ADAMS AMESBURY ANDOVER ARLINGTON ATTLEBORO BARNSTABLE COUNTY BELMONT BERKSHIRE COUNTY BEVERLY BLUE HILLS BOSTON BRAINTREE BRISTOL COUNTY BROCKTON BROOKLINE CAMBRIDGE CHELSEA CHICOPEE CLINTON CONCORD DANVERS DEDHAM DUKES COUNTY EASTHAMPTON ESSEX EVERETT FAIRHAVEN FALL RIVER FALMOUTH FITCHBURG FRAMINGHAM FRANKLIN REGIONAL GARDNER GLOUCESTER GREATER LAWRENCE GREENFIELD HAMPDEN COUNTY HAMPSHIRE COUNTY HAVERHILL HINGHAM HOLYOKE HULL LAWRENCE LEXINGTON LEOMINSTER LOWELL LYNN MALDEN MARBLEHEAD MARLBOROUGH MASS HOUSING MASSPORT MASS TEACHERS MWRA MAYNARD MEDFORD MELROSE METHUEN MIDDLESEX COUNTY MILFORD MILTON MINUTEMAN MONTAGUE NATICK NEEDHAM NEW BEDFORD NEWBURYPORT NEWTON NORFOLK COUNTY NORTH ADAMS NORTH ATTLEBORO NORTHAMPTON NORTHBRIDGE NORWOOD PEABODY PITTSFIELD PLYMOUTH PLYMOUTH COUNTY QUINCY READING REVERE SALEM SAUGUS SHREWSBURY SOMERVILLE SOUTHBRIDGE SPRINGFIELD STATE STONEHAM SWAMPSCOTT TAUNTON WAKEFIELD WALTHAM WATERTOWN WEBSTER WELLESLEY WEST SPRINGFIELD WESTFIELD WEYMOUTH WINCHESTER WINTHROPWORLINN WORCESTER REGIONAL WORCESTER





CAMBRIDGE CHELSEA CHICOPEE CLINTON CONCORD DANVERS DEDHAM DUKES COUNTY EASTHAMPTON ESSEX EVERETT FAIRHAVEN FALL RIVER FALMOUTH FITCHBURG FRAMINGHAM FRANKLIN REGIONAL GARDNER GLOUCESTER GREATER LAWRENCE GREENFIELD HAMPDEN COUNTY HAMPSHIRE COUNTY HAVERHILL HINGHAM HOLYOKE HULL LAWRENCE LEXINGTON LEOMINSTER LOWELL LYNN MALDEN MARBLEHEAD MARLBOROUGH MASS HOUSING MASSPORT MASS TEACHERS MWRAMAYNARD MEDFORD MELROSE METHUEN MIDDLESEX COUNTY MILFORD MILTON MINUTEMAN MONTAGUE NATICK NEEDHAM NEW BEDFORD NEWBURYPORT NEWTON NORFOLK COUNTY NORTH ADAMS NORTH ATTLEBORO NORTHAMPTON NORTHBRIDGE NORWOOD PEABODY PITTSFIELD PLYMOUTH PLYMOUTH COUNTY QUINCY READING REVERE SALEM SAUGUS SHREWSBURY SOMERVILLE SOUTHBRIDGE SPRINGFIELD STATE STONEHAM SWAMPSCOTT TAUNTON WAKEFIELD WALTHAM WATERTOWN WEBSTER WELLESLEY WEST SPRINGFIELD WESTFIELD WEYMOUTH WINCHESTER WINTHROP WOBURN WORCESTER REGIONAL WORCESTER

Contents

- **ii** Commission Members
- iv Mission Statement
- **1** Dedication John Parsons
- 2 Letter from the Chairman
- **4** Letter from the Executive Director
- 7 PERAC Year in Review

14 Massachusetts Contributory Retirement Board Profiles

- **15** Composite Investment Profile
- **16** Board Profiles:

Adams 16 Danvers 37 Amesbury 17 Dedham 38 Andover 18 Dukes County 39 Arlington 19 Easthampton 40 Attleboro 20 Essex Regional 41 Barnstable County 21 Everett 42 Belmont 22 Fairhaven 43 Berkshire County 23 Fall River 44 Falmouth 45 Beverly 24 Blue Hills Regional 25 Fitchburg 46 Boston (City) 26 Framingham 47 Boston (Teachers) 27 Franklin Regional 48 Braintree 28 Gardner 49 Gloucester 50 Bristol County 29 Brockton 30 Greater Lawrence 51 Brookline 31 Greenfield 52 Cambridge 32 Hampden County 53 Chelsea 33 Hampshire County 54 Chicopee 34 Haverhill 55 Clinton 35 Hingham 56 Concord 36 Holyoke 57 Hull 58

Disability Retirement Statistics

Lawrence 59 Leominster 60 Lexington 61 Lowell 62 Lynn 63 Malden 64 Marblehead 65 Marlborough 66 MHFA 67 Massport 68 MA Teachers' (MTRS) 69 MWRA 70 Maynard 71 Medford 72 Melrose 73 Methuen 74 Middlesex County 75 Milford 76 Milton 77 Minuteman Regional 78 Montague 79

Natick 80 Needham 81 New Bedford 82 Newburyport 83 Newton 84 Norfolk County 85 North Adams 86 North Attleboro 87 Northampton 88 Northbridge 89 Norwood 90 Peabody 91 Pittsfield 92 Plymouth 93 Plymouth County 94 PRIM 121 Quincy 95 Reading 96 Revere 97 Salem 98 Saugus 99

Shrewsbury 100 Somerville 101 Southbridge 102 Springfield 103 State 104 Stoneham 105 Swampscott 106 Taunton 107 Wakefield 108 Waltham 109 Watertown 110 Webster 111 Wellesley 112 West Springfield 113 Westfield 114 Weymouth 115 Winchester 116 Winthrop 117 Woburn 118 Worcester 119 Worcester Regional 120

- 122
- 124 Investment Vendors
- 135 Current PERAC Staff

CAMBRIDGE CHELSEA CHICOPEE CLINTON CONCORD DANVERS DEDHAM DUKES COUNTY EASTHAMPTON ESSEX EVERETT FAIRHAVEN FALL RIVER FALMOUTH FITCHBURG FRAMINGHAM FRANKLIN REGIONAL GARDNER GLOUCESTER GREATER LAWRENCE GREENFIELD HAMPDEN COUNTY HAMPSHIRE COUNTY HAVERHILL HINGHAM HOLYOKE HULL LAWRENCE LEXINGTON LEOMINSTER LOWELL LYNN MALDEN MARBLEHEAD MARLBOROUGH MASS HOUSING MASSPORT MASS TEACHERS MWRAMAYNARD MEDFORD MELROSE METHUEN MIDDLESEX COUNTY MILFORD MILTON MINUTEMAN MONTAGUE NATICK NEEDHAM NEW BEDFORD NEWBURYPORT NEWTON NORFOLK COUNTY NORTH ADAMS NORTH ATTLEBORO NORTHAMPTON NORTHBRIDGE NORWOOD PEABODY PITTSFIELD PLYMOUTH PLYMOUTH COUNTY QUINCY READING REVERE SALEM SAUGUS SHREWSBURY SOMERVILLE SOUTHBRIDGE SPRINGFIELD STATE STONEHAM SWAMPSCOTT TAUNTON WAKEFIELD WALTHAM WATERTOWN WEBSTER WELLESLEY WEST SPRINGFIELD WESTFIELD WEYMOUTH WINCHESTER WINTHROP WOBURN WORCESTER REGIONAL WORCESTER

PERAC Commissioners



CHAIR

Philip Y. Brown, Esq. Principal/Founder, Brown Counsel



VICE CHAIR

The Honorable **Diana DiZoglio** Auditor of the Commonwealth CAMBRIDGE CHELSEA CHICOPEE CLINTON CONCORD DANVERS DEDHAM DUKES COUNTY EASTHAMPTON ESSEX EVERETT FAIRHAVEN FALL RIVER FALMOUTH FITCHBURG FRAMINGHAM FRANKLIN REGIONAL GARDNER GLOUCESTER GREATER LAWRENCE GREENFIELD HAMPDEN COUNTY HAMPSHIRE COUNTY HAVERHILL HINGHAM HOLYOKE HULL LAWRENCE LEXINGTON LEOMINSTER LOWELL LYNN MALDEN MARBLEHEAD MARLBOROUGH MASS HOUSING MASSPORT MASS TEACHERS MWRA MAYNARD MEDFORD MELROSE METHUEN MIDDLESEX COUNTY MILFORD MILTON MINUTEMAN MONTAGUE NATICK NEEDHAM NEW BEDFORD NEWBURYPORT NEWTON NORFOLK COUNTY NORTH ADAMS NORTH ATTLEBORO NORTHAMPTON NORTHBRIDGE NORWOOD PEABODY PITTSFIELD PLYMOUTH PLYMOUTH COUNTY QUINCY READING REVERE SALEM SAUGUS SHREWSBURY SOMERVILLE SOUTHBRIDGE SPRINGFIELD STATE STONEHAM SWAMPSCOTT TAUNTON WAKEFIELD WELTHAM WATERTOWN WEBSTER WELLESLEY WEST SPRINGFIELD WESTFIELD WEYMOUTH WINCHESTER WINTHROP WOBURN WORCESTER REGIONAL WORCESTER

PERAC Commissioners



Kathleen M. Fallon Practice Area Director Public Consulting Group



Kate Fitzpatrick Town Manager Town of Needham



Richard MacKinnon, Jr. President, Professional Firefighters of Massachusetts



James J. Guido Lieutenant, Chelsea Police Department



Jennifer F. Sullivan, Esq. Governor's Appointee Investment Professional

MISSION STATEMENT

Generation is to provide regulatory oversight and guidance for the effective, equitable, and ethical operation of the Commonwealth of Massachusetts' public pension systems.





DEDICATION John Parsons

The 2024 Annual Report is dedicated to the former PERAC Executive Director John Parsons, who retired on March 1, 2024, after a decades long career spent entirely in public service.

John started his career in Norton Public Schools before starting his state service as a legislative aide for then State Representative and House Chairman of the Committee on Human Services and Elderly Affairs, Joe DeNucci. After Joe DeNucci became State Auditor, John was appointed Legislative Counsel in 1987, then General Counsel in 2002, and First Deputy Auditor in 2009. When Suzanne Bump was elected Auditor, he was appointed Deputy Auditor for Audit Operations in 2011.

It was during his time at the State Auditor's office that John began a 23-year association with the public retirement systems, serving as a PERAC Commissioner from 2001-2010 and as a member of the Teachers' Retirement Board from 2002-2009 and 2011-2012. He also served on the Special Commission on Massachusetts Contributory Retirement Systems in 2009.

He came to PERAC in 2012 as General Counsel, becoming Deputy Director from 2013-2019 and finished out his career as PERAC's fourth executive director from 2019-2024.

On behalf of the Commission and staff at PERAC, we commend John for his leadership, fairness, collaboration and good nature, all of which he brought to PERAC and the Chapter 32 retirement community.

Thank you, John! We wish you all the best in your retirement!









CAREER HIGHLIGHTS

CAREEF	RHIGHLIGHTS
1981-84	Began his career in the Norton Public School system
1985-87	Legislative Aide to Representative Joseph A. DeNucci and Law Clerk for Murphy, LaMere & Murphy
1987-2012	Joins State Auditor's Office, serving many roles including Legislative Counsel, General Counsel, Deputy Auditor/General Counsel, First Deputy Auditor and Deputy State Auditor for Audit Operations
2001-12	Served as a PERAC Commissioner and member of Teachers' Retirement Board
2009	Member of special commission on MA Contributory Retirement Systems that proposed intiatives forming Chapter 176 of the Acts of 2011
2012-13	General Counsel at PERAC
2013-19	PERAC Deputy Director
2019-24	PERAC Executive Director



Letter from the CHAIR Philip Y. Brown

"PERAC continues its efforts to enact regulations and promote legislation that benefits public employees and enhances the protections provided by Chapter 32."

o the extent that the phrase, "the more things change, the more they stay the same," means that, even with change, the fundamentals remain the same, it is apropos of PERAC this year.

As many of you may know, PERAC's Executive Director, John Parsons, retired in March of 2024. John's service as General Counsel while Joe Connarton was Executive Director, and his subsequent service as Executive Director was exemplary. Under John, PERAC continued prior policies of improving technology and working with boards to ensure the long-term protection of retirees' pension benefits. When John announced his decision to retire the Commission was determined to run an inclusive and thorough search for a new Executive Director.

The Commission received interest from dozens of high qualified candidates. The search process was difficult for those Commissioners tasked with conducting the winnowing process because those selected for in-person interviews were not only highly qualified but were also able to skillfully present their candidacies. After the final round of interviews before the full Commission, Bill Keefe, an Assistant Deputy Director at PERAC, was selected as PERAC's new Executive Director. Of course, a change in leadership will result in a certain amount of trepidation. But Bill hit the ground running and has already expertly dealt with a variety of unique issues. However, the fundamentals of PERAC's mission have not changed. Bill is following the Commission's direction of ensuring that the staff continues to collaborate both internally and externally. He is also following the Commission's direction that PERAC continue to reach out to, and partner with, retirement boards to be a resource for compliance as well as a regulator. The strength of these partnerships is critical as we face new obstacles, such as cybersecurity threats. Bill's leadership will be critical as we address the challenges faced by the pension community.

To that end, PERAC continues its efforts to enact regulations and promote legislation that benefits public employees and enhances the protections provided by Chapter 32. PERAC is also committed to providing timely, interesting, and useful educational opportunities for retirement board members. And, PERAC has hired additional staff to improve one of PERAC's fundamental missions, which is to provide useful and thorough audits of boards and systems.



CAMBRIDGE CHELSEA CHICOPEE CLINTON CONCORD DANVERS DEDHAM DUKES COUNTY EASTHAMPTON ESSEX EVERETT FAIRHAVEN FALL RIVER FALMOUTH FITCHBURG FRAMINGHAM FRANKLIN REGIONAL GARDNER GLOUCESTER GREATER LAWRENCE GREENFIELD HAMPDEN COUNTY HAMPSHIRE COUNTY HAVERHILL HINGHAM HOLYOKE HULL LAWRENCE LEXINGTON LEOMINSTER LOWELL LYNN MALDEN MARBLEHEAD MARLBOROUGH MASS HOUSING MASSPORT MASS TEACHERS MWRAMAYNARD MEDFORD MELROSE METHUEN MIDDLESEX COUNTY MILFORD MILTON MINUTEMAN MONTAGUE NATICK NEEDHAM NEW BEDFORD NEWBURYPORT NEWTON NORFOLK COUNTY NORTH ADAMS NORTH ATTLEBORO NORTHAMPTON NORTHBRIDGE NORWOOD PEABODY PITTSFIELD PLYMOUTH PLYMOUTH COUNTY QUINCY READING REVERE SALEM SAUGUS SHREWSBURY SOMERVILLE SOUTHBRIDGE SPRINGFIELD STATE STONEHAM SWAMPSCOTT TAUNTON WAKEFIELD WALTHAM WATERTOWN WEBSTER WELLESLEY WEST SPRINGFIELD WESTFIELD WEYMOUTH WINCHESTER WINTHROP WOBURN WORCESTER REGIONAL WORCESTER

Letter from the Chair (cont'd.)

Finally, I must apologize. In my letter from last year's Annual Report, I wrote: "... this should be the last Annual Report from 5 Middlesex Avenue, Somerville" - I was wrong! We are still located at that address (and are among the last tenants in the building as it is scheduled to be demolished). However, after much diligent work by First Deputy Executive Director Caroline Carcia, among others, we have signed a lease for new space a short distance away with plans to move in the first quarter of 2025. Perhaps **this** is our last Annual Report from 5 Middlesex Avenue in Somerville!



"Perhaps **this** is our last Annual Report from 5 Middlesex Avenue in Somerville!"

Thank you to all PERAC's employees who have had to navigate stresses from change in leadership and the proposed move as you all have helped PERAC to stay focused on its fundamentals through various changes.

And thank you to all the board members, executive directors, and staff in the retirement community for your positive interactions with your members and for working to prudently manage your assets so pension benefits will be available to all public employees in the future.

Sincerely,

Parm

Philip Y. Brown Chair



Letter from the **EXECUTIVE DIRECTOR Bill Keefe**

"… the goal remains the same – to work collaboratively with retirement board members and staff, state and local government, stakeholder groups, practitioners and vendors to provide members, retirees and beneficiaries the secure retirement they have been promised and an effective, equitable and ethical retirement system for all."

There is a new name and face on this page, but utilizing the foundation of high-quality, dedicated PERAC staff, the leadership of the PERAC Commission and the legacy of past executive directors, the goal remains the same – to work collaboratively with retirement board members and staff, state and local government, stakeholder groups, practitioners and vendors to provide members, retirees and beneficiaries the secure retirement they have been promised and an effective, equitable and ethical retirement system for all.

I am extremely grateful for, and humbled by, the Commissioners placing their trust in me and I will work every day to uphold that trust. I am most appreciative of the kind and warm reception I have received from board members, staff and all the folks in the Chapter 32 community, and your willingness to maintain and strengthen our partnership and relationships. You do outstanding work that often goes unnoticed. I have said many times, we are all in this together and together we can do more.

I am very proud of the PERAC staff and hope that the support that I provide to them equals the support they have given me. To a person, they care deeply about the mission of public retirement and serving members and retirement boards. We are lucky to have them and the success of PERAC is theirs.

Likewise, I am fortunate to have known John Parsons for nearly 30 years, from the time I entered public service, and for the majority of that time to have worked with and for him. John is a consummate professional and an even better person. He was always well-informed, reasonable, approachable and had no agenda. His interest was in what's best for all concerned. I'm also fortunate to have known his predecessor, Joe Connarton, for just as long. He shaped and formed PERAC from its early days over his long tenure into a trusted and reliable resource. I'm happy to call both John and Joe friends and I am privileged to stand on the solid footing they established.

In 2023, the Commission bid farewell to its 12-year vice chair in Auditor Suzanne Bump, who did not run for re-election, and welcomed a new vice chair in newlyelected Auditor Diana DiZoglio, who we were pleased to see maintained Michael Leung-Tat as her designee to the Commission.

After a challenging investment environment in 2022, returns rebounded strongly in 2023 with nearly all boards posting double-digit returns and with all boards exceeding their assumed return. The composite return was 11.64%. In 2018, there were 38 boards with a funding ratio of 70% or better. As of this writing, there are now 69. That level of growth was barely fathomable when forward funding was established in 1988. It is a testament to the reasoned, thoughtful, and disciplined approach of retirement boards across the Commonwealth, together with a commitment from state and local government. Already, there are some boards that have achieved full funding and others that are close, meaning some of these funds dedicated to retirement will soon be able to CAMBRIDGE CHELSEA CHICOPEE CLINTON CONCORD DANVERS DEDHAM DUKES COUNTY EASTHAMPTON ESSEX EVERETT FAIRHAVEN FALL RIVER FALMOUTH FITCHBURG FRAMINGHAM FRANKLIN REGIONAL GARDNER GLOUCESTER GREATER LAWRENCE GREENFIELD HAMPDEN COUNTY HAMPSHIRE COUNTY HAVERHILL HINGHAM HOLYOKE HULL LAWRENCE LEXINGTON LEOMINSTER LOWELL LYNN MALDEN MARBLEHEAD MARLBOROUGH MASS HOUSING MASSPORT MASS TEACHERS MWRAMAYNARD MEDFORD MELROSE METHUEN MIDDLESEX COUNTY MILFORD MILTON MINUTEMAN MONTAGUE NATICK NEEDHAM NEW BEDFORD NEWBURYPORT NEWTON NORFOLK COUNTY NORTH ADAMS NORTH ATTLEBORO NORTHAMPTON NORTHBRIDGE NORWOOD PEABODY PITTSFIELD PLYMOUTH PLYMOUTH COUNTY QUINCY READING REVERE SALEM SAUGUS SHREWSBURY SOMERVILLE SOUTHBRIDGE SPRINGFIELD STATE STONEHAM SWAMPSCOTT TAUNTON WAKEFIELD WALTHAM WATERTOWN WEBSTER WELLESLEY WEST SPRINGFIELD WESTFIELD WEYMOUTH WINCHESTER WINTHROP WOBURN WORCESTER REGIONAL WORCESTER

Letter from the Executive Director (cont'd.)

be repurposed to serve Massachusetts residents. A prime example of this is the latest Commonwealth funding schedule. While maintaining a 7% return assumption, the annual

"The Legal Unit embarked on a comprehensive review of PERAC regulations, leading an internal working group that resulted in draft changes, hearings and public comment periods..." CMR 8.00 Applicability of \$30,000 Salary Cap and 840 CMR 11.00 Service After Age 70.

Monthly cash books and annual statements

increase in the total appropriation of 9.63% transitions to a 4% increasing amortization for Fiscal Year 2028 - closer than we think - through the schedule's completion in FY 36.

PERAC devoted significant effort to updating its Outsourced Chief Investment Officer (OCIO) Policy as changes in the marketplace dictated new guidance. Several outreach meetings were held with interested vendors to hear their perspectives and concerns. The work ultimately resulted in the Commission voting to approve a revised policy which was described in Memo #24 of 2023.

The Legal Unit embarked on a comprehensive review of PERAC regulations, leading an internal working group that resulted in draft changes, hearings and public comment periods for several regulations: 840 CMR 2.00 Retirement Board Travel; 840 CMR 4.00 Financial Operations/Standard Method of Accounting; 840 CMR 12.00 Service Between Age 65 and 70; 840 CMR 15.00 Miscellaneous (which included relaxing the permissible uses of board credit cards); and 840 CMR 25.00 The Conduct of Field examinations of Contributory Retirement Systems. The Legal Unit also recommended the repeal of 840 were the latest enhancements rolled into PROSPER by the IT team, working with the Audit and Investment Units. Continuing to make documents electronic and centrally located should streamline processes for all involved.

There were a number of developments on the legislative front. After three years of waivers due to the pandemic, 2023 saw the earnings and hours limitation of Section 91 reintroduced for retirees working in the public sector. Meanwhile, the Open Meeting Law waivers allowing remote and hybrid meetings without the chair or a quorum physically present while requiring public access were extended to March 31, 2025.

Veterans' buyback legislation was refiled in the 2023-24 session by Sen. John Velis and Rep. Jerry Parisella at PERAC's request. Gov. Maura Healey then filed an omnibus veterans' benefit bill – "the HERO Act" – which included this veterans' buyback legislation. Similarly, Sen. Pat Jehlen and Rep. Jay Livingstone filed An Act to Protect Gender Pay Equity at PERAC's request; the bill would ensure people who received an equity-based pay increase resulting from the Massachusetts Equal Pay Act would realize the full impact of that increase in retireCAMBRIDGE CHELSEA CHICOPEE CLINTON CONCORD DANVERS DEDHAM DUKES COUNTY EASTHAMPTON ESSEX EVERETT FAIRHAVEN FALL RIVER FALMOUTH FITCHBURG FRAMINGHAM FRANKLIN REGIONAL GARDNER GLOUCESTER GREATER LAWRENCE GREENFIELD HAMPDEN COUNTY HAMPSHIRE COUNTY HAVERHILL HINGHAM HOLYOKE HULL LAWRENCE LEXINGTON LEOMINSTER LOWELL LYNN MALDEN MARBLEHEAD MARLBOROUGH MASS HOUSING MASSPORT MASS TEACHERS MWRAMAYNARD MEDFORD MELROSE METHUEN MIDDLESEX COUNTY MILFORD MILTON MINUTEMAN MONTAGUE NATICK NEEDHAM NEW BEDFORD NEWBURYPORT NEWTON NORFOLK COUNTY NORTH ADAMS NORTH ATTLEBORO NORTHAMPTON NORTHBRIDGE NORWOOD PEABODY PITTSFIELD PLYMOUTH PLYMOUTH COUNTY QUINCY READING REVERE SALEM SAUGUS SHREWSBURY SOMERVILLE SOUTHBRIDGE SPRINGFIELD STATE STONEHAM SWAMPSCOTT TAUNTON WAKEFIELD WALTHAM WATERTOWN WEBSTER WELLESLEY WEST SPRINGFIELD WESTFIELD WEYMOUTH WINCHESTER WINTHROP WOBURN WORCESTER REGIONAL WORCESTER

Letter from the Executive Director (cont'd.)

ment without tripping anti-spiking provisions. Among PERAC's seven bill filings were six re-files and a new bill which would require the payment of prior non-membership service for employees of units that newly adopt Chapter 32 which would be consistent with other such buybacks.

PERAC maintained its commitment to training, offering board members and staff a full complement of regular, originally-produced events. PERAC staff contributed to two MACRS conferences, three administrators' trainings held across the state and presented several webinars. PERAC once again hosted the Emerging Issues Forum; the final rendition at Holy Cross featured presentations from US Department of Labor Principal Deputy Assistant Secretary Ali Khawar, House Public Service Chair Ken Gordon, Massachusetts Taxpayers Foundation President Doug Howgate and the MBTA Retirement Fund. We are appreciative of our continued partnership with the Office of the Inspector General, which provides two educational sessions per year. Additionally, our continued partnership with the Executive Office of Technology Services and Security has made a free annual cybersecurity awareness program available to retirement boards and we are grateful to EOTSS for this.

Staff made contributions beyond formal work, giving back to the community through two programs, in addition to other individual volunteering efforts. PERAC employees donated toys and gift cards for the Christmas in the City toy drive, which brings some holiday spirit to families experiencing homelessness. PERAC staff also took time to remember and honor the over 37,000 Massachusetts residents who have given their life in service to our country by participating in the Massachusetts Military Heroes Fund and Home Base Memorial Day Flag Garden at Boston Common.

Both efforts were reason for us all to pause, reflect and appreciate, sentiments we repeated upon the passing of retirement community giant, dedicated public servant and decorated US Marine Corps veteran Ralph White.

Public retirement is moving forward on a very steady and stable course thanks to contributors like Ralph and everyone in the Chapter 32 community. Together, we will continue on that course and build on that success. Sincerely,

Betl Keefe

Bill Keefe Executive Director





PERAC The Year in Review



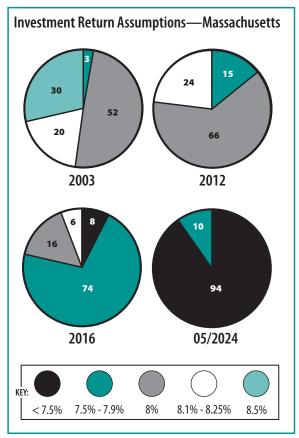
Actuarial Unit

As always, actuarial information details the fiscal condition of the systems, which can play a direct role in state and local budgets. The funded ratio indicates the extent to which assets cover system liabilities. When the system will pay off its unfunded liability and what type of funding technique is being used are also noted. PERAC has consistently urged boards to conduct actuarial valuations in order to provide an up-to-date assessment of the fiscal condition of the system.

Actu	Actuarial Valuations and Funding Schedules (By Year)				
Y	'EAR	PERAC VALUATIONS	PRIVATE	FUNDING SCHEDULES	
20	023	20	20	46	
20	022	19	55	68	
20	021	20	23	38	
20	020	18	55	69	
20	019	17	22	36	
20	018	19	44	63	
20	017	22	24	46	
20	016	21	50	62	
20	015	24	24	40	

In the actuarial area, PERAC approved 46 revised funding schedules and completed 20 actuarial valuations in 2023. The valuations complemented the 20 valuations performed by private actuaries. Throughout the year, PERAC responded to legislative and gubernatorial requests for analysis of legislation and made several presentations.

The Massachusetts Investment Return Assumptions from 2003 to present:





Audits

As in 2022, the Audit Unit continued to work in a hybrid fashion, although more in person than remote. PERAC issued 21 audits

and 17 follow-up audits in 2023. Appreciation is extended to all retirement boards that underwent audits for their cooperation, courtesy, and accommodations.

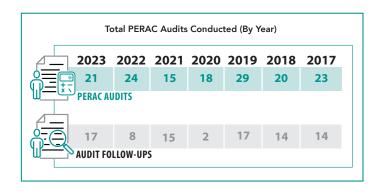
We had some staff changes during the year as one auditor left for other employment and two new auditors were hired.

The Audit Unit continued to work with PERAC's IT Unit to integrate the Annual Statement submission process into PROSPER. All Annual Statements are now submitted and housed in PROSPER. Our goal is to introduce even more audit functionality into the PROSPER application



to streamline the information gathering needed to complete our audits more efficiently. The Audit Unit also participated in the internal working group reviewing all of PERAC's regulations, conducted our annual seminar on the preparation and submission of the Annual Statement, presented at the spring MACRS conference and the New Administrator trainings and provided technical assistance to dozens of boards.

Monthly meetings of the full Audit Unit continued to provide opportunities for coaching, troubleshooting, and training for our staff.





Information Technology

The Information Technology Unit has been busy with projects to enhance internal PERAC functionality and

automating processeses for retirement systems within the PERAC Portal.

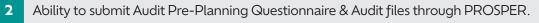
Three such projects in the works that will impact Retirement Boards for FY25 are outlined in the figure below.

The PERAC IT unit has also been very busy preparing the office for the upcoming move later this year.



Projects Moving into PROSPER in FY 2025

Retirees will have the option to file 91A online via PROSPER.



Plans to move audit Internal Control Questionnaire to an online submission, allowing Boards to only update information that has changed from a prior submission.



Education

PERAC's educational offerings continued to build off the previous year's offerings with several in-person and remote sessions

available for retirement board members and staff. A wide variety of sessions were offered each quarter giving board members an opportunity to comply with their educational requirements while also ensuring the topics remained varied and relevant to them.

Board Administrator Training



The New Administrator Training continued for the second year in a row after a brief post pandemic hiatus. The one-day events were held in Northampton, Norwood,

and Danvers with very well attended sessions. The topics covered in these sessions included An Audit Case Study, Recent Audit Results, Before and After 4/2/2012, Common Questions Concerning Post-Retirement Work, Actuarial Valuation Basics, Local Options and a Compliance Overview. Board members who attended earned three educational credits.



Above Left: The Honorable Ali Khawar from the US Department of Labor delivers a Forum presentation.

Above Right: (L-R) PERAC's John Parsons, Bill Keefe, Ken Hill and Chairman Phil Brown at the 2023 Forum



Emerging Issues Forum



This year's Emerging Issues Forum felt like old times with a packed house and a full agenda. This was the final year at Holy Cross and the day did not disappoint. We

had beautiful weather, a host of engaging presentations and close to 200 participants.

Doug Howgate, president of the Massachusetts Taxpayers' Foundation, gave an engaging presentation on the state of the Massachusetts economy. The Honorable Ali Khawar, Principal Deputy Assistant Secretary with the U.S. Department of Labor provided insight on the Department of Labor rules on fiduciary consideration of environmental, social and governance (ESG) factors. The Honorable Ken Gordon, Chair of the Joint Committee on Public Service updated attendees on legislative matters related to public retirement. Finally, John Barry, Interim Executive Director of the MBTA Retirement Fund, and PERAC Chairman Phil Brown, helped attendees better understand the differences and similarities of the MBTA retirement plan.

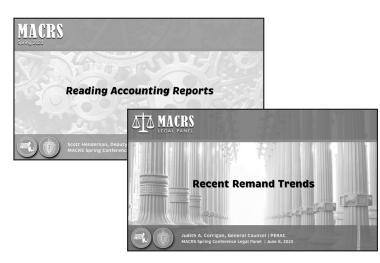
We look forward to welcoming everyone at our new location in 2024.



Above: Chairman Phil Brown delivers the Forum's Welcome Remarks Left: PERAC's John Parsons introduces the MBTA Retirement Fund presentation.

MACRS

PERAC staff also participated in the spring and fall MACRS Conferences in 2023. The Conferences were well attended and included several PERAC presentations including Reading Accounting Reports, Recent Remand Trends, Section 91A and Business Ownership, the Legal Panel, and an overview of the proposed updates to some of PERAC's regulations.



2023 Pension Fraud Poster Campaign

PERAC is mandated by the Legislature with identifying and preventing public pension fraud and runs a poster campaign every other year. Copies of a poster, PERAC's Referral Report of Potential Fraud and a brochure about the PERAC Fraud Prevention Unit and various types of pension fraud are distributed to the public. The mission

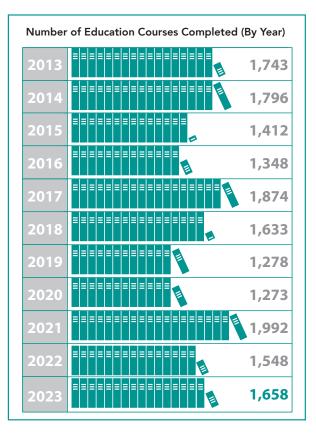
is to facilitate the reporting of fraudulent pension claims and payments. The 2023 Fraud Poster Campaign portrayed a superhero theme to spread the word to the public about the PERAC hotline and email address for confidential reporting of pension fraud.



Other Training Events

In addition to the in-person events, we continued our virtual educational series with several webinars throughout the year. Our partnership with the Inspector General continued with webinars on Fiduciary Duty for Board Members, Fraud Prevention and Awareness and Contract Administration. PERAC staff also conducted webinars on the ever popular Recent Cases of Interest, Veterans Benefits and Annual Statements and Cash Books. Webinars offered by PERAC are typically recorded and posted to our website for board members to have another opportunity to earn credits if they are unable to attend the live sessions.

With close to 1700 course completions in 2023 for all educational sessions, we will continue to listen to the feedback we receive to ensure we keep offering topics that are relevant and useful to the public retirement community.



PERAC's 2023 Pension Fraud Prevention Campaign poster.



Legislation

This year saw PERAC file an ambitious legislative agenda. With the start of a new two-year legislative session beginning

in 2023, PERAC filed seven bills in the House of Representatives in November of 2022. Five were refiles from the 2021-2022 session and two were new bills.

The two new bills were H. 14, An Act to Provide for Payment of Creditable Service which would require the members of a public entity that joins Chapter 32 to purchase their prior service in line with other buybacks. H. 15, An Act Clarifying the Chapter 32 Definition of Wages was filed in response to the *Vernava* case, which hinged on the Chapter 32, Section 1 definition of regular compensation being tied to services performed. To ensure that usage of accrued leave time remains treated as regular compensation as it has since the beginning of the public retirement system in 1946, this bill adds vacation, sick and personal time to the definition of wages, excluding when used with workers comp benefits.

In additional to the bills filed by PERAC four legislators also sponsored bills that PERAC had filed in the past. Rep. Jerry Parisella and Sen. John Velis, both veterans, filed An Act Relative to Veterans' Buyback. After being passed by the House in July 2022, the Senate passed Veterans' Buyback on the last day of the legislative session in January 2023, but it needed one more procedural vote in each chamber to get to the Governor before the clock ran out. Additionally, Rep. Jay Livingstone and Sen. Pat Jehlen, the authors of the Massachusetts Equal Pay Act which ensures people of different genders are paid comparably, filed An Act to Protect Gender Pay Equity, which would add an exemption to the anti-spiking statute for salary adjustments made in accordance with the Equal Pay Act.

All of the legislative initiatives had public hearings before the Joint Committee on Public Service during 2023.

The Fiscal Year Budget for 2023 included a 3% Cost of Living Adjustment for the State and Teachers' Retirement System.

The Open Meeting Law waivers, which have exempted public bodies from having a physical quorum for a meeting and the Chair being physically present as long as there is adequate alternate means of access to the public, were extended to March 31, 2025.

The Actuarial Unit provided cost estimates on two dozen classification bills at the request of the Public Service Committee to aid in their deliberations. PERAC regularly reviewed legislation by legislative request for matters of equity, consistency and technicality. Additionally, PERAC regularly responded to legislative requests regarding retirement-related issues for constituents.

PERAC-Filed Bills

1	House 9 - An Act Relative to Pension Forfeiture
2	House 10 - An Act Relative to the Recovery of Overearnings
3	House 11 - An Act Relative to Modifications of Retirement Allowances
4	House 12 - An Act Relative to Accidental Disability and Group 1 Emotional Distress
5	House 13 - An Act Providing for Statement of Financial Interest Flexibility
6	House 14 - An Act to Provide for Payment of Creditable Service
7	House 15 - An Act Clarifying the Chapter 32 Definition of Wages

Legislator-Filed Bills

1 House 2627/S 1750 - An Act Relative to Veterans' Buyback

2 House 2588/S 1691 - An Act to Protect Gender Pay Equity



Legal Unit

PERAC's Legal Unit represented the Commission in numerous cases this past year at the Division of Administrative Law

Appeals. Cases also progressed through the Contributory Retirement Appeal Board, and to the Superior Court, where the Legal Unit assisted the Attorney General's office in ongoing cases. The Legal Unit reviewed 572 disability transmittals and remanded 39 transmittals. Members of the Legal Unit also participated in, produced, and presented numerous educational webinars.

