



2021

ANNUAL REPORT



PERAC

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CHAIR

Philip Y. Brown, Esq.

Principal/Founder, Brown Counsel



VICE CHAIR

The Honorable **Suzanne M. Bump**

Auditor of the Commonwealth

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



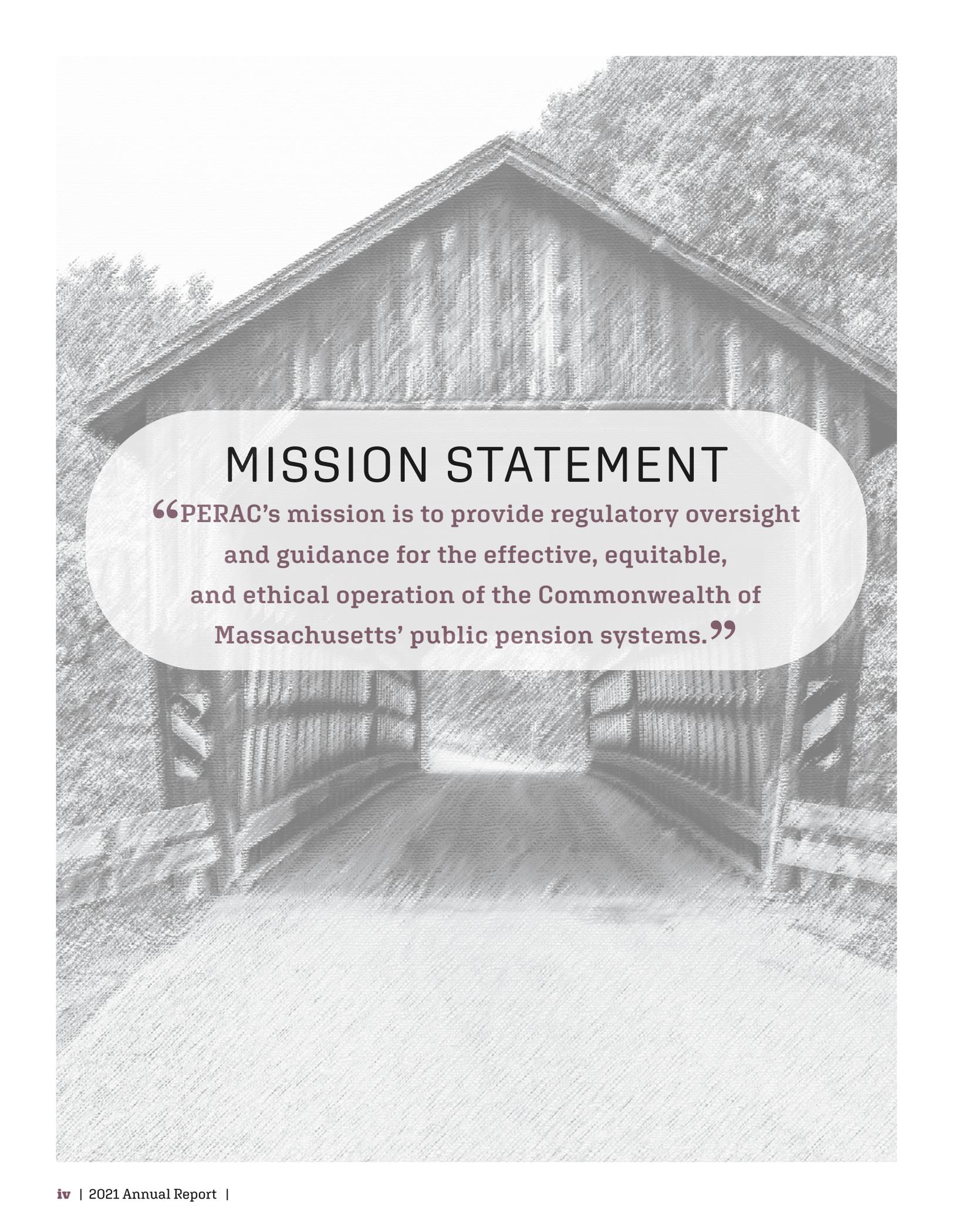
James J. Guido

Sergeant, Chelsea
Police Department



Jennifer F. Sullivan, Esq.

Governor's Appointee
Investment Professional



MISSION STATEMENT

“PERAC’s mission is to provide regulatory oversight and guidance for the effective, equitable, and ethical operation of the Commonwealth of Massachusetts’ public pension systems.”



Dedication

James Machado

Upon retiring as a sergeant after a 43-year career with the Fall River Police Department and a 44-year career in public service, Jim Machado announced at the May 11, 2022 PERAC Commission meeting that he would not be seeking re-appointment to the public safety seat chosen by the governor. Jim made his presence felt as Commissioner for 20 years, appointed by five different governors. He could have sought to remain a Commissioner, which would have been welcomed, but true to his nature, Jim put the system and others before himself and felt that the seat should be occupied by an active uniformed member.

Jim began his career in public service as a substitute teacher before joining the Fall River Police in the late 1970's. He served as a member of the PRIM board. He served as an Executive Board member for the Massachusetts Police Association, and will continue as their Legislative Director. In addition to his public service, Jim had extensive investment and financial experience. He was actively involved in the retirement system before PERAC and there was no bigger champion of PERAC than Jim. He saw the need for uniformity, an independent arbiter, and a trusted partner and resource. His presence and his leadership have much to do with PERAC's present-day position and its positive collaborative working relationships with the 104 retirement systems.

“Jim brought passion, compassion, intelligence and common sense to the Commission. He played a significant role in developing investment policies, ensuring assets were protected and enhanced to provide the promised retirement security for hard-working public employees.”

Jim was a staunch advocate for members. At the same time, he was fair, equitable, and reasonable. The little guy, PERAC, and board staff had no better friend than Jim. He brought passion, compassion, intelligence, and common sense to the Commission. He played a significant role in developing investment policies, ensuring assets were protected and enhanced to provide the promised retirement security for hard-working public employees.

Through it all, Jim did this with a tremendous sense of decency, humility, and humor. Your fellow Commissioners, PERAC staff, members of the retirement community, and public employees across the state appreciate and salute Jim Machado for all his contributions in guiding and strengthening the public retirement system. ■



Jim, we wish you the best of everything in your retirement!



Letter from the Chair

Philip Y. Brown

“For all the back and forth, all the difficulties and challenges, the Massachusetts public retirement systems came through 2021 as strong as ever.”

What a year. Oh wait, I said that last year.

While 2020 was a shock to the system, 2021 brought the aftershocks. It was not a complete do-over, but 2021 felt like we were in suspended animation, taking one step forward only to take one step back. Cases got better; then they got worse. Masks came off; masks went back on. Indoor events were ok; then they were not. Life was kind of normal again; life was then anything but normal.

That said, it seemed easier than 2020 because we had all adapted. We made the big necessary changes in 2020. We pulled together. Last year, it was a matter of making adjustments, being flexible and riding out the storm.

For all the back and forth, all the difficulties and challenges, the Massachusetts public retirement systems came through 2021 as strong as ever. Boards earned an astounding composite investment return of 19.5%. While we know there will be highs and there will be lows, it is still an accomplishment to celebrate and reflects on the diligence, dedication, and sound business practices of board members, staff and their investment partners.

At the same time, less flashy but equally important tasks continued to be fulfilled: counseling members, conducting open meetings, issuing pension checks, and a host of other matters that often go unnoticed but are nonetheless vitally essential.

In a similar fashion, the PERAC IT team continued to work behind the scenes to enhance the PROSPER application to help make staff and board members' work more streamlined and interactions with PERAC more convenient. All active board members, over 500 in total, successfully filed their statements of financial interests and did so via PROSPER for the first time. Retirement calculations were another enhancement that brought added value and benefit for all involved.

Many other PERAC units function in a similar manner, not basking in the spotlight, but doing the work that is needed and relied on. They join the retirement boards in their goals of providing quality service, protecting and enhancing system assets, and ensuring fair and equal treatment for all. Whether in person, on the phone, through email or on a video conference, PERAC staff remain committed to serving members, board members and staff, working collaboratively and serving as a resource and a partner.

No one personified that belief more, or believed in the mission of PERAC more, than Jim Machado, who retired as a PERAC Commissioner in early 2022. He was involved in the public retirement system from so many perspectives throughout his 44-year career in public service: as a substitute teacher, a 43-year member of the Fall River Police Department retiring as a Sergeant, as an Executive Board member



and Legislative Director for the Massachusetts Police Association, as a member of the PRIM board, and for 20 years as a PERAC Commissioner. Having worn so many different hats with so many vested interests and varied perspectives, and having been active during pre-PERAC days, Jim's advocacy and support for PERAC carried serious weight. He embraced the vision of uniform standards across systems, equitable treatment for all and robust education. Jim always saw PERAC as part of the solution, not a source of conflict. His passion, intelligence, empathy, and sense of fairness deeply resonated with me and with all who know him. He always stood up for, and never forgot about, the little guy. Thank you for your service and guidance Jim, and even more so, your friendship.

Also departing as a Commissioner was Tim Dooling, who was appointed an administrative law judge for the Department of Industrial Accidents. Tim served for five years as the designee of State Auditor Suzanne Bump. Tim brought varied state government experience to the table, was always prepared, always engaged and ready to ask the tough question. Tim brought perspective and judgment to the Commission (qualities that I'm sure recommended him for the position of an administrative law judge) and we appreciated his thoughtfulness, his good humor and his friendship. We at PERAC appreciate all his contributions.

“Whether in person, on the phone, through email or on a video conference, PERAC staff remain committed to serving members, board members and staff, working collaboratively and serving as a resource and a partner.”

With their departures, we welcomed as Commissioners Chelsea Police Sergeant and Massachusetts Police Association Executive Board Member Jay Guido and Michael Leung-Tat, Auditor Bump's designee and General Counsel. Both bring important and needed voices to the Commission. We are delighted that they are willing to serve. They are already making significant contributions to PERAC and we look forward to working with them in the years to come.

Here's to moving forward in all aspects. Continuing to move toward normalcy and our regular lives. Embracing some of the enhancements and innovations borne out of having to adapt. Growing stronger bonds with each other and the members we serve. Building upon the strong foundation of our retirement system.

Thank you to all retirement board members, retirement board staff, PERAC staff, Commissioners, and all members of the Massachusetts public retirement community for your continued dedication and diligence to operate, and advance, a well-run system. ■

Sincerely,

Philip Y. Brown
Chair



Letter from the Executive Director

John W. Parsons

“In 2021, COVID, with all of its restrictions, masks, boosters, social distancing, Zooms and lack of in-person contact, had the feeling of that last house guest that just doesn’t know when to leave.”

The Commission and staff are pleased to release this Annual Report on the Massachusetts Public Retirement Systems for 2021, which in ways both good and bad, was similar to 2020.

In 2020, life came to a halt and then dramatically changed. We got creative, we developed work arounds, we persevered, we got used to the “new normal.” In 2021, COVID, with all its restrictions, masks, boosters, social distancing, Zooms and lack of in-person contact, had the feeling of that last house guest that just doesn’t know when to leave. It was another year without the MACRS or Emerging Issues conferences.

Similar to 2020, retirement systems continued to excel in 2021 providing quality services to members and delivering retirement allowances without a hitch. After strong composite investment returns in both 2019 and 2020, the 2021 results of 19.5% topped both years due in part to continued strong board oversight and leadership, competitive processes, and deliberate portfolio construction. The same wise and thoughtful approaches which brought bountiful returns will be

heavily leaned on as 2022 begins with challenging market and economic conditions.

Tied to careful investment planning is careful establishment of the investment return assumption. It is a fine line to establish taking into account the impacts this assumption makes on funded status, on appropriations, and on asset allocation and risk tolerance. Utilizing a variety of reports and studies in its analysis, PERAC established a Commonwealth investment return assumption of 7.0% for 2021, which fell about right in the middle of public funds nationally. Most local boards were within 50 basis points either way of that figure.

Collectively, 2021 saw PERAC and the boards move forward in automating our interactive processes. Retirement calculations are now processed completely via PROSPER, eliminating the need for paper files and improving the timing and integrity of the pension calculation function. In addition, board members submitted

their annual Statements of Financial Interest via PROSPER for the first time and PERAC reported 100% compliance for active members. Subsequent filings will be greatly enhanced by the new program. Technology continued to aid in holding public meetings, counseling members and processing benefits, among other functions.

Technology also allowed us to continue our education program with 41 courses all offered online with 1,990 completions. And it was woven into our latest pension fraud campaign, “**Help Take a Bite Out of Pension Fraud,**” as we are utilizing electronic means to distribute the message in addition to the normal dissemination of posters.



actions can be prevented, collectively we have recognized the need for vigilance, have raised our awareness and have taken action – whether it’s taking training, upgrading IT infrastructure and software, reviewing processes to increase security, or pursuing cyber insurance. At PERAC, we have investigated actual and attempted cyber attacks, issued memos offering guidance and offered training. In particular, we asked that all attempted cyber attacks, whether successful or not, be reported to PERAC. This has proved very useful in communicating threats to other retirement systems and for understanding the nature of the threats. Collectively, all of these efforts are proving fruitful as a number of potential attacks have been detected and snuffed out. However, we all know cybersecurity is an ongoing concern we will all have every day going forward.

On the legislative front, PERAC filed eight bills for the 2021-22 legislative session to address various retirement issues ranging from veterans’ buyback to gender pay equity to pension forfeiture. All were reported favorably by the Public Service Committee. Chapters 67 and 76 of the Acts of 2021 increased from 960 to 1,200 the number of hours a superannuation retiree can work in the public sector.

Chapter 29 of the Acts of 2021 made a significant change to Section 100, allowing for those benefits to be awarded in the case of a police officer who dies responding to an emergency after the tragic death of Worcester Police Officer Manny Familia who drowned while attempting a water rescue. We honor Officer Familia’s service and sacrifice and wish his family peace and comfort.

The PERAC Commission saw change in 2021 with the departure of Commissioner Tim Dooling, the designee of State Auditor Suzanne Bump, and the appointment of Commissioner Michael Leung-Tat. Dooling served as a Commissioner for over five years through September 2021 before being appointed an administrative law judge in the Department of Industrial Accidents. He was a great resource, always prepared, thorough and asked tough, pointed questions to ensure all angles were covered. Michael Leung-Tat, having previously worked with Dooling, succeeded him as General Counsel at the State Auditor’s Office. Michael graduated from Yale before earning his law degree from the Cardozo School of Law in New York City. He brings with him experience at both the municipal and state levels of government.

The PERAC staff also saw a couple of key veteran employees retire in Senior Executive Assistant Kim Boisvert and Senior Programmer/Analyst Chuck Hoyt. Followers of PERAC know Kim well as she was instrumental in handling all Commission meeting matters. Chuck was more behind the scenes, but his presence was also felt as a key player in the development of PROSPER. We wish them both a happy and well-deserved retirement.

Calendar year 2021 was not without its challenges, but between improving conditions and having had to deal with all that the beginning of the pandemic brought in 2020, it seemed more manageable. That is a tribute to all in the retirement community.

Thank you for your contributions to the Massachusetts public retirement system and I am proud to continue working with you for an effective, equitable and ethical system for all. ■

Sincerely,



John W. Parsons, Esq.
Executive Director





PERAC

Year in Review



Commission/Staff Update

Auditor Suzanne Bump appointed **Michael Leung-Tat** to serve as her statutory designee to the Commission replacing **Timothy Dooling** who now serves as an administrative law judge in the Department of Industrial Accidents (DIA). Dooling served as the auditor's designee from April 2016 to September 2021. Leung-Tat serves as the Office of the State Auditor's (OSA) General Counsel and Deputy Auditor. Leung-Tat oversees the OSA's legal affairs, as well as the agency's Bureau of Special Investigations and Division of Local Mandates.

James (Jimmy) Machado, long-time serving Commissioner and former Sergeant of the Fall River Police Department, announced his retirement in May 2022. Machado served as a PERAC Commissioner since 2002, serving as the Governor's designee to the public safety union representative seat. Governor Charlie Baker appointed **James J. Guido** to a five-year term to fill that seat on the Commission. Guido has been a

member of the Executive Board of the Massachusetts Police Association since 2021. He served for two years as the vice president of the Chelsea Police Patrol Officers Association in 2008. He earned a promotion to detective in September 2017 followed by a promotion to sergeant in January 2021. On behalf of all PERAC staff, we look forward to working with Commissioners Leung-Tat and Guido in the years ahead.

In 2021, **Kim Boisvert**, Senior Executive Assistant and **Charles Hoyt**, Senior Programmer/Analyst announced their retirements. We wish them both a happy retirement!

While several PERAC staff resigned to accept other positions at retirement boards and state agencies, we welcomed **John Galvin** to serve as PERAC's Compliance Analyst, overseeing board member compliance. ■





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.

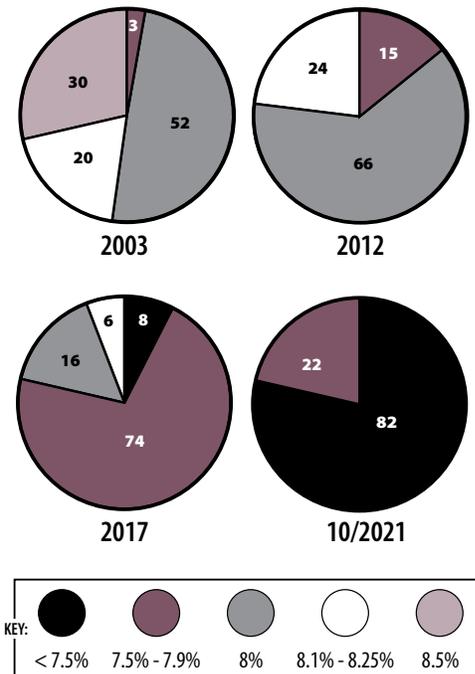
In the actuarial area, PERAC approved 38 revised funding schedules and completed 20 actuarial valuations in 2021. The valuations complemented the 23 valuations performed by private actuaries. Throughout the year, PERAC responded to legislative and gubernatorial requests for analysis of legislation and made several presentations. ■

Actuarial Valuations and Funding Schedules (By Year)

YEAR	PERAC VALUATIONS	PRIVATE VALUATIONS	FUNDING SCHEDULES
2021	20	23	38
2020	18	55	69
2019	17	22	36
2018	19	44	63
2017	22	24	46
2016	21	50	62
2015	24	24	40

The Massachusetts Investment Return Assumptions from 2003 to present:

Investment Return Assumptions—Massachusetts



Audits

Like many industries, the audit unit worked in a hybrid fashion, working both remotely and gradually more in person as COVID restrictions progressively lifted. PERAC issued 15 audits and 15 follow-up audits in 2021. Appreciation is extended to all retirement boards that underwent audits in 2021 for their cooperation, courtesy, and accommodations.

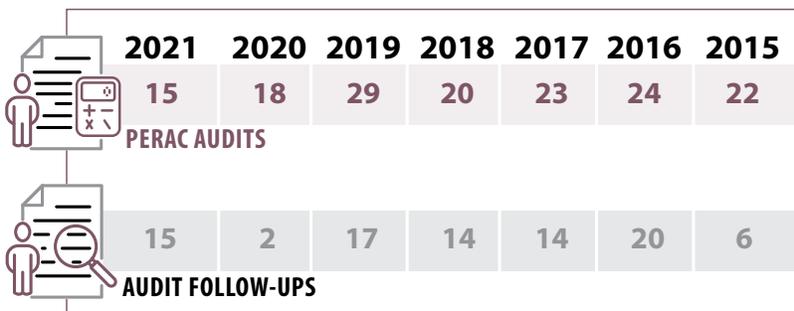
In order to improve workflow, we elevated senior auditor Elaine Pursley to the role of reviewer where she will help shepherd audits from field work through issuance. Combined with the work deputy chief auditor

Scott Henderson already does in this area, it has improved the quality and timeliness of the work. Staffing was otherwise stable until late 2021 when an auditor left for other employment.

We continued to work with boards under temporary orders, reviewing draft policies, monitoring improvements and

conducting follow-up audits. We also participated in the internal working group reviewing all of PERAC's regulations. Monthly meetings of the full audit unit continued to provide great opportunities for coaching, troubleshooting, and training. ■

Total PERAC Audits Conducted (By Year)



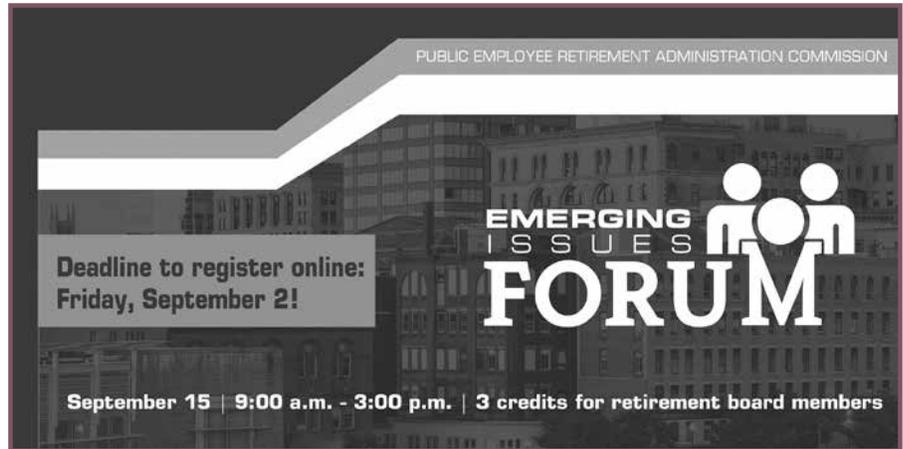


Emerging Issues Forum

Due to the ongoing pandemic, we were unable to host our annual Forum in 2021.

However, for 2022 - it's back! We are thrilled to host our Emerging Issues Forum in person for the first time since 2019! We will continue to monitor all public health guidelines and mandates and will notify boards should anything change, but for now, plan on joining us in September.

Registration information is available on our website. ■



Education

This past year, PERAC continued to offer a comprehensive educational program through a wide variety of educational webinars that members could participate

in remotely. While the pandemic caused

this milestone tenth year of our education program to come and go without much fanfare, our goal of providing board members with the skills needed to properly administer a public retirement system has not been overlooked. We provided a wide variety of courses, including *Liability in Certain Situations & Dual Membership*, *Retirement On-Ramp - a course for newer board members*, *Recent Changes in Massachusetts Public Pension Law*, and closed out the year as we typically do with *Cases of Interest*.

This year we also partnered with the Office of the Inspector General and the Office of the State Comptroller to offer board members training in the areas of *Internal Control Plans*, *Cybersecurity*, *Public Sector Ethics*, and *Fiduciary Duty for Board Members*. All of these sessions were very well attended, and we plan to continue with the partnership in the coming years.

As we continue to work through a prolonged pandemic and all of its phases, we will continue to work on improvements and new, innovative ways to offer our board members educational opportunities in order for them to stay abreast of the ever-changing public pension landscape despite the logistical challenges. ■

Number of Education Courses Completed (By Year)

2013		1,743
2014		1,796
2015		1,412
2016		1,348
2017		1,874
2018		1,633
2019		1,278
2020		1,273
2021		1,992



Legislation

Several pieces of legislation were enacted into law in 2021 that impacted the retirement community.

Chapter 20 of the Acts of 2021 was signed into law, allowing certain pandemic waivers from statutes to continue. Of particular note, was the extension of the Open Meeting Law waivers from requiring a physical quorum for a meeting and requiring the Chair be physically present. As part of those waivers, the statute continued to require adequate alternate means of access to the public for public meetings.

After the tragic death of Worcester Police Officer Manny Familia who drowned trying to save a child, the Legislature passed, and the Governor approved, Chapter 29 of the Acts of 2021. Specifically, Section 9 of the Acts amended Chapter 32, Section 100 to provide these benefits to a spouse if a police officer is killed, or sustains injuries which result in their death, while engaged in the performance of their duties while at the scene of an emergency.

This change brings the language relative to police officers in line with the language relative to firefighters.

An additional \$250 million payment to the Commonwealth's pension obligations was authorized pursuant to Chapter 33 of Acts of 2021.

On June 15, 2021, the provisions of Section 68 of Chapter 227 of the Acts of 2020 expired, which reinstated the cap on earnings and 960 hours worked for public retirees working in the public sector. However, in October, the limit on hours was permanently expanded to 1,200 hours per calendar year, retroactive to July 1 pursuant to Chapters 67 and 76 of the Acts of 2021. ■

PERAC's eight filed bills were all heard and reported favorably by committee:

1	House 10 - An Act Relative to Pension Forfeiture
2	House 11 - An Act Relative to the Veterans' Buyback
3	House 12 - An Act Relative to the Recovery of Overearnings
4	House 13 - An Act Relative to Wages
5	House 14 - An Act Relative to Modification of Retirement Allowances
6	House 15 - An Act Relative to Accidental Disability and Group 1 Emotional Distress
7	House 16 - An Act to Protect Gender Pay Equity
8	House 17 - An Act Providing for Statement of Financial Interests Flexibility

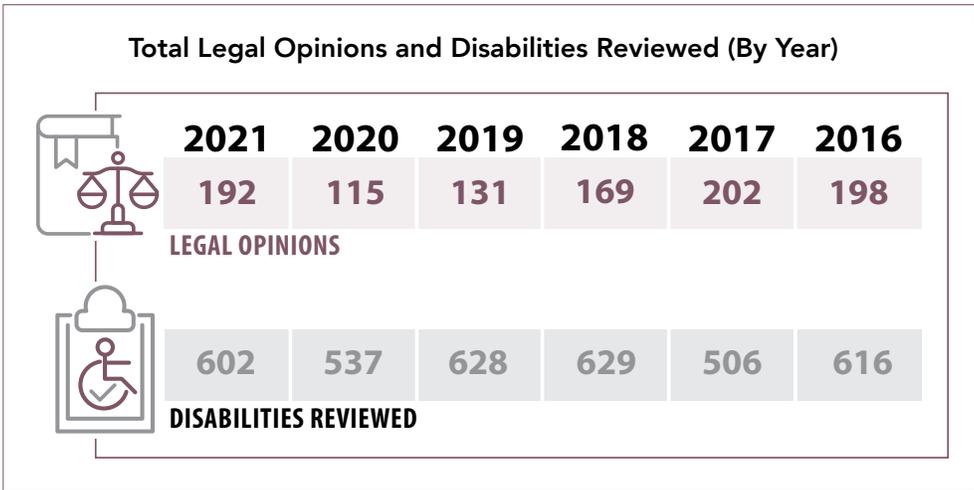


Legal Unit

PERAC's Legal Unit represented the Commission (both remotely and in person) 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. Assistant Deputy Director Ken Hill argued before the Supreme Judicial Court this past Spring in a matter involving the regular compensation status of certain payments. The Legal Unit also produced 192 Opinion Letters in 2021,

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. The Legal Unit reviewed approximately 640 applications in 2021, and approved 602 of them. Members of the Legal Unit also participated in, produced and presented numerous educational webinars, and also returned to limited in-person training. ■

*“The Legal Unit produced **192** Opinion Letters in 2021, and conducted the statutory disability retirement review of all accidental disability, accidental death, and ordinary disability applications approved by the 104 retirement boards.”*



Information Technology

The Information Technology Unit has been busy with a number of ongoing projects to enhance internal PERAC functionality as well as improve many processes for retirement systems.

The unit is continuing its work on migrating pension calculations into PROSPER to streamline the process. A cashbook submission application is also being developed to allow all boards to submit cashbooks online. This new

functionality should be ready for production sometime in the fall of 2022. Work on other PROSPER enhancements continues as well as work triaging PROSPER issues with board members and vendors through the PROSPER HelpDesk and directly with boards and vendors.

In addition to the development work, the Unit recently updated internal computer systems for the PERAC office with the migration to Office 365. This transition is expected to enhance both internal and external communications. ■



Medical Panels

In addition to the information detailed in the Profiles, PERAC, as always, has been busy assisting the boards in other areas. In 2021, 806 medical panel requests were initiated and processed. A total of 600 disability applications and 16 accidental death claims were approved in 2021. For Post-Retirement medical reviews, 1,116 disability retirees were eligible for comprehensive medical evaluations. Occupational Health Physicians conducted comprehensive medical evaluations on 7 retirees and 3 retirees were examined for restoration to service. ■

Medical Panels (By Year)

YEAR	MEDICAL PANEL REQUESTS	IN-HOUSE CME REVIEWS	DISABILITY APPROVALS	DEATH APPROVALS
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

“In 2021, PERAC analyzed 12,733 earnings reports, 3,344 retirees reported earnings and 87 earned more than the statutory limits. An additional 178 retirees failed to comply with the reporting requirement.”



Post-Retirement Earnings

PERAC is responsible for the post-retirement monitoring of disabled retirees. One aspect of that task is enforcing the earnings limits set forth in Chapter 32. In 2021, PERAC analyzed 12,733 earnings reports, 3,344 retirees reported earnings and 87 earned more than the statutory limits. An additional 178 retirees failed to comply with the reporting requirement. This resulted in the identification of \$1,189,525.84 in excess earnings and \$5,624,045.49 for non-compliance. In addition, 21 retirees waived their allowance, saving \$438,967.49. ■

Post-Retirement Earnings (By Year)

YEAR	EARNINGS REPORTS ANALYZED	REPORTED EARNINGS	NUMBER OF EXCESS EARNERS	NON-COMPLIANT	WAIVED
2021	12,733	3,344	87	178	21
2020	12,783	3,563	87	161	22
2019	12,859	3,473	87	92	23
2018	12,773	3,557	62	73	21
2017	15,576	3,720	59	135	21
2016	15,895	3,849	54	101	37
2015	15,887	3,845	146	84	36

YEAR	EXCESS EARNINGS AMOUNT	NON-COMPLIANCE AMOUNT	WAIVED AMOUNT
2021	\$1,189,525	\$5,624,045	\$438,967
2020	\$1,459,319	\$4,100,425	\$263,238
2019	\$1,222,947	\$2,401,351	\$356,167
2018	\$933,422	\$1,572,729	\$352,691
2017	\$858,781	\$4,418,867	\$400,867
2016	\$839,993	\$2,606,471	\$502,028
2015	\$1,459,550	\$2,176,174	\$556,935



PROFILES

MA Contributory Retirement Boards

Introduction

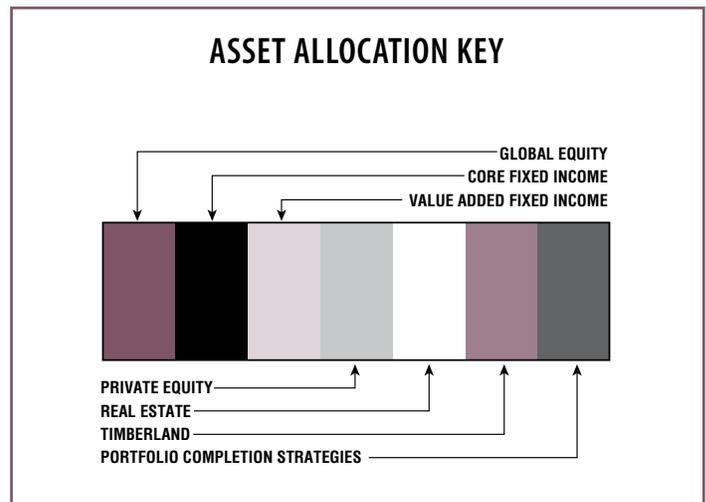
The Board Profile section of the PERAC Annual Report provides a detailed assessment of some of the important indicators relative to the financial health of the retirement systems. The information provided in this report can enable board members to provide factual comment and advice to policymakers as 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 last valuation.

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

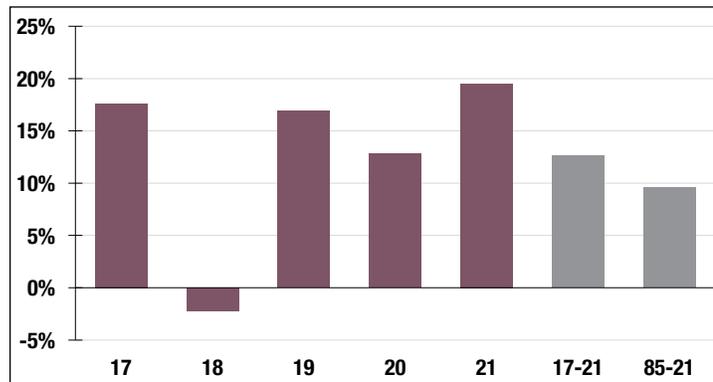
COMPOSITE INVESTMENT PROFILE

- Commonwealth of Massachusetts
- Public Employee Retirement Systems

\$123.6 B Market Value	19.51% 2021 Returns	10.86% 2012-2021 (Annualized)	9.58% 1985-2021 (Annualized)
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Investment Returns

(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



Adams

CONTACT INFORMATION

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BOARD MEMBERS

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

BOARD ADMINISTRATOR

William Flynn

SYSTEM MEMBERS

Active Members 197
Total Payroll \$7.0 M
Average Salary \$35,400
Average Age 47
Average Service 10.9

Retired Members 158
Benefits Paid \$3.0 M
Average Benefit \$18,700
Average Age 74

2020 EARNED INCOME OF DISABILITY RETIREES:

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

Last Valuation: 1/1/20
Actuary: PERAC



Click/Scan for Website

\$44.1 M
Market Value

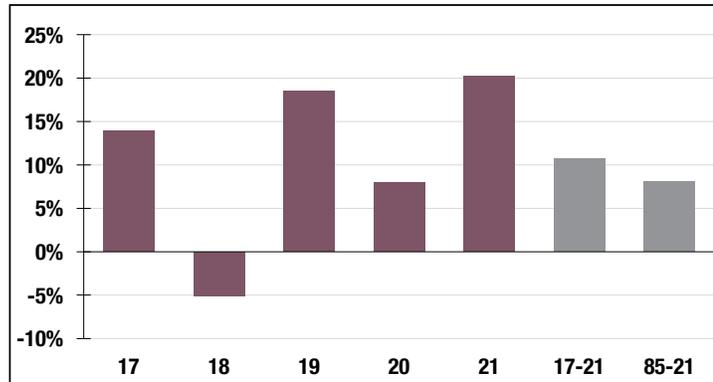
20.22%
2021 Returns

8.30%
2012-2021
(Annualized)

8.09%
1985-2021
(Annualized)

Investment Returns

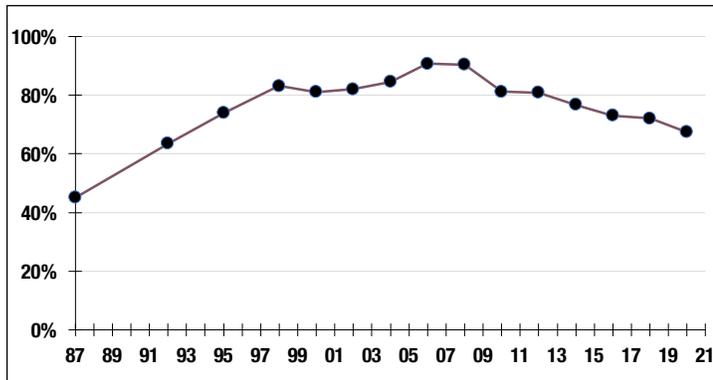
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



67.4%

Funded Ratio

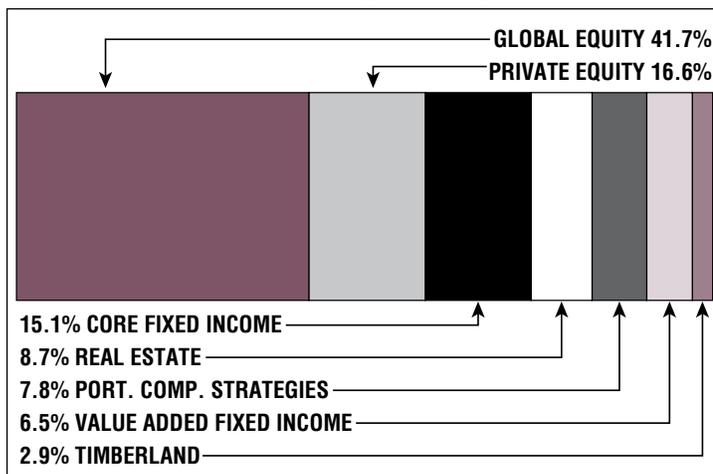
2037

Fully Funded

7.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$17.6 M

Unfunded Liability

\$2.0 M
(FY2022)

Total Pension Appropriation

Amesbury

CONTACT INFORMATION

City Hall
62 Friend Street
Amesbury, MA 01913
Phone 978-388-8131
Fax 978-388-6727

BOARD MEMBERS

Marisa Batista
Craig Bailey
Bonnijo Kitchin
Donna Cornoni*
David Van Dam
*indicates Chairperson

BOARD ADMINISTRATOR

Kevin Caira

SYSTEM MEMBERS

Active Members276
Total Payroll\$14.9 M
Average Salary\$53,800
Average AgeNA
Average ServiceNA

Retired Members255
Benefits Paid\$6.7 M
Average Benefit\$26,400
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees13
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



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\$78.3 M
Market Value

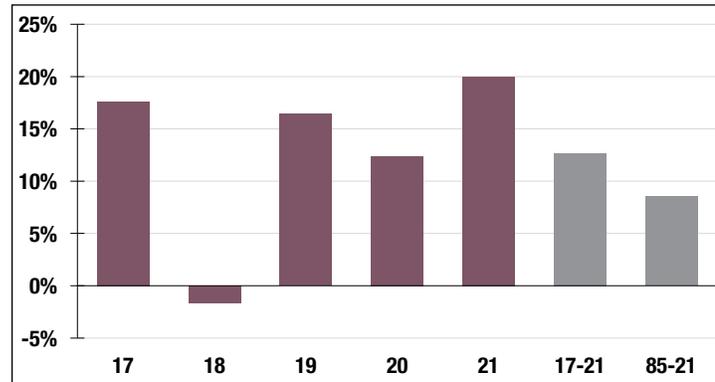
20.00%
2021 Returns

10.89%
2012-2021
(Annualized)

8.55%
1985-2021
(Annualized)

Investment Returns

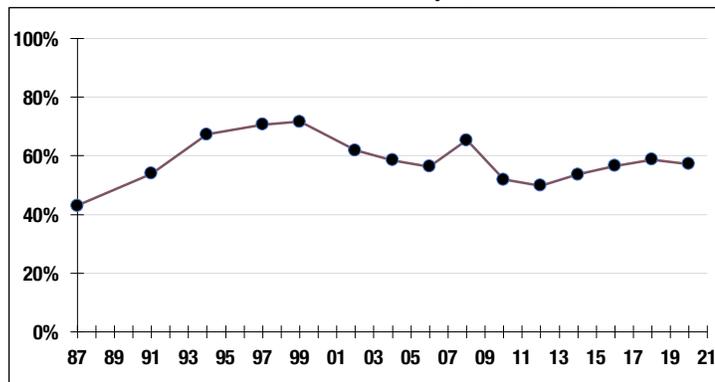
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



57.2%

Funded Ratio

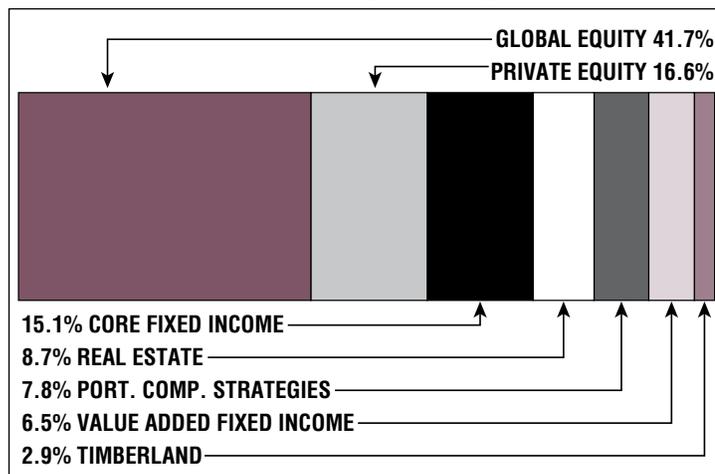
2035

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$45.0 M

Unfunded Liability

\$5.1 M
(FY2022)

Total Pension Appropriation

Andover

CONTACT INFORMATION

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

BOARD MEMBERS

Hayley Green*
Thomas Hartwell
Elena Kothman
Eric Teichert
Blackwell Taylor
*indicates Chairperson

BOARD ADMINISTRATOR

Elena Kothman

SYSTEM MEMBERS

Active Members739
Total Payroll\$45.8 M
Average Salary\$62,000
Average Age49
Average Service 12.3

Retired Members523
Benefits Paid\$16.6 M
Average Benefit\$31,700
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees39
Reported Earnings 12
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: KMS



Click/Scan for Website

\$384.2 M
Market Value

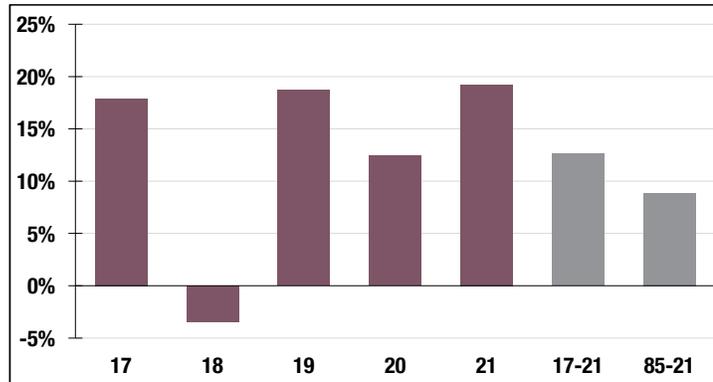
19.22%
2021 Returns

10.88%
2012-2021
(Annualized)

8.85%
1985-2021
(Annualized)

Investment Returns

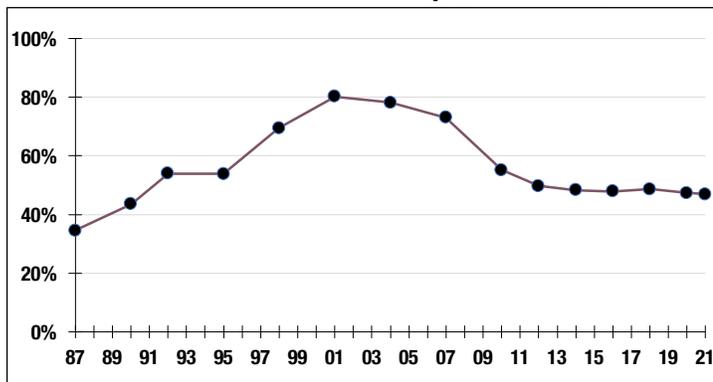
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



5.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



46.9%

Funded Ratio

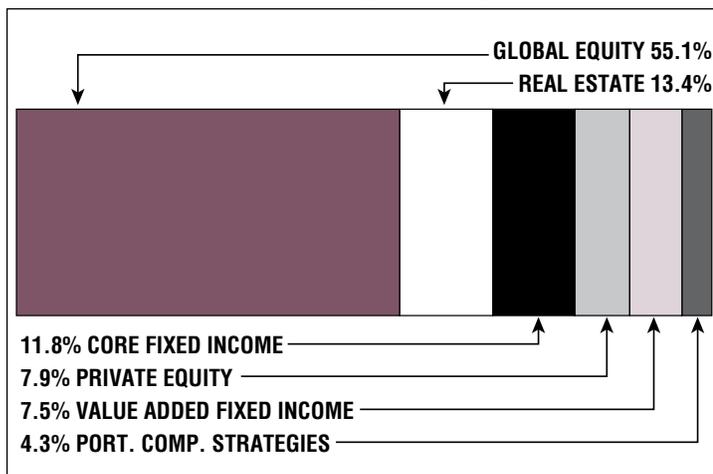
2040

Fully Funded

3.61% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$193.5 M

Unfunded Liability

\$13.0 M
(FY2022)

Total Pension Appropriation

Arlington

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Richard Greco

SYSTEM MEMBERS

Active Members771
Total Payroll\$43.1 M
Average Salary\$55,900
Average Age47
Average Service 10.1

Retired Members602
Benefits Paid\$19.5 M
Average Benefit\$32,500
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees78
Reported Earnings26
Excess Earners 1
Refund Due\$2,859

Last Valuation: 1/1/21
Actuary: Stone



\$226.3 M
Market Value

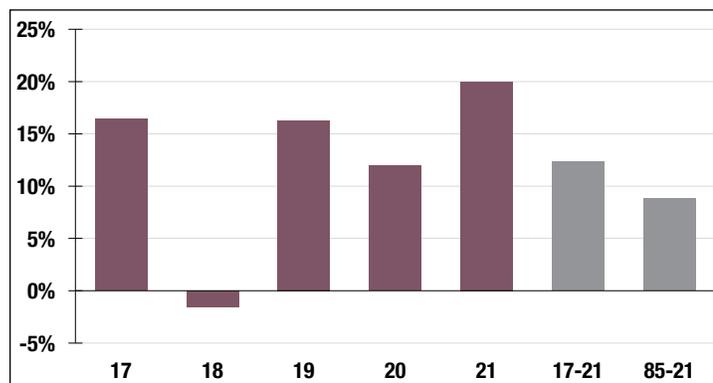
20.01%
2021 Returns

10.59%
2012-2021
(Annualized)

8.83%
1985-2021
(Annualized)

Investment Returns

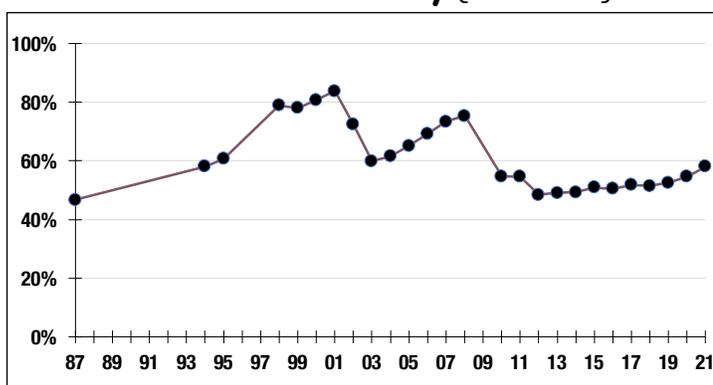
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



58.1%

Funded Ratio

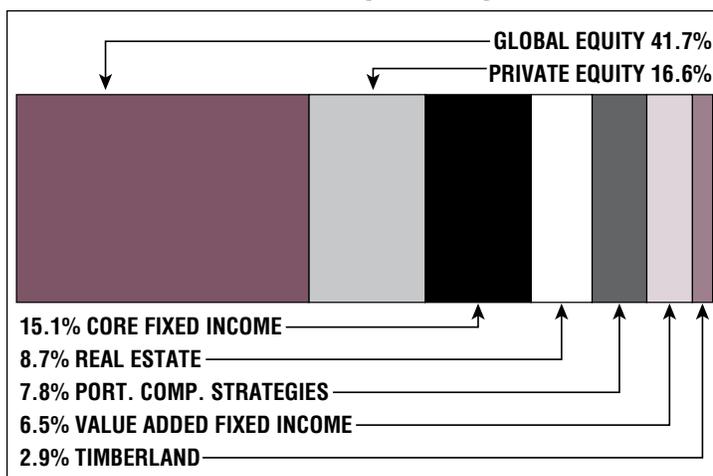
2033

Fully Funded

5.5% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$131.7 M

Unfunded Liability

\$14.6 M
(FY2022)

Total Pension Appropriation

Attleboro

CONTACT INFORMATION

77 Park Street
Attleboro, MA 02703
Phone 508-223-2222
Fax 508-223-2063

BOARD MEMBERS

Deborah Gould
Barry Lacasse
Scott Charette
Bruce Tondreau*
Richard Boucher
*indicates Chairperson

BOARD ADMINISTRATOR

Kenneth Badertscher

SYSTEM MEMBERS

Active Members685
Total Payroll\$38.0 M
Average Salary\$55,500
Average Age47
Average Service11.8

Retired Members455
Benefits Paid\$13.8 M
Average Benefit\$30,400
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees41
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$216.0 M
Market Value

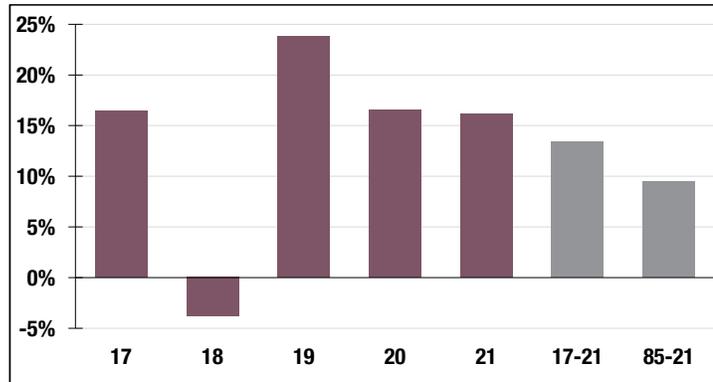
16.12%
2021 Returns

11.38%
2012-2021
(Annualized)

9.43%
1985-2021
(Annualized)

Investment Returns

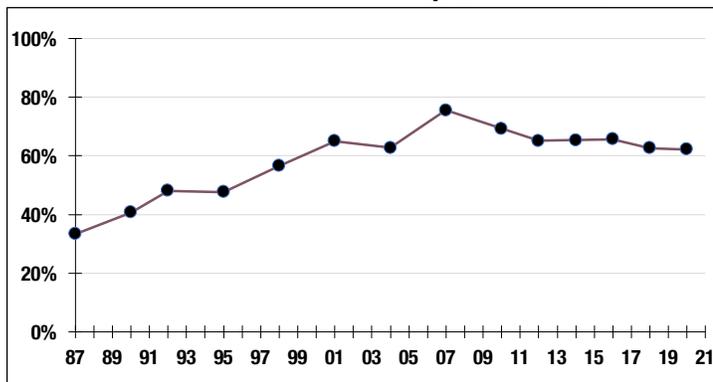
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



62.2%

Funded Ratio

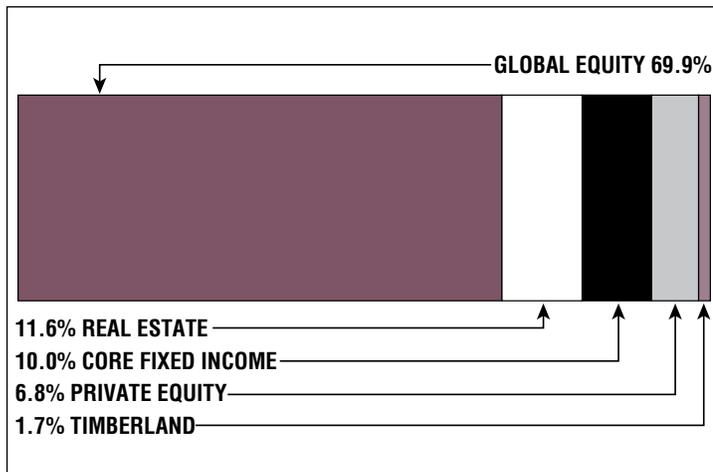
2037

Fully Funded

5.86% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$95.8 M

Unfunded Liability

\$8.8 M
(FY2022)

Total Pension Appropriation

Barnstable County

CONTACT INFORMATION

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

BOARD MEMBERS

Carol Coppola*
Ronald Bergstrom
Robert Rolanti
Harold Brunelle
TK Menesale
*indicates Chairperson

BOARD ADMINISTRATOR

Christine Tetreault

SYSTEM MEMBERS

Active Members4,799
Total Payroll\$293.7 M
Average Salary\$61,200
Average Age48
Average Service11.4

Retired Members3,326
Benefits Paid\$99.1 M
Average Benefit\$29,800
Average Age71

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees332
Reported Earnings124
Excess Earners2
Refund Due\$68,773

Last Valuation: 1/1/20
Actuary: Segal



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\$1.7 B
Market Value

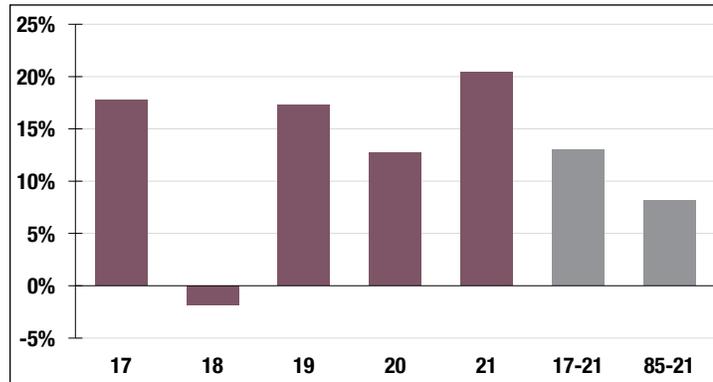
20.44%
2021 Returns

11.09%
2012-2021
(Annualized)

8.15%
1985-2021
(Annualized)

Investment Returns

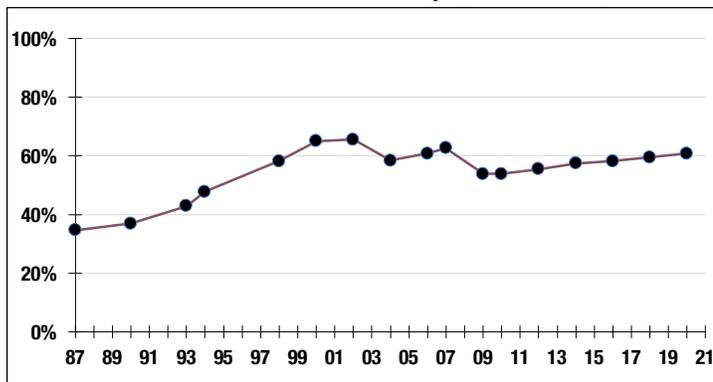
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



60.8%

Funded Ratio

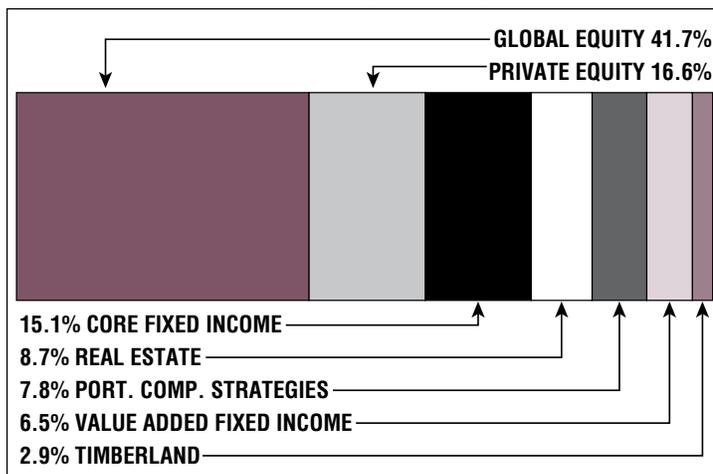
2037

Fully Funded

5.80% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$782.8 M

Unfunded Liability

\$74.5 M
(FY2022)

Total Pension Appropriation

Belmont

CONTACT INFORMATION

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

BOARD MEMBERS

Glen Castro
Floyd Carman
Walter Wellman
Ross Vona
Thomas Gibson*
*indicates Chairperson

BOARD ADMINISTRATOR

Robert Soohoo

SYSTEM MEMBERS

Active Members498
Total Payroll\$29.7 M
Average Salary\$59,600
Average Age47
Average Service 10.7

Retired Members.....351
Benefits Paid\$11.6 M
Average Benefit\$32,900
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees39
Reported Earnings 11
Excess Earners..... 1
Refund Due\$747

Last Valuation: 1/1/20
Actuary: Segal



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\$161.8 M
Market Value

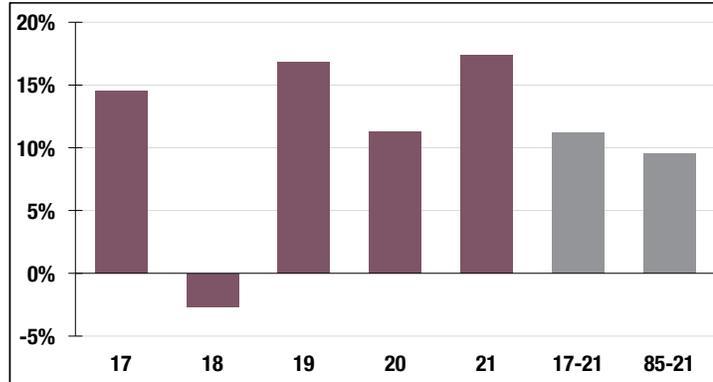
17.37%
2021 Returns

10.24%
2012-2021
(Annualized)

9.59%
1985-2021
(Annualized)

Investment Returns

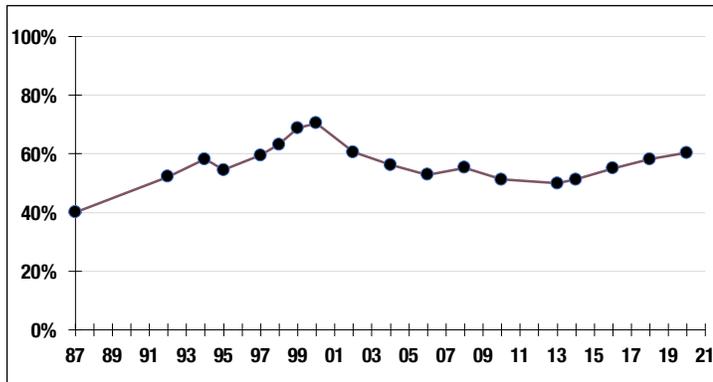
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



60.4%

Funded Ratio

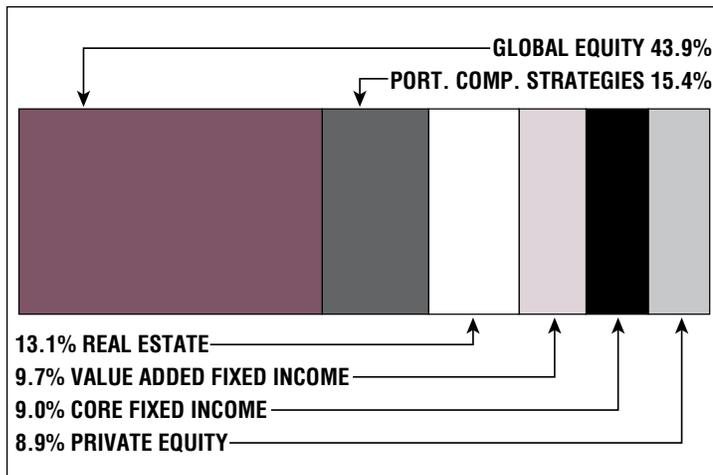
2031

Fully Funded

4.45% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$79.5 M

Unfunded Liability

\$11.3 M
(FY2022)

Total Pension Appropriation

Berkshire County

CONTACT INFORMATION

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

BOARD MEMBERS

Paul Lisi, Jr.
Michael Ovitt*
Mark Bashara
Karen Williams
Beth Matson
*indicates Chairperson

BOARD ADMINISTRATOR

Sheila LaBarbera

SYSTEM MEMBERS

Active Members 1,172
Total Payroll\$51.4 M
Average Salary\$43,800
Average Age49
Average Service10.5

