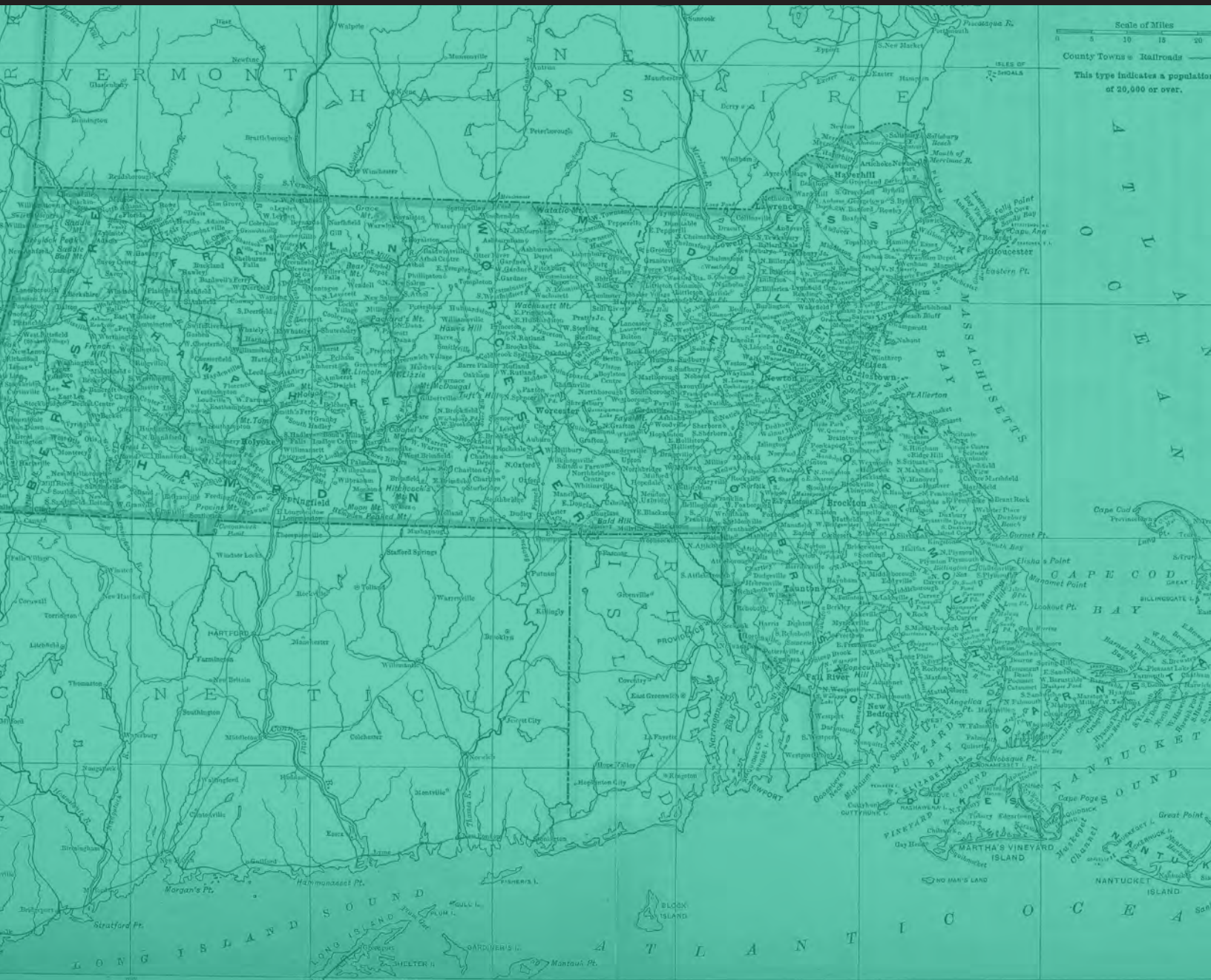


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Public Employee Retirement Administration Commission

ANNUAL REPORT

JULY 2021



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PERAC Commissioners

Commissioner

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

Chair



Commissioner

The Honorable Suzanne M. Bump
Auditor of the Commonwealth

Vice Chair



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.



Kathleen M. Fallon
Practice Area Director,
Public Consulting Group



Kate Fitzpatrick
Town Manager,
Town of Needham



James M. Machado
Sargeant, Fall River
Police Department



Richard MacKinnon, Jr.
President, Professional
Firefighters of Massachusetts



Jennifer F. Sullivan
Governor's Appointee,
Investment Professional

In Memoriam

Remembering **Kate Hogan**,
PERAC Disability Manager of Medical Services



“Kate was universally respected and appreciated throughout the MA retirement community.”

It is with great sadness that we must report that our longtime Disability Unit Manager, Kate Hogan, passed away after a short illness. In addition to being a great employee who truly enjoyed her work and her colleagues, Kate was a good friend to many of us here at PERAC and it has been difficult news to accept, made even more difficult by the suddenness of it. “Kate’s sudden passing left a huge professional and personal void here at PERAC and throughout the retirement and medical community,” said Executive Director John Parsons. “Kate was universally respected and appreciated throughout the MA retirement community.”

In her tenure at PERAC, Kate assisted retirement boards, employers, applicants, and physicians throughout the Disability Retirement Application Process.

Among the many heartfelt comments received by PERAC were the words of one long-time retirement board director: “Kate was truly the most wonderful person I had the honor of associating with over my 38-year Ch. 32 career, on both a professional and personal level. The epitome of what every public servant and human being should be — kind, patient, funny, empathetic. I could go on and on...”

Prior to joining PERAC, she worked for many years at the Massachusetts Hospital School providing direct care to children with physical disabilities.

In addition to her work at PERAC, Kate was also a visual artist and attended Massachusetts College of Art, majoring in Sculpture and Art Education.

Kate’s professionalism, warm personality, and friendship will be sorely missed by her colleagues at PERAC and throughout the retirement community. Please keep Kate and her family in your thoughts and prayers. ■



Dedication

Robert McCarthy Retires After Decades of Service on PERAC Commission



“Bob’s entire professional career has been dedicated to serving his community, the Commonwealth, and his country.”

During PERAC’s October Commission meeting, long-time Commissioner Robert McCarthy announced that he was retiring from the Commission upon appointment of his successor. “Bob” has served as a PERAC Commissioner off and on since its inception in 1996, serving as the designee of the President of the AFL-CIO, as appointed by the State Auditor.

Bob’s entire professional career has been dedicated to serving his community, the Commonwealth, and his country. Bob has served in the U.S. Navy, as a career firefighter, as Chairman of the Watertown Retirement Board, and on the Boards of Trustees at the University of Massachusetts, Fitchburg State College, and Blue Cross Blue Shield. From 1987-2011 he served as the President of the Professional Firefighters of Massachusetts.

Throughout his over 50 years of public service, the common element of Bob’s service has been an incomparable commitment to helping his fellow public employees. Bob’s passion for improving the working conditions of his brethren is legendary, and his skills as an advocate for public employees have left an indelible mark on the quality of life of those he has lobbied for. Anyone that worked in State Government from the 1980’s to the present has witnessed and benefited from Bob’s efforts.

At PERAC, Bob has played an integral role in the shaping of pension policy, committed to the integrity and full funding of our retirement systems, and protection of the pension benefits earned by the public employees of Massachusetts. The PERAC Commission and PERAC staff will miss the passion and camaraderie that Bob has brought to this agency. As importantly, the public employees of Massachusetts are losing a true champion who always looked out for their best interests.

On behalf of the Commission, PERAC Staff, and public employees everywhere, we wish Commissioner McCarthy good fortune and health in his retirement from public service. ■



Letter from the Chair

Philip Y. Brown



“In every single case, with ingenuity, patience, help and cooperation from all, you found a way. There was a positive resolution and outcome for every challenge that was faced.”

It was a year the likes of which we have never seen, and hopefully, we will never see again. While the pandemic affected all of us, it certainly affected some of us more than others whether it was through loss of a loved one, personal illness or of those close to you, or financial burdens. As we persevered, we found comfort in each other, whether it was visiting loved ones through a nursing home window or helping with a food drive, and in the little things, like taking a walk or cooking nightly dinners.

I am very proud that no matter what personal challenges we all faced, the Massachusetts public retirement community pulled through, pulled together and pulled it off. In a non-pandemic year, for one to look back at the innovations, the adaptations and the performance of this past year, it was an extremely successful one by any measure. The fact that all of this happened in the midst of once-in-a-lifetime global turmoil is remarkable and, for that, all of the retirement community is to be commended and applauded.

As the financial floor dropped, impending doom predicted, and offices shuttered, retirees, board members, board staff, board counsel, investment officers, PERAC staff and local and state officials all had to figure out — how do we make this work?

- ▶ Will I receive my pension check?
- ▶ How do we ensure retirement checks go out?
- ▶ How do we work if the office is closed?
- ▶ How do I interact with my board if it is closed?
- ▶ How do we protect investments?
- ▶ How do we process disabilities?
- ▶ How do we process new retirement applications?
- ▶ How do we counsel our members?
- ▶ How do we obtain signatures?
- ▶ How do we file forms?
- ▶ How do we conduct training and undertake education?
- ▶ How does our board conduct an open, public meeting when nothing public can be open?

And, as you know all too well, that's far from an exhaustive list of questions.



In every single case, with ingenuity, patience, help and cooperation from all, you found a way. There was a positive resolution and outcome for every challenge that was faced.