The Legal Unit also produced 131 Opinion Letters in 2023, including the statutorily required review of the supplemental regulations of retirement boards, and conducted the statutory review of all accidental disability, accidental death, ordinary disability, and termination retirement allowance applications approved by the 104 retirement boards.





Medical Panels

In addition to the information detailed in the Profiles, PERAC, as always, has been busy assisting the boards in other areas.

In 2023, 770 medical panel requests were initiated and processed. A total of 569 disability applications and 10 accidental death claims were approved in 2023.

For Post-Retirement medical reviews, 1,607 disability retirees were eligible for comprehensive medical evaluations. Occupational Health Physicians conducted comprehensive medical evaluations on 20 retirees and 5 retirees were examined for restoration to service.

Medical Panels (By Year)				
YEAR	MEDICAL PANEL REQUESTS	IN-HOUSE CME REVIEWS	DISABILITY APPROVALS	DEATH APPROVALS
2023	770	1,607	569	10
2022	703	578	585	14
2021	806	1,116	600	16
2020	470	1,110	494	9
2019	768	1,424	628	23
2018	641	1,312	616	9
2017	523	1,315	456	53
2016	659	1,356	499	76
2015	648	1,398	543	66
2014	669	1,302	573	24



Post-Retirement Earnings

PERAC is responsible for the postretirement monitoring of disabled retirees. One aspect of that task is enforcing the earnings limits set forth in Chapter 32. In 2023, PERAC analyzed 12,680 earnings reports, 3,492 retirees reported earnings and 136 earned more than the statutory limits.

"In 2023, PERAC analyzed 12,680 earnings reports, 3,492 retirees reported earnings and 136 earned more than the statutory limits. An additional 49 retirees failed to comply with the reporting requirement." An additional 49 retirees failed to comply with the reporting requirement. This resulted in the identification of \$2,006,406 in excess earnings and \$452,518* for non-compliance. In addition, 23 retirees waived their allowance, saving \$534,268.

*Not all boards submit amounts.

Post-Retirement Earnings (By Year)						
YEAR	EARNINGS REPORTS ANALYZED	REPORT EARNIN		NUMBER OF Excess Earners	NON- Compliant	WAIVED
2023	12,680	3,49	2	136	49	23
2022	12,789	3,30	4	108	67	20
2021	12,733	3,34	4	87	178	21
2020	12,783	3,56	3	87	161	22
2019	12,859	3,47	3	87	92	23
2018	12,773	3,55	7	62	73	21
2017	15,576	3,72	0	59	135	21
2016	15,895	3,84	9	54	101	37
2015	15,887	3,84	5	146	84	36
				ĴĜ ⁱ Ĉ		
	EXCESS EARNINGS AMOUNT					
YEAR			N	ON-COMPLIANC AMOUNT		VAIVED MOUNT
YEAR 2023		NOUNT			A	
	EARNINGS A	MOUNT ,733	\$	AMOUNT	4 \$53	MOUNT
2023	EARNINGS AI \$2,041,	,733 ,757	\$ \$	AMOUNT 1,175,81	4 \$53 * \$40	MOUNT 34,268
2023 2022	EARNINGS AI \$2,041, \$1,624,	MOUNT 733 757 525	\$ \$ \$	AMOUNT 1,175,81 827,719	4 \$53 * \$40 5 \$43	MOUNT 34,268 53,090
2023 2022 2021	EARNINGS A \$2,041, \$1,624, \$1,189,	400000 733 757 525 319	\$ \$ \$	AMOUNT 1,175,81 827,719 5,624,04	4 \$53 * \$40 5 \$43 5 \$20	MOUNT 34,268 53,090 38,967
2023 2022 2021 2020	EARNINGS AI \$2,041, \$1,624, \$1,189, \$1,189,	400000 733 757 525 ,319 ,947	\$ \$ \$ \$	AMOUNT 1,175,81 827,719 5,624,04 4,100,42	4 \$53 * \$40 5 \$43 5 \$20 1 \$33	MOUNT 34,268 53,090 38,967 53,238
2023 2022 2021 2020 2020 2019	EARNINGS AI \$2,041, \$1,624, \$1,189, \$1,459, \$1,222,	MOUNT 733 757 525 319 947 422	\$ \$ \$ \$ \$	AMOUNT 1,175,81 827,719 5,624,04 4,100,42 2,401,35	4 \$53 * \$40 5 \$43 5 \$20 1 \$33 9 \$33	MOUNT 34,268 53,090 38,967 53,238 56,167
2023 2022 2021 2020 2019 2018	EARNINGS AI \$2,041, \$1,624, \$1,189, \$1,459, \$1,459, \$1,222, \$933,4	MOUNT ,733 ,757 ,525 ,319 ,947 ,22 ,781	\$ \$ \$ \$ \$ \$	AMOUNT 1,175,81 827,719 5,624,04 4,100,42 2,401,35 1,572,72	4 \$53 * \$40 5 \$43 5 \$20 1 \$33 9 \$34 7 \$40	MOUNT 34,268 53,090 38,967 53,238 56,167 52,691
2023 2022 2021 2020 2019 2018 2017	EARNINGS AI \$2,041, \$1,624, \$1,189, \$1,459, \$1,222, \$933,4 \$858,7	MOUNT 733 757 525 319 947 422 781 993	\$ \$ \$ \$ \$ \$ \$	AMOUNT 1,175,81 827,719 5,624,04 4,100,42 2,401,35 1,572,72 4,418,86	4 \$53 * \$40 5 \$43 5 \$20 1 \$33 9 \$33 7 \$40 1 \$50	MOUNT 34,268 53,090 38,967 53,238 56,167 52,691 00,867



PROFILES MA Contributory Retirement Boards

Introduction

The Board Profile section of the PERAC Annual Report provides a detailed assessment of some of the important indicators relative to the financial health of the retirement systems. The information provided in this report can enable board members to provide factual comment and advice to policymakers as various proposals relative to the retirement law are assessed. Through this and other studies, PERAC seeks to provide objective, comprehensive, and accurate data for use by all interested parties. All actuarial information in this report is as of the date of the board's most recent valuation as of April 1, 2024.

Actuarial Valuations and Funding Schedules

The Funding Schedule on the board profile pages reflects the amortization schedule for the Unfunded Actuarial Liability (UAL). For example, "1.5% Increasing" with a year fully funded of 2030, means the UAL is being amortized on a 1.5% annually increasing basis to FY30.

A number of systems utilize phase-in schedules in which payments increase more rapidly over the first few years of the schedule than later in the schedule. We reflect those schedules using the ultimate amortization schedule and note there is a phase-in. For example, "4.0% Increasing Phase-In" with a year fully funded of 2035, means the total appropriation increases by a certain percent per year for a period of time and then the remaining unfunded liability is amortized on a 4% increasing basis until FY35.

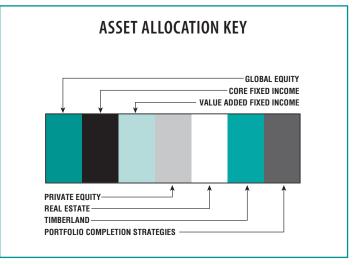
Schedules described as "Total Increasing" mean the annual appropriation increases by the amount indicated, which may vary, for the entire schedule.

A Word on Portfolio Valuations

In assessing investment performance, PERAC relies on the retirement boards to submit accurate and complete information about investment activity. PERAC numbers might differ from those provided to a board by its consultant because PERAC measures all assets, including monies not committed to investment management.

Asset allocation is presented in graph form. The way a retirement board allocates its assets among the various investment classes available to it has long been recognized as the prime determining factor in the generation of returns. Allocation information reported by the investment consultants advising the retirement boards, or PRIM, forms the basis of these graphs. PERAC has not independently confirmed the accuracy of this data.

The key used for the Asset Allocation graphs:



DISCLAIMER: In publishing this information PERAC makes no comment regarding any retirement board's asset allocation, investment strategy, or manager/fund commitments.

COMPOSITE

COMPOSITE INVESTMENT PROFILE

Commonwealth of Massachusetts

Public Employee Retirement Systems

\$119.2 B

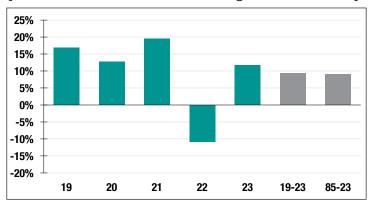
Market Value

11.64% 2023 Returns

7.81% 2014-2023 (Annualized) **9.05%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Adams

CONTACT INFORMATION

44 Spring Street Suite 19 Adams, MA 01220 Phone 413-743-5575

WEBSITE

town.adams.ma.us/ retirement-board

BOARD MEMBERS

Patricia Wol George Haddad Holli Havens-Jayko* Beth Matson *indicates Chairperson

BOARD ADMINISTRATOR

William Flynn

SYSTEM MEMBERS

Active Members168
Total Payroll\$6.8 M
Average Salary\$40,600
Average Age47
Average Service9.6
Retired Members177
Benefits Paid\$3.6 M
Average Benefit \$20,300
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees5
Reported Earnings2
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: PERAC



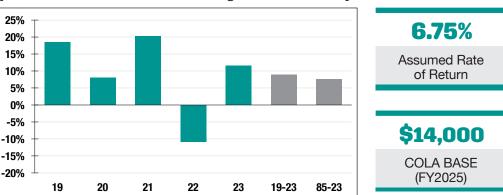
Market Value

11.49% 2023 Returns

5.69% 2014-2023 (Annualized) **7.64%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



\$16.9 M

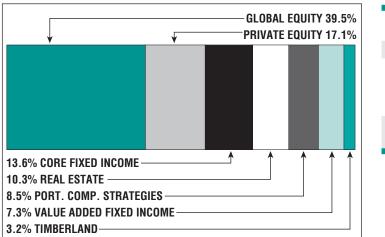
Unfunded Liability

\$2.2 M

(FY2024)

Total Pension Appropriation

Asset Allocation (12/31/23)



Amesbury

CONTACT INFORMATION

City Hall 62 Friend Street Amesbury, MA 01913-2825 Phone 978-388-8131

WEBSITE

amesburyma.gov/277/ Retirement

BOARD MEMBERS

Sheryl Wright Craig Bailey Donna Cornoni* Shaunna Ring David Van Dam *indicates Chairperson

BOARD ADMINISTRATOR

Kevin Caira

SYSTEM MEMBERS

Active Members290
Total Payroll\$16.6 M
Average Salary\$57,300
Average AgeNA
Average ServiceNA
Retired Members267
Benefits Paid\$7.6 M
Average Benefit \$28,500
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees13	
Reported Earnings3	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: Sherman



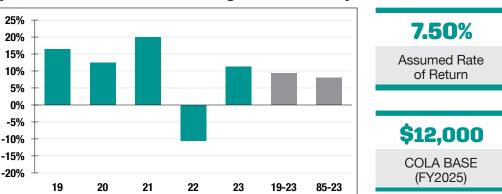
Market Value

11.22% 2023 Returns

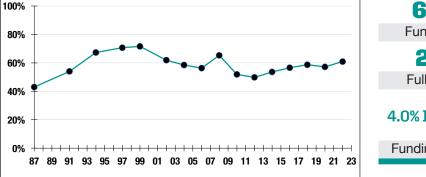
7.88% 2014-2023 (Annualized) **8.08%** 1985-2023 (Annualized)

Investment Returns

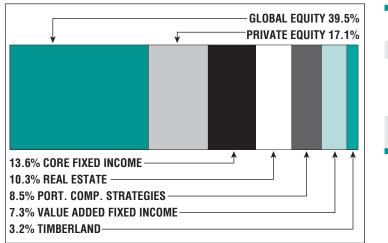
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



Asset Allocation (12/31/23)



60.9% Funded Ratio 2035 Fully Funded 4.0% Increasing

Funding Schedule

\$45.2 M

Unfunded Liability

\$5.8 M (FY2024)

Total Pension

Appropriation

Andover

CONTACT INFORMATION

Town Offices 36 Bartlet Street Andover, MA 01810 Phone 978-623-8540 Fax 978-623-8594

WEBSITE

andovermaretirement.com/

BOARD MEMBERS

Hayley Green* Mathew Fabiani Eric Teichert Blackwell Taylor *indicates Chairperson

BOARD ADMINISTRATOR

Vacant

SYSTEM MEMBERS

Active Members708	
Total Payroll\$48.6 M	
Average Salary\$68,600	
Average Age48	
Average Service11.6	
Retired Members572	
Benefits Paid\$18.8 M	
Average Benefit\$32,800	

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Age73

Disability Retirees
Reported Earnings11
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: KMS



Market Value

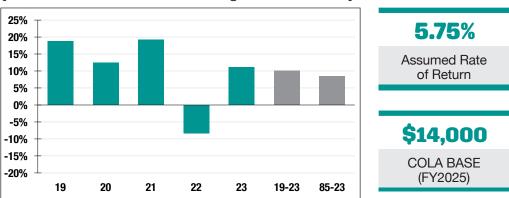
11.12% 2023 Returns

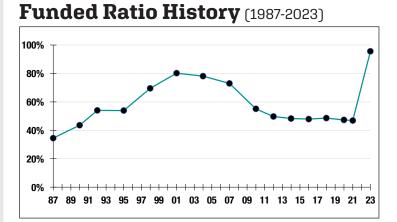


8.43% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







\$17.0 M

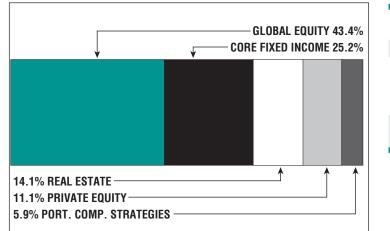
Unfunded Liability

\$7.3 M

(FY2024)

Total Pension Appropriation

Asset Allocation (12/31/23)



Arlington

CONTACT INFORMATION

27 Maple Street Room 203 Arlington, MA 02476 Phone 781-316-3370 Fax 781-316-3379

WEBSITE

arlingtonma.gov/towngovernance/boards-andcommittees/retirementboard

BOARD MEMBERS

Ida Cody Richard Keshian Kenneth Hughes* Robert Jefferson Alfred Fantini *indicates Chairperson

BOARD ADMINISTRATOR

Richard Greco

SYSTEM MEMBERS

Active Members	802
Total Payroll	\$46.3 M
Average Salary	\$57,700
Average Age	46
Average Service	9.3
Retired Members	s619
Benefits Paid	\$20.9 M

Benefits	Paid	.\$20.9	Μ
Average	Benefit	\$33,8	00
Average	Age		75

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees......74 Reported Earnings23 Excess Earners......2 Refund Due\$15,077

Last Valuation: 1/1/23 Actuary: Stone



Market Value

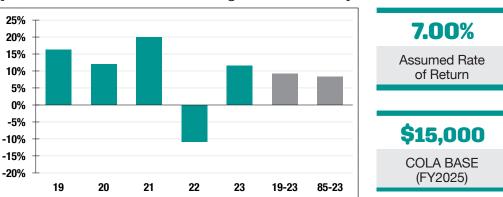
11.53% 2023 Returns

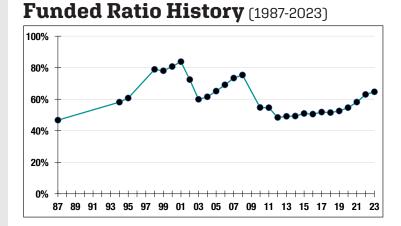


8.35% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







\$118.1 M

Unfunded Liability

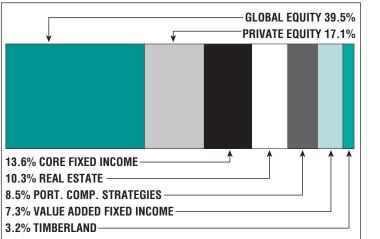
\$16.3 M

(FY2024)

Total Pension

Appropriation

Asset Allocation (12/31/23)



| 2023 Annual Report | 19

Attleboro

CONTACT INFORMATION

77 Park Street Attleboro, MA 02703 Phone 508-223-2222

WEBSITE

cityofattleboro.us/411/ Retirement-Board

BOARD MEMBERS

Deborah Gould* Barry LaCasse Bruce Tondreau Scott Charette Debra Bush *indicates Chairperson

BOARD ADMINISTRATOR

Rachel Dindy

SYSTEM MEMBERS

Active Members712	
Total Payroll\$40.2 M	
Average Salary\$56,500	
Average Age46	
Average Service10.8	
Retired Members485	

Benefits Paid\$15.9 M Average Benefit\$32,800 Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees42
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: Stone

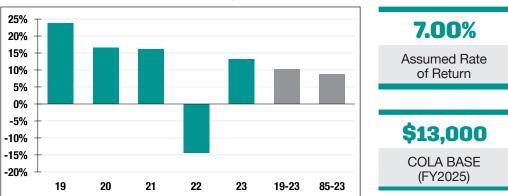


13.22% 2023 Returns

7.55% 2014-2023 (Annualized) **8.84%** 1985-2023 (Annualized)

Investment Returns

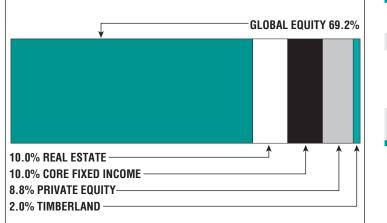
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



Asset Allocation (12/31/23)



\$85.1 M Unfunded Liability **\$9.9 M** (FY2024)

> Total Pension Appropriation

Barnstable County

CONTACT INFORMATION

750 Attucks Lane Hyannis, MA 02601 Phone 508-775-1110 Fax 508-775-1344

WEBSITE

barnstablecountyretirement.org

BOARD MEMBERS

Charles Frazier Carol Coppola* Ronald Bergstrom Harold Brunelle TK Menesale *indicates Chairperson

BOARD ADMINISTRATOR

Susy Bento Holmes

SYSTEM MEMBERS

4,790
\$307.8 M
\$64,300
48
11.1

Retired Members......3,510 Benefits Paid\$113.4 M Average Benefit\$32,300 Average Age71

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees326
Reported Earnings134
Excess Earners3
Refund Due\$13,257

Last Valuation: 1/1/22 Actuary: Segal



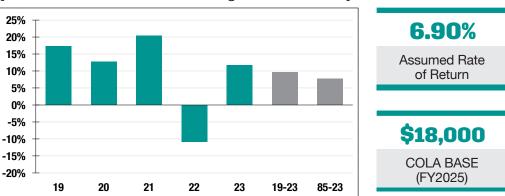
Market Value

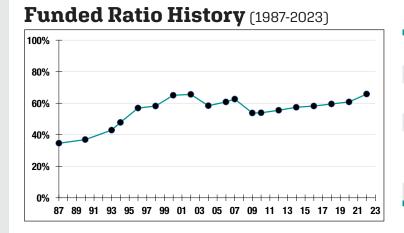
11.66% 2023 Returns

8.06% 2014-2023 (Annualized) **7.70%** 1985-2023 (Annualized)

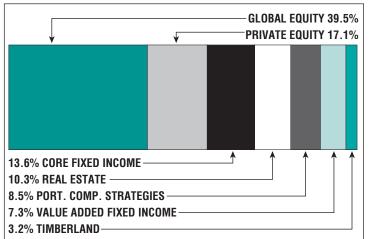
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)



65.8% Funded Ratio 2037 Fully Funded 5.80% Total Increasing Funding Schedule

\$755.2 M

Unfunded Liability

\$83.4 M

(FY2024)

Total Pension Appropriation

Belmont

CONTACT INFORMATION

90 Concord Avenue 3rd Floor, Suite 3 Belmont, MA 02478-0900 Phone 617-993-2792 Fax 617-993-2793

WEBSITE

belmontretirementsystem.org

BOARD MEMBERS

Donna Tuccinardi Brian Antonellis Walter Wellman Ross Vona Thomas Gibson* *indicates Chairperson

BOARD ADMINISTRATOR

Ryan Horan

SYSTEM MEMBERS

Active Members460 Total Payroll\$28.6 M
Average Salary\$62,200 Average Age48 Average Service11.3
Retired Members357 Benefits Paid\$12.4 M Average Benefit\$34,800 Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees40	
Reported Earnings14	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: Segal



Market Value

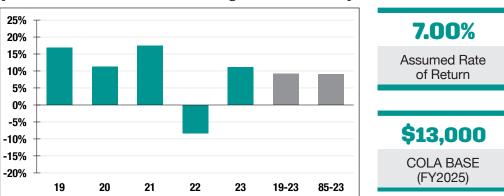
11.08% 2023 Returns

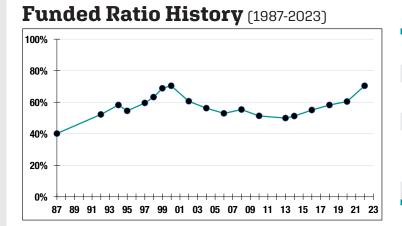
7.38% 2014-2023 (Annualized)

9.12% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







\$62.1 M

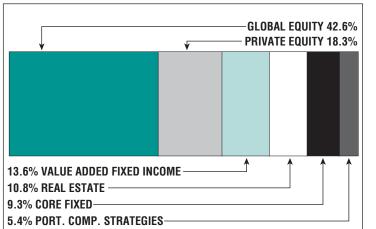
\$12.3 M (FY2024)

Total Pension

Appropriation

Unfunded Liability

Asset Allocation (12/31/23)



Berkshire County

CONTACT INFORMATION

29 Dunham Mall Pittsfield, MA 01201 Phone 413-499-1981 Fax 413-445-7990

WEBSITE

berkshireretirement.com

BOARD MEMBERS

Sue Funk Michael Ovitt* **Timothy Sorrell** Mark Bashara **Beth Matson** *indicates Chairperson

BOARD ADMINISTRATOR

Sheila LaBarbera

SYSTEM MEMBERS

Active Members1,204
Total Payroll\$56.4 M
Average Salary\$46,800
Average Age49
Average Service9.6
Retired Members900
Benefits Paid\$18.5 M
Average Benefit \$20,600

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Age73

Disability Retirees27
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: PERAC



Market Value

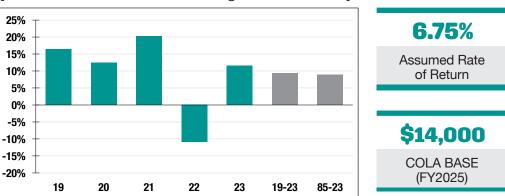
11.48% 2023 Returns

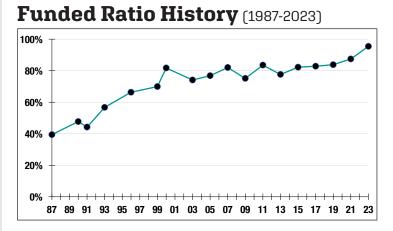
7.89% 2014-2023 (Annualized)

8.90% 1985-2023 (Annualized)

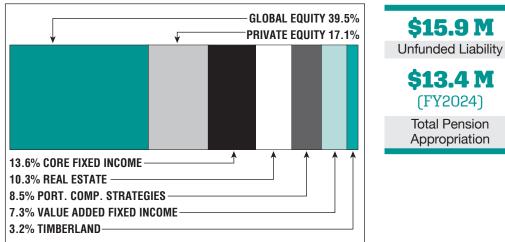
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)



95.4% **Funded Ratio** 2026 **Fully Funded** 7.0% Total Increasing **Funding Schedule**

\$15.9 M

\$13.4 M

(FY2024)

Total Pension Appropriation

Beverly

CONTACT INFORMATION

275 Rantoul Street Beverly, MA 01915 Phone 978-605-2370

WEBSITE

beverlyma.gov/355/ Retirement-Board

BOARD MEMBERS

Carol Augulewicz Bryant Ayles* Kevin Smith D. Wesley Slate Adam Travinski *indicates Chairperson

BOARD ADMINISTRATOR

Colleen Loughlin

SYSTEM MEMBERS

Active Members596
Total Payroll\$33.3 M
Average Salary\$55,800
Average Age48
Average Service11.1
Retired Members476
Benefits Paid\$14.8 M
Average Benefit\$31,100

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Age74

Disability Retirees42
Reported Earnings12
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: PERAC



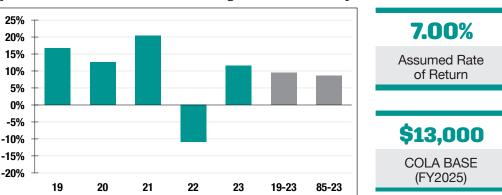
11.53% 2023 Returns

7.96% 2014-2023 (Annualized)

8.57% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



\$70.7 M

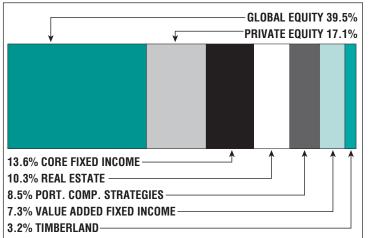
\$13.7 M

(FY2024)

Total Pension Appropriation

Unfunded Liability

Asset Allocation (12/31/23)



Blue Hills Regional

CONTACT INFORMATION

800 Randolph Street Canton, MA 02021 Phone 781-828-5800 Fax 781-828-0794

WEBSITE NO WEBSITE

BOARD MEMBERS

Charles Gisondi* Steven Moore Patricia Brooks Kathleen Manning Lisa Maloney *indicates Chairperson

BOARD ADMINISTRATOR

Frank Zecha

SYSTEM MEMBERS

Active Members48	3
Total Payroll\$2.6 N	1
Average Salary\$54,400)
Average Age51	
Average Service10.4	ł

Retired Members......47 Benefits Paid\$1.1 M Average Benefit\$22,900 Average Age78

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees0	
Reported Earnings0	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: PERAC



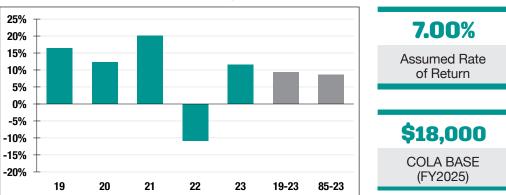
Market Value

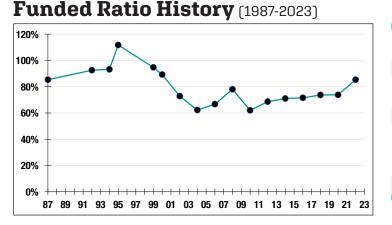
11.51% 2023 Returns

7.85% 2014-2023 (Annualized) **8.62%** 1985-2023 (Annualized)

Investment Returns

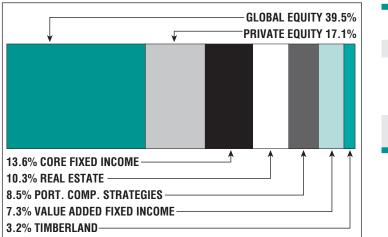
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





85.3% Funded Ratio 2029 Fully Funded 7.1% Total Increasing Funding Schedule

Asset Allocation (12/31/23)



\$2.5 M Unfunded Liability \$735 IX (FY2024) Total Pension Appropriation

Boston (City)

CONTACT INFORMATION

City Hall, Room 816 Boston, MA 02201 Phone 617-635-4311 Fax 617-635-4318

WEBSITE

boston.gov/departments/ retirement

BOARD MEMBERS

Scott Finn Daniel Greene* Michael O'Reilly Karen Cross Thomas Jackson *indicates Chairperson

BOARD ADMINISTRATOR

Timothy Smyth

SYSTEM MEMBERS

Active Members14,581
Total Payroll \$1.1 B
Average Salary\$77,500
Average Age46
Average Service12.6
Retired Members9,898
Benefits Paid\$418.7 M
Average Benefit\$42,300

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Age74

Disability Retirees.....1,482 Reported Earnings282 Excess Earners.......12 Refund Due\$268,770

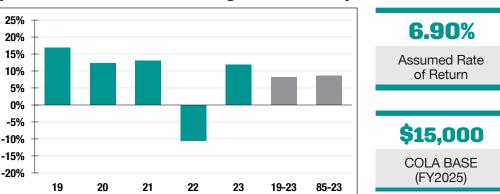
Last Valuation: 1/1/22 Actuary: Segal **\$7.2 B** Market Value

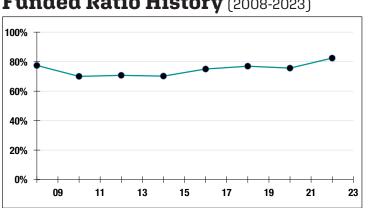
11.78% 2023 Returns

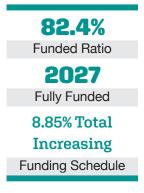
6.38% 2014-2023 (Annualized) **8.56%** 1985-2023 (Annualized)

Investment Returns

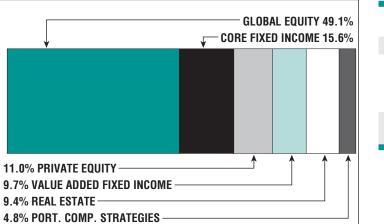
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)





Funded Ratio History (2008-2023)

26 | 2023 Annual Report |

Boston (Teachers)

CONTACT INFORMATION

See Boston (City)

SYSTEM MEMBERS

Active Members	6,618
Total Payroll	.\$681.9 M
Average Salary	.\$103,000
Average Age	43
Average Service	10.6

Retired Members.....4,789 Benefits Paid\$271.0 M Average Benefit\$56,600 Average Age75

Last Valuation: 1/1/23 Actuary: PERAC

NOTES ON BOSTON (CITY) & BOSTON (TEACHERS):

The results for Boston Teachers and non-teachers (City) are separated in this report.

The liability for Boston Teachers has always been the responsibility of the Commonwealth.

In 2010, legislation was enacted that allocated assets to Boston Teachers and separate accounts have been maintained since that date. The actuarial information for the City now solely reflects liability that is the responsibility of the City.

The Funded Ratio chart for the City reflects information available since that allocation.

Please note the following when reviewing the charts on these pages:

- Boston Teachers' assets prior to 2010 were estimated as approximately 30% of Boston (System) total assets.
- The information with respect to Disability Retirees on the City Board Profile page reflects the entire system, including Boston Teachers.
- The information with respect to Investment Return History for the City reflects actual returns for Boston (City) for 2019-2023 and total returns for the Boston System prior to 2011.

```
$2.4 B
```

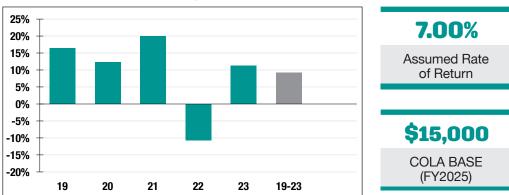
Market Value

11.26% 2023 Returns

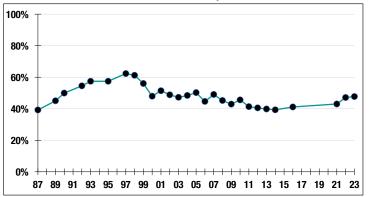
7.86% 2014-2023 (Annualized) **NA** 1985-2023 (Annualized)

Investment Returns

(2019-2023 and 5-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)





\$2.4 B

Unfunded Liability

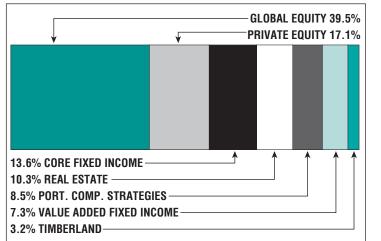
\$238.5 M

(FY2024)

Total Pension

Appropriation

Asset Allocation (12/31/23)



Braintree

CONTACT INFORMATION

74 Pond Street, 2nd Floor Braintree, MA 02184 Phone 781-794-8211 Fax 781-794-8407

WEBSITE

braintreema.gov/337/ Retirement

BOARD MEMBERS

Edward Spellman Joseph Driscoll Gerald Kenny* Frederick Viola David DelGallo *indicates Chairperson

BOARD ADMINISTRATOR

Dennis Gallagher

SYSTEM MEMBERS

Active Members790
Total Payroll\$52.7 M
Average Salary\$66,800
Average Age49
Average Service11.9
Retired Members568
Benefits Paid\$20.5 M
Average Benefit\$36,000
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees55	
Reported Earnings16	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: KMS



Market Value

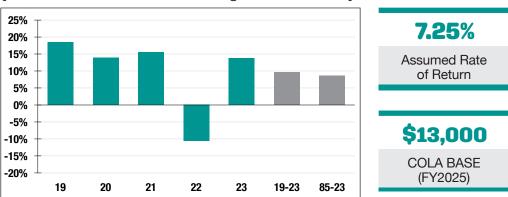
13.71% 2023 Returns

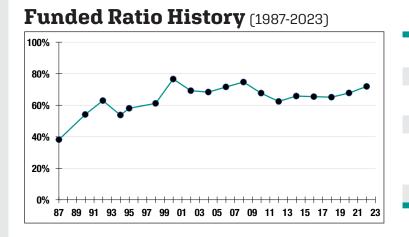


8.55% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







\$102.5 M

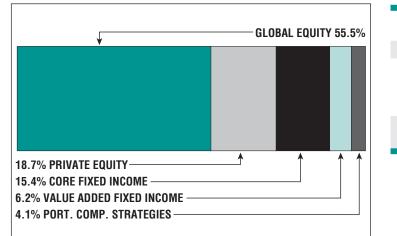
Unfunded Liability

\$14.6 M (FY2024)

Total Pension

Appropriation

Asset Allocation (12/31/23)



Bristol County

CONTACT INFORMATION

County Crossing 645 County Street Taunton, MA 02780 Phone 508-824-4029 Fax 508-880-8749

WEBSITE

bristolcountyretirement.org

BOARD MEMBERS

Christopher Saunders* John Saunders William Downey Stephen Rivard Christine DeFontes *indicates Chairperson

BOARD ADMINISTRATOR

Roxanne Donovan

SYSTEM MEMBERS

Active Members3,349
Total Payroll\$185.7 M
Average Salary\$55,500
Average Age48
Average Service11.3
Retired Members2,743
Benefits Paid\$75.4 M
Average Benefit \$27,500
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees216
Reported Earnings73
Excess Earners5
Refund Due\$33,086

Last Valuation: 1/1/22 Actuary: Stone \$895.6 M

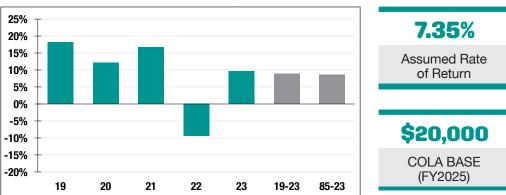
Market Value

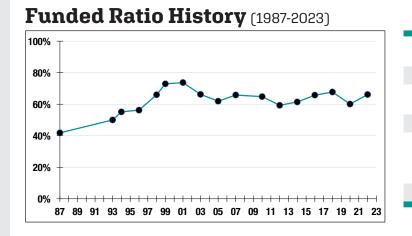
9.70% 2023 Returns

7.05% 2014-2023 (Annualized) **8.68%** 1985-2023 (Annualized)

Investment Returns

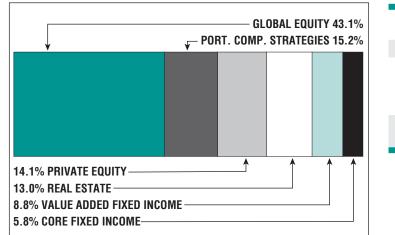
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





66.1% Funded Ratio 2034 Fully Funded 5.08% Total Increasing Funding Schedule

Asset Allocation (12/31/23)





Total Pension Appropriation

Brockton

CONTACT INFORMATION

1322 Belmont Street Suite 101 Brockton, MA 02301 Phone 508-580-7847 Fax 508-559-0559

WEBSITE

brocktonretirement.com

BOARD MEMBERS

Irene Giannopoulos John Condon Scott Albanese Archie Gormley William Farmer* *indicates Chairperson

BOARD ADMINISTRATOR

Jeanne Martineau

SYSTEM MEMBERS

Active Members1,948
Total Payroll\$117.4 M
Average Salary\$60,200
Average Age46
Average Service10.2
Retired Members1,319
Benefits Paid\$47.9 M
Average Benefit\$36,300
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 159
Reported Earnings41
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: KMS



Market Value

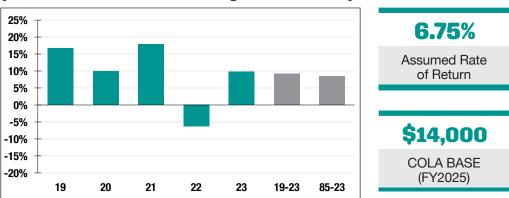
9.78% 2023 Returns



8.50% 1985-2023 (Annualized)