Retired Members854
Benefits Paid\$16.8 M
Average Benefit\$19,600
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees22
Reported Earnings4
Excess Earners1
Refund Due\$29,024

Last Valuation: 1/1/21
Actuary: PERAC



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\$358.5 M
Market Value

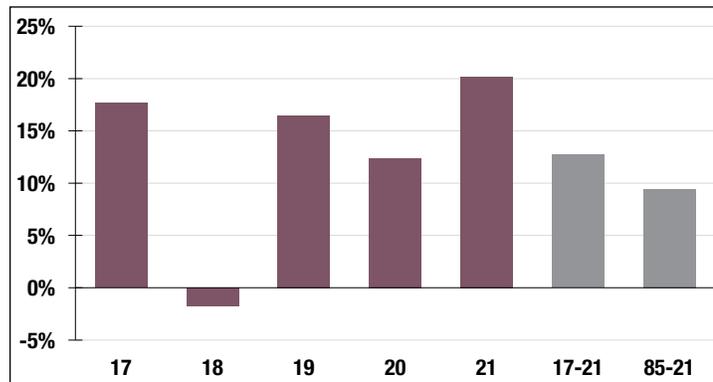
20.18%
2021 Returns

10.91%
2012-2021
(Annualized)

9.43%
1985-2021
(Annualized)

Investment Returns

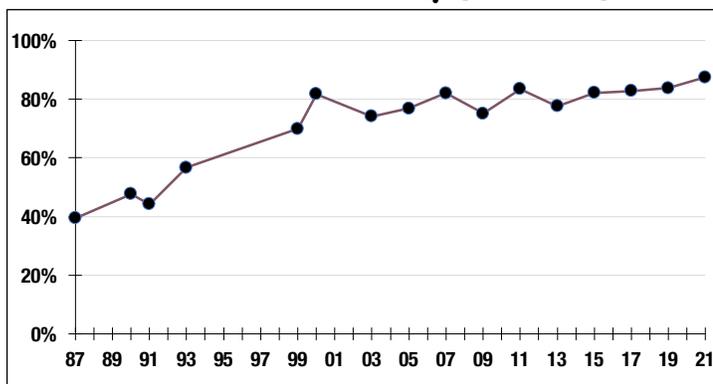
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



87.4%

Funded Ratio

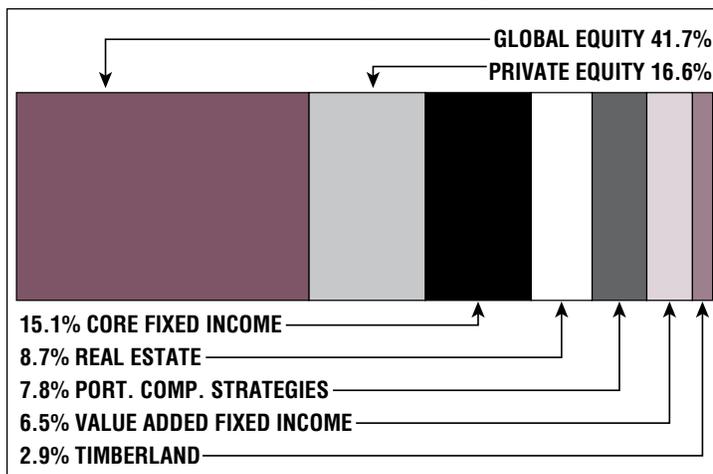
2028

Fully Funded

7.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$40.6 M

Unfunded Liability

\$11.7 M
(FY2022)

Total Pension Appropriation

Beverly

CONTACT INFORMATION

City Hall
191 Cabot Street
Beverly, MA 01915
Phone 978-605-2370
Fax 978-921-8582

BOARD MEMBERS

Carol Augulewicz
Bryant Ayles*
D. Wesley Slate, Jr.
Kevin Smith
Charles Kostro
*indicates Chairperson

BOARD ADMINISTRATOR

Barbara Wells

SYSTEM MEMBERS

Active Members626
Total Payroll\$31.8 M
Average Salary\$50,800
Average Age48
Average Service 10.9

Retired Members469
Benefits Paid\$13.8 M
Average Benefit\$29,500
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees44
Reported Earnings 12
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$189.7 M
Market Value

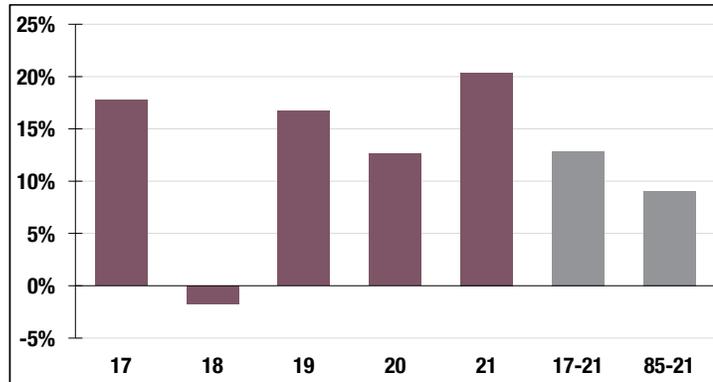
20.37%
2021 Returns

11.08%
2012-2021
(Annualized)

9.07%
1985-2021
(Annualized)

Investment Returns

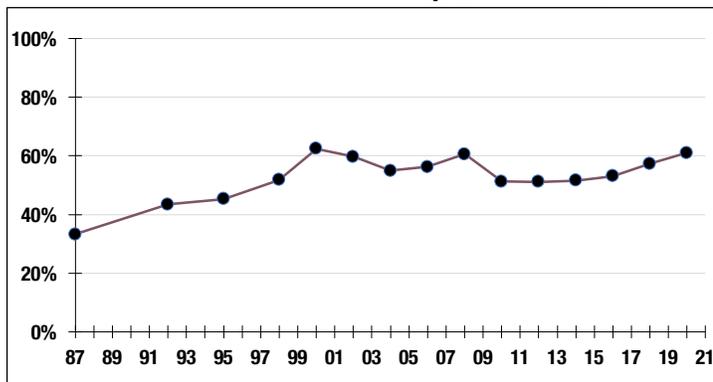
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



61.0%

Funded Ratio

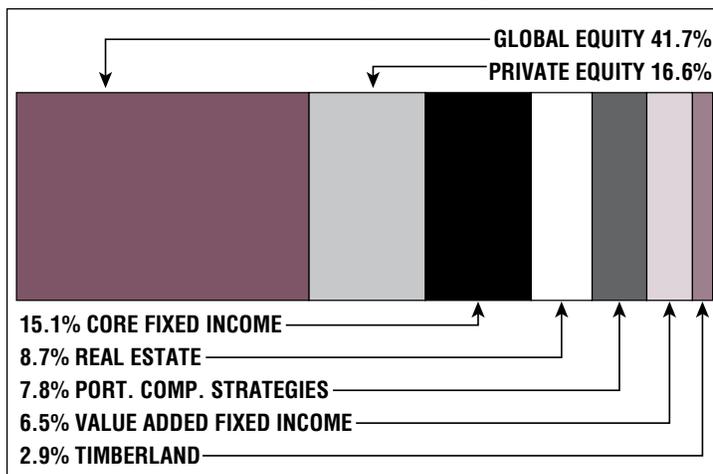
2033

Fully Funded

4.5% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$89.6 M

Unfunded Liability

\$12.5 M
(FY2022)

Total Pension Appropriation

Blue Hills Regional Vocational School

CONTACT INFORMATION

Employees' Retirement Board
800 Randolph Street
Canton, MA 02021
Phone 781-828-5800
Fax 781-828-0794

BOARD MEMBERS

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

BOARD ADMINISTRATOR

David Sullivan

SYSTEM MEMBERS

Active Members50
Total Payroll\$2.6 M
Average Salary\$51,200
Average Age52
Average Service11

Retired Members.....47
Benefits Paid \$989 K
Average Benefit\$21,000
Average Age79

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees0
Reported Earnings0
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$15.9 M
Market Value

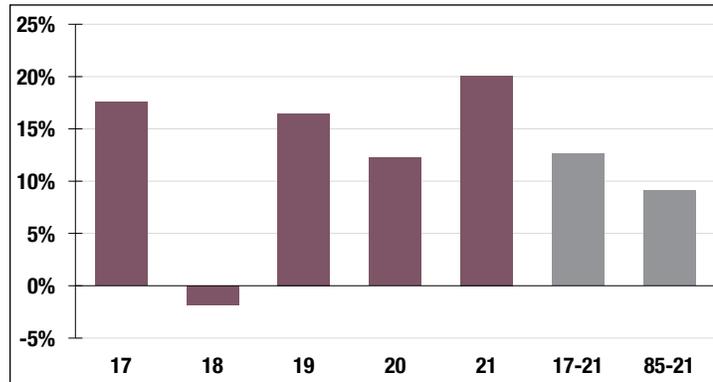
20.09%
2021 Returns

10.85%
2012-2021
(Annualized)

9.13%
1985-2021
(Annualized)

Investment Returns

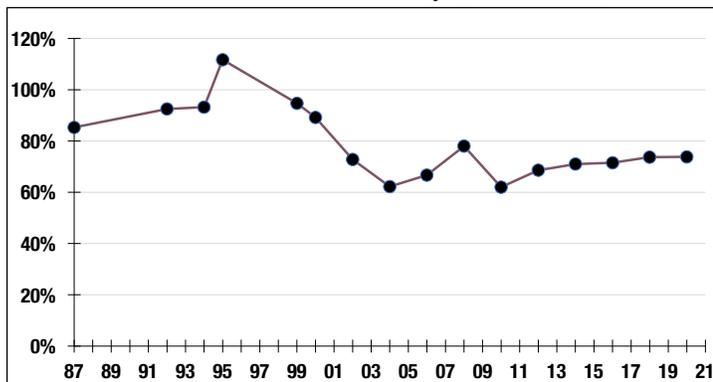
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



73.8%

Funded Ratio

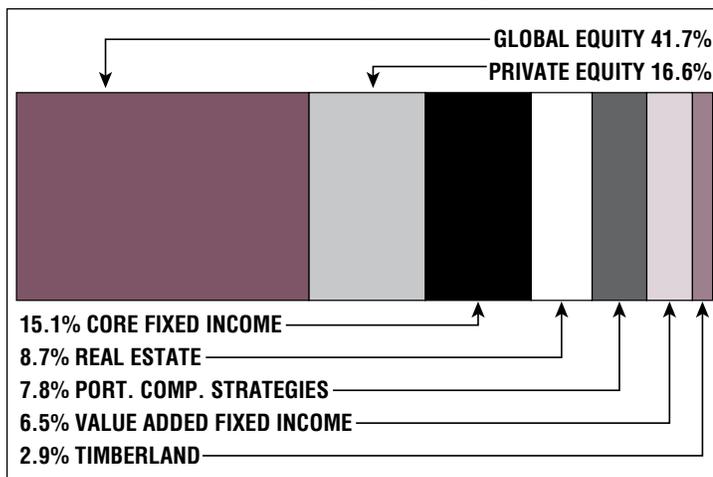
2032

Fully Funded

7.1% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$4.2 M

Unfunded Liability

\$641 K
(FY2022)

Total Pension Appropriation

Boston (City)

CONTACT INFORMATION

City Hall, Room 816
 Boston, MA 02201
 Phone 617-635-4305
 Fax 617-635-4318

BOARD MEMBERS

Maureen Joyce
 Daniel Greene*
 Michael O'Reilly
 Michael McLaughlin
 Thomas Jackson
 *indicates Chairperson

BOARD ADMINISTRATOR

Christine Weir

SYSTEM MEMBERS

Active Members 14,709
 Total Payroll \$1.1 B
 Average Salary \$72,300
 Average Age 46
 Average Service 12.9

Retired Members 9,779
 Benefits Paid \$376.6 M
 Average Benefit \$38,500
 Average Age 74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 1,453
 Reported Earnings 241
 Excess Earners 6
 Refund Due \$49,847

Last Valuation: 1/1/20
 Actuary: Segal

See notes on Boston (City) and Boston (Teachers) on page 25.



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\$7.1 B
 Market Value

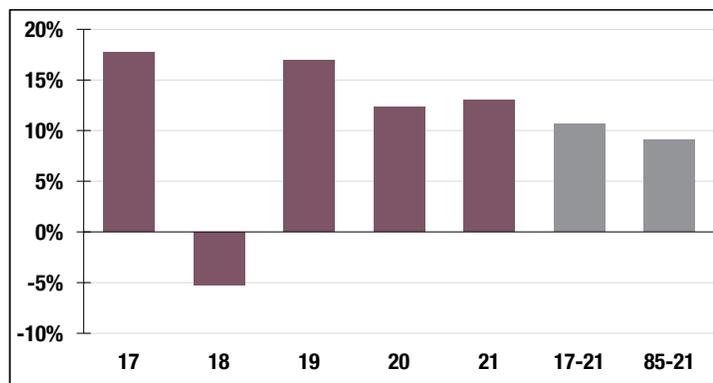
13.03%
 2021 Returns

9.24%
 2012-2021
 (Annualized)

9.04%
 1985-2021
 (Annualized)

Investment Returns

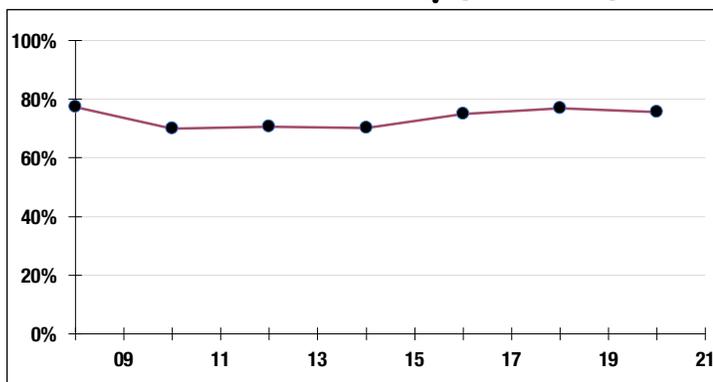
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.05%

Assumed Rate of Return

Funded Ratio History (2008-2021)



75.6%

Funded Ratio

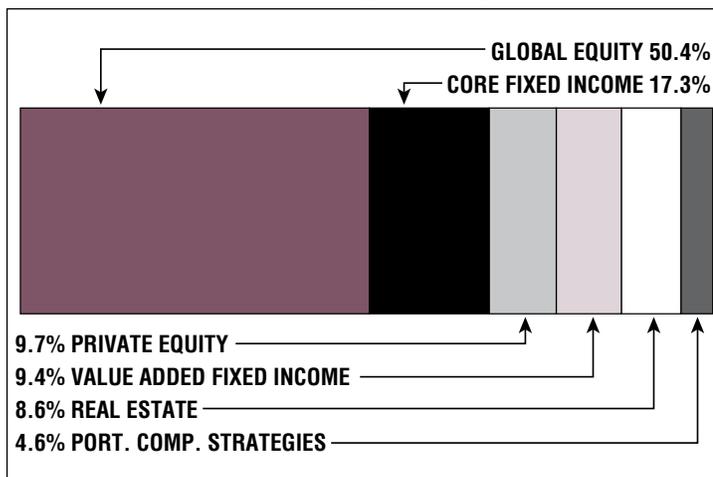
2027

Fully Funded

8.85% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$1.8 B

Unfunded Liability

\$365.2 M
 (FY2022)

Total Pension Appropriation

Boston (Teachers)

CONTACT INFORMATION

See Boston (City)

SYSTEM MEMBERS

Active Members 6,450
 Total Payroll \$636.4 M
 Average Salary \$98,700
 Average Age 42.7
 Average Service 10.2

Retired Members 4,806
 Benefits Paid \$263.6 M
 Average Benefit \$54,856
 Average Age 73.9

Last Valuation: 1/1/21

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 2017-2021 and total returns for the Boston System prior to 2011.

\$2.4 B
Market Value

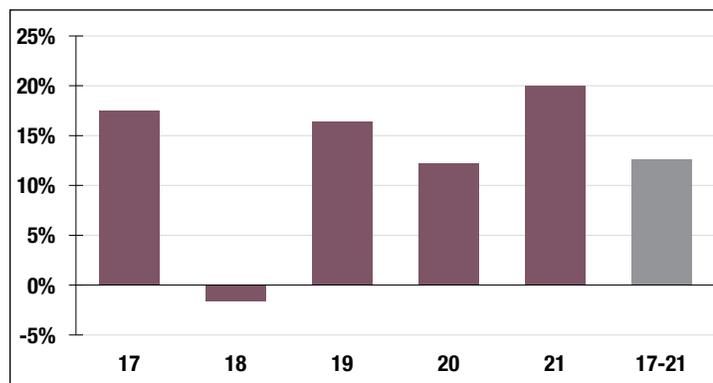
19.96%
2021 Returns

10.87%
2012-2021
(Annualized)

NA
1985-2021
(Annualized)

Investment Returns

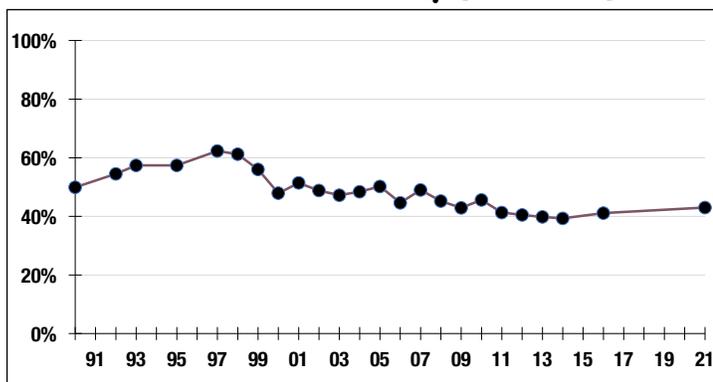
(2017-2021 & 5-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1990-2021)



43.0%

Funded Ratio

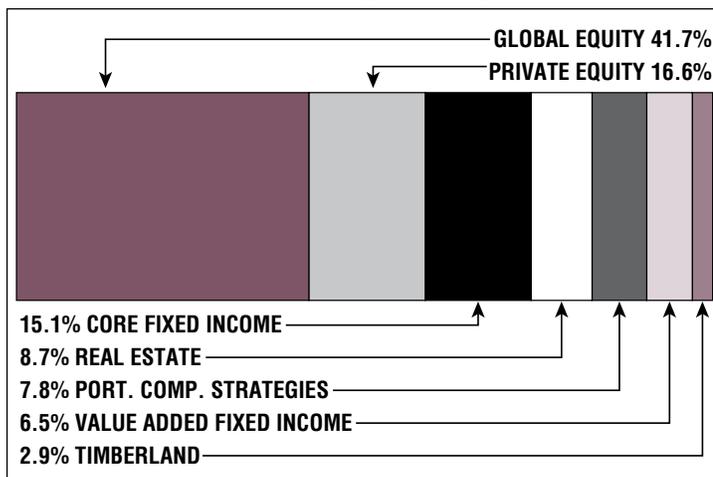
2036

Fully Funded

9.63% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$2.5 B

Unfunded Liability

\$179.4 M
(FY2022)

Total Pension Appropriation

Braintree

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Dennis Gallagher

SYSTEM MEMBERS

Active Members817
Total Payroll\$50.1 M
Average Salary\$61,300
Average Age50
Average Service 12.5

Retired Members523
Benefits Paid\$17.6 M
Average Benefit\$33,700
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees53
Reported Earnings 14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: KMS



Click/Scan for Website

\$286.8 M
Market Value

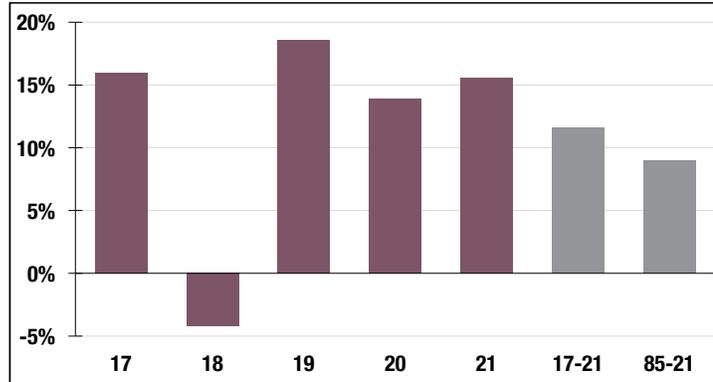
15.60%
2021 Returns

9.75%
2012-2021
(Annualized)

8.98%
1985-2021
(Annualized)

Investment Returns

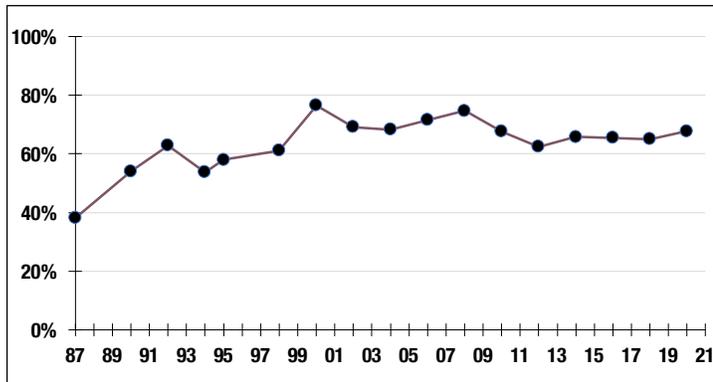
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.65%

Assumed Rate of Return

Funded Ratio History (1987-2021)



67.7%

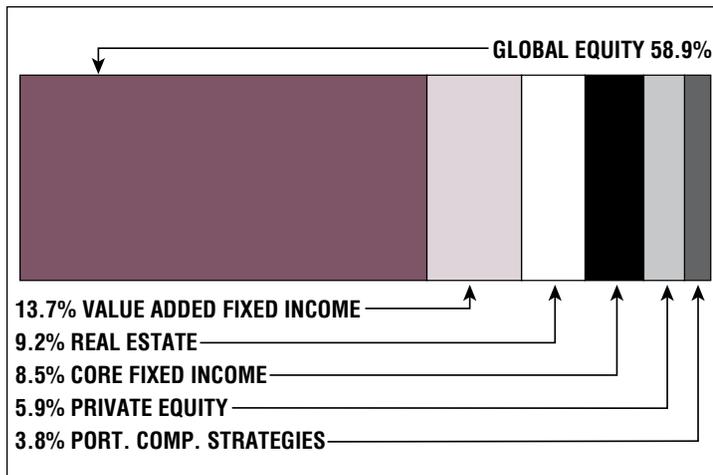
Funded Ratio

2033

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$104.7 M

Unfunded Liability

\$13.0 M
(FY2022)

Total Pension Appropriation

Bristol County

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Roxanne Donovan

SYSTEM MEMBERS

Active Members3,319
Total Payroll\$173.7 M
Average Salary\$52,300
Average Age48
Average Service 11.5

Retired Members2,646
Benefits Paid\$69.8 M
Average Benefit\$26,400
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees221
Reported Earnings72
Excess Earners 1
Refund Due\$453

Last Valuation: 1/1/20
Actuary: Stone



Click/Scan for Website

\$941.0 M
Market Value

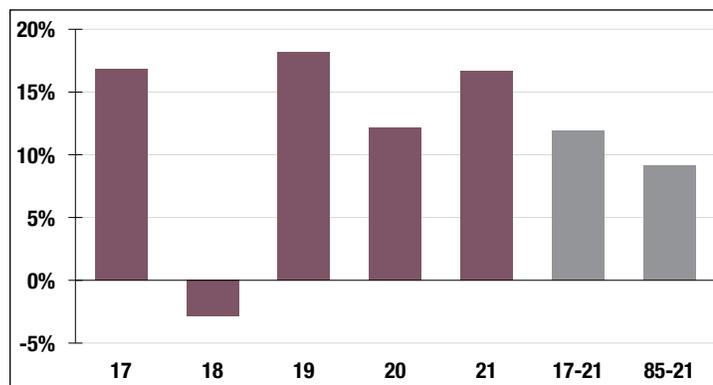
16.72%
2021 Returns

10.56%
2012-2021
(Annualized)

9.19%
1985-2021
(Annualized)

Investment Returns

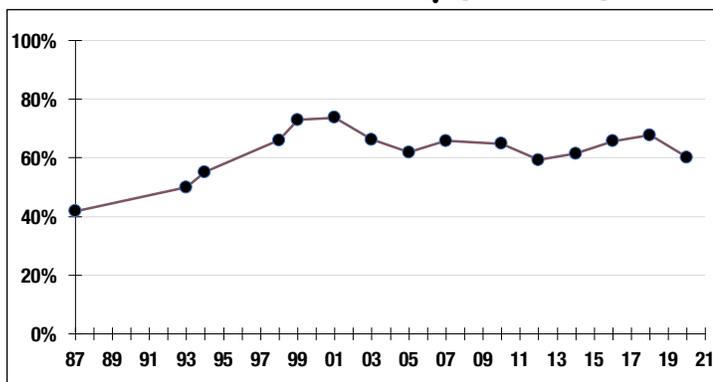
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



60.1%

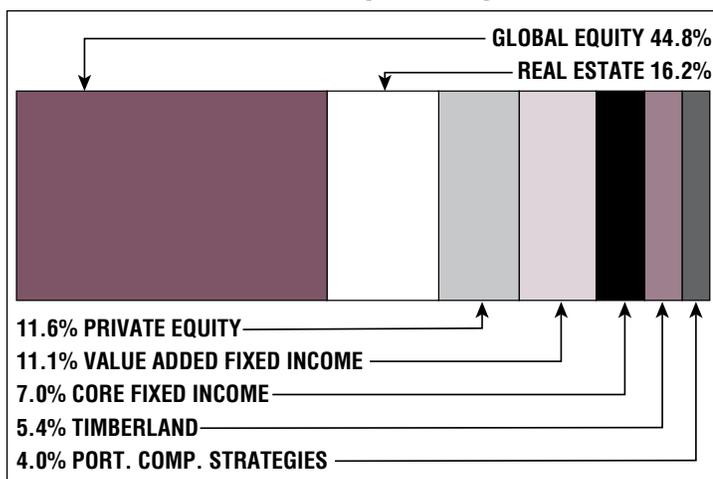
Funded Ratio

2034

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$482.1 M

Unfunded Liability

\$49.3 M
(FY2022)

Total Pension Appropriation

Brockton

CONTACT INFORMATION

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

BOARD MEMBERS

Karen Preval
John Condon
Scott Albanese
Archie Gormley
William Farmer*
*indicates Chairperson

BOARD ADMINISTRATOR

Jeanne Martineau

SYSTEM MEMBERS

Active Members1,779
Total Payroll\$105.0 M
Average Salary\$59,000
Average Age47
Average Service 11.3

Retired Members.....1,293
Benefits Paid\$44.5 M
Average Benefit\$34,400
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees151
Reported Earnings37
Excess Earners.....2
Refund Due\$5,983

Last Valuation: 1/1/20
Actuary: KMS



Click/Scan for Website

\$825.2 M
Market Value

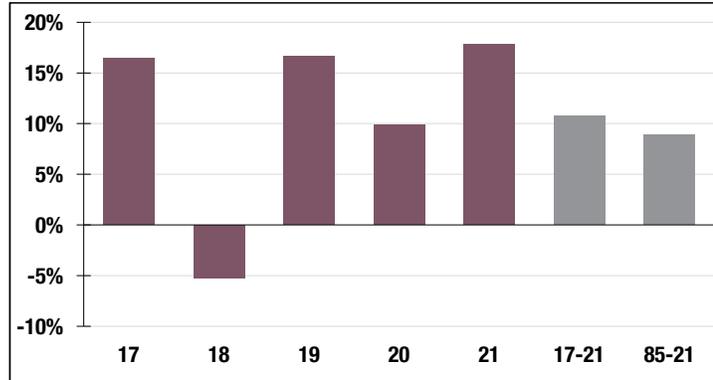
17.84%
2021 Returns

9.08%
2012-2021
(Annualized)

8.89%
1985-2021
(Annualized)

Investment Returns

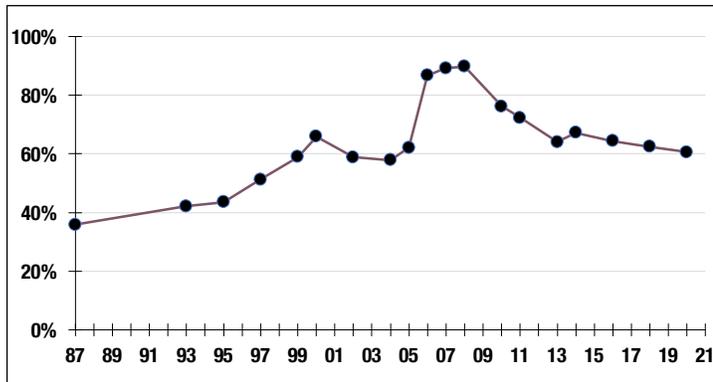
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



60.6%

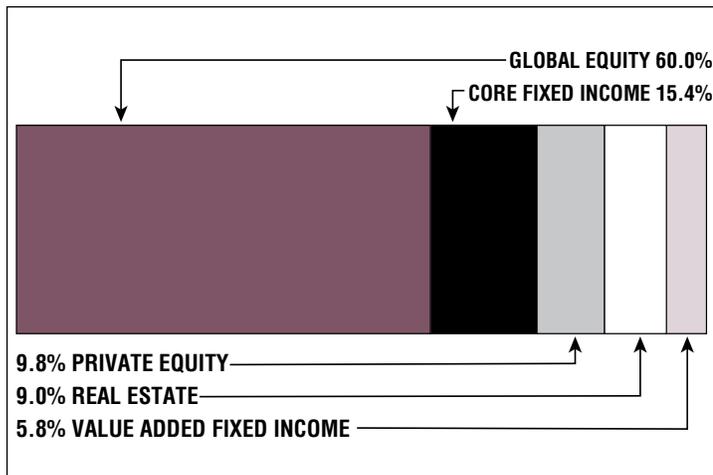
Funded Ratio

2032

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$282.9 M

Unfunded Liability

\$32.2 M
(FY2022)

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

BOARD MEMBERS

Michael DiPietro
Justin Casanova-Davis
Robert Ward
John Canney
Gary Altman*
*indicates Chairperson

BOARD ADMINISTRATOR

Frank Zecha

SYSTEM MEMBERS

Active Members 1,395
Total Payroll \$78.8 M
Average Salary \$56,500
Average Age 43
Average Service 9.7

Retired Members 905
Benefits Paid \$32.0 M
Average Benefit \$35,400
Average Age 74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 147
Reported Earnings 32
Excess Earners 1
Refund Due \$22,148

Last Valuation: 1/1/20
Actuary: Segal



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\$473.4 M
Market Value

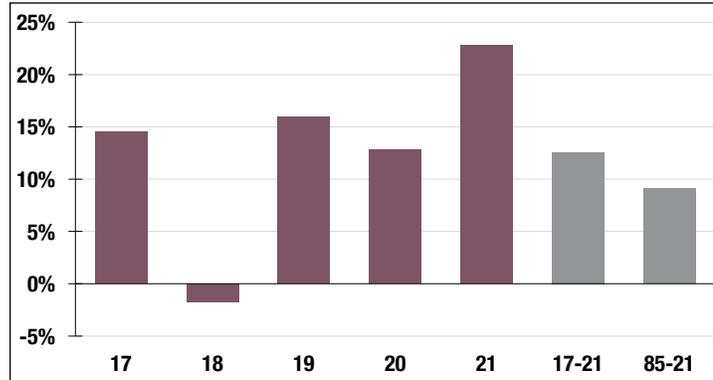
22.83%
2021 Returns

10.33%
2012-2021
(Annualized)

9.13%
1985-2021
(Annualized)

Investment Returns

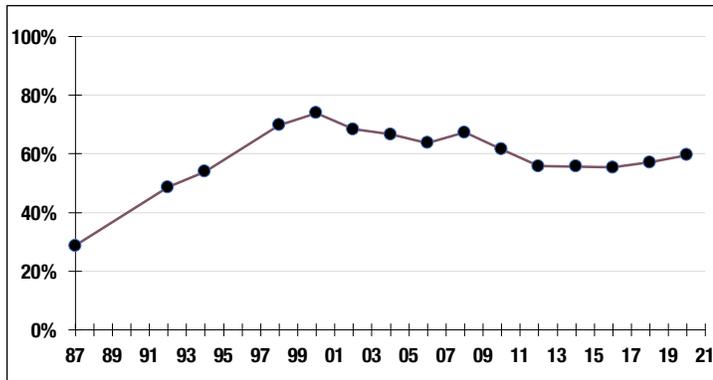
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.20%

Assumed Rate of Return

Funded Ratio History (1987-2021)



59.6%

Funded Ratio

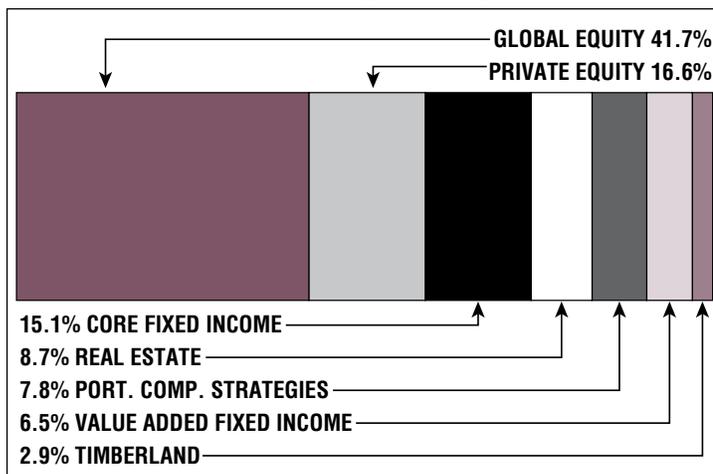
2030

Fully Funded

7.85% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$227.9 M

Unfunded Liability

\$29.6 M
(FY2022)

Total Pension Appropriation

Cambridge

CONTACT INFORMATION

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

BOARD MEMBERS

Joseph McCann
Michael Gardner
John Shinkwin
Francis Murphy, III*
Nadia Chamblin-Foster
*indicates Chairperson

BOARD ADMINISTRATOR

Ellen Philbin

SYSTEM MEMBERS

Active Members3,040
Total Payroll\$235.7 M
Average Salary\$77,500
Average Age47
Average Service 13.8

Retired Members.....2,247
Benefits Paid\$87.0 M
Average Benefit\$38,700
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees224
Reported Earnings45
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$1.8 B
Market Value

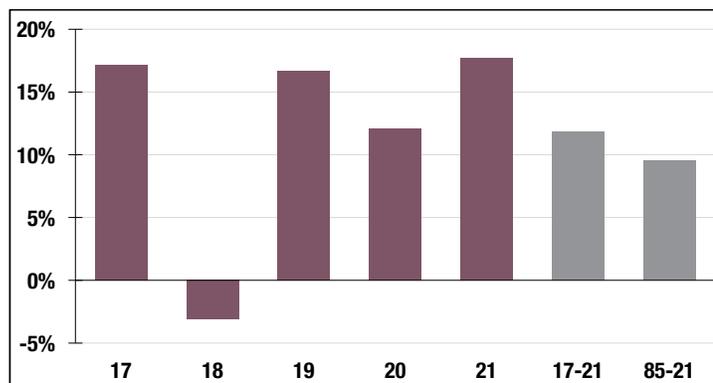
17.74%
2021 Returns

10.90%
2012-2021
(Annualized)

9.56%
1985-2021
(Annualized)

Investment Returns

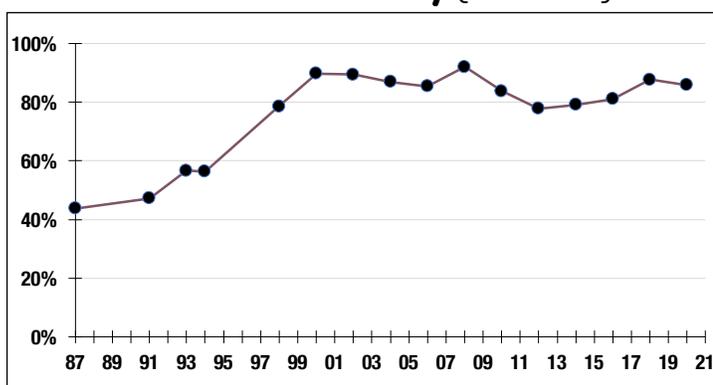
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



85.8%

Funded Ratio

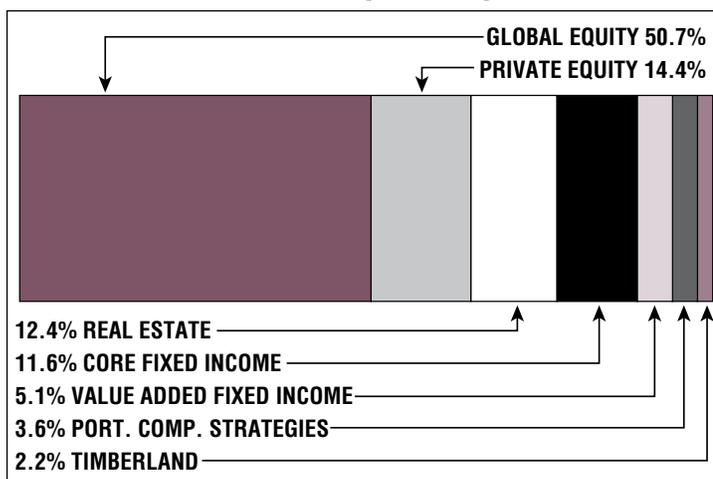
2026

Fully Funded

12.1% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$239.9 M

Unfunded Liability

\$53.8 M
(FY2022)

Total Pension Appropriation

Chelsea

CONTACT INFORMATION

City Hall, Room 214
500 Broadway
Chelsea, MA 02150
Phone 617-466-4230
Fax 617-466-4234

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Michael Nicolazzo

SYSTEM MEMBERS

Active Members758
Total Payroll\$44.1 M
Average Salary\$58,200
Average Age45
Average Service 11.9

Retired Members395
Benefits Paid\$12.6 M
Average Benefit\$31,800
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees61
Reported Earnings21
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$276.0 M
Market Value

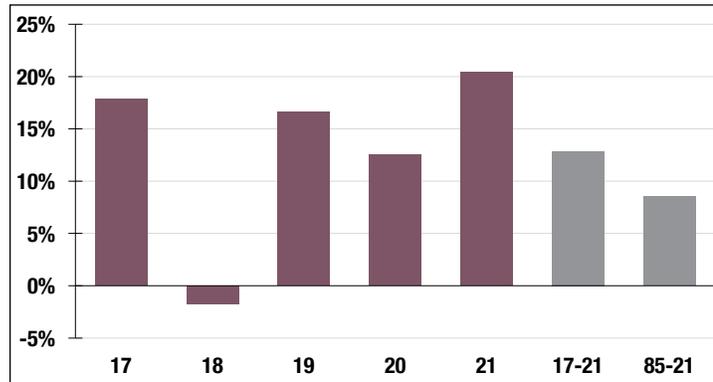
20.43%
2021 Returns

11.00%
2012-2021
(Annualized)

8.54%
1985-2021
(Annualized)

Investment Returns

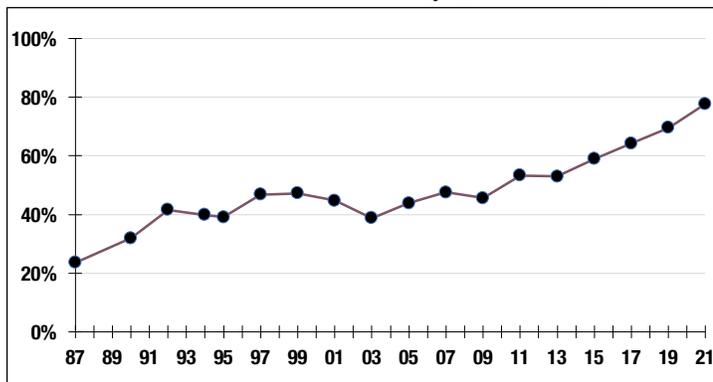
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



77.7%

Funded Ratio

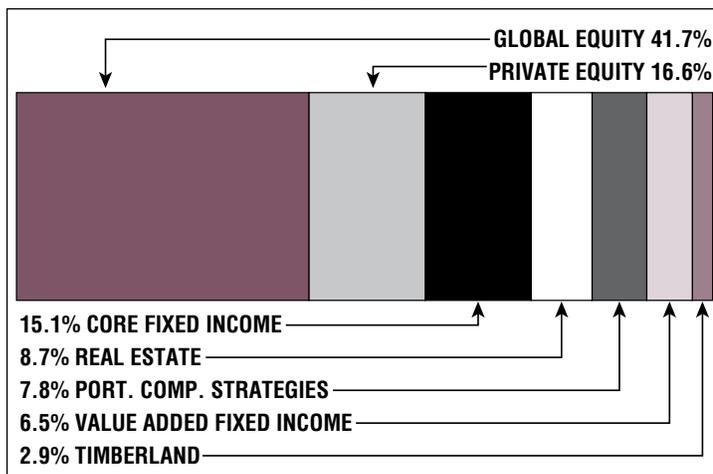
2028

Fully Funded

5.05% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$60.5 M

Unfunded Liability

\$14.5 M
(FY2022)

Total Pension Appropriation

Chicopee

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Anna Maria Hamblin

SYSTEM MEMBERS

Active Members 1,177
 Total Payroll \$59.7 M
 Average Salary \$50,700
 Average Age 47
 Average Service 12.9

 Retired Members 885
 Benefits Paid \$25.1 M
 Average Benefit \$28,300
 Average Age 72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 87
 Reported Earnings 25
 Excess Earners 1
 Refund Due \$14

Last Valuation: 1/1/21
 Actuary: Stone



\$460.6 M
 Market Value

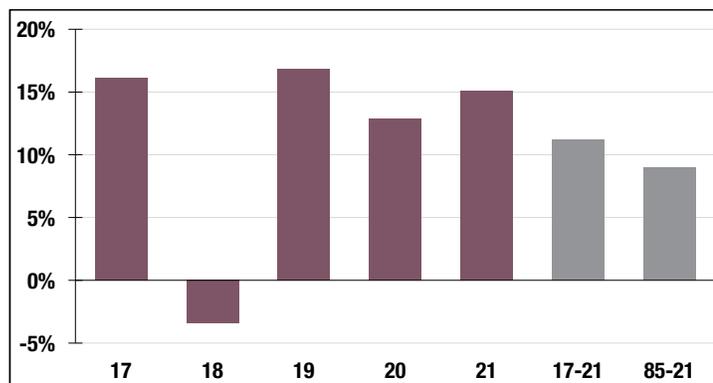
15.10%
 2021 Returns

10.62%
 2012-2021
 (Annualized)

8.98%
 1985-2021
 (Annualized)

Investment Returns

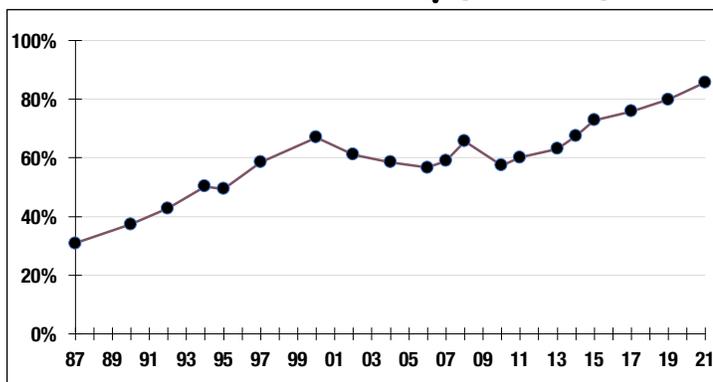
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



85.7%

Funded Ratio

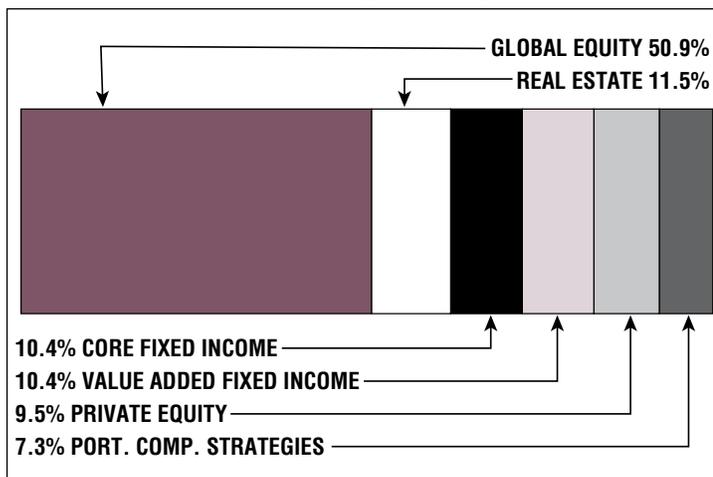
2026

Fully Funded

3.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$63.7 M

Unfunded Liability

\$20.0 M
 (FY2022)

Total Pension Appropriation

Clinton

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Patricia Hazel

SYSTEM MEMBERS

Active Members247
Total Payroll\$12.0 M
Average Salary\$48,500
Average Age48
Average Service11.8

Retired Members 138
Benefits Paid\$4.0 M
Average Benefit\$29,000
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 12
Reported Earnings3
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$76.8 M
Market Value

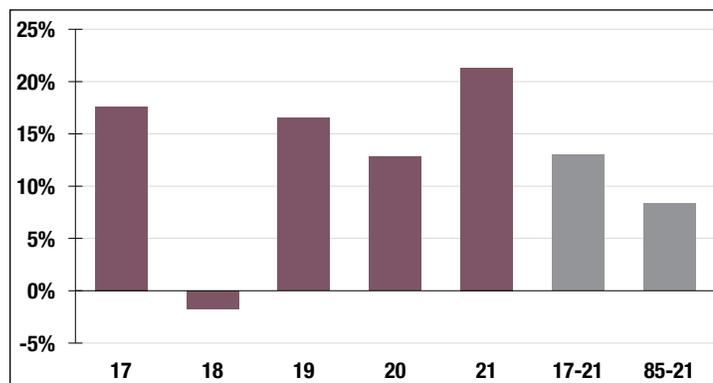
21.32%
2021 Returns

11.03%
2012-2021
(Annualized)

8.35%
1985-2021
(Annualized)

Investment Returns

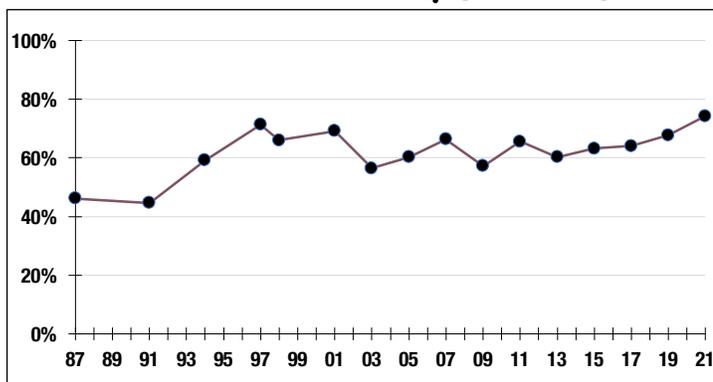
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



74.2%

Funded Ratio

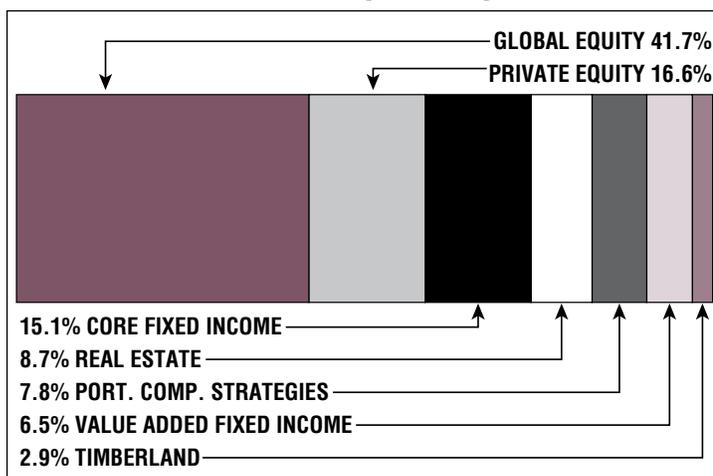
2034

Fully Funded

5.10% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$20.7 M

Unfunded Liability

\$3.4 M
(FY2022)

Total Pension Appropriation

Concord

CONTACT INFORMATION

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

BOARD MEMBERS

Mary Barrett
Kerry Lafleur
Peter Fulton*
Brian Whitney
Eric Macy
*indicates Chairperson

BOARD ADMINISTRATOR

Linda Boucher

SYSTEM MEMBERS

Active Members588
Total Payroll\$37.7 M
Average Salary\$64,100
Average Age48
Average Service10.4

Retired Members334
Benefits Paid\$10.4 M
Average Benefit\$31,000
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 19
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Stone



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\$234.1 M
Market Value

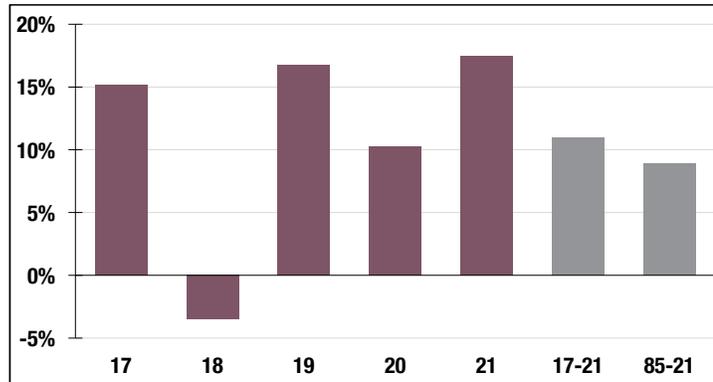
17.51%
2021 Returns

10.10%
2012-2021
(Annualized)

8.88%
1985-2021
(Annualized)

Investment Returns

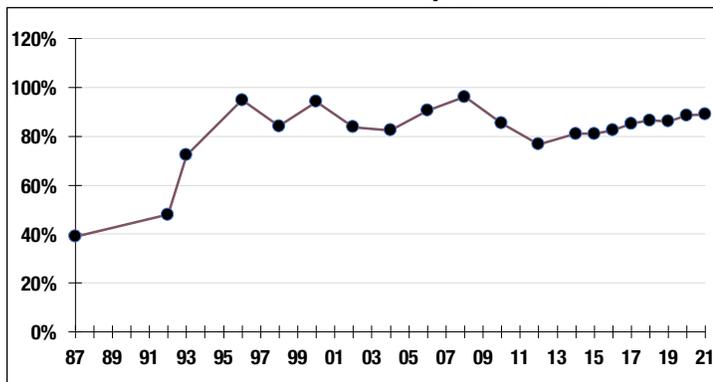
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



89.0%

Funded Ratio

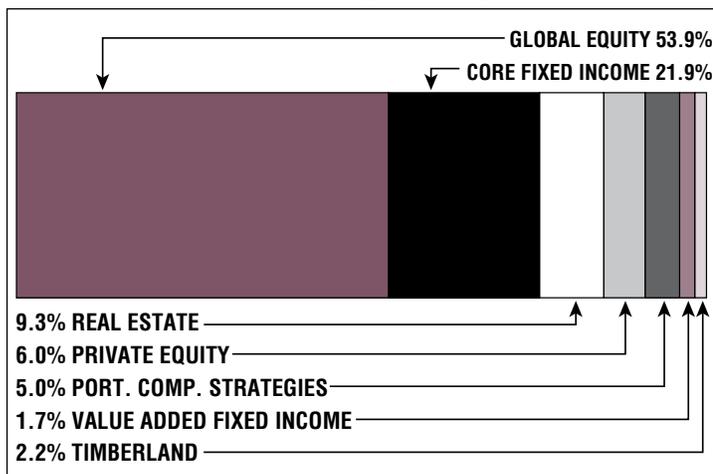
2031

Fully Funded

Level Dollar

Funding Schedule

Asset Allocation (12/31/21)



\$24.1 M

Unfunded Liability

\$6.4 M
(FY2022)

Total Pension Appropriation

Danvers

CONTACT INFORMATION

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

BOARD MEMBERS

Heather Varney
Stephen Bartha
Joseph Collins*
Dana Hagan
Stephen Swanson
*indicates Chairperson

BOARD ADMINISTRATOR

Susan Little

SYSTEM MEMBERS

Active Members491
Total Payroll\$30.4 M
Average Salary\$61,900
Average Age47
Average Service 12.1

Retired Members.....413
Benefits Paid\$12.6 M
Average Benefit\$30,600
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings8
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: KMS



\$160.5 M
Market Value

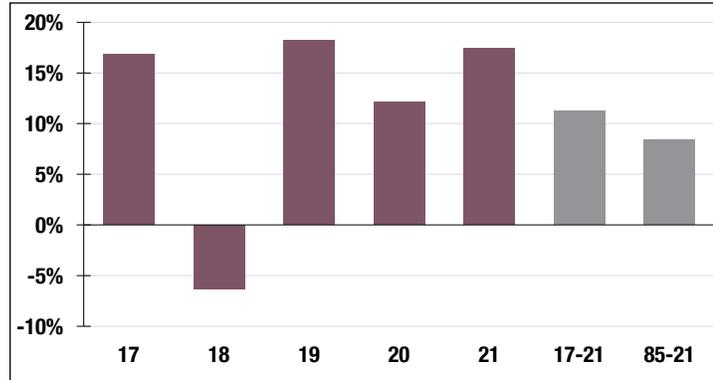
17.40%
2021 Returns

9.66%
2012-2021
(Annualized)

8.39%
1985-2021
(Annualized)

Investment Returns

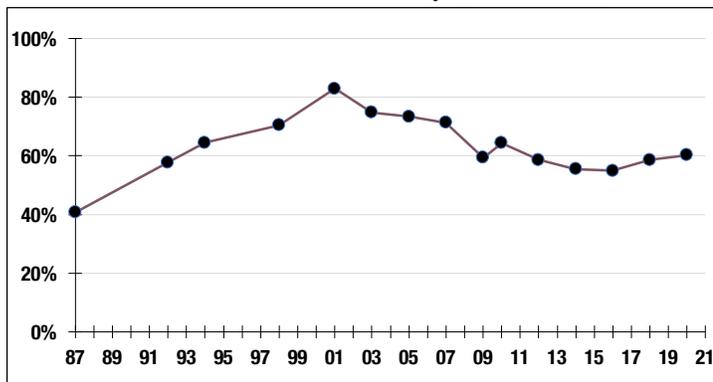
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



60.3%

Funded Ratio

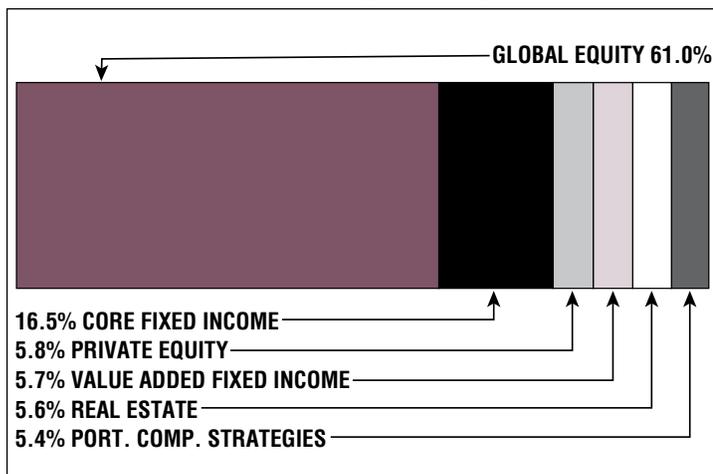
2035

Fully Funded

4.0% Increasing Phase-In

Funding Schedule

Asset Allocation (12/31/21)



\$82.5 M

Unfunded Liability

\$8.7 M
(FY2022)

Total Pension Appropriation

Dedham

CONTACT INFORMATION

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

BOARD MEMBERS

Shannon MacKenzie
Michael Butler
Stephen MacDougall
John Maloney
Thomas Rorrie*
*indicates Chairperson

BOARD ADMINISTRATOR

Barbara Isberg

SYSTEM MEMBERS

Active Members460
Total Payroll\$26.2 M
Average Salary\$57,100
Average Age47
Average Service 10.8

Retired Members333
Benefits Paid\$10.0 M
Average Benefit\$30,200
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees45
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$202.2 M
Market Value

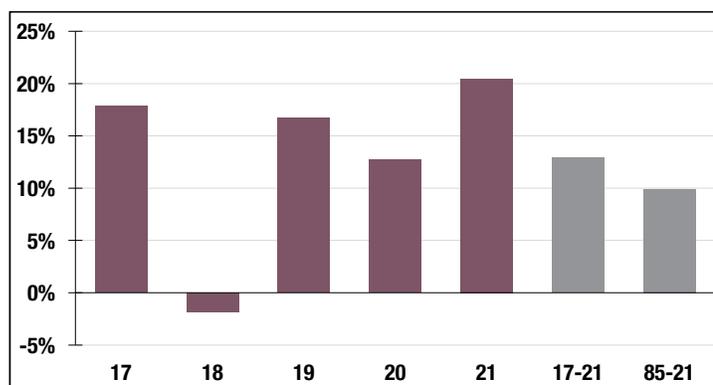
20.47%
2021 Returns

11.08%
2012-2021
(Annualized)

9.90%
1985-2021
(Annualized)

Investment Returns

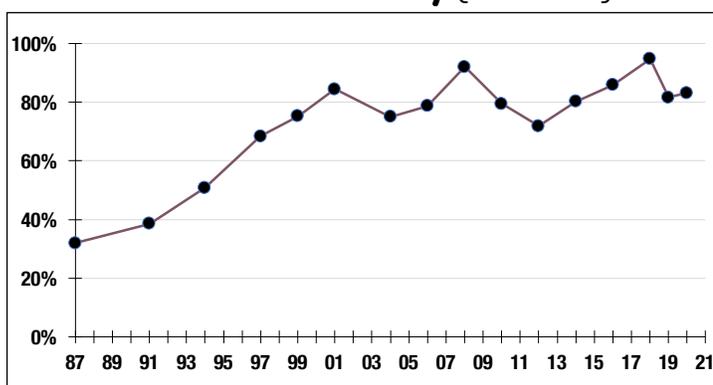
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



83.1%

Funded Ratio

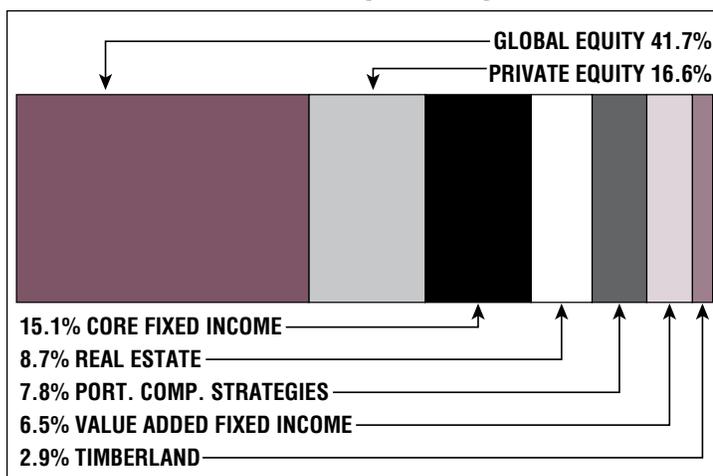
2030

Fully Funded

4.97% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$30.8 M

Unfunded Liability

\$4.5 M
(FY2022)