Regulations and procedures were developed to use estimated calculations. Telehealth medical panels were established. Laptops were purchased. Video conferences and the mute button became a way of life. Remote work ensured business was conducted, allowing for staggered schedules and distanced staff to come to the office for those tasks needed to be completed there. Board meetings were held virtually. Education courses were conducted. PROSPER enhancements were rolled out. Drive through form drops and counseling were created. Prudently and skillfully designed investment portfolios proved both resilient and extremely successful. And most importantly, pension checks were paid in full and on time, every single month of the year.

While this was a total team effort, I would be remiss if I did not mention the contributions of two key people. First, our dear friend Kate Hogan, PERAC's Manager of Medical Services, who sadly left us too young. Kate was universally liked personally with her kind and cheerful nature, but also professionally as she was thorough, dedicated, and always helpful to all.

A Navy veteran, career firefighter, and past president of the Professional Firefighters of Massachusetts, Bobby McCarthy retired as a PERAC Commissioner after providing years of leadership and guidance going back to the agency's first days. I know that I am better off from their wisdom and friendship, as I am sure so many of you are as well. They are missed and they are appreciated.

With that, I am pleased to welcome Rich MacKinnon, the current President of the Professional Firefighters of Massachusetts, as a PERAC Commissioner. We will benefit from his knowledge, experience and leadership and he already is an important voice on the Commission.

We all came up with solutions and work arounds this past year that came to feel like standard operating procedure. As we transition out of pandemic operations, we've actually

grown accustomed to some of the new ways of doing things and will look to retain them going forward. More convenience. More effective. More efficient.

More transparent. More accessible. Out of something bad has come many things that are good.

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

*“Out of something bad
has come many things
that are good.”*

Letter from the Executive Director

John W. Parsons



“My optimistic view and wish is that 2021 will be a better year than 2020. Part of that is because we all went through 2020 and we went through it together. We scrambled, we rallied, we collaborated, we cooperated and we persevered.”

The Commission and staff are pleased to release this Annual Report on the Massachusetts Public Retirement Systems for 2020, a year that needs no introduction.

As we look back at this unique year, it's difficult to view this unparalleled period with any objectivity or critical eye. As individuals, we battled through the significant personal challenges that presented themselves; at home, work, amongst family and friends, and in the community. As employers, we struggled to address the competing challenges of protecting the health of our colleagues and meeting the demands placed on our agencies on behalf of the members who rely on us. Collectively, we watched with great sadness the pandemic's effect on families and businesses, while at the same time constantly adjusting to the new normal at work and throughout our society. At the risk of sounding self-serving, I sincerely believe that

the performance of all those who make our pension system work rose to the occasion in 2020, and remarkably we were able to not only meet the demands on our agencies, but to move forward in several significant ways.

Apart from meeting the daily demands of counseling, buybacks, retirement and disability applications, payroll, etc., MA pension systems moved forward in important, permanent ways. From the beginning of the pandemic, the disability process was upended, and we were forced to adapt to the world of telehealth to keep this process working. With PERAC, boards, employers, members and the medical community working together, we were able to overcome the many logistical and statutory complications at play and establish a telehealth review process that allowed members' applications to be processed. I credit PERAC's former Disability Director, Kate Hogan, for the primary role she played in

establishing this system, all while battling an illness that ultimately took her much too soon. Telehealth becoming a permanent element of the disability process is a small remembrance of Kate's many contributions during her 20 years of service to PERAC and the pension community at large.

In 2020, the next initiative in the development of the PROSPER system, electronic filing of retirement calculations, was rolled out. Following a trial application and staff training, boards are now able to file all types of retirement calculations electronically, saving time and eliminating paper records. It is our hope and goal to significantly reduce the turnaround time in the processing of these applications. Thank you to PERAC's development vendor CGI, our IT and Actuarial staff, volunteer retirement staff, and all board staff for the successful implementation of this important new improvement.



Another important addition to PROSPER, developed in the fall of 2020 and rolled out in early 2021, is the electronic filing of board members' Statements of Financial Interest ("SFIs"). Moving from an all-paper process to an electronic filing will save board members significant time going forward and improve recordkeeping. Thank you to everyone involved in the successful rollout of this new PROSPER feature.

The pandemic fundamentally affected our ability to provide in-person training and continuing education. However, through innovation and a commitment to the benefits of virtual presentations, PERAC and MACRS combined to provide 36 courses and 2,046 course completions. Thank you to all the presenters and staff that worked to make these presentations successful and enlightening, and to attendees for their continued commitment to becoming better informed board members and improving our pension systems.

All of these changes reflected a need to do things differently. Weaved through all of them was communication, which also required its own unique solutions. Without seeing people face to face, without people in offices to call, we needed to find a way to maintain lines of communication with members, with colleagues, and between boards and PERAC. The Commonwealth's State of Emergency due to the the pandemic started in March, 2020, and by the end of April PERAC had issued six memos relating to COVID-19. Not since 2012 has PERAC issued more memos than the 39 that were issued in 2020.

Obviously, the biggest change was in electronic communication, particularly video. It allowed PERAC and all boards to continue public meetings in accordance with the Governor's executive order, staff meetings, and meetings with members. Prior to 2020, Zoom was a children's television show to many of us and mute, lighting and backgrounds were things that never crossed our minds. While it was a challenge for many of us, and also not a replacement for in-person interaction, it did provide a level of convenience for people to reduce travel time in order to participate and, likewise, increased participation levels and transparency in the important work that we do.

Despite these advances, the pandemic did take away our ability to gather and truly mark milestones. One such milestone was the retirement of longtime PERAC Commissioner Bob McCarthy. I don't want to repeat the tribute to Bob in this report, but I do want to congratulate, commend, and thank him for his lifetime of public service as a Navy veteran, a career firefighter who became President of the Professional Firefighters of Massachusetts (PFFM), and as a Commissioner since the beginning of PERAC. Personally, I appreciated his advice, his passion and, most of all, his friendship.

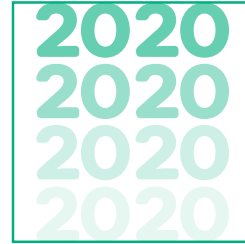
That said, we are pleased that Richard MacKinnon, Jr., the current president of the PFFM, was appointed by State Auditor Suzanne Bump to fill Bob's seat as the AFL-CIO representative. I have known Rich over the years to be knowledgeable, fair and dedicated. It has been a pleasure to begin working with him in his new role.

My optimistic view and wish is that 2021 will be a better year than 2020. Part of that is because we all went through 2020 and we went through it together. We scrambled, we rallied, we collaborated, we cooperated, and we persevered. Our collective experiences, and our collective success, in 2020 make all of us better and should make all of us proud.

Thank you for your dedication to the Massachusetts public retirement system and I truly look forward to continue working with you – in person! – this coming year and beyond. ■

Sincerely,

John W. Parsons, Esq.
Executive Director



Commission/Staff Update

Long-time serving Commissioner and former President of the Professional Firefighters of Massachusetts (PFFM), Robert McCarthy, announced his retirement in December 2020. Bob has served as a PERAC Commissioner on and off since its inception in 1996 serving as the designee of the President of the AFL-CIO, as appointed by the State Auditor. State Auditor Suzanne Bump appointed Richard D. MacKinnon, Jr. to a five-year term to fill that seat on the Commission. MacKinnon has served for over 20 years as a firefighter/paramedic in the Town of Whitman. MacKinnon served on the Executive Board of PFFM and as chair and co-chair of a number of PFFM committees. He was elected in October 2016 to serve as the PFFM's President. On behalf of all PERAC staff we look forward to working with Richard in the years ahead.

Deputy Executive Director, Joseph I. Martin announced his retirement on June 30, 2020 after a 38-year career in public service in particular, investments and pension law. Joe also served as PERAC's designee to the Contributory Retirement Appeal Board (CRAB) where he served for the past 33 years. With Joe Martin's retirement, the Commission unanimously appointed Senior Associate General Counsel, Patrick Charles, to serve on the board.

Clinical Case Manager, Jane Carritte announced her retirement of October 30, 2020 after 11 years of employment.

Sadly in 2020, we lost a colleague and good friend, Kate Hogan who served as PERAC's Disability Manager of Medical Services to a sudden illness in November. Kate began her career at PERAC in 1990, where she assisted retirement boards, employers, applicants, medical vendors, and physicians throughout the Disability Retirement process. Kate's professionalism and friendship will be greatly missed.

2020 certainly had its challenges and staffing changes were no different. With the loss of long-term employees, concentration to fill the void was made through re-organization, promotions, and new hires. In 2020, Stephen Forcucci joined the IT Unit as a .NET Developer to assist with the PROSPER enhancements and additional tasks that retirement boards use to submit, track, and retain data of their membership. The Legal Unit hired Felicia McGinnis as PERAC's Associate General Counsel. She will be reviewing disability cases, writing opinion letters, reviewing PERAC retirement guides, and other legal matters. The Actuarial Unit employed Kathleen Smolak who will be reviewing retirement calculations, performing valuation reports, and reviewing funding schedules. Just recently, the Disability Unit hired two nurses, Eileen Tobin and Mariyam Gadatia to review disability retirees' medical information as it relates to the restoration to service process and comprehensive medical examinations. We welcome the new employees to our PERAC Team. ■

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.