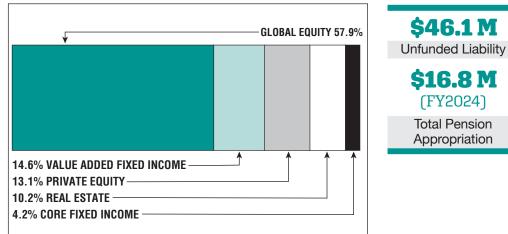
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





Funding Schedule

\$46.1 M

\$16.8 M (FY2024)

Total Pension

Appropriation

Brookline

CONTACT INFORMATION

Public Health Building Ground Floor 11 Pierce Street Brookline, MA 02445 Phone 617-730-2028 Fax 617-730-2298

WEBSITE

brooklinema.gov/714/ Retirement-Board

BOARD MEMBERS

Lincoln Heineman Robert Ward John Canney Gary Altman* *indicates Chairperson

BOARD ADMINISTRATOR

Frank Zecha

SYSTEM MEMBERS

Active Members1,347
Total Payroll\$81.2 M
Average Salary\$60,300
Average Age43
Average Service10.1
Retired Members891
Benefits Paid\$33.5 M
Average Benefit\$37,600
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 151	
Reported Earnings40	
Excess Earners1	
Refund Due\$16,508	

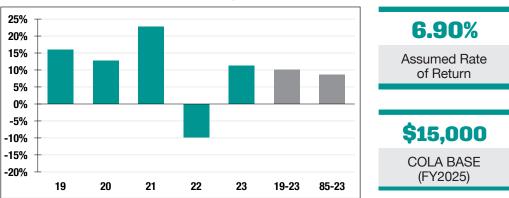
Last Valuation: 1/1/22 Actuary: Segal **\$476.6 M** Market Value

11.22% 2023 Returns

7.92% 2014-2023 (Annualized) **8.65%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



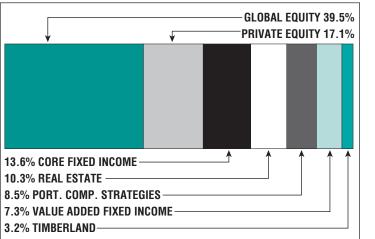
\$188.2 M

Unfunded Liability

\$34.4 M (FY2024) Total Pension

Appropriation

Asset Allocation (12/31/23)



Cambridge

CONTACT INFORMATION

125 CambridgePark Drive Suite 104 Cambridge, MA 02140-2369 Phone 617-868-3401 Fax 617-868-3477

WEBSITE

cambridgeretirementma.gov

BOARD MEMBERS

Joseph McCann Michael Gardner James Monagle Francis Murphy^{*} Nadia Chamblin-Foster *indicates Chairperson

BOARD ADMINISTRATOR

Chris Burns

SYSTEM MEMBERS

Active Members3,156
Total Payroll\$247.8 M
Average Salary\$78,500
Average Age46
Average Service12.9
Retired Members2,306
Benefits Paid\$96.6 M
Average Benefit\$41,900
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 228
Reported Earnings57
Excess Earners2
Refund Due\$103,326

Last Valuation: 1/1/22 Actuary: Segal



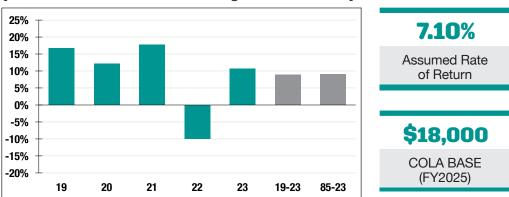
Market Value

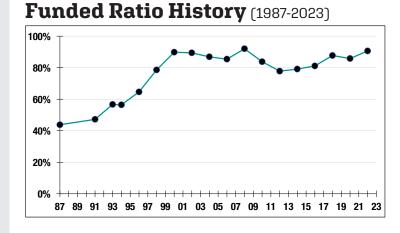
10.66% 2023 Returns

7.29% 2014-2023 (Annualized) **9.04%** 1985-2023 (Annualized)

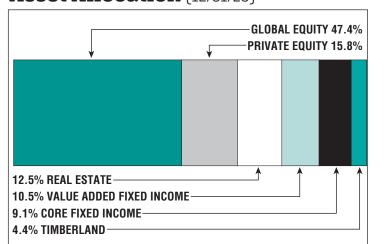
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)



90.6% Funded Ratio 2026 Fully Funded 12.1% Total Increasing Funding Schedule

\$175.4 M

Unfunded Liability

\$67.7 M (FY2024)

Total Pension

Appropriation

32 | 2023 Annual Report |

Chelsea

CONTACT INFORMATION

90 Everett Ave Suite 5 Chelsea, MA 02150 Phone 857-776-6544 Fax 617-466-0032

WEBSITE

chelseama.gov/government/ boards___commission/ retirement board/index.php

BOARD MEMBERS

Edward Dunn **Cheryl Watson Fisher Richard Carroccino** Joseph Siewko* Carolyn Russo *indicates Chairperson

BOARD ADMINISTRATOR

Michael Nicolazzo

SYSTEM MEMBERS

Active Members .	793
Total Payroll	\$49.1 M
Average Salary	\$61,900
Average Age	44
Average Service	

Retired Members......429 Benefits Paid\$14.9 M Average Benefit\$34,700 Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees59	
Reported Earnings16	
Excess Earners1	
Refund Due\$8,140	

Last Valuation: 1/1/23 Actuary: PERAC

\$280.1 M

Market Value

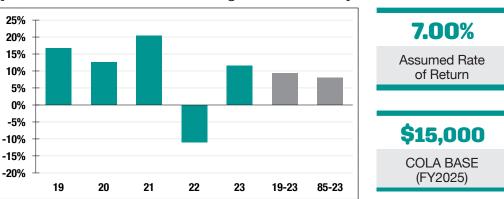
11.58% 2023 Returns

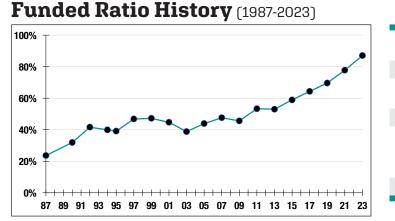


8.06% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)

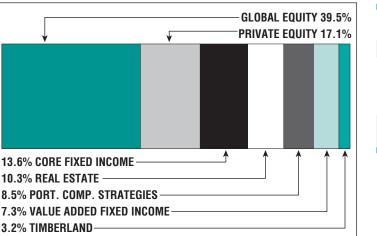






Funding Schedule

Asset Allocation (12/31/23)



\$39.1 M Unfunded Liability \$16.0 M (FY2024) **Total Pension**

Appropriation

Chicopee

CONTACT INFORMATION

274 Front Street City Hall, Market Square Chicopee, MA 01013 Phone 413-594-1542 Fax 413-594-1544

WEBSITE

chicopeema.gov/351/ Retirement-Office

BOARD MEMBERS

Sharyn Riley Debra Boronski Timothy O'Shea* Paul Mailhott David Ference *indicates Chairperson

BOARD ADMINISTRATOR

Ana Gomes

SYSTEM MEMBERS

Active Members1,214
Total Payroll\$65.2 M
Average Salary\$53,700
Average Age47
Average Service11.9
Detine d Manshaus 001
Retired Members931
Benefits Paid\$28.1 M
Average Benefit\$30,200
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees91	
Reported Earnings27	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/23 Actuary: Stone



Market Value

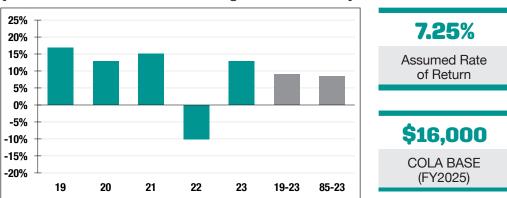
12.85% 2023 Returns

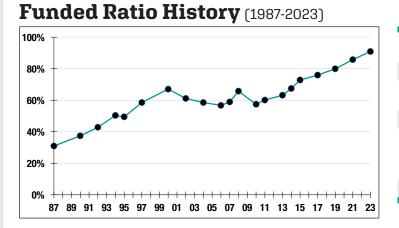


8.54% 1985-2023 (Annualized)

Investment Returns

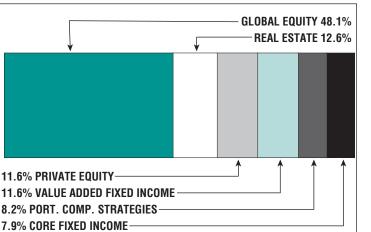
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





90.9% Funded Ratio 2027 Fully Funded 3.0% Total Increasing Funding Schedule

Asset Allocation (12/31/23)



\$44.7 M Unfunded Liability **\$21.2 M**

> (FY2024) Total Pension Appropriation

Clinton

CONTACT INFORMATION

242 Church Street Clinton, MA 01510 Phone 978-365-4118 Fax 978-612-0215

WEBSITE

clintonma.gov/214/ **Retirement-Board**

BOARD MEMBERS

Diane Magliozzi David Baird Joseph Casasanto James McNamara Paul Cherubini* *indicates Chairperson

BOARD ADMINISTRATOR

Patricia Hazel

SYSTEM MEMBERS

Active Members281
Total Payroll\$14.5 M
Average Salary\$51,800
Average Age47
Average Service10.6
Retired Members150
Benefits Paid\$4.7 M
Average Benefit\$31,400
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees12
Reported Earnings2
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: PERAC



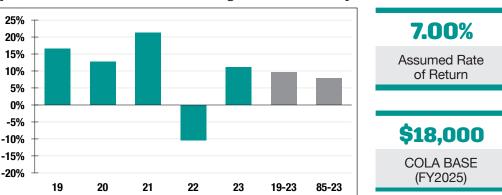
11.20% 2023 Returns

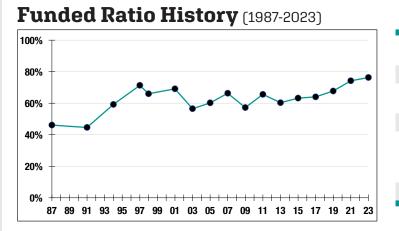


7.89% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





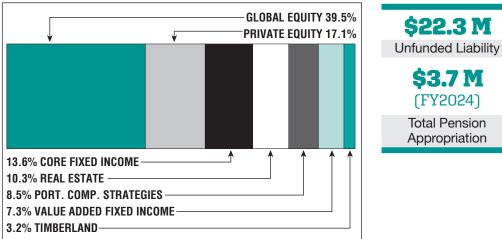
76.3% Funded Ratio 2035 **Fully Funded** 5.80% Total Increasing **Funding Schedule**

\$22.3 M

\$3.7 M (FY2024)

Total Pension

Appropriation



Concord

CONTACT INFORMATION

2250 Main Street West Concord, MA 01742 Phone 978-759-6057 Fax 978-610-6778

WEBSITE

concordma.gov/160/ Retirement-Board

BOARD MEMBERS

Richard Delorey Anthony Ansaldi Peter Fulton* **Brian Whitney** Eric Macy *indicates Chairperson

BOARD ADMINISTRATOR

Linda Boucher

SYSTEM MEMBERS

Active Members567
Active Members
Total Payroll\$37.7 M
Average Salary\$66,400
Average Age48
Average Service10.1
Retired Members351
Benefits Paid\$11.3 M
Average Benefit\$32,100
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees18
Reported Earnings3
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: Stone



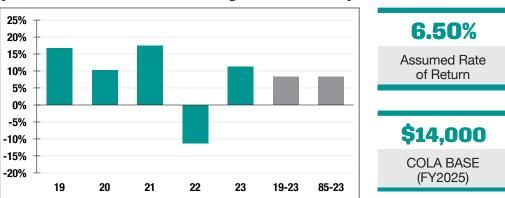
11.23% Market Value 2023 Returns

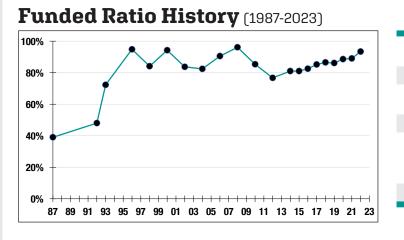


8.37% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)

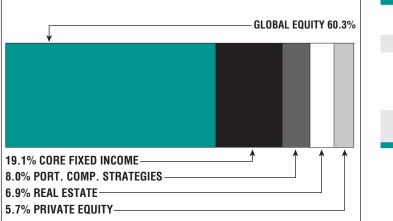






Funding Schedule

Asset Allocation (12/31/23)





Total Pension Appropriation

Danvers

CONTACT INFORMATION

Town Hall 1 Sylvan Street Danvers, MA 01923 Phone 978-777-0001 Fax 978-406-4196

WEBSITE

danversma.gov/240/ Retirement-Board

BOARD MEMBERS

Heather Russo **Rodney Conley** Joseph Collins* Dana Hagan Stephen Swanson *indicates Chairperson

BOARD ADMINISTRATOR

Corinna Grace

SYSTEM MEMBERS

Active Members466
Total Payroll\$30.9 M
Average Salary\$66,400
Average Age48
Average Service12.5
Retired Members418
Benefits Paid\$13.6 M
Average Benefit\$32,600
Average Age75

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees31	
Reported Earnings10	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: KMS

\$152.7 M

Market Value

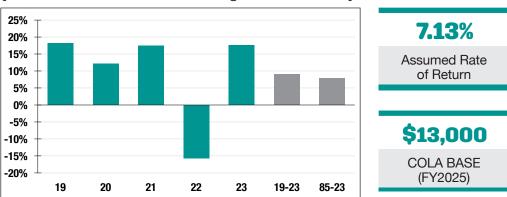
17.53% 2023 Returns

6.50% 2014-2023 (Annualized)

7.92% 1985-2023 (Annualized)

Investment Returns

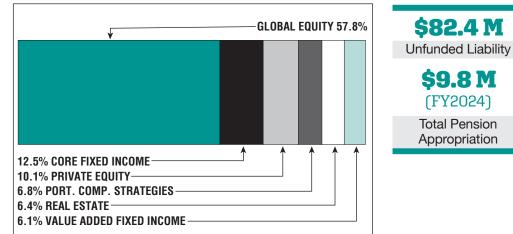
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023) 100% 80% 60% 40% 20% በ% 87 89 91 93 95 97 99 01 03 05 07 09 11 13 15 17 19 21 23



Asset Allocation (12/31/23)



\$9.8 M (FY2024) **Total Pension**

Dedham

CONTACT INFORMATION

202 Bussey St., Suite 101 Dedham, MA 02026 Phone 781-326-7693 Fax 781-329-4123

WEBSITE

dedhamret.com

BOARD MEMBERS

Shannon MacKenzie Adam Satriano Stephen MacDougall Michael Doyle Thomas Rorrie* *indicates Chairperson

BOARD ADMINISTRATOR

Barbara Isberg

SYSTEM MEMBERS

Active Members	476
Total Payroll	\$29.5 M
Average Salary	\$62,000
Average Age	47
Average Service	10.6
Retired Members	

Benefits Paid\$10.8 M Average Benefit\$33,200 Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees38	
Reported Earnings9	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: Segal

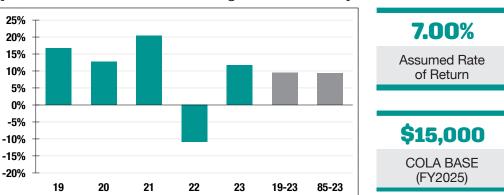


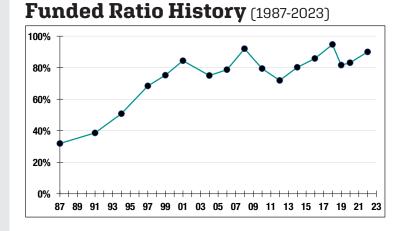
11.65% 2023 Returns

8.02% 2014-2023 (Annualized) **9.35%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





90.0% Funded Ratio 2029 Fully Funded 2.0% Total Increasing Funding Schedule

\$20.2 M

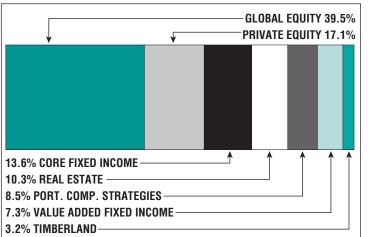
Unfunded Liability

\$4.7 M

(FY2024)

Total Pension Appropriation

Asset Allocation (12/31/23)



38 | 2023 Annual Report |

Dukes County

CONTACT INFORMATION

9 Airport Road Suite 1 Vineyard Haven, MA 02568 Phone 508-696-3846 Fax 508-696-3847

WEBSITE

dukesretirement.com

BOARD MEMBERS

Juliet Mulinare* James Hagerty Timothy McLean Jo Ann Murphy Jonathan Snyder *indicates Chairperson

BOARD ADMINISTRATOR

Kelly McCracken

SYSTEM MEMBERS

Active Members665
Total Payroll\$46.3 M
Average Salary\$69,600
Average Age49
Average Service10.1
Retired Members398
Benefits Paid\$12.3 M
Average Benefit\$30,900
Average Age71

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees
Reported Earnings9
Excess Earners1
Refund Due\$27,572

Last Valuation: 1/1/22 Actuary: KMS



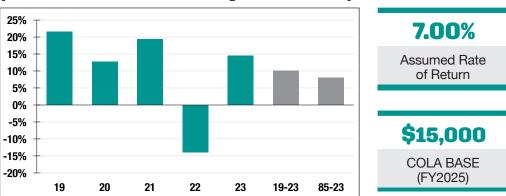
Market Value

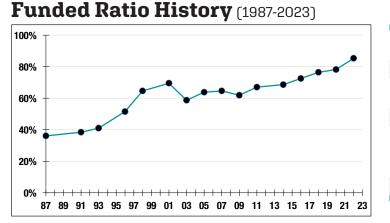
14.44% 2023 Returns

8.77% 2014-2023 (Annualized) **8.07%** 1985-2023 (Annualized)

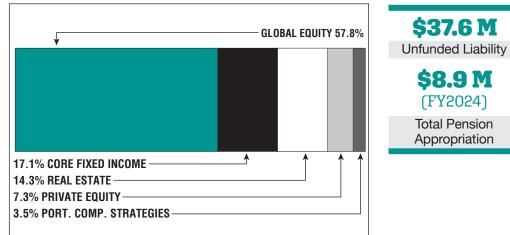
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)









Easthampton

CONTACT INFORMATION

199 Northampton Street Easthampton, MA 01027 Phone 413-203-1307

WEBSITE

easthamptonma.gov/223/ Retirement

BOARD MEMBERS

Hetal Patel Jessica Hebert Donald Emerson* David Mottor

*indicates Chairperson

BOARD ADMINISTRATOR

Kymme Wood

SYSTEM MEMBERS

Active Members256	;
Total Payroll\$12.8 M	
Average Salary\$49,900)
Average Age44	•
Average Service9.4	
Retired Members188	;
Benefits Paid\$5.1 M	

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Benefit \$27,100

Average Age72

Disability Retirees15
Reported Earnings5
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: PERAC



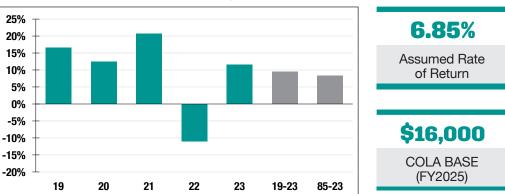
Market Value

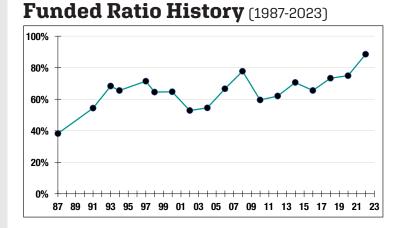
11.55% 2023 Returns

7.96% 2014-2023 (Annualized) **8.32%** 1985-2023 (Annualized)

Investment Returns

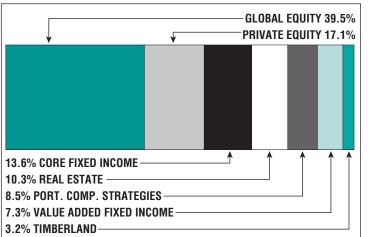
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





88.5% Funded Ratio 2028 Fully Funded 5.0% Total Increasing Funding Schedule

Asset Allocation (12/31/23)



\$10.2 M Unfunded Liability \$3.9 M (FY2024) Total Pension Appropriation

Essex Regional

CONTACT INFORMATION

Building 200, Suite 202 491 Maple Street Danvers, MA 01923 Phone 978-739-9151 Fax 978-750-0745

WEBSITE

essexregional.com

BOARD MEMBERS

Tracy Blais Kevin Merz Susan Yaskell* Katherine Carleton Vincent Malgeri *indicates Chairperson

BOARD ADMINISTRATOR

Charles Kostro

SYSTEM MEMBERS

Active Members2,933 Total Payroll\$160.0 M Average Salary\$54,600
Average Age48 Average Service10.3
Retired Members2,000 Benefits Paid\$82.6 M Average Benefit\$41,300 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 107	
Reported Earnings29	
Excess Earners1	
Refund Due\$25,363	

Last Valuation: 1/1/22 Actuary: Segal



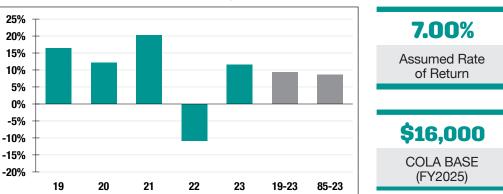
Market Value

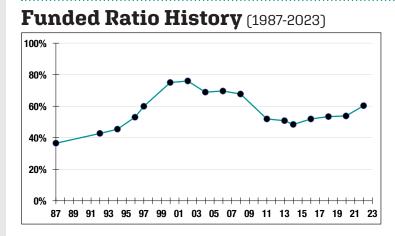
11.52% 2023 Returns

8.01% 2014-2023 (Annualized) **8.69%** 1985-2023 (Annualized)

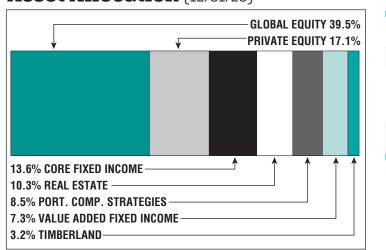
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





\$417.8 M

Unfunded Liability

\$47.4 M (FY2024)

Total Pension

Appropriation

Everett

CONTACT INFORMATION

City Hall 484 Broadway, Room 30 Everett, MA 02149 Phone 617-394-2310 Fax 617-381-7016

WEBSITE

cityofeverett.com/city-hall/ departments/retirement

BOARD MEMBERS

Eric Demas Keith Slattery William Pierce* Maria Bussell Peter Cocciardi *indicates Chairperson

BOARD ADMINISTRATOR

Robert Shaw

SYSTEM MEMBERS

Active Members716
Total Payroll\$51.2 M
Average Salary\$71,500
Average Age46
Average Service11.2
Retired Members512
Benefits Paid\$16.3 M
Average Benefit\$31,900
Average Age75

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees55	
Reported Earnings15	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: PERAC



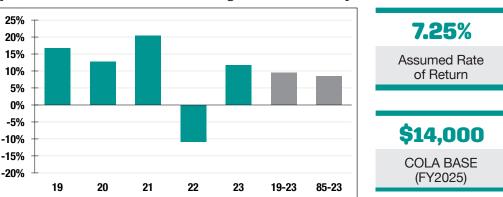
Market Value

11.72% 2023 Returns

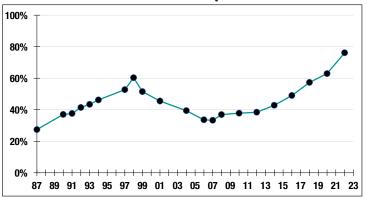
8.04% 2014-2023 (Annualized) **8.48%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



76.1% Funded Ratio 2028 Fully Funded 5.0% Total Increasing Funding Schedule

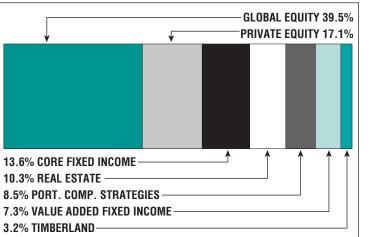
\$75.2 M

\$20.0 M (FY2024) Total Pension

Appropriation

Unfunded Liability

Asset Allocation (12/31/23)



42 | 2023 Annual Report |

Fairhaven

CONTACT INFORMATION

Town Hall 40 Centre Street Fairhaven, MA 02719 Phone 508-979-4023 Fax 508-993-9486

WEBSITE

fairhaven-ma.gov/ retirement-board

BOARD MEMBERS

Anne Carreiro* Mark Rees Wally Therrien Timothy Cox Alfred Robichaud *indicates Chairperson

BOARD ADMINISTRATOR

Lee Ann Torres

SYSTEM MEMBERS

Active Members259
Total Payroll\$14.0 M
Average Salary\$54,200
Average Age46
Average Service11.8
Retired Members204
Benefits Paid\$5.0 M
Average Benefit \$24,600
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees23
Reported Earnings10
Excess Earners1
Refund Due\$4,843

Last Valuation: 1/1/22 Actuary: PERAC \$91.0 M

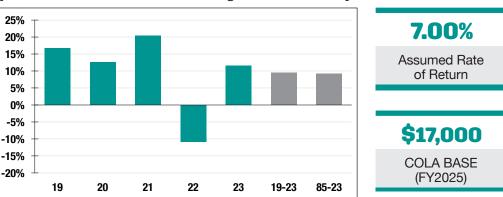
Market Value

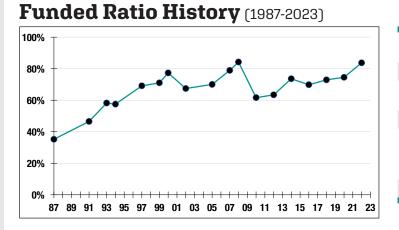
11.56% 2023 Returns

7.95% 2014-2023 (Annualized) **9.16%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





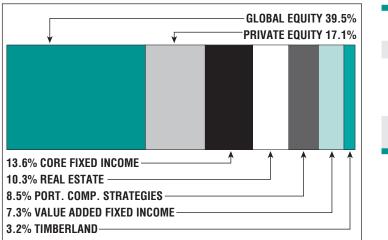
83.7% Funded Ratio 2031 Fully Funded 5.0% Total Increasing Funding Schedule

\$16.4 M

Unfunded Liability

\$4.1 M (FY2024) Total Pension

Appropriation



Fall River

CONTACT INFORMATION

21 Father Devalles Blvd. Suite GR1, Box 14 Fall River, MA 02723 Phone 508-646-9120 Fax 508-646-9123

WEBSITE

fallriverretirement.com

BOARD MEMBERS

Bridget Almon Mark Nassiff* **Robert Camara** James Machado Nicholas Christ *indicates Chairperson

BOARD ADMINISTRATOR

Michael Pasternak

Active Members1,900
Total Payroll\$98.0 M
Average Salary\$51,600
Average Age44
Average Service10
Retired Members1,523
Benefits Paid\$45.3 M
Average Benefit \$29,800
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 185
Reported Earnings50
Excess Earners5
Refund Due\$91,871

Last Valuation: 1/1/23 ____

\$376.9 M Market Value

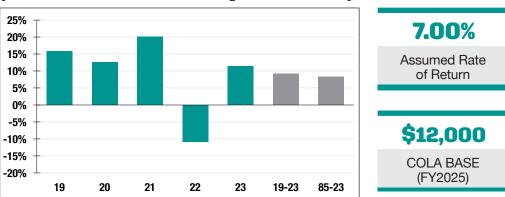
11.38% 2023 Returns

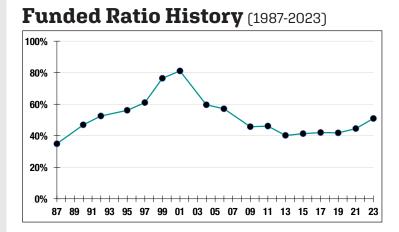
7.78% 2014-2023 (Annualized)

8.36% 1985-2023 (Annualized)

Investment Returns

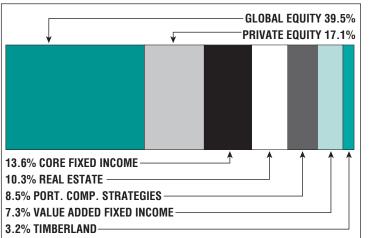
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)



Unfunded Liability \$43.6 M (FY2024) **Total Pension** Appropriation

\$364.4 M

SYSTEM MEMBERS

Actuary: PERAC	

Falmouth

CONTACT INFORMATION

80 Davis Straits Suite 102 Falmouth, MA 02540 Phone 508-457-0578 Fax 508-540-9962

WEBSITE

falmouthretirementma.gov

BOARD MEMBERS

Victoria Rose Paul Slivinski Scott Starbard Craig O'Malley Ellen Philbin* *indicates Chairperson

BOARD ADMINISTRATOR

Francis St. Germaine

SYSTEM MEMBERS

Active Members644
Total Payroll\$35.7 M
Average Salary\$55,400
Average Age48
Average Service11.4
Retired Members435
Benefits Paid\$13.7 M
Average Benefit\$31,500
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: PERAC

\$200.6 M

Market Value

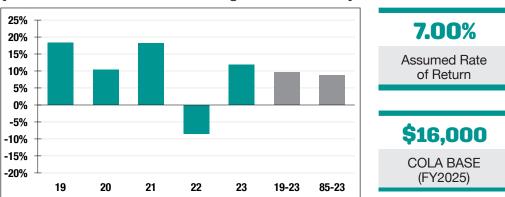
11.80% 2023 Returns

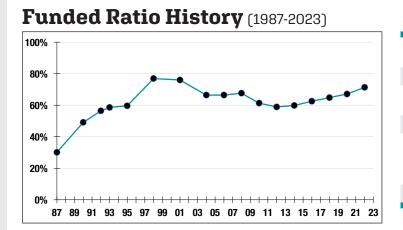


8.80% 1985-2023 (Annualized)

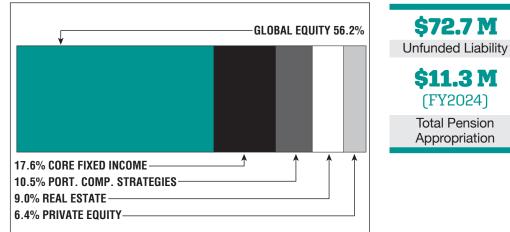
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)









Fitchburg

CONTACT INFORMATION

718 Main Street Fitchburg, MA 01420 Phone 978-829-1843 Fax 978-829-1973

WEBSITE

http://ci.fitchburg. ma.us/792/Retirement

BOARD MEMBERS

Jacquelyn Cronin Mary Cringan Thomas Dateo* Anna Farrell John Brown *indicates Chairperson

BOARD ADMINISTRATOR

Tina Schneider

SYSTEM MEMBERS

Active Members643 Total Payroll\$34.5 M Average Salary\$53,700 Average Age46 Average Service11	
Retired Members601 Benefits Paid\$18.5 M Average Benefit\$30,800 Average Age73	

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees55
Reported Earnings15
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: Stone



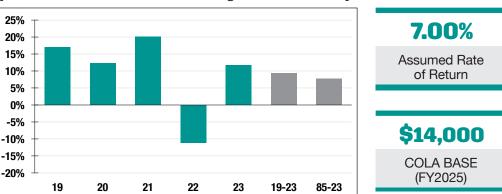
51/3.6 M 11 Market Value 2023

11.66% 2023 Returns

7.86% 2014-2023 (Annualized) **7.78%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



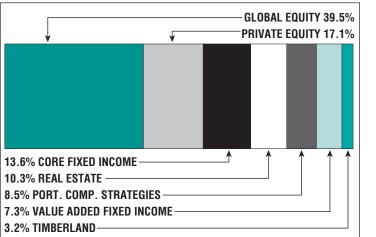
\$132.4 M

Unfunded Liability

\$17.1 M (FY2024)

Total Pension

Appropriation



Framingham

CONTACT INFORMATION

Memorial Bldg, Room B-31 150 Concord Street Framingham, MA 01702 Phone 508-532-5465 Fax 508-532-5757

WEBSITE

framinghamma.gov/2160/ Retirement-Board

BOARD MEMBERS

Richard Howarth* Jennifer Pratt Peter Rovinelli Joseph Fonseca John White *indicates Chairperson

BOARD ADMINISTRATOR

Laurie Lizak

SYSTEM MEMBERS

Active Members1,271
Total Payroll\$74.6 M
Average Salary\$58,700
Average Age46
Average Service10.2
Retired Members901
Benefits Paid\$29.1 M
Average Benefit\$32,300
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees64
Reported Earnings18
Excess Earners1
Refund Due\$2,651

Last Valuation: 1/1/22 Actuary: PERAC \$453.4 M

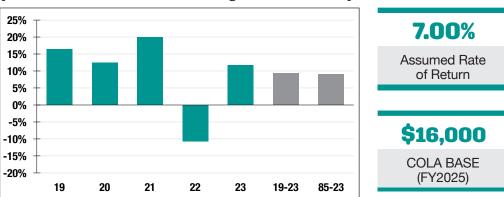
Market Value

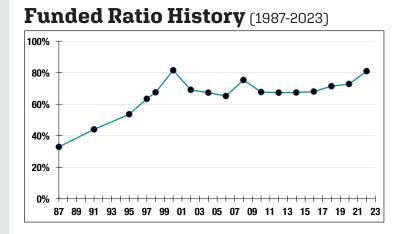
11.66% 2023 Returns

7.92% 2014-2023 (Annualized) **9.13%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





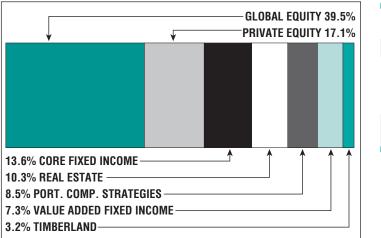
80.9% Funded Ratio 2030 Fully Funded 5.5% Total Increasing Funding Schedule

\$98.4 M

Unfunded Liability

\$22.4 M (FY2024) Total Pension

Appropriation



Franklin Regional

CONTACT INFORMATION

101 Munson Street Suite 108 Greenfield, MA 01301 Phone 413-774-4837

WEBSITE

frrsma.com

BOARD MEMBERS

Sandra Hanks* Angel Bragdon Mary Stokarski Gabriele Voelker Paul Mokrzecki *indicates Chairperson

BOARD ADMINISTRATOR

Kristine Mathis

SYSTEM MEMBERS

Active Members993	
Total Payroll\$41.3 M	
Average Salary\$41,600	
Average Age48	
Average Service9.5	
Retired Members675	
Benefits Paid\$12.3 M	
Average Benefit \$18,300	

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Age72

Disability Retirees25
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: KMS



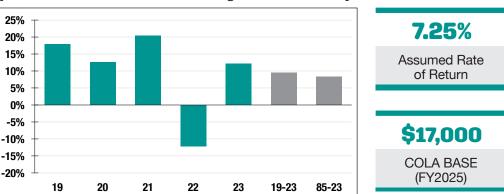
Market Value

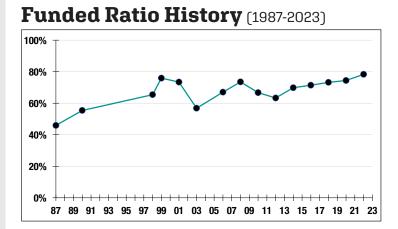
12.10% 2023 Returns

7.74% 2014-2023 (Annualized) **8.37%** 1985-2023 (Annualized)

Investment Returns

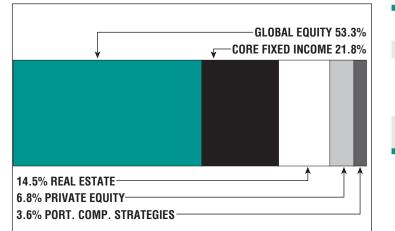
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)





Total Pension Appropriation

Gardner

CONTACT INFORMATION

City Hall, Room 17 95 Pleasant Street Gardner, MA 01440 Phone 978-630-4006 Fax 978-630-4012

WEBSITE

gardner-ma.gov/432/ Retirement-Board

BOARD MEMBERS

John Richard Kevin McInerney Robert Newton Denise Merriam* Neil Janssens *indicates Chairperson

BOARD ADMINISTRATOR

Cheryl Bosse

SYSTEM MEMBERS

Active Members323
Total Payroll\$16.0 M
Average Salary\$49,400
Average Age43
Average Service8.1
Retired Members271
Benefits Paid\$7.4 M
Average Benefit \$27,400
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees	18
Reported Earnings	3
Excess Earners	0
Refund Due	\$0

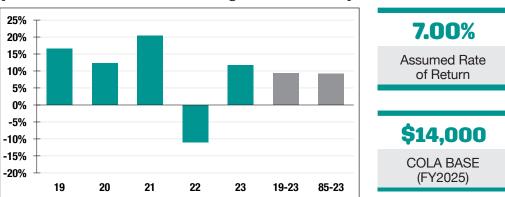
Last Valuation: 1/1/23 Actuary: Stone \$75.9 M Market Value