Total Pension Appropriation

Dukes County

CONTACT INFORMATION

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

BOARD MEMBERS

Timothy McLean*
James Hagerty
Jo Ann Murphy
David Rossi
Jonathan Snyder
*indicates Chairperson

BOARD ADMINISTRATOR

Timothy McLean (interim)

SYSTEM MEMBERS

Active Members666
Total Payroll\$44.4 M
Average Salary\$66,700
Average Age49
Average Service 10.3

Retired Members369
Benefits Paid\$10.4 M
Average Benefit\$28,200
Average Age71

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees31
Reported Earnings 10
Excess Earners 1
Refund Due\$26,732

Last Valuation: 1/1/20
Actuary: KMS



Click/Scan for Website

\$247.2 M
Market Value

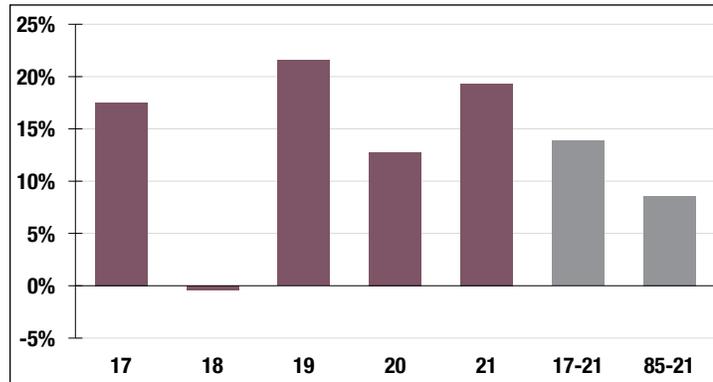
19.32%
2021 Returns

11.89%
2012-2021
(Annualized)

8.57%
1985-2021
(Annualized)

Investment Returns

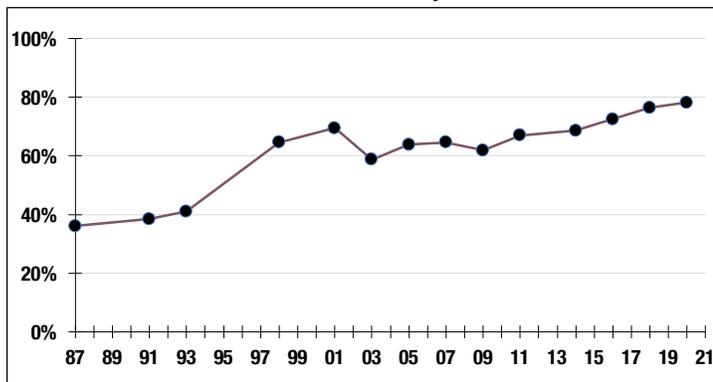
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



78.2%

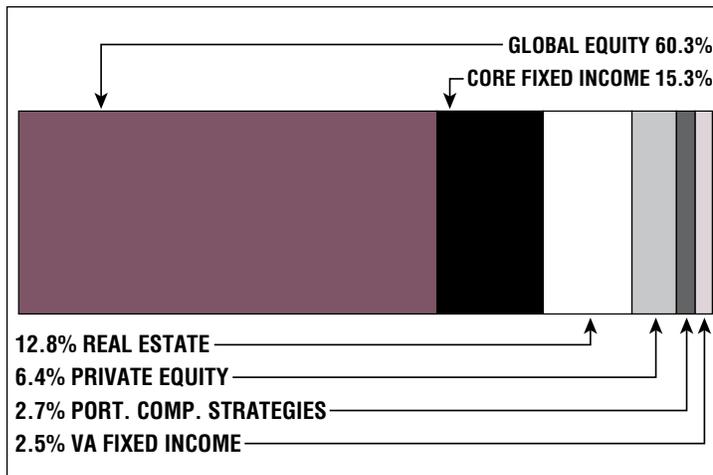
Funded Ratio

2031

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$48.3 M

Unfunded Liability

\$8.0 M
(FY2022)

Total Pension Appropriation

Easthampton

CONTACT INFORMATION

199 Northampton Street
 Easthampton, MA 01027
 Phone 413-203-1307
 Fax 413-203-1308

BOARD MEMBERS

Hetal Patel
 Jessica Hebert
 David Mottor
 Donald Emerson*
 Cornelius Sullivan
 *indicates Chairperson

BOARD ADMINISTRATOR

Kymme Wood

SYSTEM MEMBERS

Active Members248
 Total Payroll\$11.1 M
 Average Salary\$44,600
 Average Age45
 Average Service10.3
 Retired Members 178
 Benefits Paid\$4.4 M
 Average Benefit\$24,800
 Average Age71

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 18
 Reported Earnings6
 Excess Earners0
 Refund Due\$0

Last Valuation: 1/1/20
 Actuary: PERAC



\$78.6 M
 Market Value

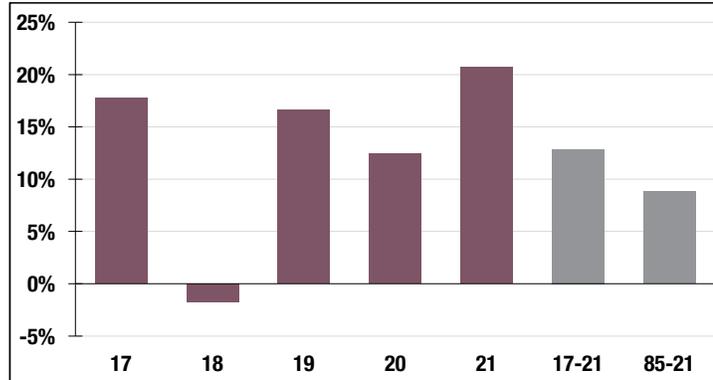
20.67%
 2021 Returns

11.01%
 2012-2021
 (Annualized)

8.81%
 1985-2021
 (Annualized)

Investment Returns

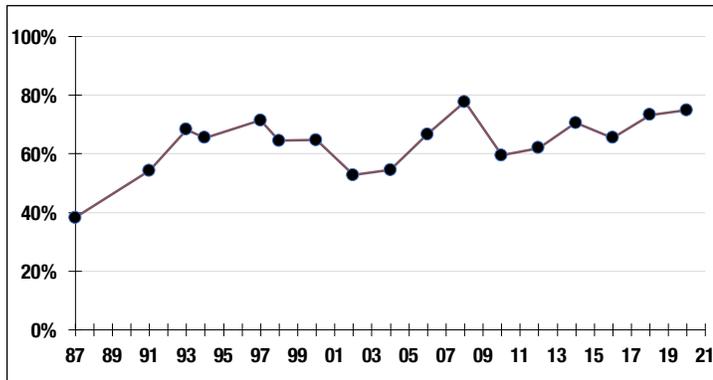
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



74.9%

Funded Ratio

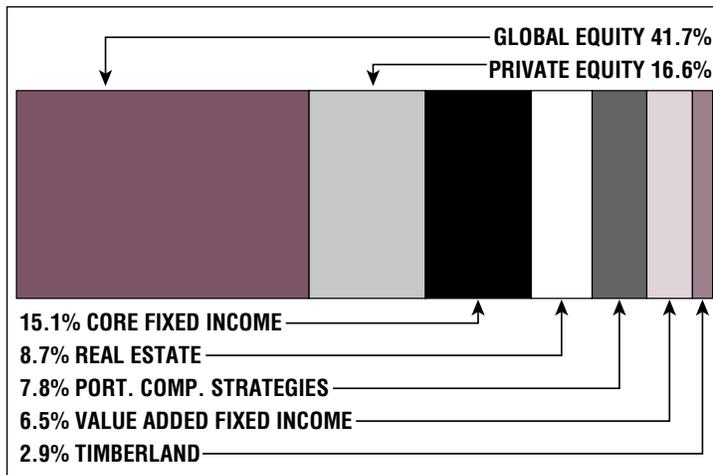
2032

Fully Funded

5.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$20.0 M

Unfunded Liability

\$3.5 M
 (FY2022)

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

BOARD MEMBERS

Andrew Sheehan
Kevin Merz
Susan Yaskell
H. Joseph Maney*
Vincent Malgeri
*indicates Chairperson

BOARD ADMINISTRATOR

Charles Kostro

SYSTEM MEMBERS

Active Members2,850
Total Payroll\$144.7 M
Average Salary\$50,800
Average Age49
Average Service 10.8

Retired Members..... 1,900
Benefits Paid\$48.4 M
Average Benefit\$25,500
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees..... 109
Reported Earnings31
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$702.1 M
Market Value

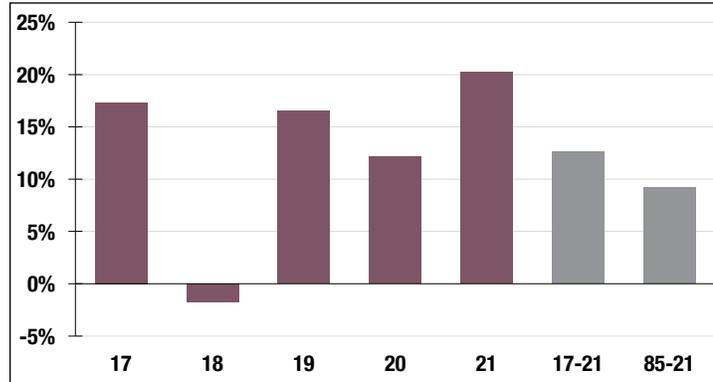
20.24%
2021 Returns

10.97%
2012-2021
(Annualized)

9.20%
1985-2021
(Annualized)

Investment Returns

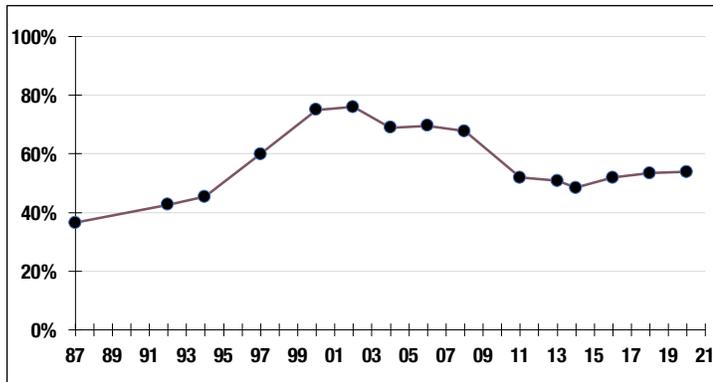
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.30%

Assumed Rate of Return

Funded Ratio History (1987-2021)



53.8%

Funded Ratio

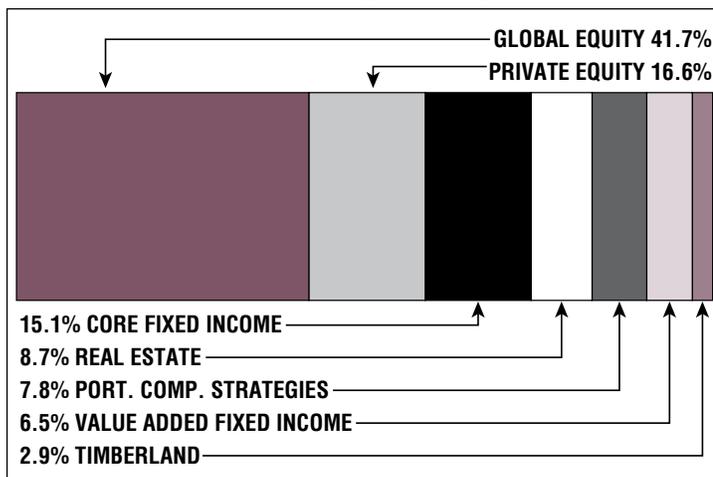
2035

Fully Funded

Varies Increasing Phase-In

Funding Schedule

Asset Allocation (12/31/21)



\$437.1 M

Unfunded Liability

\$41.4 M
(FY2022)

Total Pension Appropriation

Everett

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Robert Shaw

SYSTEM MEMBERS

Active Members731
Total Payroll\$47.7 M
Average Salary\$65,300
Average Age47
Average Service11.7

Retired Members504
Benefits Paid\$14.2 M
Average Benefit\$28,100
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees64
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$265.5 M
Market Value

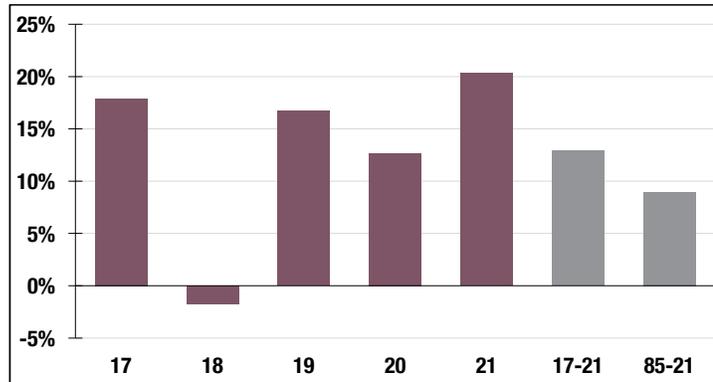
20.35%
2021 Returns

11.09%
2012-2021
(Annualized)

8.97%
1985-2021
(Annualized)

Investment Returns

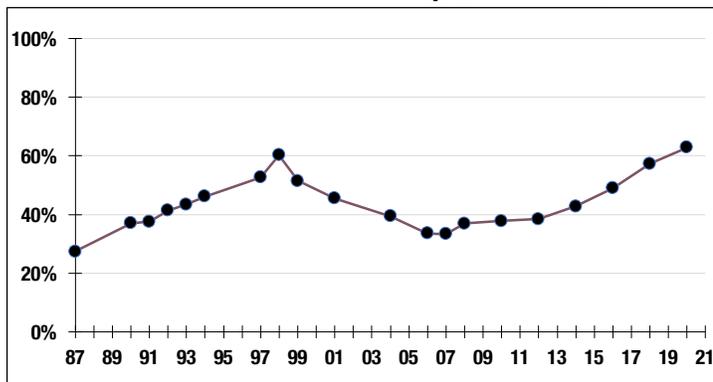
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.38%

Assumed Rate of Return

Funded Ratio History (1987-2021)



62.9%

Funded Ratio

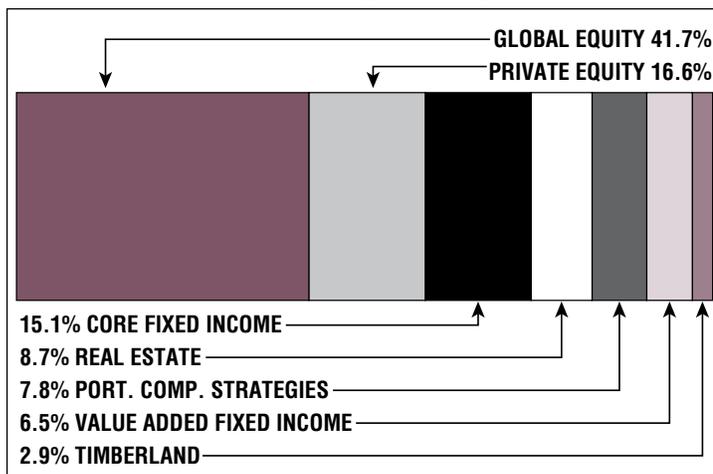
2030

Fully Funded

5.01% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$105.0 M

Unfunded Liability

\$18.1 M
(FY2022)

Total Pension Appropriation

Fairhaven

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Mary Sturgeon

SYSTEM MEMBERS

Active Members250
Total Payroll\$13.0 M
Average Salary\$52,100
Average Age48
Average Service 12.7

Retired Members 197
Benefits Paid\$4.7 M
Average Benefit\$24,000
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees24
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$93.7 M
Market Value

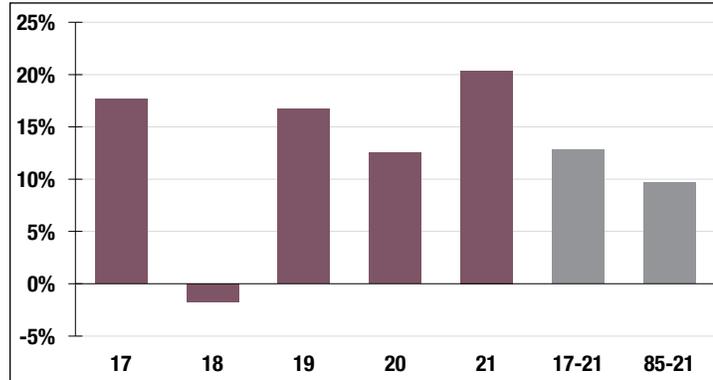
20.39%
2021 Returns

10.99%
2012-2021
(Annualized)

9.70%
1985-2021
(Annualized)

Investment Returns

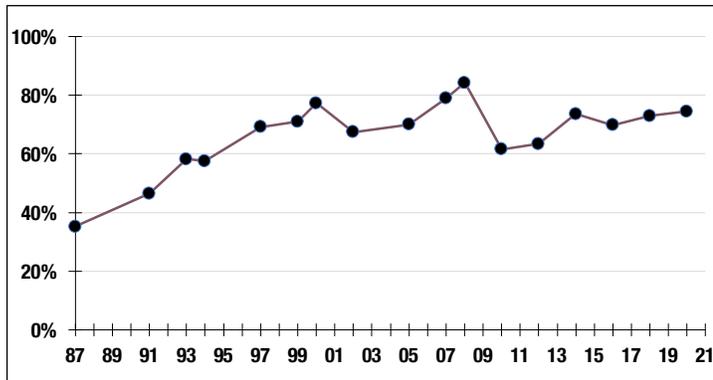
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



74.5%

Funded Ratio

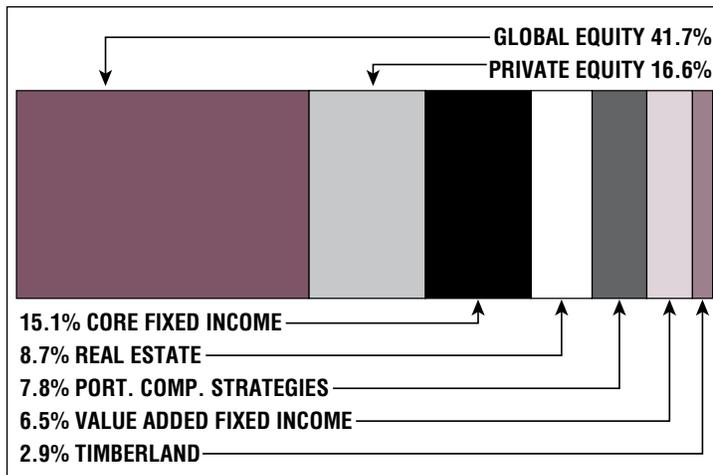
2034

Fully Funded

5.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$23.1 M

Unfunded Liability

\$3.7 M
(FY2022)

Total Pension Appropriation

Fall River

CONTACT INFORMATION

21 Father DeValles Boulevard
Suite GR1, Box 14
Fall River, MA 02723
Phone 508-646-9120
Fax 508-646-9123

BOARD MEMBERS

Ashley Pires
Mark Nassiff
Robert Camara
David Machado
Arthur Viana*
*indicates Chairperson

BOARD ADMINISTRATOR

Michael Pasternak

SYSTEM MEMBERS

Active Members 1,662
Total Payroll \$84.6 M
Average Salary \$50,900
Average Age 45
Average Service 11.7

Retired Members 1,533
Benefits Paid \$43.0 M
Average Benefit \$28,000
Average Age 73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 194
Reported Earnings 53
Excess Earners 4
Refund Due \$103,903

Last Valuation: 1/1/21

Actuary: PERAC



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\$392.2 M
Market Value

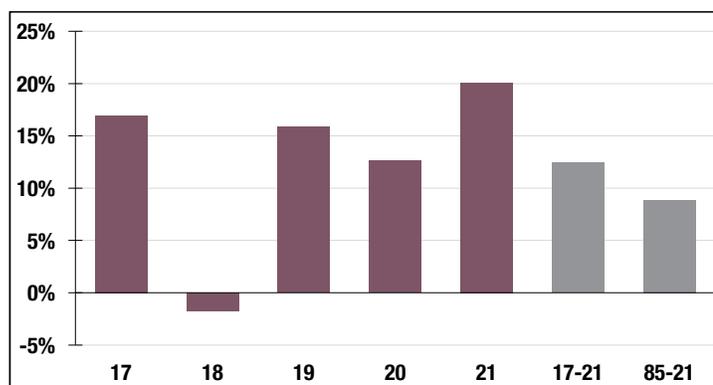
20.09%
2021 Returns

10.77%
2012-2021
(Annualized)

8.85%
1985-2021
(Annualized)

Investment Returns

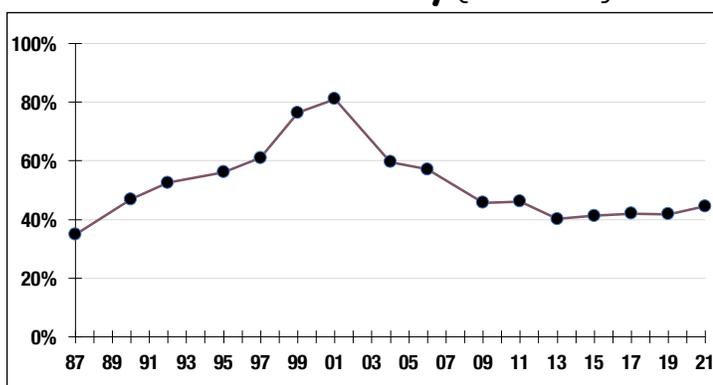
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



44.5%

Funded Ratio

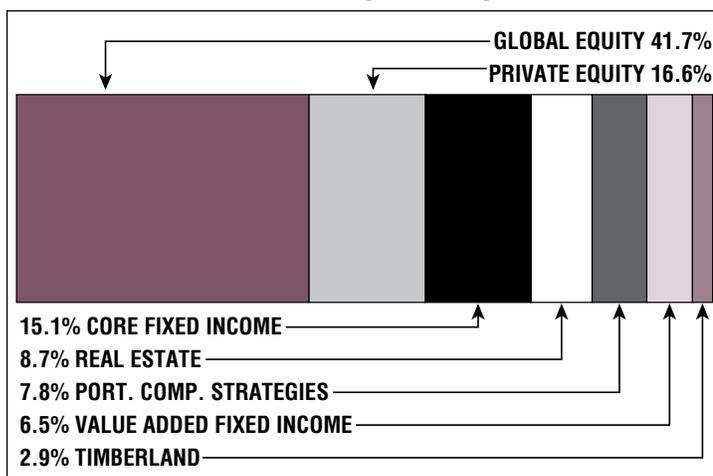
2035

Fully Funded

7.5% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$396.6 M

Unfunded Liability

\$37.7 M
(FY2022)

Total Pension Appropriation

Falmouth

CONTACT INFORMATION

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

BOARD MEMBERS

Jennifer Mullen
Paul Slivinski
Russell Ferreira*
Craig O'Malley
Ellen Philbin
*indicates Chairperson

BOARD ADMINISTRATOR

Francis St. Germaine, III

SYSTEM MEMBERS

Active Members581
Total Payroll\$32.2 M
Average Salary\$55,400
Average Age49
Average Service 12.6

Retired Members409
Benefits Paid\$12.1 M
Average Benefit\$29,500
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees37
Reported Earnings 14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$200.4 M
Market Value

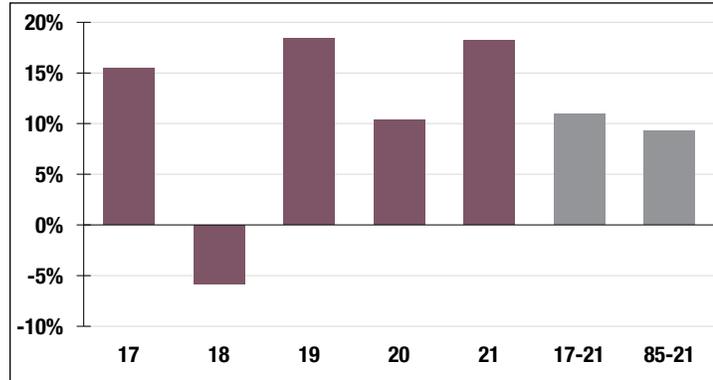
18.26%
2021 Returns

10.43%
2012-2021
(Annualized)

9.23%
1985-2021
(Annualized)

Investment Returns

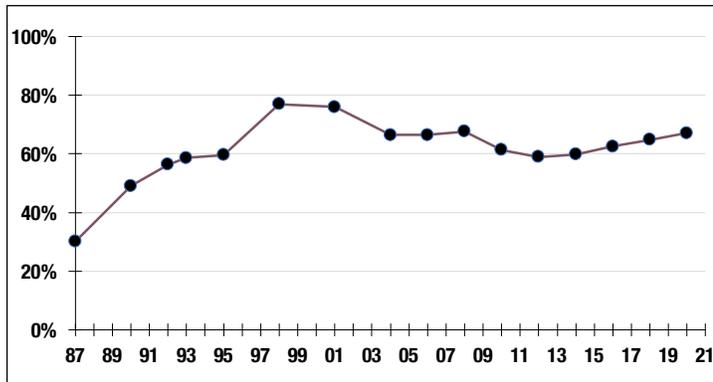
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



67.1%

Funded Ratio

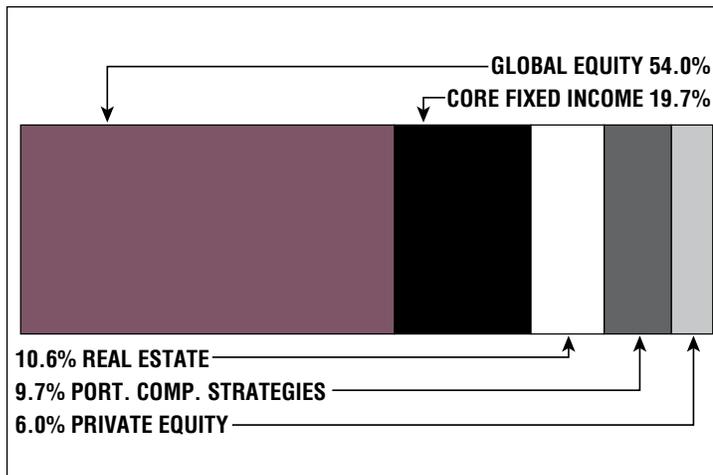
2033

Fully Funded

6.31% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$74.6 M

Unfunded Liability

\$9.7 M
(FY2022)

Total Pension Appropriation

Fitchburg

CONTACT INFORMATION

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

BOARD MEMBERS

Calvin Brooks*
Mary Cringan
Thomas Dateo, Jr.

Anna Farrell
John Brown

*indicates Chairperson

BOARD ADMINISTRATOR

Tina Schneider

SYSTEM MEMBERS

Active Members682
Total Payroll\$34.7 M
Average Salary\$50,900
Average Age46
Average Service11.3

Retired Members588
Benefits Paid\$16.5 M
Average Benefit\$28,100
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees54
Reported Earnings12
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$177.8 M
Market Value

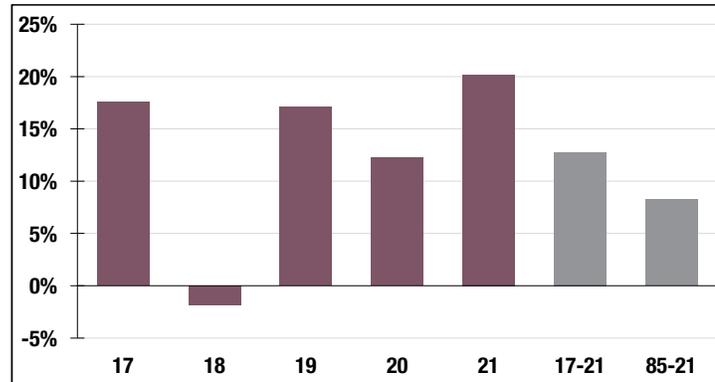
20.17%
2021 Returns

10.81%
2012-2021
(Annualized)

8.24%
1985-2021
(Annualized)

Investment Returns

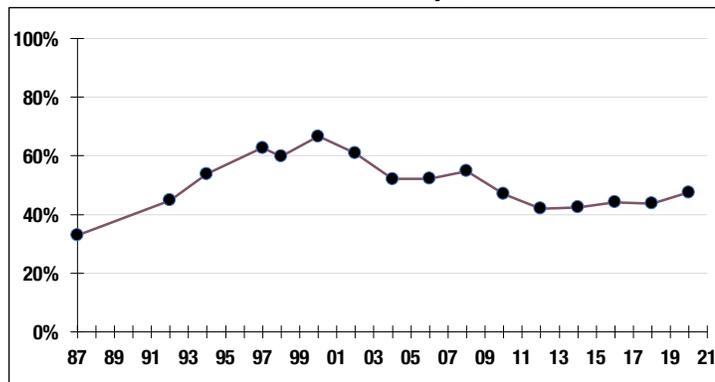
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



47.6%

Funded Ratio

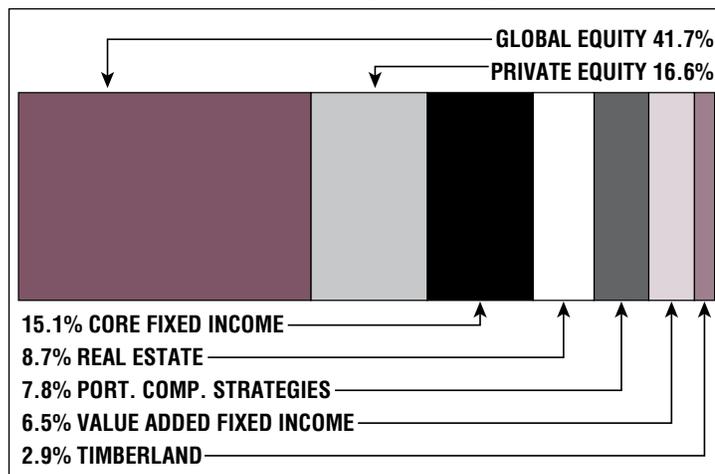
2033

Fully Funded

6.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$144.6 M

Unfunded Liability

\$15.3 M
(FY2022)

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

BOARD MEMBERS

Richard Howarth, Jr.*
Louise Miller
Peter Rovinelli
Joseph Fonseca
John White, Jr.
*indicates Chairperson

BOARD ADMINISTRATOR

Laurie Lizak

SYSTEM MEMBERS

Active Members1,237
Total Payroll\$71.6 M
Average Salary\$57,900
Average Age46
Average Service 11.1

Retired Members877
Benefits Paid\$26.4 M
Average Benefit\$30,100
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees64
Reported Earnings 14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$463.1 M
Market Value

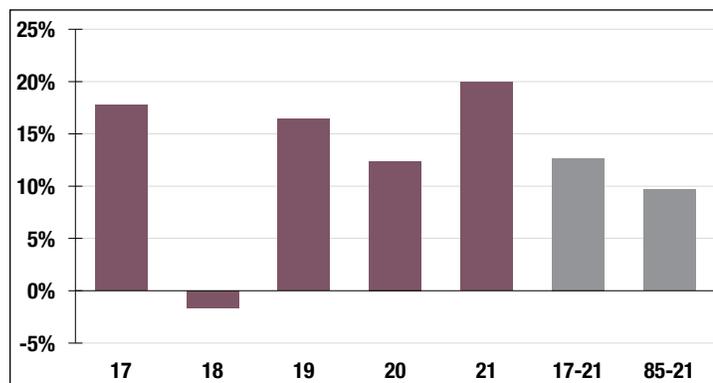
19.97%
2021 Returns

10.92%
2012-2021
(Annualized)

9.65%
1985-2021
(Annualized)

Investment Returns

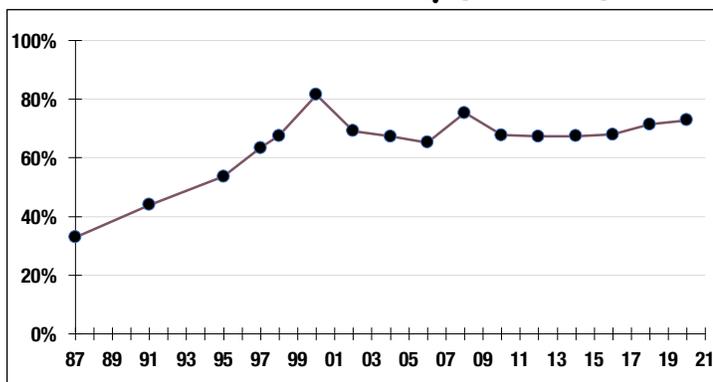
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



72.8%

Funded Ratio

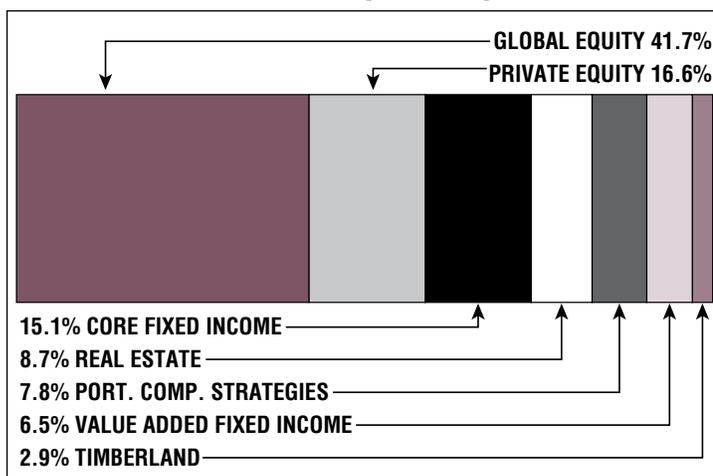
2030

Fully Funded

6.95% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$126.5 M

Unfunded Liability

\$19.8 M
(FY2022)

Total Pension Appropriation

Franklin Regional

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Dale Kowacki

SYSTEM MEMBERS

Active Members 1,044
Total Payroll\$39.7 M
Average Salary\$38,000
Average Age48
Average Service9.2

Retired Members656
Benefits Paid\$11.5 M
Average Benefit\$17,600
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees26
Reported Earnings5
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: KMS



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\$207.2 M
Market Value

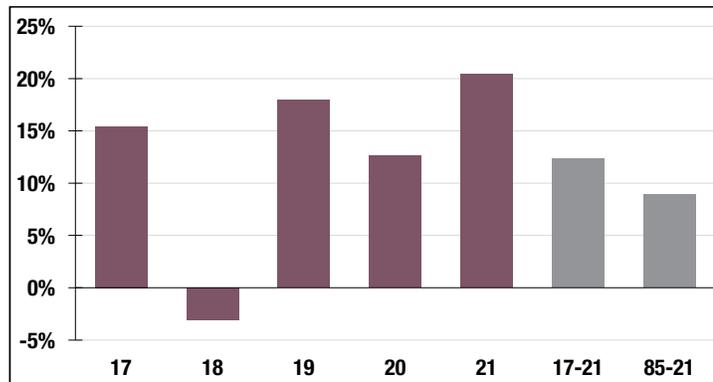
20.40%
2021 Returns

11.26%
2012-2021
(Annualized)

8.89%
1985-2021
(Annualized)

Investment Returns

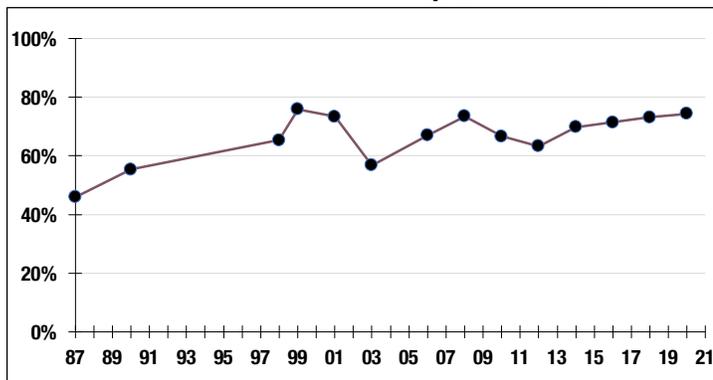
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



74.4%

Funded Ratio

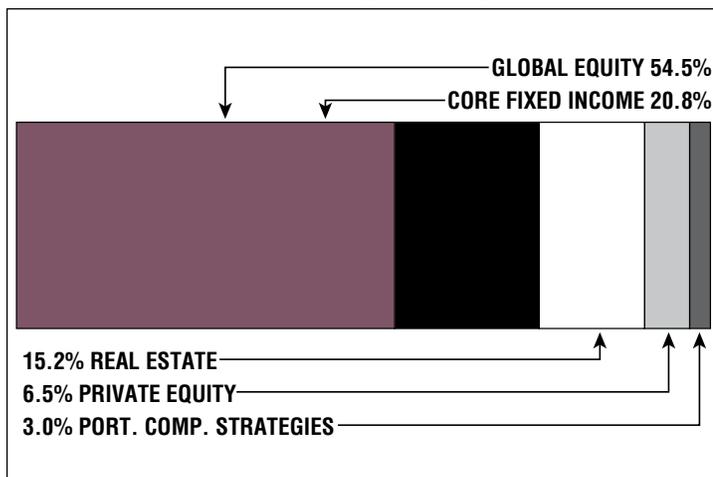
2034

Fully Funded

5.75% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$52.8 M

Unfunded Liability

\$7.8 M
(FY2022)

Total Pension Appropriation

Gardner

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Cheryl Bosse

SYSTEM MEMBERS

Active Members313
 Total Payroll\$15.1 M
 Average Salary\$48,100
 Average Age45
 Average Service9.6

 Retired Members260
 Benefits Paid\$6.6 M
 Average Benefit\$25,600
 Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees17
 Reported Earnings4
 Excess Earners0
 Refund Due\$0

Last Valuation: 1/1/21
 Actuary: Stone



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\$79.1 M
 Market Value

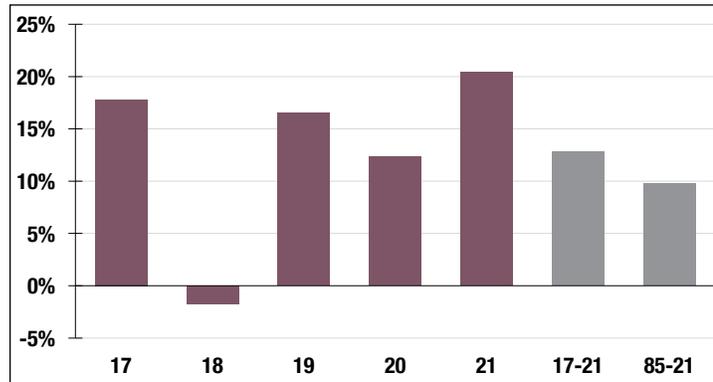
20.45%
 2021 Returns

10.98%
 2012-2021
 (Annualized)

9.77%
 1985-2021
 (Annualized)

Investment Returns

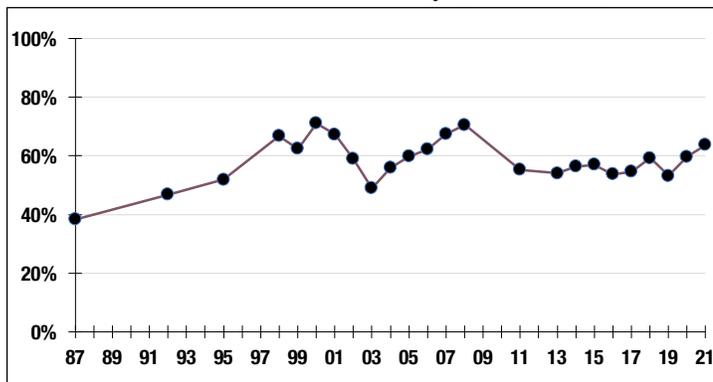
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



63.7%

Funded Ratio

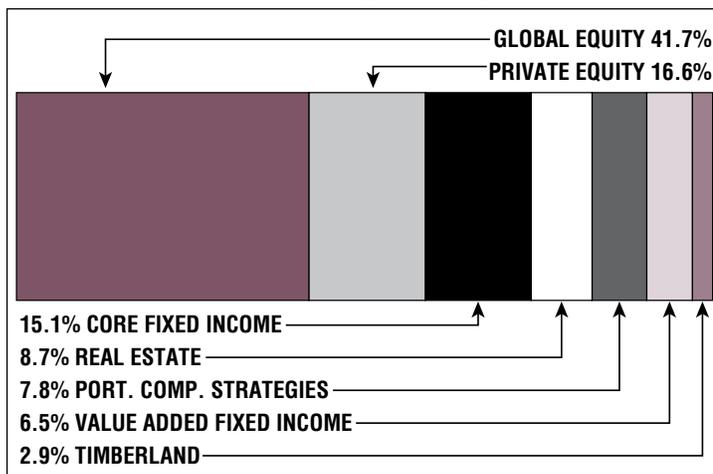
2031

Fully Funded

7.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$38.2 M

Unfunded Liability

\$5.0 M
 (FY2022)

Total Pension Appropriation

Gloucester

CONTACT INFORMATION

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

BOARD MEMBERS

Kenny Costa
 Donna Leete
 James Hannon, Jr.
 Douglas MacArthur*
 Juanita Escobar
 *indicates Chairperson

BOARD ADMINISTRATOR

Patricia Ivas

SYSTEM MEMBERS

Active Members557
 Total Payroll\$32.1 M
 Average Salary\$57,700
 Average Age49
 Average Service 11.9

Retired Members486
 Benefits Paid\$13.5 M
 Average Benefit\$27,900
 Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees36
 Reported Earnings8
 Excess Earners0
 Refund Due\$0

Last Valuation: 1/1/20
 Actuary: Segal



\$160.8 M
 Market Value

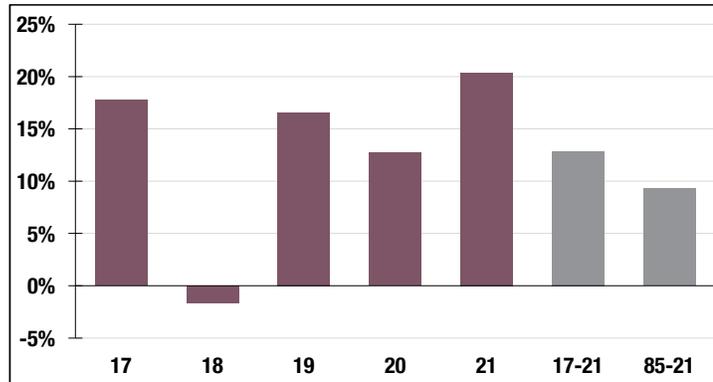
20.38%
 2021 Returns

11.01%
 2012-2021
 (Annualized)

9.32%
 1985-2021
 (Annualized)

Investment Returns

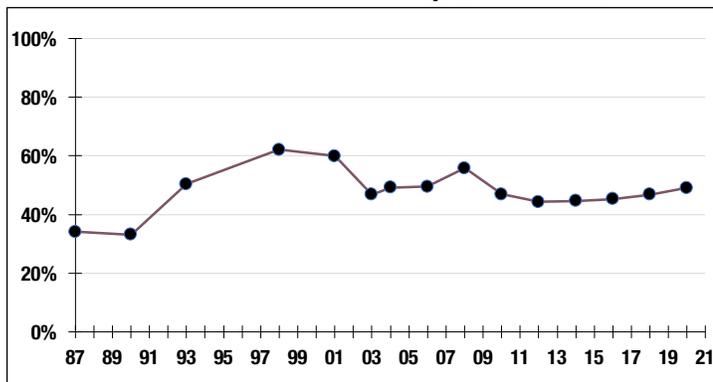
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



49.1%

Funded Ratio

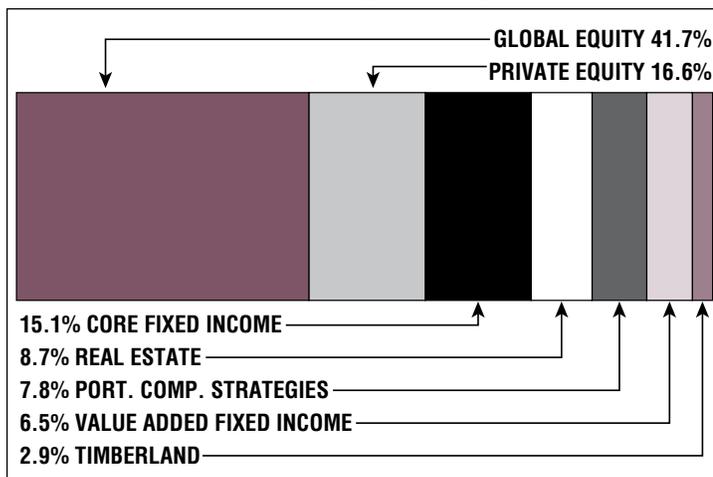
2034

Fully Funded

6.8% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$120.9 M

Unfunded Liability

\$1.6 M
 (FY2022)

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

BOARD MEMBERS

Joseph Quartarone
 Laurie Elliott
 Sandra Grenier*
 Michael Gagnon
 Ronald Pollone
 *indicates Chairperson

BOARD ADMINISTRATOR

Heather Thibeault

SYSTEM MEMBERS

Active Members40
 Total Payroll\$2.8 M
 Average Salary\$69,400
 Average Age48
 Average Service13.3

 Retired Members.....38
 Benefits Paid\$1.2 M
 Average Benefit\$31,800
 Average Age70

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees1
 Reported Earnings0
 Excess Earners.....0
 Refund Due\$0

Last Valuation: 1/1/21
 Actuary: PERAC



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\$28.3 M
 Market Value

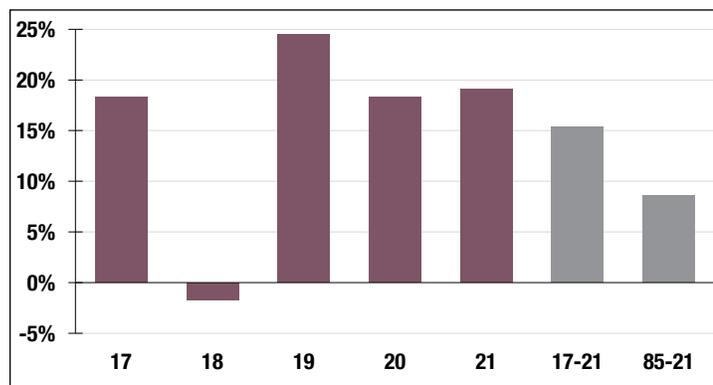
19.07%
 2021 Returns

12.23%
 2012-2021
 (Annualized)

8.55%
 1985-2021
 (Annualized)

Investment Returns

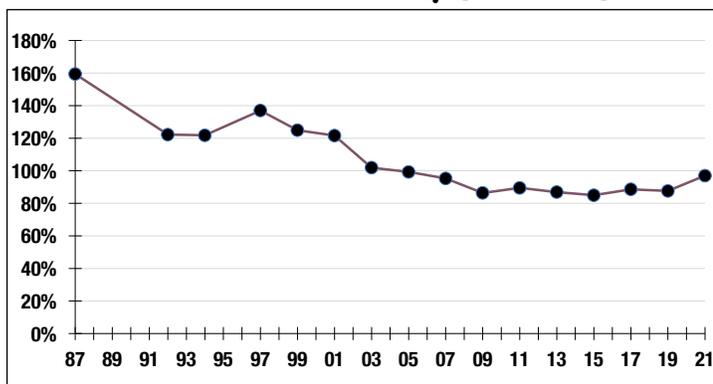
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



97.0%

Funded Ratio

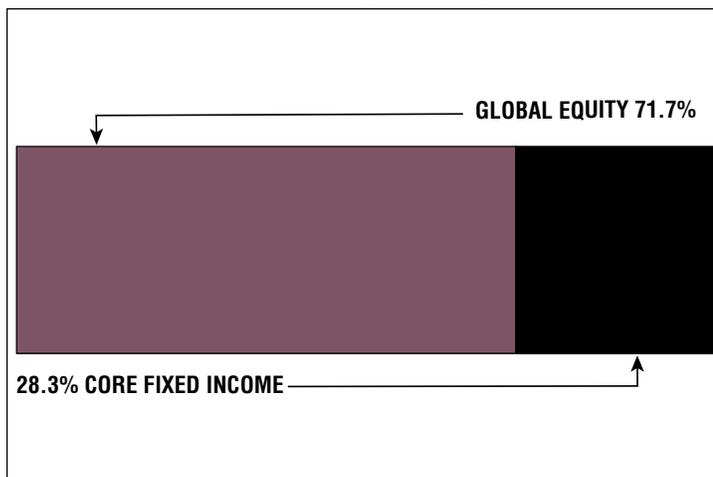
2027

Fully Funded

9.73% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$687 K

Unfunded Liability

\$430 K
 (FY2022)

Total Pension Appropriation

Greenfield

CONTACT INFORMATION

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

BOARD MEMBERS

Angelica Desroches
Marianne Fiske
William Devino*
Kyle Phelps
Frances Stotz
*indicates Chairperson

BOARD ADMINISTRATOR

Shari Hildreth

SYSTEM MEMBERS

Active Members451
Total Payroll\$20.0 M
Average Salary\$44,300
Average Age46
Average Service9

Retired Members308
Benefits Paid\$7.8 M
Average Benefit\$25,400
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees18
Reported Earnings7
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



Click/Scan for Website

\$101.7 M
Market Value

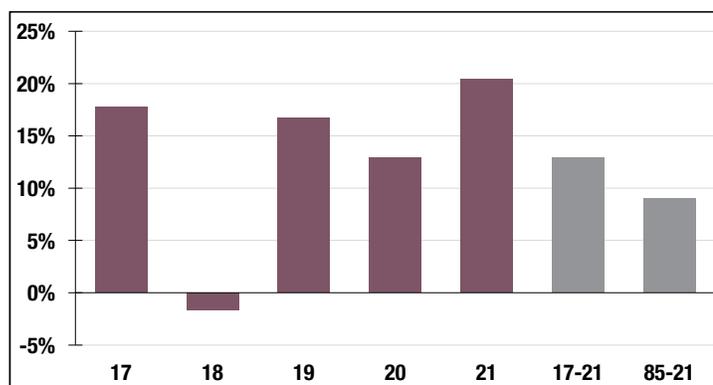
20.41%
2021 Returns

11.12%
2012-2021
(Annualized)

9.02%
1985-2021
(Annualized)

Investment Returns

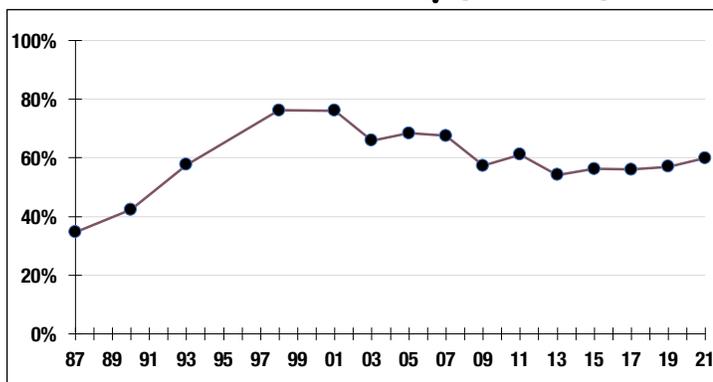
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



59.9%

Funded Ratio

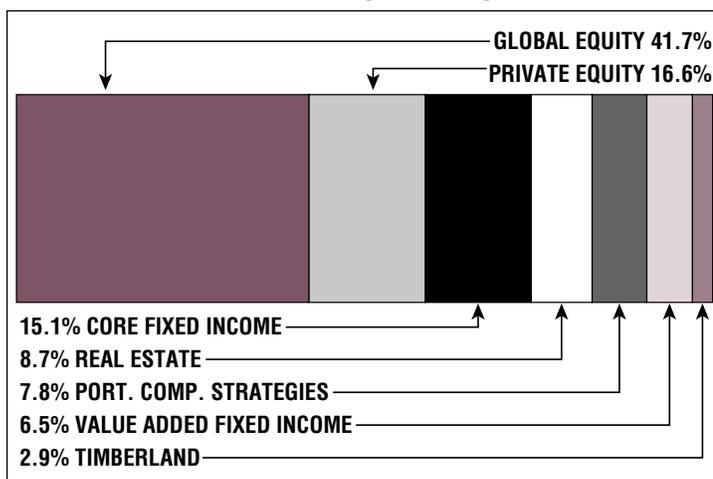
2035

Fully Funded

7.1% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$54.3 M

Unfunded Liability

\$6.0 M
(FY2022)

Total Pension Appropriation

Hampden County

CONTACT INFORMATION

Agawam Corporate Center
67 Hunt Street, Suite 116
Agawam, MA 01001
Phone 413-737-1344
Fax 413-732-7999

BOARD MEMBERS

Karl Schmaelzle*
Michelle Hill
Thomas Sullivan
Robert Taylor
Patrick O'Neil
*indicates Chairperson

BOARD ADMINISTRATOR

Karen Martin

SYSTEM MEMBERS

Active Members2,784
Total Payroll\$120.1 M
Average Salary\$43,100
Average Age48
Average Service 10.7

Retired Members1,794
Benefits Paid\$42.0 M
Average Benefit\$23,400
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees101
Reported Earnings29
Excess Earners2
Refund Due\$2,919

Last Valuation: 1/1/20
Actuary: Segal



Click/Scan for Website

\$538.1 M
Market Value

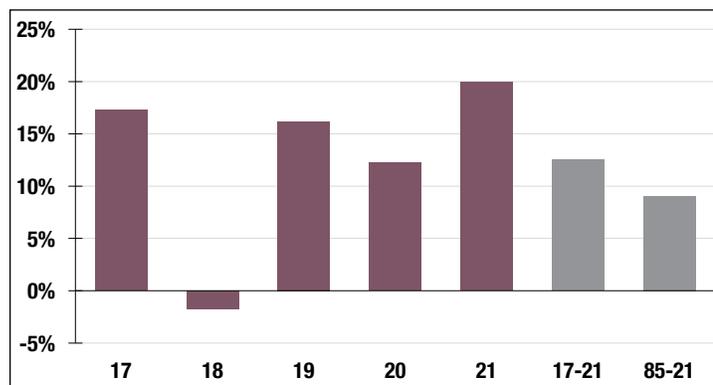
19.95%
2021 Returns

10.73%
2012-2021
(Annualized)

9.05%
1985-2021
(Annualized)

Investment Returns

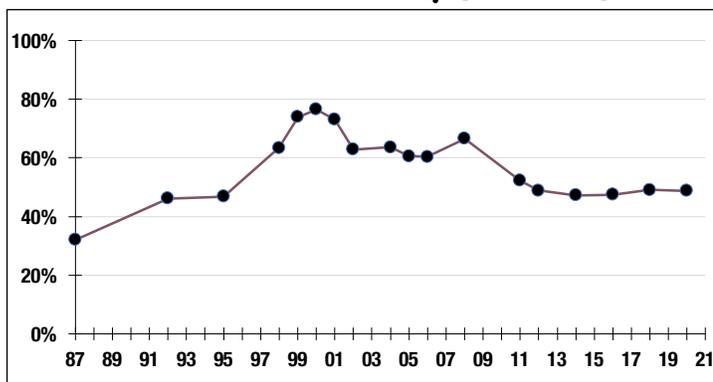
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



48.7%

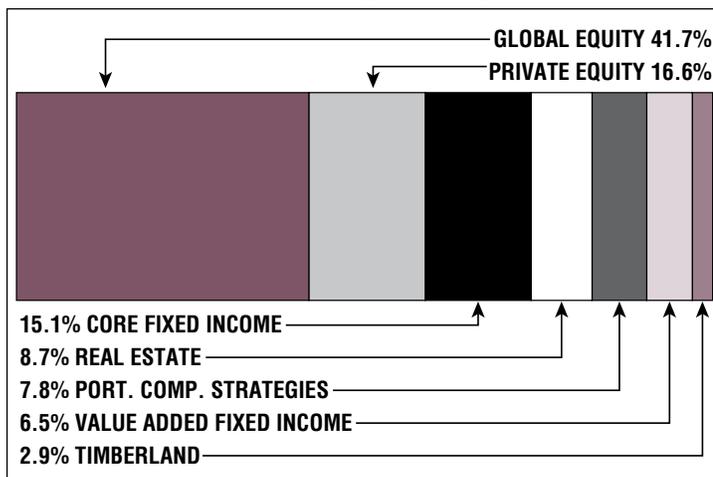
Funded Ratio

2036

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$418.9 M

Unfunded Liability

\$36.6 M
(FY2022)

Total Pension Appropriation

Hampshire County

CONTACT INFORMATION

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

BOARD MEMBERS

Patrick Brock*
Jane Wolfe
Harry Chadwick
Joyce Karpinski
*indicates Chairperson

BOARD ADMINISTRATOR

Mary Baronas

SYSTEM MEMBERS

Active Members 1,968
Total Payroll\$89.4 M
Average Salary\$45,400
Average Age47
Average Service 10.6

Retired Members 1,357
Benefits Paid\$30.4 M
Average Benefit\$22,400
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees76
Reported Earnings31
Excess Earners 1
Refund Due\$4,182

Last Valuation: 1/1/20
Actuary: KMS



Click/Scan for Website

\$475.5 M
Market Value

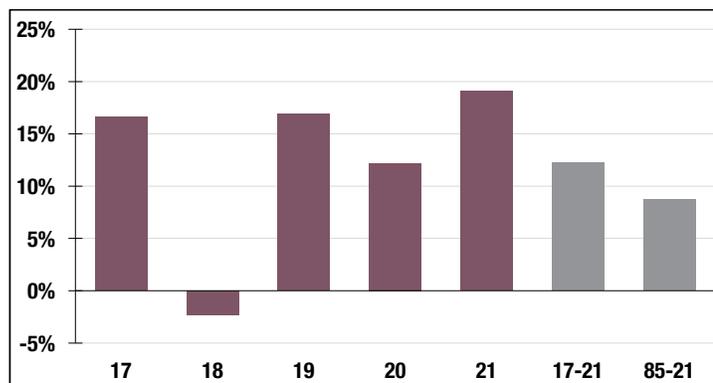
19.09%
2021 Returns

10.11%
2012-2021
(Annualized)

8.73%
1985-2021
(Annualized)

Investment Returns

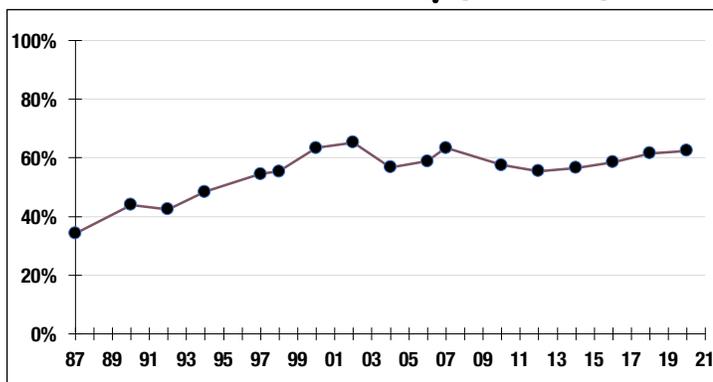
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