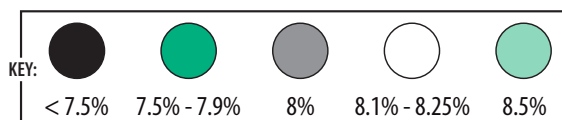
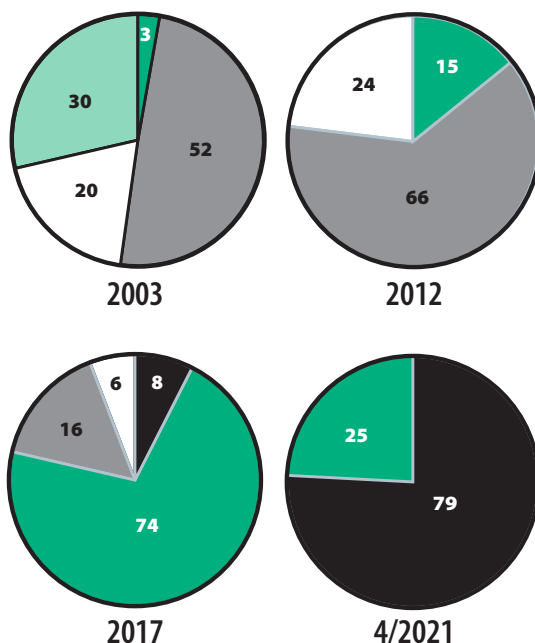
In the actuarial area, PERAC approved 69 revised funding schedules and completed 18 actuarial valuations in 2020. The valuations complemented the 55 valuations performed by private actuaries. Due to the COVID-19 pandemic, the Actuarial Unit did not complete the annual actuarial valuation of the Commonwealth's pension liability. 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
2020	18	55	69
2019	17	22	36
2018	19	44	63
2017	22	24	46
2016	21	50	62
2015	24	24	40
2014	27	49	78

The Massachusetts Investment Return Assumptions from 2003 to present:

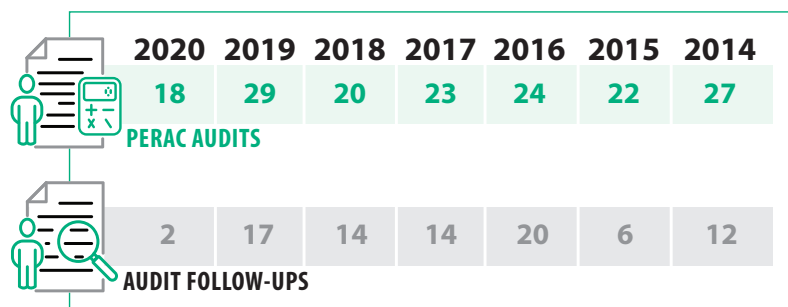
Investment Return Assumptions—Massachusetts



Audits

Despite restrictions and limitations to visiting retirement boards in person, as well as retirement board staff working remotely, the audit unit adapted quickly to electronic and remote work as much as possible. PERAC issued 18 audits and 2 follow-ups in 2020. Appreciation is extended to all retirement boards that underwent audits in 2020 for their cooperation, courtesy and accommodations.

Total PERAC Audits Conducted (By Year)



A planned transition to a new audit software platform, Engagement, was ready to launch just as the pandemic hit. This strategic planning was both timely and instrumental in allowing audit staff to work remotely.

In an unstable year, we had stability in our auditing staff which has allowed for much development and continuity. Staff attended virtual trainings and monthly staff meetings also managed to continue on remotely. ■

Emerging Issues Forum

We did not host our annual in-person Emerging Issues Forum in 2020, however, we did have a webinar for the Forum with keynote speaker, J. Robert Brown, who served at the time on the Public Company Accounting Oversight Board.

Mr. Brown provided attendees with an overview of the PCAOB’s role and how the organization’s mission overlaps with the mission of public retirement systems.

His presentation was complemented by a PERAC presentation on Post Retirement Employment and a video montage of past Forums. ■



Emerging Issues keynote speaker J. Robert Brown gave a webinar on the role of the Public Company Accounting Oversight Board.

Education










Despite the challenges of the pandemic, PERAC continued its comprehensive education program for retirement board members in 2020. This was the ninth year of the program and included courses on “Accidental Disability: Remands and Medical Panels,” “Buybacks Under Chapter 32,” “Recent Changes in Massachusetts Public Pension Law,” and closed out the year with the ever popular “Cases of Interest.”

We expanded our webinar capabilities in 2020 and offered all of our educational courses 100% online. Most of the courses we offered were also recorded and posted to the website at a later date as an additional option for members.

In addition, we expanded the number of non-PERAC webinars offered for credit, including webinars from the Massachusetts Inspector General, the State Ethics Commission, and national organizations such as the National Council on Teacher Retirement and the National Conference on Public Employee Retirement Systems. While there were no in-person conferences offered by the Massachusetts Association of Contributory Retirement Systems (MACRS), we partnered with them on their September Legal Panel Webinar and offered credit for their Cybersecurity webinar.

As the state continues to reopen, we will reconsider in-person courses again in the future, while keeping the safety of participants in mind, but will also continue to offer the webinar option. ■

Number of Education Courses Completed (By Year)

2012		1,853
2013		1,743
2014		1,796
2015		1,412
2016		1,348
2017		1,874
2018		1,633
2019		1,278
2020		1,273

Legislation

The FY 21 budget was ultimately passed in November after legislative leaders ascertained a better picture of the state's fiscal position. Despite the fiscal uncertainty at the time, the Governor and Legislature maintained their commitment to the new three-year Commonwealth pension funding schedule, making the full contribution of \$3.1 billion. Additionally, the Governor and Legislature included funding for a Cost of Living Adjustment for state and teachers' system retirees.

Among the numerous bills, statutes and gubernatorial orders dealing with the coronavirus in 2020, a few stood out. Chapter 53 of the Acts of 2020 suspended the Chapter 32, Section 91 hours and earnings limits for superannuation retirees working in the public sector. That statute waived those requirements through the first of two events, the end of the governor's state of emergency or calendar year 2020. As the pandemic continued and the calendar year came to a close, Chapter 277 of the Acts of 2020 extended the waiver on the same terms, the end of the governor's state of emergency or calendar year 2021, whichever occurred first.

While not legislation per se, the Governor's first COVID executive order temporarily waived provisions of the Open Meeting Law, allowing for fully remote meetings without a physically-present quorum and without the Chair physically present, so long as adequate alternative access for the public was provided.

In November, PERAC filed eight pieces of legislation, six refiles, House 10-15, and two new bills, House 16 and 17, for the 2021-2022 session of the Legislature.

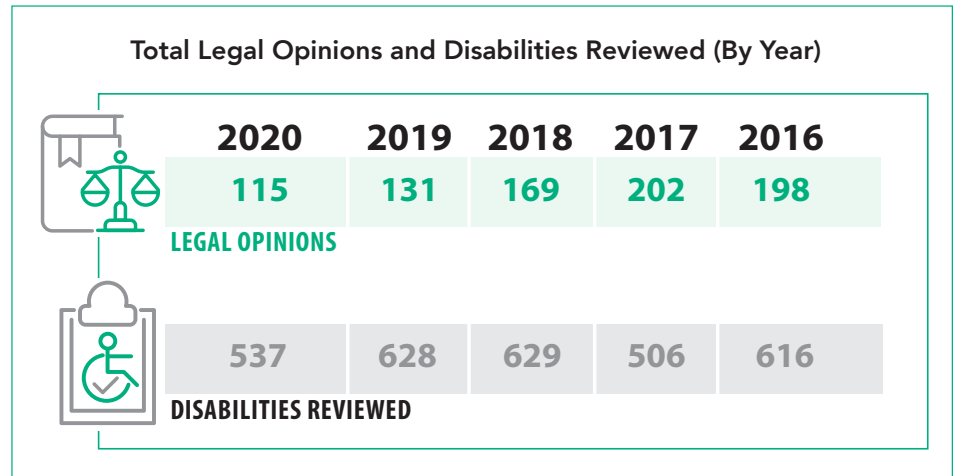
“PERAC regularly reviewed legislation by legislative request for matters of equity, consistency and technicality. Additionally, PERAC regularly responded to legislative requests regarding retirement-related issues for constituents.”

The bills are as follows:

- 1. House 10 - An Act Relative to Pension Forfeiture:** Amends the pension forfeiture provisions of Chapter 32 in light of the Supreme Judicial Court decision in the Bettencourt case which determined that the existing statute may violate the 8th Amendment of the U.S. Constitution in some cases.
- 2. House 11 - An Act Relative to the Veterans' Buyback:** Extends the time period in which veterans may purchase up to four years of creditable service as a result of their military service. If adopted, the buyback may be initiated within one year following vesting rather than within 180 days from hiring. The bill would create a one-time, one-year window for such purchases for those members who may have missed their initial opportunity.
- 3. House 12 - An Act Relative to the Recovery of Overearnings:** Clarifies the amount that may be recovered in an instance where a retired member has exceeded earning limits.
- 4. House 13 - An Act Relative to Wages:** Includes sick and vacation leave taken in conjunction with workers' compensation as part of regular compensation for retirement purposes.
- 5. House 14 - An Act Relative to Modification of Retirement Allowances:** Streamlines the process for modification of retirement allowances in an instance where a disabled retiree has exceeded earnings limits.
- 6. House 15 - An Act Relative to Accidental Disability and Group 1 Emotional Distress:** Allows a Group 1 member to cite employer incident reports to satisfy the injury report requirement when filing for disability based on an emotional injury.
- 7. House 16 - An Act to Protect Gender Pay Equity:** This would add an exemption from the anti-spiking provisions for salary actions related to the Massachusetts Equal Pay Act, which prohibits an employer from paying someone less than an employee of a different gender who does comparable work.
- 8. House 17 - An Act Providing for Statement of Financial Interests Flexibility:** Similar to what exists for board member education compliance, this bill would allow for a hardship waiver petition related to timely filing of the SFI. ■

Legal Unit

PERAC's Legal Unit represented the Commission [remotely] this past year at the Division of Administrative Law Appeals. Cases also progressed through the Contributory Retirement Appeal Board, and the Superior Court. The Legal Unit produced 115 Opinion Letters in 2020, and conducted the statutory disability retirement review of all accidental disability, accidental death and ordinary disability applications approved by the 104 retirement boards. The amount of these applications for 2020 was 537. Members of the Legal Unit also participated in, produced and presented numerous educational webinars. ■



*“The Legal Unit produced **115** Opinion Letters in 2020, 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

As is true in business operations, the Information Technology Unit's impact and narrative is weaved throughout different sections of this report. IT not only enabled PERAC to maintain its functionality in 2020, it expanded functionality for both PERAC and Boards.