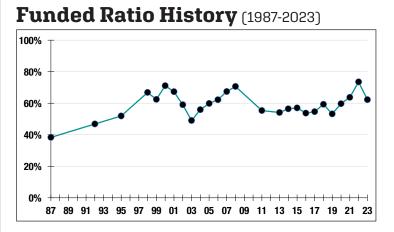
11.73% 2023 Returns

7.92% 2014-2023 (Annualized) **9.23%** 1985-2023 (Annualized)

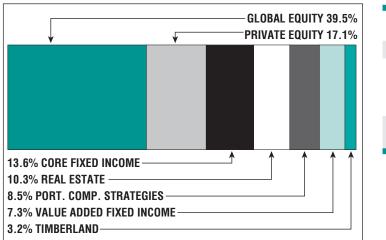
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





\$42.0 M

Unfunded Liability

\$5.7 M (FY2024) Total Pension

Appropriation

Gloucester

CONTACT INFORMATION

P.O. Box 114 Gloucester, MA 01931 Phone 978-281-9744 Fax 978-281-9817

WEBSITE

gcrsys.com

BOARD MEMBERS

Kenny Costa Jill Cahill James Hannon Douglas MacArthur^{*} Linda Boucher *indicates Chairperson

BOARD ADMINISTRATOR

Patricia Ivas

SYSTEM MEMBERS

Active Members	555
Total Payroll	\$34.8 M
Average Salary	\$62,700
Average Age	49
Average Service	11.8
Retired Members	491

Benefits Paid\$14.4 M Average Benefit\$29,400 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees34
Reported Earnings7
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: Segal



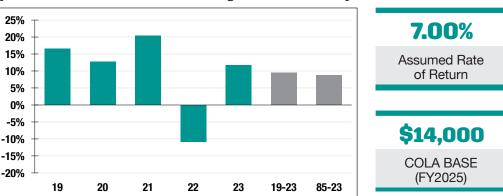
Market Value

11.67% 2023 Returns

8.02% 2014-2023 (Annualized) **8.81%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



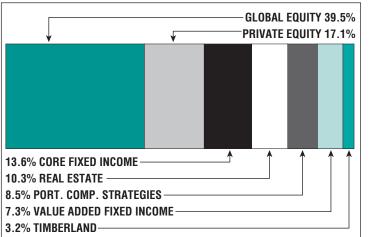
\$112.6 M

Unfunded Liability

\$13.3 M

(FY2024)

Total Pension Appropriation



Greater Lawrence Sanitary District

CONTACT INFORMATION

240 Charles Street P.O. Box 187 North Andover, MA 01845 Phone 978-689-9464 Fax 978-685-7790

WEBSITE

glsders.org/retirees

BOARD MEMBERS

Joseph Quartarone Laurie Elliott Kristin Politano Karen Driggers Ronald Pollone* *indicates Chairperson

BOARD ADMINISTRATOR

Heather Thibeault

SYSTEM MEMBERS

Active Members36
Total Payroll\$2.7 M
Average Salary\$76,000
Average Age49
Average Service14.5
Retired Members35
Benefits Paid\$1.2 M
Average Benefit\$35,500
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees	0
Reported Earnings	0
Excess Earners	0
Refund Due\$	0

Last Valuation: 1/1/23 Actuary: PERAC



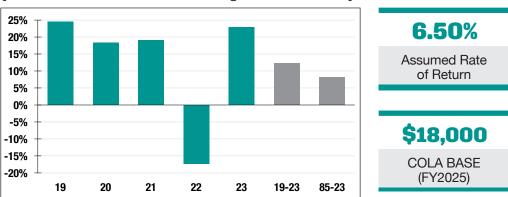
Market Value

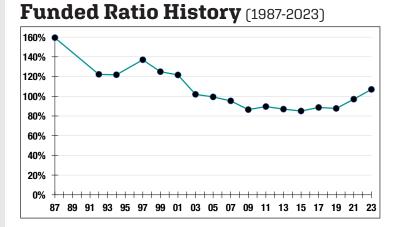
22.88% 2023 Returns

9.19% 2014-2023 (Annualized) **8.14%** 1985-2023 (Annualized)

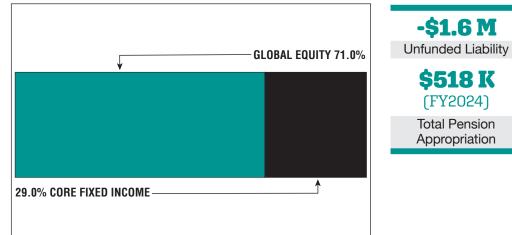
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)









Greenfield

CONTACT INFORMATION

Town Hall 14 Court Square Greenfield, MA 01301 Phone 413-772-1503 Fax 413-772-1582

WEBSITE

greenfield-ma.gov/ departments/retirement_ board/index.php

BOARD MEMBERS

Katherine Cabrera Veloz Marianne Fiske William Devino* **Kyle Phelps Deborah Frentzos** *indicates Chairperson

BOARD ADMINISTRATOR

Shari Hildreth

SYSTEM MEMBERS

Active Members437	
Total Payroll\$21.2 M	
Average Salary\$48,500	
Average Age46	
Average Service8.8	

Retired Members......313 Benefits Paid\$8.3 M Average Benefit \$26,500 Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees1	8
Reported Earnings	8
Excess Earners	0
Refund Due\$	0

Last Valuation: 1/1/23 Actuary: PERAC

\$99.5 M

Market Value

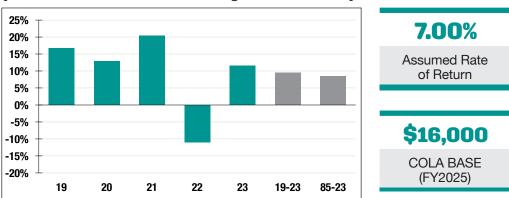
11.55% 2023 Returns

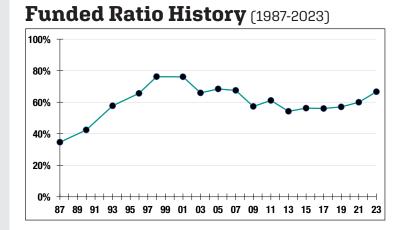


8.52% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





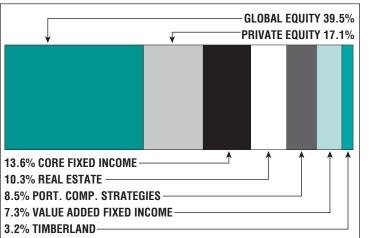


\$48.2 M

Unfunded Liability

\$6.9 M (FY2024) **Total Pension** Appropriation

Asset Allocation (12/31/23)



52 | 2023 Annual Report |

Hampden County

CONTACT INFORMATION

Agawam Corporate Center 67 Hunt Street, Suite 202 Agawam, MA 01001 Phone 413-737-1344 Fax 413-732-7999

WEBSITE

hcrb.org

BOARD MEMBERS

Karl Schmaelzle* Dawn Fonte Robert Taylor Patrick O'Neil *indicates Chairperson

BOARD ADMINISTRATOR

Karen Martin

SYSTEM MEMBERS

Active Members	2,824
Total Payroll\$1	30.9 M
Average Salary\$	46,300
Average Age	46
Average Service	9.7

Retired Members.....1,952 Benefits Paid\$48.6 M Average Benefit\$24,900 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees99
Reported Earnings33
Excess Earners1
Refund Due\$8,514

Last Valuation: 1/1/22 Actuary: Segal



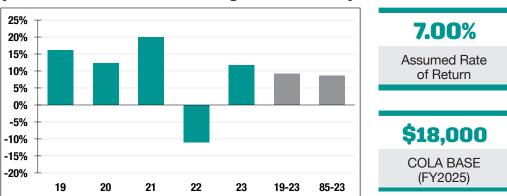
Market Value

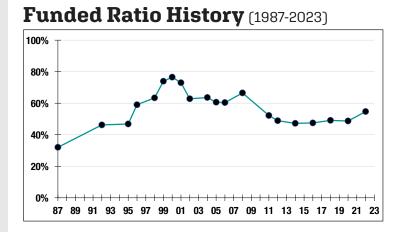
11.77% 2023 Returns

7.85% 2014-2023 (Annualized) **8.55%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







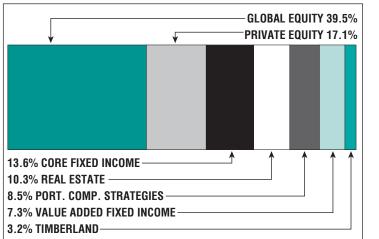
\$401.7 M

Unfunded Liability

\$42.7 M

(FY2024)

Total Pension Appropriation



Hampshire County

CONTACT INFORMATION

99 Industrial Drive Suite 2 Northampton, MA 01060 Phone 413-584-9100 Fax 413-587-9396

WEBSITE

hampshireretirementma.org

BOARD MEMBERS

Patrick Brock* Jane Wolfe Jennifer LaFountain Joseph Shea Joe Cook *indicates Chairperson

BOARD ADMINISTRATOR

Mary Baronas

SYSTEM MEMBERS

Active Members1,981
Total Payroll\$96.0 M
Average Salary\$48,500
Average Age47
Average Service10.1
Retired Members1,392
Benefits Paid\$33.4 M
Average Benefit \$24,000
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees76	
Reported Earnings33	
Excess Earners2	
Refund Due\$17,479	

Last Valuation: 1/1/22 Actuary: KMS



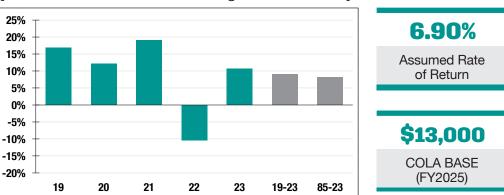
54/2.9 M 10 Market Value 2023

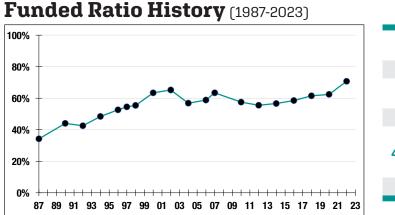
10.66% 2023 Returns

7.32% 2014-2023 (Annualized) **8.24%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Funding Schedule

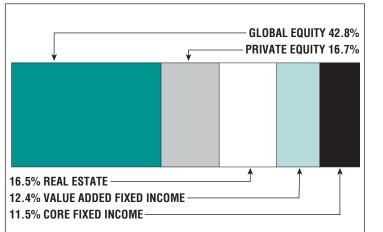
\$177.4 M

Unfunded Liability

\$33.0 M (FY2024)

Total Pension

Appropriation



Haverhill

CONTACT INFORMATION

4 Summer Street, Room 303 Haverhill, MA 01830-5843 Phone 978-374-2358 Fax 978-374-2353

WEBSITE

ci.haverhill.ma.us/ departments/haverhill_ retirement_system/index.php

BOARD MEMBERS

Angel Perkins Richard MacDonald Anthony Haugh Pamela Carr James Cleary* *indicates Chairperson

BOARD ADMINISTRATOR

David Van Dam

SYSTEM MEMBERS

Active Members1,063
Total Payroll\$53.7 M
Average Salary\$50,500
Average Age46
Average Service10
Retired Members1,064
Benefits Paid\$27.8 M
Average Benefit \$26,100
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees58
Reported Earnings15
Excess Earners1
Refund Due\$8,709

Last Valuation: 1/1/22 Actuary: KMS

\$288.6 M

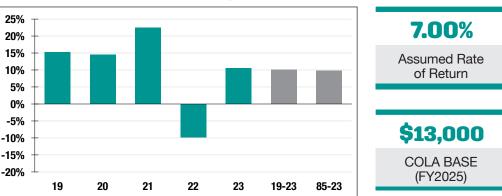
Market Value

10.53% 2023 Returns

7.95% 2014-2023 (Annualized) **9.73%** 1985-2023 (Annualized)

Investment Returns

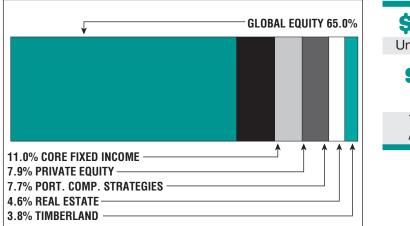
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



Funding Schedule





Hingham

CONTACT INFORMATION

210 Central Street Hingham, MA 02043-2758 Phone 781-804-2478 Fax 781-804-2444

WEBSITE

hingham-ma.gov/149/ Retirement-Board

BOARD MEMBERS

Ann MacNaughton Eileen McCracken Jean Montgomery **David Jones** Charles Cristello* *indicates Chairperson

BOARD ADMINISTRATOR

Maressa Orellana

SYSTEM MEMBERS

Active Members610
Total Payroll\$35.7 M
Average Salary\$58,600
Average Age48
Average Service10.1
Retired Members359
Benefits Paid\$10.9 M
Average Benefit\$30,300
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees11	
Reported Earnings2	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: KMS



Market Value

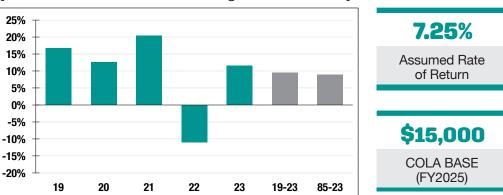
11.52% 2023 Returns

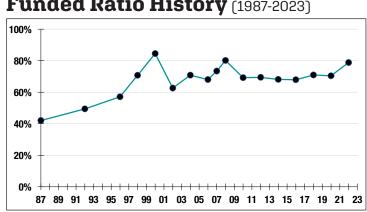
7.77% 2014-2023 (Annualized)

8.99% 1985-2023 (Annualized)

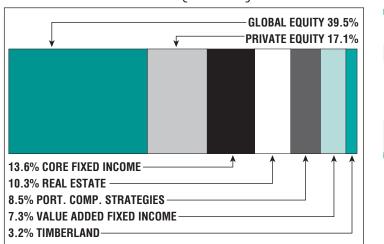
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)

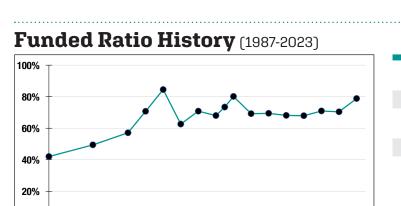




\$7.0 M (FY2024) **Total Pension** Appropriation

\$42.2 M

Unfunded Liability



Holyoke

CONTACT INFORMATION

20 Korean Veterans Plaza Room 207 Holyoke, MA 01040-5044 Phone 413-322-5590 Fax 413-322-5591

WEBSITE

holyoke.org/departments/ retirement-board

BOARD MEMBERS

Tanya Wdowiak Todd McGee Cheryl Dugre* Michele Aubrey *indicates Chairperson

BOARD ADMINISTRATOR

Anthony Dulude

SYSTEM MEMBERS

Active Members1,168 Total Payroll\$66.2 M Average Salary\$56,700
Average Age44 Average Service11
Retired Members980 Benefits Paid\$29.7 M Average Benefit\$30,300 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees72
Reported Earnings16
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: Segal



Market Value

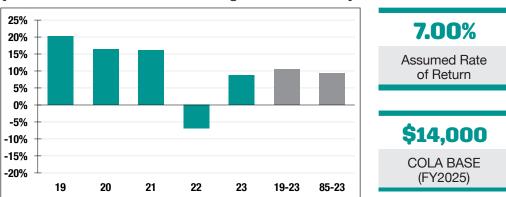
8.71% 2023 Returns

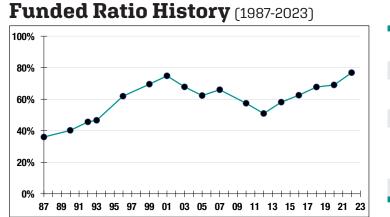


9.31% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Funding Schedule

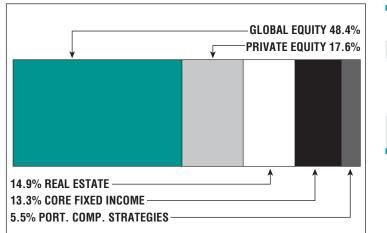
\$113.8 M

Unfunded Liability

\$18.8 M (FY2024)

Total Pension

Appropriation



Hull

CONTACT INFORMATION

253 Atlantic Avenue 2nd Floor Hull, MA 02045 Phone 781-925-2282 Fax 781-925-8509

WEBSITE

town.hull.ma.us/retirement

BOARD MEMBERS

J. Michael Buckley* **Eileen White Bartley Kelly** Christopher Di Iorio Gregory Galvin *indicates Chairperson

BOARD ADMINISTRATOR

Darrell Bright

SYSTEM MEMBERS

Active Members166
Total Payroll\$11.0 M
Average Salary\$66,100
Average Age50
Average Service11.8
Retired Members152
Benefits Paid\$5.2 M
Average Benefit\$33,900
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees14
Reported Earnings3
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: PERAC



Market Value

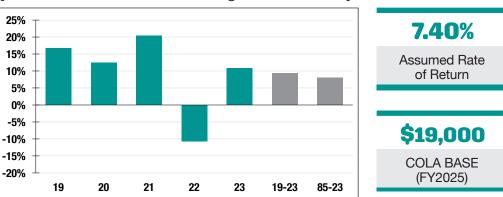
10.87% 2023 Returns



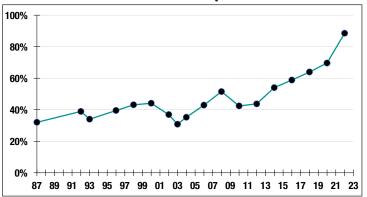
8.01% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



88.5% Funded Ratio 2030**Fully Funded 4.0% Total** Increasing **Funding Schedule**

\$9.6 M

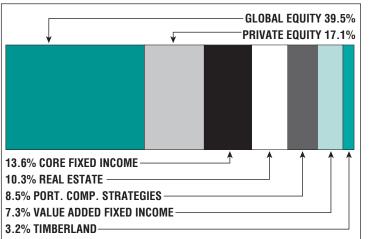
Unfunded Liability

\$4.4 M (FY2024)

Total Pension

Appropriation

Asset Allocation (12/31/23)



58 | 2023 Annual Report |

Lawrence

CONTACT INFORMATION

354 Merrimack Street Suite 302, Entry C Lawrence, MA 01843 Phone 978-620-3570 Fax 978-722-9490

WEBSITE

lawrenceretirement.net

BOARD MEMBERS

Ramona Ceballos* Pascual Ruiz **Diane Cockroft Robert Wilson** Sheryl Wright *indicates Chairperson

BOARD ADMINISTRATOR

Gina Rizzo

SYSTEM MEMBERS

Active Members1,554
Total Payroll\$83.7 M
Average Salary\$53,800
Average Age45
Average Service10.4
Retired Members912
Benefits Paid\$22.9 M
Average Benefit \$25,100
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees96
Reported Earnings26
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: KMS



Market Value

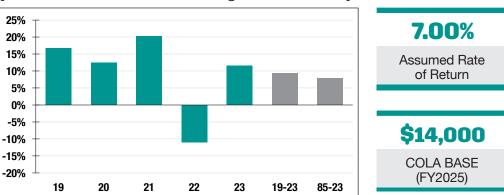
11.54% 2023 Returns

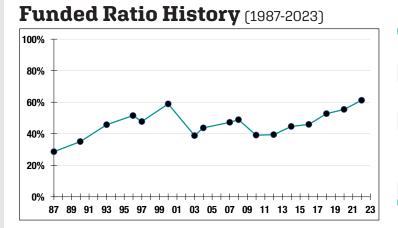
7.91% 2014-2023 (Annualized)

7.91% 1985-2023 (Annualized)

Investment Returns

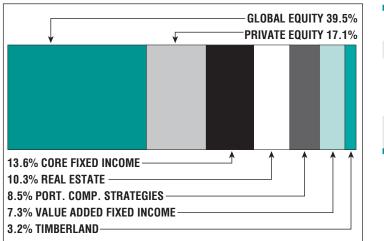
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)



\$194.2 M

Unfunded Liability

\$24.8 M (FY2024)

Total Pension

Appropriation

Leominster

CONTACT INFORMATION

City Hall, Room 15 25 West Street Leominster, MA 01453 Phone 978-962-3539 Fax 978-534-7508

WEBSITE

leominster-ma.gov/400/ Retirement-Board

BOARD MEMBERS

Jennifer Reddington David Laplante* Jonathan Campagna Shayne Newton Douglas Farwell *indicates Chairperson

BOARD ADMINISTRATOR

Erin Hunt

SYSTEM MEMBERS

Active Members675
Total Payroll\$36.2 M
Average Salary\$53,600
Average Age44
Average Service9.2
Retired Members439
Benefits Paid\$12.9 M
Average Benefit \$29,400
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees
Reported Earnings18
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: Stone \$281.4 M

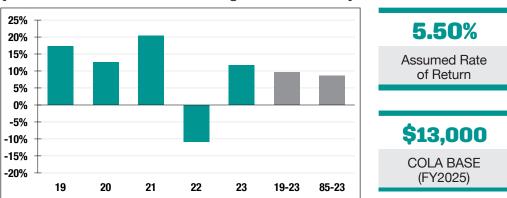
Market Value

11.64% 2023 Returns

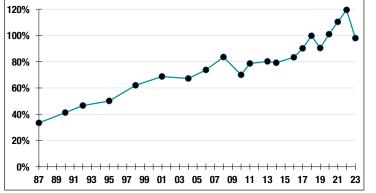
7.79% 2014-2023 (Annualized) **8.56%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)

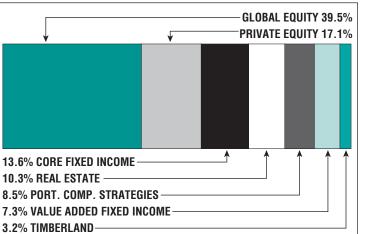


Funded Ratio History (1987-2023)





Asset Allocation (12/31/23)



\$5.6 M Unfunded Liability \$4.4 M (FY2024) Total Pension

Total Pension Appropriation

Lexington

CONTACT INFORMATION

1625 Massachusetts Avenue Lexington, MA 02420 Phone 781-861-2720 Fax 781-861-2794

WEBSITE

lexingtonma.gov/834/ Retirement-Board

BOARD MEMBERS

Carolyn Kosnoff Frederick Weiss Joseph Foley Robert Cunha* Alan Fields *indicates Chairperson

BOARD ADMINISTRATOR

Michelle Malone

SYSTEM MEMBERS

Active Members747
Total Payroll\$48.1 M
Average Salary\$64,300
Average Age46
Average Service9.8
Retired Members466
Benefits Paid\$15.0 M
Average Benefit\$32,200
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees22
Reported Earnings9
Excess Earners1
Refund Due\$11,429

Last Valuation: 1/1/23 Actuary: Stone



Market Value

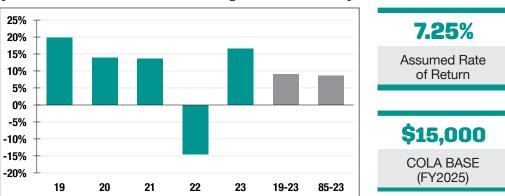
16.55% 2023 Returns

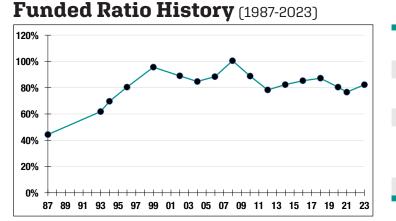


8.62% 1985-2023 (Annualized)

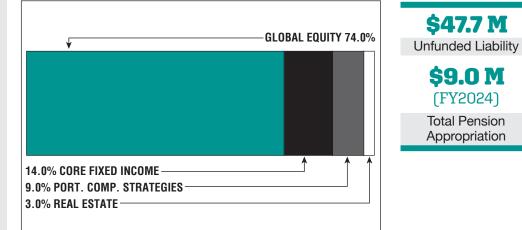
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)









Lowell

CONTACT INFORMATION

City Hall, Room 3 375 Merrimack Street Lowell, MA 01852 Phone 978-674-4094 Fax 978-446-7019

WEBSITE

lowellretirement.com

BOARD MEMBERS

Kelly Oakes David Keene Robert Littlefield William Desrosiers* Michael Brennan *indicates Chairperson

BOARD ADMINISTRATOR

Shannon Dowd

SYSTEM MEMBERS

Active Members1,859
Total Payroll\$118.1 M
Average Salary\$63,500
Average Age45
Average Service10.7
Retired Members1,341
Benefits Paid\$46.7 M
Average Benefit\$34,800
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 156
Reported Earnings41
Excess Earners2
Refund Due\$42,038

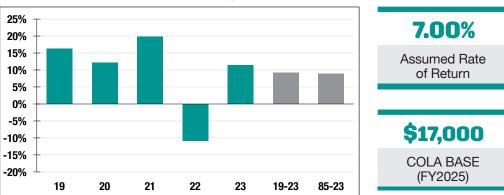
Last Valuation: 1/1/23 Actuary: KMS **\$528.5 M** Market Value

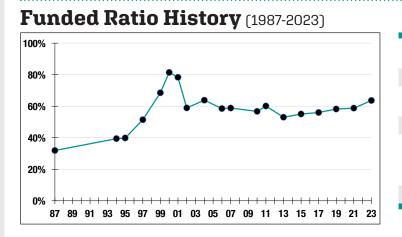
11.37% 2023 Returns

7.72% 2014-2023 (Annualized) **8.94%** 1985-2023 (Annualized)

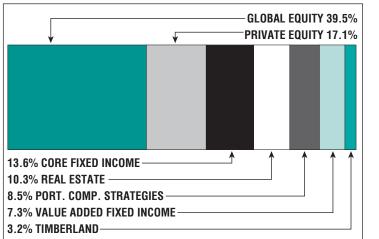
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





(FY2024) Total Pension Appropriation

\$296.1 M

Unfunded Liability

\$35.2 M

Lynn

CONTACT INFORMATION

3 City Hall Square Room 106 Lynn, MA 01901 Phone 781-586-6897 Fax 781-595-9101

WEBSITE

lynnma.gov/boards/ retirementboard.shtml

BOARD MEMBERS

Stephen Spencer Frank Valeri Richard Biagiotti Robert Mullins Michael Marks* *indicates Chairperson

BOARD ADMINISTRATOR

Gary Brenner

SYSTEM MEMBERS

Active Members1,520
Total Payroll\$96.7 M
Average Salary\$63,600
Average Age46
Average Service12.1
Retired Members1,188
Benefits Paid\$45.3 M
Average Benefit\$38,100
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 140	
Reported Earnings31	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/23 Actuary: PERAC



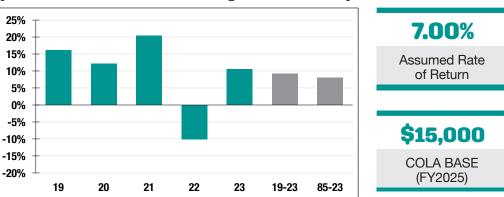
M 10

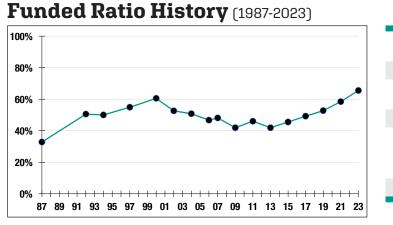
10.60% 2023 Returns

7.89% 2014-2023 (Annualized) **8.08%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)

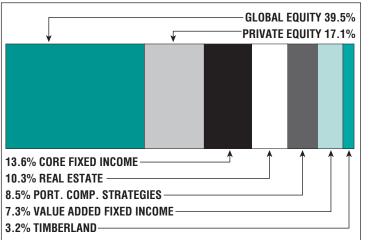






Funding Schedule

Asset Allocation (12/31/23)



(FY2024) Total Pension Appropriation

\$272.4 M

Unfunded Liability

\$42.4 M

Malden

CONTACT INFORMATION

215 Pleasant Street 5th Floor Malden, MA 02148 Phone 781-397-7087

WEBSITE

cityofmalden.org/462/ Retirement-Board

BOARD MEMBERS

Charles Ranaghan Domenic Fermano John Hall Warren Atkinson* Scott Lucey *indicates Chairperson

BOARD ADMINISTRATOR

Robert Soohoo

SYSTEM MEMBERS

Active Members775
Total Payroll\$46.8 M
Average Salary\$60,400
Average Age48
Average Service13
Retired Members706
Benefits Paid\$22.5 M
Average Benefit\$31,800
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees73
Reported Earnings17
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: Stone



Market Value

13.72% 2023 Returns

6.69% 2014-2023 (Annualized)

9.14% 1985-2023 (Annualized)

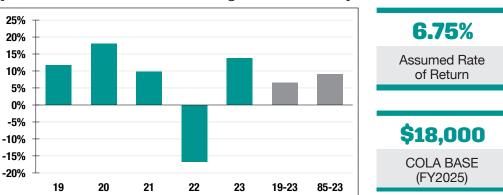
80.2%

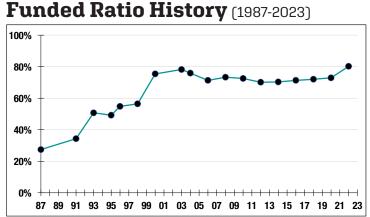
Funded Ratio 2030

Fully Funded

Investment Returns

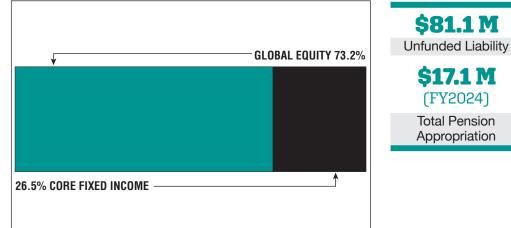
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





4.1% Total Increasing **Funding Schedule**

Asset Allocation (12/31/23)



64 | 2023 Annual Report |

Marblehead

CONTACT INFORMATION

Mary Alley Building 7 Widger Road Marblehead, MA 01945 Phone 781-639-3418 Fax 781-631-2617

WEBSITE

marblehead.org/boardretirement

BOARD MEMBERS

Aleesha Nunley Benjamin Charles Gessner Douglas Knowles Jason Gilliland Robert Peck* *indicates Chairperson

BOARD ADMINISTRATOR

Linda Gifford

SYSTEM MEMBERS

Active Members378
Total Payroll\$22.3 M
Average Salary\$58,900
Average Age50
Average Service11.5
Retired Members346
Benefits Paid\$10.1 M
Average Benefit \$29,100
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees16
Reported Earnings8
Excess Earners1
Refund Due\$5,239

Last Valuation: 1/1/22 Actuary: PERAC \$124.6 M

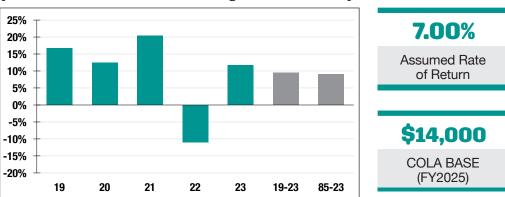
Market Value

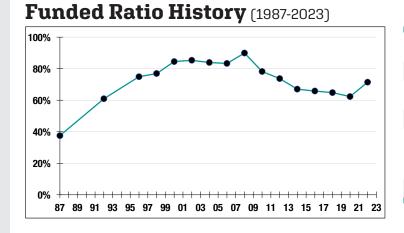
11.70% 2023 Returns

7.96% 2014-2023 (Annualized) **9.09%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





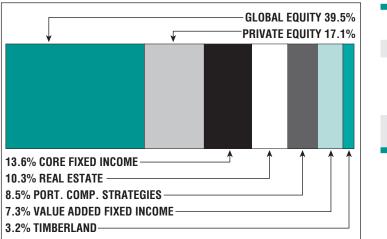


\$48.3 M

Unfunded Liability

\$5.6 M (FY2024) Total Pension

Appropriation



Marlborough

CONTACT INFORMATION

289 Elm Street Suite 111 Marlborough, MA 01752 Phone 508-460-3760

WEBSITE

marlborough-ma.gov/ retirement-board

BOARD MEMBERS

Diane Smith Daniel Stanhope Gregory Brewster* William Taylor Robert Gustafson *indicates Chairperson

BOARD ADMINISTRATOR

Mark Bingle

SYSTEM MEMBERS

Active Members610
Total Payroll\$38.1 M
Average Salary\$62,400
Average AgeNA
Average ServiceNA
Retired Members499
Benefits Paid\$16.8 M
Average Benefit\$33,700
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees
Reported Earnings9
Excess Earners1
Refund Due\$1,205

Last Valuation: 1/1/23 Actuary: Sherman



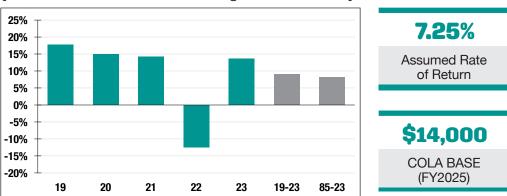
Market Value

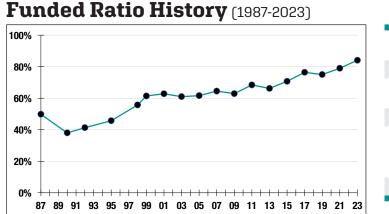
13.54% 2023 Returns

6.68% 2014-2023 (Annualized) **8.18%** 1985-2023 (Annualized)

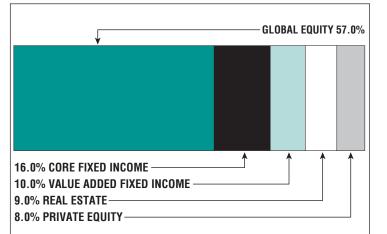
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)



84.1% Funded Ratio 2028 Fully Funded 4.5% Increasing

Funding Schedule

\$10.7 M (FY2024) Total Pension

\$43.0 M

Unfunded Liability

Appropriation

MHFA (Mass. Housing Finance Agency)

CONTACT INFORMATION

One Beacon Street Boston, MA 02108 Phone 617-854-1871 Fax 617-624-9469

WEBSITE

masshousingretirement.com

BOARD MEMBERS

Rachel Madden Thomas Flynn Antonio Torres Michael Fitzmaurice^{*} Paul Hynes *indicates Chairperson

BOARD ADMINISTRATOR

Joseph Petty

SYSTEM MEMBERS

Active Members	316
Total Payroll\$36.9	M
Average Salary \$116,7	700
Average Age	.50
Average Service1	4.6

Retired Members......210 Benefits Paid\$11.0 M Average Benefit\$52,300 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees1
Reported Earnings0
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: Stone



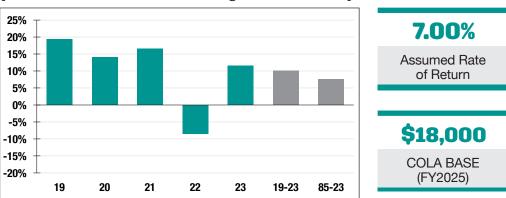
Market Value

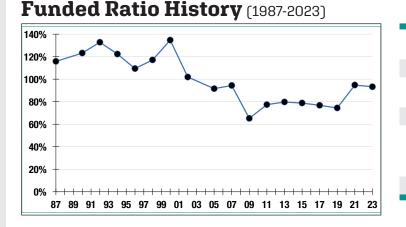
11.62% 2023 Returns

7.33% 2014-2023 (Annualized) **7.63%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Funding Schedule

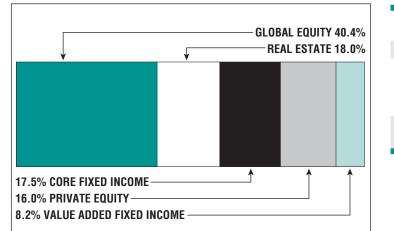
\$15.9 M

Unfunded Liability

\$4.7 M

(FY2024)

Total Pension Appropriation



MassPort

CONTACT INFORMATION

One Harborside Drive Suite 200S East Boston, MA 02128 Phone 617-568-3951 Fax 617-568-3957

WEBSITE

massport.com/massport/ about-massport/ employment/retirementinformation/

BOARD MEMBERS

John Pranckevicius Michael Grieco **Betsy Taylor** Jon Turco James Hoyte* *indicates Chairperson

BOARD ADMINISTRATOR

Irene Moran

SYSTEM MEMBERS

Active Members1,145
Total Payroll\$115.7 M
Average Salary\$101,100
Average Age47
Average Service13.4

```
Retired Members......996
Benefits Paid ......$44.6 M
Average Benefit .... $44,800
Average Age .....71
```

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees	42
Reported Earnings	11
Excess Earners	0
Refund Due	\$0