62.4%

Funded Ratio

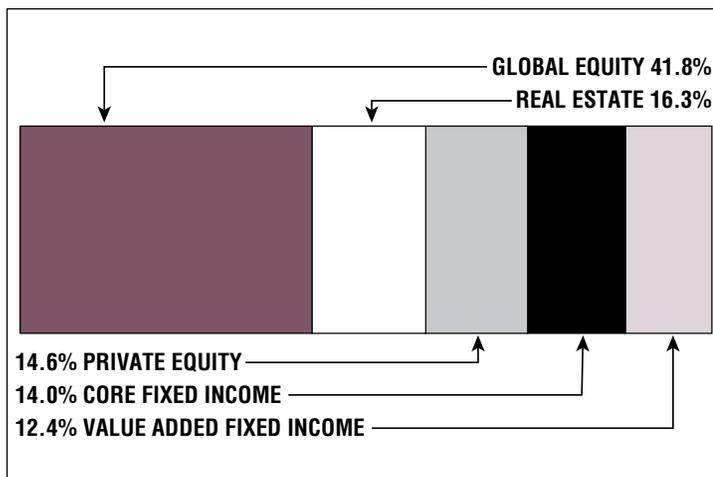
2033

Fully Funded

4.0% Increasing Phase-In

Funding Schedule

Asset Allocation (12/31/21)



\$210.3 M

Unfunded Liability

\$28.6 M
(FY2022)

Total Pension Appropriation

Haverhill

CONTACT INFORMATION

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

BOARD MEMBERS

Angel Perkins
Richard MacDonald
William Klueber*
Lewis Poore
James Cleary
*indicates Chairperson

BOARD ADMINISTRATOR

David Van Dam

SYSTEM MEMBERS

Active Members989
Total Payroll\$47.5 M
Average Salary\$48,000
Average Age47
Average Service 10.6

Retired Members.....1,075
Benefits Paid\$26.8 M
Average Benefit\$24,900
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees60
Reported Earnings 15
Excess Earners..... 1
Refund Due\$63,128

Last Valuation: 1/1/20
Actuary: KMS



\$294.6 M
Market Value

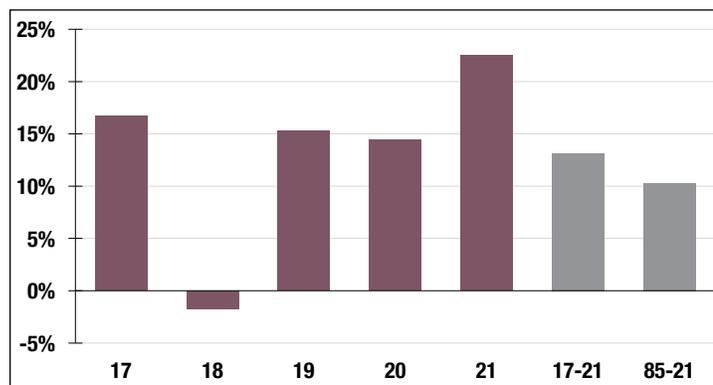
22.53%
2021 Returns

10.92%
2012-2021
(Annualized)

10.29%
1985-2021
(Annualized)

Investment Returns

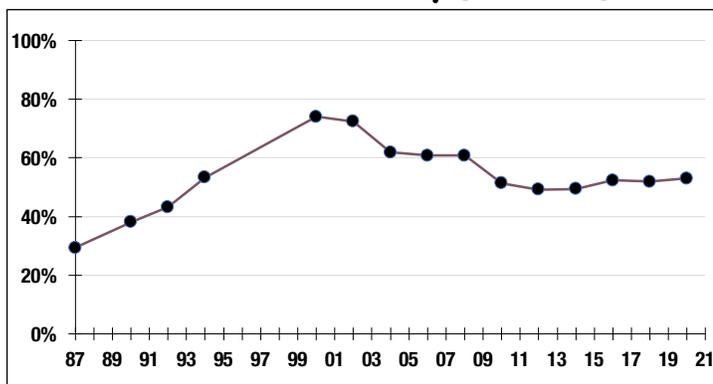
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



53.0%

Funded Ratio

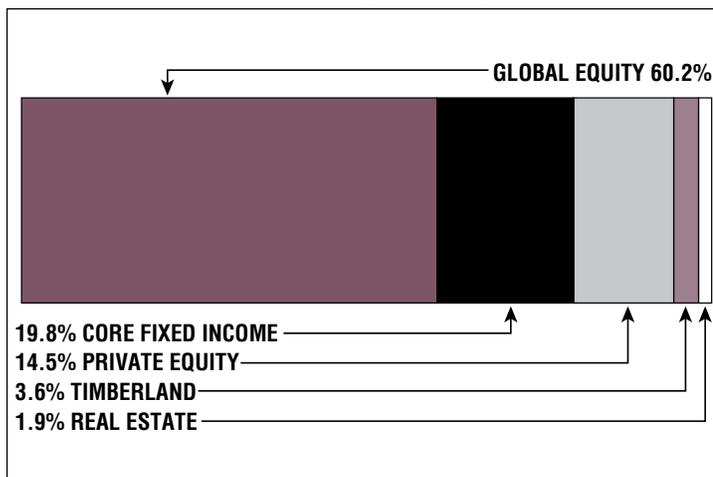
2032

Fully Funded

6.06% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$188.5 M

Unfunded Liability

\$22.3 M
(FY2022)

Total Pension Appropriation

Hingham

CONTACT INFORMATION

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

BOARD MEMBERS

Susan Nickerson*
Eileen McCracken
Jean Montgomery
David Jones
Charles Cristello
*indicates Chairperson

BOARD ADMINISTRATOR

Maressa Orellana

SYSTEM MEMBERS

Active Members601
Total Payroll\$33.1 M
Average Salary\$55,100
Average Age49
Average Service10.3

Retired Members337
Benefits Paid\$9.5 M
Average Benefit\$28,200
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 10
Reported Earnings 1
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/20
Actuary: KMS



\$174.4 M
Market Value

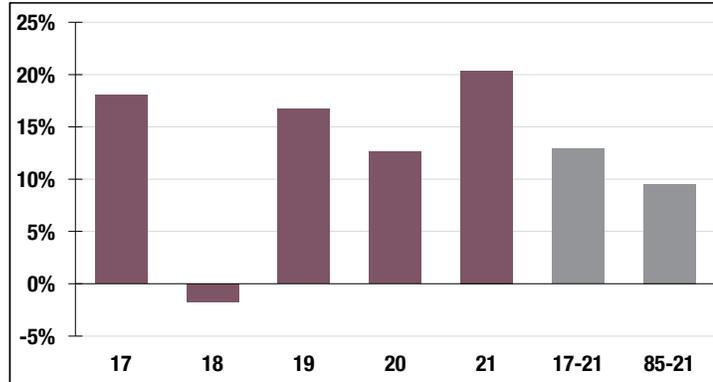
20.39%
2021 Returns

10.37%
2012-2021
(Annualized)

9.52%
1985-2021
(Annualized)

Investment Returns

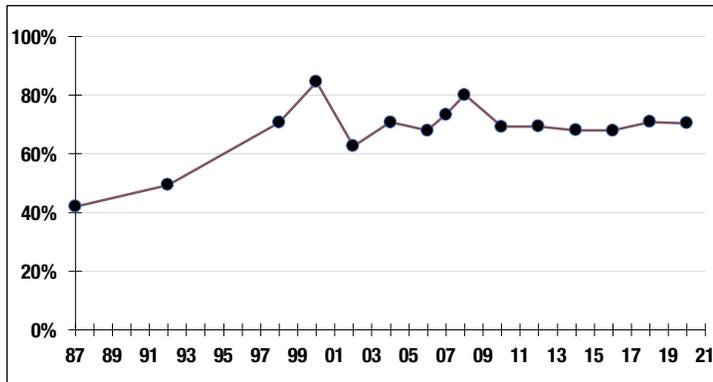
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.40%

Assumed Rate of Return

Funded Ratio History (1987-2021)



70.4%

Funded Ratio

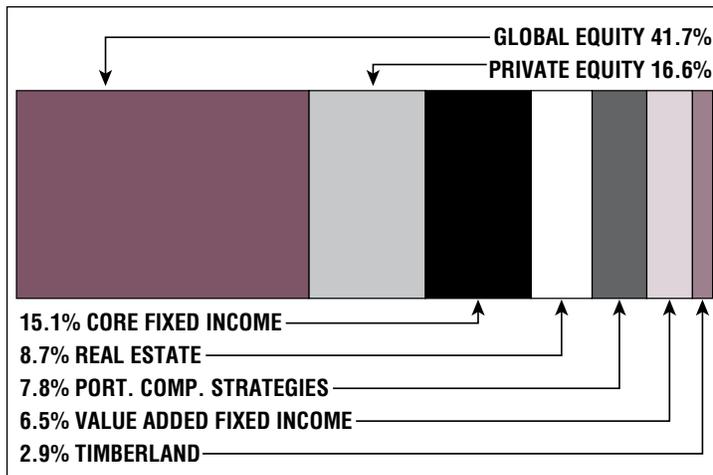
2035

Fully Funded

7.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$53.5 M

Unfunded Liability

\$6.1 M
(FY2022)

Total Pension Appropriation

Holyoke

CONTACT INFORMATION

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

BOARD MEMBERS

Tanya Wdowiak
Andrew Melendez
John McCarthy*
Cheryl Dugre
Michele Aubrey
*indicates Chairperson

BOARD ADMINISTRATOR

Anthony Dulude

SYSTEM MEMBERS

Active Members 1,122
Total Payroll \$58.4 M
Average Salary \$52,000
Average Age 45
Average Service 11.7

Retired Members 966
Benefits Paid \$27.3 M
Average Benefit \$28,200
Average Age 72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 73
Reported Earnings 12
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/20
Actuary: Segal



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\$408.5 M
Market Value

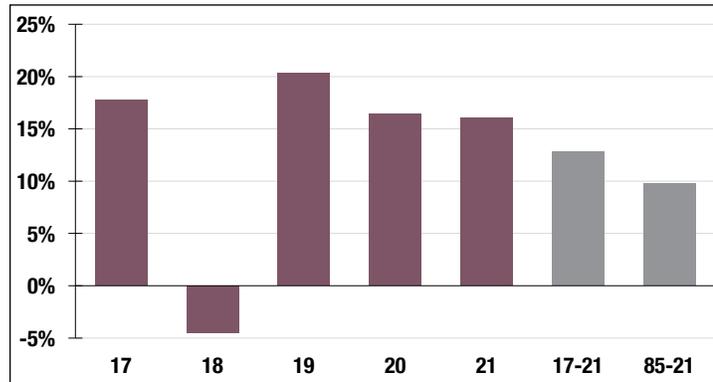
16.07%
2021 Returns

11.90%
2012-2021
(Annualized)

9.80%
1985-2021
(Annualized)

Investment Returns

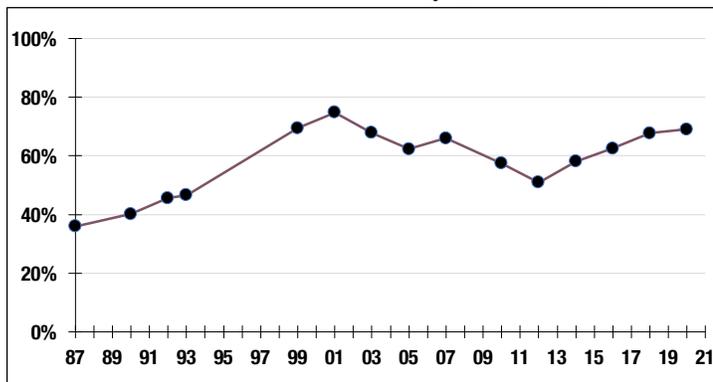
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



69.0%

Funded Ratio

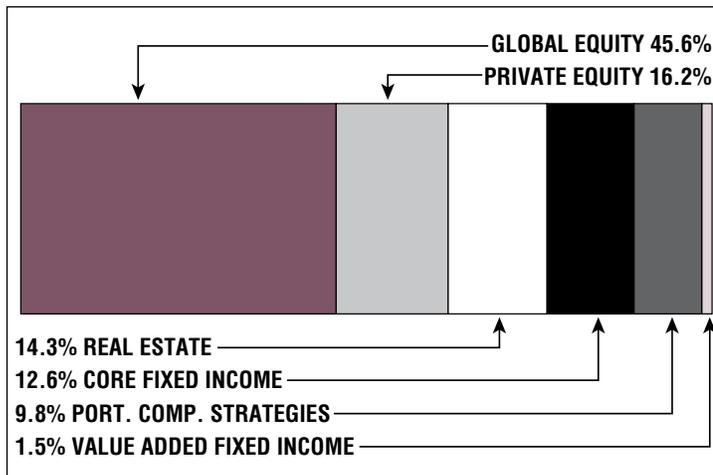
2035

Fully Funded

3.07% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$142.3 M

Unfunded Liability

\$17.8 M
(FY2022)

Total Pension Appropriation

Hull

CONTACT INFORMATION

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

BOARD MEMBERS

J. Michael Buckley*
Eileen White
Jason Harris
Bartley Kelly
Gregory Galvin
*indicates Chairperson

BOARD ADMINISTRATOR

Lauren Durham

SYSTEM MEMBERS

Active Members 163
Total Payroll \$10.5 M
Average Salary \$64,200
Average Age 52
Average Service 13

Retired Members 142
Benefits Paid \$4.6 M
Average Benefit \$32,600
Average Age 72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 15
Reported Earnings 7
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$74.1 M
Market Value

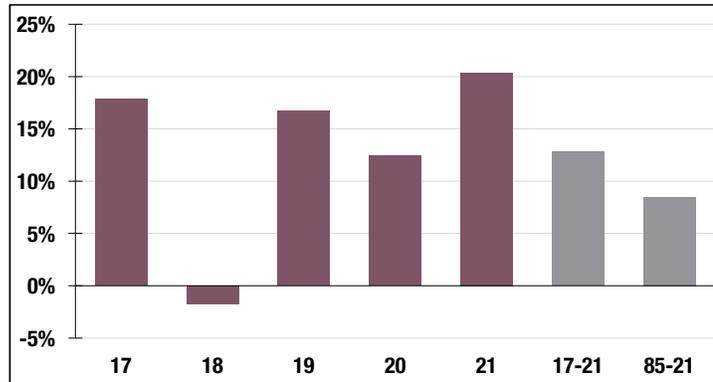
20.38%
2021 Returns

11.00%
2012-2021
(Annualized)

8.49%
1985-2021
(Annualized)

Investment Returns

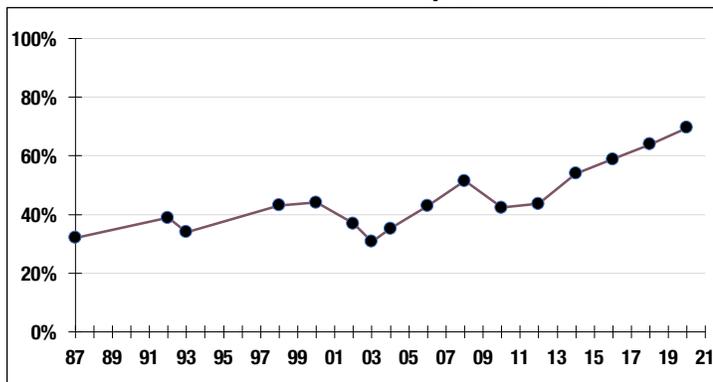
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.40%

Assumed Rate of Return

Funded Ratio History (1987-2021)



69.6%

Funded Ratio

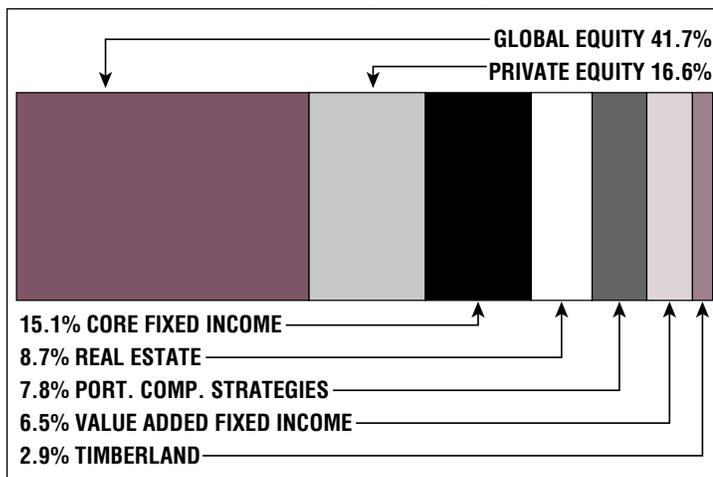
2031

Fully Funded

4.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$24.2 M

Unfunded Liability

\$4.1 M
(FY2022)

Total Pension Appropriation

Lawrence

CONTACT INFORMATION

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

BOARD MEMBERS

Ramona Ceballos
Thomas Cuddy*
Robert Wilson
Diane Cockroft
Sheryl Wright
*indicates Chairperson

BOARD ADMINISTRATOR

Gina Rizzo

SYSTEM MEMBERS

Active Members 1,633
Total Payroll \$75.9 M
Average Salary \$46,400
Average Age 44
Average Service 10

Retired Members 924
Benefits Paid \$26.4 M
Average Benefit \$28,600
Average Age 73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 103
Reported Earnings 23
Excess Earners 1
Refund Due \$31,116

Last Valuation: 1/1/20
Actuary: Stone



Click/Scan for Website

\$343.7 M
Market Value

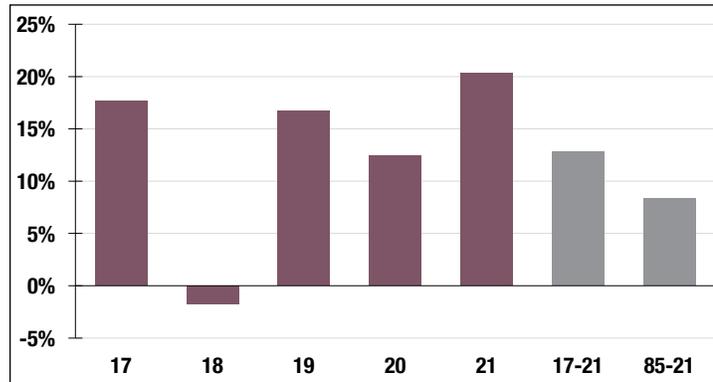
20.30%
2021 Returns

10.95%
2012-2021
(Annualized)

8.38%
1985-2021
(Annualized)

Investment Returns

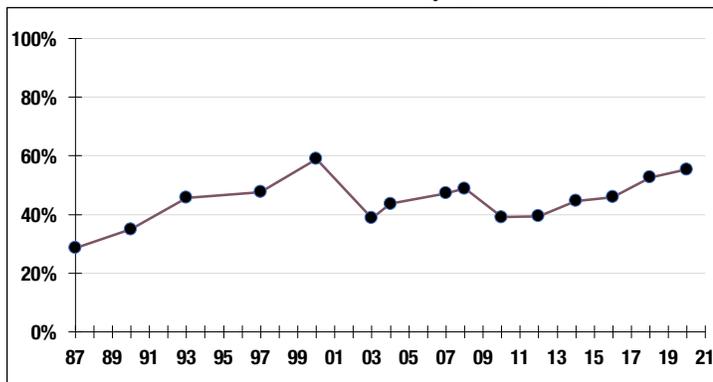
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



55.4%

Funded Ratio

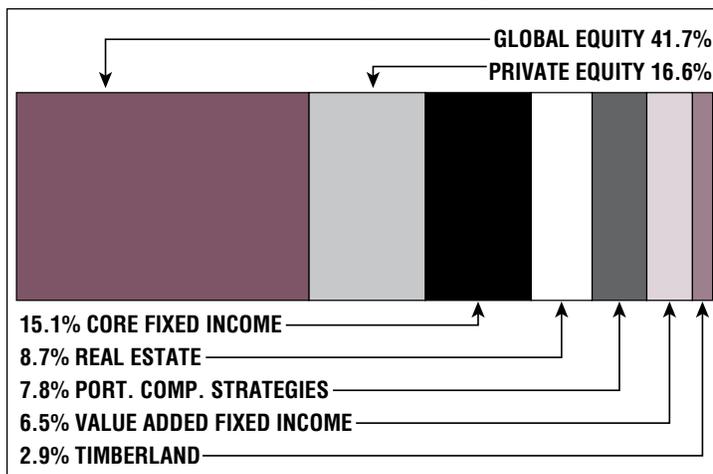
2037

Fully Funded

3.65% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$205.9 M

Unfunded Liability

\$22.1 M
(FY2022)

Total Pension Appropriation

Leominster

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Erin Kelley

SYSTEM MEMBERS

Active Members607
Total Payroll\$31.4 M
Average Salary\$51,800
Average Age45
Average Service 10.5

Retired Members.....438
Benefits Paid\$11.6 M
Average Benefit\$26,600
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees36
Reported Earnings 19
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Stone



\$299.4 M
Market Value

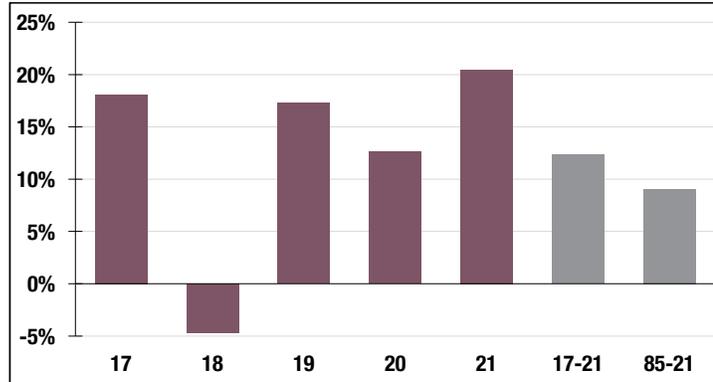
20.46%
2021 Returns

11.54%
2012-2021
(Annualized)

9.06%
1985-2021
(Annualized)

Investment Returns

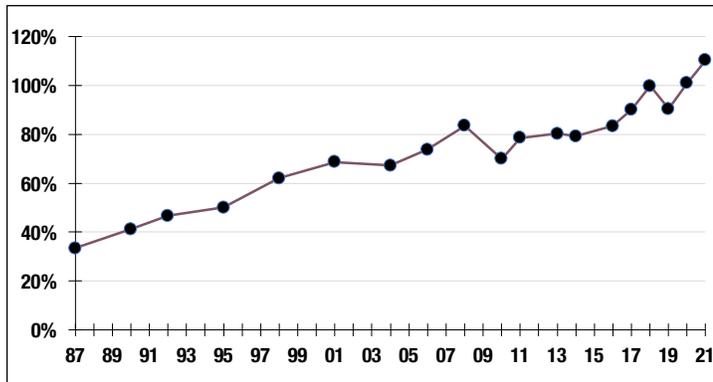
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



5.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



110.3%

Funded Ratio

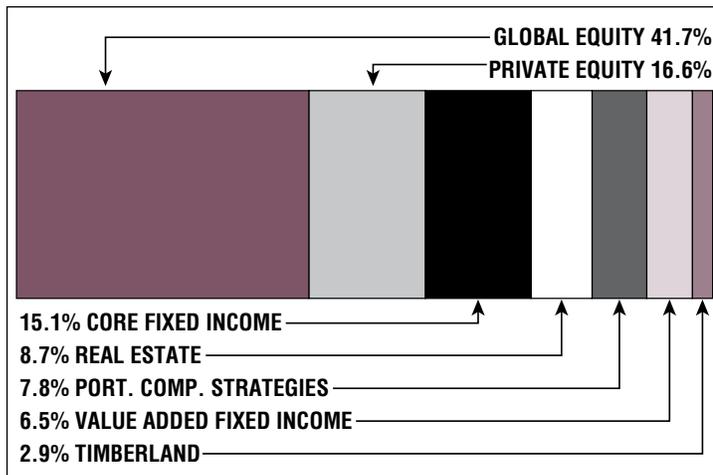
N/A

Fully Funded

Fully Funded/
Normal Cost

Funding Schedule

Asset Allocation (12/31/21)



-\$24.1 M

Unfunded Liability

\$2.0 M
(FY2022)

Total Pension
Appropriation

Lexington

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Marguerite Oliva

SYSTEM MEMBERS

Active Members757
Total Payroll\$45.7 M
Average Salary\$60,400
Average Age46
Average Service9.9

Retired Members457
Benefits Paid\$13.8 M
Average Benefit\$30,200
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees22
Reported Earnings10
Excess Earners1
Refund Due\$33,872

Last Valuation: 1/1/21
Actuary: Stone



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\$228.7 M
Market Value

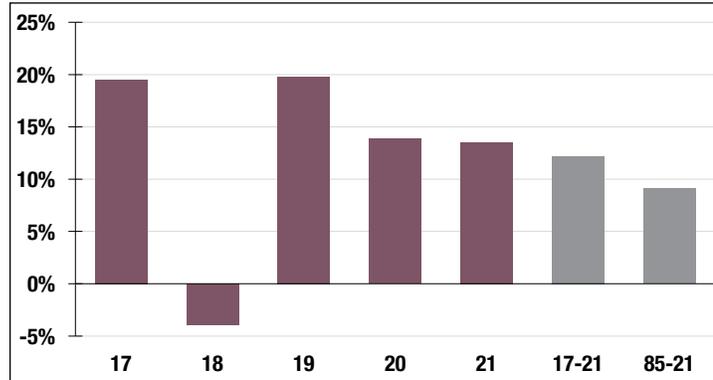
13.54%
2021 Returns

10.34%
2012-2021
(Annualized)

9.12%
1985-2021
(Annualized)

Investment Returns

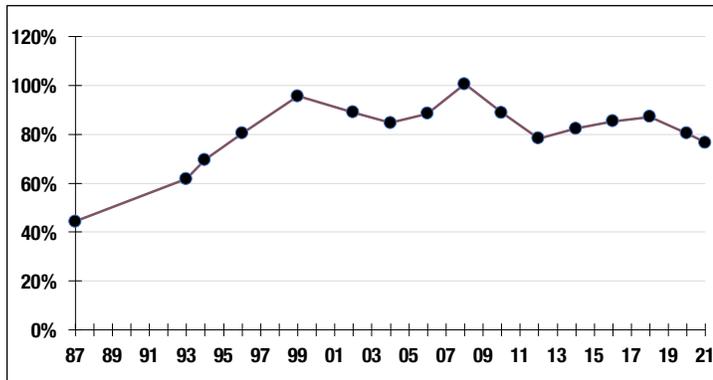
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



76.6%

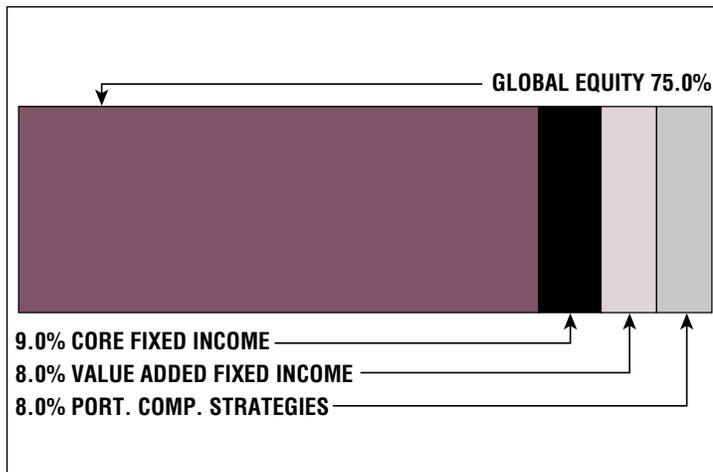
Funded Ratio

2030

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$59.3 M

Unfunded Liability

\$7.5 M
(FY2022)

Total Pension Appropriation

Lowell

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Shannon Dowd

SYSTEM MEMBERS

Active Members1,693
Total Payroll\$106.0 M
Average Salary\$62,600
Average Age46
Average Service12.3

Retired Members1,288
Benefits Paid\$42.4 M
Average Benefit\$32,900
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees158
Reported Earnings43
Excess Earners2
Refund Due\$32,168

Last Valuation: 1/1/21
Actuary: KMS



Click/Scan for Website

\$546.8 M
Market Value

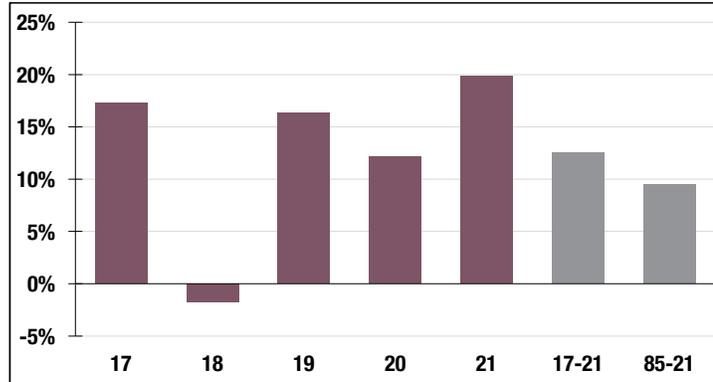
19.85%
2021 Returns

10.70%
2012-2021
(Annualized)

9.46%
1985-2021
(Annualized)

Investment Returns

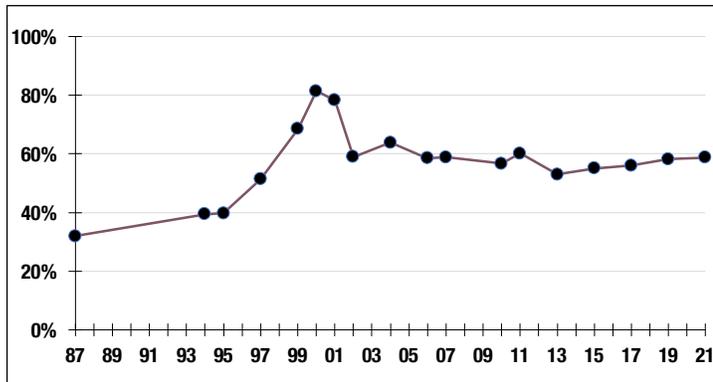
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.10%

Assumed Rate of Return

Funded Ratio History (1987-2021)



58.7%

Funded Ratio

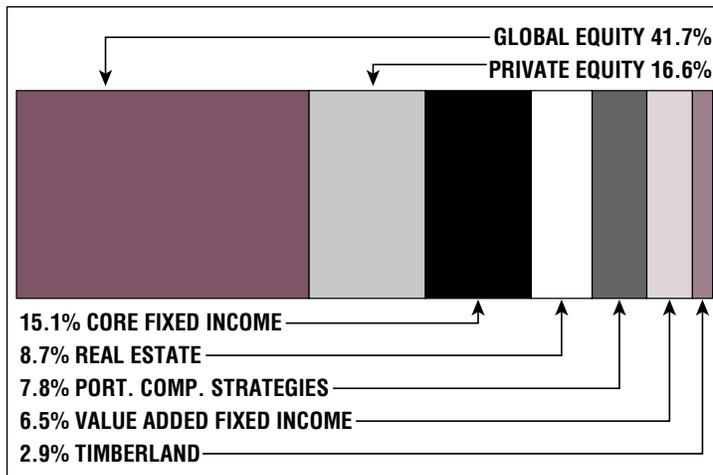
2037

Fully Funded

5.2% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$312.5 M

Unfunded Liability

\$31.8 M
(FY2022)

Total Pension Appropriation

Lynn

CONTACT INFORMATION

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

BOARD MEMBERS

Stephen Spencer
 Frank Valeri
 Richard Biagiotti
 Gordon Barton
 Michael Marks*
 *indicates Chairperson

BOARD ADMINISTRATOR

Gary Brenner

SYSTEM MEMBERS

Active Members 1,325
 Total Payroll \$83.5 M
 Average Salary \$63,100
 Average Age 48
 Average Service 14.1

Retired Members 1,201
 Benefits Paid \$42.8 M
 Average Benefit \$35,700
 Average Age 74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 144
 Reported Earnings 31
 Excess Earners 1
 Refund Due \$8,415

Last Valuation: 1/1/21
 Actuary: PERAC



Click/Scan for Website

\$540.5 M
 Market Value

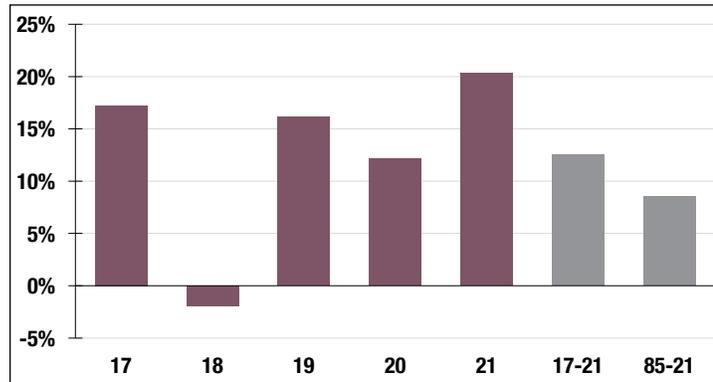
20.33%
 2021 Returns

10.86%
 2012-2021
 (Annualized)

8.55%
 1985-2021
 (Annualized)

Investment Returns

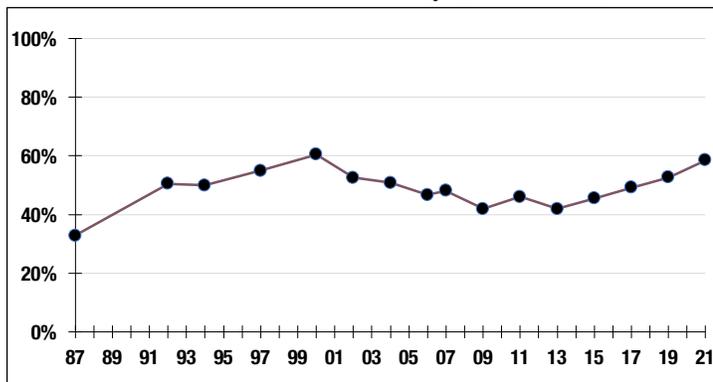
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



58.5%

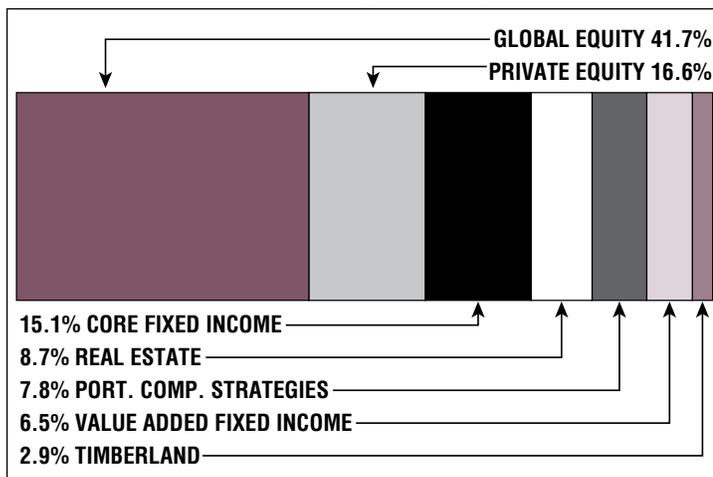
Funded Ratio

2033

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$303.8 M

Unfunded Liability

\$37.8 M
 (FY2022)

Total Pension Appropriation

Malden

CONTACT INFORMATION

215 Pleasant Street
5th Floor
Malden, MA 02148
Phone 781-397-7086
Fax 781-397-7358

BOARD MEMBERS

Charles Ranaghan
Domenic Fermano
Warren Atkinson*
Donald Boyce
Scott Lucey
*indicates Chairperson

BOARD ADMINISTRATOR

James Ryan

SYSTEM MEMBERS

Active Members804
Total Payroll\$45.2 M
Average Salary\$56,300
Average Age48
Average Service12.7

Retired Members672
Benefits Paid\$21.1 M
Average Benefit\$31,400
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees80
Reported Earnings20
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



Click/Scan for Website

\$353.3 M
Market Value

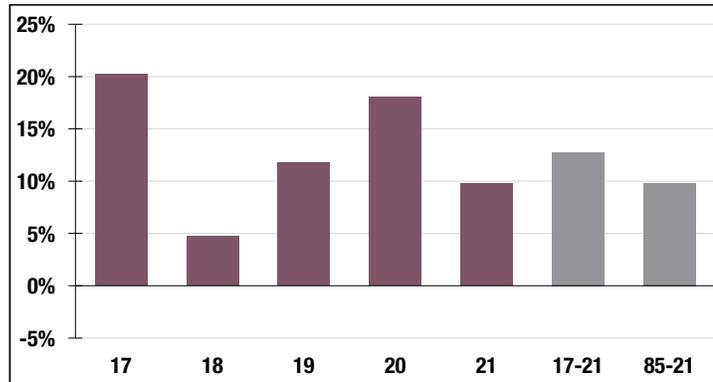
9.79%
2021 Returns

10.10%
2012-2021
(Annualized)

9.82%
1985-2021
(Annualized)

Investment Returns

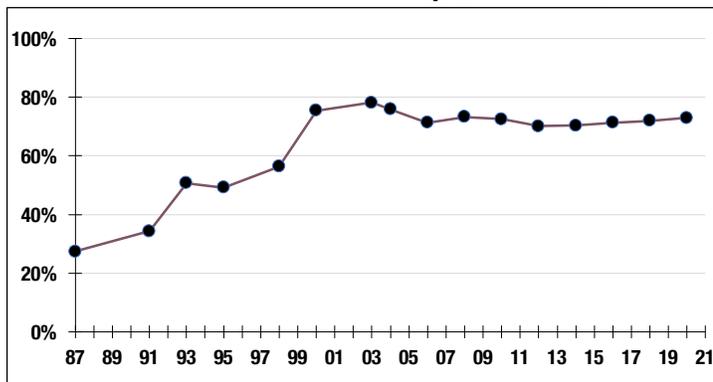
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



72.9%

Funded Ratio

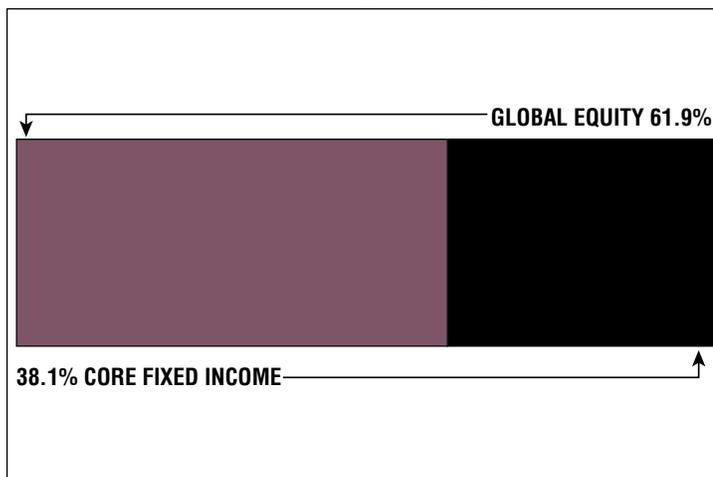
2030

Fully Funded

8.6% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$100.2 M

Unfunded Liability

\$15.2 M
(FY2022)

Total Pension Appropriation

Marblehead

CONTACT INFORMATION

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

BOARD MEMBERS

Michael Carritte
Charles Gessner
Paul Jalbert
Jason Gilliland
Robert Peck*
*indicates Chairperson

BOARD ADMINISTRATOR

Linda Gifford

SYSTEM MEMBERS

Active Members396
Total Payroll\$21.6 M
Average Salary\$54,700
Average Age49
Average Service 11.2

Retired Members357
Benefits Paid\$9.8 M
Average Benefit\$27,400
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees18
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



\$133.9 M
Market Value

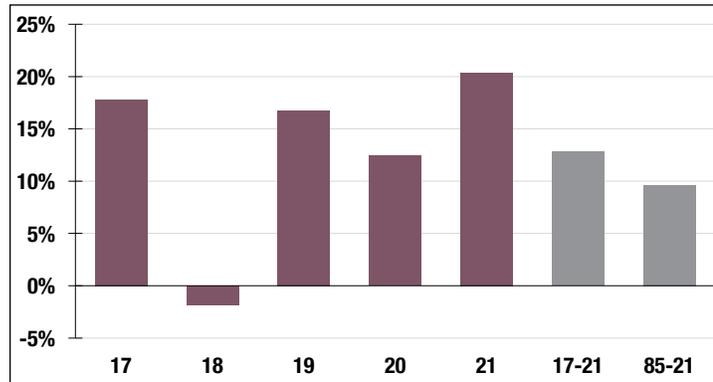
20.37%
2021 Returns

11.00%
2012-2021
(Annualized)

9.63%
1985-2021
(Annualized)

Investment Returns

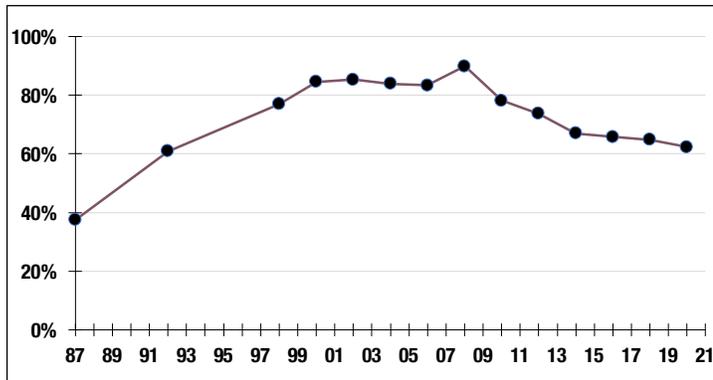
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



62.3%

Funded Ratio

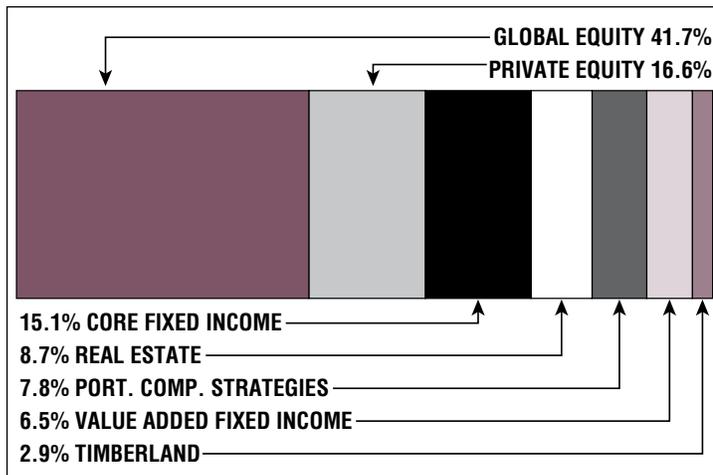
2039

Fully Funded

8.6% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$61.0 M

Unfunded Liability

\$4.8 M
(FY2022)

Total Pension Appropriation

Marlborough

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Beth Matson

SYSTEM MEMBERS

Active Members640
Total Payroll\$38.1 M
Average Salary\$59,500
Average AgeNA
Average ServiceNA

Retired Members456
Benefits Paid\$14.7 M
Average Benefit\$32,100
Average Age71

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees30
Reported Earnings9
Excess Earners1
Refund Due\$4,556

Last Valuation: 1/1/21
Actuary: Sherman



\$237.6 M
Market Value

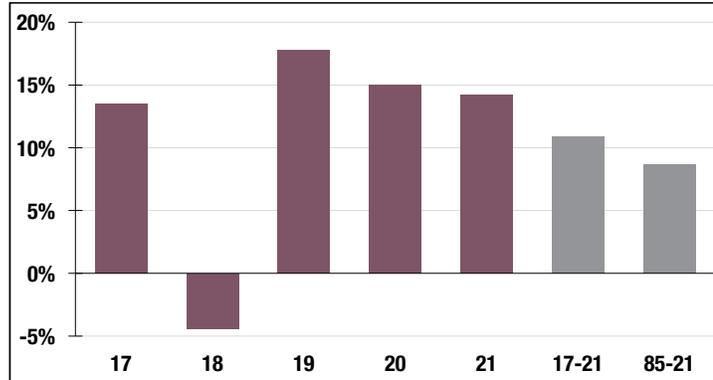
14.24%
2021 Returns

9.30%
2012-2021
(Annualized)

8.66%
1985-2021
(Annualized)

Investment Returns

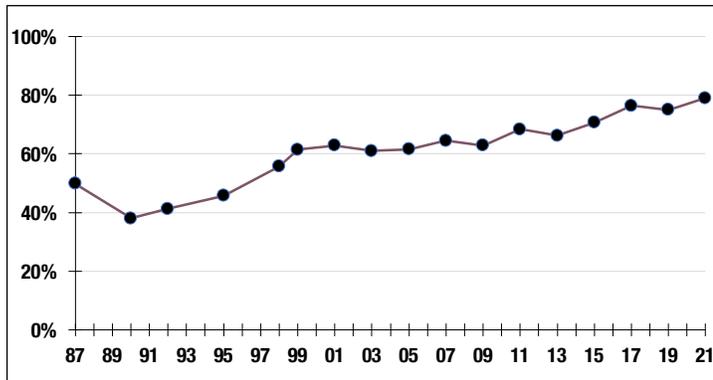
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



79.0%

Funded Ratio

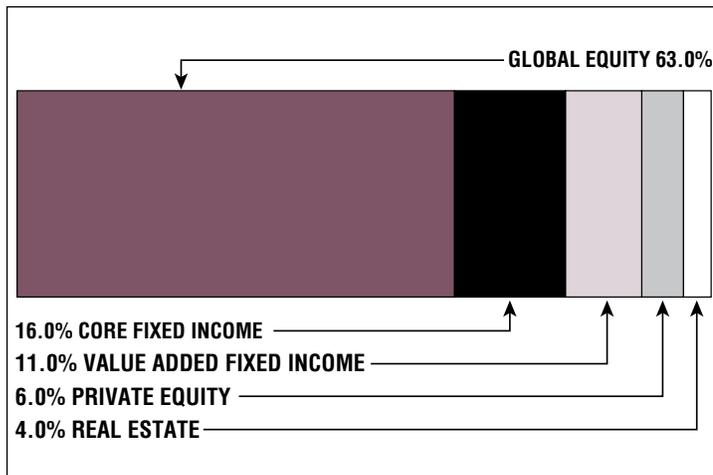
2028

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$52.9 M

Unfunded Liability

\$9.5 M
(FY2022)

Total Pension Appropriation

MHFA (Mass. Housing Finance Agency)

CONTACT INFORMATION

One Beacon Street
 Boston, MA 02108
 Phone 617-854-1871
 Fax 617-854-1027

BOARD MEMBERS

Ping Yin Chai
 Michael Fitzmaurice*
 Antonio Torres
 Paul Hynes
 *indicates Chairperson

BOARD ADMINISTRATOR

Joseph Petty

SYSTEM MEMBERS

Active Members312
 Total Payroll\$34.0 M
 Average Salary ...\$108,900
 Average Age50
 Average Service 15.2

Retired Members 194
 Benefits Paid\$9.4 M
 Average Benefit\$48,600
 Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 1
 Reported Earnings0
 Excess Earners0
 Refund Due\$0

Last Valuation: 1/1/21
 Actuary: Stone



Click/Scan for Website

\$248.3 M
 Market Value

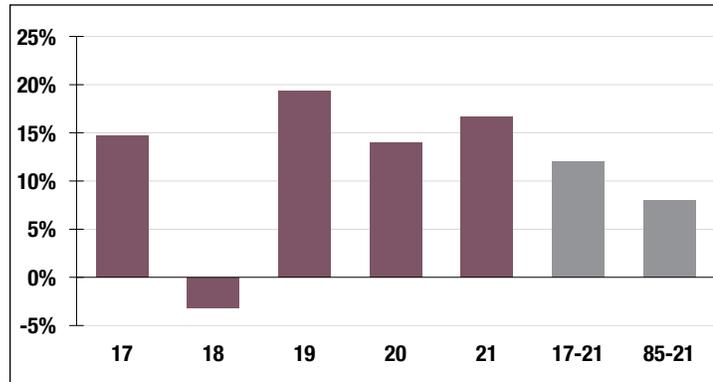
16.62%
 2021 Returns

9.52%
 2012-2021
 (Annualized)

7.99%
 1985-2021
 (Annualized)

Investment Returns

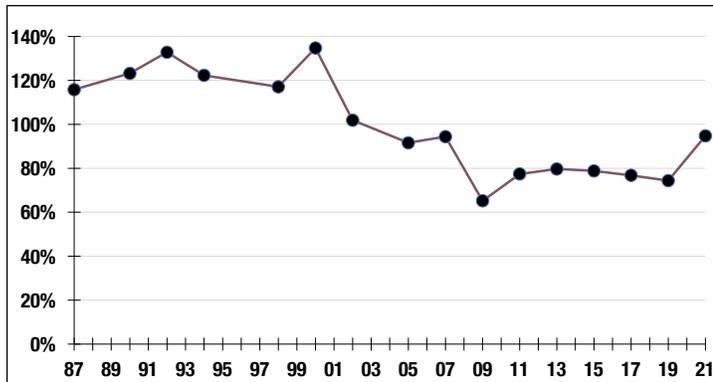
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



94.8%

Funded Ratio

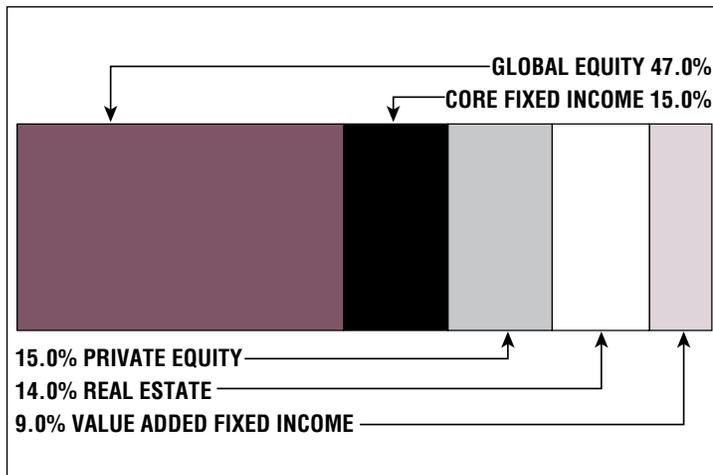
2021

Fully Funded

Fully Funded/
 Normal Cost

Funding Schedule

Asset Allocation (12/31/21)



\$11.5 M

Unfunded Liability

\$1.0 M
 (FY2022)

Total Pension
 Appropriation

MassPort

CONTACT INFORMATION

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

BOARD MEMBERS

John Prankevicius
Michael Grieco
Michael O'Brien
Betsy Taylor
James Hoyte*

*indicates Chairperson

BOARD ADMINISTRATOR

Irene Moran

SYSTEM MEMBERS

Active Members 1,263
Total Payroll \$120.7 M
Average Salary \$95,600
Average Age 47
Average Service 13

Retired Members 930
Benefits Paid \$39.9 M
Average Benefit \$42,900
Average Age 70

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 44
Reported Earnings 10
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/21
Actuary: Stone



\$919.2 M
Market Value

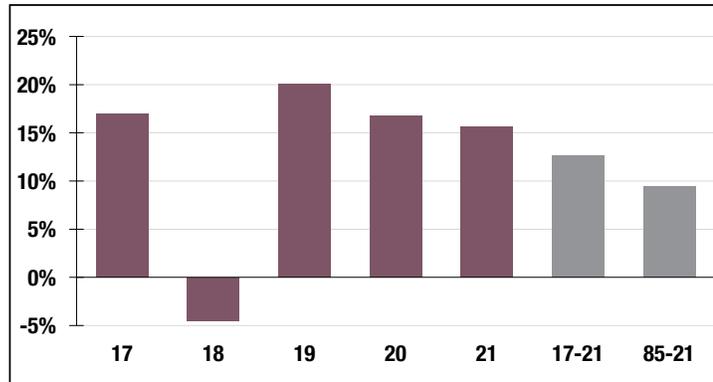
15.66%
2021 Returns

10.56%
2012-2021
(Annualized)

9.41%
1985-2021
(Annualized)

Investment Returns

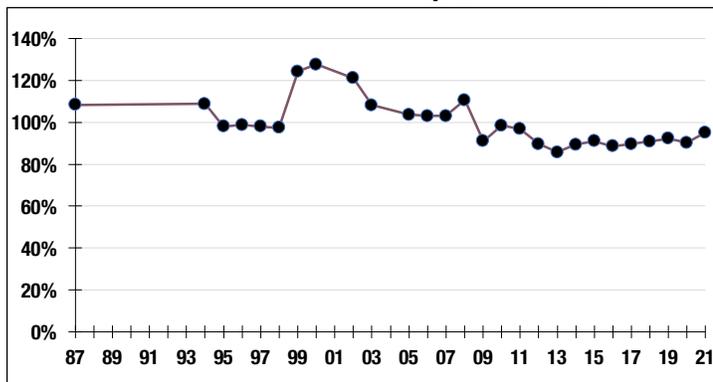
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



95.1%

Funded Ratio

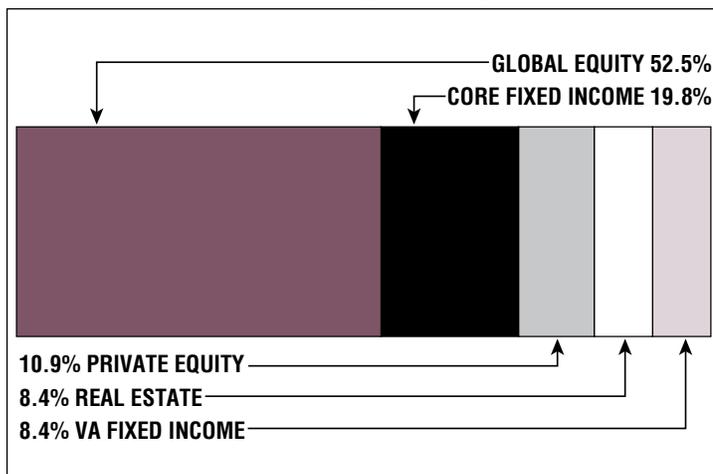
NA

Fully Funded

Frozen Entry Age

Funding Schedule

Asset Allocation (12/31/21)



\$38.6 M

Unfunded Liability

\$11.7 M
(FY2022)

Total Pension Appropriation

MTRS (Mass. Teachers')

CONTACT INFORMATION

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

BOARD MEMBERS

Dr. Ventura Rodriguez*
State Treasurer,
Deborah Goldberg
(Nicola Favorito, designee)
State Auditor Suzanne Bump
(Michael Leung-Tat, Designee)
Anne Wass
Jacqueline Gorrie
Dennis Naughton
Richard Liston
*indicates Chairperson

BOARD ADMINISTRATOR

Erika Glaster

SYSTEM MEMBERS

Active Members96,527
Total Payroll \$7.7 B
Average Salary\$79,500
Average Age44
Average Service 13.4

Retired Members68,780
Benefits Paid \$3.2 B
Average Benefit\$46,700
Average Age74

2020 EARNED INCOME

OF DISABILITY RETIREES:

Disability Retirees535
Reported Earnings 101
Excess Earners2
Refund Due\$8,835

Last Valuation: 1/1/21

Actuary: PERAC



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\$39.5 B
Market Value

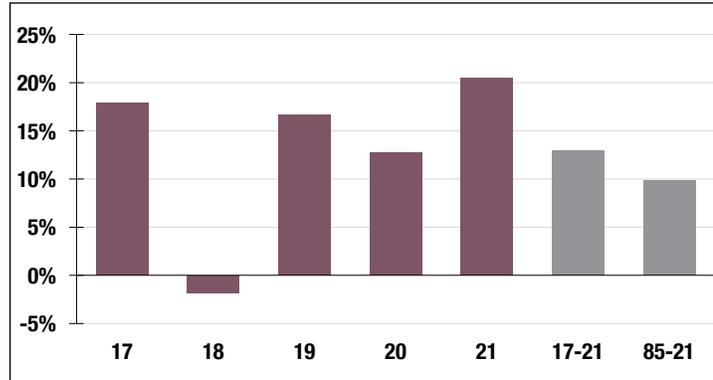
20.50%
2021 Returns

11.07%
2012-2021
(Annualized)

9.84%
1985-2021
(Annualized)

Investment Returns

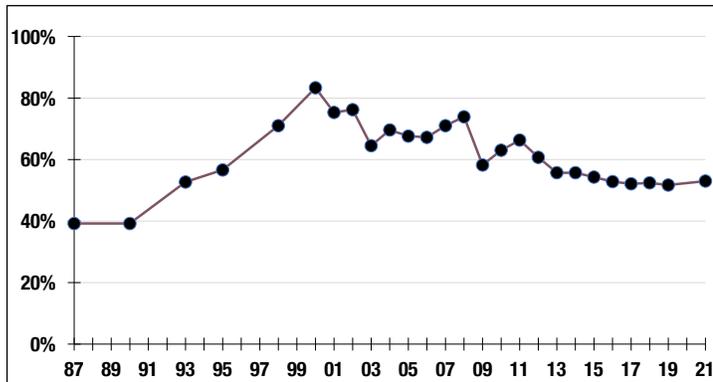
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate
of Return

Funded Ratio History (1987-2021)



53.0%

Funded Ratio

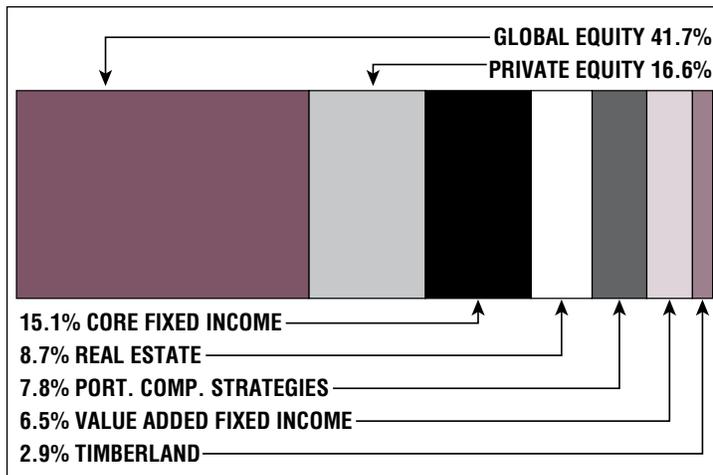
2036

Fully Funded

**9.63% Total
Increasing**

Funding Schedule

Asset Allocation (12/31/21)



\$27.7 B

Unfunded Liability

\$1.9 B
(FY2022)

Total Pension
Appropriation

MWRA (Mass. Water Resources Authority)

CONTACT INFORMATION

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

BOARD MEMBERS

Andrew Pappastergion
Thomas Durkin
Kevin McKenna
James Fleming*
Frank Zecha
*indicates Chairperson

