetts State Retirement Board	Winthrop Retirement Board
Massachusetts Teachers' Retirement Board	Worcester Regional Retirement Board
Massachusetts Turnpike Authority Retirement Board	

APPENDIX B

Purchasing Retirement Systems as of June 30, 2017

Andover Retirement Board	Maynard Retirement Board
Arlington Retirement Board	Medford Retirement Board
Attleboro Retirement Board	Milford Retirement Board
Belmont Retirement Board	MWRA [Massachusetts Water Resources Authority] Retirement Board
Beverly Retirement Board	Natick Retirement Board
Braintree Retirement Board	Newburyport Retirement Board
Bristol County Retirement Board	Newton Retirement Board
Brookline Retirement Board	Norfolk County Retirement Board
Cambridge Retirement Board	North Adams Retirement Board
Chicopee Retirement Board	Northampton Retirement Board
Clinton Retirement Board	Norwood Retirement Board
Concord Retirement Board	Plymouth Retirement Board
Danvers Retirement Board	Quincy Retirement Board
Dukes County Retirement Board	Revere Retirement Board
Essex Regional Retirement Board	Shrewsbury Retirement Board
Falmouth Retirement Board	State Retiree Benefits Trust Fund
Framingham Retirement Board	Stoneham Retirement Board
Franklin Regional Retirement Board	Swampscott Retirement Board
Greenfield Retirement Board	Waltham Retirement Board
Hampden County Regional Retirement Board	Watertown Retirement Board
Hampshire County Retirement Board	Webster Retirement Board
Haverhill Retirement Board	Wellesley Retirement Board
Hingham Retirement Board	Westfield Retirement Board
Hull Retirement Board	Weymouth Retirement Board
Leominster Retirement Board	Winchester Retirement Board
Lexington Retirement Board	Woburn Retirement Board
Marblehead Retirement Board	Worcester Retirement Board
Massachusetts Port Authority Employees' Retirement Board	