Last Valuation: 1/1/23 Actuary: Stone



Market Value

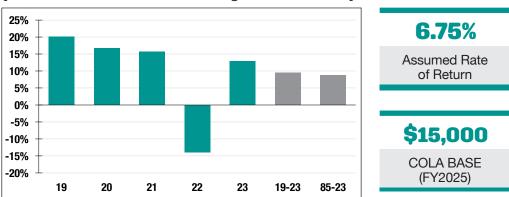
12.86% 2023 Returns

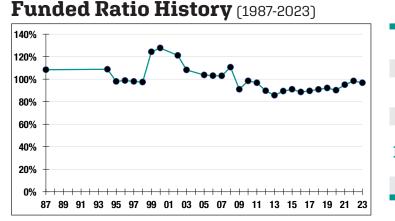


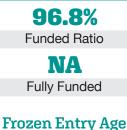
8.82% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



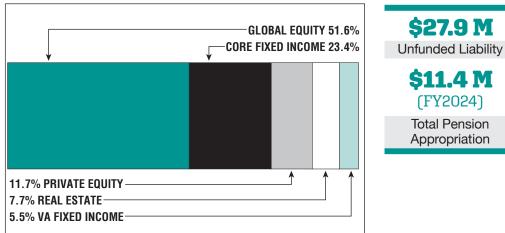




Funding Schedule

\$27.9 M

\$11.4 M (FY2024) **Total Pension** Appropriation



MTRS (MA Teachers')

CONTACT INFORMATION

500 Rutherford Avenue, Suite 210 Charlestown, MA 02129 Phone 617-679-6877 Fax 617-679-1661

WEBSITE

mass.gov/mtrs

BOARD MEMBERS

State Treasurer Deborah Goldberg State Auditor Diana DiZoglio Iraida Alvarez* Anne Wass Dennis Naughton Jacqueline Gorrie Richard Liston *indicates Chairperson

BOARD ADMINISTRATOR

Erika Glaster

SYSTEM MEMBERS

Active Members101,286	;
Total Payroll \$8.4 E	5
Average Salary\$82,700)
Average Age44	ł
Average Service13	5

Retired Members....70,769 Benefits Paid\$3.4 B Average Benefit\$48,400 Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 508
Reported Earnings106
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: PERAC



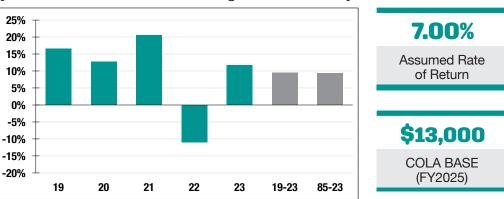
Market Value

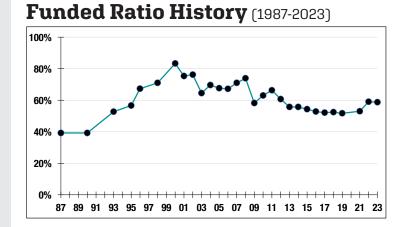
11.66% 2023 Returns

8.00% 2014-2023 (Annualized) **9.30%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



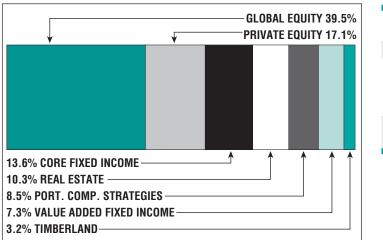




\$25.7 B

Unfunded Liability

\$2.4 B (FY2024) Total Pension Appropriation



MWRA (Mass. Water Resources Authority)

CONTACT INFORMATION

Two Griffin Way Chelsea, MA 02150 Phone 617-305-5595 Fax 617-371-1616

WEBSITE

mwraretirement.com/

BOARD MEMBERS

Brian Pena Matthew Horan James Fleming* Kevin McKenna Frank Zecha *indicates Chairperson

BOARD ADMINISTRATOR

Carolyn Russo

SYSTEM MEMBERS

Active Members	1,045
Total Payroll	.\$106.5 M
Average Salary	.\$101,900
Average Age	51
Average Service	16.8

Retired Members......797 Benefits Paid\$36.4 M Average Benefit\$45,600 Average Age71

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees70
Reported Earnings19
Excess Earners2
Refund Due\$4,140

Last Valuation: 1/1/23 Actuary: Segal



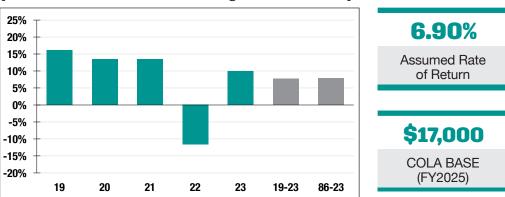
Market Value

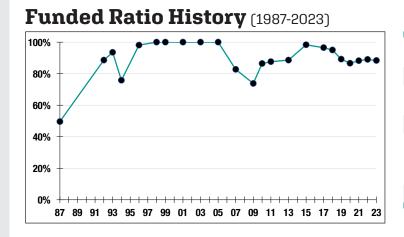
9.90% 2023 Returns

6.32% 2014-2023 (Annualized) **7.93%** 1986-2023 (Annualized)

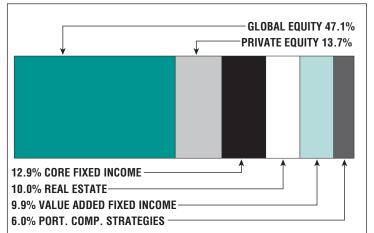
Investment Returns

(2019-2023, 5-Year & 38-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)



88.4% Funded Ratio 2030 Fully Funded 14.20% Total Increasing Funding Schedule

\$91.1 M

\$14.1 M

(FY2024)

Total Pension Appropriation

Unfunded Liability

Maynard

CONTACT INFORMATION

195 Main Street Maynard, MA 01754 Phone 978-897-1820

WEBSITE

townofmaynard-ma. gov/293/Retirement-Board

BOARD MEMBERS

Kevin Petersen James Alexander Patrick Hakey Sandra Baltazar Christopher Connolly* *indicates Chairperson

BOARD ADMINISTRATOR

Kenneth DeMars

SYSTEM MEMBERS

Active Members189
Total Payroll\$10.9 M
Average Salary\$57,600
Average Age46
Average Service9.7
Retired Members136
Benefits Paid\$4.1 M
Average Benefit\$30.100

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Age74

Disability Retirees5
Reported Earnings2
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: PERAC



Market Value

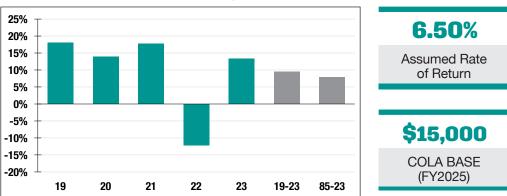
13.38% 2023 Returns



7.91% 1985-2023 (Annualized)

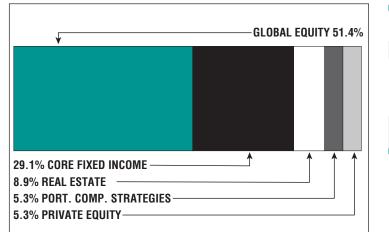
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





\$14.7 M

Unfunded Liability

\$3.1 M

(FY2024)

Total Pension Appropriation

Medford

CONTACT INFORMATION

City Hall, Room 215 85 George P. Hassett Drive Medford, MA 02155 Phone 781-393-2517 Fax 781-393-2522

WEBSITE

medfordretirement.org

BOARD MEMBERS

Robert Dickinson Robert Maiocco Patrick Ripley Rick Jordan* James Vieira *indicates Chairperson

BOARD ADMINISTRATOR

Mark Minervini

SYSTEM MEMBERS

Active Members742
Total Payroll\$47.6 M
Average Salary\$64,100
Average AgeNA
Average ServiceNA
Retired Members620
Benefits Paid\$22.6 M
Average Benefit\$36,500
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees8	6
Reported Earnings1	8
Excess Earners	1
Refund Due\$55,53	3

Last Valuation: 1/1/22 Actuary: Sherman



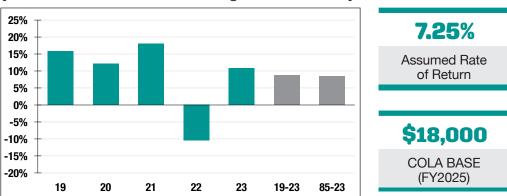
Market Value 202

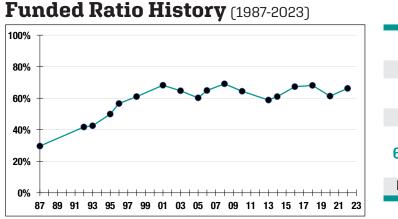
10.83% 2023 Returns

6.56% 2014-2023 (Annualized) **8.51%** 1985-2023 (Annualized)

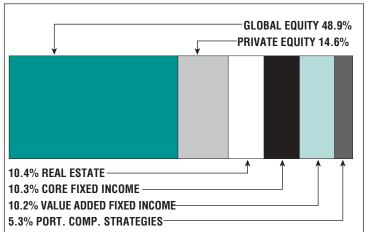
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





Funding Schedule

\$117.6 M

Unfunded Liability

\$16.2 M (FY2024)

Total Pension

Appropriation

Melrose

CONTACT INFORMATION

City Hall 562 Main Street Melrose, MA 02176 Phone 781-979-4151 Fax 781-979-4206

WEBSITE

cityofmelrose.org/ retirement-board

BOARD MEMBERS

Kerriann Golden Jill Irvin Michael Lyle* Scott Colborne John McLaughlin *indicates Chairperson

BOARD ADMINISTRATOR

Adam Travinski

SYSTEM MEMBERS

Active Members456
Total Payroll\$25.1 M
Average Salary\$54,900
Average Age46
Average Service9.2
Retired Members396
Benefits Paid\$10.6 M
Average Benefit \$26,800
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees	25
Reported Earnings	5
Excess Earners	0
Refund Due	\$0

Last Valuation: 1/1/23 Actuary: Stone \$116.7 M

Market Value

11.46% 2023 Returns

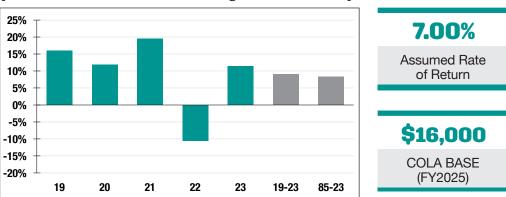
urns 20

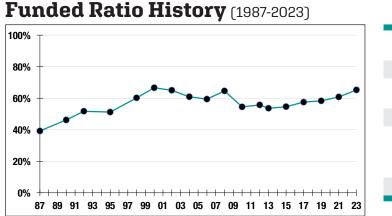


8.34% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)

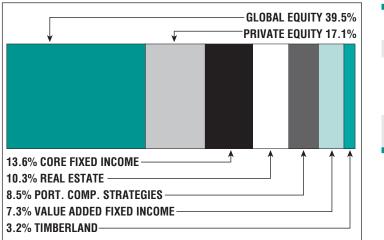






Funding Schedule

Asset Allocation (12/31/23)



\$61.3 M Unfunded Liability \$7.5 M (FY2024) Total Pension Appropriation

Methuen

CONTACT INFORMATION

41 Pleasant Street Suite 313 Methuen, MA 01844 Phone 978-983-8620 Fax 978-983-8972

WEBSITE

cityofmethuen.net/609/ Retirement-Board

BOARD MEMBERS

Kathleen Beam Gina LaGreca Albert Trott John Sheehy* Christina St. Onge *indicates Chairperson

BOARD ADMINISTRATOR

Kaitlyn Doucette

SYSTEM MEMBERS

Active Members664
Total Payroll\$39.2 M
Average Salary\$59,000
Average Age48
Average Service12.2
Retired Members478
Benefits Paid\$17.2 M
Average Benefit\$36,000
Average Age72

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees49
Reported Earnings15
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: PERAC



Market Value

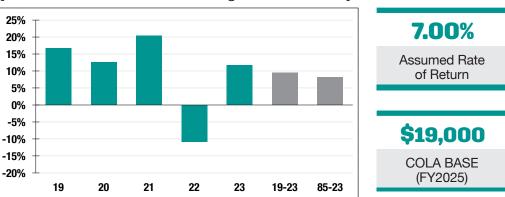
11.67% 2023 Returns

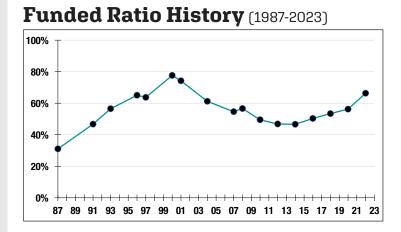


8.11% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





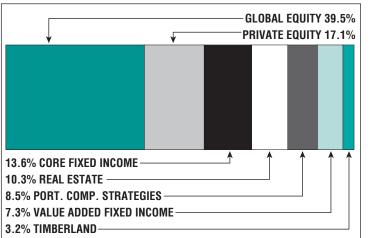


\$109.5 M

Unfunded Liability

\$16.3 M (FY2024) **Total Pension**

Appropriation



Middlesex County

CONTACT INFORMATION

25 Linnell Circle Billerica, MA 01865 Phone 978-439-3000 Fax 978-439-3050

WEBSITE

middlesexretirement.org/

BOARD MEMBERS

Thomas Gibson* Brian Curtin John Brown Joseph Kearns Robert Healy *indicates Chairperson

BOARD ADMINISTRATOR

Lisa Maloney

SYSTEM MEMBERS

Active Members9,432	
Total Payroll\$519.2 M	
Average Salary\$55,100	
Average Age47	
Average Service10.6	

Retired Members.....6,284 Benefits Paid\$184.4 M Average Benefit\$29,300 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees372
Reported Earnings124
Excess Earners7
Refund Due\$110,510

Last Valuation: 1/1/22 Actuary: Segal



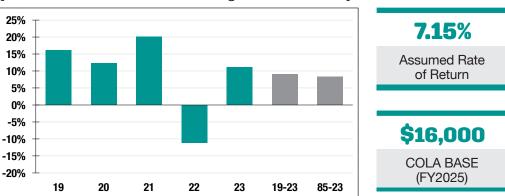
Market Value

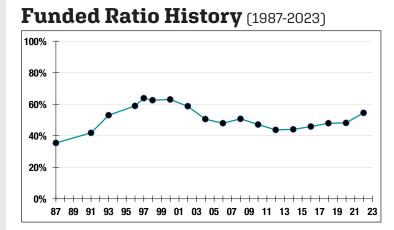
11.19% 2023 Returns

7.62% 2014-2023 (Annualized) **8.35%** 1985-2023 (Annualized)

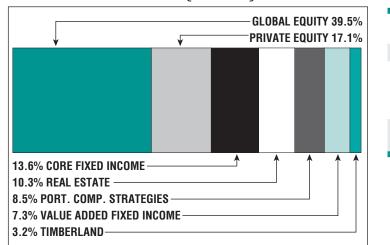
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





\$1.6 B

Unfunded Liability

\$166.5 M

(FY2024)

Total Pension Appropriation

| 2023 Annual Report | 75

Milford

CONTACT INFORMATION

60 N. Bow Street Senior Center Milford, MA 01757 Phone 508-634-2321 Fax 508-634-0902

WEBSITE

milfordma.gov/milfordretirement-board

BOARD MEMBERS

Zachary Taylor* Christopher Pilla James Curley **Richard Villani** Martha White *indicates Chairperson

BOARD ADMINISTRATOR

Kelly Capece

SYSTEM MEMBERS

Active Members526
Total Payroll\$28.2 M
Average Salary\$53,600
Average Age47
Average Service10.5
Retired Members342
Benefits Paid\$10.7 M
Average Benefit\$31,200
Average Age74

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees31
Reported Earnings12
Excess Earners1
Refund Due\$7,387

Last Valuation: 1/1/23 Actuary: PERAC

\$133.6 M Market Value

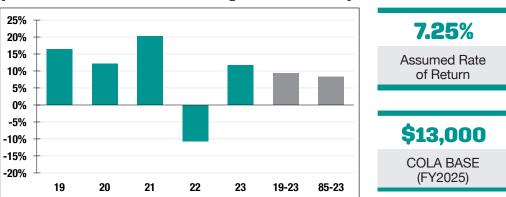
11.72% 2023 Returns

7.93% 2014-2023 (Annualized)

8.26% 1985-2023 (Annualized)

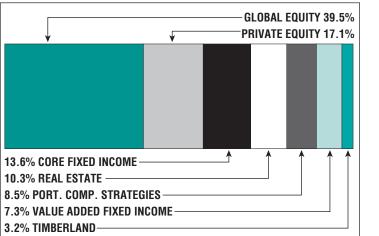
Investment Returns

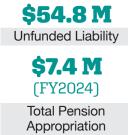
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)











Milton

CONTACT INFORMATION

40 Willard Street Suite G102 Quincy, MA 02169 Phone 617-770-5970 Fax 617-770-5971

WEBSITE

townofmilton.org/374/ Retirement-Board

BOARD MEMBERS

Amy Dexter* Johanna McCarthy Thomas Cicerone William Murphy Robert O'Melia *indicates Chairperson

BOARD ADMINISTRATOR

Jeanne Darcy

SYSTEM MEMBERS

Active Members401
Total Payroll\$26.9 M
Average Salary\$67,000
Average Age47
Average Service11.5
Retired Members282
Benefits Paid\$10.3 M
Average Benefit\$36,600
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees	.21
Reported Earnings	6
Excess Earners	0
Refund Due	.\$0

Last Valuation: 1/1/23 Actuary: PERAC \$198.8 M

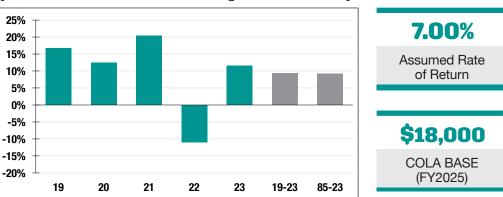
Market Value

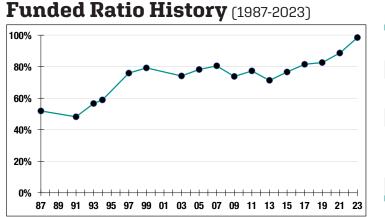
11.52% 2023 Returns

7.93% 2014-2023 (Annualized) **9.21%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







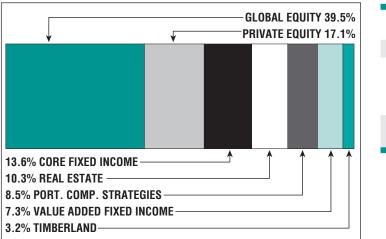
\$3.0 M

Unfunded Liability

\$8.4 M (FY2024) Total Pension

Appropriation

Asset Allocation (12/31/23)



| 2023 Annual Report | 77

Minuteman Regional

CONTACT INFORMATION

758 Marrett Road Lexington, MA 02421 Phone 781-861-6500 Fax 781-863-1747

WEBSITE NO WEBSITE

BOARD MEMBERS

Laurie Elliott* Nikki Andrade Chervl Mixon Maria Oliveira Norman Cohen *indicates Chairperson

BOARD ADMINISTRATOR

Sandor Zapolin

SYSTEM MEMBERS

Active Members34	
Total Payroll\$2.1 M	
Average Salary\$61,000	
Average Age51	
Average Service8.4	
Retired Members41	
netired wiembers41	
Benefits Paid\$1.1 M	

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Benefit \$26,800

Average Age74

Disability Retirees1
Reported Earnings0
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: PERAC



Market Value

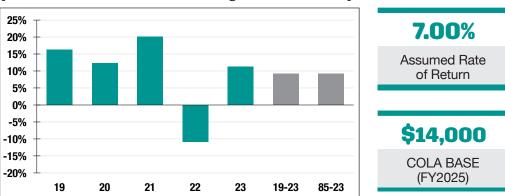
11.33% 2023 Returns

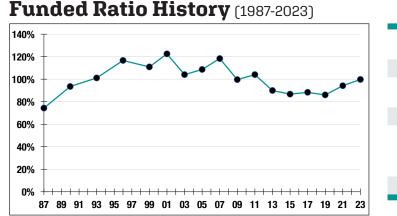
7.76% 2014-2023 (Annualized)

9.25% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Funded Ratio 2024 **Fully Funded** Phase to NC in **FY28 Funding Schedule**

\$43 K

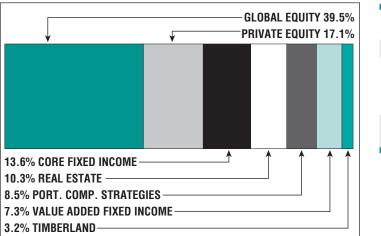
Unfunded Liability

\$395 K

(FY2024)

Total Pension Appropriation

99.7%



Montague

CONTACT INFORMATION

One Avenue A Turners Falls, MA 01376 Phone 413-863-3200 Fax 833-719-1294

WEBSITE

montague-ma.gov/g/40/ Retirement-Board

BOARD MEMBERS

Angelica Desroches Steven Ellis Cheryl Clark* David Dion Marianne Fiske *indicates Chairperson

BOARD ADMINISTRATOR

Debra Underhill

SYSTEM MEMBERS

Active Members194
Total Payroll\$8.1 M
Average Salary\$41,900
Average Age46
Average Service9.4
Retired Members164
Benefits Paid\$3.8 M
Average Benefit\$22,900
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees14
Reported Earnings3
Excess Earners2
Refund Due\$4,060

Last Valuation: 1/1/22 Actuary: PERAC



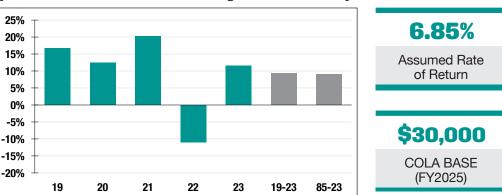
Market Value

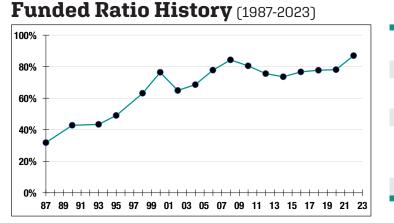
11.53% 2023 Returns

7.91% 2014-2023 (Annualized) **9.00%** 1985-2023 (Annualized)

Investment Returns

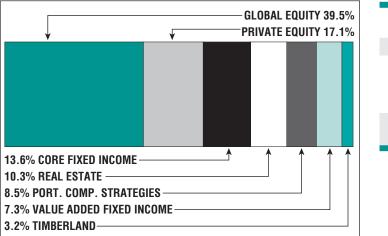
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)



\$8.4 M Unfunded Liability \$2.4 M (FY2024) Total Pension Appropriation

Natick

CONTACT INFORMATION

117 West Central Street. Suite 210 Natick, MA 01760 Phone 508-647-6440 Fax 508-647-6443

WEBSITE

natickma.gov/585/ Contributory-Retirement-Board

BOARD MEMBERS

Michelle Laramee Marco Gargurevich Michael Melchiorri* Nicholas Mabardy B. Michael Reardon *indicates Chairperson

BOARD ADMINISTRATOR

Beth Matson

SYSTEM MEMBERS

Active Members635
Total Payroll\$38.0 M
Average Salary\$59,900
Average Age47
Average Service11.3
Retired Members414
Benefits Paid\$13.6 M
Average Benefit \$32,800

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees14	
Reported Earnings6	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/21 Actuary: Segal



Market Value

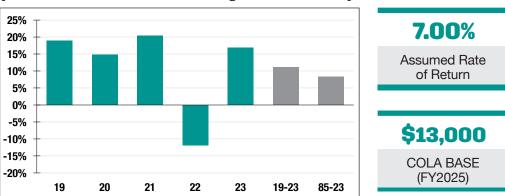
16.92% 2023 Returns

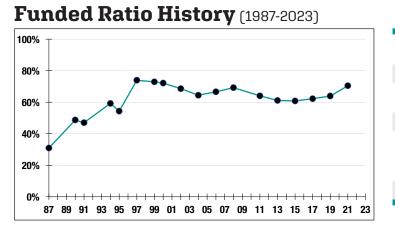
8.50% 2014-2023 (Annualized)

8.34% 1985-2023 (Annualized)

Investment Returns

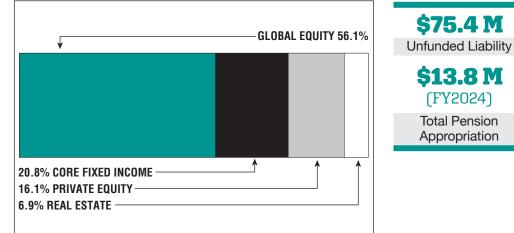
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







(FY2024)



Needham

CONTACT INFORMATION

Town Hall 1471 Highland Avenue Needham, MA 02492 Phone 781-455-7500 Fax 781-449-4569

WEBSITE

needhamma.gov/index. aspx?NID=2728

BOARD MEMBERS

Michelle Vaillancourt Sandra Cincotta* John Krawiecki Robert Papetti **Robert Mearls** *indicates Chairperson

BOARD ADMINISTRATOR

Jacob Cole

SYSTEM MEMBERS

Active Members749
Total Payroll\$48.1 M
Average Salary\$64,200
Average Age47
Average Service10.3
Retired Members481
Benefits Paid\$15.1 M
Average Benefit\$31,300
Average Age76

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees24	
Reported Earnings3	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/23 Actuary: KMS

\$236.8 M

Market Value

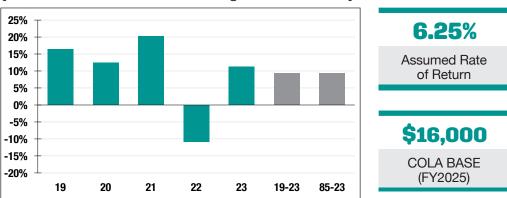
11.21% 2023 Returns

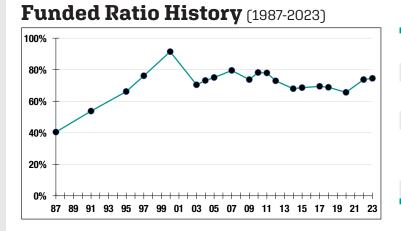


9.42% 1985-2023 (Annualized)

Investment Returns

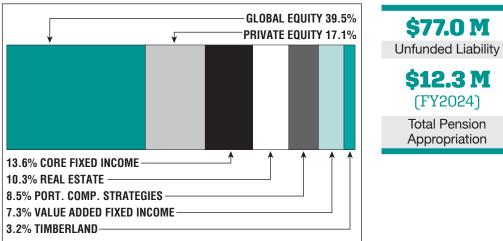
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)



(FY2024) **Total Pension** Appropriation

\$12.3 M

\$77.0 M

New Bedford

CONTACT INFORMATION

651 Orchard Street, #203A New Bedford, MA 02744 Phone 508-979-1538 Fax 508-979-1799

WEBSITE

newbedfordretirement.org

BOARD MEMBERS

Quillan Lowney Angela Natho James Kummer Leonard Baillargeon* Christopher Saunders *indicates Chairperson

BOARD ADMINISTRATOR

Eric Cohen

SYSTEM MEMBERS

Active Members2,217	
Total Payroll\$115.3 M	
Average Salary\$52,000	
Average Age44	
Average Service10.7	

Retired Members.....1,813 Benefits Paid\$50.3 M Average Benefit\$27,700 Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees251
Reported Earnings63
Excess Earners3
Refund Due\$20,255

Last Valuation: 1/1/22 Actuary: KMS



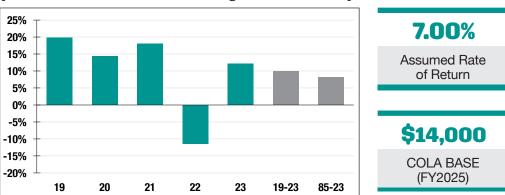
Market Value

12.08% 2023 Returns

7.84% 2014-2023 (Annualized) **8.17%** 1985-2023 (Annualized)

Investment Returns

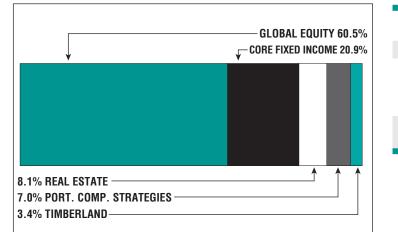
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



Asset Allocation (12/31/23)



\$389.5 M Unfunded Liability \$43.4 M (FY2024)

> Total Pension Appropriation

Newburyport

CONTACT INFORMATION

16 Unicorn Street Newburyport, MA 01950 Phone 978-465-6619 Fax 978-462-4042

WEBSITE

cityofnewburyport.com/ newburyport-retirement-system

BOARD MEMBERS

Ethan Manning John Moak Jeffrey Cutter* Joseph Spaulding Larry Giunta *indicates Chairperson

BOARD ADMINISTRATOR

Elena Kothman

SYSTEM MEMBERS

Active Members370
Total Payroll\$21.1 M
Average Salary\$57,000
Average Age49
Average Service11.7
Retired Members267
Benefits Paid\$8.3 M
Average Benefit\$31,100
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees21	
Reported Earnings5	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: PERAC



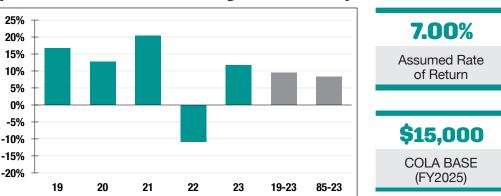
Market Value

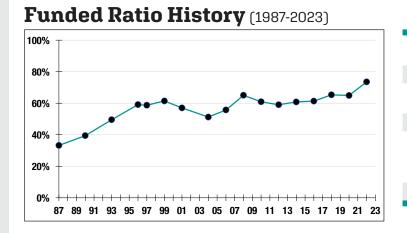
11.67% 2023 Returns

7.88% 2014-2023 (Annualized) **8.26%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







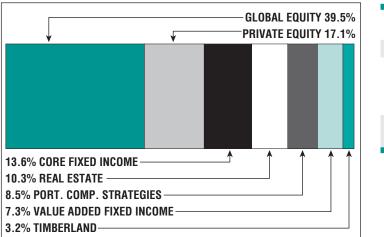
\$40.4 M

Unfunded Liability

\$6.2 M (FY2024)

Total Pension

Appropriation



Newton

CONTACT INFORMATION

City Hall 1000 Commonwealth Ave. Newton Centre, MA 02459 Phone 617-796-1095 Fax 617-796-1098

WEBSITE

newtonma.gov/government/ retirement

BOARD MEMBERS

Stephen Curley Anthony Logalbo Kelly Byrne Thomas Lopez* Lisa Maloney *indicates Chairperson

BOARD ADMINISTRATOR

Barbara O'Brien

SYSTEM MEMBERS

Active Members1,555
Total Payroll\$112.0 M
Average Salary\$72,000
Average Age46
Average Service12.1
Retired Members1,334
Benefits Paid\$44.8 M
Average Benefit\$33,600
Average Age75

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 125
Reported Earnings29
Excess Earners2
Refund Due\$85,358

Last Valuation: 1/1/22 Actuary: Segal



Market Value

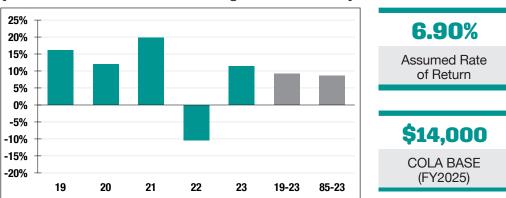
11.47% 2023 Returns

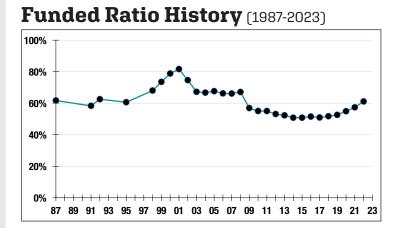


8.57% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





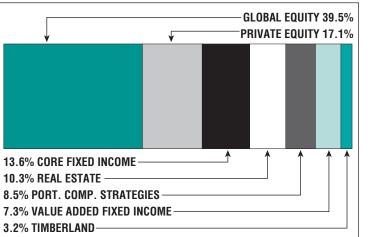


\$301.2 M

Unfunded Liability

\$44.8 M (FY2024) Total Pension

Appropriation



Norfolk County

CONTACT INFORMATION

480 Neponset Street Bldg. 15 Canton, MA 02021 Phone 781-821-0664 Fax 781-821-0981

WEBSITE

norfolkcountyretirement.org

BOARD MEMBERS

Michael Bellotti* Paul Connors Edwin Little Josephine Shea Lisa Sinkus *indicates Chairperson

BOARD ADMINISTRATOR

Kathleen Kiely-Becchetti

SYSTEM MEMBERS

Active Members5,801
Total Payroll\$339.6 M
Average Salary\$58,500
Average AgeNA
Average ServiceNA
Retired Members3,717
Benefits Paid\$111.1 M
Average Benefit \$29,900
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees
Reported Earnings86
Excess Earners4
Refund Due\$42,666

Last Valuation: 1/1/22 Actuary: Sherman



Market Value

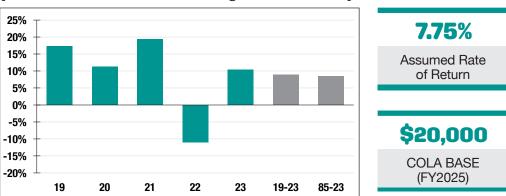
10.43% 2023 Returns

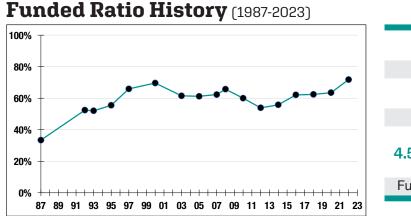
6.84% 2014-2023 (Annualized)

8.42% 1985-2023 (Annualized)

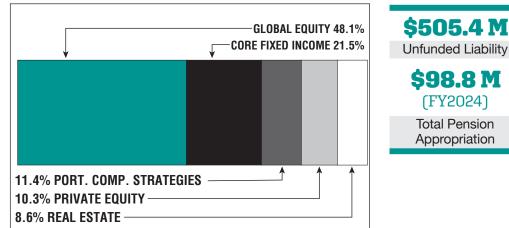
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)



71.8% Funded Ratio 2029 **Fully Funded** 4.5% Increasing

Funding Schedule

\$98.8 M (FY2024)

Total Pension

Appropriation

North Adams

CONTACT INFORMATION

61 Main Street Suite 247 North Adams, MA 01247 Phone 413-663-5185 Fax 413-664-9412

WEBSITE

northadams-ma.gov/index. php?nav_id=47

BOARD MEMBERS

Beverly Cooper Kathleen Wall Lawrence O'Brien* Matthew LaBonte Fred Thompson *indicates Chairperson

BOARD ADMINISTRATOR

Shawn Flynn

SYSTEM MEMBERS

Active Members318
Total Payroll\$13.3 M
Average Salary\$41,900
Average Age45
Average Service8.9
Retired Members251
Benefits Paid\$5.9 M
Average Benefit \$23,500
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees31
Reported Earnings15
Excess Earners1
Refund Due\$1,683

Last Valuation: 1/1/23 Actuary: PERAC \$82.9 M

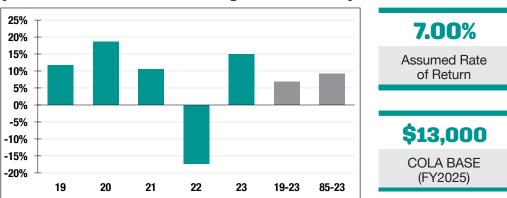
Market Value

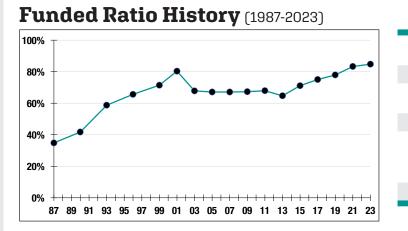
14.93% 2023 Returns

7.01% 2014-2023 (Annualized) **9.15%** 1985-2023 (Annualized)

Investment Returns

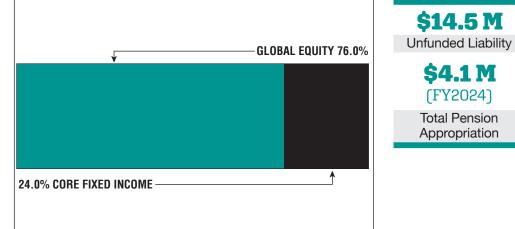
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





84.8% Funded Ratio 2030 Fully Funded

Funding Schedule



North Attleboro

CONTACT INFORMATION

500 East Washington Street 2nd Floor North Attleboro, MA 02760 Phone 508-699-0119 Fax 508-699-0127

WEBSITE

nattleboro.com/495/ Retirement-Board

BOARD MEMBERS

Linda Catanzariti Michael Gallagher Brian Brousseau Craig Chapman^{*} Lauren Durham *indicates Chairperson