BOARD ADMINISTRATOR

Carolyn Russo

SYSTEM MEMBERS

Active Members 1,103
Total Payroll\$102.1 M
Average Salary\$92,600
Average Age51
Average Service 17.5

Retired Members 702
Benefits Paid\$28.5 M
Average Benefit\$40,500
Average Age71

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees72
Reported Earnings 14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Segal



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\$722.8 M
Market Value

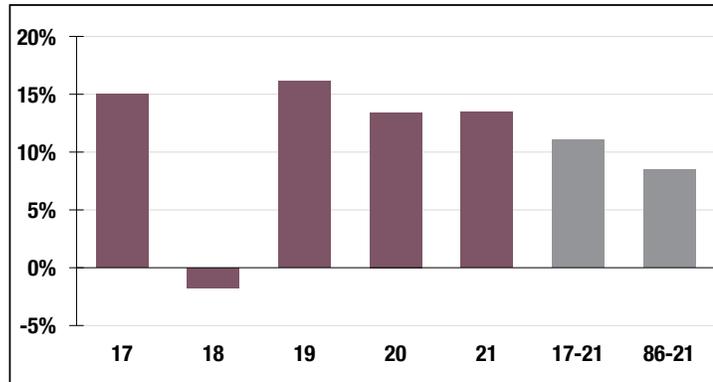
13.46%
2021 Returns

9.70%
2012-2021
(Annualized)

8.47%
1986-2021
(Annualized)

Investment Returns

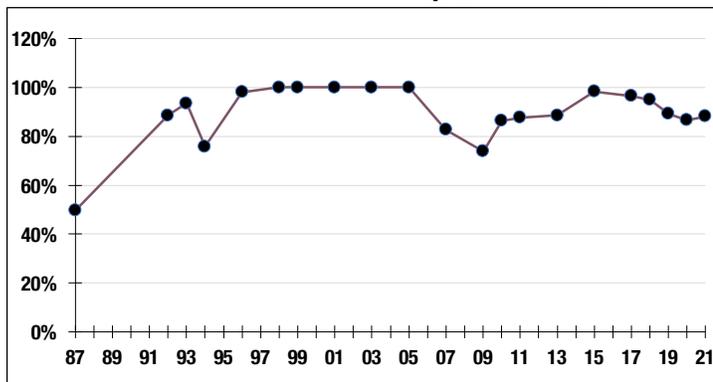
(2017-2021, 5-Year & 36-Year Averages, as of 12/31/21)



6.90%

Assumed Rate of Return

Funded Ratio History (1987-2021)



88.2%

Funded Ratio

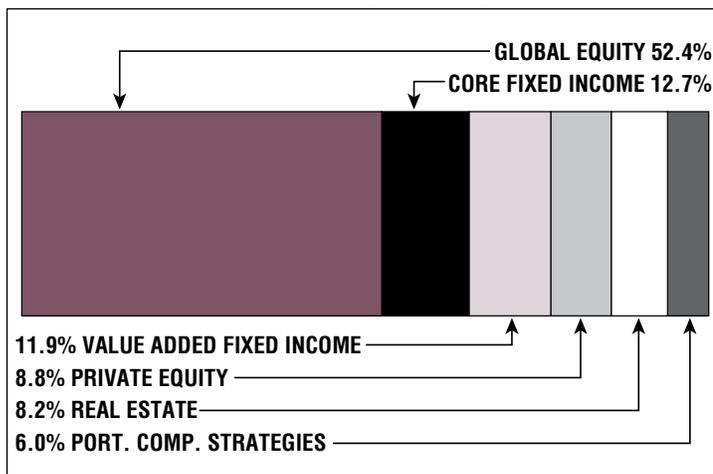
2030

Fully Funded

12.05% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$83.9 M

Unfunded Liability

\$11.2 M
(FY2022)

Total Pension Appropriation

Maynard

CONTACT INFORMATION

195 Main Street
 Maynard, MA 01754
 Phone 978-897-1820
 Fax 978-897-1013

BOARD MEMBERS

Lauri Plourde
 Kevin Petersen
 Patrick Hakey
 Clifford Wilson
 Christopher Connolly*
 *indicates Chairperson

BOARD ADMINISTRATOR

Kenneth DeMars

SYSTEM MEMBERS

Active Members 186
 Total Payroll \$9.8 M
 Average Salary \$52,900
 Average Age 46
 Average Service 10

 Retired Members 136
 Benefits Paid \$3.9 M
 Average Benefit \$28,500
 Average Age 73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 5
 Reported Earnings 3
 Excess Earners 0
 Refund Due \$0

Last Valuation: 1/1/21
 Actuary: PERAC



\$64.9 M
 Market Value

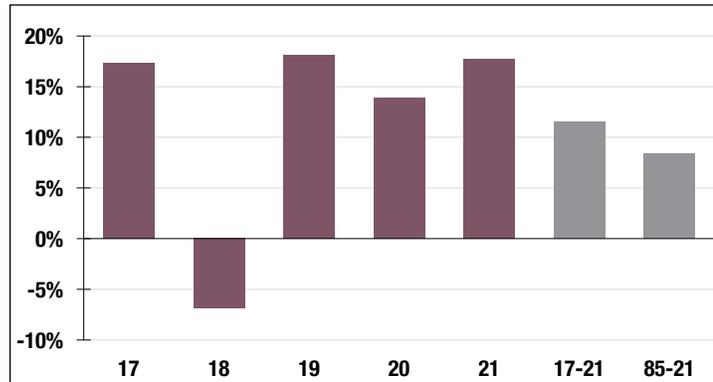
17.71%
 2021 Returns

10.49%
 2012-2021
 (Annualized)

8.37%
 1985-2021
 (Annualized)

Investment Returns

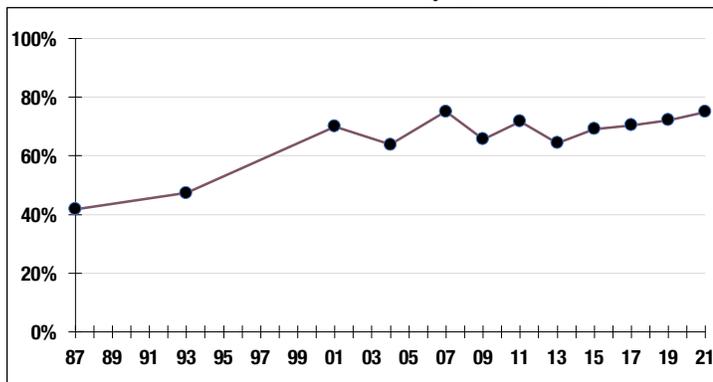
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



75.0%

Funded Ratio

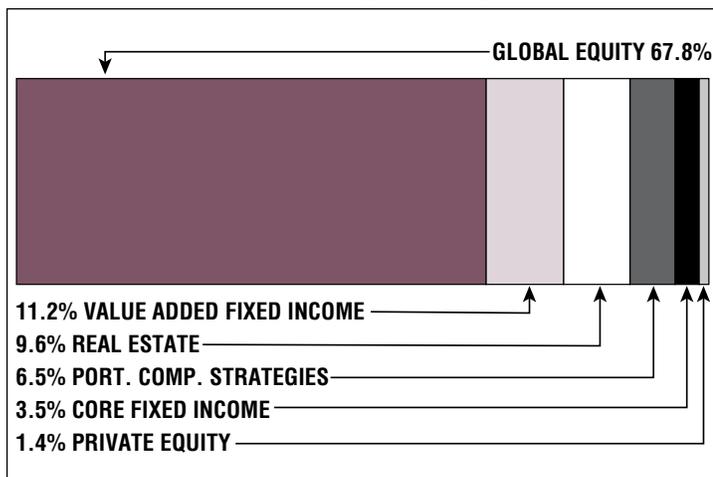
2035

Fully Funded

6.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$17.4 M

Unfunded Liability

\$2.8 M
 (FY2022)

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Mark Minervini

SYSTEM MEMBERS

Active Members776
Total Payroll\$46.0 M
Average Salary\$59,300
Average AgeNA
Average ServiceNA

Retired Members607
Benefits Paid\$20.8 M
Average Benefit\$34,200
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees96
Reported Earnings18
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20

Actuary: Sherman



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\$260.2 M
Market Value

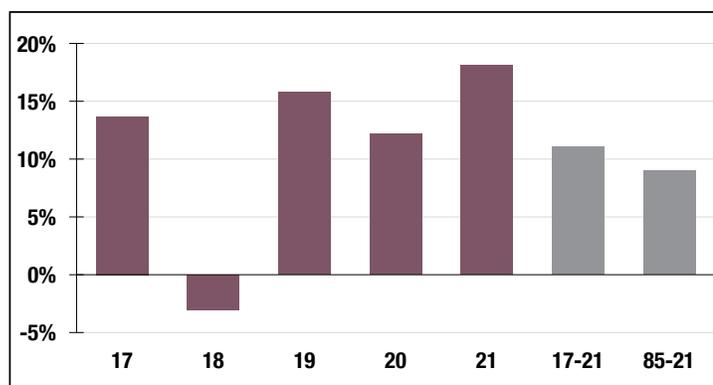
18.11%
2021 Returns

9.12%
2012-2021
(Annualized)

9.01%
1985-2021
(Annualized)

Investment Returns

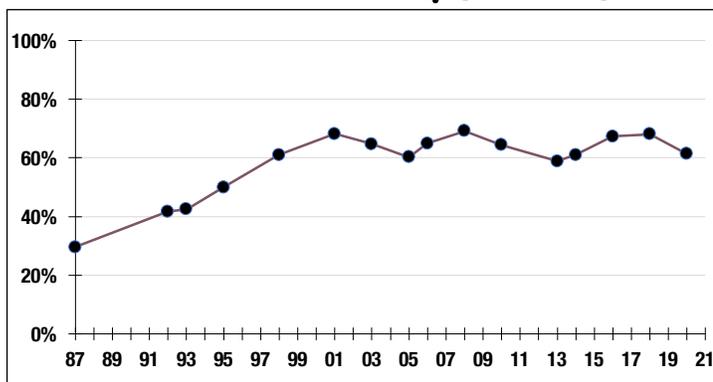
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



61.3%

Funded Ratio

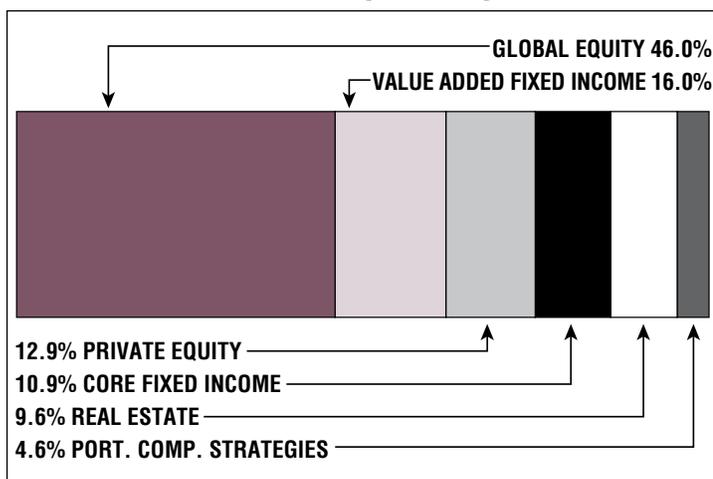
2033

Fully Funded

8.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$129.5 M

Unfunded Liability

\$14.0 M
(FY2022)

Total Pension Appropriation

Melrose

CONTACT INFORMATION

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

BOARD MEMBERS

Patrick Dello Russo*
Kelly Cogavin
Scott Colborne
Michael Lyle
John McLaughlin
*indicates Chairperson

BOARD ADMINISTRATOR

Adam Travinski

SYSTEM MEMBERS

Active Members406
Total Payroll\$22.7 M
Average Salary\$56,000
Average Age47
Average Service 10.2

Retired Members397
Benefits Paid\$9.9 M
Average Benefit\$24,900
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees28
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Stone



Click/Scan for Website

\$121.4 M
Market Value

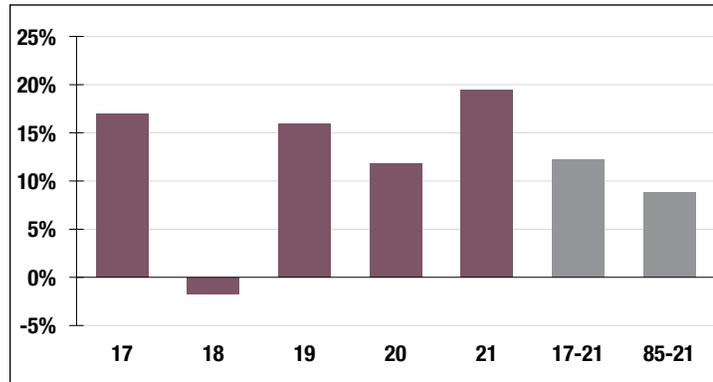
19.44%
2021 Returns

10.43%
2012-2021
(Annualized)

8.81%
1985-2021
(Annualized)

Investment Returns

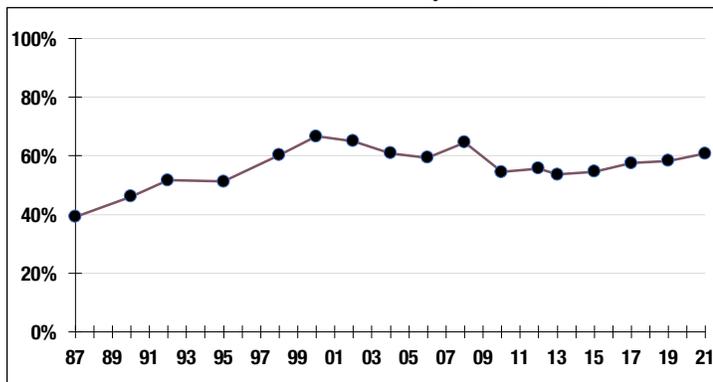
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



60.8%

Funded Ratio

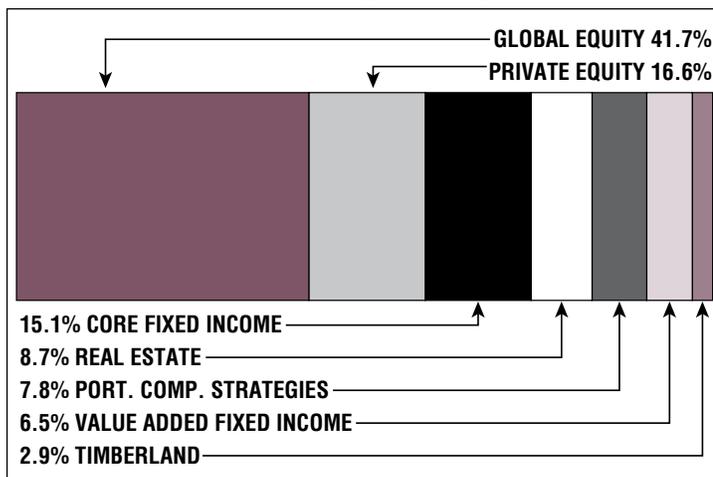
2037

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$64.1 M

Unfunded Liability

\$6.8 M
(FY2022)

Total Pension Appropriation

Methuen

CONTACT INFORMATION

41 Pleasant Street
Suite 303
Methuen, MA 01844
Phone 978-983-8620
Fax 978-983-8972

BOARD MEMBERS

Louise Moss
John Sheehy
Michael Hennessy*
Albert Trott, III
Robert Sheehan
*indicates Chairperson

BOARD ADMINISTRATOR

Kaitlyn Doucette

SYSTEM MEMBERS

Active Members625
Total Payroll\$37.3 M
Average Salary\$59,700
Average Age47
Average Service 13.6

Retired Members464
Benefits Paid\$15.3 M
Average Benefit\$32,900
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees47
Reported Earnings 16
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$239.7 M
Market Value

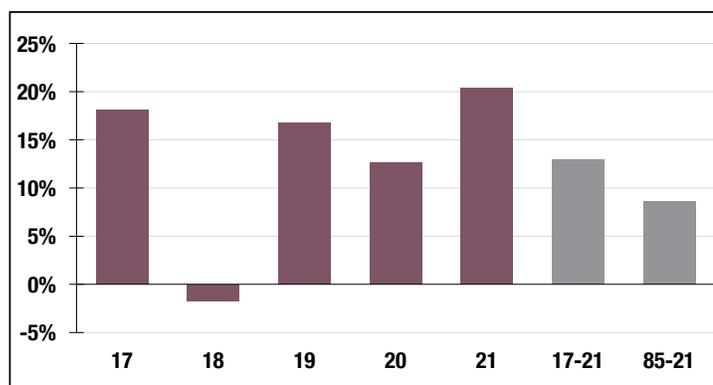
20.39%
2021 Returns

11.25%
2012-2021
(Annualized)

8.58%
1985-2021
(Annualized)

Investment Returns

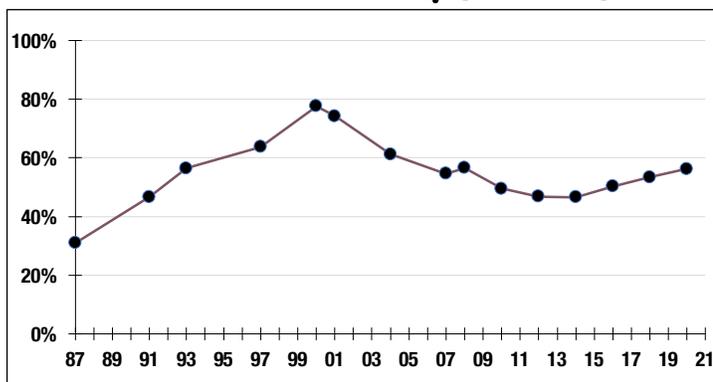
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



56.2%

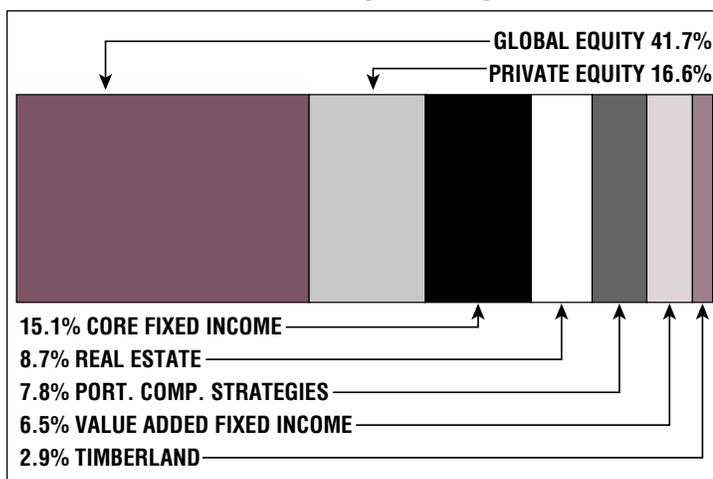
Funded Ratio

2036

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$130.6 M

Unfunded Liability

\$14.8 M
(FY2022)

Total Pension Appropriation

Middlesex County

CONTACT INFORMATION

25 Linnell Circle
 P.O. Box 160
 Billerica, MA 01865
 Phone 978-439-3000
 Fax 978-439-3050

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Lisa Maloney

SYSTEM MEMBERS

Active Members9,282
 Total Payroll\$492.1 M
 Average Salary\$53,000
 Average Age48
 Average Service 11.2

Retired Members5,862
 Benefits Paid\$161.2 M
 Average Benefit\$27,500
 Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees364
 Reported Earnings 122
 Excess Earners 1
 Refund Due\$5,530

Last Valuation: 1/1/20
 Actuary: Segal



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\$2.1 B
 Market Value

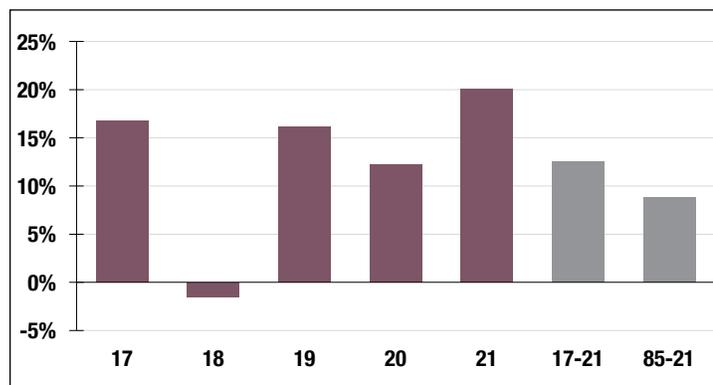
20.11%
 2021 Returns

10.62%
 2012-2021
 (Annualized)

8.86%
 1985-2021
 (Annualized)

Investment Returns

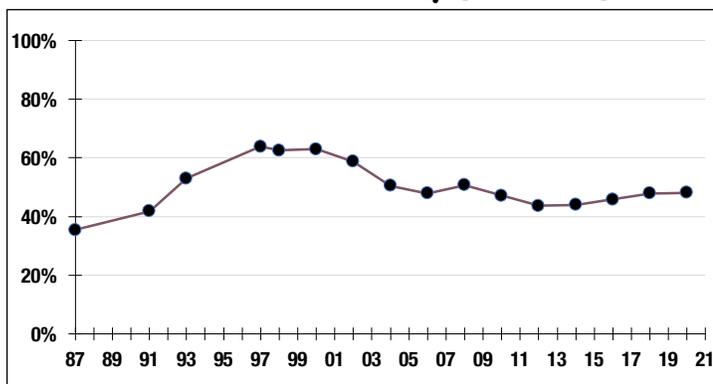
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.30%

Assumed Rate of Return

Funded Ratio History (1987-2021)



48.1%

Funded Ratio

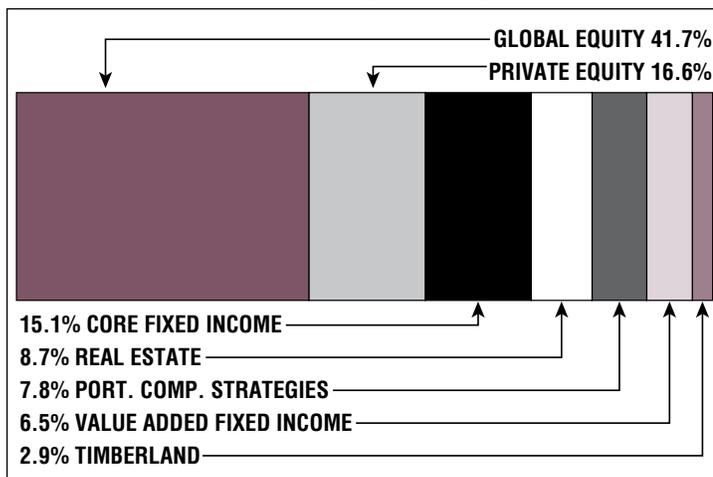
2037

Fully Funded

4.0% Increasing Phase-In

Funding Schedule

Asset Allocation (12/31/21)



\$1.6 B

Unfunded Liability

\$146.8 M
 (FY2022)

Total Pension Appropriation

Milford

CONTACT INFORMATION

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

BOARD MEMBERS

Zachary Taylor*
Christopher Pilla
Richard Villani
Gerald Moody
Martha White
*indicates Chairperson

BOARD ADMINISTRATOR

Kelly Capece

SYSTEM MEMBERS

Active Members512
Total Payroll\$24.2 M
Average Salary\$47,300
Average Age48
Average Service 10.8

Retired Members329
Benefits Paid\$9.6 M
Average Benefit\$29,200
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees30
Reported Earnings 11
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



Click/Scan for Website

\$139.0 M
Market Value

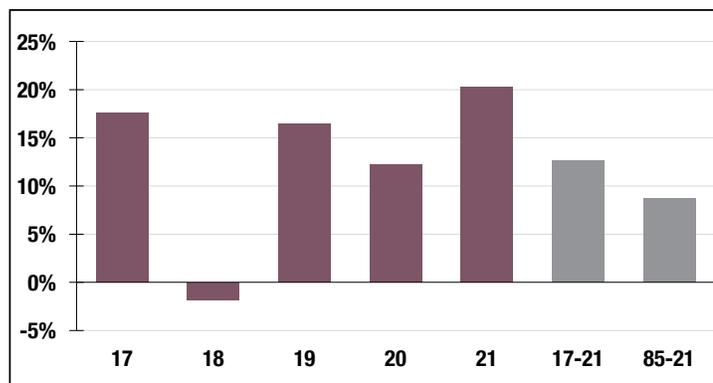
20.25%
2021 Returns

10.85%
2012-2021
(Annualized)

8.73%
1985-2021
(Annualized)

Investment Returns

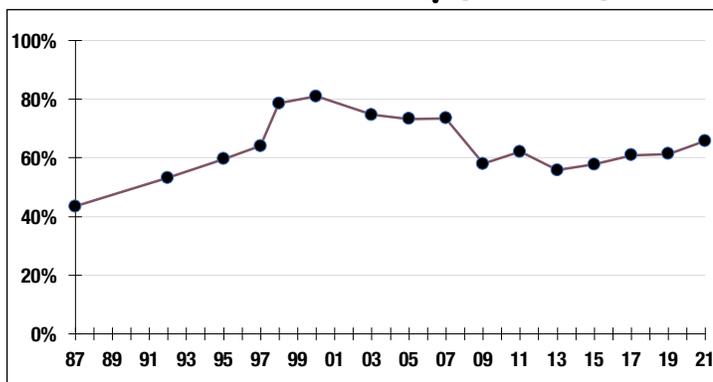
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



65.8%

Funded Ratio

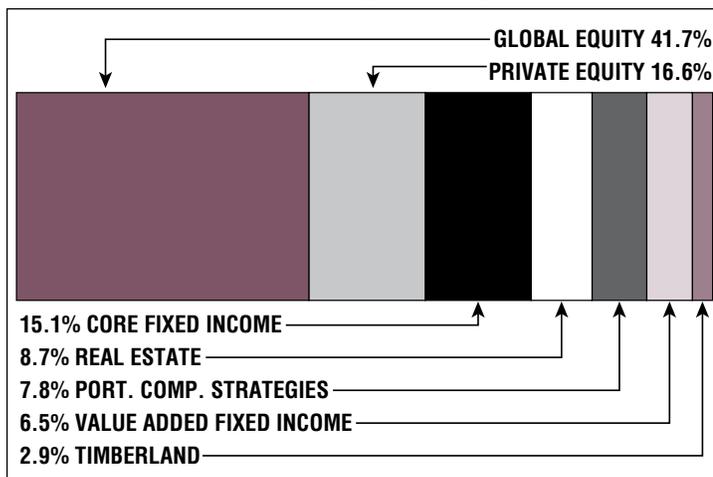
2035

Fully Funded

7.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$57.2 M

Unfunded Liability

\$6.4 M
(FY2022)

Total Pension Appropriation

Milton

CONTACT INFORMATION

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

BOARD MEMBERS

Paige Eppolito*
William Murphy
Thomas Cicerone
Robert O'Melia
*indicates Chairperson

BOARD ADMINISTRATOR

Jeanne Darcy

SYSTEM MEMBERS

Active Members402
Total Payroll\$26.8 M
Average Salary\$66,800
Average Age47
Average Service11.7

Retired Members280
Benefits Paid\$9.4 M
Average Benefit\$33,600
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees25
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$203.1 M
Market Value

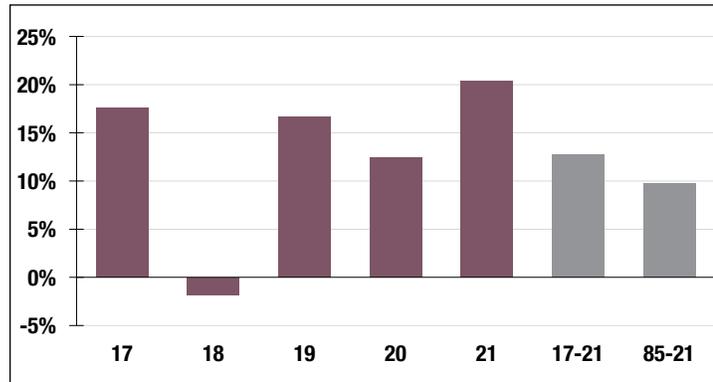
20.43%
2021 Returns

10.99%
2012-2021
(Annualized)

9.76%
1985-2021
(Annualized)

Investment Returns

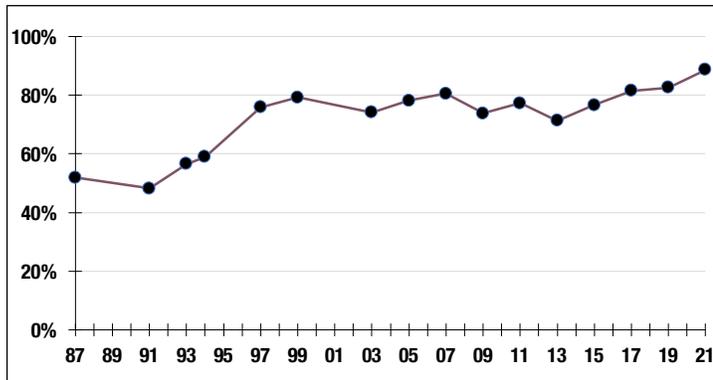
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



88.6%

Funded Ratio

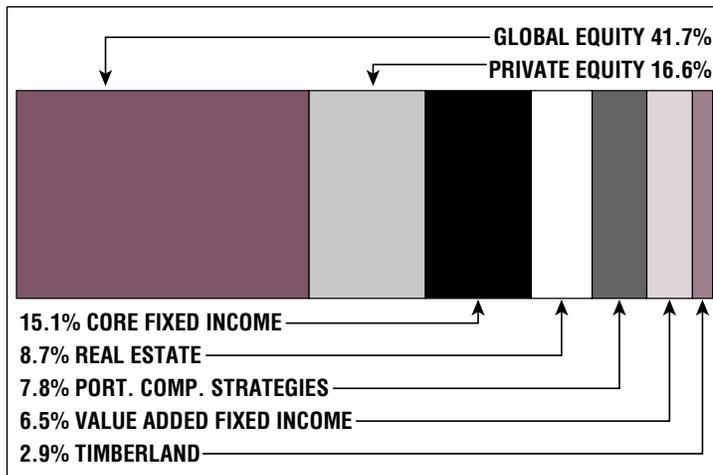
2026

Fully Funded

6.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$20.4 M

Unfunded Liability

\$7.5 M
(FY2022)

Total Pension Appropriation

Minuteman Regional School District

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Sandor Zapolin

SYSTEM MEMBERS

Active Members35
Total Payroll\$2.0 M
Average Salary\$58,000
Average Age48
Average Service7.6

Retired Members39
Benefits Paid\$1.0 M
Average Benefit\$26,800
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 1
Reported Earnings0
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$18.0 M
Market Value

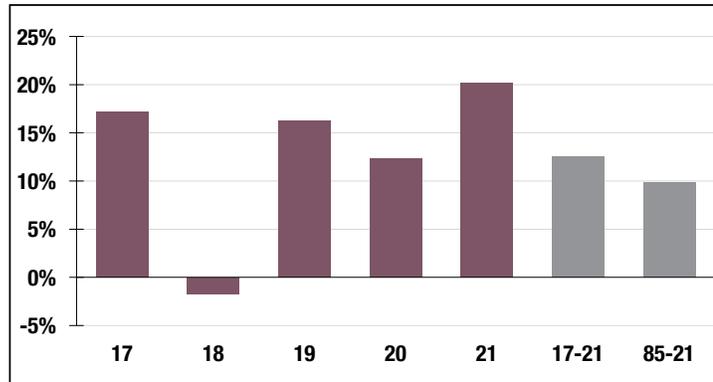
20.17%
2021 Returns

10.69%
2012-2021
(Annualized)

9.79%
1985-2021
(Annualized)

Investment Returns

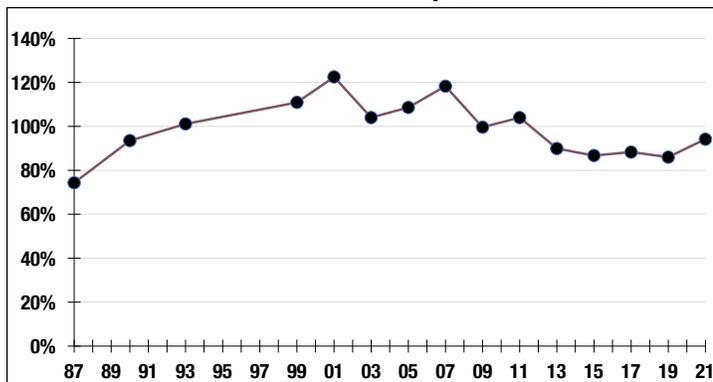
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



94.2%

Funded Ratio

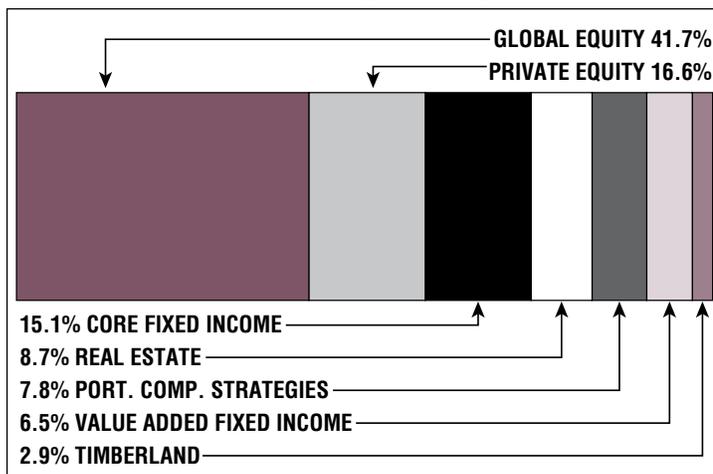
2027

Fully Funded

10.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$911 K

Unfunded Liability

\$327 K
(FY2022)

Total Pension Appropriation

Montague

CONTACT INFORMATION

One Avenue A
Turners Falls, MA 01376
Phone 413-863-3200
Fax 413-863-3224

BOARD MEMBERS

Carolyn Olsen*
Steven Ellis
David Dion
Cheryl Clark
Marianne Fiske
*indicates Chairperson

BOARD ADMINISTRATOR

Debra Underhill

SYSTEM MEMBERS

Active Members 194
Total Payroll \$7.5 M
Average Salary \$38,900
Average Age 48
Average Service 10.3

Retired Members 145
Benefits Paid \$3.1 M
Average Benefit \$21,700
Average Age 73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 12
Reported Earnings 2
Excess Earners 1
Refund Due \$6,789

Last Valuation: 1/1/20
Actuary: PERAC



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\$62.1 M
Market Value

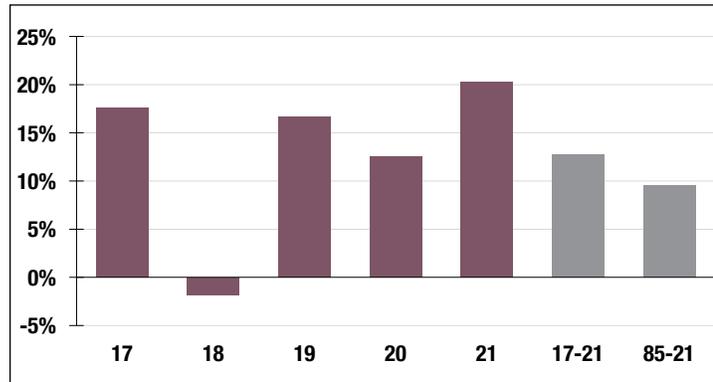
20.31%
2021 Returns

10.97%
2012-2021
(Annualized)

9.53%
1985-2021
(Annualized)

Investment Returns

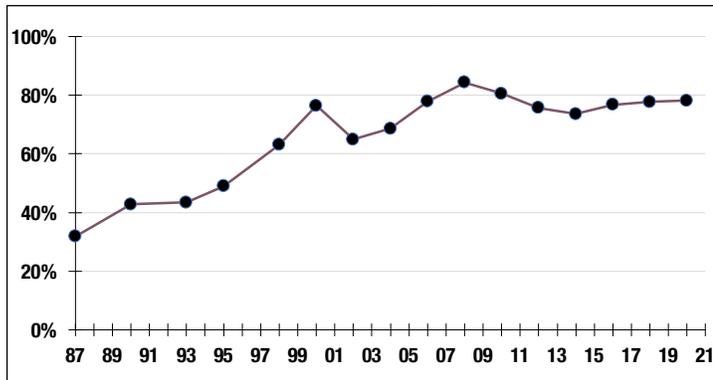
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



78.1%

Funded Ratio

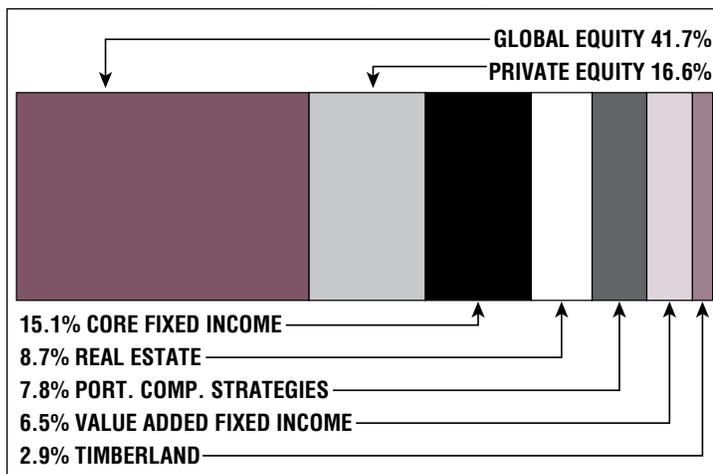
2033

Fully Funded

5.2% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$12.6 M

Unfunded Liability

\$2.2 M
(FY2022)

Total Pension Appropriation

Natick

CONTACT INFORMATION

13 East Central Street
Natick, MA 01760
Phone 508-647-6440
Fax 508-647-6443

BOARD MEMBERS

Michelle Laramee
Eliot Lurier
Nicholas Mabardy
Michael Melchiorri*
B. Michael Reardon
*indicates Chairperson

BOARD ADMINISTRATOR

Kathleen Bacon

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
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 15
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Segal



\$226.9 M
Market Value

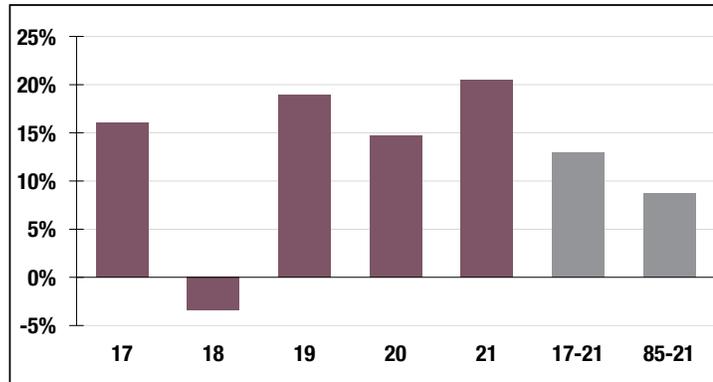
20.46%
2021 Returns

11.57%
2012-2021
(Annualized)

8.72%
1985-2021
(Annualized)

Investment Returns

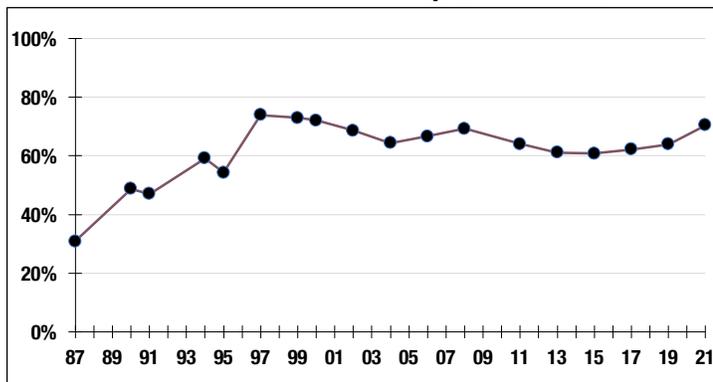
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



70.4%

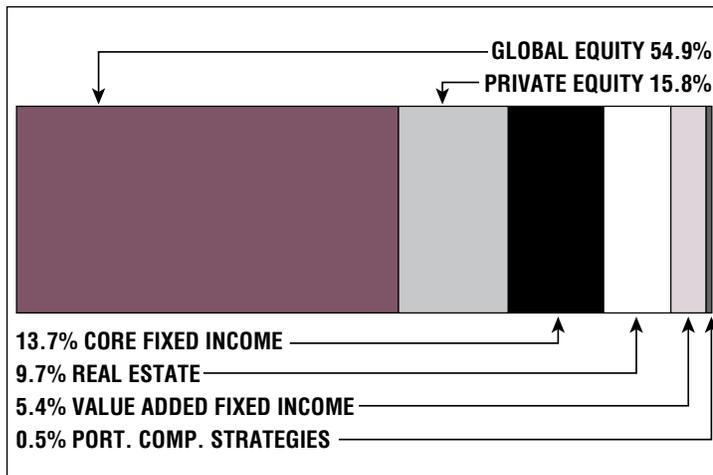
Funded Ratio

2030

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$75.4 M

Unfunded Liability

\$12.3 M
(FY2022)

Total Pension Appropriation

Needham

CONTACT INFORMATION

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

BOARD MEMBERS

Evelyn Ponesse*
Sandra Cincotta
Robert Papetti
John Krawiecki
Robert Mearls
*indicates Chairperson

BOARD ADMINISTRATOR

Jacob Cole

SYSTEM MEMBERS

Active Members742
Total Payroll\$41.7 M
Average Salary\$56,200
Average Age47
Average Service 10.6

Retired Members459
Benefits Paid\$13.0 M
Average Benefit\$28,400
Average Age76

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$242.7 M
Market Value

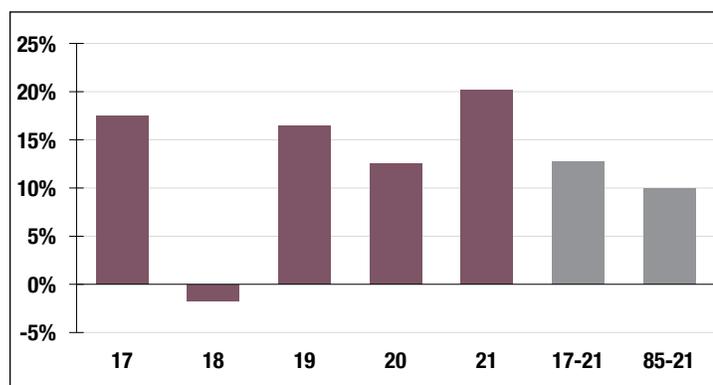
20.22%
2021 Returns

10.89%
2012-2021
(Annualized)

9.97%
1985-2021
(Annualized)

Investment Returns

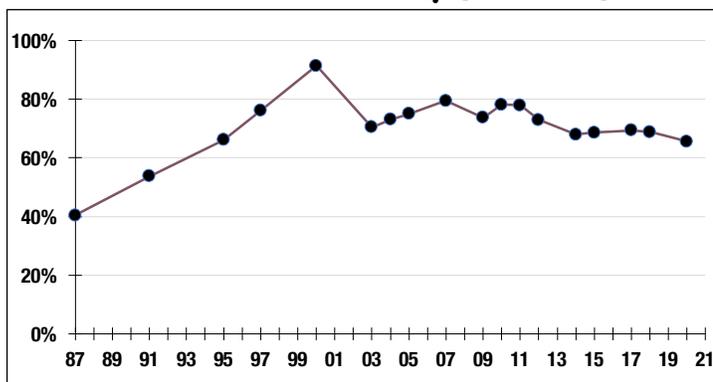
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



65.6%

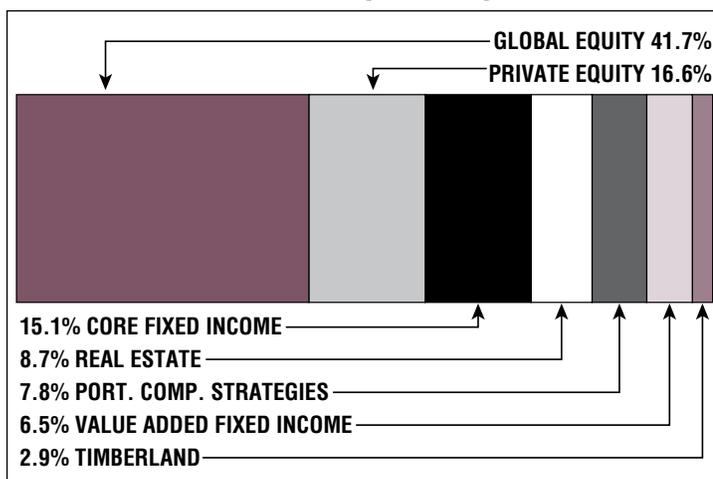
Funded Ratio

2033

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$92.2 M

Unfunded Liability

\$10.4 M
(FY2022)

Total Pension Appropriation

New Bedford

CONTACT INFORMATION

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

BOARD MEMBERS

Emily Arpke
Angela Natho
Leonard Baillargeon*
James Kummer
Susan Thompson
*indicates Chairperson

BOARD ADMINISTRATOR

Eric Cohen

SYSTEM MEMBERS

Active Members2,140
Total Payroll\$101.2 M
Average Salary\$47,300
Average Age45
Average Service 11.2

Retired Members.....1,854
Benefits Paid\$48.7 M
Average Benefit\$26,200
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees264
Reported Earnings57
Excess Earners.....2
Refund Due\$9,687

Last Valuation: 1/1/20

Actuary: KMS



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\$473.7 M
Market Value

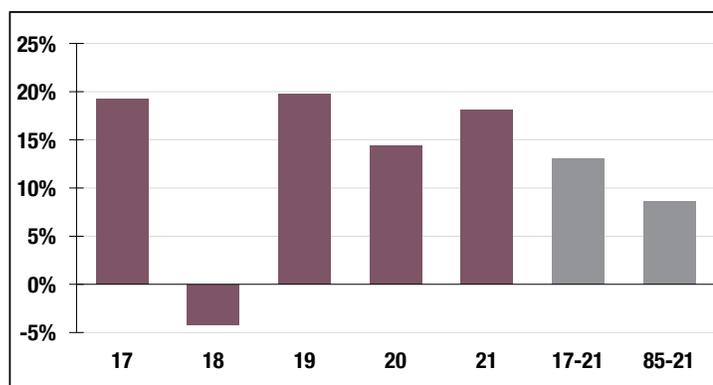
18.11%
2021 Returns

11.16%
2012-2021
(Annualized)

8.65%
1985-2021
(Annualized)

Investment Returns

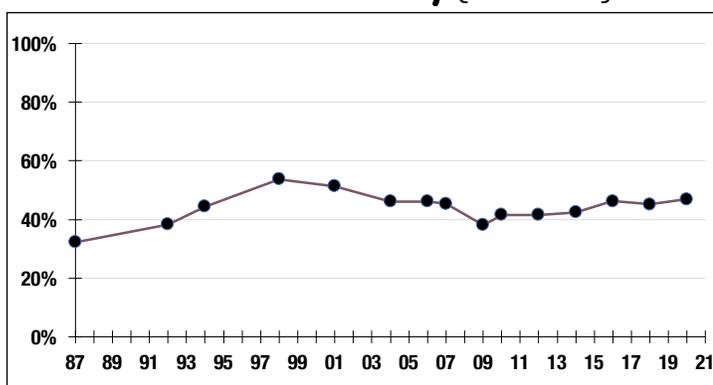
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



46.9%

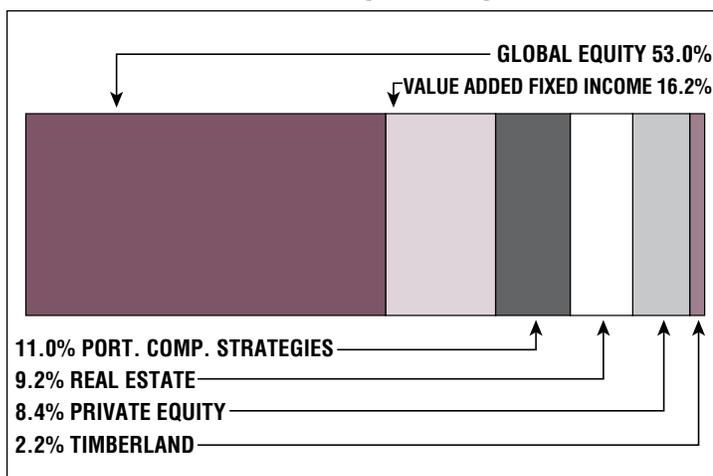
Funded Ratio

2035

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$394.7 M

Unfunded Liability

\$38.7 M
(FY2022)

Total Pension Appropriation

Newburyport

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Laurie Burton

SYSTEM MEMBERS

Active Members370
Total Payroll\$20.2 M
Average Salary\$54,700
Average Age50
Average Service12.3

Retired Members244
Benefits Paid\$7.3 M
Average Benefit\$30,000
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees23
Reported Earnings7
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$124.5 M
Market Value

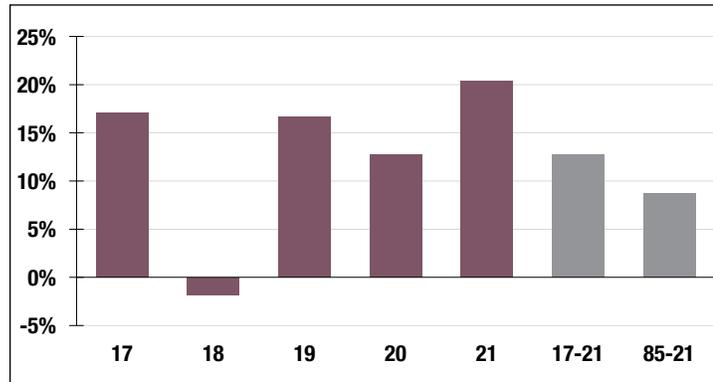
20.35%
2021 Returns

10.88%
2012-2021
(Annualized)

8.74%
1985-2021
(Annualized)

Investment Returns

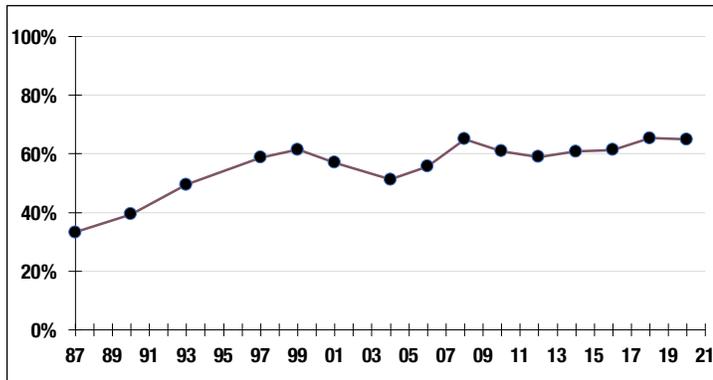
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



64.9%

Funded Ratio

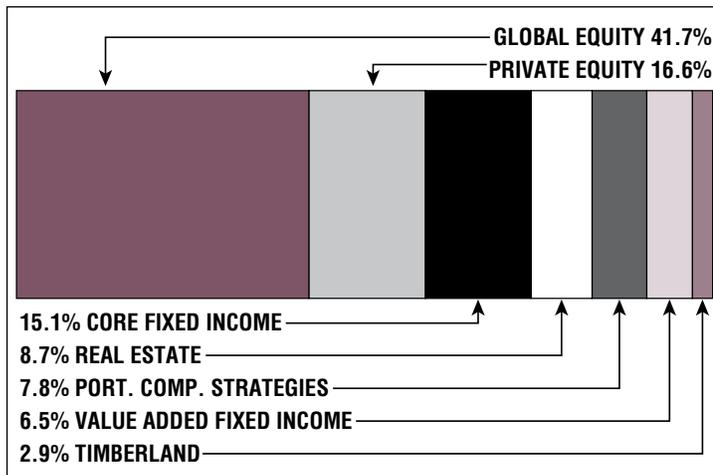
2038

Fully Funded

5.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$48.2 M

Unfunded Liability

\$5.7 M
(FY2022)

Total Pension Appropriation

Newton

CONTACT INFORMATION

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

BOARD MEMBERS

Stephen Curley
Anthony Logalbo
Thomas Lopez*
Paul Bianchi
Lisa Maloney
*indicates Chairperson

BOARD ADMINISTRATOR

Barbara O'Brien

SYSTEM MEMBERS

Active Members1,570
Total Payroll\$107.2 M
Average Salary\$68,300
Average Age46
Average Service 11.8

Retired Members.....1,337
Benefits Paid\$42.2 M
Average Benefit\$31,600
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees126
Reported Earnings26
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Segal



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\$526.3 M
Market Value

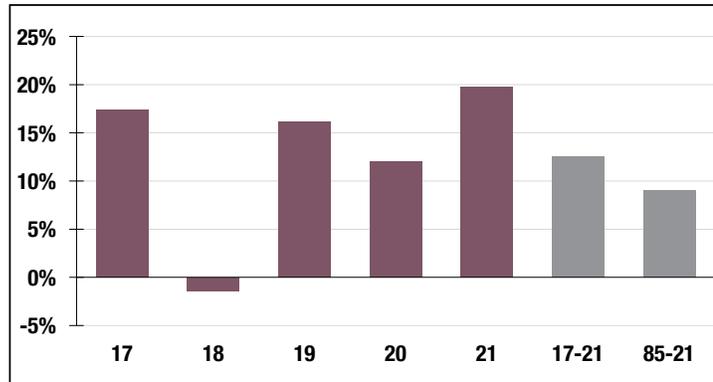
19.76%
2021 Returns

10.81%
2012-2021
(Annualized)

9.06%
1985-2021
(Annualized)

Investment Returns

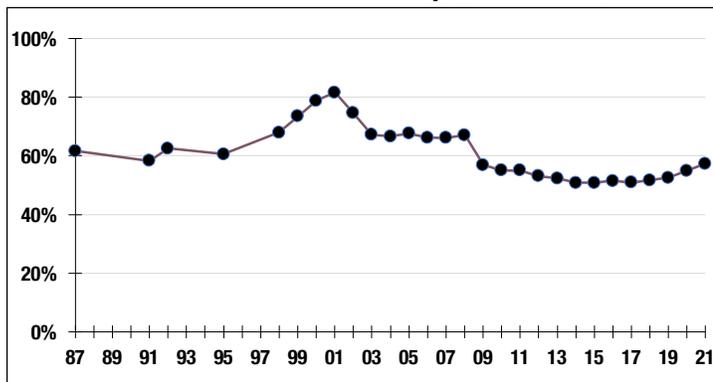
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



57.4%

Funded Ratio

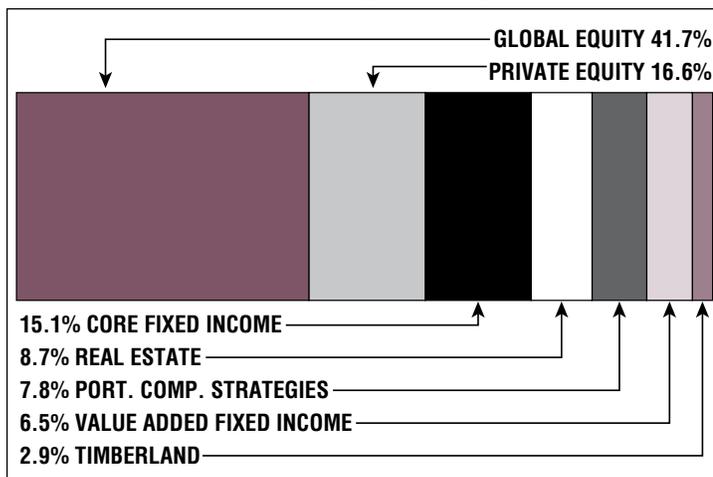
2030

Fully Funded

9.6% Total Increase

Funding Schedule

Asset Allocation (12/31/21)



\$312.4 M

Unfunded Liability

\$37.3 M
(FY2022)

Total Pension Appropriation

Norfolk County

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Kathleen Kiely-Becchetti

SYSTEM MEMBERS

Active Members5,576
Total Payroll\$312.9 M
Average Salary\$56,100
Average AgeNA
Average ServiceNA

Retired Members3,506
Benefits Paid\$99.4 M
Average Benefit\$28,400
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees305
Reported Earnings93
Excess Earners5
Refund Due\$94,530

Last Valuation: 1/1/20
Actuary: Sherman



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\$1.4 B
Market Value

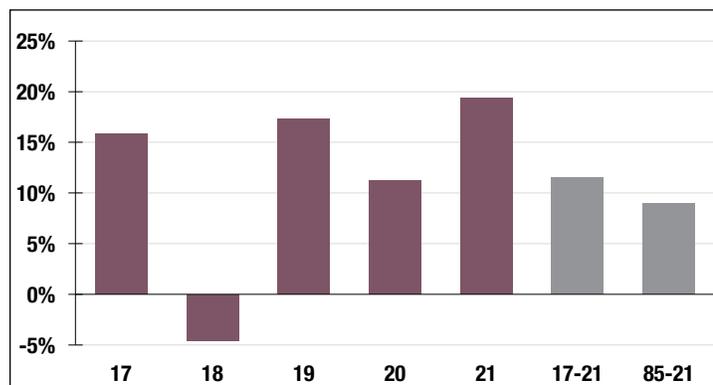
19.40%
2021 Returns

10.14%
2012-2021
(Annualized)

8.94%
1985-2021
(Annualized)

Investment Returns

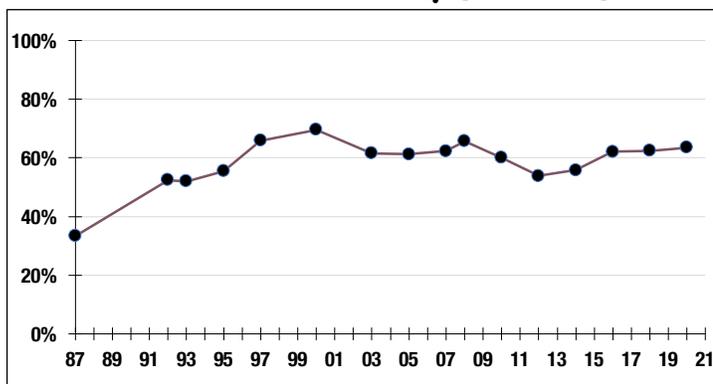
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



63.5%

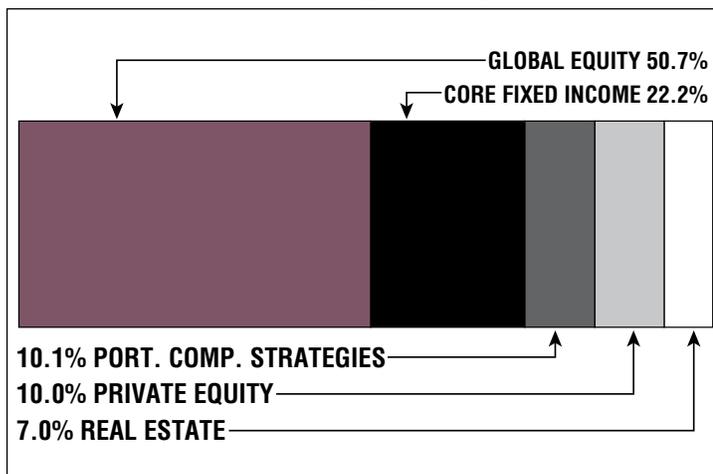
Funded Ratio

2029

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$605.3 M

Unfunded Liability

\$87.2 M
(FY2022)