As the pandemic made things come to a halt, the IT Unit was busy prepping and supplying laptops and tablets to staff to enable remote work. With that, came the need for additional VPN licenses and the new world of remote meeting platforms Go to Meeting and Go to Webinar.

The IT Unit then completed significant additions to PROSPER, allowing for the electronic filings of both cash books and statements of financial interest. Work on other PROSPER enhancements continued as did work triaging PROSPER issues with board members and vendors.





Meanwhile, IT was also working on developing training, enhancing security and increasing data usage. ■



Medical Panels

As always, PERAC has been busy assisting the boards in other areas. In 2020, 470 medical panel request were initiated and processed. A total of 494 disability applications and 9 accidental death claims were approved in 2020. For Post-Retirement medical reviews, PERAC Nurse Case Managers conducted 1,110 comprehensive medical evaluations. Occupational Health Physicians conducted comprehensive medical evaluations on 20 retirees, and examined 1 retiree for restoration to service. ■

Medical Panels (By Year)

YEAR	 MEDICAL PANEL REQUESTS	 IN-HOUSE CME REVIEWS	 DISABILITY APPROVALS	 DEATH APPROVALS
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 2020, PERAC analyzed **12,783** earnings reports, **3,563** retirees reported earnings and **87** earned in excess of the statutory limits. An additional **161** 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 2020, PERAC analyzed 12,783 earnings reports, 3,563 retirees reported earnings and 87 earned in excess of the statutory limits. An additional 161 retirees failed to comply with the reporting requirement. This resulted in the identification of \$1,459,319.84 in excess earnings and \$4,100,425.90 for non-compliance. In addition, 22 retirees waived their allowance, saving \$263,238.61. ■

Post-Retirement Earnings (By Year)

YEAR	EARNINGS REPORTS ANALYZED	REPORTED EARNINGS	NUMBER OF EXCESS EARNERS	NON-COMPLIANT	WAIVED
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
2014	15,699	3,792	125	91	38

YEAR	EXCESS EARNINGS AMOUNT	NON-COMPLIANCE AMOUNT	WAIVED AMOUNT
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
2014	\$1,167,922	\$1,334,305	\$512,247

Profiles

Massachusetts Contributory Retirement Boards



Introduction

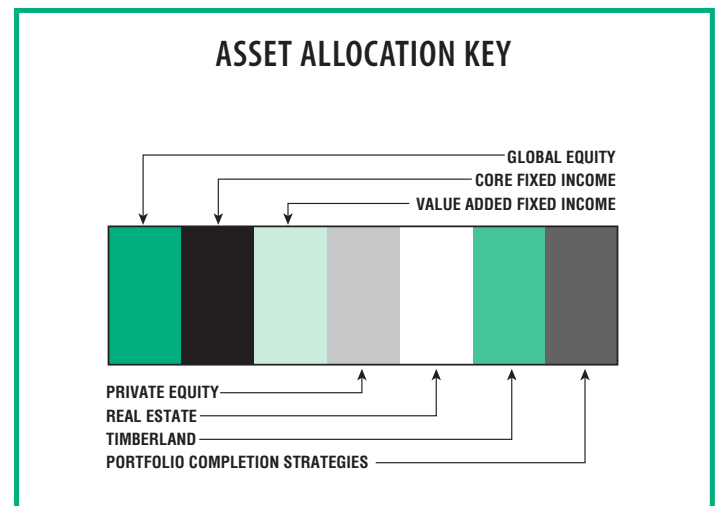
The Board Profile section of the PERAC Annual Report provides a detailed assessment of some of the important indicators relative to the financial health of the retirement systems. The information provided in this report can enable board members to provide factual comment and advice to policymakers as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

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 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

\$104.1 B
Market Value

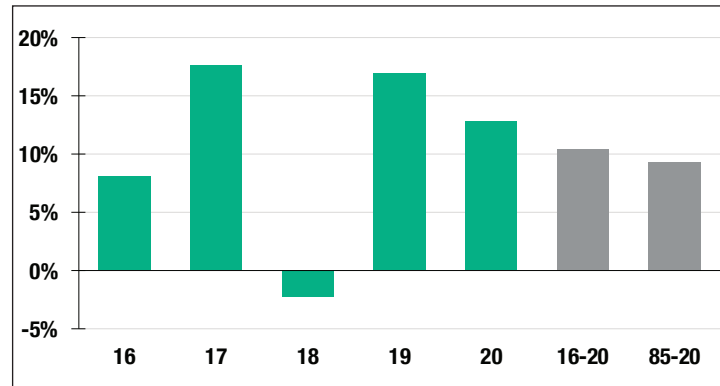
12.80%
2020 Returns

8.93%
2011-2020
[Annualized]

9.31%
1985-2020
[Annualized]

Investment Returns

(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



Adams

CONTACT INFORMATION

Adams Visitor Center
3 Hoosac Street, 2nd Floor
Adams, MA 01220
Phone 413-743-5575
Fax 413-743-2815

BOARD MEMBERS

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

*indicates Chairperson

BOARD ADMINISTRATOR

Cheryl DeMarsico

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 6
Reported Earnings 3
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/20

Actuary: PERAC



Click/Scan for website

\$38.9 M
Market Value

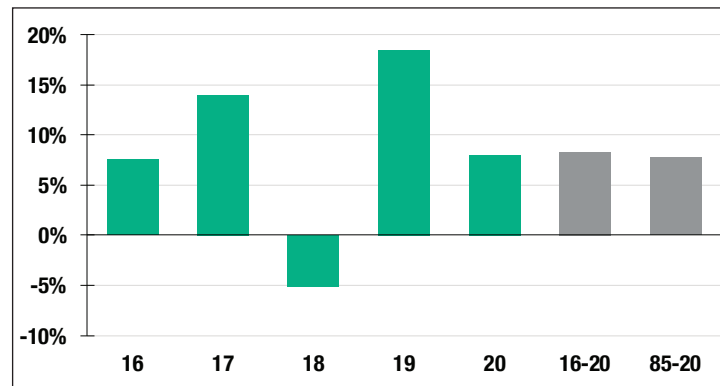
8.00%
2020 Returns

6.46%
2011-2020
[Annualized]

7.77%
1985-2020
[Annualized]

Investment Returns

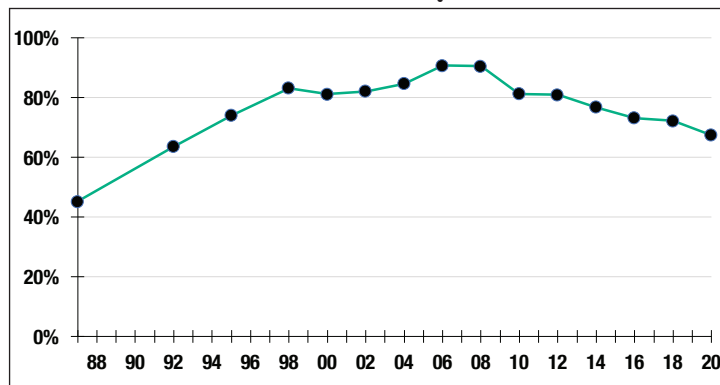
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



6.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



67.4%

Funded Ratio

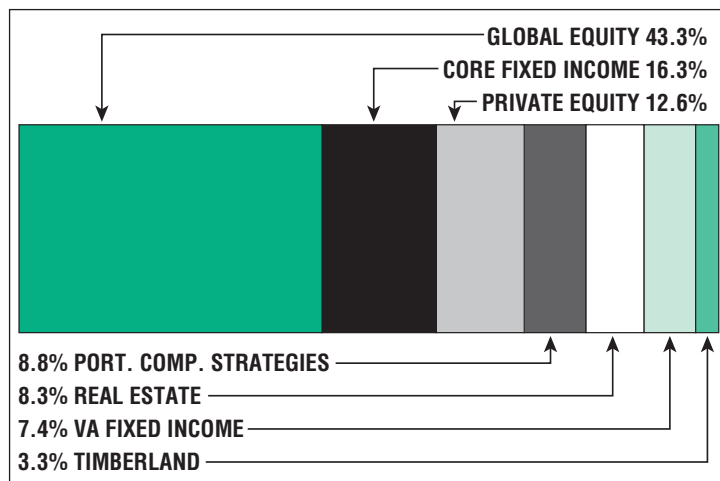
2037

Fully Funded

**7.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$17.6 M

Unfunded Liability

\$1.8 M
[FY2021]

