



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

Making government work better

Official Audit Report – Issued December 1, 2022

Pension Reserves Investment Management Board

For the period July 1, 2019 through January 15, 2022





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

Making government work better

December 1, 2022

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, methodology, findings, and recommendations for the audit period, July 1, 2019 through January 15, 2022. My audit staff discussed the contents of this report with management of the agency, whose comments are reflected in this report.

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 "SMBump".

Suzanne M. Bump
Auditor of the Commonwealth

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

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1
OVERVIEW OF AUDITED ENTITY 2
AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY 7

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 (PRIM) Board for the period July 1, 2019 through January 15, 2022. In this performance audit, we examined the PRIM Board’s compliance with its Investment Policy Statement by investing between 5%–10% of all its investments with emerging managers.¹ We also determined whether the PRIM Board developed a plan to ensure that not less than 20% of its investment managers² are owned by minorities, women, or people with disabilities,³ in accordance with Section 23(8)(a–c) of Chapter 32 of the General Laws.

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

-
1. According to the PRIM Board’s Investment Policy Statement, emerging managers are “investment managers with less than \$2 billion of assets under management that may have shorter track records or investment managers that are minority-owned or women-owned.” Assets under management refers to the total amount of money that an investment manager manages for its clients.
 2. According to the PRIM Board’s Investment Policy Statement, “PRIM employs professional investment managers [also called investment management companies] and gives them discretion, consistent with specified objectives and guidelines, to manage the [Pension Reserves Investment Trust] Fund’s assets.”
 3. The PRIM Board refers to investment managers that are owned or led by minorities, women, or people with disabilities as diverse managers. Investment managers that are minority-owned or woman-owned are also considered emerging managers, as previously stated.

OVERVIEW OF AUDITED ENTITY

The Pension Reserves Investment Management (PRIM) Board was established by Chapter 661 of the Acts of 1983, and later amended by Chapter 315 of the Acts of 1996, to oversee the 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 the PRIM Board's website,

The Pension Reserves Investment Management Board's mission is to provide a professional investment service for public employee retirement funds that maximizes the return on investment within acceptable levels of risk. We broadly diversify its investment portfolio, capitalizing on economies of scale to achieve cost-effective operations, and provide access to high quality, innovative investment management firms.

Additionally, the PRIM Board's website states,

The nine-member PRIM Board acts as Trustee for each retirement system that invests in the PRIT Fund and is responsible for the control and management of the Fund.

The Treasurer & Receiver-General of the Commonwealth, or his/her designee, is a member ex officio of the PRIM Board and serves as its Chair. The Treasurer also appoints one member of the PRIM Board, who is a private citizen with an investment/business background. The Governor, or his/her designee, is also an ex officio member and appoints two members of the Board: one is a non-state official or employee, and one is a representative of a public safety union. The State-Teachers' Retirement System has two representatives on the Board: the members of that Retirement System elect one, and one is an Elected Member of the Massachusetts Teachers' Retirement Board. The State Employees' Retirement System has two representatives on the Board: the members of that Retirement System elect one, and one is an Elected Member of the State Employees' Retirement Board.

The PRIM Board has 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 assist the PRIM Board with carrying out its duties, as well as offer counsel on investment decisions and the PRIM Board's general operations.

The PRIM Board's staff consists of an investment team of 28 employees and a finance and operation team of 28 employees. The investment team works on the management of the PRIT Fund, and the finance and operation team works on financial reporting for the PRIT Fund and on all other administrative support.

The members of the PRIM Board, as trustees for each retirement system that invests in the PRIT Fund, have the authority to employ an executive director, external investment managers, custodians, and consultants to develop policies and procedures needed to manage the assets of the PRIT Fund. The executive director creates investment and administrative policy, implements the policies and programs created by the members of the PRIM Board, and reports to the members of the PRIM Board on the status of the PRIT Fund and the operations of the PRIM Board.

According to the PRIM Board's Investment Policy Statement, 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 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 annualized return of 7% for the PRIT Fund. As of June 30, 2021, the PRIT Fund's five-year annualized return was 11.9%.

Retirement Systems

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 their assets must remain in the PRIT Fund for at least five years. Purchasing retirement systems can invest part of their funds in the PRIT Fund and are able 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 investments. As of June 30, 2021, there were 100 retirement systems with investments in the PRIT Fund.