Total Pension Appropriation

North Adams

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Shawn Flynn

SYSTEM MEMBERS

Active Members312
Total Payroll\$11.8 M
Average Salary\$37,800
Average Age46
Average Service 10.7

Retired Members241
Benefits Paid\$5.3 M
Average Benefit\$22,200
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees33
Reported Earnings 11
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21

Actuary: PERAC



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\$90.7 M
Market Value

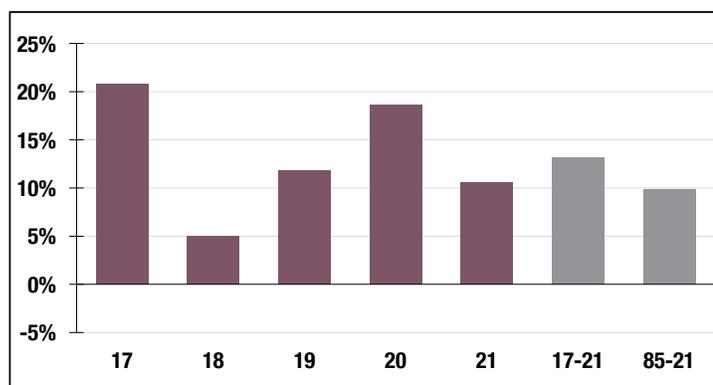
10.53%
2021 Returns

10.63%
2012-2021
(Annualized)

9.82%
1985-2021
(Annualized)

Investment Returns

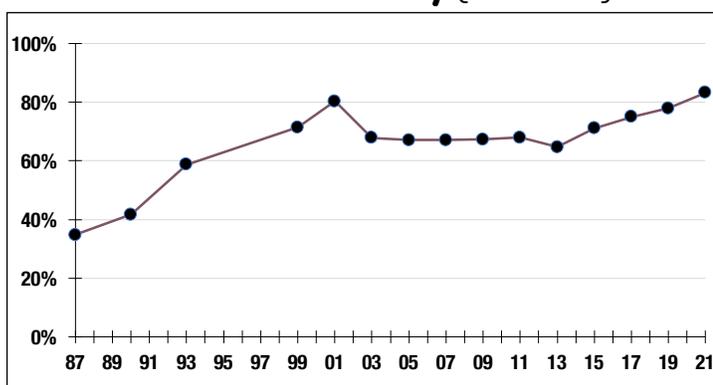
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



83.3%

Funded Ratio

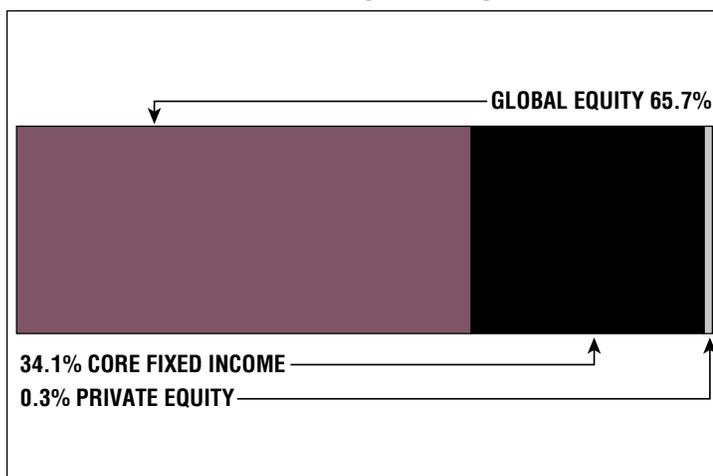
2029

Fully Funded

4.9% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$15.1 M

Unfunded Liability

\$3.7 M
(FY2022)

Total Pension Appropriation

North Attleboro

CONTACT INFORMATION

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

BOARD MEMBERS

Linda Catanzariti
Pedro Alves
Craig Chapman*
Brian Brousseau
Lynn Carley
*indicates Chairperson

BOARD ADMINISTRATOR

Sharon Sullivan

SYSTEM MEMBERS

Active Members525
Total Payroll\$26.1 M
Average Salary\$49,700
Average Age48
Average Service 11.8

Retired Members.....301
Benefits Paid\$8.2 M
Average Benefit\$27,100
Average Age71

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings 11
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



\$168.7 M
Market Value

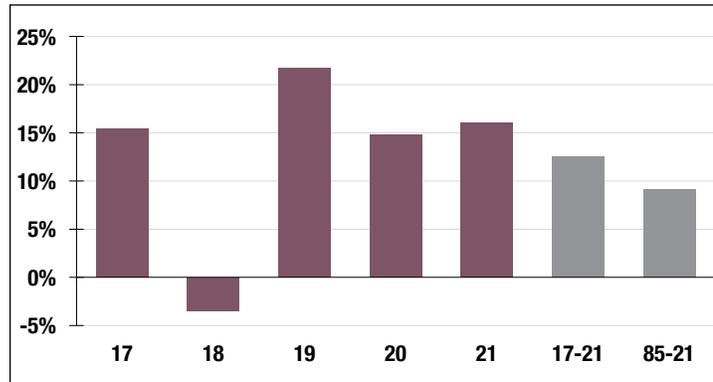
16.06%
2021 Returns

11.19%
2012-2021
(Annualized)

9.12%
1985-2021
(Annualized)

Investment Returns

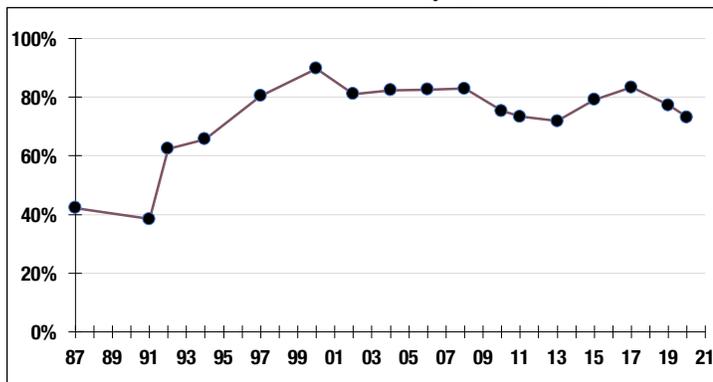
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



73.2%

Funded Ratio

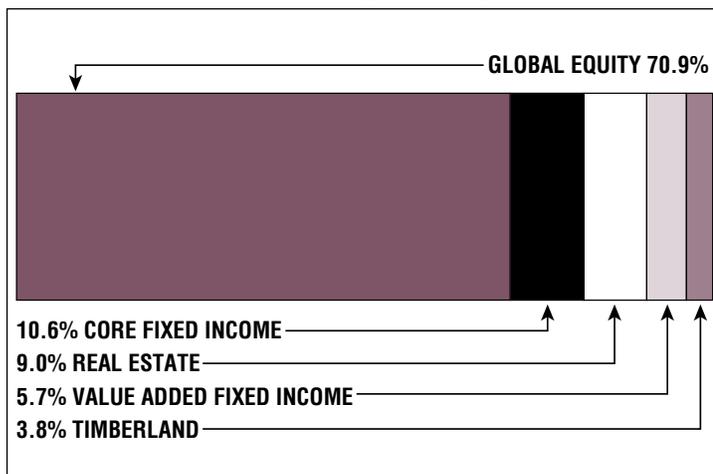
2034

Fully Funded

5.6% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$46.0 M

Unfunded Liability

\$4.4 M
(FY2022)

Total Pension Appropriation

Northampton

CONTACT INFORMATION

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

BOARD MEMBERS

Joyce Karpinski*
 Charlene Nardi
 Tammy Suprenant
 Karen Lafleche
 Thomas Sullivan
 *indicates Chairperson

BOARD ADMINISTRATOR

David Shipka

SYSTEM MEMBERS

Active Members645
 Total Payroll\$30.9 M
 Average Salary\$47,800
 Average Age47
 Average Service 10.4

 Retired Members.....451
 Benefits Paid\$11.2 M
 Average Benefit\$24,800
 Average Age71

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees29
 Reported Earnings9
 Excess Earners.....0
 Refund Due\$0

Last Valuation: 1/1/20
 Actuary: Stone



\$177.7 M
 Market Value

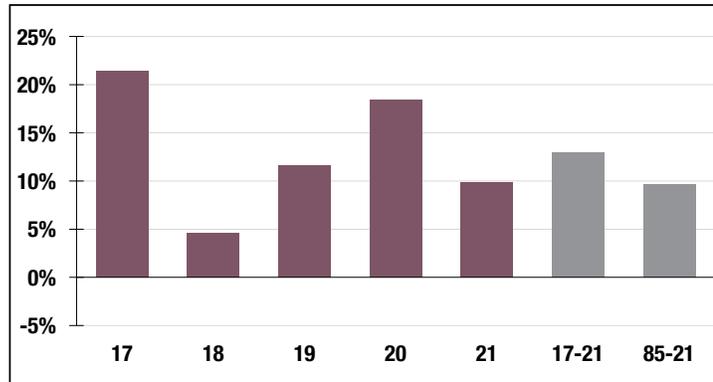
9.82%
 2021 Returns

10.48%
 2012-2021
 (Annualized)

9.63%
 1985-2021
 (Annualized)

Investment Returns

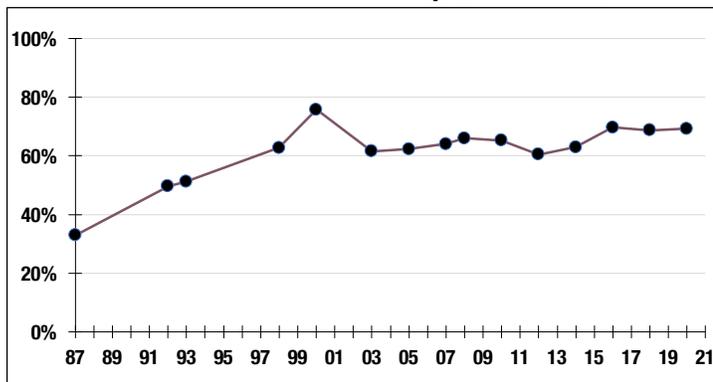
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.13%

Assumed Rate of Return

Funded Ratio History (1987-2021)



69.2%

Funded Ratio

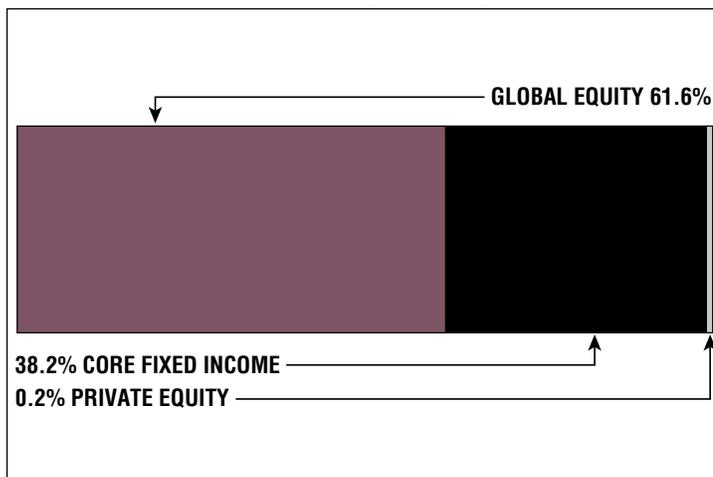
2037

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$60.8 M

Unfunded Liability

\$7.2 M
 (FY2022)

Total Pension Appropriation

Northbridge

CONTACT INFORMATION

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

BOARD MEMBERS

Neil Vaidya
Sharon Susienka
John Meagher*
George Murray
Thomas Frieswyk
*indicates Chairperson

BOARD ADMINISTRATOR

Scott McGrath

SYSTEM MEMBERS

Active Members210
Total Payroll\$9.3 M
Average Salary\$44,300
Average Age47
Average Service 10.5

Retired Members 113
Benefits Paid\$2.7 M
Average Benefit\$23,700
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 10
Reported Earnings3
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



\$54.2 M
Market Value

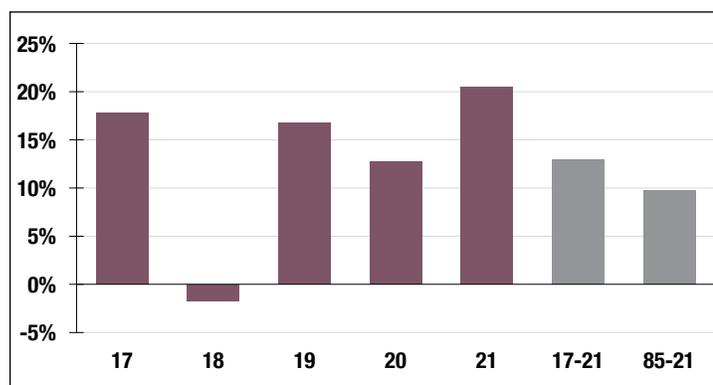
20.50%
2021 Returns

11.07%
2012-2021
(Annualized)

9.75%
1985-2021
(Annualized)

Investment Returns

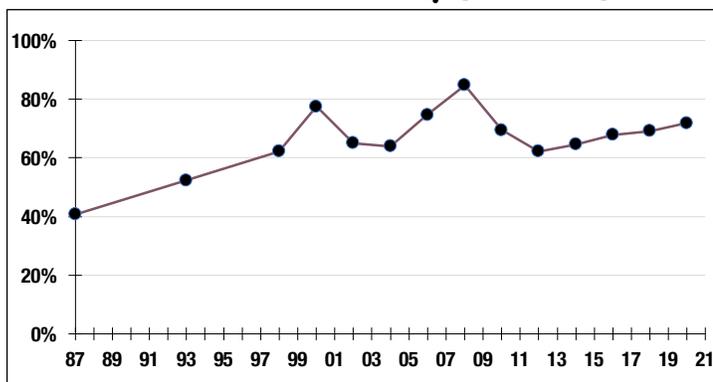
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



72.8%

Funded Ratio

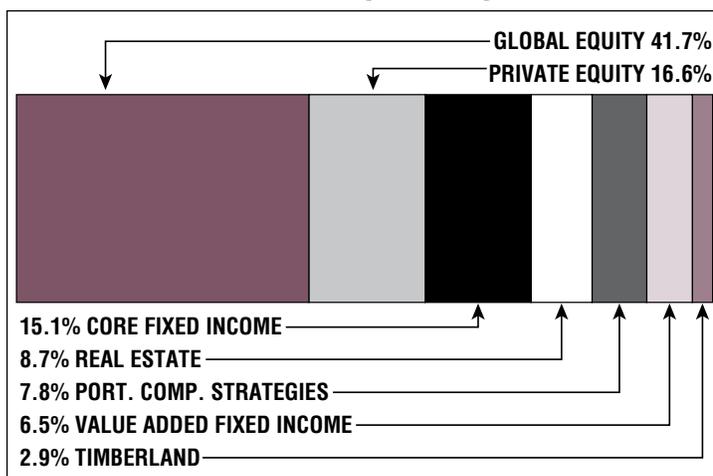
2035

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$14.6 M

Unfunded Liability

\$2.0 M
(FY2022)

Total Pension Appropriation

Norwood

CONTACT INFORMATION

566 Washington Street
Norwood, MA 02062
Phone 781-762-1240
Fax 781-278-3024

BOARD MEMBERS

Margaret LaMay
Edmund Mulvehill, Jr.*
Thomas O'Toole
Eileen Hickey
Thomas Rorrie
*indicates Chairperson

BOARD ADMINISTRATOR

Debra Wilkes

SYSTEM MEMBERS

Active Members613
Total Payroll\$36.8 M
Average Salary\$60,100
Average AgeNA
Average ServiceNA

Retired Members402
Benefits Paid\$13.0 M
Average Benefit\$32,200
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees37
Reported Earnings11
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



\$227.3 M
Market Value

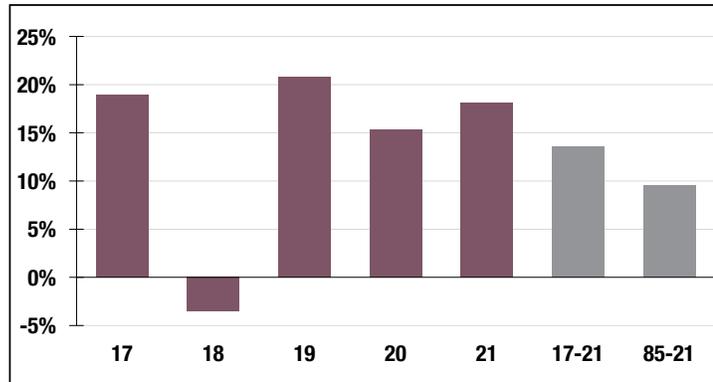
18.07%
2021 Returns

11.02%
2012-2021
(Annualized)

9.59%
1985-2021
(Annualized)

Investment Returns

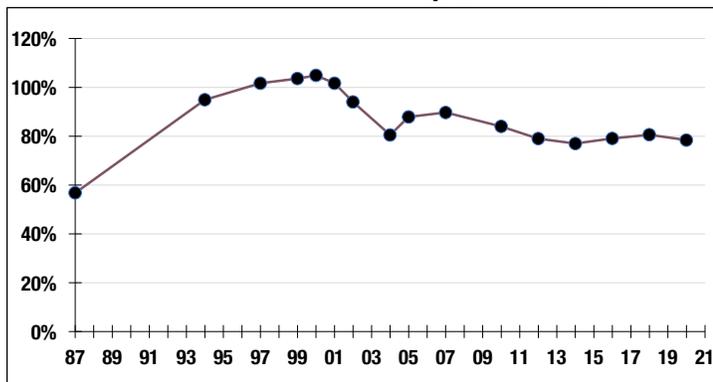
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.60%

Assumed Rate of Return

Funded Ratio History (1987-2021)



78.4%

Funded Ratio

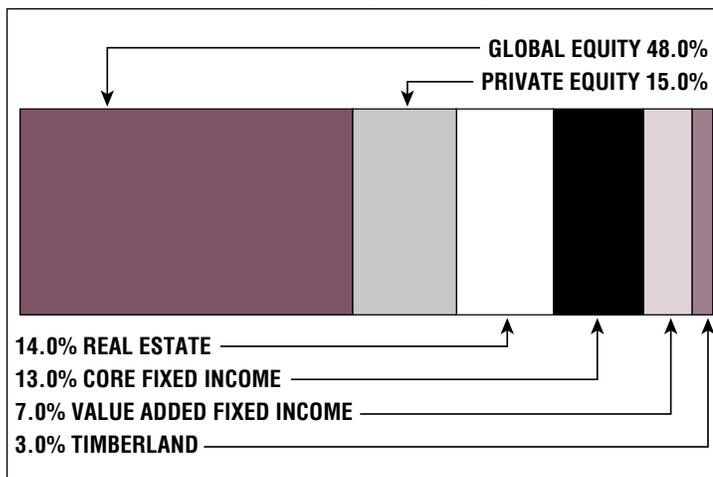
2032

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$46.9 M

Unfunded Liability

\$6.0 M
(FY2022)

Total Pension Appropriation

Peabody

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

James Freeman

SYSTEM MEMBERS

Active Members846
Total Payroll\$50.3 M
Average Salary\$59,500
Average AgeNA
Average ServiceNA

Retired Members772
Benefits Paid\$20.5 M
Average Benefit\$26,600
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees43
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



Click/Scan for Website

\$211.0 M
Market Value

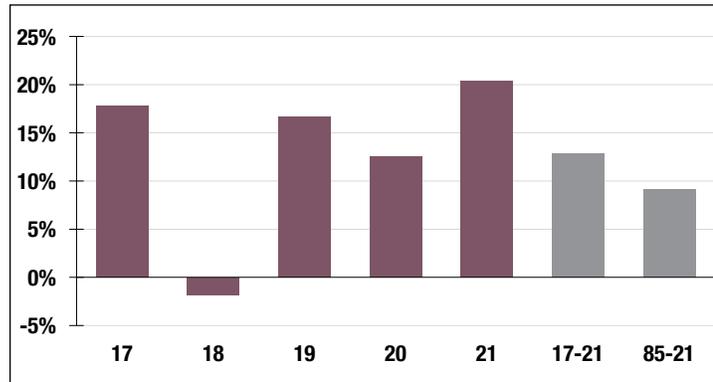
20.39%
2021 Returns

11.02%
2012-2021
(Annualized)

9.11%
1985-2021
(Annualized)

Investment Returns

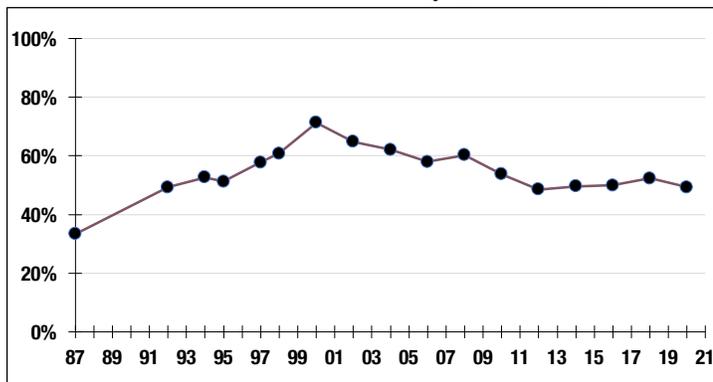
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



49.3%

Funded Ratio

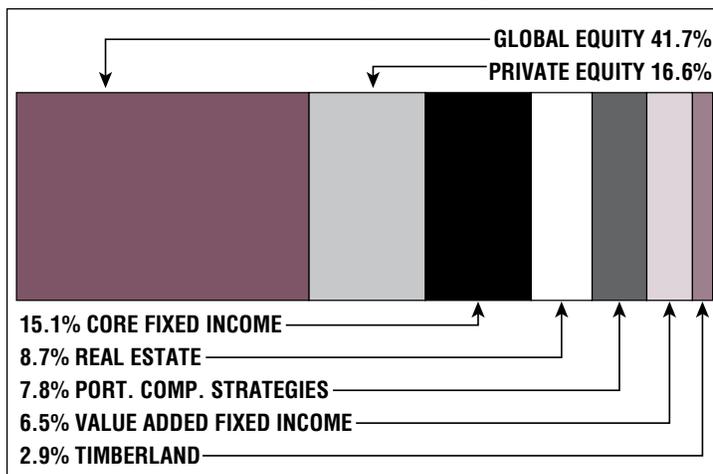
2036

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$169.3 M

Unfunded Liability

\$14.2 M
(FY2022)

Total Pension Appropriation

Pittsfield

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Karen Lancto

SYSTEM MEMBERS

Active Members861
Total Payroll\$37.2 M
Average Salary\$43,200
Average Age48
Average Service11.1

Retired Members792
Benefits Paid\$19.4 M
Average Benefit\$24,500
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees64
Reported Earnings15
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



\$198.6 M
Market Value

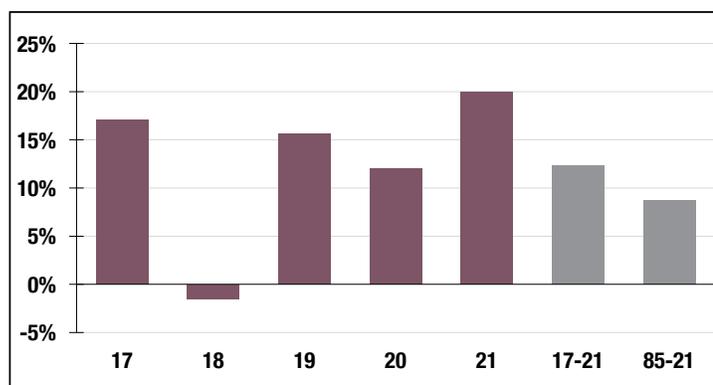
19.99%
2021 Returns

10.74%
2012-2021
(Annualized)

8.68%
1985-2021
(Annualized)

Investment Returns

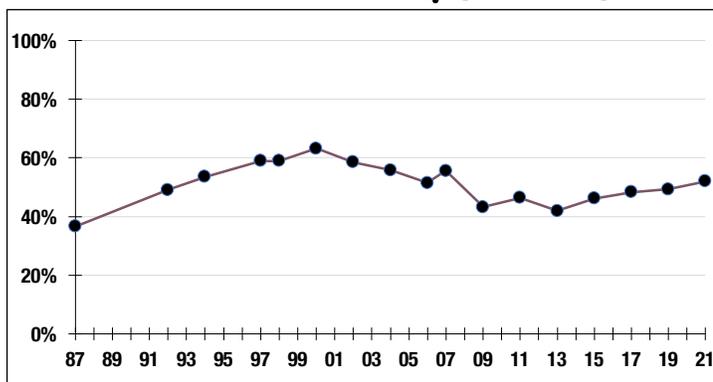
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



52.0%

Funded Ratio

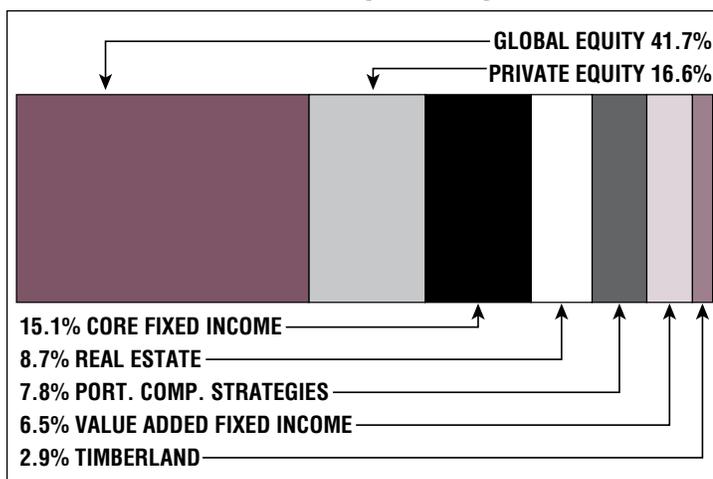
2037

Fully Funded

5.2% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$146.8 M

Unfunded Liability

\$15.5 M
(FY2022)

Total Pension Appropriation

Plymouth

CONTACT INFORMATION

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

BOARD MEMBERS

Lynne Barrett
Gerald Coughlin
Thomas Kelley*
Dale Webber
Robert Ness
*indicates Chairperson

BOARD ADMINISTRATOR

Wendy Cherry

SYSTEM MEMBERS

Active Members914
Total Payroll\$51.2 M
Average Salary\$56,000
Average Age48
Average Service 11.8

Retired Members.....763
Benefits Paid\$19.8 M
Average Benefit\$26,000
Average Age71

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees78
Reported Earnings28
Excess Earners..... 1
Refund Due\$42,882

Last Valuation: 1/1/20
Actuary: KMS



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\$257.6 M
Market Value

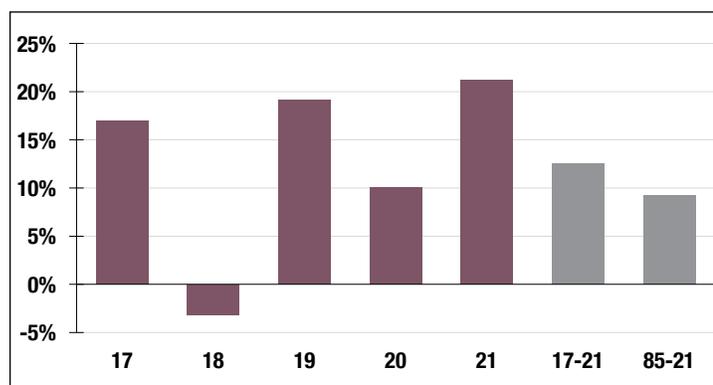
21.19%
2021 Returns

11.36%
2012-2021
(Annualized)

9.25%
1985-2021
(Annualized)

Investment Returns

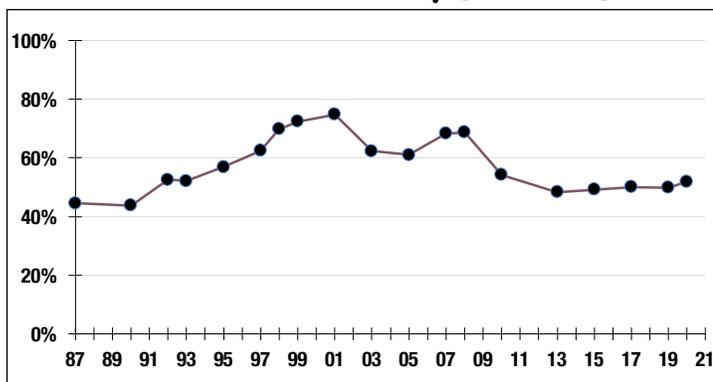
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



51.9%

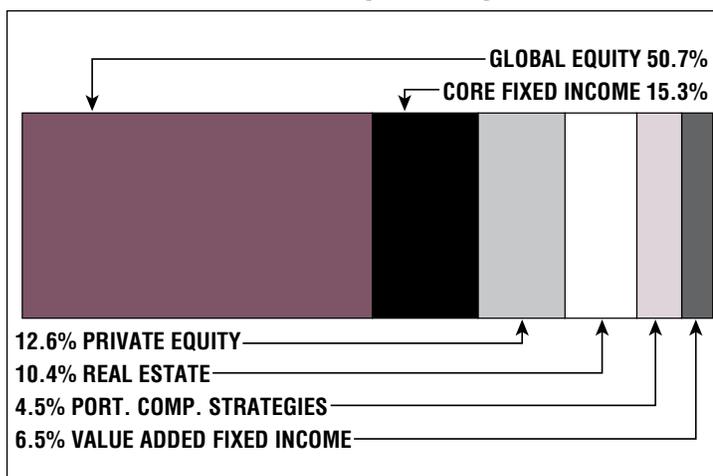
Funded Ratio

2035

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$176.0 M

Unfunded Liability

\$16.6 M
(FY2022)

Total Pension Appropriation

Plymouth County

CONTACT INFORMATION

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

BOARD MEMBERS

Thomas O'Brien*
James Harrington
Joseph McDonough
John Sciarra
Mary Beth Carter
*indicates Chairperson

BOARD ADMINISTRATOR

Timothy Smyth

SYSTEM MEMBERS

Active Members5,708
Total Payroll\$294.6 M
Average Salary\$51,600
Average AgeNA
Average ServiceNA

Retired Members4,334
Benefits Paid\$111.4 M
Average Benefit\$25,700
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees311
Reported Earnings107
Excess Earners4
Refund Due\$30,909

Last Valuation: 1/1/20
Actuary: Sherman



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\$1.4 B
Market Value

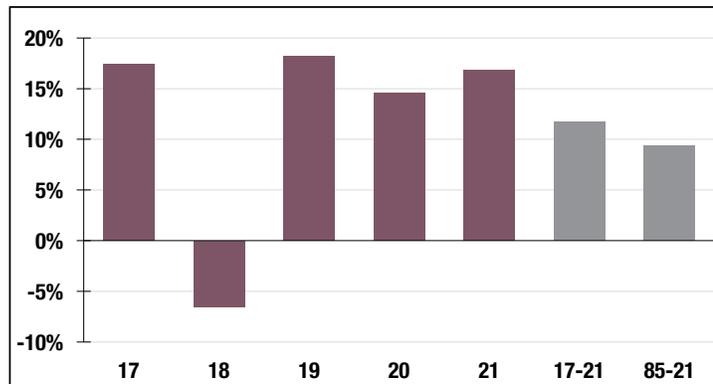
16.88%
2021 Returns

10.07%
2012-2021
(Annualized)

9.36%
1985-2021
(Annualized)

Investment Returns

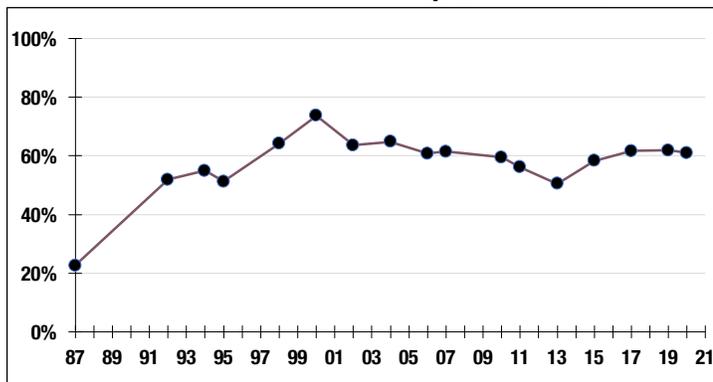
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.88%

Assumed Rate of Return

Funded Ratio History (1987-2021)



61.0%

Funded Ratio

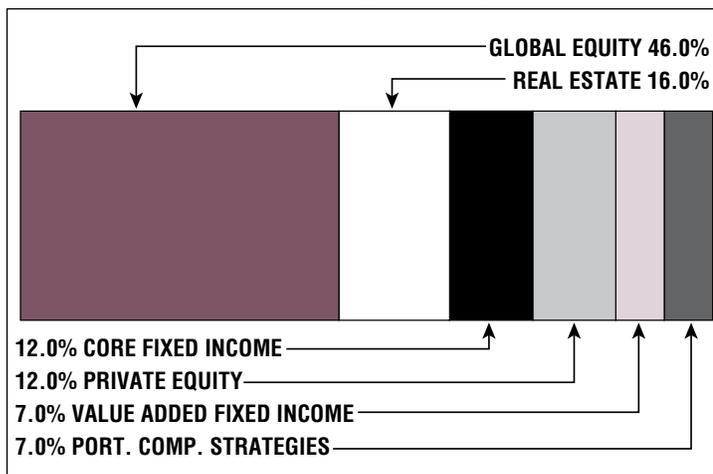
2029

Fully Funded

8.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$693.3 M

Unfunded Liability

\$87.6 M
(FY2022)

Total Pension Appropriation

Quincy

CONTACT INFORMATION

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

BOARD MEMBERS

Susan O'Connor*
Michael McFarland
Leo Coppens
Ernest Arienti
Richard Fitzpatrick
*indicates Chairperson

BOARD ADMINISTRATOR

Brad Croall

SYSTEM MEMBERS

Active Members 1,546
Total Payroll \$101.7 M
Average Salary \$65,800
Average Age 49
Average Service 12.4

Retired Members 1,521
Benefits Paid \$47.6 M
Average Benefit \$31,300
Average Age 75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 136
Reported Earnings 30
Excess Earners 1
Refund Due \$242

Last Valuation: 1/1/20
Actuary: Stone



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\$917.7 M
Market Value

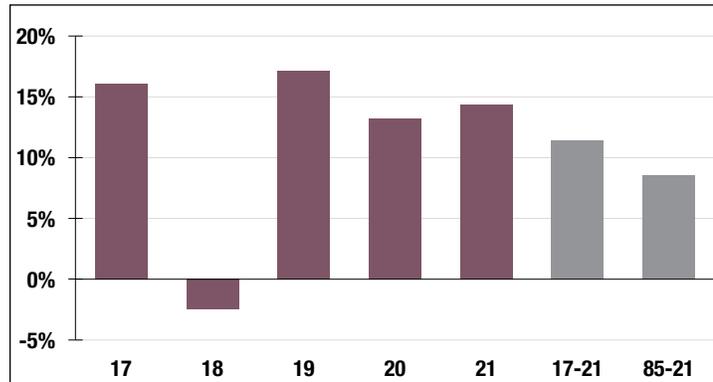
14.34%
2021 Returns

9.42%
2012-2021
(Annualized)

8.52%
1985-2021
(Annualized)

Investment Returns

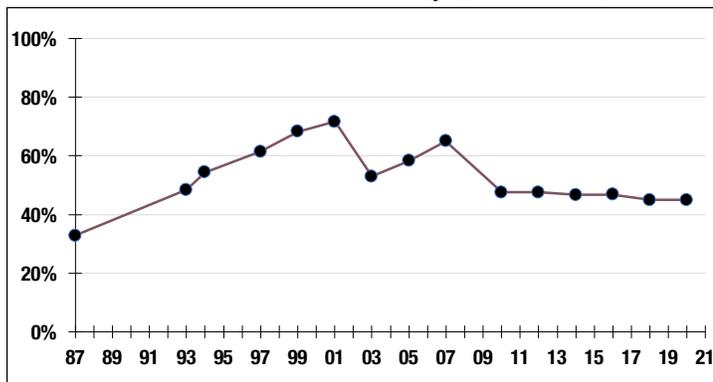
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



45.9%

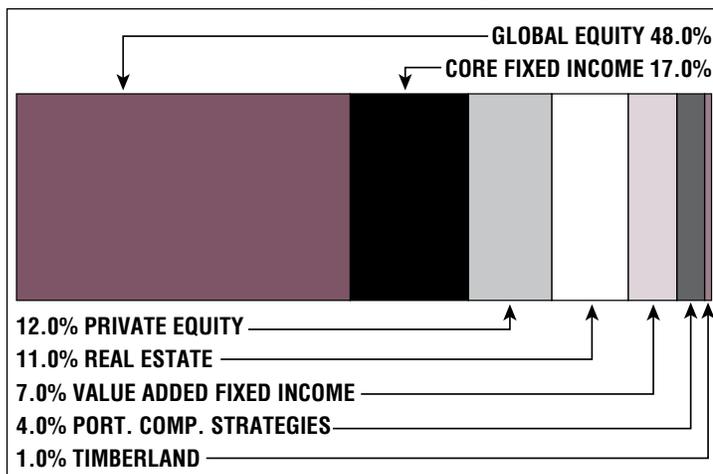
Funded Ratio

2036

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$426.7 M

Unfunded Liability

\$38.3 M
(FY2022)

Total Pension Appropriation

Reading

CONTACT INFORMATION

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

BOARD MEMBERS

Sharon Angstrom
Carol Roberts
David Gentile*
Robert Beck
John Halsey
*indicates Chairperson

BOARD ADMINISTRATOR

Colleen Loughlin

SYSTEM MEMBERS

Active Members355
Total Payroll\$29.6 M
Average Salary\$83,400
Average Age47
Average Service 12.7

Retired Members366
Benefits Paid\$12.3 M
Average Benefit\$33,600
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: KMS



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\$199.1 M
Market Value

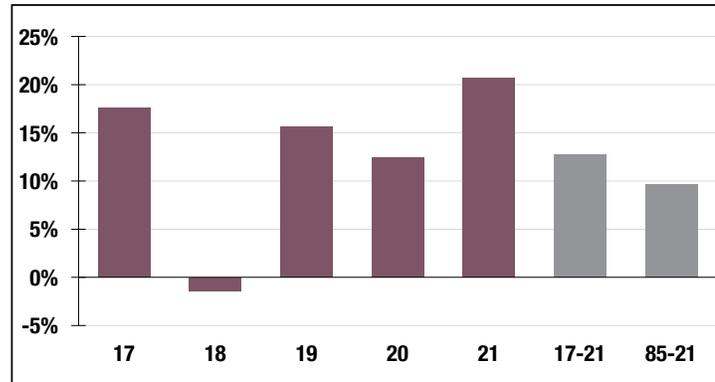
20.70%
2021 Returns

10.99%
2012-2021
(Annualized)

9.66%
1985-2021
(Annualized)

Investment Returns

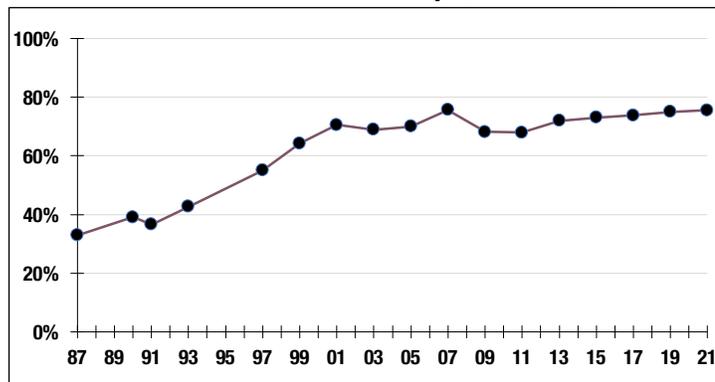
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



75.5%

Funded Ratio

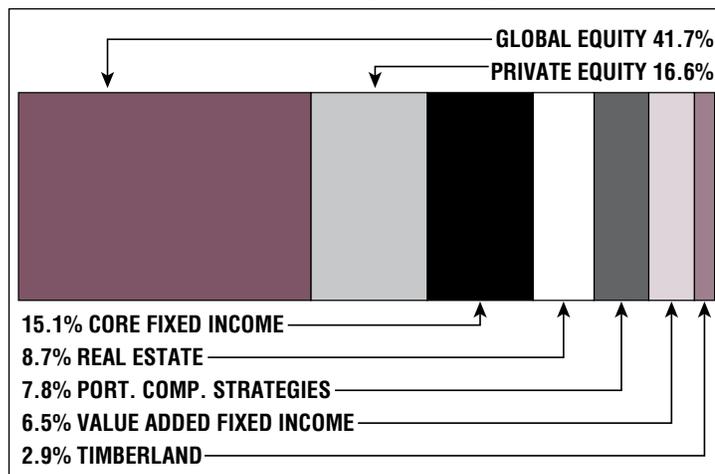
2031

Fully Funded

6.0% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$52.2 M

Unfunded Liability

\$8.1 M
(FY2022)

Total Pension Appropriation

Revere

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Sandor Zapolin

SYSTEM MEMBERS

Active Members622
Total Payroll\$43.3 M
Average Salary\$69,600
Average Age47
Average Service 11.9

Retired Members490
Benefits Paid\$17.2 M
Average Benefit\$35,000
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees87
Reported Earnings27
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$248.3 M
Market Value

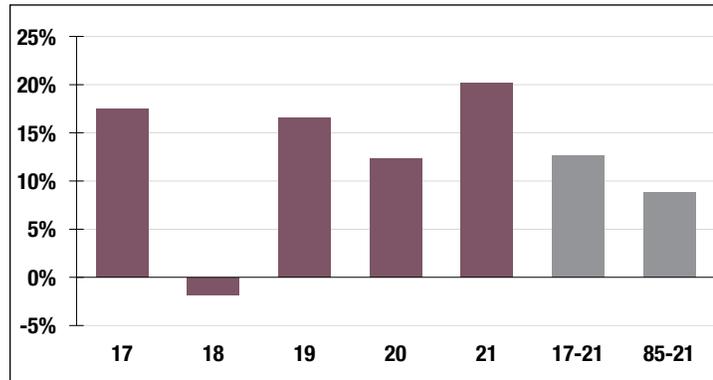
20.16%
2021 Returns

10.87%
2012-2021
(Annualized)

8.87%
1985-2021
(Annualized)

Investment Returns

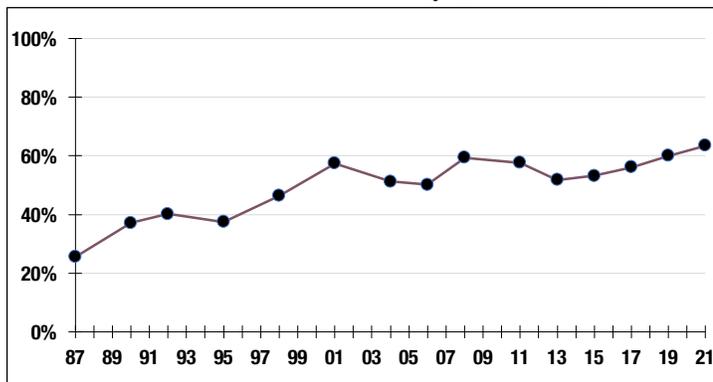
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



63.5%

Funded Ratio

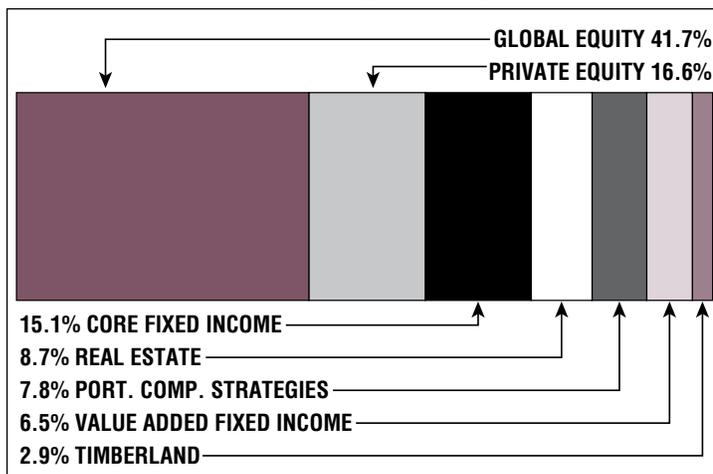
2033

Fully Funded

6.32% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$111.2 M

Unfunded Liability

\$15.0 M
(FY2022)

Total Pension Appropriation

Salem Contributory

CONTACT INFORMATION

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

BOARD MEMBERS

Anna Freedman
Dominick Pangallo*
Sarah (Sally) Hayes
Robert Callahan
Matthew Veno
*indicates Chairperson

BOARD ADMINISTRATOR

Paul Findlen

SYSTEM MEMBERS

Active Members922
Total Payroll\$50.1 M
Average Salary\$54,400
Average Age48
Average Service 11.3

Retired Members610
Benefits Paid\$17.5 M
Average Benefit\$28,700
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees46
Reported Earnings 15
Excess Earners 1
Refund Due\$2,502

Last Valuation: 1/1/20
Actuary: Segal



Click/Scan for Website

\$277.2 M
Market Value

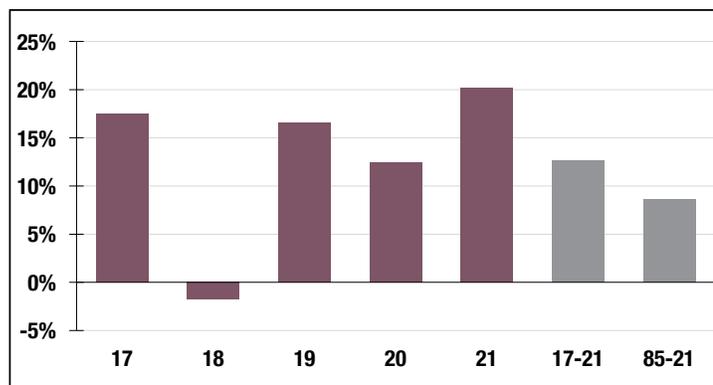
20.13%
2021 Returns

10.68%
2012-2021
(Annualized)

8.64%
1985-2021
(Annualized)

Investment Returns

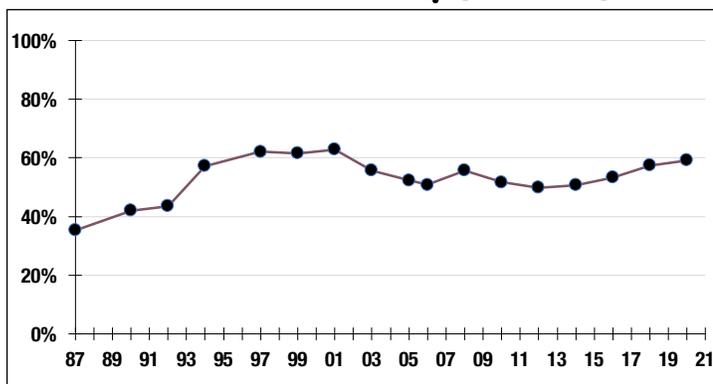
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



59.2%

Funded Ratio

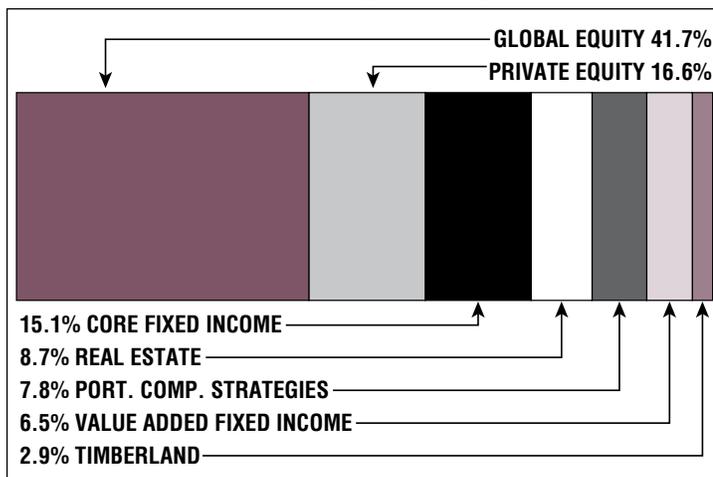
2032

Fully Funded

5.55% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$136.8 M

Unfunded Liability

\$16.3 M
(FY2022)

Total Pension Appropriation

Saugus

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Ann Quinlan

SYSTEM MEMBERS

Active Members340
Total Payroll\$20.4 M
Average Salary\$60,000
Average Age46
Average Service 11.8

Retired Members302
Benefits Paid\$8.7 M
Average Benefit\$28,900
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



Click/Scan for Website

\$154.9 M
Market Value

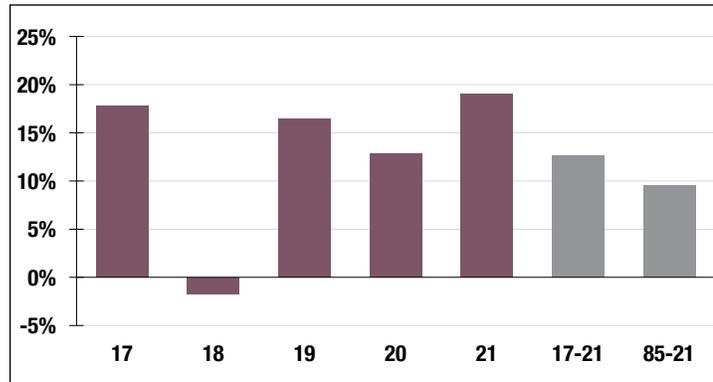
19.05%
2021 Returns

10.91%
2012-2021
(Annualized)

9.59%
1985-2021
(Annualized)

Investment Returns

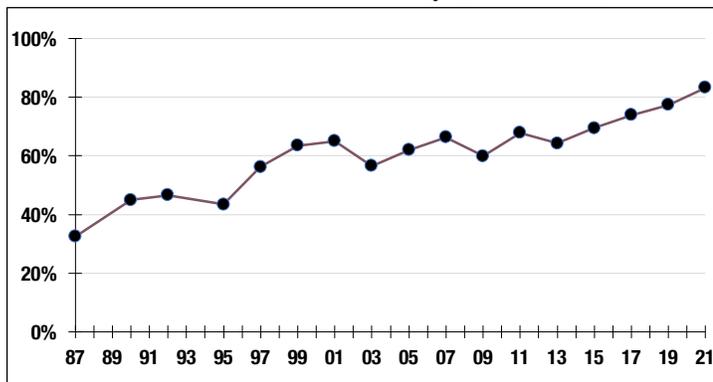
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



83.2%

Funded Ratio

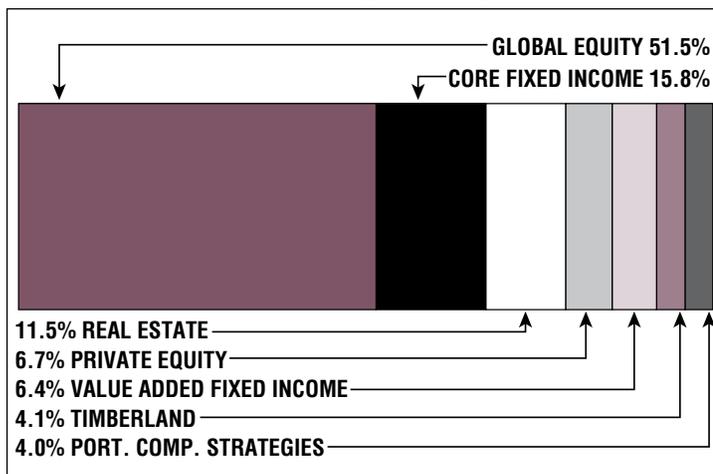
2027

Fully Funded

5.2% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$25.3 M

Unfunded Liability

\$7.9 M
(FY2022)

Total Pension Appropriation

Shrewsbury Contributory

CONTACT INFORMATION

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

BOARD MEMBERS

Amy Li
Thomas Kennedy*
Ralph Iaccarino
David Hodgerney
Alice Ferro
*indicates Chairperson

BOARD ADMINISTRATOR

Gregory Gatsogiannis

SYSTEM MEMBERS

Active Members440
Total Payroll\$26.2 M
Average Salary\$59,500
Average AgeNA
Average ServiceNA

Retired Members294
Benefits Paid\$8.7 M
Average Benefit\$29,600
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees22
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Sherman



Click/Scan for Website

\$181.9 M
Market Value

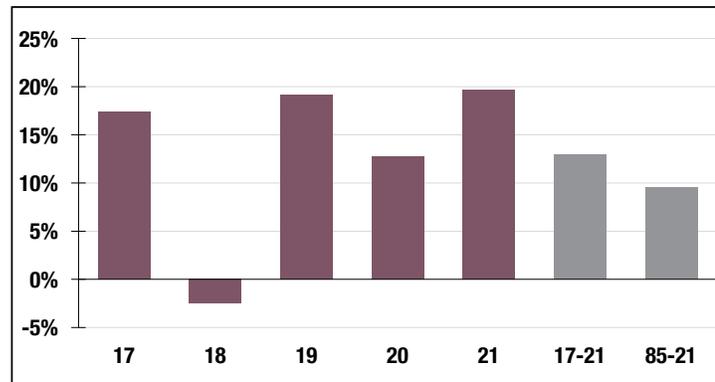
19.64%
2021 Returns

11.55%
2012-2021
(Annualized)

9.57%
1985-2021
(Annualized)

Investment Returns

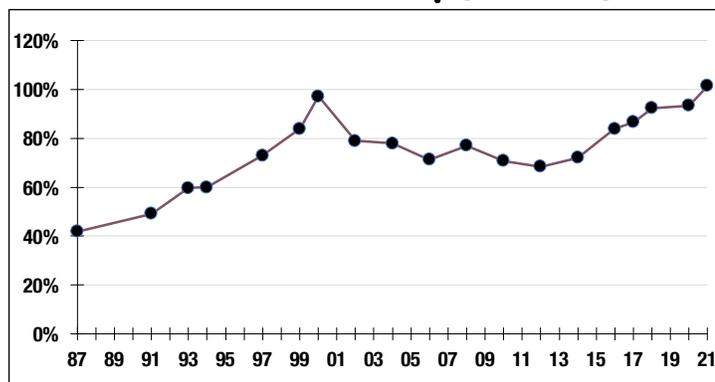
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



101.4%

Funded Ratio

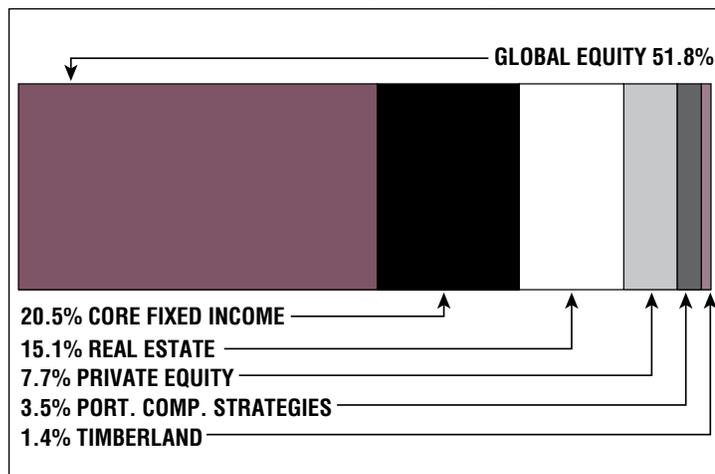
2023

Fully Funded

Level Dollar

Funding Schedule

Asset Allocation (12/31/21)



-\$2.1 M

Unfunded Liability

\$1.1 M
(FY2022)

Total Pension Appropriation

Somerville

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Michael Pasquariello

SYSTEM MEMBERS

Active Members 1,251
Total Payroll\$88.3 M
Average Salary\$70,600
Average AgeNA
Average ServiceNA

Retired Members940
Benefits Paid\$30.5 M
Average Benefit\$32,500
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 101
Reported Earnings30
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Sherman



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\$453.2 M
Market Value

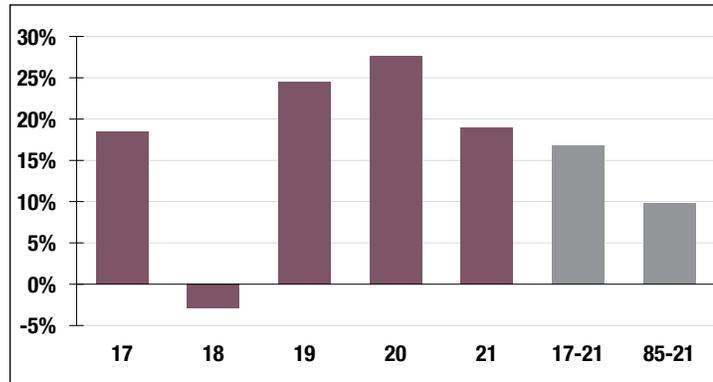
18.89%
2021 Returns

12.97%
2012-2021
(Annualized)

9.84%
1985-2021
(Annualized)

Investment Returns

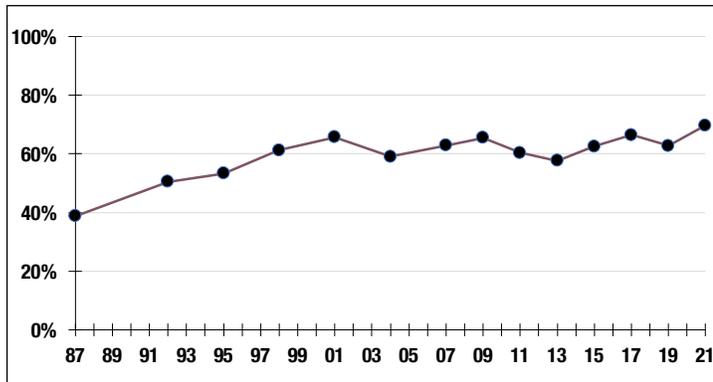
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



69.7%

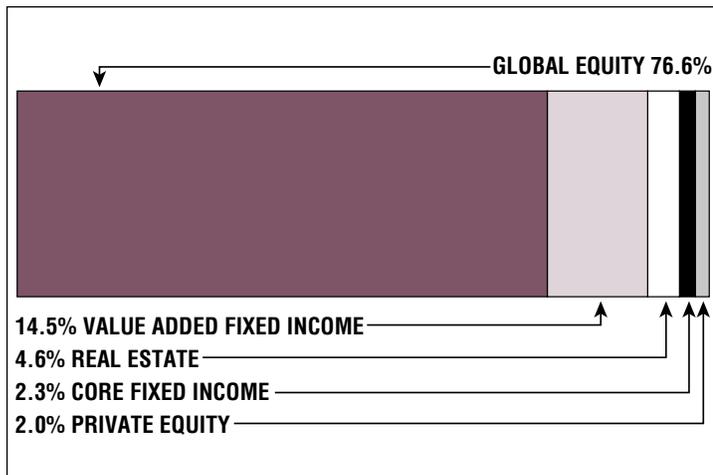
Funded Ratio

2033

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$149.9 M

Unfunded Liability

\$16.6 M
(FY2022)