Total Pension
Appropriation

Amesbury

CONTACT INFORMATION

City Hall
62 Friend Street
Amesbury, MA 01913-2825
Phone 978-388-8131
Fax 978-388-6727

BOARD MEMBERS

Angel Wills
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees12
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



Click/Scan for website

\$66.8 M
Market Value

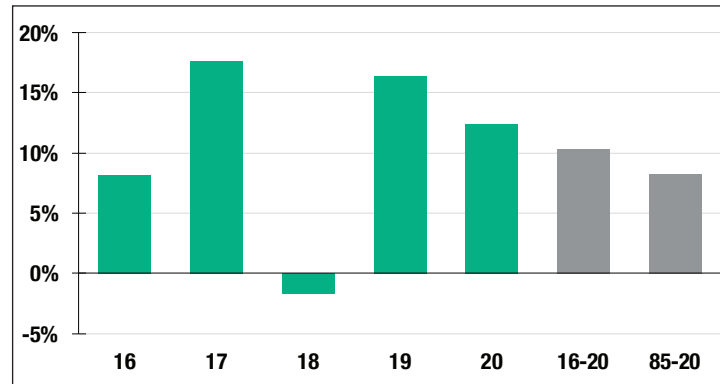
12.39%
2020 Returns

8.89%
2011-2020
[Annualized]

8.25%
1985-2020
[Annualized]

Investment Returns

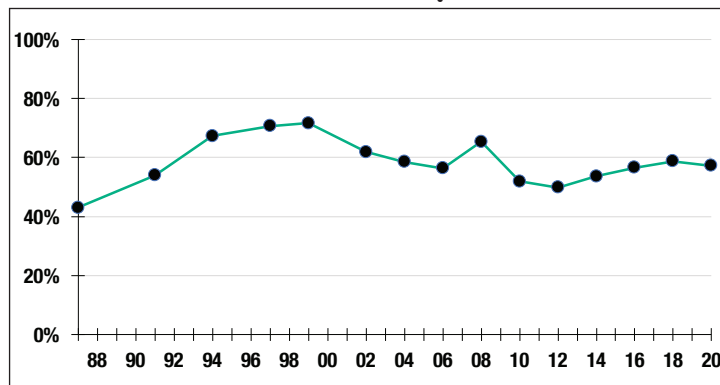
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



57.2%

Funded Ratio

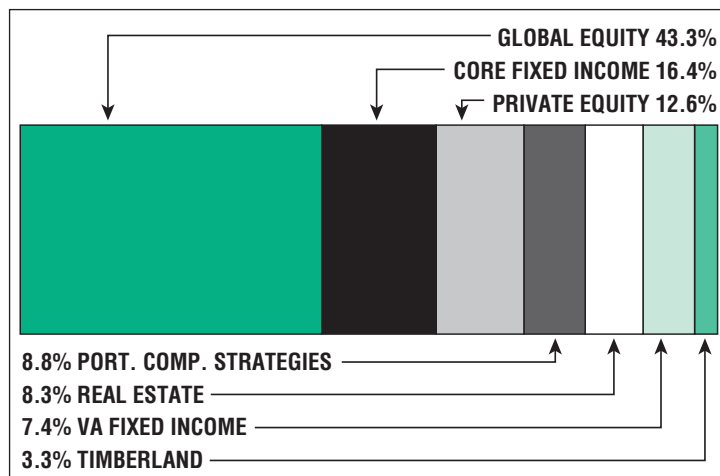
2035

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$45.0 M

Unfunded Liability

\$4.3 M
[FY2021]

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 J. Teichert
Blackwell Taylor
*indicates Chairperson

BOARD ADMINISTRATOR

Elena Kothman

SYSTEM MEMBERS

Active Members755
Total Payroll\$42.3 M
Average Salary\$56,100
Average Age49
Average Service12.2

Retired Members497
Benefits Paid\$15.4 M
Average Benefit\$31,100
Average AgeNA

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees36
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



Click/Scan for website

\$183.5 M
Market Value

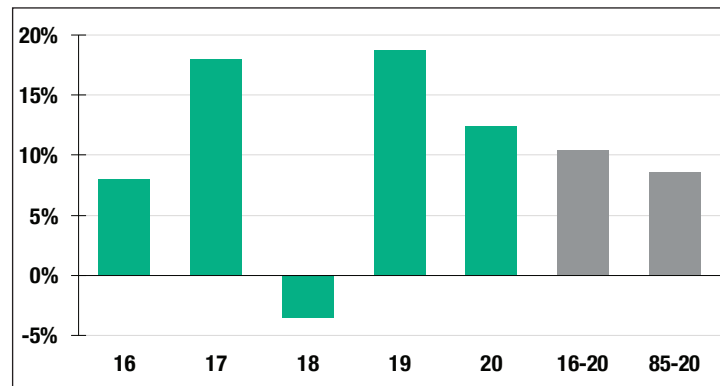
12.42%
2020 Returns

8.99%
2011-2020
[Annualized]

8.58%
1985-2020
[Annualized]

Investment Returns

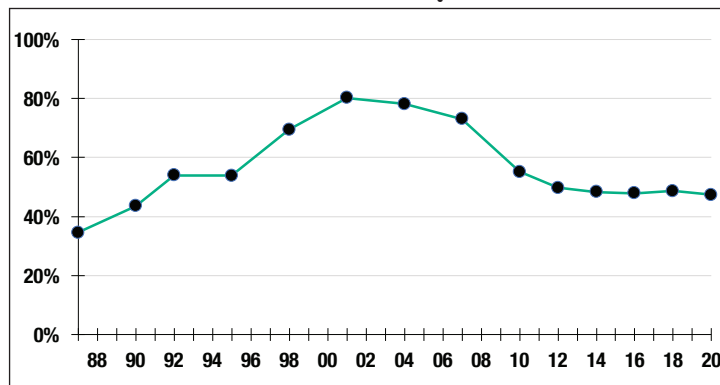
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



6.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



47.3%

Funded Ratio

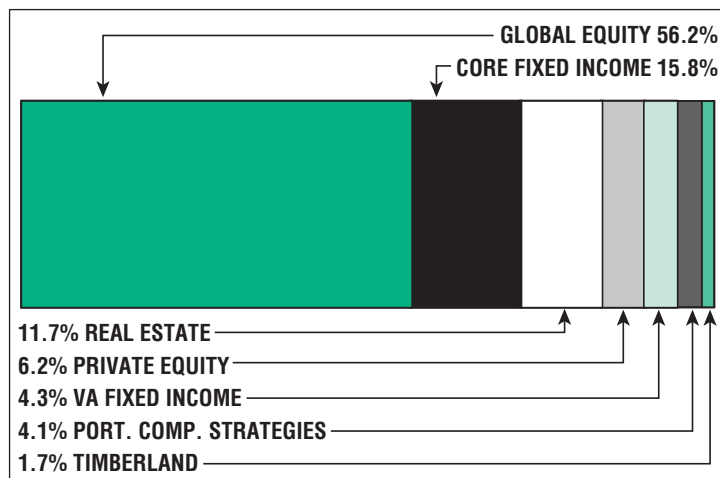
2037

Fully Funded

**8.35% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$172.2 M

Unfunded Liability

\$12.0 M
[FY2021]

Total Pension
Appropriation

Arlington

CONTACT INFORMATION

27 Maple Street
Suite G-11
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 Members812
Total Payroll\$41.8 M
Average Salary\$51,500
Average Age46
Average Service9.6

Retired Members608
Benefits Paid\$19.3 M
Average Benefit\$31,700
Average Age75

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees77
Reported Earnings22
Excess Earners1
Refund Due\$2,155

Last Valuation: 1/1/20
Actuary: Stone



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\$191.3 M
Market Value

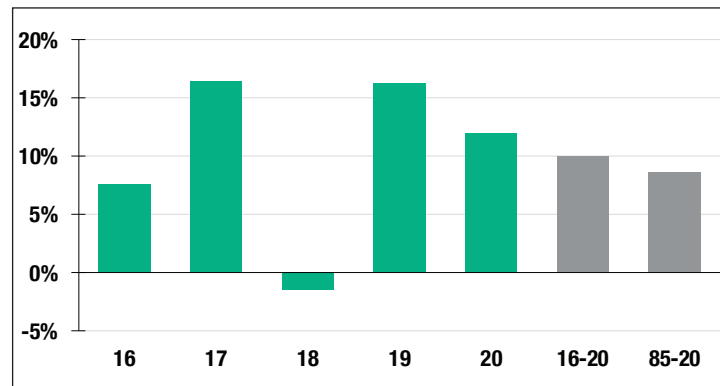
11.94%
2020 Returns

8.72%
2011-2020
[Annualized]

8.54%
1985-2020
[Annualized]

Investment Returns

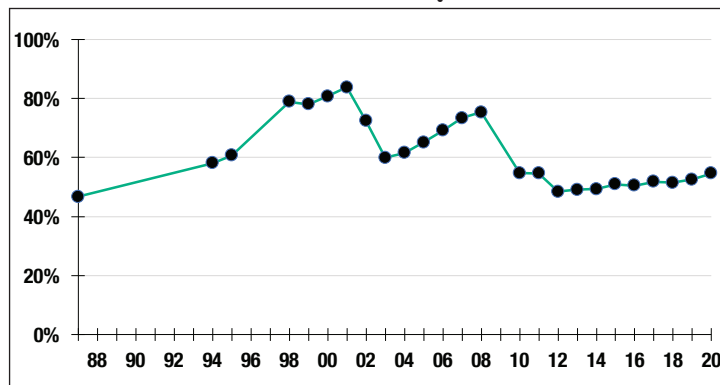
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