Chapter 84 of the Acts of 1996 allows the retirement systems of Massachusetts authorities, counties, cities, and towns to invest in the separate accounts of the PRIT Fund as an alternative to investing in the General Allocation Account.⁴ This investment option is called segmentation. According to the PRIM Board's website, "This 'segmentation' of the PRIT Fund's investment options gives local retirement boards

4. The General Allocation Account is the main aggregate account in which retirement systems can invest their funds. It invests in all the types of investment assets of the PRIT Fund, which also have their own accounts.

flexibility to pick and choose specific asset classes in whatever proportions they believe are best suited to their needs.”

Asset Allocation Targets

The PRIM Board sets target ranges for how much of its funds it wants to allocate to each asset class (i.e., type of investment) for the PRIT Fund as a way of reducing risk and delivering the highest investment return possible. Below is a table highlighting the PRIT Fund’s asset allocation target ranges and the actual allocations, as of June 30, 2021:

Asset Class	Actual Allocation	Target Range
Global Equity	42.7%	34%–44%
Core Fixed Income	15.3%	12%–18%
Value-Added Fixed Income	6.9%	5%–11%
Real Estate	8.3%	7%–13%
Private Equity	14.5%	11%–17%
Timberland	3.0%	1%–7%
Portfolio Completion Strategies	8.3%	7%–13%
Overlay	1.0%	–

Net assets in the PRIT Fund totaled \$74,985,759,000 for fiscal year 2020 and \$95,698,845,000 for fiscal year 2021. The PRIM Board incurred total investment management fees of \$140,692,000 and \$164,076,000 for fiscal years 2020 and 2021, respectively.

The PRIM Board incurred investment advisory fees of \$11,563,000 for fiscal year 2020 and \$13,049,000 for fiscal year 2021; custodian fees of \$1,670,000 in fiscal year 2020 and \$1,672,000 in fiscal year 2021; and other administrative fees of \$15,973,000 in fiscal year 2020 and \$20,147,000 in fiscal year 2021.

Investment Manager Goals

On January 14, 2021, Section 23(8)(a–c) of Chapter 32 of the General Laws was enacted, requiring the PRIM Board to establish policy regarding investments with diverse managers. Specifically, the PRIM Board’s goal for investment managers was revised to the following in Section 23(8)(b) of Chapter 32 of the General Laws:

It shall be the goal of the PRIM Board that not less than 20% of investment managers be minorities, females, and persons with disabilities. It shall further be the goal of the PRIM board to utilize

businesses owned by minorities, females and persons with disabilities for not less than 20 per cent of total contracts awarded [to investment managers].

According to Section 23(8)(c) of Chapter 32 of the General Laws,

Annually, not later than January 15 of each year, PRIM shall file with the house and senate committee on ways and means and with the joint committee on public service a report detailing its progress toward implementing the policies and goals outlined [in Section 23(8)(b)]. Such report shall include documentation related to all minority investment managers considered for investment, including documentation, where applicable, of the reasons for declining any such investment.

The PRIM Board's Investment Policy Statement, amended in February 2021, states,

The PRIM Board may consider hiring "emerging managers", i.e., investment managers with less than \$2 billion of assets under management (AUM) that may have shorter track records or investment managers that are minority-owned or women-owned. PRIM should consider emerging managers for all asset classes, and should make a good-faith effort to invest with emerging managers for all asset classes, and should set an objective of investing between 5 and 10% of all new and current investments with emerging managers. In this effort, PRIM should consider using advisors to identify emerging managers.

FUTURE Initiative and the Emerging-Diverse Manager Program

To achieve its goal of having at least 20% of its investment managers be owned by minorities, women, or people with disabilities, the PRIM Board developed the FUTURE Initiative and the Emerging-Diverse Manager Program. According to the PRIM Board's 2021 FUTURE Initiative Annual Report,

In May 2021, PRIM launched the FUTURE Initiative, our strategic plan to achieve the goals set forth by this legislation as well as position PRIM to be a leader on improving diversity in the asset management industry. The FUTURE Initiative is focused on four keys to success.

1. Reduce Barriers for Diverse Managers.

The first step is to reduce the barriers to diverse managers. PRIM will work to ensure all diverse managers have a clear path to work with PRIM regardless of their size or track record.

2. Enhance [Diversity, Equity, and Inclusion, or DEI] Reporting.

PRIM will enhance the measuring and tracking of comprehensive DEI information across our investment managers and vendors, and ultimately report on this information, as required by the new law.

3. Improve the Sourcing of Diverse Investment Managers.

PRIM will work to improve our sourcing and pipeline of diverse managers. . . .

4. Continue to Allocate Capital to Diverse Managers.

PRIM will continue to allocate capital to diverse managers to achieve our goals. . . .

The first key to our FUTURE success is reducing barriers for diverse managers by creating a path for all diverse managers, regardless of their size or track record, to manage assets for PRIM. To achieve this, PRIM launched an Emerging-Diverse Manager Program (Program).