Total Pension Appropriation

Southbridge

CONTACT INFORMATION

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

BOARD MEMBERS

Karen Harnois
Sharon Ashleigh
Julie Pena*
Wilfrid Cournoyer
Pamela Leduc
*indicates Chairperson

BOARD ADMINISTRATOR

Yolanda Alvarado

SYSTEM MEMBERS

Active Members354
Total Payroll\$17.5 M
Average Salary\$49,400
Average Age46
Average Service9.9

Retired Members186
Benefits Paid\$4.8 M
Average Benefit\$25,600
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees18
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$83.6 M
Market Value

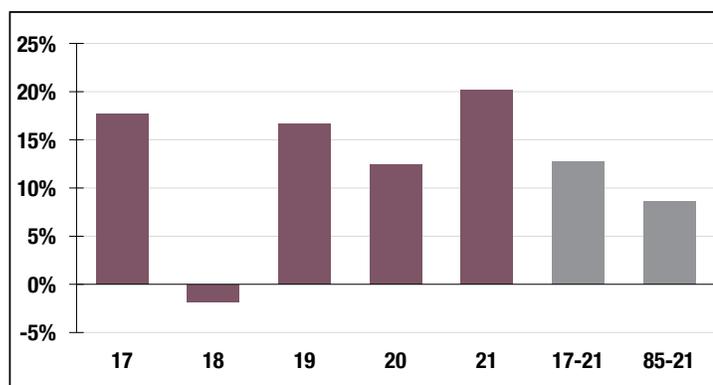
20.22%
2021 Returns

10.85%
2012-2021
(Annualized)

8.59%
1985-2021
(Annualized)

Investment Returns

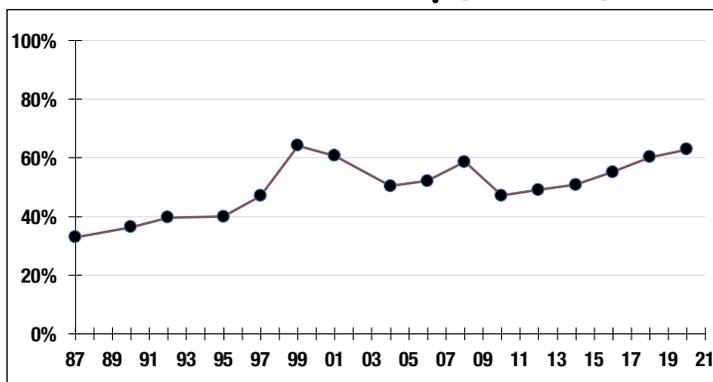
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.15%

Assumed Rate of Return

Funded Ratio History (1987-2021)



62.9%

Funded Ratio

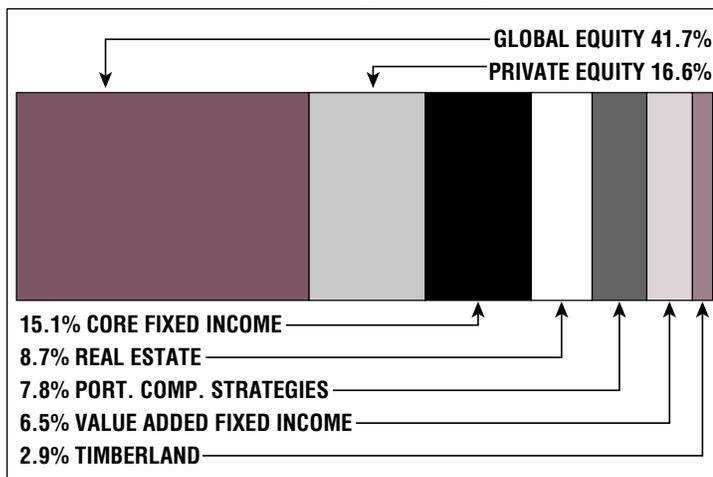
2035

Fully Funded

5.5% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$34.5 M

Unfunded Liability

\$4.7 M
(FY2022)

Total Pension Appropriation

Springfield

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Susana Baltazar

SYSTEM MEMBERS

Active Members3,342
Total Payroll\$171.7 M
Average Salary\$51,400
Average Age44
Average Service11.4

Retired Members2,817
Benefits Paid\$80.5 M
Average Benefit\$28,600
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees387
Reported Earnings119
Excess Earners5
Refund Due\$49,361

Last Valuation: 1/1/20
Actuary: PERAC



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\$552.0 M
Market Value

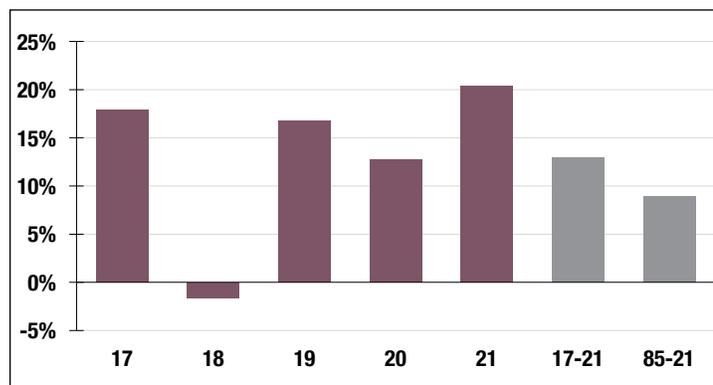
20.44%
2021 Returns

11.15%
2012-2021
(Annualized)

8.92%
1985-2021
(Annualized)

Investment Returns

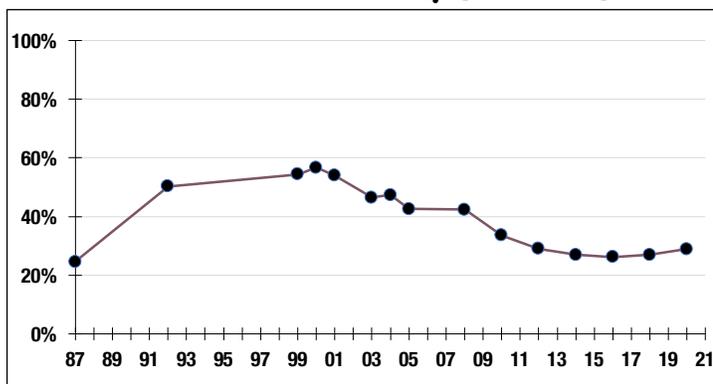
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



28.9%

Funded Ratio

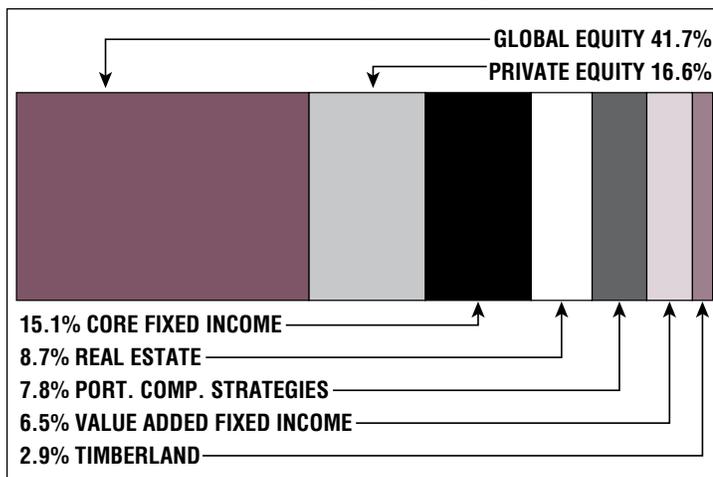
2033

Fully Funded

9.2% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$938.1 M

Unfunded Liability

\$85.3 M
(FY2022)

Total Pension Appropriation

State

CONTACT INFORMATION

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

BOARD MEMBERS

State Treasurer
Deborah Goldberg*
Maureen Valente
Theresa McGoldrick
Frank Valeri
Archie Gormley
*indicates Chairperson

BOARD ADMINISTRATOR

Nicola Favorito

SYSTEM MEMBERS

Active Members87,136
Total Payroll \$6.5 B
Average Salary\$75,100
Average Age47
Average Service 12.3

Retired Members....66,901
Benefits Paid \$2.6 B
Average Benefit\$38,400
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees.....3,418
Reported Earnings942
Excess Earners.....26
Refund Due\$291,671

Last Valuation: 1/1/21
Actuary: PERAC



\$38.1 B
Market Value

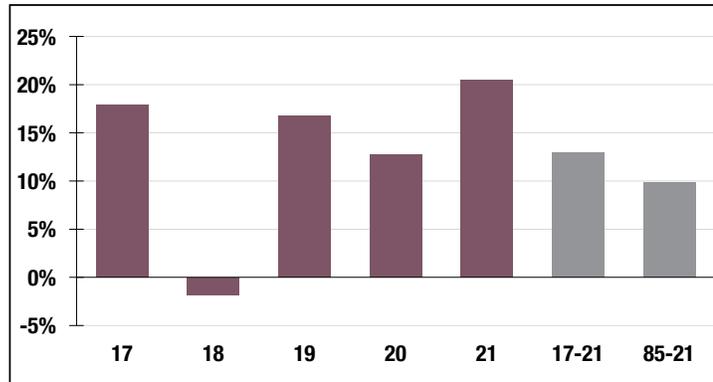
20.50%
2021 Returns

11.08%
2012-2021
(Annualized)

9.84%
1985-2021
(Annualized)

Investment Returns

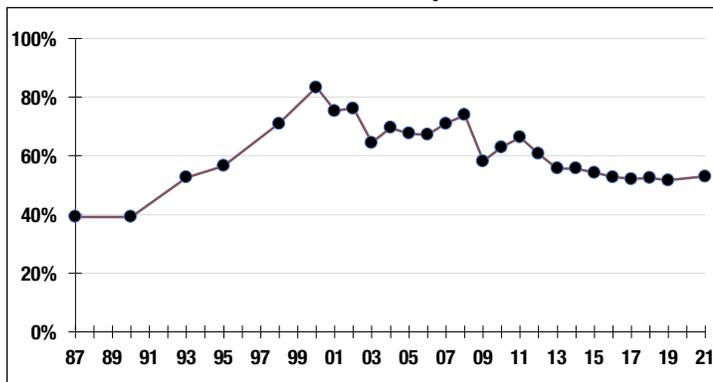
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



66.4%

Funded Ratio

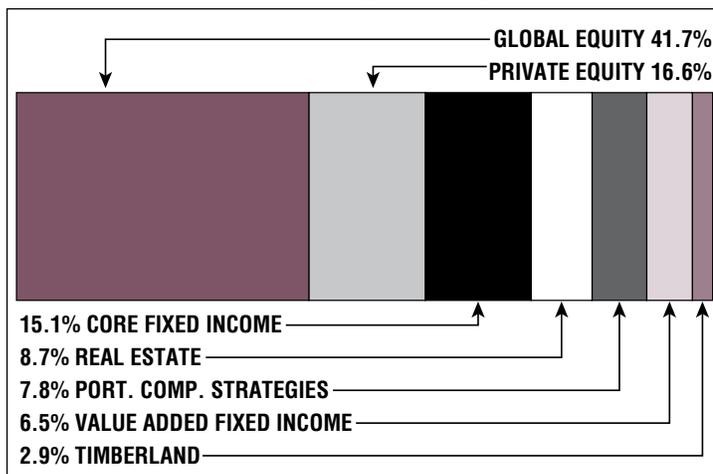
2036

Fully Funded

9.63% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$15.3 B

Unfunded Liability

\$1.3 B
(FY2022)

Total Pension Appropriation

Stoneham

CONTACT INFORMATION

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

BOARD MEMBERS

Eric Duffy
Kathleen Sullivan
John Scullin
Francis Gould
Janice Houghton*
*indicates Chairperson

BOARD ADMINISTRATOR

Karen DeAngelis

SYSTEM MEMBERS

Active Members313
Total Payroll\$16.2 M
Average Salary\$51,700
Average Age48
Average Service11

Retired Members291
Benefits Paid\$8.5 M
Average Benefit\$29,400
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees17
Reported Earnings3
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$127.1 M
Market Value

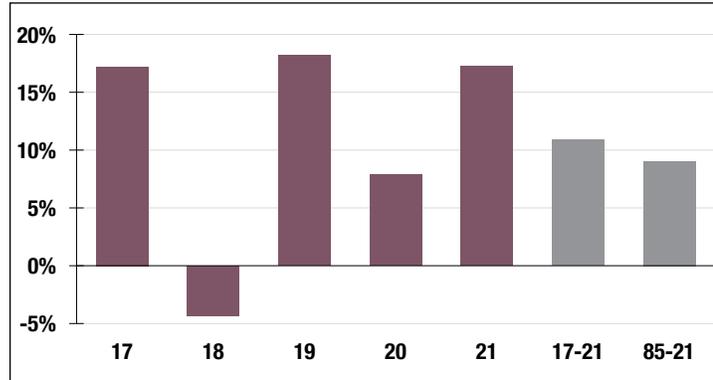
17.26%
2021 Returns

10.18%
2012-2021
(Annualized)

9.04%
1985-2021
(Annualized)

Investment Returns

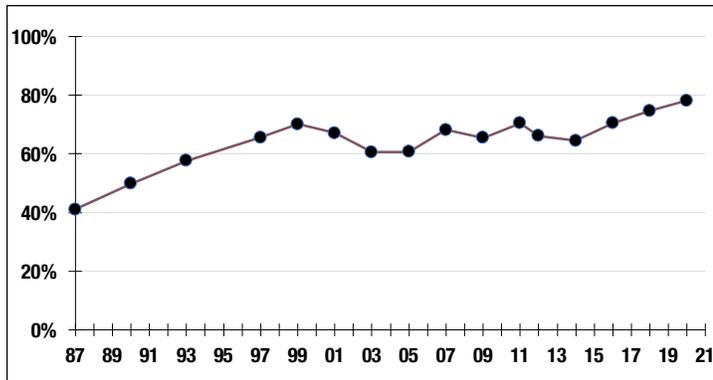
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



78.1%

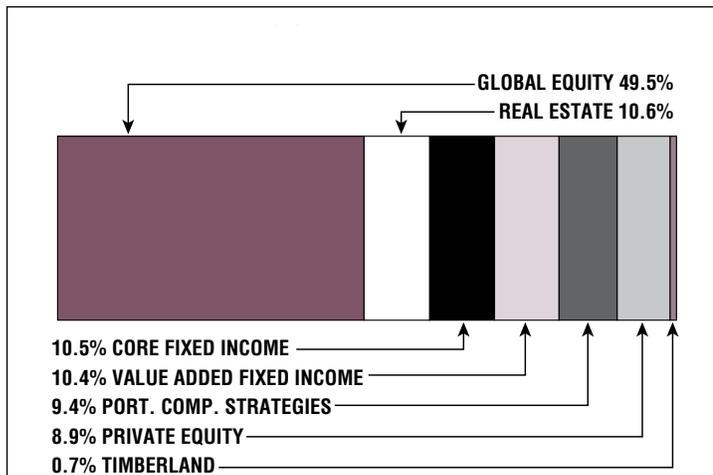
Funded Ratio

2026

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$28.0 M

Unfunded Liability

\$7.0 M
(FY2022)

Total Pension Appropriation

Swampscott Contributory

CONTACT INFORMATION

22 Monument Avenue
Town Hall
Swampscott, MA 01907
Phone 781-596-8827
Fax 781-596-8899

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Nancy Lord

SYSTEM MEMBERS

Active Members249
Total Payroll\$13.2 M
Average Salary\$53,100
Average Age46
Average Service 11.6

Retired Members235
Benefits Paid\$6.8 M
Average Benefit\$29,100
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees19
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Segal



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\$88.4 M
Market Value

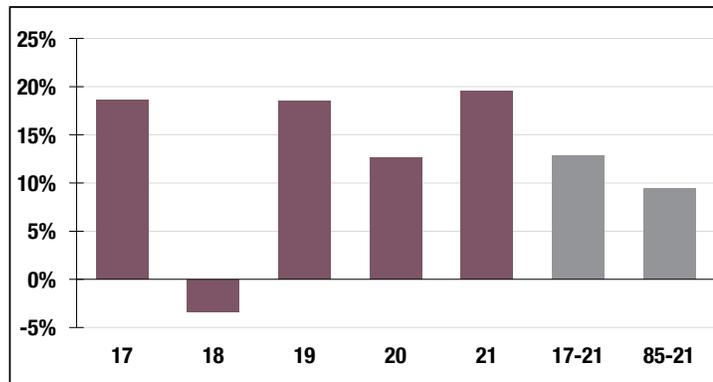
19.59%
2021 Returns

11.29%
2012-2021
(Annualized)

9.46%
1985-2021
(Annualized)

Investment Returns

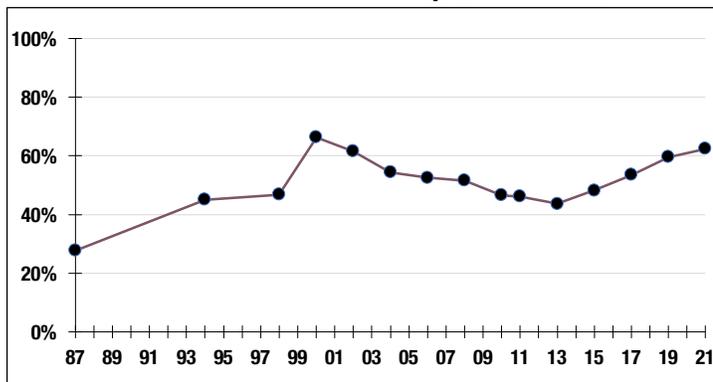
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.13%

Assumed Rate
of Return

Funded Ratio History (1987-2021)



62.4%

Funded Ratio

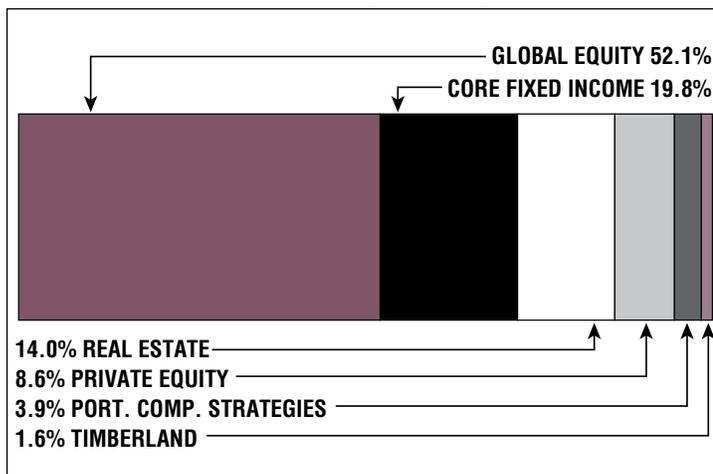
2031

Fully Funded

**5.0% Total
Increasing**

Funding Schedule

Asset Allocation (12/31/21)



\$42.4 M

Unfunded Liability

\$5.7 M
(FY2022)

Total Pension
Appropriation

Taunton

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Paul Slivinski

SYSTEM MEMBERS

Active Members 1,061
Total Payroll \$67.2 M
Average Salary \$63,400
Average Age NA
Average Service NA

Retired Members 907
Benefits Paid \$27.8 M
Average Benefit \$30,700
Average Age 73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 81
Reported Earnings 15
Excess Earners 1
Refund Due \$5,925

Last Valuation: 1/1/20
Actuary: Sherman



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\$444.6 M
Market Value

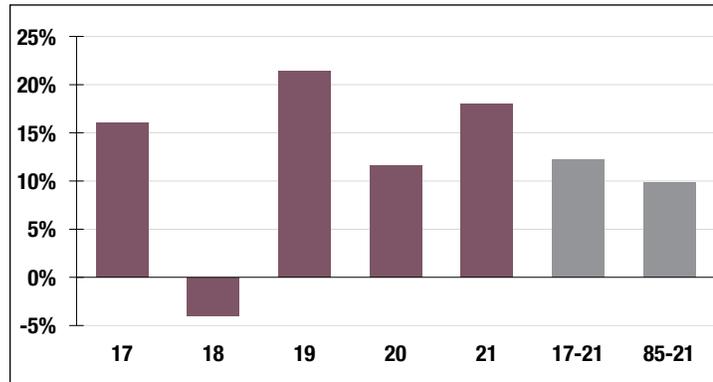
17.97%
2021 Returns

10.80%
2012-2021
(Annualized)

9.88%
1985-2021
(Annualized)

Investment Returns

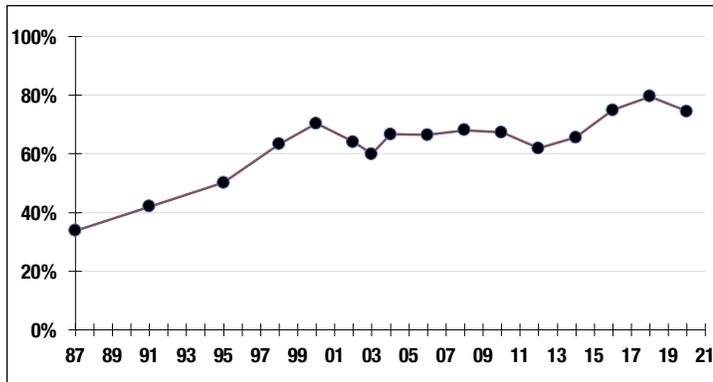
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



74.5%

Funded Ratio

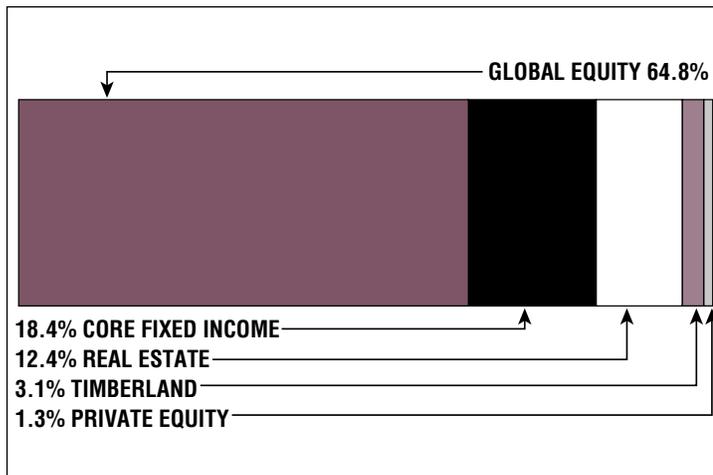
2030

Fully Funded

4.5% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$118.6 M

Unfunded Liability

\$18.8 M
(FY2022)

Total Pension Appropriation

Wakefield

CONTACT INFORMATION

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

BOARD MEMBERS

Kevin Gill*

Sherri Dalton

Joseph Albert

Dennis Fazio

Daniel Sherman

*indicates Chairperson

BOARD ADMINISTRATOR

Cathy Cheek

SYSTEM MEMBERS

Active Members451
Total Payroll\$28.8 M
Average Salary\$63,800
Average Age49
Average Service 12.6

Retired Members363
Benefits Paid\$11.2 M
Average Benefit\$30,900
Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings7
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20

Actuary: PERAC



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\$175.1 M
Market Value

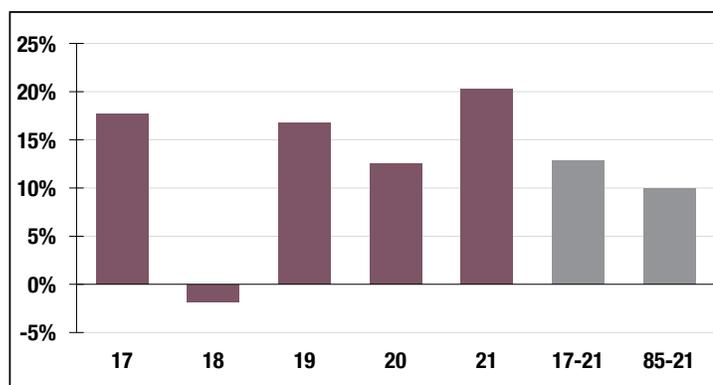
20.31%
2021 Returns

11.04%
2012-2021
(Annualized)

10.00%
1985-2021
(Annualized)

Investment Returns

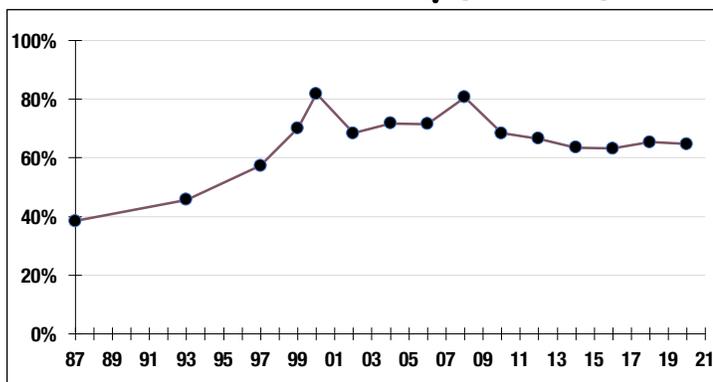
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.40%

Assumed Rate
of Return

Funded Ratio History (1987-2021)



64.7%

Funded Ratio

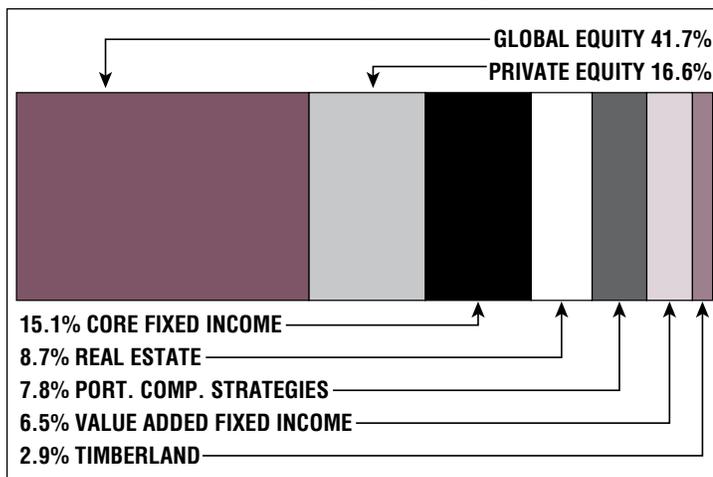
2036

Fully Funded

Varies Total
Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$69.8 M

Unfunded Liability

\$7.2 M
(FY2022)

Total Pension
Appropriation

Waltham

CONTACT INFORMATION

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

BOARD MEMBERS

Paul Centofanti
Elizabeth Arnold
William MacDonald*
Scott Hovsepien
Mary Rosen
*indicates Chairperson

BOARD ADMINISTRATOR

Andrew Malis

SYSTEM MEMBERS

Active Members915
Total Payroll\$66.6 M
Average Salary\$72,800
Average AgeNA
Average ServiceNA

Retired Members796
Benefits Paid\$28.3 M
Average Benefit\$35,600
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees67
Reported Earnings19
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Sherman



\$350.1 M
Market Value

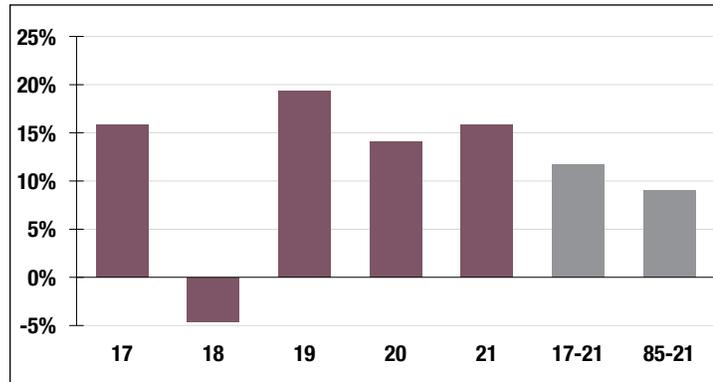
15.80%
2021 Returns

10.70%
2012-2021
(Annualized)

9.03%
1985-2021
(Annualized)

Investment Returns

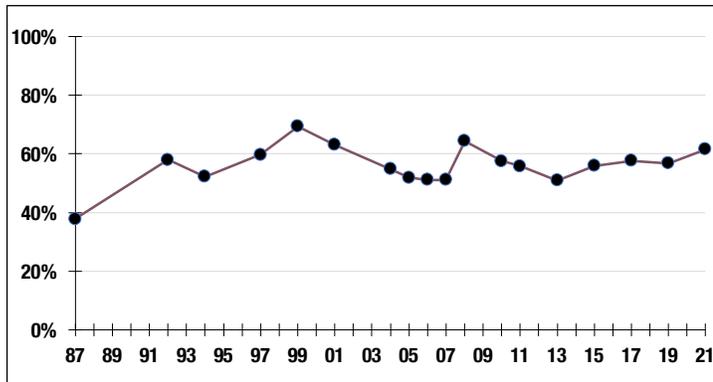
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.75%

Assumed Rate of Return

Funded Ratio History (1987-2021)



61.5%

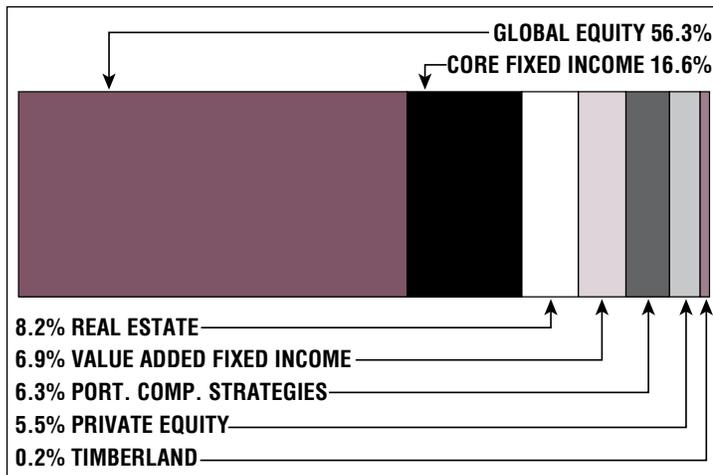
Funded Ratio

2032

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$181.0 M

Unfunded Liability

\$19.8 M
(FY2022)

Total Pension Appropriation

Watertown

CONTACT INFORMATION

149 Main Street
 P.O. Box 199
 Watertown, MA 02471
 Phone 617-972-6456
 Fax 617-923-3531

BOARD MEMBERS

Sharon Gallagher
 John Loughran
 Thomas Thibaut, Jr.*
 Domenic Arone
 Kathleen Kiely-Becchetti
 *indicates Chairperson

BOARD ADMINISTRATOR

Barbara Sheehan

SYSTEM MEMBERS

Active Members521
 Total Payroll\$36.2 M
 Average Salary\$69,500
 Average AgeNA
 Average ServiceNA

 Retired Members432
 Benefits Paid\$15.0 M
 Average Benefit\$34,800
 Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees44
 Reported Earnings10
 Excess Earners1
 Refund Due\$5,444

Last Valuation: 1/1/21
 Actuary: Sherman



\$285.0 M
 Market Value

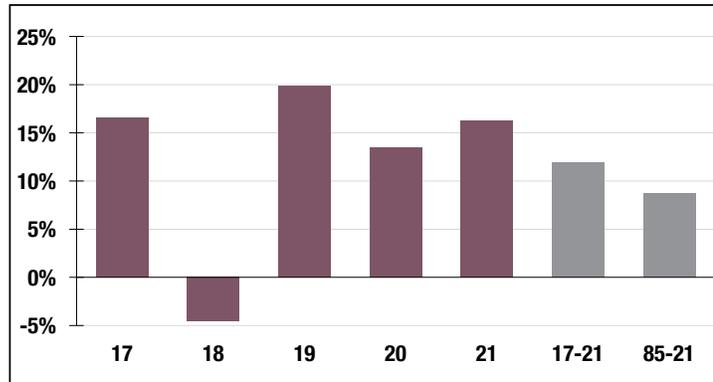
16.24%
 2021 Returns

10.45%
 2012-2021
 (Annualized)

8.72%
 1985-2021
 (Annualized)

Investment Returns

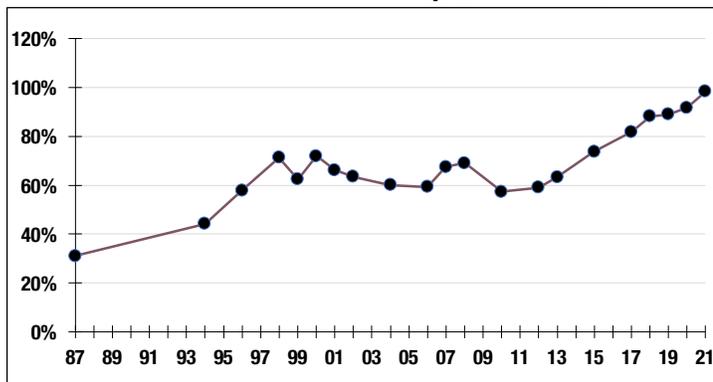
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.80%

Assumed Rate of Return

Funded Ratio History (1987-2021)



98.3%

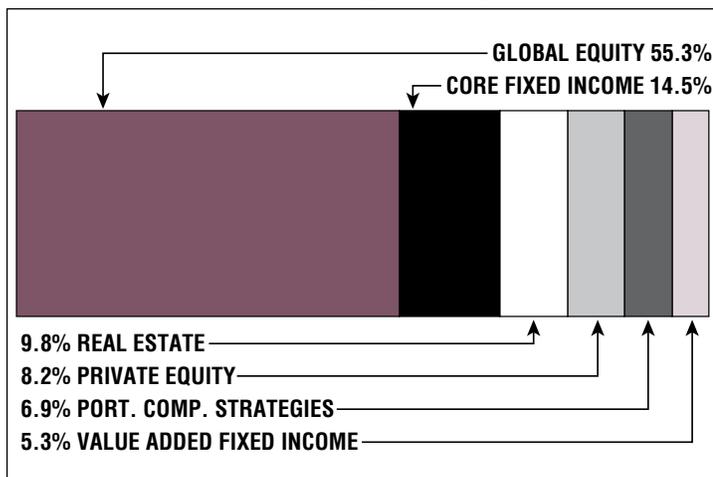
Funded Ratio

2023

Fully Funded

Varies Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$4.0 M

Unfunded Liability

\$7.7 M
 (FY2022)

Total Pension Appropriation

Webster

CONTACT INFORMATION

350 Main Street
Suite 5
Webster, MA 01570
Phone 508-949-3800
Fax 508-949-3826

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Kristin LaPlante

SYSTEM MEMBERS

Active Members269
Total Payroll\$12.3 M
Average Salary\$45,900
Average Age46
Average Service9.8

Retired Members150
Benefits Paid\$4.0 M
Average Benefit\$27,000
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees7
Reported Earnings2
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$57.8 M
Market Value

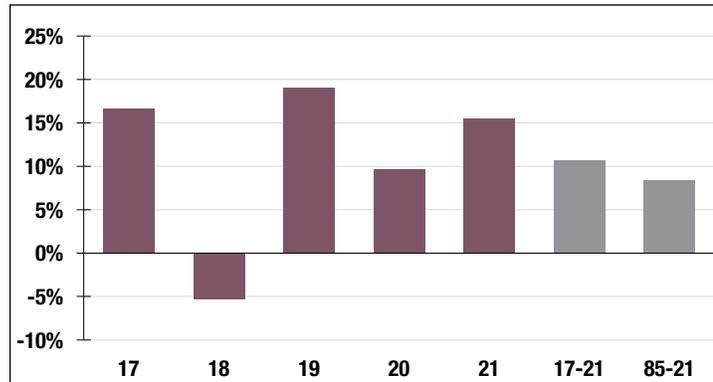
15.45%
2021 Returns

10.02%
2012-2021
(Annualized)

8.42%
1985-2021
(Annualized)

Investment Returns

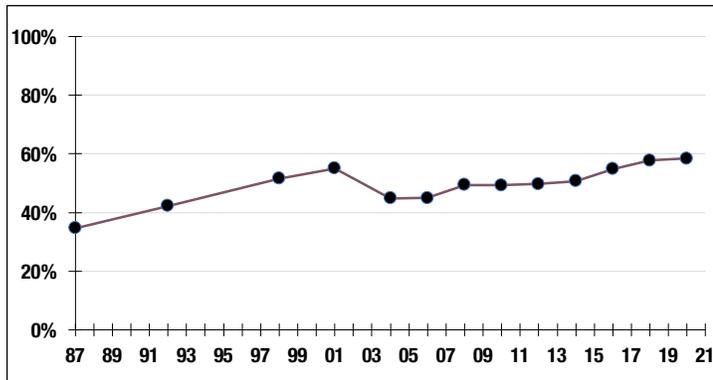
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.30%

Assumed Rate of Return

Funded Ratio History (1987-2021)



58.4%

Funded Ratio

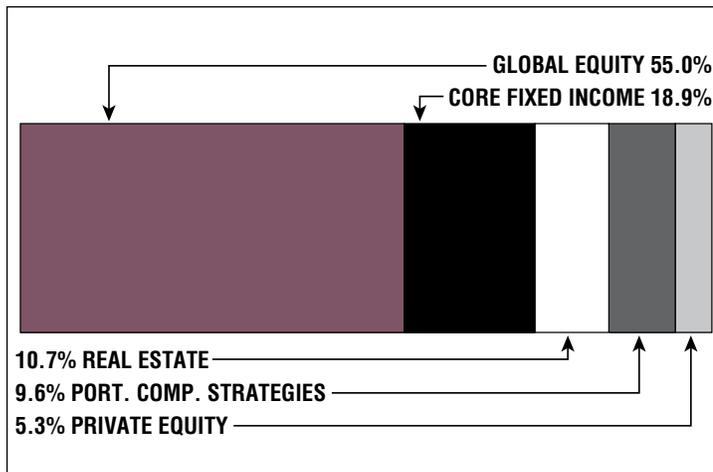
2033

Fully Funded

6.5% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$31.0 M

Unfunded Liability

\$4.1 M
(FY2022)

Total Pension Appropriation

Wellesley

CONTACT INFORMATION

Town Hall
525 Washington Street
Wellesley, MA 02482
Phone 781-489-4238
Fax 781-431-8643

BOARD MEMBERS

Sheryl Strother
David Kornwitz*
Timothy Barros
Michael Leach
Charles Cahill
*indicates Chairperson

BOARD ADMINISTRATOR

Lynn Whynot

SYSTEM MEMBERS

Active Members691
Total Payroll\$40.9 M
Average Salary\$59,200
Average Age46
Average Service 10.5

Retired Members426
Benefits Paid\$13.3 M
Average Benefit\$31,100
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees29
Reported Earnings 10
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Segal



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\$289.9 M
Market Value

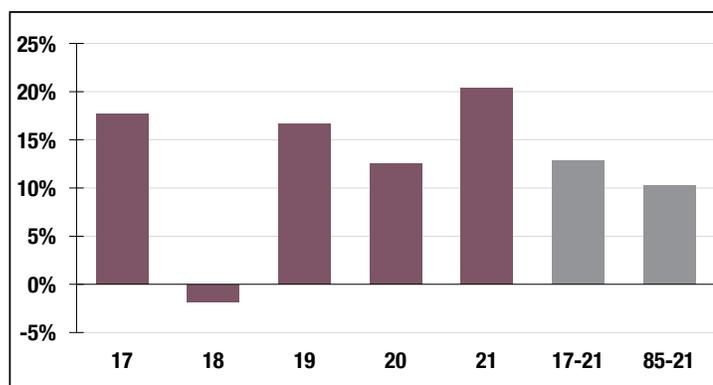
20.37%
2021 Returns

11.03%
2012-2021
(Annualized)

10.26%
1985-2021
(Annualized)

Investment Returns

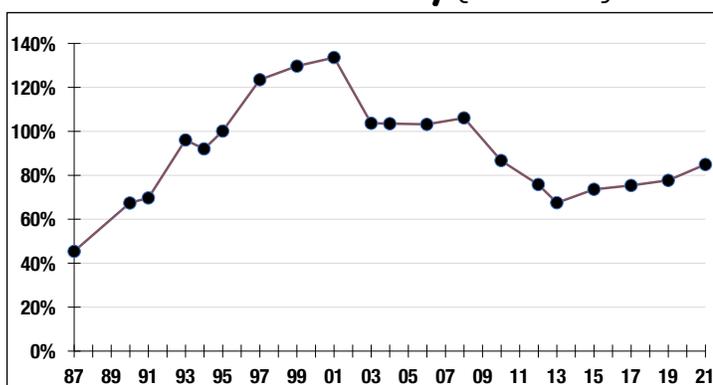
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



84.9%

Funded Ratio

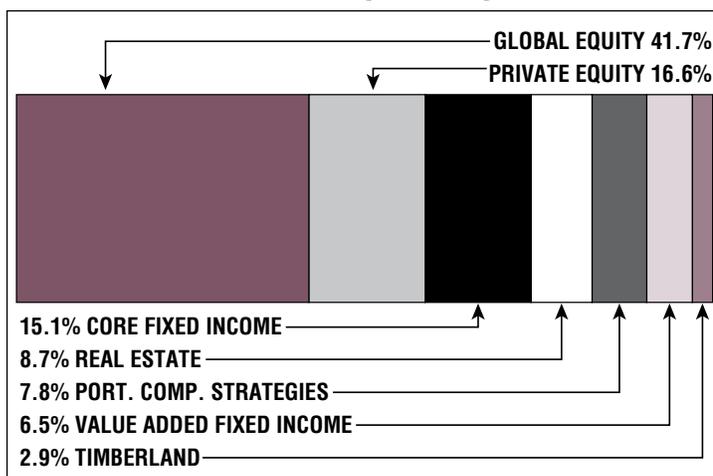
2030

Fully Funded

3.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$43.1 M

Unfunded Liability

\$9.8 M
(FY2022)

Total Pension Appropriation

West Springfield

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

James Lovotti

SYSTEM MEMBERS

Active Members601
Total Payroll\$27.8 M
Average Salary\$46,200
Average Age46
Average Service11.1

Retired Members431
Benefits Paid\$10.9 M
Average Benefit\$25,300
Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees33
Reported Earnings13
Excess Earners1
Refund Due\$9,330

Last Valuation: 1/1/20
Actuary: Stone



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\$165.0 M
Market Value

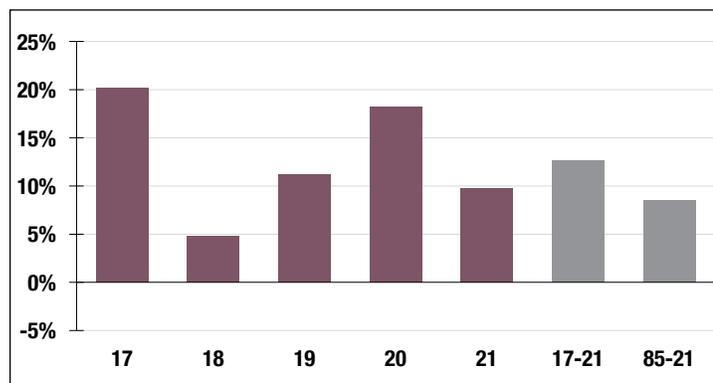
9.73%
2021 Returns

10.33%
2012-2021
(Annualized)

8.56%
1985-2021
(Annualized)

Investment Returns

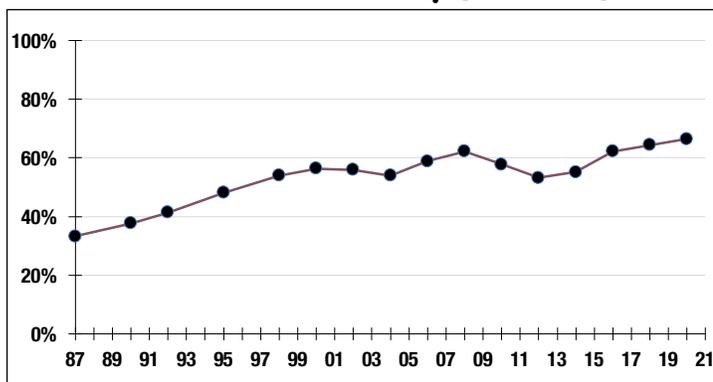
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



66.4%

Funded Ratio

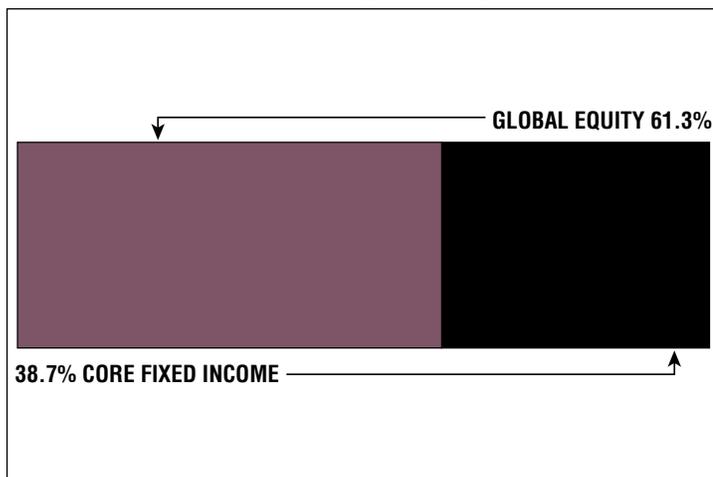
2033

Fully Funded

4.2% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$65.5 M

Unfunded Liability

\$7.9 M
(FY2022)

Total Pension Appropriation

Westfield

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Liam Browne

SYSTEM MEMBERS

Active Members831
 Total Payroll\$43.8 M
 Average Salary\$52,700
 Average Age47
 Average Service12

 Retired Members.....719
 Benefits Paid\$21.0 M
 Average Benefit\$29,200
 Average Age72

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees49
 Reported Earnings12
 Excess Earners.....0
 Refund Due\$0

Last Valuation: 1/1/21
 Actuary: PERAC



\$320.4 M
 Market Value

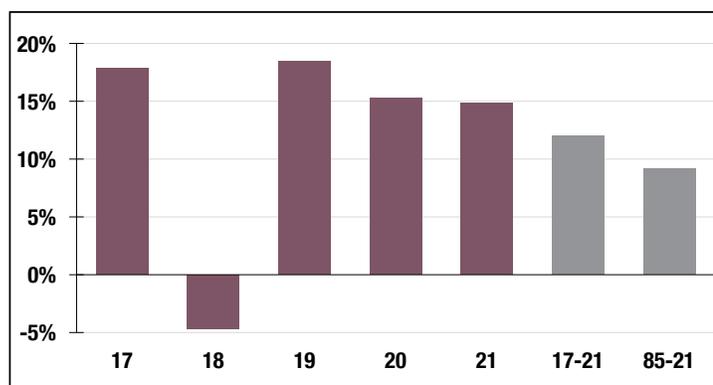
14.86%
 2021 Returns

11.46%
 2012-2021
 (Annualized)

9.19%
 1985-2021
 (Annualized)

Investment Returns

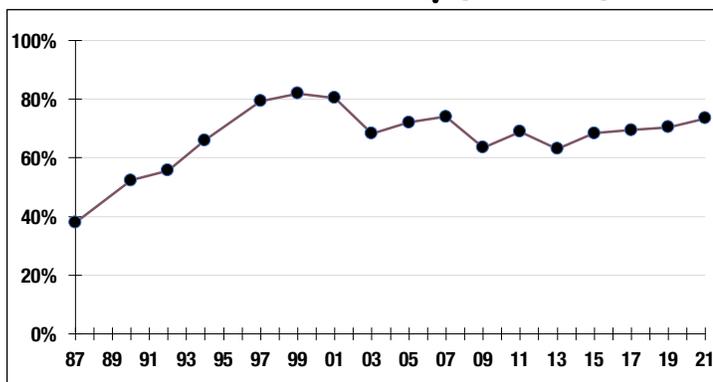
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



73.5%

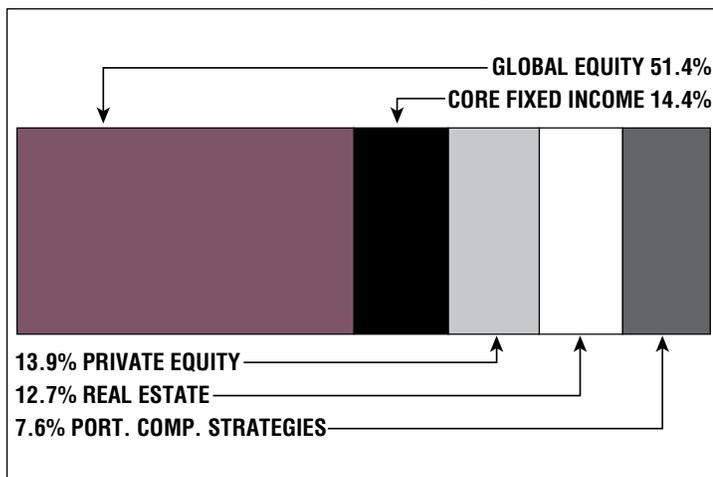
Funded Ratio

2036

Fully Funded

4.96% Total Increasing Funding Schedule

Asset Allocation (12/31/21)



\$94.7 M

Unfunded Liability

\$12.4 M
 (FY2022)

Total Pension Appropriation

Weymouth

CONTACT INFORMATION

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

BOARD MEMBERS

Patrice Cook
Greg Hargadon
Richard Hayes
Joseph Davis*
Barbara Costa
*indicates Chairperson

BOARD ADMINISTRATOR

Edward Masterson

SYSTEM MEMBERS

Active Members911
Total Payroll\$46.1 M
Average Salary\$50,600
Average Age48
Average Service10.6

Retired Members650
Benefits Paid\$19.4 M
Average Benefit\$29,900
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees77
Reported Earnings21
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$281.1 M
Market Value

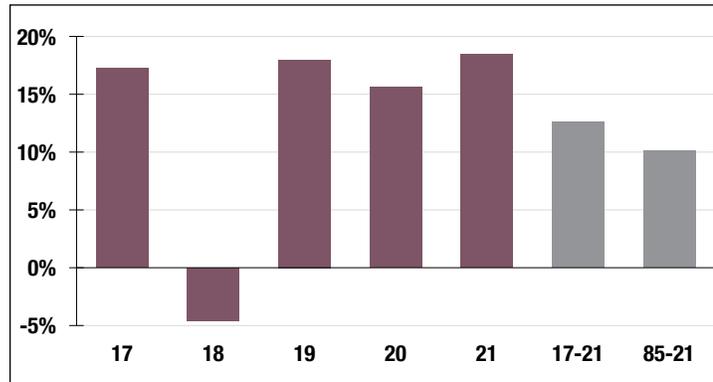
18.49%
2021 Returns

10.92%
2012-2021
(Annualized)

10.11%
1985-2021
(Annualized)

Investment Returns

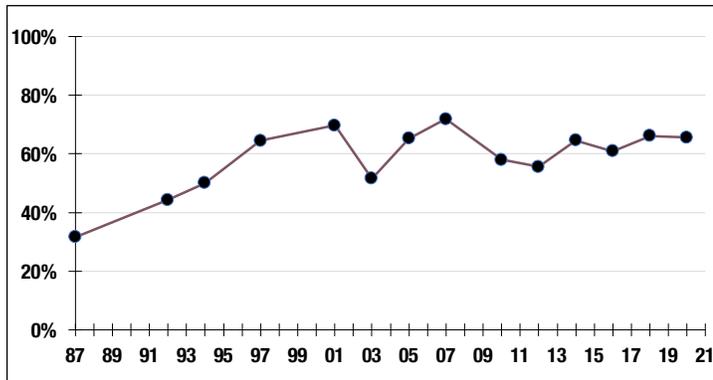
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.25%

Assumed Rate of Return

Funded Ratio History (1987-2021)



65.6%

Funded Ratio

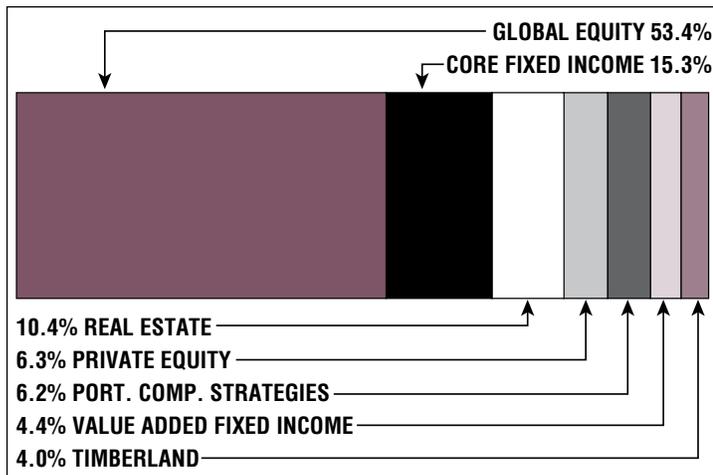
2036

Fully Funded

2.88% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$111.8 M

Unfunded Liability

\$13.4 M
(FY2022)

Total Pension Appropriation

Winchester

CONTACT INFORMATION

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

BOARD MEMBERS

Stacie Ward
Michael Lucas
Philip Ciampa
Robert Fray
George Morrissey*
*indicates Chairperson

BOARD ADMINISTRATOR

Karen Manchuso

SYSTEM MEMBERS

Active Members393
Total Payroll\$23.5 M
Average Salary\$59,700
Average Age48
Average Service11.9

Retired Members281
Benefits Paid\$8.8 M
Average Benefit\$31,200
Average Age76

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees17
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$176.7 M
Market Value

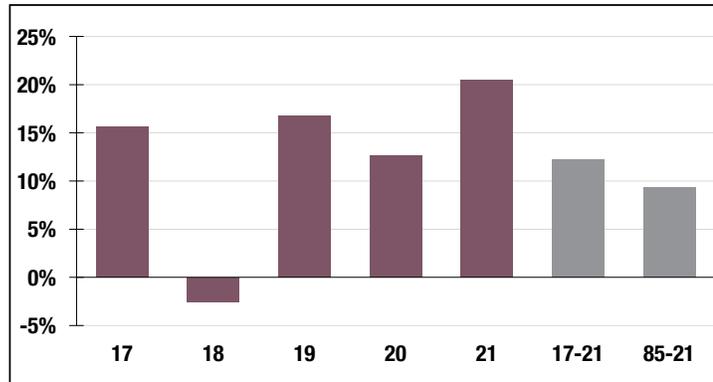
20.47%
2021 Returns

9.96%
2012-2021
(Annualized)

9.35%
1985-2021
(Annualized)

Investment Returns

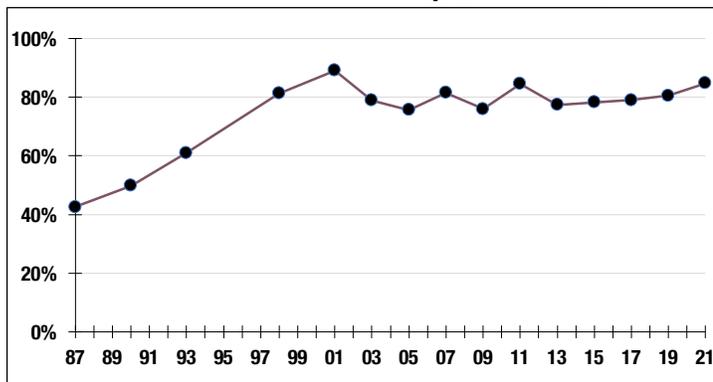
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate of Return

Funded Ratio History (1987-2021)



84.7%

Funded Ratio

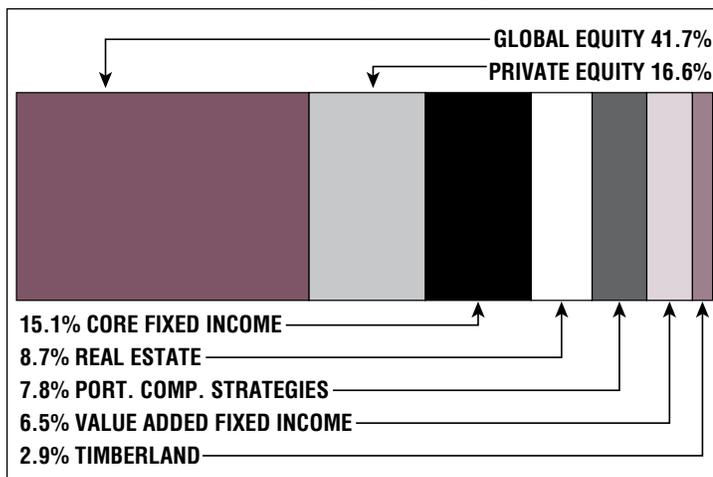
2029

Fully Funded

7.7% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$25.1 M

Unfunded Liability

\$5.9 M
(FY2022)

Total Pension Appropriation

Winthrop

CONTACT INFORMATION

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

BOARD MEMBERS

Terence Delehanty

James Feeley

Dennis Boudrow

Karin Chavis

*indicates Chairperson

BOARD ADMINISTRATOR

Michelle Church

SYSTEM MEMBERS

Active Members251

Total Payroll\$13.0 M

Average Salary\$51,800

Average Age49

Average Service 11.4

Retired Members 193

Benefits Paid\$4.8 M

Average Benefit\$24,900

Average Age75

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 11

Reported Earnings2

Excess Earners 1

Refund Due\$31,906

Last Valuation: 1/1/21

Actuary: PERAC



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\$106.2 M
Market Value

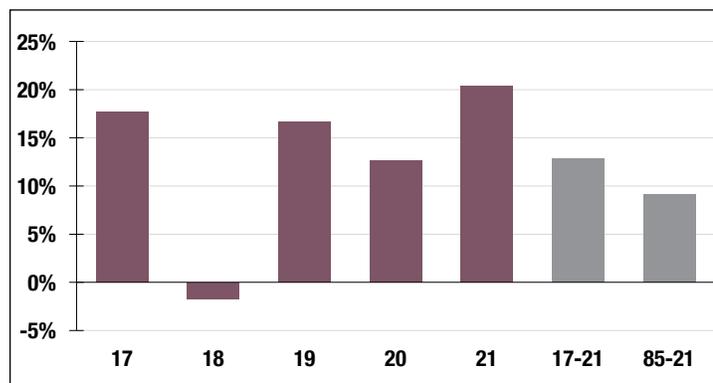
20.39%
2021 Returns

10.84%
2012-2021
(Annualized)

9.13%
1985-2021
(Annualized)