54.6%

Funded Ratio

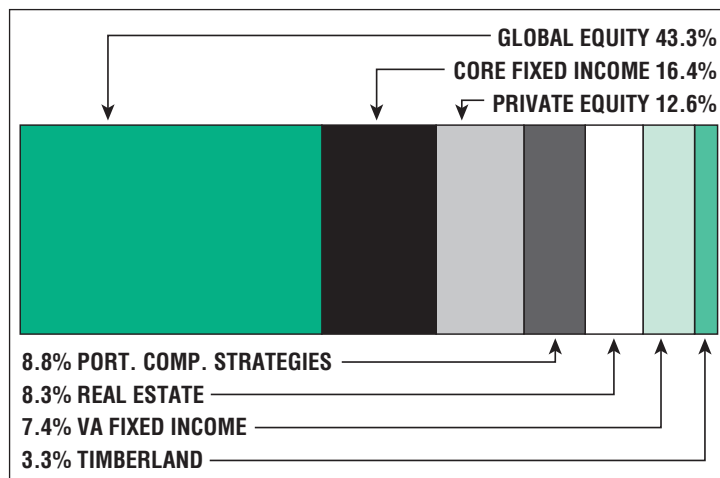
2034

Fully Funded

**6.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$139.8 M

Unfunded Liability

\$13.8 M
[FY2021]

Total Pension
Appropriation

Attleboro

CONTACT INFORMATION

77 Park Street
Attleboro, MA 02703
Phone 508-223-2222 Ext 3201
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees41
Reported Earnings10
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$190.1 M
Market Value

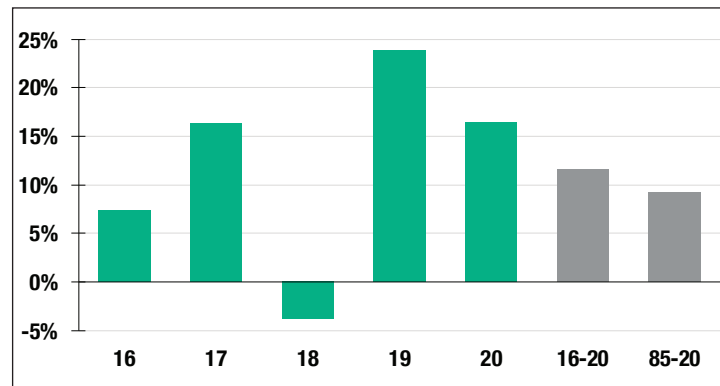
16.51%
2020 Returns

9.78%
2011-2020
[Annualized]

9.25%
1985-2020
[Annualized]

Investment Returns

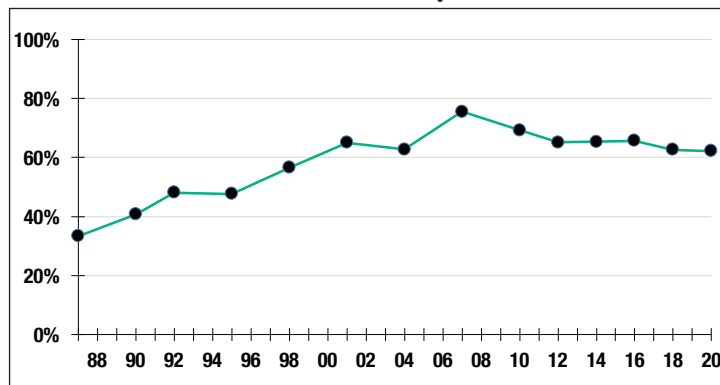
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



62.2%

Funded Ratio

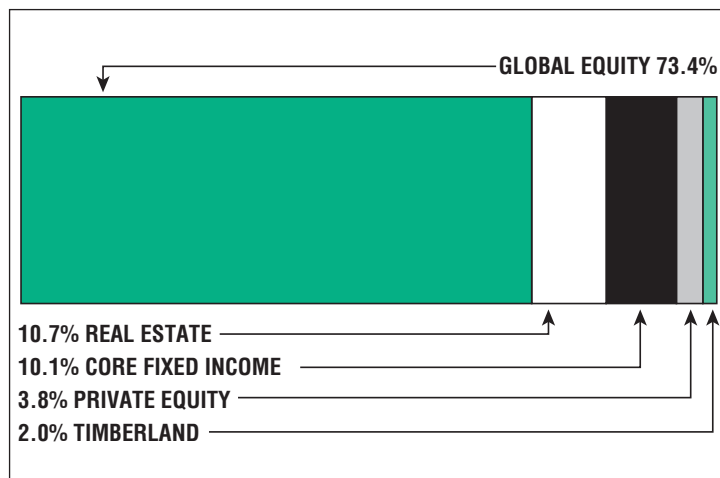
2037

Fully Funded

**5.86% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$95.8 M

Unfunded Liability

\$8.4 M
[FY2021]

Total Pension
Appropriation

Barnstable County

CONTACT INFORMATION

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

BOARD MEMBERS

Robert Lawton, Jr.*
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees332
Reported Earnings122
Excess Earners3
Refund Due\$83,832

Last Valuation: 1/1/20
Actuary: Segal



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\$1.4 B
Market Value

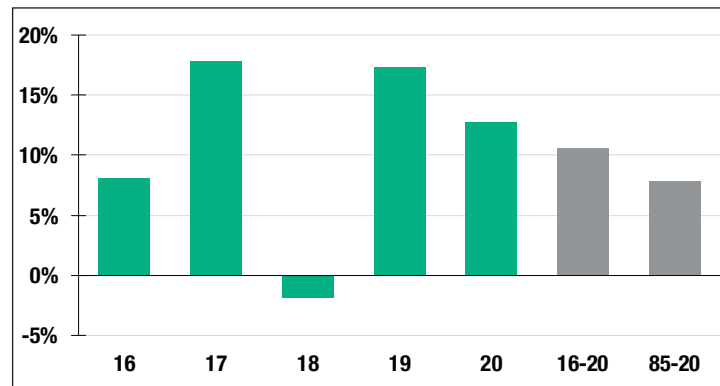
12.71%
2020 Returns

9.08%
2011-2020
[Annualized]

7.83%
1985-2020
[Annualized]

Investment Returns

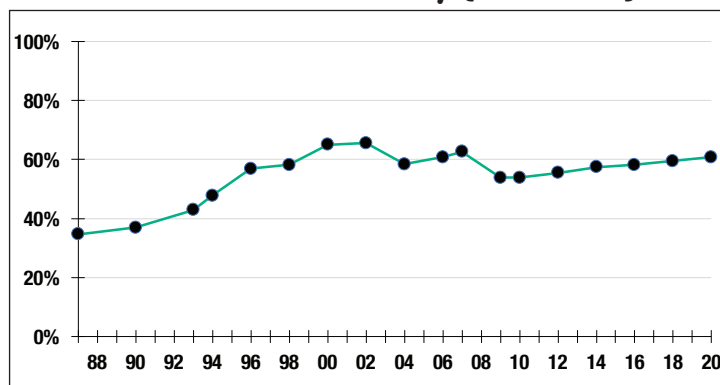
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



60.8%

Funded Ratio

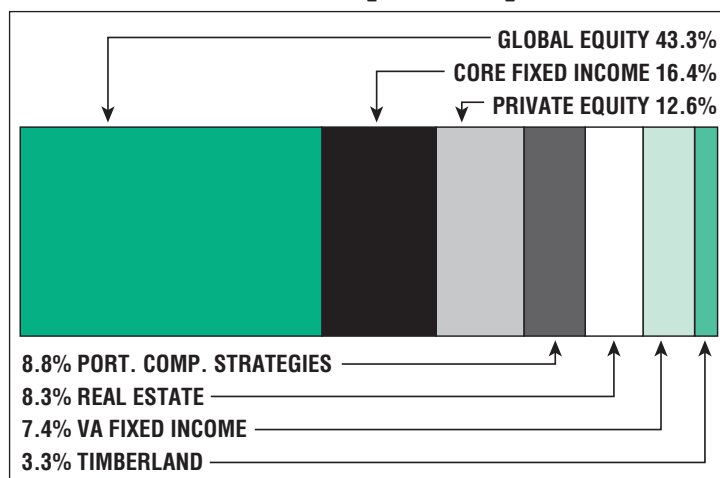
2037

Fully Funded

**5.80% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$782.8 M

Unfunded Liability

\$70.4 M
[FY2021]

Total Pension
Appropriation

Belmont

CONTACT INFORMATION

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

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 Service10.7

Retired Members351
Benefits Paid\$11.6 M
Average Benefit\$32,900
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees34
Reported Earnings10
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



Click/Scan for website

\$137.9 M
Market Value

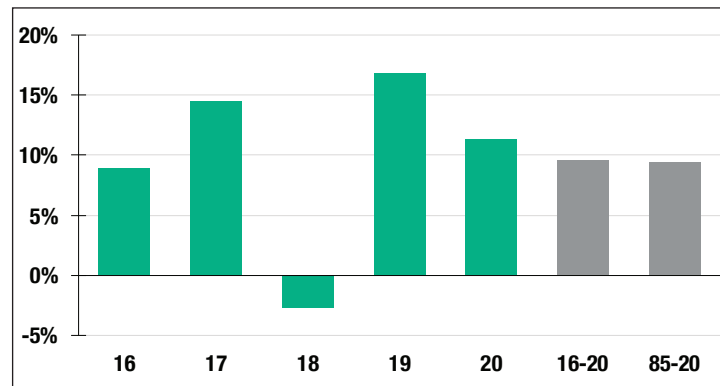
11.30%
2020 Returns

8.75%
2011-2020
[Annualized]