For more established diverse managers, those with higher assets under management (AUM) and longer track records, PRIM staff will continue to review, conduct due diligence, select, and monitor these managers as we have successfully done in the past. PRIM's new Emerging-Diverse Manager Program was created to ensure that prospective diverse and emerging managers, firms with lower assets under management or shorter track records, will now have a clear path to partner with PRIM.

This Program will utilize managers-of-managers as an extension of PRIM staff, to help PRIM source, conduct due diligence and have full discretion to select and monitor a portfolio of emerging-diverse managers. . . .

In late 2021, Lenox Park surveyed PRIM's investment managers. The data from this survey will provide PRIM a single source of DEI data on our managers that can be utilized to track and monitor progress over time. . . .

In May 2021, a new page on PRIM's website (mapension.com) was added that allows any investment manager to fill out a questionnaire, which is then uploaded into our internal database of managers and added to PRIM's pipeline of managers to review. This web page provides a gateway portal for managers to submit information to us (including their diversity designation) and enhances PRIM's ability to track prospective managers.

After Section 23(8)(a–c) of Chapter 32 of the General Laws was enacted, the PRIM Board measured its investments with diverse managers by extracting performance reports from its custodian bank's⁵ information system to calculate what percentage of funds in the PRIT Fund were from diverse managers. These reports captured the source accounts (accounts designated for each of the PRIM Board's investment managers) and net asset values⁶ of all investment managers, as well as the aggregated net asset values of the diverse managers. As of September 30, 2021, eight percent of the PRIT Fund was managed by diverse managers.

5. A custodian bank is a financial institution responsible for safeguarding the assets (e.g., bonds or cash) of its clients and has possession of the assets. These banks often offer related services, such as account management, handling taxes, and distributing dividends. The bank is generally not engaged in other consumer banking services, such as lending.

6. According to the United States Securities and Exchange Commission's website, the net asset value "is the company's total assets minus its liabilities."

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 Pension Reserves Investment Management Board (PRIM) Board for the period July 1, 2019 through January 15, 2022.

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.

Objectives	Conclusion
1. Did the PRIM Board meet its objective of investing between 5%–10% of all investments with emerging managers, as required by Section 21 of the PRIM Board’s Investment Policy Statement?	Yes
2. Did the PRIM Board develop a plan to ensure that not less than 20% of its investment managers are owned by minorities, women, or people with disabilities, in accordance with Section 23(8)(a–c) of Chapter 32 of the General Laws?	Yes

To achieve our audit objectives, we gained an understanding of the internal control environment in the areas related to the objectives by reviewing applicable PRIM Board policies and procedures, as well as the PRIM Board’s internal control plan; conducting interviews with management and other employees; and performing walkthroughs of the processes related to the PRIM Board’s investments with emerging managers.

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

To determine whether the PRIM Board met its objective of investing between 5%–10% of all investments with emerging managers, as required by Section 21 of the PRIM Board’s Investment Policy Statement, from July 1, 2019 through January 13, 2021,⁷ we performed the following tests:

- We obtained and reviewed a list of emerging managers used by the PRIM Board during the audit period with information on assets under management (AUM) under \$2 billion and woman/minority-owned status. This list was put together by the PRIM Board in a Microsoft Excel spreadsheet, upon our request. We also obtained and reviewed a list of the PRIM Board’s total investments, including investments with diverse managers, from the PRIM Board custodian bank’s information system, NEXEN,⁸ which included the source account names and AUM amounts of the PRIM Board’s investment managers. We obtained and reviewed a list of investment managers’ names from Dynamo.⁹
- We merged the lists from both systems to match the investment managers’ source account names from NEXEN with the investment managers’ names in Dynamo to generate a comprehensive list of the PRIM Board’s investment managers with their AUM amounts and woman/minority-owned status.
- Using the data from the Microsoft Excel spreadsheet and comprehensive list of the PRIM Board’s investment managers, we calculated what percentage of all the PRIM Board’s investments were with emerging managers.

To determine whether the PRIM Board developed a plan to ensure that not less than 20% of its investment managers are owned by minorities, women, or people with disabilities (or diverse managers), in accordance with Section 23(8)(a–c) of Chapter 32 of the General Laws, from January 14, 2021 through January 15, 2022, we performed the following tests:

- We reviewed the meeting minutes of the three PRIM Board meetings that took place during the above period to ensure that the four parts of the PRIM Board’s FUTURE Initiative were discussed. We also reviewed the following:
 - the meeting meetings for evidence of the PRIM Board’s approval to allocate capital to the FUTURE Initiative’s Emerging-Diverse Manager Program

7. When Section 23(8)(a–c) of Chapter 32 of the General Laws came into effect on January 14, 2021, the PRIM Board stopped measuring its investments with emerging managers and created a plan to measure its investments with diverse managers to comply with this law. Therefore, we only considered the period July 1, 2019 through January 13, 2021 for this objective.