BOARD ADMINISTRATOR

Nathaniel Chen

SYSTEM MEMBERS

Active Members509
Total Payroll\$27.3 M
Average Salary\$53,700
Average Age48
Average Service11.3
Retired Members325
Benefits Paid\$9.7 M
Average Benefit\$30,000
Average Age71

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings13
Excess Earners3
Refund Due\$26,843

Last Valuation: 1/1/22 Actuary: Segal \$158.4 M

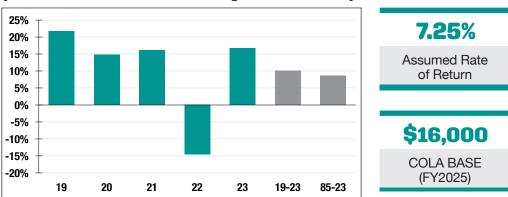
Market Value

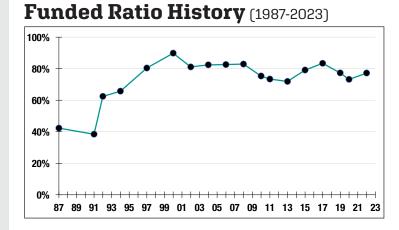
16.67% 2023 Returns

7.98% 2014-2023 (Annualized) **8.62%** 1985-2023 (Annualized)

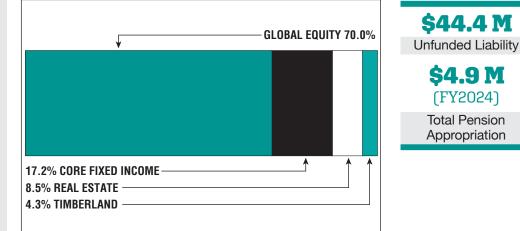
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





77.2% Funded Ratio 2034 Fully Funded 6.13% Total Increasing Funding Schedule



Northampton

CONTACT INFORMATION

240 Main Street First Floor Northampton, MA 01060 Phone 413-587-1211 Fax 413-587-1278

WEBSITE

northamptonma.gov/224/ Retirement

BOARD MEMBERS

Kala Fisher Charlene Nardi* Karen Lafleche Tammy Suprenant Thomas Sullivan *indicates Chairperson

BOARD ADMINISTRATOR

David Shipka

SYSTEM MEMBERS

Active Members682
Total Payroll\$33.9 M
Average Salary\$49,600
Average Age46
Average Service9.7
Retired Members471
Benefits Paid\$12.3 M
Average Benefit \$26,100
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings10
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: Stone \$162.0 M

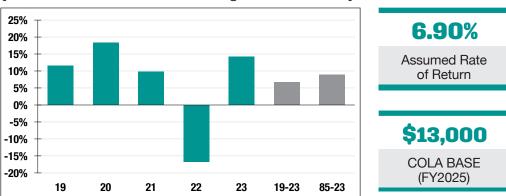
Market Value

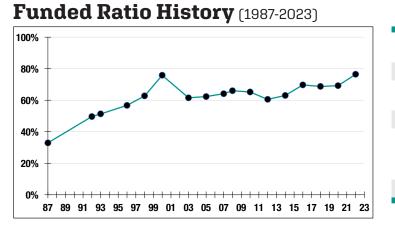
14.15% 2023 Returns

6.99% 2014-2023 (Annualized) **8.97%** 1985-2023 (Annualized)

Investment Returns

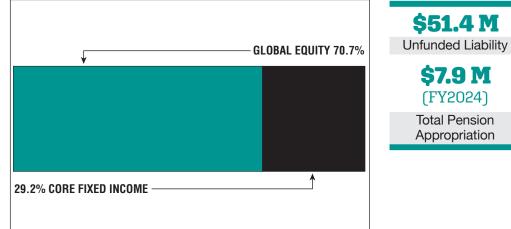
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Funding Schedule



Northbridge

CONTACT INFORMATION

7 Main Street Town Hall Whitinsville, MA 01588 Phone 508-234-0820 Fax 508-234-5834

WEBSITE

northbridgemass.org/ northbridge-retirementboard

BOARD MEMBERS

Sharon Emerick Sharon Susienka* George Murray Scott McGrath Thomas Frieswyk *indicates Chairperson

BOARD ADMINISTRATOR

Caitlin Leahey

SYSTEM MEMBERS

Active Members218	
Total Payroll\$9.9 M	
Average Salary\$45,500	
Average Age45	
Average Service9.5	

Retired Members......115 Benefits Paid\$2.9 M Average Benefit\$24,800 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees10	
Reported Earnings5	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: Stone \$52.1 M

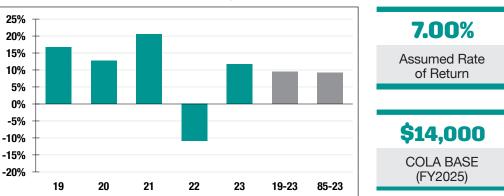
Market Value

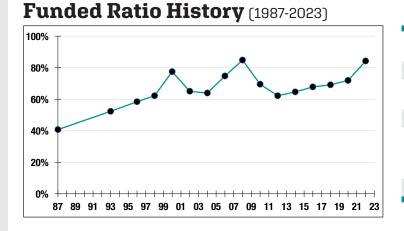
11.69% 2023 Returns

8.03% 2014-2023 (Annualized) **9.21%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



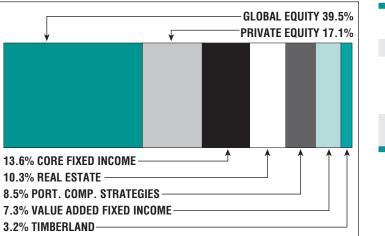


84.2% Funded Ratio 2031 Fully Funded 2.0% Total Increasing Funding Schedule

\$9.2 M

Unfunded Liability

\$2.1 M (FY2024) Total Pension Appropriation



Norwood

CONTACT INFORMATION

900B Washington Street Norwood, MA 02062 Phone 781-762-1240

WEBSITE

norwoodma.gov/ government/committees_ boards/retirement board/ index.php

BOARD MEMBERS

Jeffrey O'Neill Edmund Mulvehill* Eileen Hickey Thomas O'Toole **Thomas Rorrie** *indicates Chairperson

BOARD ADMINISTRATOR

Debra Wilkes

SYSTEM MEMBERS

Active Members650	
Total Payroll\$40.6 M	
Average Salary\$62,400	
Average Age48	
Average Service10.6	
Retired Members439	
Benefits Paid\$13.5 M	
Average Benefit\$30,800	
Average Age72	

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees29
Reported Earnings9
Excess Earners1
Refund Due\$62,097

Last Valuation: 1/1/22 Actuary: Segal



Market Value

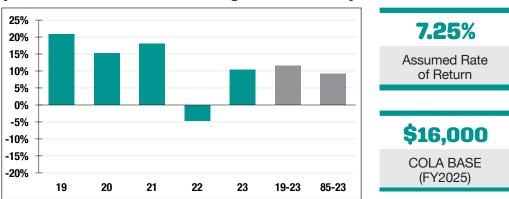
10.40% 2023 Returns



9.22% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





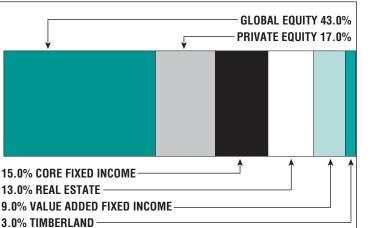


\$63.0 M

Unfunded Liability

\$6.4 M (FY2024) **Total Pension**

Appropriation



Peabody

CONTACT INFORMATION

City Hall 24 Lowell Street Peabody, MA 01960 Phone 978-538-5911 Fax 978-560-0955

WEBSITE

peabody-ma.gov/ retirement.html

BOARD MEMBERS

Michael Gingras Edward Lomasney Andrea Trefry Henry Hogan Richard Yagjian* *indicates Chairperson

BOARD ADMINISTRATOR

James Freeman

SYSTEM MEMBERS

Active Members835	
Total Payroll\$50.4 M	
Average Salary\$60,300	
Average AgeNA	
Average ServiceNA	
Retired Members769	
Benefits Paid\$21.8 M	
Average Benefit \$28,400	
Average Age75	

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees42	
Reported Earnings9	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: Sherman

\$200.0 M

Market Value

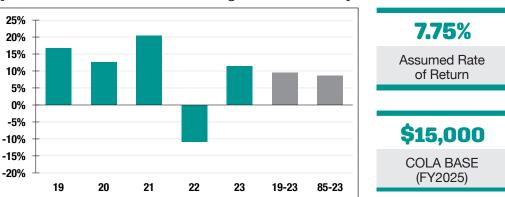
11.46% 2023 Returns



8.61% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



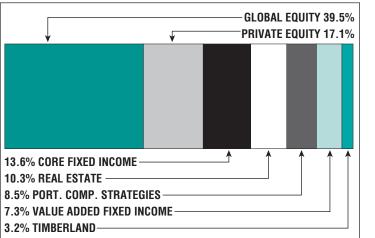


\$150.4 M

Unfunded Liability

\$16.5 M (FY2024) Total Pension

Appropriation



Pittsfield

CONTACT INFORMATION

114 Fenn Street Pittsfield, MA 01201 Phone 413-499-9468 Fax 413-499-9328

WEBSITE

cityofpittsfield.org/pittsfield_ contributory_retirement/ index.php

BOARD MEMBERS

Matthew Kerwood* Bonnie Galant Timothy Bartini Timothy Hannigan William Flynn *indicates Chairperson

BOARD ADMINISTRATOR

Karen Lancto

SYSTEM MEMBERS

Active Members869
Total Payroll\$41.8 M
Average Salary\$48,100
Average Age47
Average Service10.2
Retired Members804
Benefits Paid\$21.0 M
Average Benefit \$26,100
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees62	
Reported Earnings15	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/23 Actuary: PERAC \$191.9 M

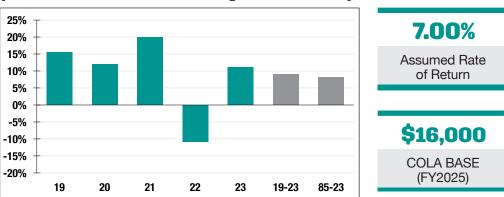
Market Value 2

11.10% 2023 Returns

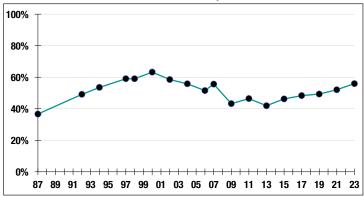
7.71% 2014-2023 (Annualized) **8.19%** 1985-2023 (Annualized)

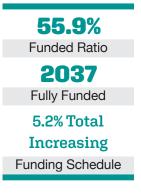
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



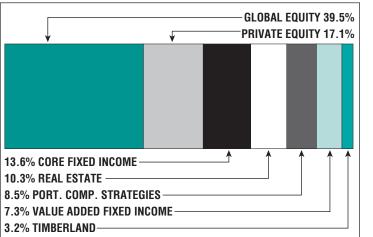


\$146.0 M

Unfunded Liability

\$17.1 M (FY2024) Total Pension

Appropriation



Plymouth

CONTACT INFORMATION

212 South Meadow Road Unit #3 Plymouth, MA 02360 Phone 508-830-4170 Fax 508-830-4019

WEBSITE

plymouthretirement.com

BOARD MEMBERS

Lynne Barrett Sharon LaRosa Dale Webber Thomas Kelley* Robert Ness *indicates Chairperson

BOARD ADMINISTRATOR

Wendy Cherry

SYSTEM MEMBERS

Active Members901
Total Payroll\$53.6 M
Average Salary\$59,500
Average Age48
Average Service11.3
Retired Members817
Benefits Paid\$22.4 M
Average Benefit \$27,500
Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees82	
Reported Earnings30	
Excess Earners1	
Refund Due\$43,722	

Last Valuation: 1/1/22 Actuary: KMS



13.08%

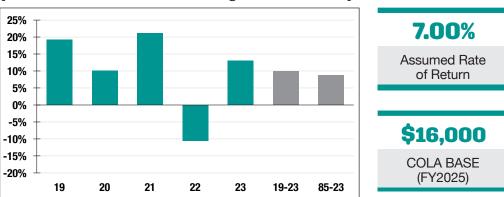
2023 Returns

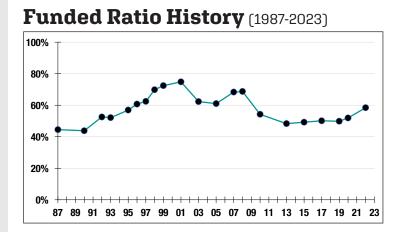


8.79% 1985-2023 (Annualized)

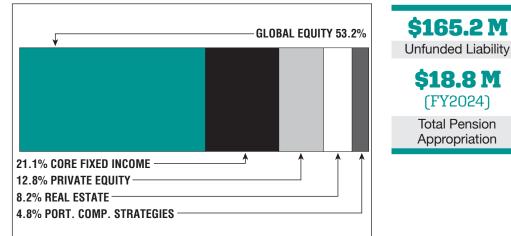
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)









Plymouth County

CONTACT INFORMATION

60 Industrial Park Road Plymouth, MA 02360 Phone 508-830-1803 Fax 508-830-1875

WEBSITE

pcr-ma.org

BOARD MEMBERS

Thomas O'Brien* James Harrington John Sciara Joseph McDonough Pamela Avitabile *indicates Chairperson

BOARD ADMINISTRATOR

Padraic Lydon

SYSTEM MEMBERS

Active Members .	5,824
Total Payroll	\$316.7 M
Average Salary	\$54,400
Average Age	NA
Average Service .	NA

Retired Members.....4,546 Benefits Paid\$124.4 M Average Benefit\$27,400 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees306
Reported Earnings98
Excess Earners3
Refund Due\$18,867

Last Valuation: 1/1/22 Actuary: Sherman



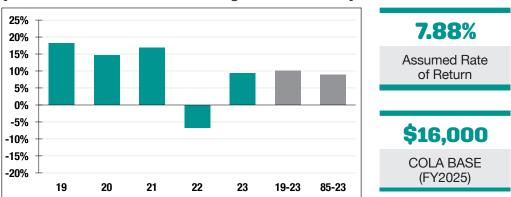
51.4 B Market Value 202

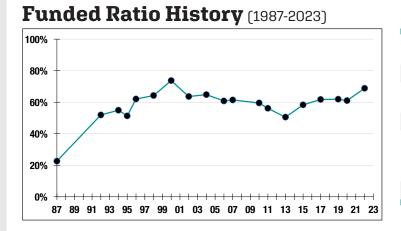
9.44% 2023 Returns

7.25% 2014-2023 (Annualized) **8.92%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







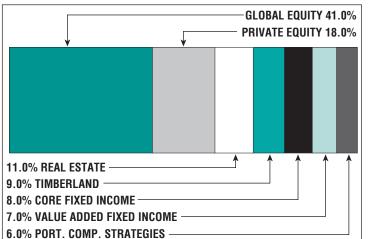
\$594.4 M

Unfunded Liability

\$103.9 M

(FY2024)

Total Pension Appropriation





Quincy

CONTACT INFORMATION

1212 Hancock Street Suite 210A Quincy, MA 02169 Phone 617-376-1075 Fax 617-376-1149

WEBSITE

quincyretirement.com

BOARD MEMBERS

Susan O'Connor* Eric Mason Paul Brown Paul Moody Richard Fitzpatrick *indicates Chairperson

BOARD ADMINISTRATOR

Brad Croall

SYSTEM MEMBERS

Active Members1,575	
Total Payroll\$107.7 M	
Average Salary\$68,400	
Average Age49	
Average Service12	

Retired Members.....1,496 Benefits Paid\$51.1 M Average Benefit\$34,200 Average Age75

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees140	
Reported Earnings32	
Excess Earners2	
Refund Due\$18,079	

Last Valuation: 1/1/22 Actuary: Stone

With the proceeds of pension obligation bonds, the city's portion of the unfunded liability was paid off as of 1/1/22. The Housing Authority is scheduled to complete the amortization of the UAL in FY34. **\$835.9 M** Market Value

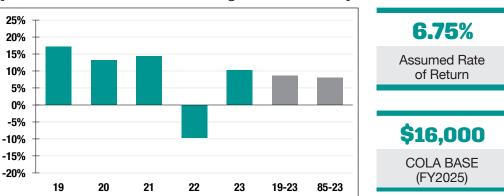
10.27% 2023 Returns

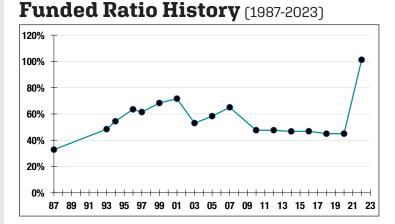


8.06% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







-\$10.1 M

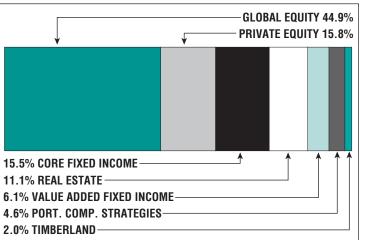
Unfunded Liability

\$10.7 M

(FY2024)

Total Pension

Appropriation



Reading

CONTACT INFORMATION

2 Haven Street Unit 307 Reading, MA 01867 Phone 781-942-9007 Fax 781-623-3053

WEBSITE

readingma.gov/318/ Retirement-Board

BOARD MEMBERS

Sharon Angstrom Richard Abate David Gentile* Robert Beck William Sweeney *indicates Chairperson

BOARD ADMINISTRATOR

Elaine Kelly

SYSTEM MEMBERS

Active Members366
Total Payroll\$31.7 M
Average Salary\$86,700
Average Age45
Average Service11.4
Retired Members384
Benefits Paid\$14.2 M
Average Benefit\$36,900
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees31	
Reported Earnings9)
Excess Earners)
Refund Due\$0)

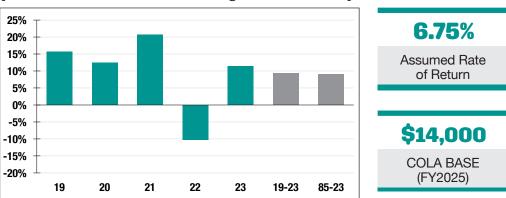
Last Valuation: 1/1/23 Actuary: KMS **\$190.6 M** Market Value

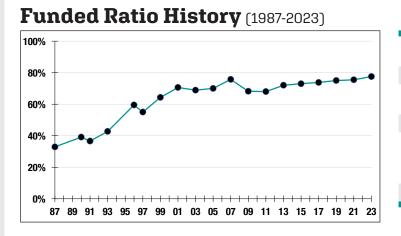
11.44% 2023 Returns

7.99% 2014-2023 (Annualized) **9.14%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





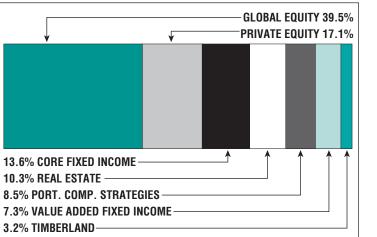
77.5% Funded Ratio 2031 Fully Funded 8.27% Total Increasing Funding Schedule

\$53.1 M

Unfunded Liability

\$9.1 M (FY2024) Total Pension

Appropriation



Revere

CONTACT INFORMATION

14 Yeamans Street Unit C2 Revere, MA 02151 Phone 781-286-8173 Fax 781-286-3316

WEBSITE

revere.org/departments/ retirement

BOARD MEMBERS

Richard Viscay* Ida Cody James Cullen Sean Manion Gennaro Cataldo *indicates Chairperson

BOARD ADMINISTRATOR

Scott Provensal

SYSTEM MEMBERS

Active Members666
Total Payroll\$48.5 M
Average Salary\$72,900
Average Age47
Average Service11.2
Retired Members502
Benefits Paid\$18.6 M
Average Benefit\$37,000
Average Age74

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees89
Reported Earnings27
Excess Earners1
Refund Due\$7,422

Last Valuation: 1/1/23 Actuary: PERAC

\$247.3 M Market Value

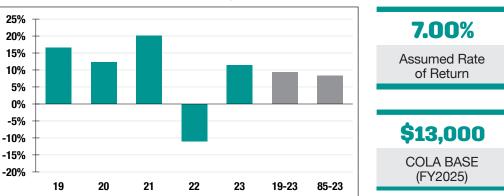
11.41% 2023 Returns

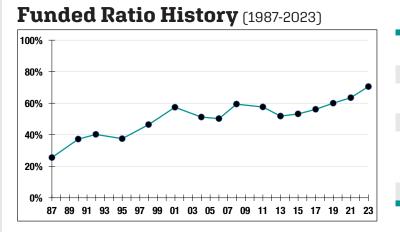
7.85% 2014-2023 (Annualized)

8.38% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



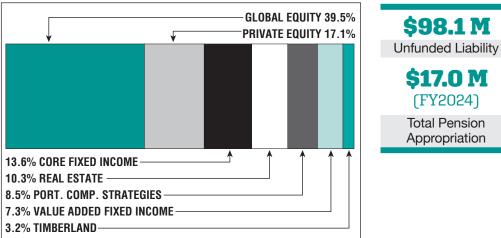


70.5% Funded Ratio 2033 **Fully Funded 5.0% Total** Increasing **Funding Schedule**

\$98.1 M

\$17.0 M (FY2024) **Total Pension**

Appropriation



Salem

CONTACT INFORMATION

20 Central Street Suite 110 Salem, MA 01970 Phone 978-745-8983 Fax 978-745-4216

WEBSITE

salemretirement.org

BOARD MEMBERS

Anna Freedman* Lisa Peterson Robert Callahan Sarah Hayes Matthew Veno *indicates Chairperson

BOARD ADMINISTRATOR

Paul Findlen

SYSTEM MEMBERS

Active Members919
Total Payroll\$55.7 M
Average Salary\$60,600
Average Age47
Average Service10.4
Retired Members636
Benefits Paid\$20.1 M
Average Benefit\$31,600
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees51	
Reported Earnings19	
Excess Earners0	
Refund Due\$0	

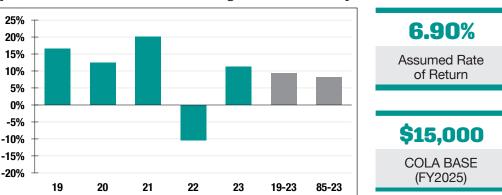
Last Valuation: 1/1/22 Actuary: Segal **\$274.0 M** Market Value

11.24% 2023 Returns

7.84% 2014-2023 (Annualized) **8.17%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



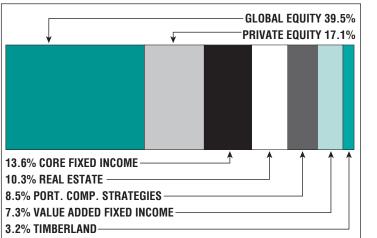
\$120.0 M

Unfunded Liability

\$18.1 M (FY2024)

Total Pension

Appropriation



Saugus

CONTACT INFORMATION

25R Main Street Town Hall Annex Saugus, MA 01906 Phone 781-558-2903 Fax 781-666-3218

WEBSITE

saugusretirement.org

BOARD MEMBERS

Donna Matarazzo Eugene Decareau Mark Gannon William Cross* Doreen DiBari *indicates Chairperson

BOARD ADMINISTRATOR

Ann Quinlan

SYSTEM MEMBERS

Active Members321
Total Payroll\$20.7 M
Average Salary\$64,300
Average Age47
Average Service12.3
Retired Members305
Benefits Paid\$9.5 M
Average Benefit\$31,000
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings7
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: PERAC

\$153.0 M

Market Value

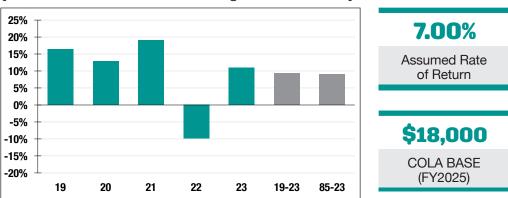
11.04% 2023 Returns

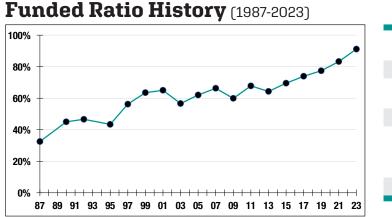
7.93% 2014-2023 (Annualized)

9.08% 1985-2023 (Annualized)

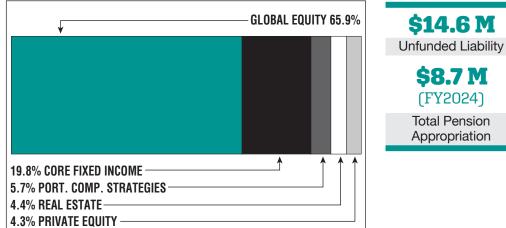
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





Funding Schedule

\$8.7 M (FY2024) **Total Pension** Appropriation

Shrewsbury

CONTACT INFORMATION

100 Maple Avenue Shrewsbury, MA 01545 Phone 508-841-8510 Fax 508-842-0587

WEBSITE

shrewsburyma.gov/324/ Retirement-Board

BOARD MEMBERS

Amy Li Michael Hale Mary Thompson* Ralph laccarino Alice Ferro *indicates Chairperson

BOARD ADMINISTRATOR

Gregory Gatsogiannis

SYSTEM MEMBERS

Active Members443
Total Payroll\$30.3 M
Average Salary\$68,400
Average AgeNA
Average ServiceNA
Retired Members333
Benefits Paid\$10.8 M
Average Benefit\$32,600
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees
Reported Earnings6
Excess Earners1
Refund Due\$8,351

Last Valuation: 1/1/23 Actuary: Sherman



Market Value

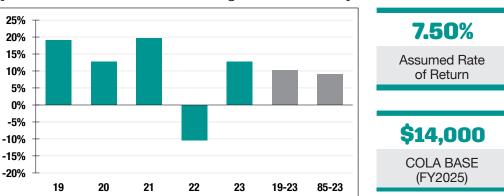
12.78% 2023 Returns

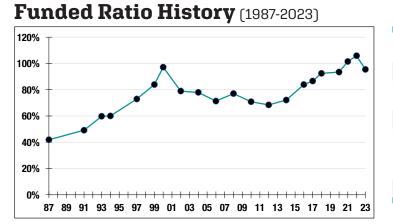
8.37% 2014-2023 (Annualized)

9.09% 1985-2023 (Annualized)

Investment Returns

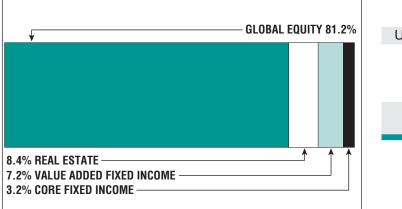
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)





Total Pension Appropriation

Somerville

CONTACT INFORMATION

323 Broadway Somerville, MA 02145 Phone 617-764-3811 Fax 617-591-3211

WEBSITE

somervillema.gov/ departments/retirement

BOARD MEMBERS

Edward Bean* Michael Mastrobuoni John Memory Thomas Ross David Castellarin *indicates Chairperson

BOARD ADMINISTRATOR

Michael Pasquariello

SYSTEM MEMBERS

Active Members1,266
Total Payroll\$93.8 M
Average Salary\$74,100
Average AgeNA
Average ServiceNA
Retired Members958
Benefits Paid\$32.3 M
Average Benefit\$33,700
Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 103
Reported Earnings27
Excess Earners2
Refund Due\$11,572

Last Valuation: 1/1/22 Actuary: Sherman

\$403.9 M

Market Value

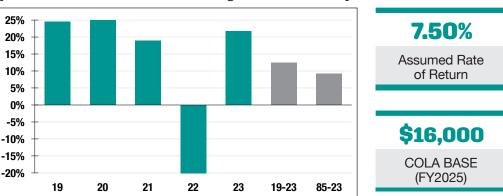
21.79% 2023 Returns



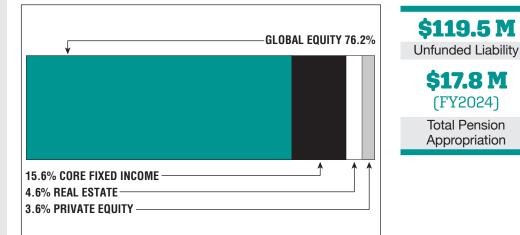
9.16% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023) 100% 80% 60% 40% 20% Funding Schedule በ% 87 89 91 93 95 97 99 01 03 05 07 09 11 13 15 17 19 21 23





Southbridge

CONTACT INFORMATION

Town Hall 41 Elm Street Southbridge, MA 01550 Phone 508-765-4903 Fax 508-765-0902

WEBSITE

ci.southbridge.ma.us/627/ Retirement

BOARD MEMBERS

Kristine Russell Michelle Hill Julie Pena Wilfrid Cournoyer* Pamela Leduc *indicates Chairperson

BOARD ADMINISTRATOR

Yolanda Alvarado

SYSTEM MEMBERS

Active Members398
Total Payroll\$19.7 M
Average Salary\$49,400
Average Age44
Average Service8.7
Retired Members187
Benefits Paid\$5.0 M
Average Benefit \$26,900
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees17
Reported Earnings7
Excess Earners1
Refund Due\$7,840

Last Valuation: 1/1/22 Actuary: PERAC \$83.3 M

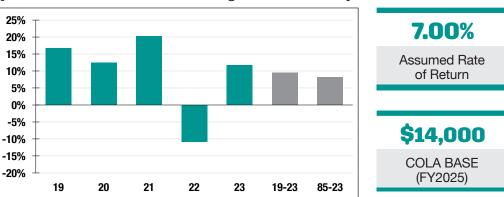
Market Value

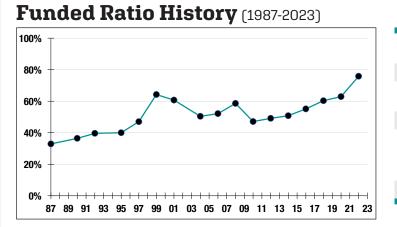
11.77% 2023 Returns

7.97% 2014-2023 (Annualized) **8.12%** 1985-2023 (Annualized)

Investment Returns

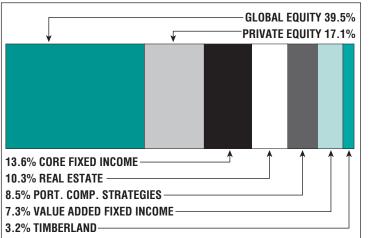
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)



\$24.1 M Unfunded Liability \$5.2 M (FY2024) Total Pension

Total Pension Appropriation

Springfield

CONTACT INFORMATION

70 Tapley Street Springfield, MA 01104 Phone 413-787-6090 Fax 413-787-6046

WEBSITE

springfieldretirement.com

BOARD MEMBERS

Patrick Burns Haskell Kennedy Robert Moynihan* Thomas Scanlon Karl Schmaelzle *indicates Chairperson

BOARD ADMINISTRATOR

Susana Baltazar

SYSTEM MEMBERS

Active Members	3,327
Total Payroll	.\$176.8 M
Average Salary	\$53,100
Average Age	44
Average Service	10.9

Retired Members.....2,812 Benefits Paid\$85.9 M Average Benefit\$30,500 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees	381
Reported Earnings	135
Excess Earners	4
Refund Due\$27,	185

Last Valuation: 1/1/22 Actuary: PERAC



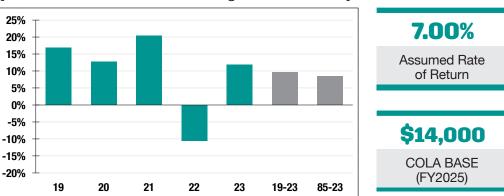
Market Value

11.82% 2023 Returns

8.17% 2014-2023 (Annualized) **8.44%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



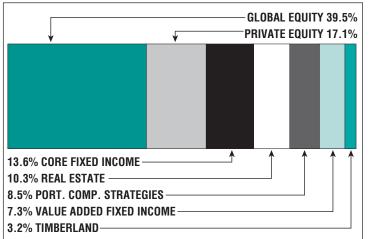
\$898.4 M

Unfunded Liability

\$101.7 M

(FY2024)

Total Pension Appropriation



State

CONTACT INFORMATION

One Winter Street 8th floor Boston, MA 02108 Phone 617-367-7770 Fax 617-723-1438

WEBSITE

mass.gov/retirement

BOARD MEMBERS

Deborah Goldberg* Joanne Goldstein Frank Valeri Theresa McGoldrick Archie Gormley *indicates Chairperson

BOARD ADMINISTRATOR

Kathryn Kougias

SYSTEM MEMBERS

Active Members87,554
Total Payroll \$7.1 B
Average Salary\$81,000
Average Age47
Average Service11.8
Retired Members69,167
Benefits Paid \$2.8 B
Average Benefit\$41,000
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees.....3,441 Reported Earnings994 Excess Earners......40 Refund Due\$633,432

Last Valuation: 1/1/23 Actuary: PERAC



Market Value

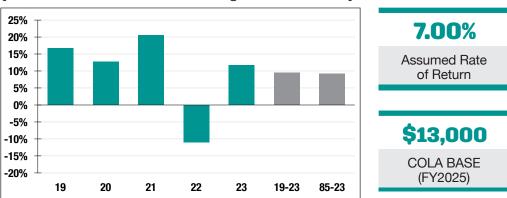
11.66% 2023 Returns

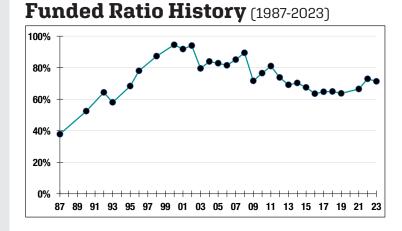


9.29% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







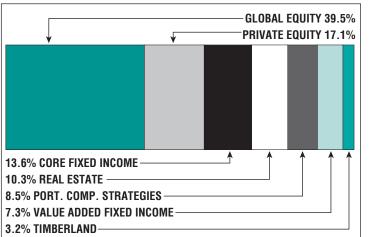
\$14.1 B

Unfunded Liability

\$1.5 B (FY2024)

Total Pension

Appropriation



Stoneham

CONTACT INFORMATION

Town Hall 35 Central Street Stoneham, MA 02180 Phone 781-279-2635 Fax 781-438-6906

WEBSITE

stoneham-ma.gov/323/ Retirement-Board

BOARD MEMBERS

Lauri Plourde Kathleen Sullivan Francis Gould John Scullin Janice Houghton* *indicates Chairperson

BOARD ADMINISTRATOR

Christopher Delisi

SYSTEM MEMBERS

Active Members309
Total Payroll\$17.2 M
Average Salary\$55,700
Average Age47
Average Service11
Retired Members291
Benefits Paid\$8.4 M
Average Benefit \$28,900
Average Age75

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees19	
Reported Earnings5	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: Stone

\$128.4 M

Market Value

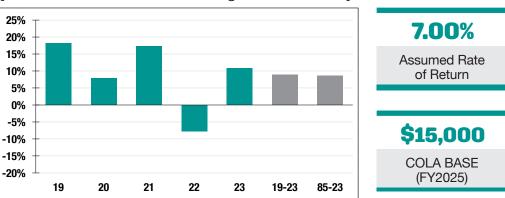
10.90% 2023 Returns



8.63% 1985-2023 (Annualized)

Investment Returns

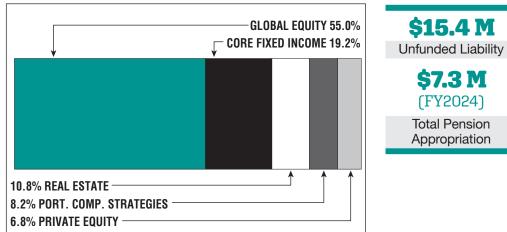
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





88.4% **Funded Ratio** 2026 **Fully Funded Level Payment Funding Schedule**

Asset Allocation (12/31/23)



\$7.3 M (FY2024) **Total Pension**

Swampscott

CONTACT INFORMATION

22 Monument Avenue Town Hall Swampscott, MA 01907 Phone 781-596-8827 Fax 781-394-2668

WEBSITE

swampscottretirement.com/ Pages/index

BOARD MEMBERS

Amy Sarro Thomas Driscoll* John Behen Kevin Breen Robert Powell *indicates Chairperson

BOARD ADMINISTRATOR

Nancy Lord

SYSTEM MEMBERS

Active Members243
Total Payroll\$14.8 M
Average Salary\$60,800
Average Age45
Average Service10.5
Retired Members240
Benefits Paid\$7.5 M
Average Benefit\$31,200
Average Age75