9.38%
1985-2020
[Annualized]

Investment Returns

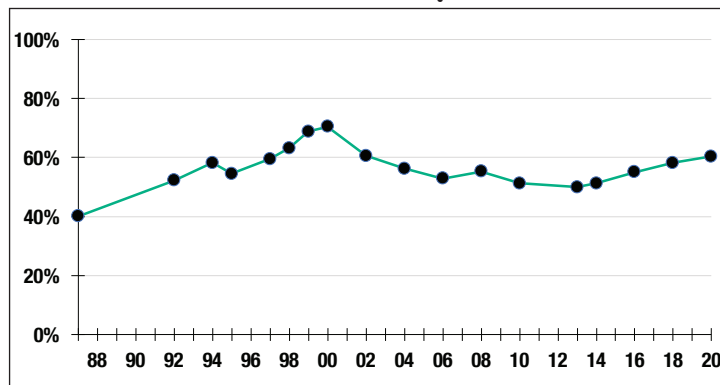
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



60.4%

Funded Ratio

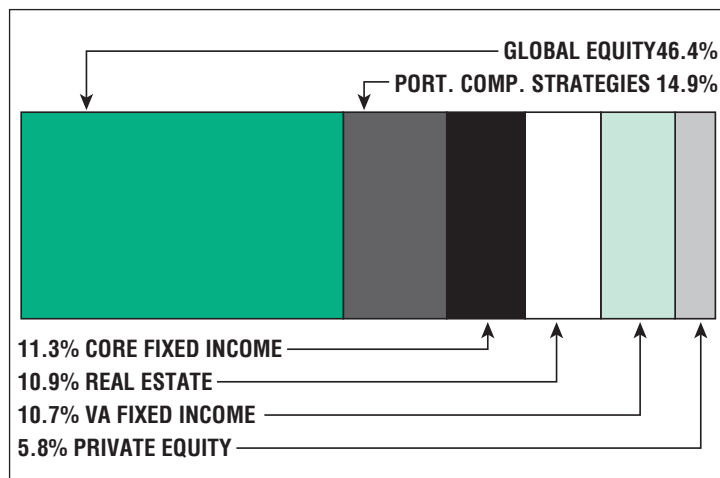
2031

Fully Funded

**4.45% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$79.5 M

Unfunded Liability

\$10.8 M
[FY2021]

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 Members1,151
Total Payroll\$47.2 M
Average Salary\$41,000
Average Age50
Average Service11

Retired Members816
Benefits Paid\$14.8 M
Average Benefit\$18,200
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees23
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



Click/Scan for website

\$301.5 M
Market Value

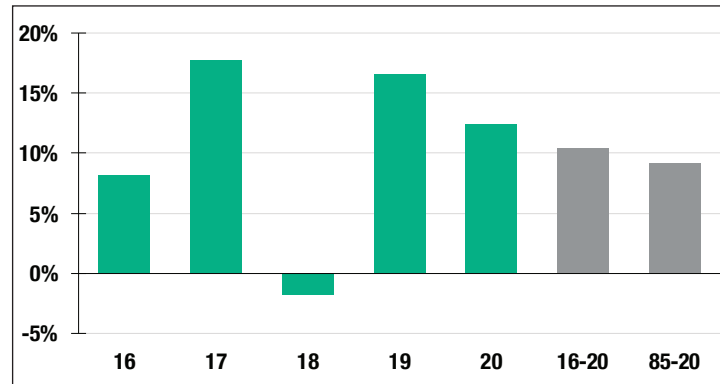
12.39%
2020 Returns

8.92%
2011-2020
[Annualized]

9.14%
1985-2020
[Annualized]

Investment Returns

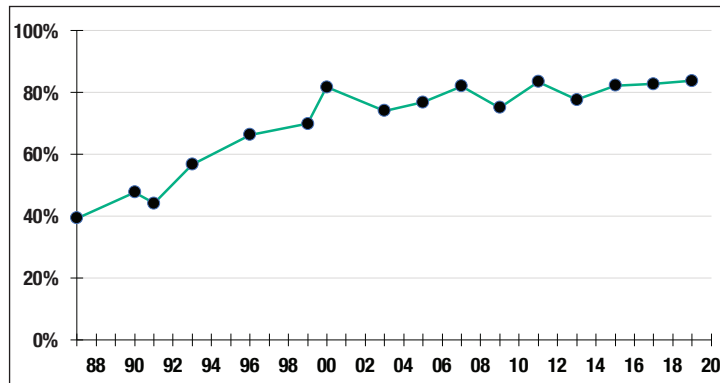
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



83.8%

Funded Ratio

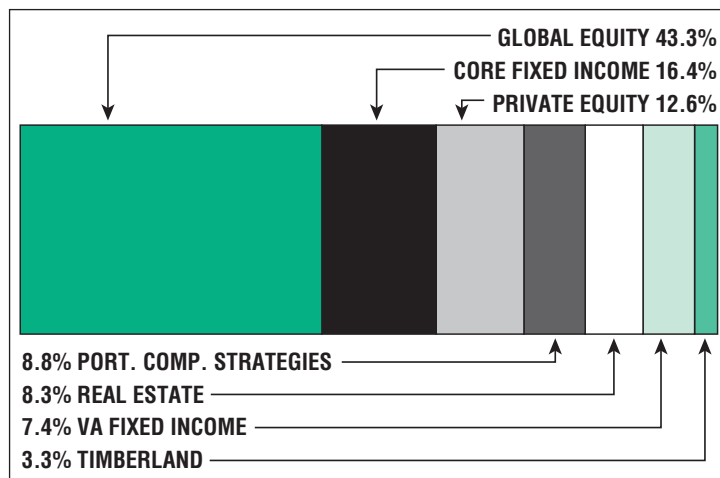
2028

Fully Funded

**7.01% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$47.3 M

Unfunded Liability

\$10.9 M
[FY2021]

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
Richard Pierce*
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 Service10.9

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees44
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



Click/Scan for website

\$158.4 M
Market Value

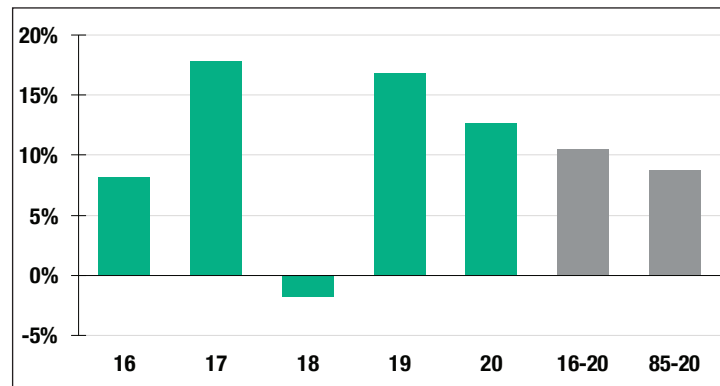
12.60%
2020 Returns

9.06%
2011-2020
[Annualized]

8.77%
1985-2020
[Annualized]

Investment Returns

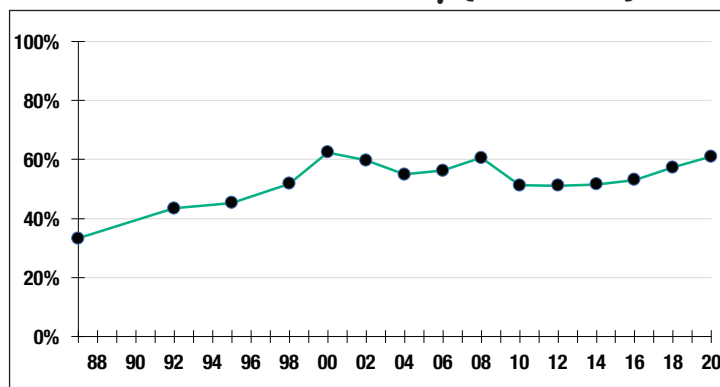
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



61.0%

Funded Ratio

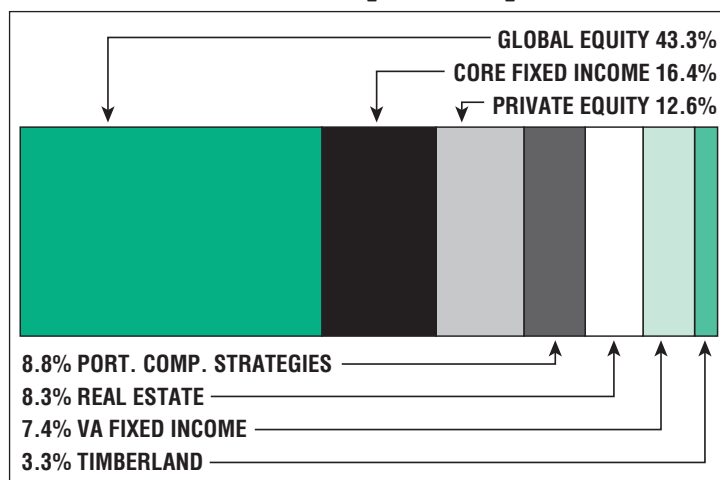
2033

Fully Funded

**4.5% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$89.6 M

Unfunded Liability

\$12.0 M
[FY2021]

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

2019 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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\$13.5 M
Market Value