Investment Returns

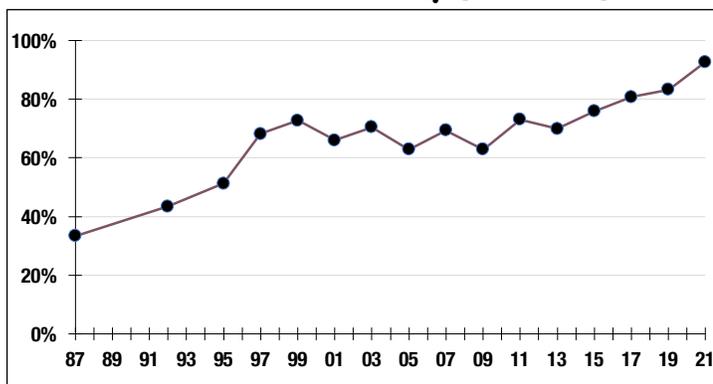
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.75%

Assumed Rate
of Return

Funded Ratio History (1987-2021)



92.7%

Funded Ratio

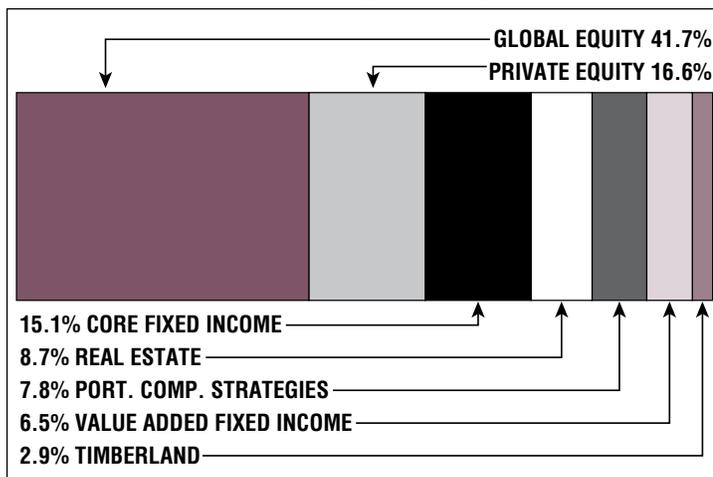
2026

Fully Funded

Level
Appropriation

Funding Schedule

Asset Allocation (12/31/21)



\$6.5 M

Unfunded Liability

\$3.9 M
(FY2022)

Total Pension
Appropriation

Woburn

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Anne Speicher

SYSTEM MEMBERS

Active Members478
Total Payroll\$29.4 M
Average Salary\$61,500
Average Age50
Average Service 13.6

Retired Members495
Benefits Paid\$15.3 M
Average Benefit\$30,900
Average AgeNA

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Buck



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\$199.1 M
Market Value

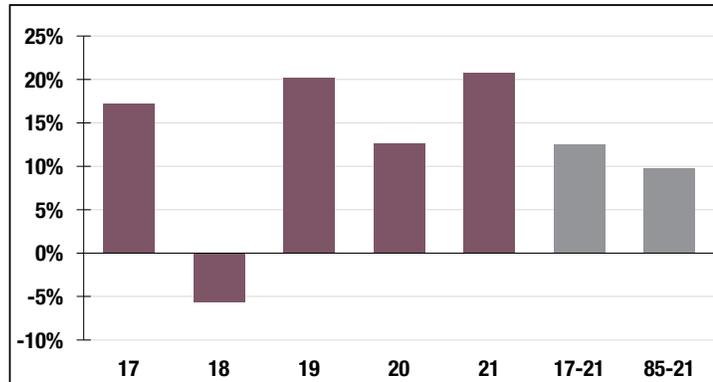
20.78%
2021 Returns

11.09%
2012-2021
(Annualized)

9.74%
1985-2021
(Annualized)

Investment Returns

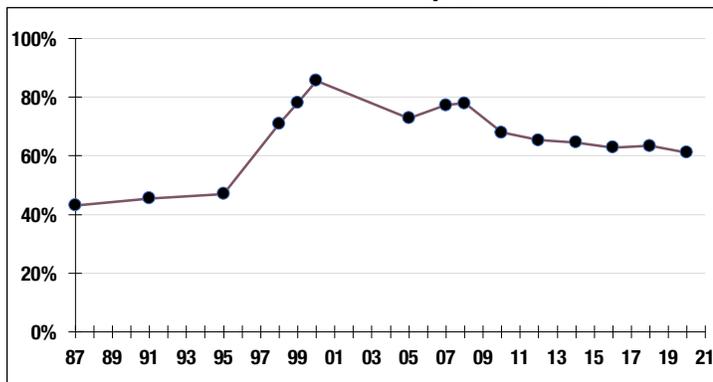
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.50%

Assumed Rate of Return

Funded Ratio History (1987-2021)



61.1%

Funded Ratio

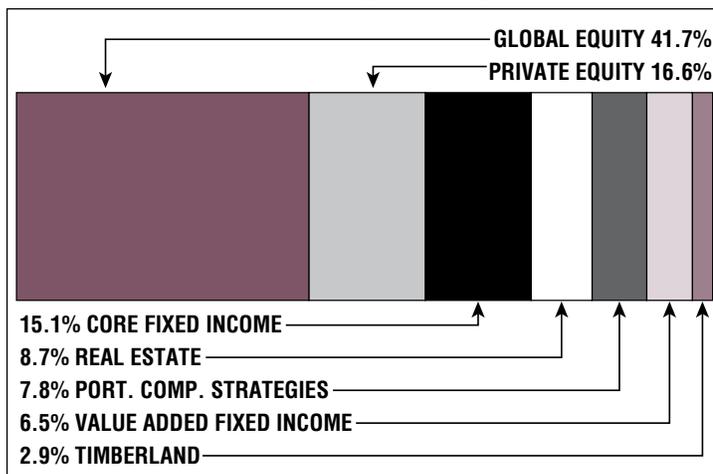
2035

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$98.2 M

Unfunded Liability

\$11.1 M
(FY2022)

Total Pension Appropriation

Worcester

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Lisa Poske

SYSTEM MEMBERS

Active Members3,411
Total Payroll\$199.1 M
Average Salary\$58,400
Average Age46
Average Service 12.3

Retired Members2,724
Benefits Paid\$89.5 M
Average Benefit\$32,900
Average Age74

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees325
Reported Earnings61
Excess Earners 1
Refund Due\$17,378

Last Valuation: 1/1/21
Actuary: Segal



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\$1.4 B
Market Value

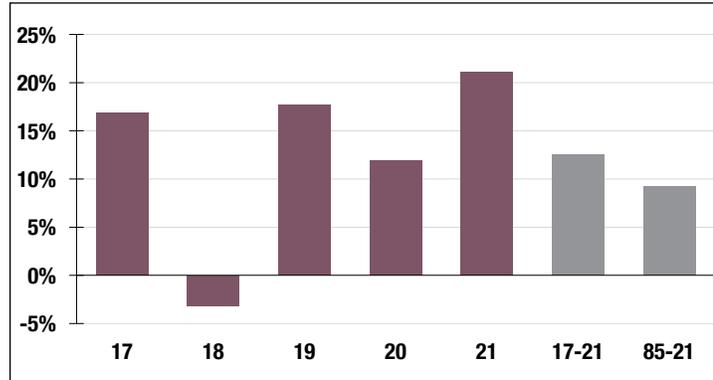
21.13%
2021 Returns

10.16%
2012-2021
(Annualized)

9.20%
1985-2021
(Annualized)

Investment Returns

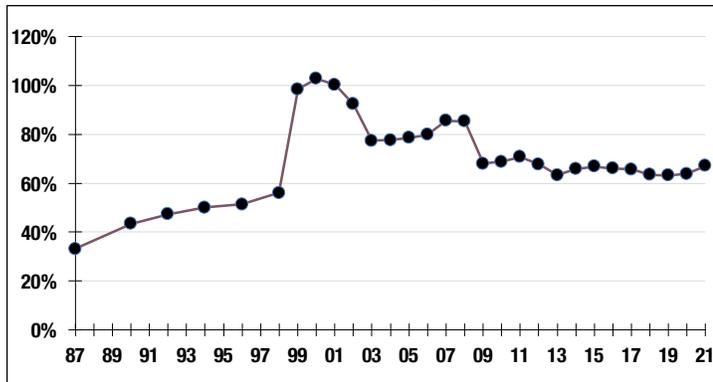
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



6.90%

Assumed Rate of Return

Funded Ratio History (1987-2021)



67.1%

Funded Ratio

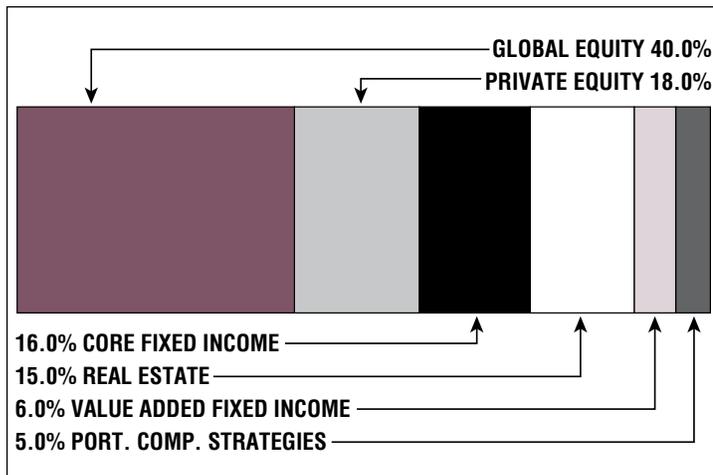
2034

Fully Funded

6.33% Total Increasing

Funding Schedule

Asset Allocation (12/31/21)



\$523.7 M

Unfunded Liability

\$59.0 M
(FY2022)

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

BOARD MEMBERS

Kevin Blanchette*
Rebecca Tuttle
Michael Donoghue
Pauline Lajoie
Eugene Durgin
*indicates Chairperson

BOARD ADMINISTRATOR

Colleen Canty

SYSTEM MEMBERS

Active Members7,024
Total Payroll\$331.2 M
Average Salary\$47,200
Average Age47
Average Service9.9

Retired Members.....3,802
Benefits Paid\$86.8 M
Average Benefit\$22,800
Average Age73

2020 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees.....249
Reported Earnings90
Excess Earners.....2
Refund Due\$41,330

Last Valuation: 1/1/20
Actuary: KMS



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\$1.1 B
Market Value

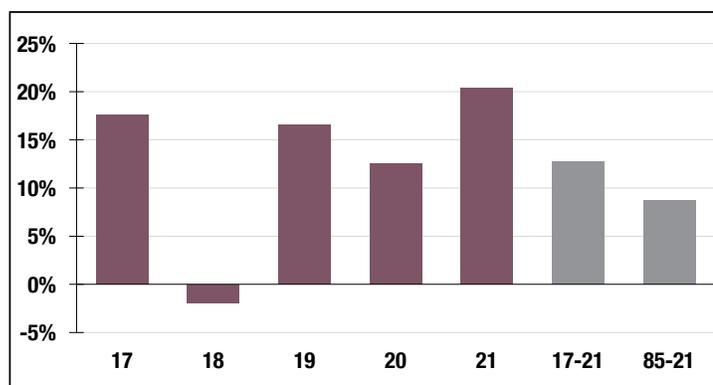
20.38%
2021 Returns

10.87%
2012-2021
(Annualized)

8.70%
1985-2021
(Annualized)

Investment Returns

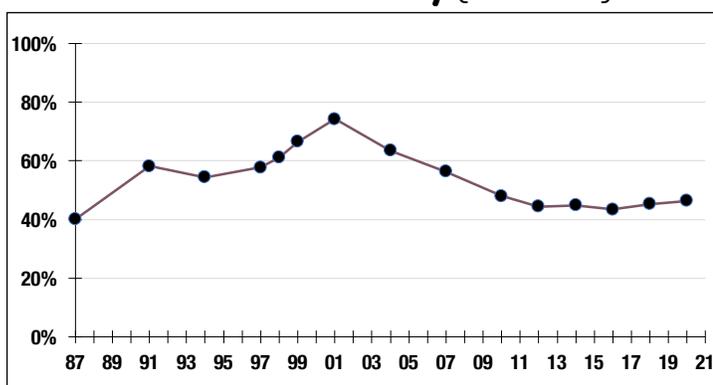
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.0%

Assumed Rate of Return

Funded Ratio History (1987-2021)



46.4%

Funded Ratio

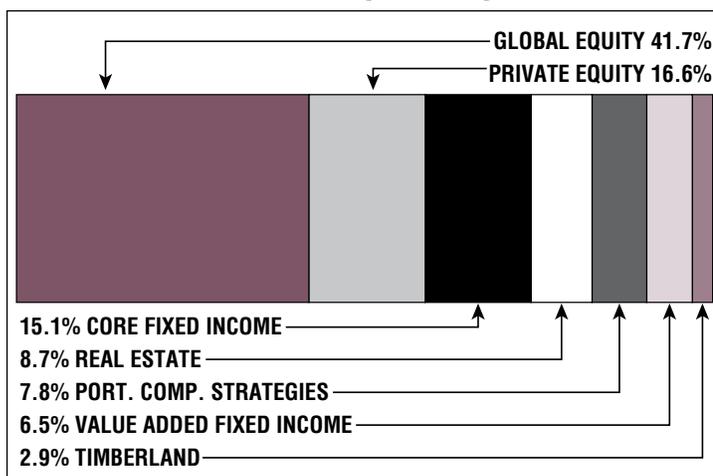
2036

Fully Funded

4.0% Increasing Phase-In

Funding Schedule

Asset Allocation (12/31/21)



\$898.6 M

Unfunded Liability

\$75.3 M
(FY2022)

Total Pension Appropriation

CONTACT INFORMATION

84 State Street
Suite 250
Boston, MA 02109
Phone 617-946-8401

BOARD MEMBERS

State Treasurer
Deborah Goldberg*
Robert Brousseau
Ruth Ellen Fitch, Esq.
James B. G. Hearty
Theresa McGoldrick, Esq.
Peter Monaco
Dennis Naughton
Carly Rose
Paul Shanley, Esq.
*indicates Chairperson

EXECUTIVE DIRECTOR/CIO

Michael G. Trotsky, CFA

\$104.3 B
Market Value

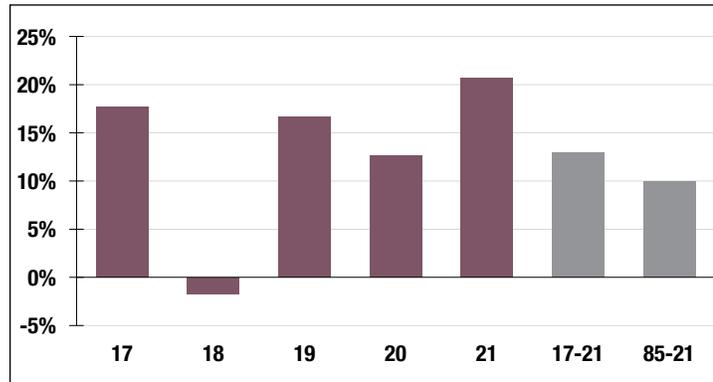
20.67%
2021 Returns

11.02%
2012-2021
(Annualized)

9.91%
1985-2021
(Annualized)

Investment Returns

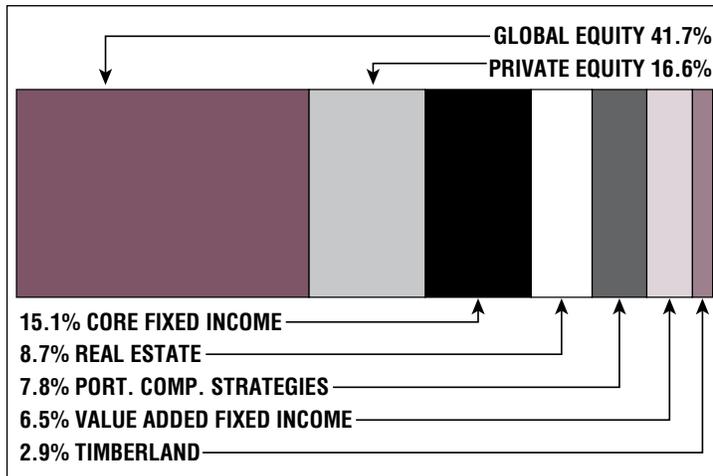
(2017-2021, 5-Year & 37-Year Averages, as of 12/31/21)



7.00%

Assumed Rate
of Return

Asset Allocation (12/31/21)



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Disability Retirement Statistics

[As of 12/31/21]

RETIREMENT BOARDS WITH 40-399 ACTIVE MEMBERS	MEDICAL PANEL REQUESTS	DISABILITY RETIREMENT APPROVALS	ACCIDENTAL DEATH APPROVALS	CME REVIEWS
Adams Retirement Board	1	0	0	0
Amesbury Retirement Board	0	0	0	1
Blue Hills Regional Vocational School Retirement Board	0	0	0	0
Clinton Retirement Board	0	0	0	0
Easthampton Retirement Board	0	1	0	1
Fairhaven Retirement Board	0	0	0	3
Gardner Retirement Board	4	2	0	0
Greater Lawrence Sanitary District Retirement Board	0	0	0	0
Hull Retirement Board	0	0	0	3
Marblehead Retirement Board	1	1	0	3
Mass Housing Finance Agency Retirement Board	0	0	0	0
Maynard Retirement Board	1	0	0	1
Minuteman Regional School District Retirement Board	0	0	0	0
Montague Retirement Board	1	2	0	0
Newburyport Retirement Board	1	1	0	1
North Adams Retirement Board	3	2	0	1
Northbridge Retirement Board	0	0	0	0
Reading Retirement Board	2	2	0	2
Saugus Retirement Board	1	0	1	1
Southbridge Retirement Board	0	1	0	1
Stoneham Retirement Board	1	1	0	0
Swampscott Contributory Retirement Board	5	1	3	2
Webster Retirement Board	0	0	0	0
Winchester Retirement Board	1	0	0	2
Winthrop Retirement Board	0	0	0	1
RETIREMENT BOARDS WITH 400-599 ACTIVE MEMBERS				
Belmont Retirement Board	2	2	0	4
Concord Retirement Board	1	0	0	0
Danvers Retirement Board	4	1	0	5
Dedham Contributory Retirement Board	0	2	0	5
Falmouth Retirement Board	3	2	0	2
Gloucester Retirement Board	0	0	0	1
Greenfield Retirement Board	0	0	0	2
Melrose Retirement Board	0	1	0	1
Milford Retirement Board	3	0	0	2
Milton Retirement Board	1	1	0	1
North Attleboro Retirement Board	1	1	0	2
Shrewsbury Contributory Retirement Board	1	0	0	1
Wakefield Retirement Board	1	0	0	1
Watertown Retirement Board	1	2	0	6
Woburn Retirement Board	2	2	0	1

Disability Retirement Statistics

[As of 12/31/21]

RETIREMENT BOARDS WITH 600-899 ACTIVE MEMBERS	MEDICAL PANEL REQUESTS	DISABILITY RETIREMENT APPROVALS	ACCIDENTAL DEATH APPROVALS	CME REVIEWS
Andover Retirement Board	3	1	0	6
Arlington Retirement Board	2	3	0	6
Attleboro Retirement Board	4	0	0	1
Beverly Retirement Board	2	2	1	3
Braintree Contributory Retirement Board	3	2	0	2
Chelsea Retirement Board	1	1	0	3
Dukes County Contributory Retirement Board	0	1	0	5
Everett Retirement Board	8	2	0	3
Fitchburg Retirement Board	3	2	0	4
Hingham Retirement Board	3	1	0	1
Leominster Retirement Board	2	2	0	1
Lexington Retirement Board	0	1	0	0
Malden Contributory Retirement Board	0	0	0	6
Marlborough Retirement Board	2	3	0	10
Medford Retirement Board	2	2	0	3
Methuen Contributory Retirement Board	2	3	0	6
Natick Retirement Board	0	0	0	1
Needham Contributory Retirement Board	9	0	0	1
Northampton Retirement Board	2	3	0	3
Norwood Contributory Retirement Board	4	0	0	2
Peabody Retirement Board	1	0	0	3
Pittsfield Retirement Board	12	5	0	7
Revere Retirement Board	8	7	2	5
Wellesley Retirement Board	0	0	0	4
West Springfield Retirement Board	2	1	0	1
Westfield Retirement Board	3	4	0	2
RETIREMENT BOARDS WITH 900-2,399 ACTIVE MEMBERS				
Berkshire County Retirement Board	3	4	0	1
Brockton Retirement Board	14	10	0	20
Brookline Retirement Board	8	5	0	8
Chicopee Retirement Board	3	7	0	11
Fall River Retirement Board	6	3	2	10
Framingham Retirement Board	5	3	0	8
Franklin Regional Retirement Board	1	1	0	5
Hampshire County Regional Retirement Board	5	4	0	9
Haverhill Retirement Board	16	0	2	1
Holyoke Retirement Board	3	2	0	10
Lawrence Retirement Board	6	6	0	7
Lowell Retirement Board	10	6	2	8
Lynn Retirement Board	4	10	0	14

Disability Retirement Statistics

[As of 12/31/21]

RETIREMENT BOARDS WITH 900-2,399 ACTIVE MEMBERS <i>(Cont'd)</i>	MEDICAL PANEL REQUESTS	DISABILITY RETIREMENT APPROVALS	ACCIDENTAL DEATH APPROVALS	CME REVIEWS
Mass Port Authority Employees' Retirement Board	3	0	0	0
Mass Water Resources Authority Retirement Board	3	4	0	7
New Bedford Retirement Board	20	12	0	22
Newton Retirement Board	6	4	0	4
Plymouth Contributory Retirement Association	18	5	1	5
Quincy Retirement Board	9	5	0	8
Salem Contributory Retirement Board	1	2	0	4
Somerville Retirement Board	6	7	0	7
Taunton Retirement Board	4	3	0	3
Waltham Retirement Board	5	3	0	8
Weymouth Retirement Board	8	4	0	9
RETIREMENT BOARDS WITH 2,400-10,000 ACTIVE MEMBERS				
Barnstable County Retirement Board	10	8	0	35
Bristol County Retirement Board	10	6	0	14
Cambridge Retirement Board	20	13	0	12
Essex Regional Retirement Board	2	3	0	0
Hampden County Regional Retirement Board	7	5	0	7
Middlesex County Retirement Board	18	20	0	39
Norfolk County Retirement Board	31	22	0	41
Plymouth County Retirement Board	12	13	0	34
Springfield Retirement Board	20	19	0	43
Worcester Regional Retirement Board	31	11	0	26
Worcester Retirement Board	32	23	0	23
RETIREMENT BOARDS WITH 10,001-100,000 ACTIVE MEMBERS				
Boston Retirement Board	156	87	1	100
State Retirement Board	150	174	1	354
State Teachers	20	12	0	53
Total All Retirement Boards	806	600	16	1,116

RESTORATION TO SERVICE STATISTICS *(Provided for those boards where a disability retiree has returned to work.)*

Lawrence Retirement Board 1			
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Investment Vendors

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	• RhumbLine Advisers	
Arlington ▶ Custodian: People's United Bank	▪ PRIT Fund		
Attleboro ▶ Custodian: People's United Bank ▶ 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 Core Real Estate USA, LP • Invesco National Trust Company • Peregrine Capital	• PRIT Fund • RhumbLine Advisers • State Street Global Advisors • Van Eck
Barnstable County	▪ PRIT Fund		
Belmont ▶ Custodian: People's United Bank ▶ Consultant: NEPC, LLC	▪ PRIT Fund	• AEW Capital Management, LP • Atlanta Capital • Carillion Tower Advisors • 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 • D.E. Shaw Investment Management, LLC • DRC Capital, LLP • Dune 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. • Mesirov Advanced Strategies, Inc. • MPM Capital, LP • NGP Energy Capital Management, LLC • Oaktree 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 • Thomas H. Lee Partners, LP • Thoma Bravo, LLC • Todd Asset Management • Tristan Capital Partners • Vontobel Asset Management, Inc. • Western Technology • Westfield Capital Management Company, LP • Westport Capital Partners, LLC • Z Capital Partners, LLC • Zevenbergen Capital Investments, LLC • ZMC Advisors LP

Investment Vendors

Retirement Board	Investment Vendors		
Boston Teachers	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Braintree ▶ Custodian: SEI Private Trust Company	<ul style="list-style-type: none"> ▪ SEI Investments 	<ul style="list-style-type: none"> • Lexington Partners, LP 	<ul style="list-style-type: none"> • PRIT Fund
Bristol County ▶ Custodian: People's United Bank ▶ Consultant: Segal Marco Advisors	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 • Hancock Timber Resource Group, Inc. • IFM Investors (US) Advisor • Intercontinental Real Estate Corp. • Lazard Asset Management, LLC • LSV Asset Management 	<ul style="list-style-type: none"> • Lyrical Asset Management, LP • Mesirov Financial Private Equity Advisors, Inc. • Pacific Investment Management Company (PIMCO) • Polaris Capital Management, LLC • PRIT Fund • RBC Global Asset Management (U.S.), Inc. • RREEF Management, LLC • Stone Harbor Investment Partners • TerraCap Management, LLC • Timberland Investment Resources, LLC
Brockton ▶ Custodian: SEI Private Trust Company ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> ▪ SEI Investments 	<ul style="list-style-type: none"> • Aberdeen Asset Management • Ascent Venture Partners 	<ul style="list-style-type: none"> • Landmark Partners, LLC • Siguler Guff Advisers, LLC
Brookline	<ul style="list-style-type: none"> ▪ PRIT Fund 	<ul style="list-style-type: none"> • Hancock Timber Resource Group, Inc. • HarbourVest Partners, LLC • Invesco Private Capital, Inc. 	<ul style="list-style-type: none"> • Lexington Partners, LP • Sustainable Woodlands Partners, LLC
Cambridge ▶ Custodian: People's United Bank ▶ Consultant: Segal Marco Advisors	<ul style="list-style-type: none"> • Aberdeen Asset Management • BlackRock Investment Management, LLC • Campbell Global LLC • Fidelity Institutional Asset Management • Hamilton Lane • Hancock Natural Resource Group, Inc. • IFM Investors (US) Advisor, LLC • Income Research & Management 	<ul style="list-style-type: none"> • 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 • Penn Square Global Real Estate Group, LLC 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Chicopee ▶ Custodian: SEI Private Trust Company	<ul style="list-style-type: none"> ▪ SEI Investments 	<ul style="list-style-type: none"> • PRIT Fund 	
Clinton ▶ Consultant: Trust Advisory Group, Ltd.	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Concord ▶ Custodian: Comerica Bank ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> • Acadian Asset Management, LLC • PRIT Fund 	<ul style="list-style-type: none"> • Rhumbline Advisers • Russell Investment Group 	<ul style="list-style-type: none"> • Wellington Management
Danvers ▶ Custodian: People's United Bank ▶ Consultant: Graystone Consulting	<ul style="list-style-type: none"> • Barings, LLC • BMO Asset Management Corporation • Eagle Capital Management, LLC 	<ul style="list-style-type: none"> • Gerber-Taylor Management Company • Intercontinental Real Estate Corp. • PRIT Fund 	<ul style="list-style-type: none"> • RhumbLine Advisers • TA Realty • Western Asset Management Co.

Investment Vendors

Retirement Board	Investment Vendors		
Dedham	▪ PRIT Fund		
Dukes County ▶ Custodian: People's United Bank ▶ Consultant: Dahab Associates, Inc.	<ul style="list-style-type: none"> Aristotle Capital Management, LLC Atlanta Capital 	<ul style="list-style-type: none"> Garcia Hamilton & Associates LP Polen Capital Management, LLC 	<ul style="list-style-type: none"> PRIT Fund
Easthampton	▪ PRIT Fund		
Essex County	▪ PRIT Fund	<ul style="list-style-type: none"> BlackRock Investment Management, LLC 	<ul style="list-style-type: none"> Levine Leichtman Capital Partners, Inc.
Everett	▪ PRIT Fund		
Fairhaven	▪ PRIT Fund		
Fall River	▪ PRIT Fund		
Falmouth ▶ Custodian: People's United Bank ▶ Consultant: Wainwright Investment Counsel, LLC	<ul style="list-style-type: none"> Dimensional Fund Advisors, LP Hamilton Lane HGK Asset Management, Inc. Lexington Partners, LP LMCG Investments, LLC 	<ul style="list-style-type: none"> Lord Abbett & Co., LLC Mesirow Financial Private Equity Advisors, Inc. PRIT Fund Rhumblin Advisers 	<ul style="list-style-type: none"> SEI Investments 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.	<ul style="list-style-type: none"> Aberdeen Asset Management Chartwell Investment Partners Copeland Capital Management 	<ul style="list-style-type: none"> Fiera Capital Inc. Loomis, Sayles & Company O'Shaughnessy Asset Management, LLC 	<ul style="list-style-type: none"> Polen Capital Management, LLC PRIT Fund
Gardner	▪ PRIT Fund		
Gloucester	▪ PRIT Fund		
Greater Lawrence ▶ Custodian: BNY Mellon Asset Servicing	<ul style="list-style-type: none"> PRIO Wealth, LLC 		
Greenfield	▪ PRIT Fund		
Hampden County	▪ PRIT Fund	<ul style="list-style-type: none"> GCM Customized Fund Investment Group 	
Hampshire County ▶ Consultant: Dahab Associates, Inc.	▪ PRIT Fund	<ul style="list-style-type: none"> Ascent Venture Partners Glouston Capital Partners, LLC 	<ul style="list-style-type: none"> Lexington Partners, LP Portfolio Advisors, LLC
Haverhill ▶ Custodian: People's United Bank ▶ Consultant: Wainwright Investment Counsel, LLC	▪ PRIT Fund	<ul style="list-style-type: none"> Fisher Investments Global Forest Partners, LP Globespan Capital Management, Inc. GrandBanks Capital Income Research & Management Mesirow Financial Institutional Real Estate 	<ul style="list-style-type: none"> Molpus Woodlands Group, LLC Putnam Advisory Company, LLC Stafford Private Equity, Inc. TerraCap Management The DSF Group
Hingham ▶ Consultant: Meketa Investment Group	▪ PRIT Fund		

Investment Vendors

Retirement Board	Investment Vendors		
Holyoke ▶ Consultant: Segal Marco Advisors	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Long Wharf Real Estate Partners, LLC • Loomis, Sayles & Company • Mesirov Financial Private Equity Advisors, Inc. • Monroe Capital • Newton Investment Management, LLC • Oaktree Capital Management, LP • Oberweis Asset Management, Inc. • Polaris Capital Management, LLC 	<ul style="list-style-type: none"> • 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: People's United Bank ▶ Consultant: Meketa Investment Group, Inc.	<ul style="list-style-type: none"> • Acadian Asset Management, LLC • Angelo, Gordan & Co., LP • Driehaus Capital Management, LLC • Fidelity Investments 	<ul style="list-style-type: none"> • Golub Capital Partners • Kayne Anderson Rudnick Investment Management • Matthews International Capital Management, LLC • Monroe Capital 	<ul style="list-style-type: none"> • PRIT Fund • RhumbLine Advisers • Wellington Management Company, LLP • White Oak Global Advisors, LLC
Lowell ▶ Custodian: People's United Bank	▪ PRIT Fund		
Lynn	▪ PRIT Fund	<ul style="list-style-type: none"> • BlackRock Investment Management, LLC 	<ul style="list-style-type: none"> • BlackRock Realty Advisors, Inc.
Malden ▶ Custodian: People's United Bank	<ul style="list-style-type: none"> • De Burlo Group, Inc. 		
Marblehead	▪ PRIT Fund		
Marlborough ▶ Custodian: Comerica Bank ▶ Consultant: Meketa Investment Group, Inc.	<ul style="list-style-type: none"> • Clarion Partners • Constitution Capital Partners, LLC • Dimensional Fund Advisors LP • Driehaus Capital Management, LLC • Fiduciary Management, Inc. 	<ul style="list-style-type: none"> • Frontier Capital Management Co., LLC • HarbourVest Partners, LLC • Payden & Rygel • RhumbLine Advisers 	<ul style="list-style-type: none"> • Rockwood Capital • Shenkman Capital Management, Inc. • SL Capital Partners, LLP • State Street Global Advisors
MHFA ▶ Custodian: People's United Bank ▶ Consultant: Meketa Investment Group, Inc.	<ul style="list-style-type: none"> • Aberdeen Asset Management • AEW Capital Management, LP • Ascent Venture Partners • Constitution Capital Partners, LLC • GQC Partners, LLC 	<ul style="list-style-type: none"> • Goldman Sachs Asset Management, LP • HarbourVest Partners, LLC • IFM Investors Advisor • Intercontinental Real Estate Corporation • Longfellow Investment Management 	<ul style="list-style-type: none"> • Lord Abbett & Co., LLC • MetLife Investment Management • State Street Global Advisors • TA Realty
Massport ▶ Custodian: People's United Bank ▶ Consultant: Wilshire Associates	<ul style="list-style-type: none"> • Baillie Gifford Overseas Limited • PRIT Fund 	<ul style="list-style-type: none"> • Pzena Investment Management, LLC • State Street Global Advisors 	<ul style="list-style-type: none"> • Wellington Management Company, LLP
MTRS (Mass Teachers' Retirement System)	▪ PRIT Fund		

Investment Vendors

Retirement Board	Investment Vendors		
MWRA ▶ Custodian: People's United Bank ▶ Consultant: NEPC, LLC	<ul style="list-style-type: none"> • 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 LLC • Corbin Capital Partners LP • EnTrust Global Partners 	<ul style="list-style-type: none"> • Foundry Group, LLP • Garcia Hamilton & Associates LP • Hamilton Lane • HarbourVest Partners, LLC • J.F. Lehman & Company • Kayne Anderson Capital Advisors, LP • Landmark Partners, LLC • Loomis, Sayles & Company • Lord, Abbett & Co. LLC • Mesirow • Morgan Stanley • Octagon Credit Investors, LLC 	<ul style="list-style-type: none"> • 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: People's United Bank	<ul style="list-style-type: none"> ▪ PRIT Fund 	<ul style="list-style-type: none"> • Boston Advisors, LLC 	
Medford ▶ Custodian: People's United Bank ▶ Consultant: NEPC, LLC	<ul style="list-style-type: none"> • Ashmore Investment Advisor Limited • City of London Investment Management • Garcia Hamilton & Associates LP 	<ul style="list-style-type: none"> • Lazard Asset Management, LLC • Loomis, Sayles & Company • PRIT Fund 	<ul style="list-style-type: none"> • RhumbLine Advisers • William Blair & Company, LLC
Melrose	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Methuen	<ul style="list-style-type: none"> ▪ PRIT Fund 	<ul style="list-style-type: none"> • BlackRock Investment Management, LLC 	
Middlesex County ▶ Custodian: State Street Bank & Trust	<ul style="list-style-type: none"> ▪ PRIT Fund 	<ul style="list-style-type: none"> • Global Forest Partners, LP 	<ul style="list-style-type: none"> • Globespan Capital Management, Inc.
Milford	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Milton	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Minuteman Regional	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Montague	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Natick ▶ Custodian: People's United Bank ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> ▪ SEI Investments 	<ul style="list-style-type: none"> • PRIT Fund 	
Needham	<ul style="list-style-type: none"> ▪ PRIT Fund 		
New Bedford ▶ Consultant: Segal Marco Advisors	<ul style="list-style-type: none"> • Aberdeen Asset Management, Inc. • Acadian Asset Management, LLC • Constitution Capital Partners LLC • Hamilton Lane • Hancock Natural Resource Group, Inc. • Intercontinental Real Estate Corp. 	<ul style="list-style-type: none"> • Lexington Advisors, Inc. • Loomis, Sayles & Company • Mesirow Private Equity Advisors, Inc. • Newton Investment Management, LLC • Pacific Investment Management Company, LLC 	<ul style="list-style-type: none"> • Neuberger Berman Management • SEI Investments • State Street Global Advisors Limited • UBS Realty Investors, LLC • Westfield Capital Management Company, LP
Newburyport	<ul style="list-style-type: none"> ▪ PRIT Fund 		
Newton	<ul style="list-style-type: none"> ▪ PRIT Fund 		

Investment Vendors

Retirement Board	Investment Vendors		
<p>Norfolk County</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank ▶ Consultant: Wainwright Investment Counsel, LLP 	<ul style="list-style-type: none"> • Amundi Pioneer Institutional Asset Mgmt., Inc. • ArLight Capital Partners, LLC • Aristotle Capital Management, LLC • Ascend Ventures Group, LLC • BNY Mellon Asset Management N.A. • Constitution Capital Partners, LLC • Corsair Capital LLC • D.E. Shaw Investment Management, LLC • DSF Group • EnTrust Partners, LLC 	<ul style="list-style-type: none"> • Gamco Asset Management, Inc. • Gerding Edlen Investment Management, LLC • Globespan Capital Management, Inc. • Goldentree Asset Management, LP • Hamilton Lane • HarbourVest Partners, LLC • Income Research & Management • Intercontinental Real Estate Corporation • Invesco Private Capital, Inc. • Lazard Asset Management, LLC • LLM Capital Partners 	<ul style="list-style-type: none"> • LMCG Investments, LLC • Loomis, Sayles & Company • Mesirow Capital Partners IX, LP • Mesirow Financial Institutional Real Estate • MFS International Advisors, Inc. • PRIT Fund • RhumbLine Advisers • Seizert Capital Partners, LLC • Siguler Guff Advisors, LLC • TerraCap Management • Wellington Management Company, LLP
<p>North Adams</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank 	<ul style="list-style-type: none"> • De Burlo Group, Inc. 	<ul style="list-style-type: none"> • PRIT Fund 	
<p>North Attleboro</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank ▶ Consultant: Dahab Associates, Inc. 	<ul style="list-style-type: none"> • AmSouth Bank • Aristotle Capital Management, LLC • Atlanta Capital • Axiom International Investors, LLC 	<ul style="list-style-type: none"> • Blackrock Realty Advisors, Inc. • Brandes Investment Partners, LP • Davenport & Company, LLC • Intercontinental Real Estate Corporation 	<ul style="list-style-type: none"> • Lazard Asset Management, LLC • Loomis, Sayles & Company • RhumbLine Advisers • Vontobel Asset Management, Inc.
<p>Northampton</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank 	<ul style="list-style-type: none"> • De Burlo Group, Inc. 	<ul style="list-style-type: none"> • PRIT Fund 	
<p>Northbridge</p>	<ul style="list-style-type: none"> ▪ PRIT Fund 		
<p>Norwood</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank ▶ Consultant: Meketa Investment Group, Inc. 	<ul style="list-style-type: none"> • Aberdeen Asset Management, Inc. • American Funds • Aristotle Capital Management, LLC • Atlanta Capital • Columbia Management Investment Advisors, LLC 	<ul style="list-style-type: none"> • Constitution Capital Partners • Dimensional Fund Advisors, LP • HarbourVest Partners, LLC • IFM Investors Advisor • Landmark Partners, LLC 	<ul style="list-style-type: none"> • Newton Investment Management, LLC • PRIT Fund • RhumbLine Advisers • State Street Global Advisors
<p>Peabody</p>	<ul style="list-style-type: none"> ▪ PRIT Fund 		
<p>Pittsfield</p>	<ul style="list-style-type: none"> ▪ PRIT Fund 		
<p>Plymouth</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank ▶ Consultant: Fiducient Advisors, LLC 	<ul style="list-style-type: none"> • Acadian Asset Management • Aristotle Capital Management, LLC • BlackRock Advisors, LLC 	<ul style="list-style-type: none"> • Boston Trust Walden • Columbia Management Investment Advisors • PRIT Fund 	<ul style="list-style-type: none"> • Rhumbline Advisers • Wellington Management Company, LLP • Westfield Capital Management Company, LP

Investment Vendors

Retirement Board	Investment Vendors		
<p>Plymouth County</p> <ul style="list-style-type: none"> ▶ Custodian: State Street Bank & Trust ▶ Consultant: Meketa Investment Group 	<ul style="list-style-type: none"> • ABS Investment Management, LLC • AEW Capital Management, LP • Akina Limited • Aristotle Capital Management, LLC • Ascent Venture Partners • Audax Management Company (NY), LLC • Basalt Infrastructure Partners • BlackRock Advisors, LLC • BTG Pactual Timberland Investment Group • Carlyle Investment Management • Charlesbank Capital Partners, LLC • Constitution Capital Partners, LLC • DN Partners • Driehaus Capital Management, LLC • Entrust Global Partners • Fisher Investments • First Eagle Investment Management • Freeman Spogoli Management 	<ul style="list-style-type: none"> • Global Infrastructure Management, LLC • Globespan Capital Management, Inc. • HarborVest Partner • IFM Investors Advisor • Income Research & Management • Invesco Trust Company • I Squared Capital • John Hancock Trust Company • J.P. Morgan Investment Management, Inc. • Kohlberg & Co., LLC • Kopernik Global Investors • Landmark Partners, LLC • Lexington Partners, LP • LLR Management • Lord Abbett & Company • Mesirow Financial Capital Partners X, LP • Mesirow Financial Institutional Real Estate 	<ul style="list-style-type: none"> • Newton Investment Management, LLC • Old Farm Partners • PCCP, LLC • RhumbLine Advisers • Ridgemont Equity Partners • Rockpoint Capital • Searchlight Capital Partners • SEI Investments • Siguler Guff Advisers, LLC • Summit Partners, LP • TA Realty • TimberVest, LLC • Trilantic Capital Management L.P. • Walter Scott & Partners, Ltd. • Waud Capital Partners • Wellington Management • Wellspring Capital Management, LLC
<p>Quincy</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank ▶ Consultant: Meketa Investment Group, Inc. 	<ul style="list-style-type: none"> • Acadian Asset Management, LLC • Adams Street Partners, LLC • AEW Capital Management, LP • Axiom • Beach Point Capital Management, LP • Brookfield Asset Management • Brown Advisory, LLC • Charlesbank Capital Partners, LLC • Colony Realty Partners • Columbia Management Investment Advisors, LLC • Driehaus Capital Management, LLC • Entrust Permal 	<ul style="list-style-type: none"> • Freeman Spogli Management • Global Infrastructure Management • Goldman Sachs Asset Management, LP • Hancock Timber Resource Group, Inc. • HarborVest Partners • IFM Investors Advisor • J.P. Morgan Investment Management • LLR Management • Loomis, Sayles & Company • Oppenheimer Alternative Investment Management • PRIT Fund 	<ul style="list-style-type: none"> • RhumbLine Advisers • Ridgemont Equity Partners • Rockwood Capital • Searchlight Capital Partners • SL Capital Partners, LLP • State Street Global Advisors • TA Realty • TerraCap Management, LLC • Torchlight Investors, LLC • Trilantic Capital Management L.P. • UBS Realty Investors, LLC • Wellspring Capital Management
<p>Reading</p>	<ul style="list-style-type: none"> ▪ PRIT Fund 		
<p>Revere</p>	<ul style="list-style-type: none"> ▪ PRIT Fund 		
<p>Salem</p>	<ul style="list-style-type: none"> ▪ PRIT Fund 		
<p>Saugus</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank ▶ Consultant: Wainwright Investment Counsel, LLP 	<ul style="list-style-type: none"> ▪ PRIT Fund 	<ul style="list-style-type: none"> • Aristotle Capital Management, LLC • Lord Abbett & Co., LLC • LMCG Investments, LLC 	<ul style="list-style-type: none"> • Massachusetts Financial Services Co. • RhumbLine Advisers • SEI Investments
<p>Shrewsbury</p> <ul style="list-style-type: none"> ▶ Custodian: People's United Bank ▶ Consultant: Dahab Associates, Inc. 	<ul style="list-style-type: none"> ▪ PRIT Fund 	<ul style="list-style-type: none"> • Atlanta Capital • Earnest Partners 	<ul style="list-style-type: none"> • Fiera Capital Inc.

Investment Vendors

Retirement Board	Investment Vendors		
Somerville ▶ Custodian: Comerica Bank	<ul style="list-style-type: none"> • Congress Asset Management Company, LLP • Lazard Asset Management, LLC 	<ul style="list-style-type: none"> • Loomis, Sayles & Company • PRIT Fund 	<ul style="list-style-type: none"> • RhumbLine Advisers • UBS Realty Investors, LLC
Southbridge	▪ PRIT Fund		
Springfield	▪ PRIT Fund		
State	▪ PRIT Fund		
Stoneham ▶ Custodian: SEI Private Trust Company ▶ Consultant: Fiducient Advisors, LLC	▪ SEI Investments	<ul style="list-style-type: none"> • PRIT Fund 	
Swampscott ▶ Custodian: People's United Bank ▶ Consultant: Dahab Associates	▪ PRIT Fund	<ul style="list-style-type: none"> • Aristotle Capital Management, LLC • Intercontinental Real Estate Corporation 	<ul style="list-style-type: none"> • LMCG Investments, LLC • TA Realty
Taunton ▶ Custodian: People's United Bank ▶ Consultant: Dahab Associates, Inc.	<ul style="list-style-type: none"> • Aberdeen Asset Management • Allspring Global Investments, Inc. • BlackRock Investment Management, LLC • Boston Partners • Ceres Partners, LLC • C.S. Mckee, LP • Frontier Capital Management Co., LLC • GAM International Management Limited 	<ul style="list-style-type: none"> • Intercontinental Real Estate Corporation • John Hancock Trust Company • LMCG Investments, LLC • Molpus Woodlands Group, LLC • Pacific Investment Management Company, LLC • Polen Capital Management, LLC • PRIT Fund 	<ul style="list-style-type: none"> • Quantitative Management Association • Rhumbline • State Street Global Advisors • TA Realty • 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	<ul style="list-style-type: none"> • PRIT Fund 	
Watertown ▶ Custodian: People's United Bank ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> • Acadian Asset Management, LLC • American Realty Advisors • Brandywine Global Investment Management, LLC • Columbia Management Investment Advisors, LLC • Eaton Vance Management 	<ul style="list-style-type: none"> • Income Research & Management • Massachusetts Financial Services Company • Pinebridge Investment, LLC • PRIT Fund • RCP Advisors, LLC 	<ul style="list-style-type: none"> • SEI Investments • TA Realty • TerraCap Management, LLC • Wellington Management Company, LLP
Webster ▶ Custodian: People's United Bank	▪ PRIT Fund	<ul style="list-style-type: none"> • HGK Asset Management Inc. 	
Wellesley	▪ PRIT Fund		

Investment Vendors

Retirement Board	Investment Vendors		
West Springfield ▶ Custodian: Comerica Bank	<ul style="list-style-type: none"> • De Burlo Group, Inc. 		
Westfield ▶ Custodian: Fiducient Advisors, LLC	<ul style="list-style-type: none"> • AEW Capital Management LP • Allspring Global Investments, Inc. • Columbia Management Investment Advisers, LLC • Constitution Capital Partners, LLC • Hamilton Lane • Income Research & Management • Intercontinental Real Estate Corporation 	<ul style="list-style-type: none"> • Lazard Asset Management, LLC • LMCG Investments, LLC • Long Wharf Real Estate Partners, LLC • Loomis, Sayles & Company • Pacific Investment Co., LLC • Polaris Capital Management, LLC 	<ul style="list-style-type: none"> • PRIT Fund • RBC Global Asset Management (U.S.), Inc. • SEI Investments • State Street Global Advisors • TerraCap Management • Wasatch Advisors, Inc.
Weymouth ▶ Custodian: Comerica ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> • 747 Capital • Acadian Asset Management, LLC • Adams Street Partners • Amundi Pioneer Institutional Asset Mgmt., Inc. • 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 	<ul style="list-style-type: none"> • 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 • OFI Global Institutional, Inc. 	<ul style="list-style-type: none"> • Principal Global Investors LLC • PRIT Fund • RhumbLine Advisers • Riverbridge 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: People's United Bank	■ PRIT Fund	<ul style="list-style-type: none"> • Charlesbank Capital Partners, LLC 	<ul style="list-style-type: none"> • Stafford Private Equity Inc.
Worcester ▶ Custodian: People's United Bank ▶ Consultant: Meketa Investment Group	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Northstar Company, LLC • Old Farm Partners LP • PRIT Fund • Ridgmont 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:

- ▶ BYN Mellon

Consultants:

- ▶ Aberdeen Asset Management Inc. - Portfolio Completion Strategies Advisory Services
- ▶ Albourne – Operational Due Diligence Service Provider
- ▶ Callan Associates - Public Market Advisory Services
- ▶ Edgewater Technology - IT Advisory Services
- ▶ Hamilton Lane - Private Equity Advisory Services
- ▶ KPMG LLP - Auditor
- ▶ NEPC, LLC - Asset Allocation Advisory Services
- ▶ O’Neill and Associates - Communication Consulting Services

Domestic Equity Managers

- Acadian Asset Management, LLC
- Brandywine Global Investment Management
- Driehaus Capital Management, LLC
- Frontier Capital Management

- Goldman Sachs Investment Management
- Lord, Abbett & Co., LLC
- Rhumblin Advisers

- Riverbridge Partners
- State Street Global Advisors
- Summit Creek Advisors

International Equity Managers

- Acadian Asset Management, LLC
- ARGA Investment Management
- Artisan Partners
- AQR Capital

- Baillie Gifford
- Driehaus Capital Management, LLC
- Marathon Asset Management, LLP
- Mondrian Investment Partners

- Russell Implementation Services
- State Street Global Advisors
- TimesSquare
- Xponance

Emerging Market Managers

- Acadian Asset Management, LLC
- AQR Capital
- Baillie Gifford

- Driehaus Capital Management, LLC
- Pzena Investment Management

- T. Rowe Price
- Wasatch Advisors, Inc.

Core Fixed Income Managers

- AFL-CIO Housing Investment Trust
- Blackrock Financial Management, Inc.
- Community Capital Management

- Loomis, Sayles & Company
- Longfellow Investment Management
- New Century Advisors, LLC

- Pacific Investment Management Company, LLC
- Pugh Capital Management
- RBC Global Asset Management

Value-Added Fixed Income Managers

- 400 Capital Management, LLC
- Anchorage Capital Group, LLC
- Ashmore Investment Management, Ltd.
- Berkshire Group, LLC
- Eaton Vance Institutional Funds

- Fidelity Management Trust Company
- LibreMax Capital
- Loomis, Sayles & Company, LP
- Mudrick Capital Management, LP

- Newmarket Capital
- Pacific Investment Management Company, LLC
- Shenkman Capital Management
- Voya Financial

Alternative Investments—Real Estate Managers

- AEW Capital Management
- Berkshire Group, LLC
- Blackstone
- Brookfield Investment Management

- CBRE Global Investors
- CenterSquare Investment Management
- DivcoWest

- INVESCO Realty Advisors
- LaSalle Investment Management
- Stockbridge

Alternative Investments—Timberland

- Campbell Group, LLC

- Forest Investment Associates

Alternative Investments—Portfolio Completion Strategy Managers

- 400 Capital Management
- Arden Asset Management
- Basswood Capital Management, LLC
- Blackrock Aviation
- Breakout Funds, LLC
- Brigade Capital G.P., LLC
- Cantab Capital Partners, LP
- Canvas Capital
- Capula Management Limited
- Cirera Capital Limited
- CKC Capital, LLC

- Complus Asset Management Limited
- Contrarian Capital Management
- Davidson Kempner Advisors, Inc.
- DLD Asset Management, LP
- East Lodge Capital
- Elliot Capital Advisors, LP
- FIR Tree Capital Management
- GaoFeng Global Asset Management, Ltd.
- Investcorp Investment Advisors, LLC
- JEN Partners, LLC
- Land and Buildings Investment Management

- Mudrick Capital Management, LP
- Mygale, LLP
- Pacific Alternative Asset Management Co. (PAAMCO)
- PGIM, Inc.
- Power Pacific Investment Management, Inc.
- RV Capital Management Pvt., Ltd.
- Sightway Capital
- Silver Creek Advisory Partners, LLC
- Summit Partners Public Asset Management, LLC
- Tabor Asset Management
- Valent Asset Management, LLC

PRIM Investment Vendors

(Organized by Service Provider Type, Continued)

Alternative Investments—Private Equity and Distressed Debt Managers

PRIVATE EQUITY:

- Acon Investments
- Advent International
- Alchemy Partners
- Alta Communications
- American Industrial Partners
- American Securities Capital Partners
- Apollo Management Co.
- Ascent Venture Partners
- Austin Ventures
- Bain Capital
- Battery Ventures
- Berkshire Partners
- Blackstone Capital Partners
- Bridgepoint Capital Limited
- Carlyle Partners
- Castille Ventures
- Catalyst Investors
- Centerbridge Capital
- Charles River Ventures
- Charlesbank Capital Partners
- Charterhouse Capital
- Chequers Capital
- Code, Hennessy & Simmons
- CVC Capital
- Denham Capital Management
- El Dorado Ventures
- Elysian Capital
- Essex Woodlands Health Ventures
- Ethos Private Equity
- Exponent Private Equity Partners
- First Reserve Corporation
- Flagship Pioneering
- Freeman Spogli Equity Partners
- GENSTAR Capital
- Georgian Partners
- Gilde Buy Out Partner AG
- GTCR Golder Rauner

- Hellman & Friedman Capital Partners
- H.I.G. Capital Partners
- Highland Capital Partners
- 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
- Medixi Ventures
- Menlo Ventures
- Montagu
- Montreux Equity Partners
- Nautic Partners
- New Enterprise Associates
- Nordic Capital
- Odyssey Investment Partners
- Olympus Partners
- Onex Capital Partners
- PAI Europe
- Permira Ventures
- Polaris Venture Partners
- Providence Equity Partners
- Providence Strategic Growth
- Quad-C Management
- Quantum Energy Partners
- Rembrandt Venture Partners
- Rhone Group, LLC
- SAIF Partners

- SCP Vitalife
- Sherbrooke Capital
- Sofinnova Ventures, Inc.
- Spark Capital
- Spectrum Equity
- 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
- Torquest Partners
- Towerbrook Capital Partners
- Union Square Ventures
- VantagePoint Partners
- Vestar Capital Partners
- Vista Equity Partners
- Waterland Private Equity
- Weston Presidio Capital
- WestView Capital Partners
- Xenon Private Equity, LTD

DISTRESSED DEBT:

- Anchorage Capital
- Avenue Capital Group
- CarVal Investors
- Centerbridge Special Credit
- Crescent Capital Group
- GSO Capital Partners
- Oaktree Capital Management
- Trust Company of the West (TCW)
- Wayzata Investment Partners

Overlay Managers (Cash)

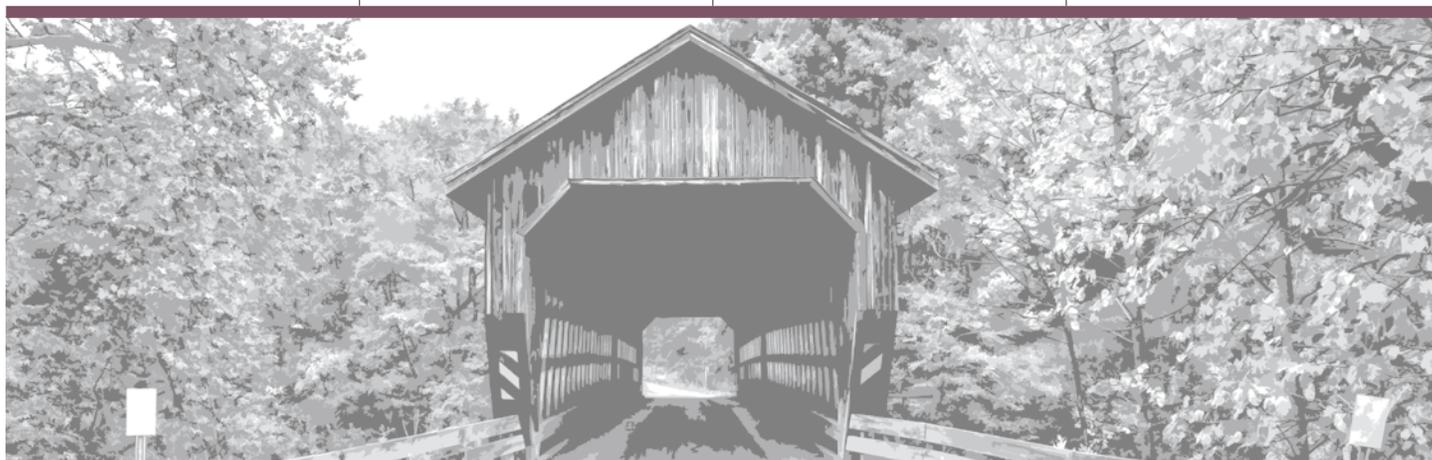
- Parametric Portfolio Associates, LLC

PERAC Directory

Units and Staff Members

ADMINISTRATION	ACTUARIAL	AUDIT	COMMUNICATIONS
<p>John W. Parsons, Esq. Executive Director</p> <p>Caroline J. Garcia Deputy Executive Director</p> <p>Kenneth J. Hill, Esq. Assistant Deputy Director</p> <p>Bill Keefe Assistant Deputy Director</p> <p>Virginia Barrows Chief Financial Manager</p> <p>Katie Bozzi Accounts Payable Specialist</p> <p>Ellen Furtado Administrative Assistant</p> <p>Tracey Legaski Administrative Assistant</p> <p>Patricia Tanso Administrative Assistant</p>	<p>John Boorack Actuary</p> <p>James Lamenzo Actuarial Consultant</p> <p>Timothy Larkin Senior Actuarial Analyst</p> <p>Kathleen Smolak Actuarial Analyst</p> <p>Sherry Brooks-Ross Benefit Calculation Specialist</p>	<p>Caryn M. Shea, CPA Director of Auditors</p> <p>Scott Henderson Deputy Chief Auditor</p> <p>Elaine Pursley, CPA Auditor II</p> <p>Karen Casper Auditor I</p> <p>Alice Munafò Auditor I</p> <p>George Nsia Auditor I</p> <p>Carol Poladian, CPA Auditor I</p> <p>Richard Wrona, CPA Auditor I</p> <p>Junior Yanga Auditor I</p>	<p>Natacha Dunker Communications Director</p> <p>Karen McMahon Graphic Designer/Editor</p> <p>Michael D. Litvack Webmaster/Graphic Design Specialist</p> <p>Ben Polatin Communications Specialist</p>
			FRAUD PREVENTION
			<p>Sandra King Fraud Prevention Manager</p>

DISABILITY	INFORMATION SYSTEMS	INVESTMENT/COMPLIANCE	LEGAL
<p>Patrice Looby, R.N. Manager of Medical Services</p> <p>Mariyam S. Gadatia, R.N. Nurse Case Manager</p> <p>Eileen Tobin, R.N., B.S.N. Nurse Case Manager</p> <p>Regina Manning Case Manager I</p> <p>Erin Groesser Administrative Assistant</p>	<p>Dan Boyle Director of Information Systems</p> <p>Anthony Tse Project Manager</p> <p>Robert Perez Senior Systems Engineer</p> <p>K-Lone Steele Senior Systems Engineer</p> <p>Stephen Forcucci .net Developer</p>	<p>Thomas J. O'Donnell Compliance Director</p> <p>Veronica Colon Senior Investment Analyst</p> <p>Sarita Yee Senior Investment Analyst</p> <p>John P. Galvin Compliance Analyst</p> <p>Rose Morrison Administrative Assistant</p>	<p>Judith Corrigan, Esq. General Counsel</p> <p>Patrick Charles, Esq. Senior Associate General Counsel</p> <p>Katherine Bensel, Esq. Associate General Counsel</p> <p>Felicia McGinnis, Esq. Associate General Counsel</p> <p>Doreen Duane Executive Assistant</p>



2021

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