2022 EARNED INCOME OF DISABILITY RETIREES:

Last Valuation: 1/1/23 Actuary: Segal \$84.5 M

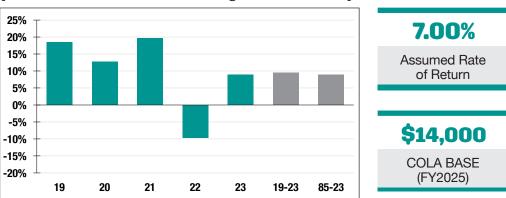
Market Value

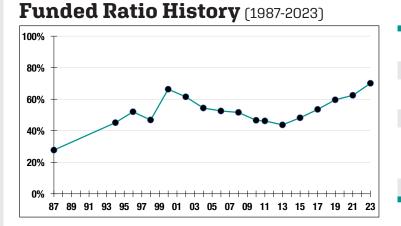
8.98% 2023 Returns

7.84% 2014-2023 (Annualized) **8.92%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





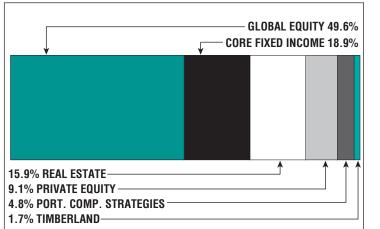


\$35.5 M

Unfunded Liability

\$6.3 M (FY2024) Total Pension

Appropriation



Taunton

CONTACT INFORMATION

104 Dean Street Suite 203 Taunton, MA 02780 Phone 508-821-1052 Fax 508-821-1063

WEBSITE

tauntonretirement.com

BOARD MEMBERS

Ian Fortes Gill Enos Dennis Smith* Thomas Bernier Barry Amaral *indicates Chairperson

BOARD ADMINISTRATOR

Paul Slivinski

SYSTEM MEMBERS

Active Members1,054
Total Payroll\$68.0 M
Average Salary\$64,500
Average Age48
Average Service12.4
Retired Members975
Benefits Paid\$31.9 M
Average Benefit\$32,800
Average AgeNA

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees76
Reported Earnings11
Excess Earners2
Refund Due\$6,421

Last Valuation: 1/1/22 Actuary: Buck

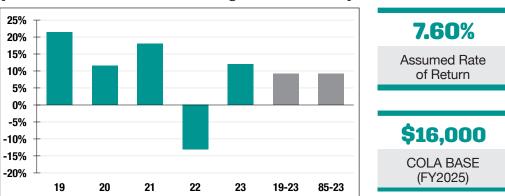


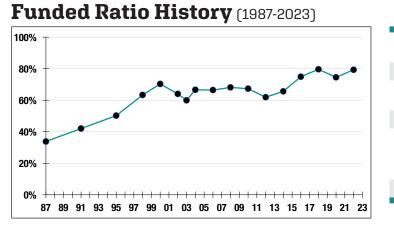
11.94% 2023 Returns

7.33% 2014-2023 (Annualized) **9.27%** 1985-2023 (Annualized)

Investment Returns

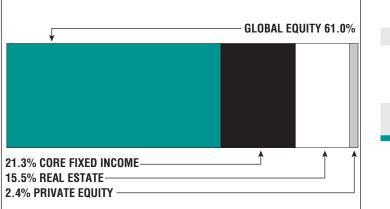
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)



\$107.4 M Unfunded Liability \$20.1 M (FY2024) Total Pension Appropriation

Wakefield

CONTACT INFORMATION

1 Lafayette Street Wakefield, MA 01880 Phone 781-246-6352

WEBSITE

wakefield.ma.us/retirement

BOARD MEMBERS

Kevin Gill* Sherri Dalton Erin Findlen Kokinda Scott Morrison Daniel Sherman *indicates Chairperson

BOARD ADMINISTRATOR

Cathy Cheek

SYSTEM MEMBERS

Active Members462	
Total Payroll\$31.4 M	
Average Salary\$68,100	
Average Age48	
Average Service12	
Retired Members372	
Benefits Paid\$12.4 M	
Average Benefit\$33,400	
Average Age74	

2022 EARNED INCOME OF DISABILITY RETIREES:

Last Valuation: 1/1/22 Actuary: PERAC



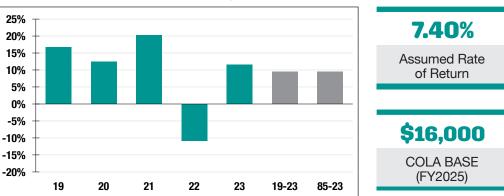
Market Value

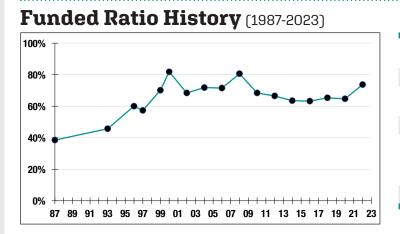
11.54% 2023 Returns

7.97% 2014-2023 (Annualized) **9.45%** 1985-2023 (Annualized)

Investment Returns

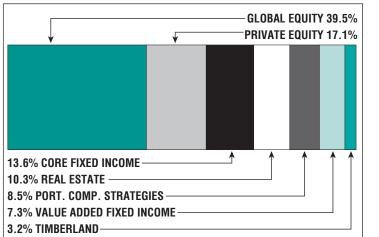
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Asset Allocation (12/31/23)



\$56.1 M Unfunded Liability \$8.0 M (FY2024) Total Pension Appropriation

Waltham

CONTACT INFORMATION

25 Lexington Street 2nd Floor Waltham, MA 02452 Phone 781-314-3230 Fax 781-314-3236

WEBSITE

city.waltham.ma.us/humanresources-department/ pages/retirement-benefits

BOARD MEMBERS

Paul Centofanti Deborah Flanagan Scott Hovsepian William MacDonald* Mary Rosen *indicates Chairperson

BOARD ADMINISTRATOR

Andrew Malis

SYSTEM MEMBERS

Active Members	915
Total Payroll	\$70.3 M
Average Salary	\$76,800
Average Age	NA
Average Service	NA

Retired Members......818 Benefits Paid\$31.2 M Average Benefit\$38,100 Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees	.65
Reported Earnings	.21
Excess Earners	0
Refund Due	.\$0

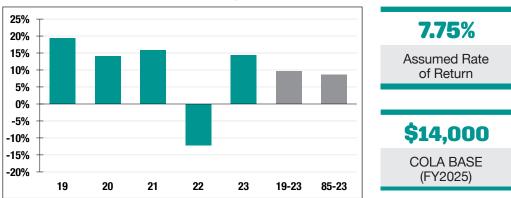
Last Valuation: 1/1/23 Actuary: Sherman \$339.3 M Market Value

14.42% 2023 Returns

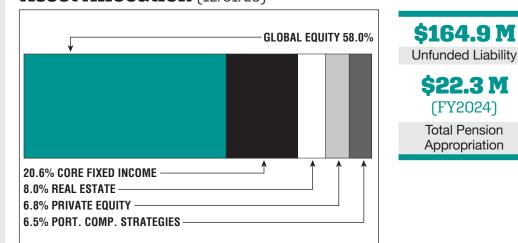
7.72% 2014-2023 (Annualized) **8.56%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)





Watertown

CONTACT INFORMATION

149 Main Street Watertown, MA 02472 Phone 617-972-6456 Fax 617-923-3531

WEBSITE

watertownretirement.com

BOARD MEMBERS

Megan Langan John Loughran **Domenic Arone Thomas Thibaut*** Kathleen Kiely-Becchetti *indicates Chairperson

BOARD ADMINISTRATOR

Kayla Sheehan

SYSTEM MEMBERS

Active Members	551
Total Payroll	\$39.8 M
Average Salary	\$72,200
Average Age	NA
Average Service	NA

Retired Members......430 Benefits Paid\$16.0 M Average Benefit\$37,200 Average Age74

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees42
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: Sherman



Market Value

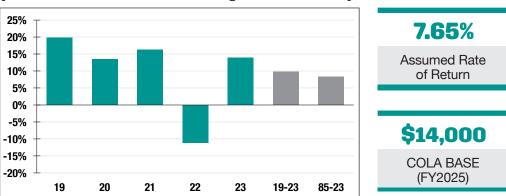
13.92% 2023 Returns

7.63% 2014-2023 (Annualized)

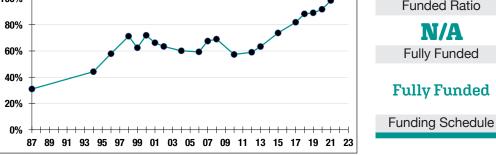
8.28% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023) 120% 100%

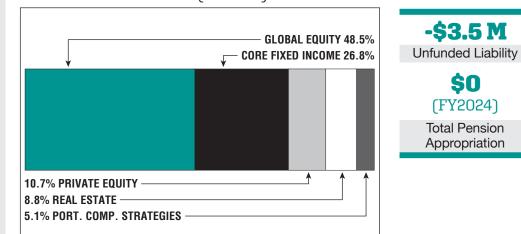




SO

(FY2024)

Total Pension



Webster

CONTACT INFORMATION

350 Main Street Suite 5 Webster, MA 01570 Phone 508-949-3800 Fax 508-949-3809

WEBSITE

webster-ma.gov/325/ Retirement-Board

BOARD MEMBERS

Timothy Bell Eleanor Doros James Hoover Robert Craver* Brian Perry *indicates Chairperson

BOARD ADMINISTRATOR

Kristin LaPlante

SYSTEM MEMBERS

Active Members275
Total Payroll\$13.4 M
Average Salary\$48,900
Average Age46
Average Service10.4
Retired Members150
Benefits Paid\$4.2 M
Average Benefit \$28,000
Average Age73

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees6)
Reported Earnings1	
Excess Earners0	
Refund Due\$0	

Last Valuation: 1/1/22 Actuary: PERAC

\$60.8 M

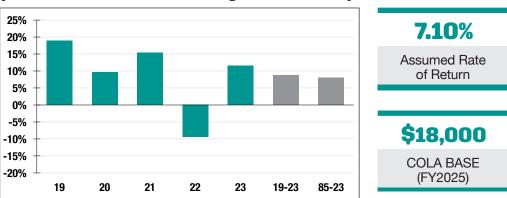
Market Value

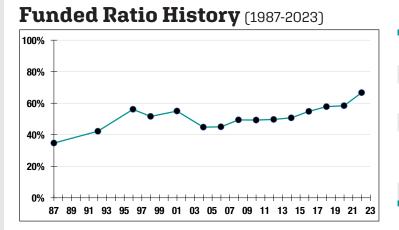
11.61% 2023 Returns

6.90% 2014-2023 (Annualized) **8.00%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





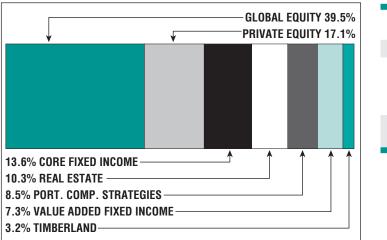
66.7% Funded Ratio 2032 Fully Funded 6.5% Total Increasing Funding Schedule

\$26.6 M

Unfunded Liability

\$4.7 M (FY2024) Total Pension

Appropriation



Wellesley

CONTACT INFORMATION

Town Hall 888 Worcester Street Wellesley, MA 02482 Phone 781-489-4238 Fax 781-431-8643

WEBSITE

wellesleyma.gov/393/ Retirement-Board

BOARD MEMBERS

Michael DiPietro David Kornwitz* Michael Leach Timothy Barros Edward Heilbron *indicates Chairperson

BOARD ADMINISTRATOR

Lynn Whynot

SYSTEM MEMBERS

Active Members656	
Total Payroll\$44.5 M	
Average Salary\$67,800	
Average Age46	
Average Service10.5	
Retired Members436	
Benefits Paid\$14.7 M	
Average Benefit\$33,800	
Average Age74	

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees29	
Reported Earnings6	
Excess Earners1	
Refund Due\$30,951	

Last Valuation: 1/1/23 Actuary: Segal \$283.1 M

Market Value

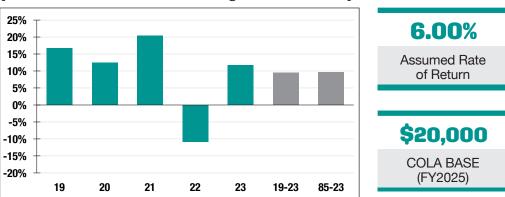
11.64% 2023 Returns

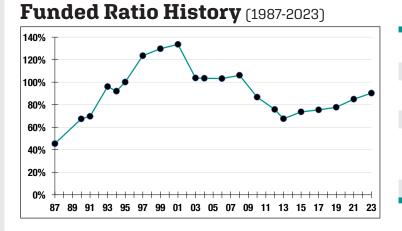
7.98% 2014-2023 (Annualized)



Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)







Funding Schedule

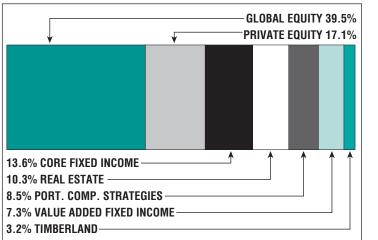
\$29.8 M

Unfunded Liability

\$10.3 M (FY2024) Total Pension

Appropriation

Asset Allocation (12/31/23)



112 | 2023 Annual Report |

West Springfield

CONTACT INFORMATION

26 Central Street, Suite 26 West Springfield, MA 01089 Phone 413-495-1891

WEBSITE

townofwestspringfield. org/Directory/Boards-Commissions-Committees/ Contributory-Retirement-Board

BOARD MEMBERS

Sharon Wilcox* Thomas Cummings Gwen Keough William Flaherty Daniel Marini *indicates Chairperson

BOARD ADMINISTRATOR

James Lovotti

SYSTEM MEMBERS

Active Members	625
Total Payroll	\$30.5 M
Average Salary	\$48,800
Average Age	45
Average Service	10.1

Retired Members......452 Benefits Paid\$12.0 M Average Benefit\$26,600 Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees.......32 Reported Earnings15 Excess Earners......2 Refund Due\$23,249

Last Valuation: 1/1/22 Actuary: Stone \$152.6 M

Market Value

13.78% 2023 Returns

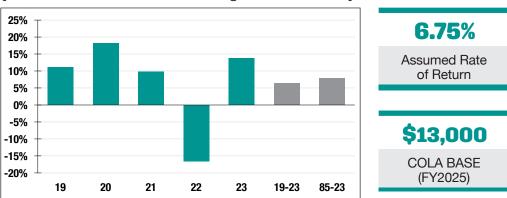
11705 11705



7.94% 1985-2023 (Annualized)

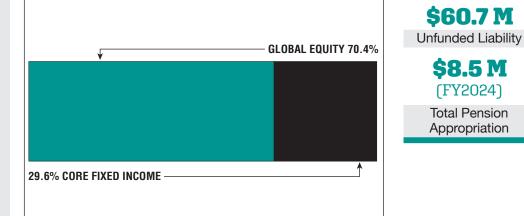
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)

72.1% Funded Ratio 2033 Fully Funded 4.0% Total Increasing Funding Schedule



Westfield

CONTACT INFORMATION

59 Court Street P.O. Box 106 Westfield, MA 01086 Phone 413-572-6239 Fax 413-642-9410

WEBSITE

cityofwestfield.org/index. aspx?NID=114

BOARD MEMBERS

Vicki Moro Edward Murphy Christopher Kane Mark Devine* Dennis Powers *indicates Chairperson

BOARD ADMINISTRATOR

Liam Browne

SYSTEM MEMBERS

Active Members831
Total Payroll\$47.1 M
Average Salary\$56,700
Average Age47
Average Service11.2
Retired Members762
Benefits Paid\$23.5 M
Average Benefit\$30,900
Average Age72

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees49
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/23 Actuary: PERAC

\$306.3 M

Market Value

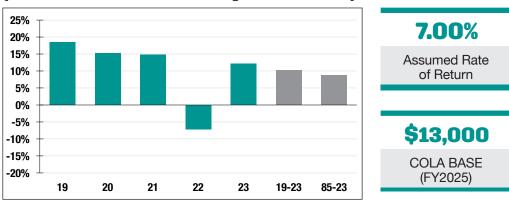
12.17% 2023 Returns

8.33% 2014-2023 (Annualized)

8.81% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023) 100% 80% 60% 40% 20% በ% 87 89 91 93 95 97 99 01 03 05 07 09 11 13 15 17 19 21 23

Fully Funded 4.96% Total Increasing **Funding Schedule**

\$82.6 M

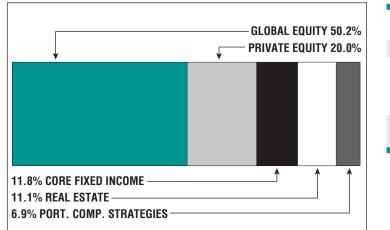
Unfunded Liability

\$13.6 M (FY2024) **Total Pension**

Appropriation

78.4%

Funded Ratio 2034



Weymouth

CONTACT INFORMATION

807 Broad Street Weymouth, MA 02189 Phone 781-331-8721 Fax 781-331-3005

WEBSITE

weymouthretirement.com

BOARD MEMBERS

Joseph Clancy Greg Hargadon Joseph Davis* **Richard Hayes** Barbara Costa *indicates Chairperson

BOARD ADMINISTRATOR

Edward Masterson

SYSTEM MEMBERS

Active Members878
Total Payroll\$48.6 M
Average Salary\$55,300
Average Age46
Average Service11
Retired Members659
Benefits Paid\$20.3 M
Average Benefit\$30,800

2022 EARNED INCOME OF DISABILITY RETIREES:

Average Age73

Disability Retirees74
Reported Earnings17
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/22 Actuary: Stone



Market Value

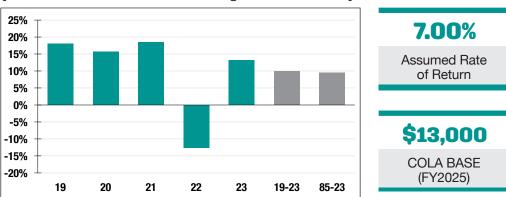
13.21% 2023 Returns



9.54% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023) 100% 80% 60% 40% 20% በ% 87 89 91 93 95 97 99 01 03 05 07 09 11 13 15 17 19 21 23

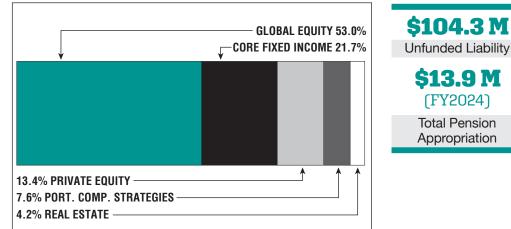


Funding Schedule

\$13.9 M

(FY2024)

Total Pension Appropriation



Winchester

CONTACT INFORMATION

71 Mount Vernon Street Winchester, MA 01890 Phone 781-721-7127 Fax 781-721-7156

WEBSITE

winchester.us/322/ Retirement-Board

BOARD MEMBERS

Stacie Ward Michael Lucas Karen Manchuso Robert Frary* *indicates Chairperson

BOARD ADMINISTRATOR

Alice Munafo

SYSTEM MEMBERS

Active Members	
Total Payroll	\$26.4 M
Average Salary	\$66,200
Average Age	48
Average Service	11.5
Retired Members	s280

Benefits Paid\$9.5 M Average Benefit\$34,000 Average Age76

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees14
Reported Earnings5
Excess Earners1
Refund Due\$2,088

Last Valuation: 1/1/23 Actuary: PERAC



11.63% 2023 Returns

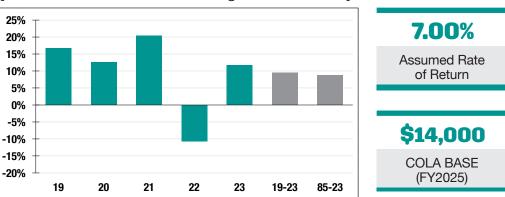
7.49% 2014-2023 (Annualized)

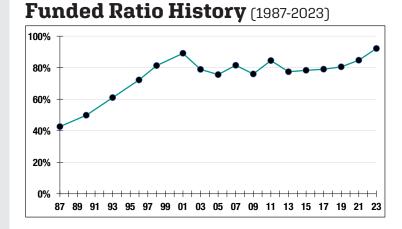


8.84% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





92.2% Funded Ratio 2027 Fully Funded 5.0% Total Increasing Funding Schedule

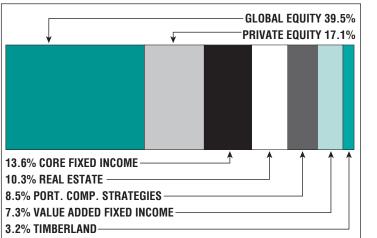
\$14.0 M

\$6.8 M

(FY2024)

Total Pension Appropriation

Unfunded Liability



Winthrop

CONTACT INFORMATION

Town Hall 1 Metcalf Square Winthrop, MA 02152 Phone 617-539-5750

WEBSITE

town.winthrop.ma.us/ retirement

BOARD MEMBERS

Dylan Cook Terence Delehanty **Dennis Boudrow Stephen Rogers** Karin Chavis* *indicates Chairperson

BOARD ADMINISTRATOR

Michelle Church

SYSTEM MEMBERS

Active Members265
Total Payroll\$14.3 M
Average Salary\$53,900
Average Age49
Average Service10.8
Retired Members194
Benefits Paid\$5.2 M
Average Benefit \$26,700
Average Age75

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees10	
Reported Earnings2	
Excess Earners1	
Refund Due\$17,957	

Last Valuation: 1/1/23 Actuary: PERAC



Market Value

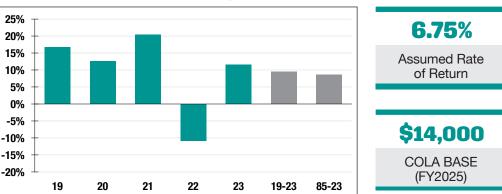
11.56% 2023 Returns



8.63% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023) 120% 100% 80% 60% 40% 20%

87 89 91 93 95 97 99 01 03 05 07 09 11 13 15 17 19 21 23



-\$2.1 M

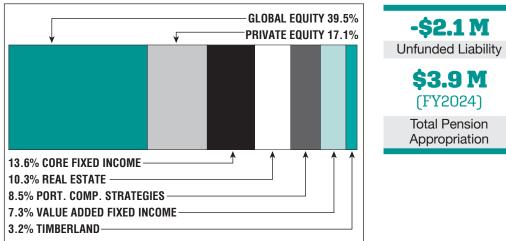
\$3.9 M (FY2024)

Total Pension

Appropriation

Asset Allocation (12/31/23)

በ%



Woburn

CONTACT INFORMATION

City Hall, 2nd Floor 10 Common Street Woburn, MA 01801 Phone 781-897-5820 Fax 339-227-4257

WEBSITE

woburnma.gov/government/ retirement-board

BOARD MEMBERS

Charles Doherty Gerald Surette Denis Devine* Marilou Lundin Michael Gorman *indicates Chairperson

BOARD ADMINISTRATOR

Anne Speicher

SYSTEM MEMBERS

Active Members529
Total Payroll\$31.7 M
Average Salary\$60,000
Average Age49
Average Service12.4
Retired Members492
Benefits Paid\$16.8 M
Average Benefit\$34,100
Average AgeNA

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees32
Reported Earnings12
Excess Earners0
Refund Due\$0

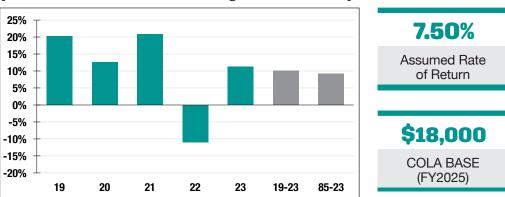
Last Valuation: 1/1/22 Actuary: Buck **\$188.6 M** Market Value

11.35% 2023 Returns

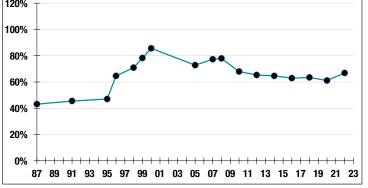
7.68% 2014-2023 (Annualized) **9.20%** 1985-2023 (Annualized)

Investment Returns

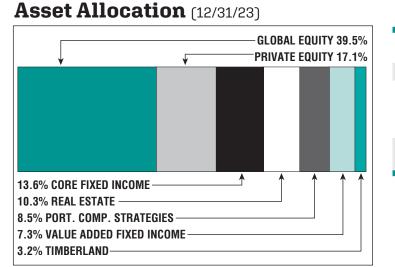
(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)







\$90.3 M Unfunded Liability \$11.5 M (FY2024) Total Pension Appropriation

Worcester

CONTACT INFORMATION

City Hall, Room 103 455 Main Street Worcester, MA 01608 Phone 508-799-1062 Fax 508-799-1047

WEBSITE

worcesterma.gov/ retirement-board

BOARD MEMBERS

Robert Stearns Matthew Wally Elizabeth Early* John Mahan Tamara Cullen *indicates Chairperson

BOARD ADMINISTRATOR

Lisa Poske

SYSTEM MEMBERS

Active Members3,630	
Total Payroll\$218.3 M	
Average Salary\$60,200	
Average Age45	
Average Service10.9	
Retired Members2,761	
Benefits Paid\$96.9 M	

Average Benefit\$35,100 Average Age74

2022 EARNED INCOME **OF DISABILITY RETIREES:**

Disability Retirees330
Reported Earnings57
Excess Earners1
Refund Due\$12,489

Last Valuation: 1/1/23 Actuary: Segal

\$1.3 B Market Value

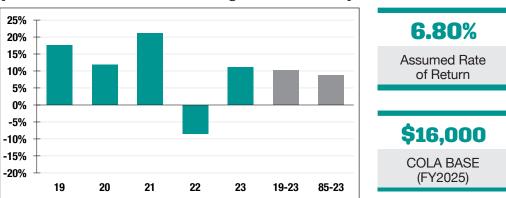
11.25% 2023 Returns

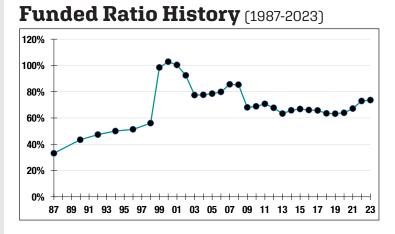
7.57% 2014-2023 (Annualized)

8.76% 1985-2023 (Annualized)

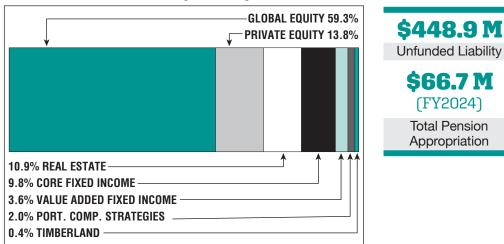
Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Asset Allocation (12/31/23)





\$66.7 M (FY2024) **Total Pension**

Appropriation

Worcester Regional

CONTACT INFORMATION

Midstate Office Park 23 Midstate Drive, Suite 106 Auburn, MA 01501 Phone 508-832-6314 Fax 508-832-6318

WEBSITE

wrrboard.org

BOARD MEMBERS

Kevin Blanchette* Kristen Noel Michael Donoghue Pauline Lajoie *indicates Chairperson

BOARD ADMINISTRATOR

Rachel Grimaldi

SYSTEM MEMBERS

Active Members7,121	
Total Payroll\$352.8 M	
Average Salary\$49,500	
Average Age47	
Average Service9.6	

Retired Members.....4,112 Benefits Paid\$101.2 M Average Benefit\$24,600 Average Age72

2022 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees249
Reported Earnings88
Excess Earners2
Refund Due\$11,169

Last Valuation: 1/1/22 Actuary: KMS



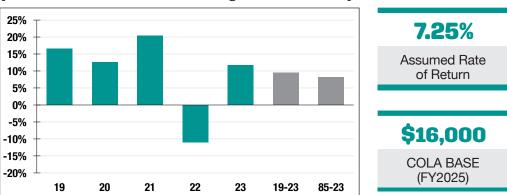
Market Value

11.77% 2023 Returns

7.91% 2014-2023 (Annualized) **8.22%** 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)



Funded Ratio History (1987-2023)



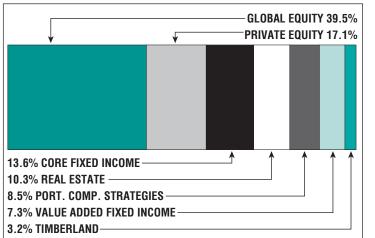
\$933.9 M

Unfunded Liability

\$91.0 M

(FY2024)

Total Pension Appropriation



PRIM (Pension Reserves Investment Management Board)

CONTACT INFORMATION

53 State Street Suite 600 Boston, MA 02109 Phone 617-946-8401

WEBSITE

mapension.com

BOARD MEMBERS

State Treasurer Deborah Goldberg* Robert Brousseau Ruth Ellen Fitch, Esq. Catherine D'Amato Theresa McGoldrick, Esq. Peter Monaco Dennis Naughton Carly Rose Paul Shanley, Esq. *indicates Chairperson

EXECUTIVE DIRECTOR/CIO

Michael G. Trotsky, CFA

\$100.9 B Market Value

11.54% 2023 Returns

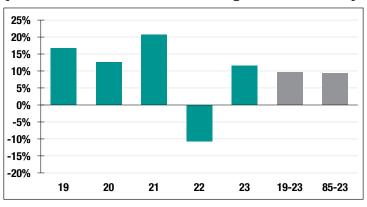
rns 201

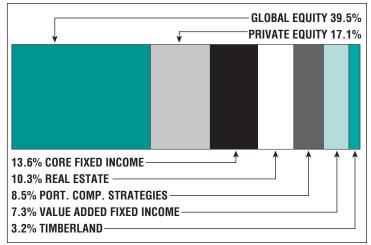


9.36% 1985-2023 (Annualized)

Investment Returns

(2019-2023, 5-Year & 39-Year Averages, as of 12/31/23)





Disability Retirement Statistics (As of 12/31/23)

RETIREMENT BOARDS WITH 600-899 ACTIVE MEMBERS	MEDICAL PANEL REQUESTS	DISABILITY RETIREMENT APPROVALS	ACCIDENTAL DEATH APPROVALS	CME REVIEWS
Andover Retirement Board	0	2	0	7
Arlington Retirement Board	2	2	0	6
Attleboro Retirement Board	4	1	0	3
Braintree Contributory Retirement Board	6	6	0	2
Chelsea Retirement Board	8	0	0	5
Dukes County Contributory Retirement Board	2	2	0	4
Everett Retirement Board	9	2	0	8
Falmouth Retirement Board	5	7	0	7
Fitchburg Retirement Board	5	1	0	8
Hingham Retirement Board	1	0	0	4
Leominster Retirement Board	0	1	0	6
Lexington Retirement Board	0	0	0	3
Malden Contributory Retirement Board	8	2	2	4
Marlborough Retirement Board	5	3	0	3
Medford Retirement Board	5	4	0	6
Methuen Contributory Retirement Board	2	2	0	7
Natick Retirement Board	0	0	0	1
Needham Contributory Retirement Board	2	0	0	0
Northampton Retirement Board	4	2	0	1
Norwood Contributory Retirement Board	4	4	0	3
Peabody Retirement Board	1	2	0	5
Pittsfield Retirement Board	4	4	0	10
Revere Retirement Board	3	3	0	9
Wellesley Retirement Board	2	1	0	1
West Springfield Retirement Board	4	2	0	4
Westfield Retirement Board	3	3	1	9
Weymouth Retirement Board	2	1	0	10
RETIREMENT BOARDS WITH 900-2,399 ACTIVE MEMBERS	_	· ·	-	
Berkshire County Retirement Board	0	0	0	6
Brockton Retirement Board	10	21	1	24
Brookline Retirement Board	10	9	0	17
Chicopee Retirement Board	8	5	0	11
Fall River Retirement Board	12	5	0	17
Framingham Retirement Board	2	2	0	6
Franklin Regional Retirement Board	0	0	0	5
Hampshire County Regional Retirement Board	5	5	0	8
Haverhill Retirement Board	14	3	0	8
				9
Holyoke Retirement Board Lawrence Retirement Board	3	2	0	
	13	3	0	15
Lowell Retirement Board	24	11	1	15

Disability Retirement Statistics (As of 12/31/23)

RETIREMENT BOARDS WITH 900-2,399 ACTIVE MEMBERS (Cont'd)	MEDICAL PANEL REQUESTS	DISABILITY RETIREMENT APPROVALS	ACCIDENTAL DEATH APPROVALS	CME REVIEWS
Mass Port Authority Employees' Retirement Board	3	0	0	6
Mass Water Resources Authority Retirement Board	2	2	0	7
New Bedford Retirement Board	6	6	0	23
Newton Retirement Board	8	6	0	15
Plymouth Contributory Retirement Association	13	7	0	18
Quincy Retirement Board	8	8	0	19
Salem Contributory Retirement Board	1	2	0	5
Somerville Retirement Board	3	3	0	6
Taunton Retirement Board	5	3	0	13
Waltham Retirement Board	6	4	0	4
RETIREMENT BOARDS WITH 2,400-10,000 ACTIVE MEMBERS				
Barnstable County Retirement Board	15	18	0	52
Bristol County Retirement Board	13	12	0	28
Cambridge Retirement Board	17	10	0	27
Essex Regional Retirement Board	6	6	0	9
Hampden County Regional Retirement Board	7	5	0	16
Middlesex County Retirement Board	18	24	0	63
Norfolk County Retirement Board	23	15	1	40
Plymouth County Retirement Board	16	9	0	33
Springfield Retirement Board	23	17	0	67
Worcester Regional Retirement Board	32	12	3	43
Worcester Retirement Board	15	14	0	30
RETIREMENT BOARDS WITH 10,001-100,000 ACTIVE MEMBERS				
Boston (City) Retirement Board	152	85	1	122
Massachusetts Teachers' (MTRS)	28	22	0	53
State Retirement Board	115	114	0	530
Total All Retirement Boards	770	569	10	1,607

RESTORATION TO SERVICE STATISTICS (Provided for those boards where a disability retiree has returned to work.)				
Arlington 1 Boston 1		Webster 1		

The following is a listing of the investment managers, custodians, and consultants that serve the Massachusetts public pension systems. The listing is based on information supplied by the retirement boards.