8. The PRIM Board’s custodian bank, BNY Mellon, uses NEXEN to contain a list of PRIM Board investment managers’ source account names and AUM amounts.

9. PRIM uses Dynamo as a customer relationship management software. It stores information such as email communications, investment strategy, quarterly reviews, and company information for each investment manager used by PRIM. It also allows PRIM to monitor investment manager performance. Dynamo contains investment managers’ names and diversity information (i.e., whether they are owned by minorities, women, or people with disabilities).

- a contract signed by the PRIM Board to hire Lenox Park Solutions¹⁰ to conduct analytics related to diversity, equity, and inclusion for the PRIM Board
- PRIM Board presentation materials, which covered the proposal of the FUTURE Initiative and changes to the PRIM Board’s website.

Data Reliability Assessment

NEXEN

To gain an understanding and assess the reliability of the list of PRIM Board’s total investments, including investments with diverse managers, from NEXEN, we interviewed PRIM Board officials. We also reviewed the System and Organization Control reports¹¹ that covered the periods April 1, 2019 through March 31, 2020; April 1, 2020 through March 31, 2021; and October 1, 2020 through September 1, 2021. These reports described testing of the information system general controls; no internal control deficiencies were identified. We also obtained and reviewed bridge letters¹² for the periods March 31, 2020 through June 30, 2020; March 31, 2021 through June 30, 2021; and September 30, 2021 through December 31, 2021. We observed PRIM Board officials perform queries and extract reports of total investments, including investments with diverse managers, as of each of the following dates: December 31, 2020; January 31, 2021; and September 30, 2021.

Dynamo

To assess the reliability of the list of all investment managers from Dynamo, we interviewed PRIM Board officials to gain an understanding of this system and its data and observed PRIM Board officials extract the list of all investment managers as of March 4, 2022. We reviewed the System and Organization Control reports that covered the periods April 1, 2019 through September 30, 2019; January 1, 2020 through September 30, 2020; and January 1, 2021 through September 30, 2021. We also obtained and reviewed bridge letters for the periods September 30, 2019 through October 8, 2020; September 30, 2020 through September 8, 2021; and September 30, 2021 through

10. Lenox Park Solutions is a data analytics company that works with financial service companies, or similar agencies, to gather information and statistics on diversity, equity, and inclusion for the company or the vendors it uses.

11. A System and Organization Control report about a service organization’s systems is issued by an independent contractor to provide assurance about a service organization’s security, processing integrity, confidentiality, and/or privacy controls.

12. A bridge letter, also known as a gap letter, is made available by a service organization to cover the period between the reporting period end date of a System and Organization Control report and the release of a new report.

February 24, 2022. These reports described testing of the information system general controls; no internal control deficiencies were identified.

In addition, we selected a sample of 11 of the 36 diverse managers on the list of all the PRIM Board's investment managers. We verified that they were owned by women, minorities, or people with disabilities by reviewing the results of the survey conducted by the PRIM Board's vendor Lenox Park Solutions and Third-Party Due Diligence reports¹³ on the investment managers.

We also selected a sample of 10 out of 187 investment managers that were not identified as diverse managers from the list of the PRIM Board's investment managers. We verified that they were not owned by women, minorities, or people with disabilities by reviewing Third-Party Due Diligence reports, hiring documentation, and the PRIM Board's emails to investment managers to confirm ownership diversity information.

List of Emerging Managers

To assess the accuracy of the list of emerging managers compiled by the PRIM Board in a Microsoft Excel spreadsheet, we selected a sample of 10 of the 36 investment managers from the list. We verified that each investment manager had AUM under \$2 billion or was woman/minority-owned by reviewing Third-Party Due Diligence reports or PRIM Board meeting minutes.

We tested for duplicates and missing data for the lists obtained from NEXEN and Dynamo. We also reconciled the lists to each other to ensure that terminated managers or data outside our audit period were not included.

Based on the procedures above, we determined that the data were sufficiently reliable for the purpose of this audit.

Conclusion

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

13. A Third-Party Due Diligence report is completed in preparation for a business transaction (such as a corporate merger or purchase of securities). It provides details on a company's assets, liabilities, contracts, benefits, and potential issues.