Retirement Board		Investment Vendors	
Adams	PRIT Fund		
Amesbury	PRIT Fund		
Andover Consultant: Dahab Associates	• PRIT Fund	Federated Hermes	RhumbLine Advisers
Arlington Custodian: M&T Bank Wilmington Trust	PRIT Fund		
Attleboro • Custodian: M&T Bank Wilmington Trust • Consultant: Dahab Associates Inc.	 Amalgated Bank BTG Pactual Timberland Investment Group Copeland Capital Management Fidelity Institutional Asset Management Frontier Capital Management Co., LLC 	 Hancock Timber Resource Group, Inc. Intercontinental Real Estate Corp. Invesco Private Capital, Inc. Peregrine Capital 	 PRIT Fund RhumbLine Advisers State Street Global Advisors Van Eck
Barnstable County	PRIT Fund		
Belmont Custodian: M&T Bank Wilmington Trust Consultant: NEPC, LLC 	• PRIT Fund	 AEW Capital Management, LP Atlanta Capital Carillon Reams Goldentree Asset Management, LP HarbourVest Partners, LLC 	 Loomis, Sayles & Company Pacific Investment Management Company, LLC RhumbLine Advisers Rothschild Asset Management Inc.
Berkshire County	• PRIT Fund		
Beverly	• PRIT Fund		
Blue Hills Regional	• PRIT Fund		
Boston (City) • Custodian: State Street Bank & Trust • Consultant: NEPC, LLC	 57 Stars, LLC ABS Investment Management, LLC AEW Capital Management, LP Aberdeen Asset Management Alcentra NY, LLC Allspring Global Investments, Inc. American Securities Angelo, Gordon & Co., LP Apollo Global Management, Inc. Arclight Capital Partners, LLC Aristotle Capital Management, LLC Arsenal Real Estate Funds, LLC Ascent Venture Partners Audax Group Aurora Management Partners Bain Capital Bernzott Capital Advisors BlackRock Advisors, LLC Blackstone Alternative Asset Management Assoc. Boston Millennia Partners Brookfield Asset Management CCMP Capital Advisors, LLC Carlyle Realty Partners Columbia Management Investment Advisors, LLC Crescent Capital Group, LP CVC Capital Partners DE. Shaw Investment Management, LLC DRC Capital Management, LP 	 Energy Spectrum Partners EnTrust Global Partners FSN Capital Goldentree Asset Management, LP Grosvenor Capital Management, LP Hamilton Lane HarbourVest Partners, LLC H.I.G. Capital ICONIQ Capital, LLC Incline Elevate Income Research & Management Insight Venture Management Intercontinental Real Estate Corp. Invesco Core Real Estate USA, LP J.F. Lehman & Company, Inc. J.P. Morgan Kayne Anderson Capital Advisors, LP KPS Capital Partners, LP Lazard Asset Management, LLC Lexington Partners, LP Lighthouse Investment Partners Main Capital Partners B.V. Mesirow Advanced Strategies, Inc. MPM Capital, LP NGP Energy Capital Management, LLC Qaktree Capital Management, LP PanAgora Asset Management, Inc. Perella Weinberg Partners Capital Management, LP Platinum Equity Advisors, LLC 	 Polen Capital Management, LLC Polunin Capital Partners Prudential Capital Partners Prudential Real Estate Investors RhumbLine Advisers Roark Capital Partners Sanderling Ventures SCP Private Equity Partners Segall Bryant & Hamill Siguler Guff Advisers, LLC SL Capital Partners State Street Global Advisors STG Partners, LLC Sterling Fund Management Summit Partners, LP TA Realty Technology Crossover Ventures THL Credit Senior Loan Strategies, LLC Thoma Bravo, LLC Todd Asset Management Tristan Capital Partners Vontobel Asset Management, Inc. Westfrield Capital Partners, LLC Z Capital Partners, LLC Westfield Capital Partners, LLC Z Capital Partners, LLC

Retirement Board		Investment Vendors	
Boston Teachers	PRIT Fund		
Braintree Custodian: SEI Private Trust Company	SEI Investments	Lexington Partners, LP	PRIT Fund
 Bristol County Custodian: M&T Bank Wilmington Trust Consultant: Segal Marco Advisors 	 Aberdeen Asset Management Arrowstreet Capital, LP Ashmore Investment Advisors, Ltd. Bardin Hill Investment Partners BlackRock Investment Management, LLC Brookfield Timberlands Management, LP BTG Pactual Timberland Investment Group Ceres Partners, LLC Clearbridge Investments Columbia Management Investment Advisers, LLC DN Partners Dupont Capital Management Earnest Partners, LLC 	 Entrust Global Fiera Capital Inc. Fiduciary Trust International Frontier Capital Management Co., LLC GCM Customized Fund Investment Group Goldentree Asset Management, LP Grosvenor Capital Management, LP Hancock Timber Resource Group, Inc. IFM Investors (US) Advisor Intercontinental Real Estate Corp. Lazard Asset Management, LLC LSV Asset Management Lyrical Asset Management, LP 	 Mesirow Financial Private Equity Advisors, Inc. Oaktree Capital Management, LP Northern Trust Investments, Inc. Pacific Investment Management Company (PIMCO) Polaris Capital Management, LLC PRIT Fund RBC Global Asset Management (U.S.), Inc. RREEF Management, LLC State Street Global Advisors Stone Harbor Investment Partners TerraCap Management, LLC Timberland Investment Resources, LLC William Blair Investment Management, LLC
Brockton Custodian: SEI Private Trust Company Consultant: Fiducient Advisors, LLC	SEI Investments	Aberdeen Asset ManagementAscent Venture Partners	 Landmark Partners, LLC Siguler Guff Advisers, LLC
Brookline	• PRIT Fund	 Hancock Timber Resource Group, Inc. HarbourVest Partners, LLC Invesco Private Capital, Inc. 	 Lexington Partners, LP Sustainable Woodlands Partners, LLC
Cambridge • Custodian: M&T Bank Wilmington Trust • Consultant: Segal Marco Advisors	 Aberdeen Asset Management Acadian Asset Management BlackRock Investment Management, LLC Campbell Global LLC Fidelity Institutional Asset Management Garcia Hamilton & Associates, LP Hamilton Lane Hancock Natural Resource Group, Inc. IFM Investors (US) Advisor, LLC 	 Income Research & Management Intercontinental Real Estate Corp. J.P. Morgan Investment Management Landmark Partners, LLC Lazard Asset Management, LLC Lexington Partners, LP Loomis Sayles & Co. Mellon Investments Corporation Mesirow Financial Investment Management, LLC 	 Penn Square Global Real Estate Group, LLC PineBridge Investments, LLC Polaris Capital Management, LLC PRIT Fund RBC Global Asset Management (U.S.), Inc. RhumbLine Advisers Rockwood Capital, LLC UBS Realty Advisors, LLC Wellington Management Company
Chelsea	PRIT Fund		
Chicopee Custodian: SEI Private Trust Company	SEI Investments	PRIT Fund	
Clinton Consultant: Trust Advisory Group, Ltd.	• PRIT Fund		
Concord Custodian: Comerica Bank Consultant: Fiducient Advisors, LLC	 Acadian Asset Management, LLC BlackRock Advisors, LLC Grantham, Mayo, Van Otterloo & Co. 	PRIT FundRhumbline Advisers	Russell Investment Group Wellington Management
Danvers Custodian: M&T Bank Wilmington Trust Consultant: Segal Marco Advisors 	 Barings, LLC BMO Asset Management Corporation Eagle Capital Management, LLC Gerber-Taylor Management Company 	 HarbourVest Partners IFM Investors Advisor Intercontinental Real Estate Corp. Mesirow Financial Investment Management, Inc. 	 PRIT Fund RhumbLine Advisers TA Realty Western Asset Management Co.

Retirement Board		Investment Vendors	
Dedham	PRIT Fund		
Dukes County Custodian: M&T Bank Wilmington Trust Consultant: Dahab Associates, Inc.	 Aristotle Capital Management, LLC Atlanta Capital 	 Garcia Hamilton & Associates LP Polen Capital Management, LLC 	• PRIT Fund
Easthampton	PRIT Fund		
Essex County	PRIT Fund	BlackRock Investment Management, LLC	Levine Leichtman Capital Partners, Inc
Everett	PRIT Fund		
Fairhaven	PRIT Fund		
Fall River	PRIT Fund		
Falmouth Custodian: M&T Bank Wilmington Trust Consultant: Wainwright Investment Counsel, LLC	 Dimensional Fund Advisors, LP Hamilton Lane HGK Asset Management, Inc. Lexington Partners, LP 	 LMCG Investments, LLC Lord Abbett & Co., LLC Mesirow Financial Private Equity Advisors, Inc. PRIT Fund 	 Rhumbline Advisers Siguler Guff Advisers, LLC State Street Global Advisors TerraCap Partners
Fitchburg	PRIT Fund		
Framingham	• PRIT Fund		
Franklin County Custodian: Comerica Bank Consultant: Dahab Associates, Inc.	 Aberdeen Asset Management Chartwell Investment Partners Copeland Capital Management 	 Fiera Capital Inc. Loomis, Sayles & Company O'Shaughnessy Asset Management, LLC 	Polen Capital Management, LLCPRIT Fund
Gardner	PRIT Fund		
Gloucester	PRIT Fund		
Greater Lawrence	PRIO Wealth, LLC		
Greenfield	• PRIT Fund		
Hampden County	PRIT Fund		
Hampshire County Consultant: Dahab Associates, Inc.	PRIT Fund	Glouston Capital Partners, LLCLexington Partners, LP	Portfolio Advisors, LLC
 Haverhill Custodian: M&T Bank Wilmington Trust Consultant: Wainwright Investment Counsel, LLC 	• PRIT Fund	 Brandywine Global Investment Management Fisher Investments Global Forest Partners, LP Globespan Capital Management, Inc. GrandBanks Capital Income Research & Management Mesirow Financial Institutional Real Estate 	 Molpus Woodlands Group, LLC Putnam Advisory Company, LLC Stafford Private Equity, Inc. TerraCap Management The Davis Companies The DSF Group
Hingham • Consultant: Meketa Investment Group	PRIT Fund		

Retirement Board		Investment Vendors	
Holyoke Consultant: Mariner Institutional 	 Aberdeen Asset Management Acadian Asset Management, LLC Allspring Global Investments, Inc. Aristotle Capital Management Constitution Capital Partners, LLC Entrust Global Fidelity Institutional Asset Management LMCG Investments, LLC 	 Long Wharf Real Estate Partners, LLC Loomis, Sayles & Company Mesirow Financial Private Equity Advisors, Inc. Monroe Capital Newton Investment Management, LLC Oaktree Capital Management, LP Oberweis Asset Management, Inc. Polaris Capital Management, LLC 	 PRIT Fund Putnam Investment Management, LLC RBC Global Asset Management (U.S.) Inc. Seizert Capital Partners, LLC State Street Global Advisors TerraCap Management, LLC Wasatch Advisors, Inc. Western Asset Management Co.
Hull	PRIT Fund		
Lawrence	• PRIT Fund		
Leominster	• PRIT Fund		
Lexington Custodian: M&T Bank Wilmington Trust Consultant: Meketa Investment Group, Inc. Lowell	Acadian Asset Management, LLC Angelo, Gordan & Co., LP Driehaus Capital Management, LLC Fidelity Investments PRIT Fund	 Golub Capital Partners Kayne Anderson Rudnick Investment Management Matthews International Capital Management, LLC Monroe Capital 	 PRIT Fund RhumbLine Advisers Wellington Management Company, LLP White Oak Global Advisors, LLC
Custodian: M&T Bank Wilmington Trust			
Lynn	• PRIT Fund		
Malden • Custodian: M&T Bank Wilmington Trust	• De Burlo Group, Inc.		
Marblehead	• PRIT Fund		
Marlborough Custodian: Comerica Bank Consultant: Meketa Investment Group, Inc. 	 Clarion Partners Constitution Capital Partners, LLC Dimensional Fund Advisors LP Driehaus Capital Management, LLC 	 Fiduciary Management, Inc. Frontier Capital Management Co., LLC HarbourVest Partners, LLC Payden & Rygel 	 RhumbLine Advisers Rockwood Capital Shenkman Capital Management, Inc. State Street Global Advisors
MHFA Custodian: M&T Bank Wilmington Trust Consultant: Meketa Investment Group, Inc.	 Aberdeen Asset Management AEW Capital Management, LP Ascent Venture Partners Constitution Capital Partners, LLC GQC Partners, LLC 	 Goldman Sachs Asset Management, LP HarbourVest Partners, LLC IFM Investors Advisor Intercontinental Real Estate Corporation Longfellow Investment Management 	 Lord Abbett & Co., LLC MetLife Investment Management State Street Global Advisors TA Realty
Massport Custodian: M&T Bank Wilmington Trust Consultant: Wilshire Associates	Baillie Gifford Overseas Limited PRIT Fund	 Pzena Investment Management, LLC State Street Global Advisors 	Wellington Management Company, LLP
MTRS (Mass Teachers' Retirement System)	• PRIT Fund		

Retirement Board		Investment Vendors	
MWRA Custodian: M&T Bank Wilmington Trust Consultant: NEPC, LLC 	 ABS Investment Management, LLC Alcentra NY, LLC Ascent Venture Partners Axiom International Investors, LLC Baillie Gifford Baxter Street Boston Partners CarVal Investors Cerberus Capital Management, LP Coho Partners, Ltd. Constitution Capital Partners LP EnTrust Global Partners 	 Foundry Group, LLP Garcia Hamilton & Associates LP Hamilton Lane HarbourVest Partners, LLC J.F. Lehman & Company Kayne Anderson Capital Advisors, LP Landmark Partners, LLC LMCG Investments Loomis, Sayles & Company Lord, Abbett & Co. LLC Mesirow Morgan Stanley Octagon Credit Investors, LLC 	 Park Square Capital Pinebridge Investments, LLC Polen Capital Management, LLC PRIT Fund Private Advisors, LLC RhumbLine Advisers Schroders Investment Management North America, Inc. SEI Investments TA Realty TerraCap Management, LLC UBS Hedge Fund Solutions, LLC
Maynard • Custodian: M&T Bank Wilmington Trust	PRIT Fund	Boston Advisors, LLC	
Medford • Custodian: M&T Bank Wilmington Trust • Consultant: NEPC, LLC Melrose	 Ashmore Investment Advisor Limited City of London Investment Management Garcia Hamilton & Associates LP PRIT Fund 	Lazard Asset Management, LLC Loomis, Sayles & Company PRIT Fund	 RhumbLine Advisers William Blair & Company, LLC
Methuen	PRIT Fund PRIT Fund	BlackRock Investment Management, LLC Global Forest Partners, LP	Globespan Capital Management, Inc.
Middlesex County	PRIT Fund	• Global Folest Partners, LP	• Gobespan capital Management, Inc.
Milford	PRIT Fund		
Milton			
Minuteman Regional	PRIT Fund		
Montague Natick Custodian: M&T Bank Wilmington Trust Consultant: Fiducient Advisors, LLC	PRIT Fund SEI Investments	• PRIT Fund	
Needham	PRIT Fund		
New Bedford Consultant: Segal Marco Advisors	 Aberdeen Asset Management, Inc. Acadian Asset Management, LLC Constitution Capital Partners LLC Hamilton Lane Hancock Natural Resource Group, Inc. IFM Investors Advisor 	 Intercontinental Real Estate Corp. Kohlberg & Co. Lexington Advisors, Inc. Loomis, Sayles & Company Mesirow Private Equity Advisors, Inc. Newton Investment Management, LLC 	 Pacific Investment Management Company, LLC Neuberger Berman Management State Street Global Advisors Limited UBS Realty Investors, LLC Westfield Capital Management Company, LP
Newburyport	PRIT Fund		
Newton	• PRIT Fund		

Retirement Board

Norfells Country	Amundi Pioneer Institutional Asset Mgmt., Inc.	Globespan Capital Management, Inc.	Mesirow Financial Institutional Real Estate
Norfolk County Custodian: M&T Bank Wilmington Trust 	Aristotle Capital Management, LLC	Goldentree Asset Management, LP	MFS International Advisors, Inc.
	Ascend Ventures Group, LLC	GW&K Investment Management	PGM Global
 Consultant: Wainwright Investment Counsel, LLP 	17		PRIT Fund
	BNY Mellon Asset Management N.A.		
	Constitution Capital Partners, LLC	HarbourVest Partners, LLC	RhumbLine Advisers
	Corsair Capital LLC	Income Research & Management	Seizert Capital Partners, LLC
	D.E. Shaw Investment Management, LLC	Intercontinental Real Estate Corporation	Siguler Guff Advisors, LLC
	DSF Group	Invesco Private Capital, Inc.	TA Realty
	EnTrust Partners, LLC	LLM Capital Partners	TerraCap Management
	Gamco Asset Management, Inc.	LMCG Investments, LLC	Wellington Management Company, LLP
	Gerding Edlen Investment Management, LLC	Mesirow Capital Partners IX, LP	
North Adams	De Burlo Group, Inc.	PRIT Fund	
• Custodian: M&T Bank Wilmington Trust			
North Attleboro	Aristotle Capital Management, LLC	Brandes Investment Partners, LP	Loomis, Sayles & Company
Custodian: M&T Bank Wilmington Trust	Atlanta Capital	Davenport & Company, LLC	RhumbLine Advisers
 Consultant: Dahab Associates, Inc. 	Axiom International Investors, LLC	Intercontinental Real Estate Corporation	Vontobel Asset Management, Inc.
Consultant: Danab Associates, IIIC.	Blackrock Realty Advisors, Inc.	Lazard Asset Management, LLC	
Northampton	De Burlo Group, Inc.	PRIT Fund	
Custodian: M&T Bank Wilmington Trust			
Northbridge	PRIT Fund		
Norwood	Aberdeen Asset Management, Inc.	Constitution Capital Partners	Landmark Partners, LLC
Custodian: M&T Bank Wilmington Trust	American Funds	Dimensional Fund Advisors, LP	Newton Investment Management, LLC
Consultant: Meketa Investment	Aristotle Capital Management, LLC	Driehaus Capital Management, LLC	PRIT Fund
Group, Inc.	Atlanta Capital	HabourVest Partners, LLC	RhumbLine Advisers
	Brigade Capital Management	IFM Investors Advisor	State Street Global Advisors
	Columbia Management Investment Advisors, LLC		
Peabody	• PRIT Fund		
Pittsfield	PRIT Fund		
Plymouth	Acadian Asset Management	Boston Trust Walden	Rhumbline Advisers
Custodian: M&T Bank Wilmington Trust	Aristotle Capital Management, LLC	Columbia Management Investment Advisers	Wellington Management Company, LLP
Consultant: Fiducient Advisors, LLC	BlackRock Advisors, LLC	PRIT Fund	Westfield Capital Management Company, LP

Investment Vendors Retirement Board ABS Investment Management, LLC Global Infrastructure Management, LLC • Old Farm Partners **Plymouth County** AEW Capital Management, LP Globespan Capital Management, Inc. Parametric Portfolio Associates ▶ Custodian: State Street Bank & Trust Aristotle Capital Management, LLC HarborVest Partner PCCP, LLC ▶ Consultant: Meketa Investment Group Ascent Venture Partners RhumbLine Advisers • · IFM Investors Advisor . Atlantic Street Capital Income Research & Management **Ridgemont Equity Partners** . Audax Management Company (NY), LLC Invesco Trust Company Rockpoint Capital . . Basalt Infrastructure Partners • I Squared Capital Schroder Investment Management • BlackRock Advisors, LLC John Hancock Trust Company Searchlight Capital Partners . **BTG Pactual Timberland Investment Group** • J.P. Morgan Investment Management, Inc. • Siguler Guff Advisers, LLC Carlyle Investment Management • Kohlberg & Co., LLC Summit Partners, LP CAI Manager LP Kopernik Global Investors Systematic Financial Management Landmark Partners, LLC . Charlesbank Capital Partners, LLC . TA Realty Constitution Capital Partners, LLC Lexington Partners, LP • Trilantic Capital Management L.P. • DN Partners Vulcan Value Partners, LLC . LLR Management Driehaus Capital Management, LLC LMCG Investments Walter Scott & Partners, Ltd. . Entrust Global Partners Waud Capital Partners Lord Abbett & Company Fisher Investments • Mesirow Financial Capital Partners X, LP Wellington Management First Eagle Investment Management • Wellspring Capital Management, LLC Mesirow Financial Institutional Real Estate • Freeman Spogoli Management Newton Investment Management, LLC RhumbLine Advisers Acadian Asset Management, LLC Global Infrastructure Management Quincy Adams Street Partners, LLC • Goldman Sachs Asset Management, LP . **Ridgemont Equity Partners** • Custodian: M&T Bank|Wilmington Trust AEW Capital Management, LP • Hancock Timber Resource Group, Inc. Rockwood Capital ▶ Consultant: Meketa Investment Axiom HarborVest Partners Searchlight Capital Partners Group, Inc. Beach Point Capital Management, LP IFM Investors Advisor SL Capital Partners, LLP • Brookfield Asset Management • J.P. Morgan Investment Management State Street Global Advisors • Brown Advisory, LLC Stockbridge Core and Value Advisors LLR Management Cedar Street Asset Management Loomis, Sayles & Company TerraCap Management, LLC • Charlesbank Capital Partners, LLC Mesirow Financial Private Equity Advisors Torchlight Investors, LLC Columbia Management Investment Advisors, LLC · Oppenheimer Alternative Investment • Trilantic Capital Management L.P. • Management Driehaus Capital Management, LLC UBS Realty Investors, LLC . PRIT Fund Entrust Permal Wellspring Capital Management • Freeman Spogli Management PRIT Fund Reading PRIT Fund Revere PRIT Fund Salem PRIT Fund Aristotle Capital Management, LLC Massachusetts Financial Services Co. Saugus • Lord Abbett & Co., LLC RhumbLine Advisers ▶ Custodian: M&T Bank|Wilmington Trust LMCG Investments, LLC ► Consultant: Wainwright Investment Counsel, LLP PRIT Fund Shrewsbury ► Custodian: M&T Bank|Wilmington Trust Consultant: Dahab Associates, Inc.

Retirement Board		Investment Vendors	
Somerville • Custodian: Comerica Bank	Congress Asset Management Company, LLP Lazard Asset Management, LLC	 Loomis, Sayles & Company PRIT Fund 	RhumbLine AdvisersUBS Realty Investors, LLC
Southbridge	• PRIT Fund		
Springfield	PRIT Fund		
State	• PRIT Fund		
Stoneham	PRIT Fund	Russell Investment Group	
Swampscott Custodian: M&T Bank Wilmington Trust Consultant: Wainwright Investment Counsel, LLC	• PRIT Fund	 Aristotle Capital Management, LLC Intercontinental Real Estate Corporation 	LMCG Investments, LLCTA Realty
Taunton • Custodian: M&T Bank Wilmington Trust • Consultant: Dahab Associates, Inc.	 Aberdeen Asset Management Allspring Global Investments, Inc. BlackRock Investment Management, LLC Boston Partners Ceres Partners, LLC C.S. Mckee, LP Domain Timber Advisors Frontier Capital Management Co., LLC GAM International Management Limited 	 Intercontinental Real Estate Corporation John Hancock Trust Company LMCG Investments, LLC Mesirow Financial Investment Management, Inc. Molpus Woodlands Group, LLC Pacific Investment Management Company, LLC Polen Capital Management, LLC PRIT Fund 	 Quantitative Management Association Rhumbline State Street Global Advisors TA Realty Timberland Investment Resources TimberVest, LLC Vontobel Asset Management, Inc. Weaver C. Barksdale & Associates
Wakefield	PRIT Fund		
Waltham Custodian: SEI Private Trust Company Consultant: Fiducient Advisors, LLC 	SEI Investments	PRIT Fund	
Watertown Custodian: M&T Bank Wilmington Trust Consultant: Fiducient Advisors, LLC 	 ABS Investment Management Acadian Asset Management, LLC American Realty Advisors BlackRock Advisors Brandywine Global Investment Management, LLC Columbia Management Investment Advisors, LLC 	 Eaton Vance Management Entrust Global Partners, LLC Income Research & Management Massachusetts Financial Services Company Pinebridge Investment, LLC 	 PRIT Fund RCP Advisors, LLC TA Realty TerraCap Management, LLC Wellington Management Company, LLP
Webster	PRIT Fund		
Wellesley	• PRIT Fund		

Retirement Board		Investment Vendors	
West Springfield • Custodian: Comerica Bank	De Burlo Group, Inc.		
Westfield • Consultant: Fiducient Advisors, LLC	 AEW Capital Management LP Columbia Management Investment Advisers, LLC Constitution Capital Partners, LLC Hamilton Lane Income Research & Management Intercontinental Real Estate Corporation 	 Lazard Asset Management LMCG Investments, LLC Long Wharf Real Estate Partners, LLC Loomis, Sayles & Company Pacific Investment Co., LLC Polaris Capital Management, LLC 	 PRIT Fund RBC Global Asset Management (U.S.), Inc. State Street Global Advisors TerraCap Management Wasatch Advisors, Inc.
Weymouth Custodian: Comerica Consultant: Fiducient Advisors, LLC 	 747 Capital Acadian Asset Management, LLC Adams Street Partners Aristotle Capital Management, LLC Ashmore Investment Advisors BlackRock Advisors, LLC Boston Trust Walden Company Brooke Private Equity Associates Management, LLC Brandywine Global Investment Management, LLC Constitution Capital Partners, LLC 	 EnTrust Global Partners, LLC Hamilton Lane Harbor Capital Advisors Inc. HarbourVest Partners, LLC Invesco Private Capital, Inc. Landmark Partners, LLC Lazard Asset Management, LLC MIRA, Americas Inc. Newton Investment Management, LLC Oaktree Capital Management, LP 	 Principal Global Investors LLC PRIT Fund RhumbLine Advisers Riverbridge Partners, LLC Seizert Capital Partners, LLC Sigular Guff Advisers, LLC Stockbridge Core and Value Advisors TerraCap Management, LLC Wasatch Advisors Western Asset Management Co.
Winchester	PRIT Fund		
Winthrop	PRIT Fund		
Woburn Custodian: M&T Bank Wilmington Trust	• PRIT Fund	Stafford Private Equity Inc.	
Worcester Custodian: M&T Bank Wilmington Trust Consultant: Meketa Investment Group	 Acadian Asset Management, LLC AEW Capital Management, LP American Securities, LLC Ascent Venture Partners Boston Millenia Partners BTG Pactual Timberland Investment Group, LLC Capital International, Inc. Charlesbank Capital Partners, LLC Eaton Vance Management 	 EnTrust Global Partners, LLC Global Infrastructure Management, LLC Hancock Natural Resource Group, Inc. Harvest Partners, LP IFM Investors (US) Advisor, LLC Income Research & Management Lazard Asset Management, LLC Loomis, Sayles & Company Newstone Capital Partners, LLC 	 Northstar Company, LLC Old Farm Partners LP PRIT Fund Ridgemont Equity Partners Riverside Company SL Capital Partners, LLP State Street Global Advisors TA Associates Management Vitruvian Partners, LLP
Worcester Regional	PRIT Fund		

PRIM Investment Vendors (Organized by Service Provider Type)

Custodian:	Consultants:		
 BYN Mellon 	 Aberdeen Asset Management Inc Portfolio Completion Strategies Advisory Services Albourne – Operational Due Diligence Service Provider 		
External Auditor:	 Albourne – Operational Due Diligence Service Provider Hamilton Lane - Private Equity Advisory Services 		
	 International Woodland Company — Timbe 		
 KPMG, LLP 	Meketa - Public Market Advisory Services	ices	
	 NEPC, LLC - Asset Allocation Advisory Serv NewAlpha Asset Management – Portfolio (
	Domestic Equity Manage		
Acadian Asset Management, LLC	Frontier Capital Management	Riverbridge Partners	
Brandywine Global Investment Management	Lord, Abbett & Co., LLC	State Street Global Advisors	
Driehaus Capital Management, LLC	Rhumbline Advispers	Summit Creek Advisors	
	International Equity Mana	agers	
Acadian Asset Management, LLC	Causeway Capital Management	Pzena Investment Management	
ARGA Investment Management Artisan Partners	Columbia Threadneedle Driehaus Capital Management, LLC	Russell Implementation Services State Street Global Advisors	
AQR Capital	Marathon Asset Management, LLP	Xponance	
Baillie Gifford	Mondrian Investment Partners		
	Emerging Market Manag	ers	
Acadian Asset Management, LLC	Driehaus Capital Management, LLC	T. Rowe Price	
AQR Capital	Pzena Investment Management	Wasatch Advisors, Inc.	
Baillie Gifford			
	Core Fixed Income Manaş	gers	
AFL-CIO Housing Investment Trust	Loomis, Sayles & Company	Pacific Investment Management Company, LLC	
Bivium Capital PartnersBlackrock Financial Management, Inc.	Longfellow Investment Management New Century Advisors, LLC	Pugh Capital Management	
	Value-Added Fixed Income M	anagers	
400 Capital Management, LLC	Bivium Capital Partners	Mudrick Capital Management, LP	
Anchorage Capital Group, LLC	Blue Owl Capital	Newmarket Capital	
ArrowMark Partners	Eaton Vance Institutional Funds	Oaktree Capital Management	
Ashmore Investment Management, Ltd.	Fidelity Management Trust Company	Pacific Investment Management Company, LLC	
BentallGreenOak	LibreMax Capital	Shenkman Capital Management	
Berkshire Group, LLC	Loomis, Sayles & Company, LP	Voya Financial	
Alte	rnative Investments—Real Est		
AEW Capital Management	CBRE Global Investors ContexEquary Investment Management	INVESCO Realty Advisors	
Berkshire Group, LLC Blackstone	CenterSquare Investment Management DivcoWest	LaSalle Investment Management Stockbridge	
Cambridge Associates		· Stockbruge	
	Alternative Investments—Tim	nberland	
Campbell Group, LLC	Forest Investment Associates		
Alternative In	vestments—Portfolio Complet	tion Strategy Managers	
400 Capital Management	Contrarian Capital Management	• Mygale, LLP	
Basswood Capital Management, LLC	Davidson Kempner Advisors, Inc.	North Peak Capital Management	
Blackrock Aviation Propleut Funds, LLC	DLD Asset Management, LP	Oaktree Capital Management Decify Alternative Acet Management (a (PAAMCO)	
 Breakout Funds, LLC Brigade Capital G.P., LLC 	Elliot Capital Advisors, LP FIR Tree Capital Management	Pacific Alternative Asset Management Co. (PAAMCO) PGIM, Inc.	
Cantab Capital Partners, LP	Investcorp Investment Advisors, LLC	 RV Capital Management Pvt., Ltd. 	
Canvas Capital	JEN Partners, LLC	Sightway Capital	
Capula Management Limited	Land and Buildings Investment Management	Silver Creek Advisory Partners, LLC	
 CKC Capital, LLC Complus Asset Management Limited 	LMCG Investments, LLC Mudrick Capital Management, LP	Summit Partners Public Asset Management, LLC Tabor Asset Management	
Complus Asset Management Limited	Muurick Capital Management, LP	Iddor Asset Management	

PRIM Investment Vendors

(Organized by Service Provider Type, Continued)

Alternative Investments–Private Equity and Private Debt Managers

PRIVATE EQUITY:

- 1315 Capital
- Acon Investments
- Advent International
- Alta Communications
- American Industrial Partners
- American Securities
- Apollo Management Co.
- Ascent Venture Partners
- Austin Ventures
- Bain Capital
- Battery Ventures
- Berkshire Partners
- Blackstone Capital Partners
- Bridgepoint Capital
- Carlyle Partners
- Castille Ventures
- Catalyst Investors
- Centerbridge Capital
- Charlesbank Capital Partners
- Charterhouse Capital
- Chequers Capital
- Clearhaven Partners
- CVC Capital
- Cypress Group
- Denham Capital Management
- El Dorado Ventures
- Elysian Capital
- Essex Woodlands Health Ventures
- Ethos Private Equity
- Exponent Private Equity
- First Reserve Corporation
- Flagship Pioneering
- GENSTAR Capital
- Georgian Partners
- GTCR Golder Rauner
- Hellman & Friedman Capital Partners

Parametric Portfolio Associates, LLC

134 | 2023 Annual Report |

• H.I.G. Capital Partners

- Highland Capital
- HongShab Capital
- Hony Capital
- Index Ventures
- Insight Partners
- Institutional Venture Partners
- InterWest Partners
- JMI Equity
- Kelso & Company
- Kepha Partners
- Keytone Ventures
- Kohlberg Kravis Roberts and Co.
- . **KPS** Capital Partners
- Lovell Minnick Partners
- Madison Dearborn Capital Partners
- M/C Venture Partners
- Medicxi Ventures
- Menlo Ventures •
- Montagu
- Montreux Equity Partners
- Nautic Partners (Chisholm Management Co.)
- New Enterprise Associates
- Nordic Capital
- Odyssey Investment Partners
- Olympus Partners
- Onex Capital
- Permira Ventures
- Polaris Growth Partners
- Polaris Venture Partners
- Providence Equity Partners
- Providence Strategic Growth •
- Quad-C Management
- Quantum Energy Partners
- Red Arts Capital
- Rembrandt Venture Partners
- Rhone Group, LLC
- Rivian Buy Out Partner AG

Overlay Managers (Cash)

SAIF Partners

- SCP Vitalife
- Sherbrooke Capital
- Sofinnova Ventures, Inc.
- Spark Capital
- Stone Point Capital (Trident Capital)
- Summit Ventures
- SV Life Sciences Advisors
- TA Associates
 - Technology Crossover Ventures
 - . Tenaska Capital
 - Texas Pacific Group
 - The Gores Group
- Thoma Bravo •
- Thoma Cressey Partners
- Thomas H. Lee Equity Partners, LP
- Thompson Street Capital
- Tidemark .
- **Torquest Partners** •
- . **Towerbrook Capital Partners**
- TPG Capital

.

•

•

•

 Union Square Ventures VantagePoint Partners

Vestar Capital Partners

• Vista Equity Partners

Wing Ventures

Waterland Private Equity

• Xenon Private Equity, LTD

PRIVATE DEBT:

Anchorage Capital

CarVal Investors

Avenue Capital Group

Centerbridge Special Credit

Oaktree Capital Management

Wavzata Investment Partners

Trust Company of the West (TCW)

Crescent Capital Group

GSO Capital Partners

WestView Capital Partners

Current PERAC Directory

Units and Staff Members (As of 10/1/2024)

ADMINISTRATION	ACTUARIAL	AUDIT	COMMUNICATIONS
Bill Keefe Executive Director	John Boorack Actuary	Caryn M. Shea, CPA Director of Audits	Natacha Dunker Communications Director
Caroline J. Carcia First Deputy Executive Director	James Lamenzo Actuarial Consultant	Scott Henderson Deputy Chief Auditor	Karen McMahon Deputy Communications Director
Kenneth J. Hill, Esq. Deputy Executive Director	Timothy Larkin Senior Actuarial Analyst	Elaine Pursley, CPA Audit Manager	Michael D. Litvack Webmaster/Graphic Design
Patrick Charles, Esq. Assistant Deputy Director	Nate Geitz Actuarial Assistant	Naomi Marinez Auditor I	Specialist Ben Polatin
Virginia Barrows Chief Financial Manager	Benjamin Condon Actuarial Assistant	George Nsia Auditor I	Communications Specialist
Katie Bozzi Fiscal Officer II	Daniel Svirkin Actuarial Assistant	John Silva Auditor I	FRAUD PREVENTION
Ellen Furtado Administrative Assistant	Sherry Brooks-Ross Benefit Calculation Specialist	Carol Poladian, CPA Auditor I	Sandra King Fraud Prevention Manager
Loretta Lamoureux Fiscal Officer I		Rajeshwari Prasad Auditor I	
Tracey Legaski Administrative Assistant		Richard Wrona, CPA Senior Auditor II	
Patricia Tanso Administrative Assistant		Junior Yanga Auditor I	
		Can Cao Auditor I	
		Connor Allan Auditor I	
		Jordan Pipes Auditor I	
		Thomas Tracy Auditor II	

DISABILITY

Patrice Looby, R.N. Manager of Medical Services

Mariyam S. Gadatia, R.N. Nurse Case Manager

Eileen Tobin, R.N., B.S.N. Nurse Case Manager

Regina Manning Case Manager II

Erin Groesser Case Manager I

INFORMATION SYSTEMS

Dan Boyle Director of Information Systems

Anthony Tse Project Manager

Robert Perez Senior Systems Engineer

K-Lone Steele Senior Systems Engineer

Stephen Forcucci .net Developer

INVESTMENT/COMPLIANCE

John P. Galvin Compliance Manager

Sarita Yee Deputy Compliance Manager

Kellie-Anne Capurso Investment Analyst

Anna Huang Investment Analyst

Rose Morrison Administrative Assistant

LEGAL

Judith Corrigan, Esq. General Counsel

Felicia McGinnis, Esq. Senior Associate General Counsel

Christopher Windle, Esq. Associate General Counsel

Doreen Duane Executive Assistant This page intentionally left blank.

ADAMS AMESBURY ANDOVER ARLINGTON ATTLEBORO BARNSTABLE COUNTY BELMONT BERKSHIRE COUNTY BEVERLY BLUE HILLS BOSTON BRAINTREE BRISTOL COUNTY BROCKTON BROOKLINE CAMBRIDGE CHELSEA CHICOPEE CLINTON CONCORD DANVERS DEDHAM DUKES COUNTY EASTHAMPTON ESSEX EVERETT FAIRHAVEN FALL RIVER FALMOUTH FITCHBURG FRAMINGHAM FRANKLIN REGIONAL GARDNER GLOUCESTER GREATER LAWRENCE GREENFIELD HAMPDEN COUNTY HAMPSHIRE COUNTY HAVERHILL HINGHAM HOLYOKE HULL LAWRENCE LEXINGTON LEOMINSTER LOWELL LYNN MALDEN MARBLEHEAD MARLBOROUGH MASS HOUSING MASSPORT MASS TEACHERS MWRA MAYNARD MEDFORD MELROSE METHUEN MIDDLESEX COUNTY MILFORD MILTON MINUTEMAN MONTAGUE NATICK NEEDHAM NEW BEDFORD NEWBURYPORT NEWTON NORFOLK COUNTY NORTH ADAMS NORTH ATTLEBORO NORTHAMPTON NORTHBRIDGE NORWOOD PEABODY PITTSFIELD PLYMOUTH PLYMOUTH COUNTY QUINCY READING REVERE SALEM SAUGUS SHREWSBURY SOMERVILLE SOUTHBRIDGE SPRINGFIELD STATE STONEHAM SWAMPSCOTT TAUNTON WAKEFIELD WALTHAM WATERTOWN WEBSTER WELLESLEY WEST SPRINGFIELD WESTFIELD WEYMOUTH WINCHESTER WINTHROPWOBURN WORCESTER REGIONAL WORCESTER

COMMONWEALTH OF MASSACHUSETTS



Public Employee Retirement Administration Commission Five Middlesex Avenue, Suite 304 · Somerville, MA 02145 PH 617-666-4446 · FAX 617-628-4002 · WEB www.mass.gov/perac