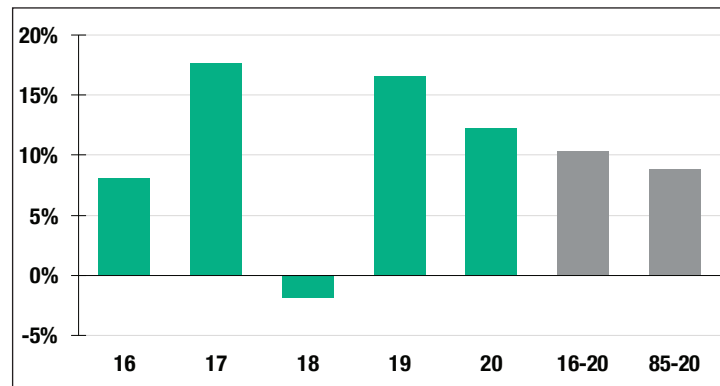
12.26%
2020 Returns

8.90%
2011-2020
[Annualized]

8.84%
1985-2020
[Annualized]

Investment Returns

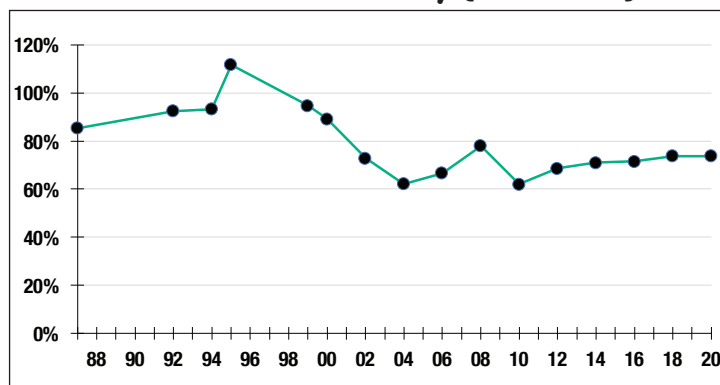
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate of Return

Funded Ratio History [1987-2020]



73.8%

Funded Ratio

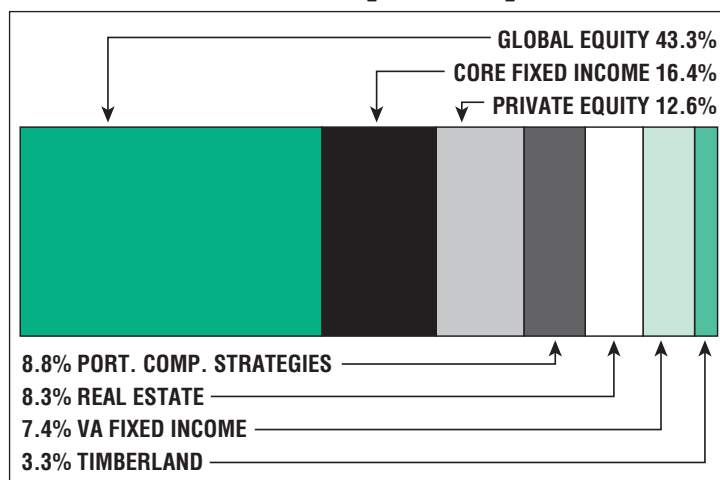
2032

Fully Funded

7.1% Total Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$4.2 M

Unfunded Liability

\$598 K
[FY2021]

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

Timothy Smyth

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 1,477
Reported Earnings 256
Excess Earners 11
Refund Due \$253,733

Last Valuation: 1/1/20
Actuary: Segal

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



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\$6.3 B
Market Value

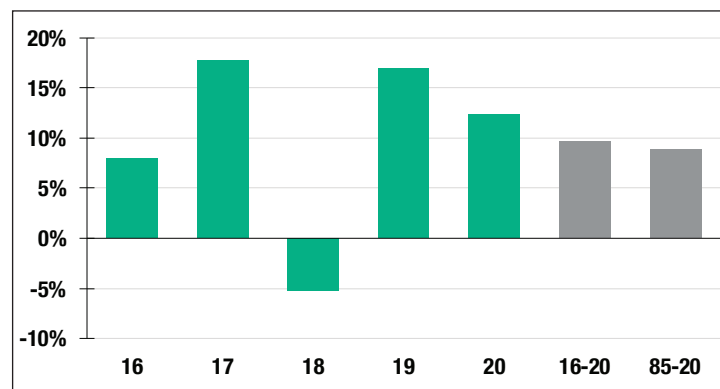
12.36%
2020 Returns

8.00%
2011-2020
(Annualized)

8.93%
1985-2020
(Annualized)

Investment Returns

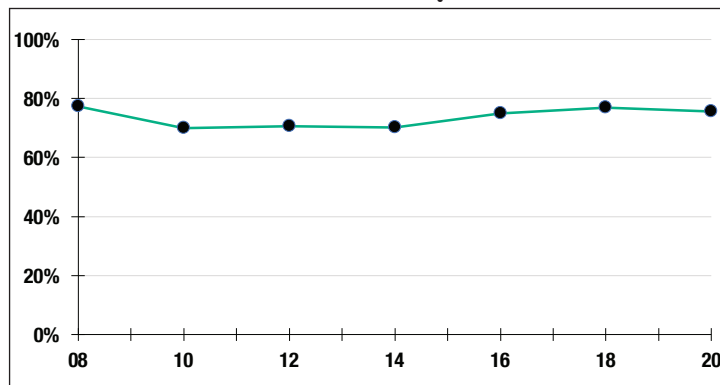
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.05%

Assumed Rate
of Return

Funded Ratio History [2008-2020]



75.6%

Funded Ratio

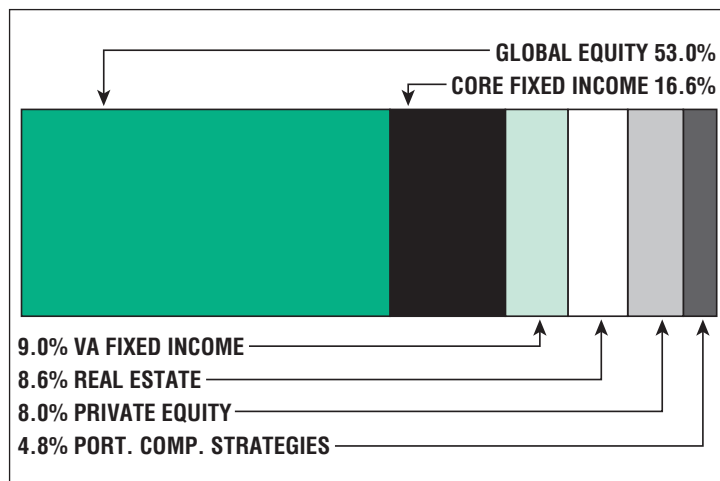
2027

Fully Funded

**8.85% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$1.8 B

Unfunded Liability

\$335.5 M
(FY2021)

Total Pension
Appropriation

Boston (Teachers)

CONTACT INFORMATION

See Boston (City)

SYSTEM MEMBERS

Active Members6,358
Total Payroll\$565.0 M
Average Salary\$88,900
Average Age42
Average Service10.5

Retired Members4,790
Benefits Paid\$254.4 M
Average Benefit\$53,100
Average Age73

Last Valuation: 1/1/19

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 2016-2020 and total returns for the Boston System prior to 2011.

\$2.0 B
Market Value

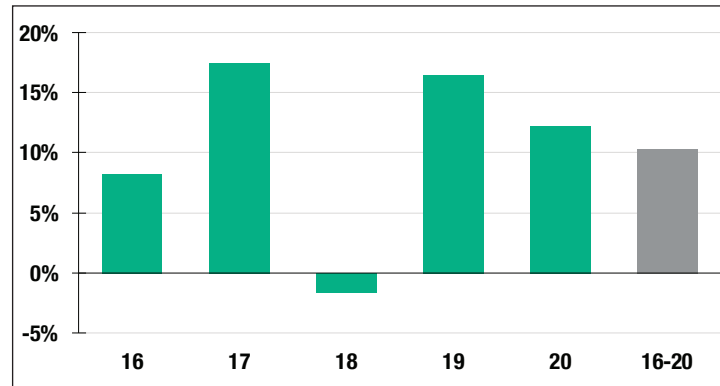
12.23%
2020 Returns

8.89%
2011-2020
(Annualized)

NA
1985-2020
(Annualized)

Investment Returns

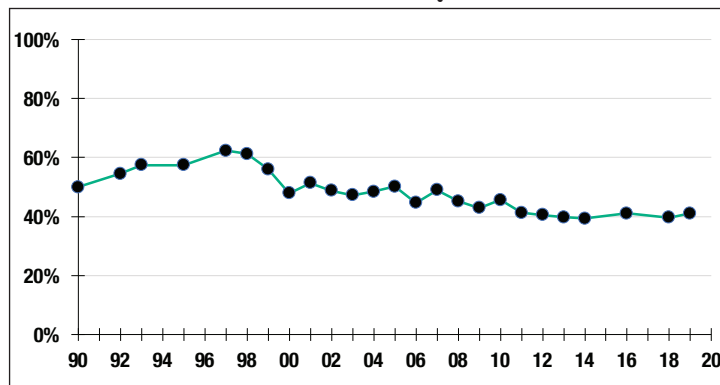
(2016-2020 & 5-Year Averages, as of 12/31/20)



7.25%

Assumed Rate
of Return

Funded Ratio History (1990-2020)



41.1%

Funded Ratio

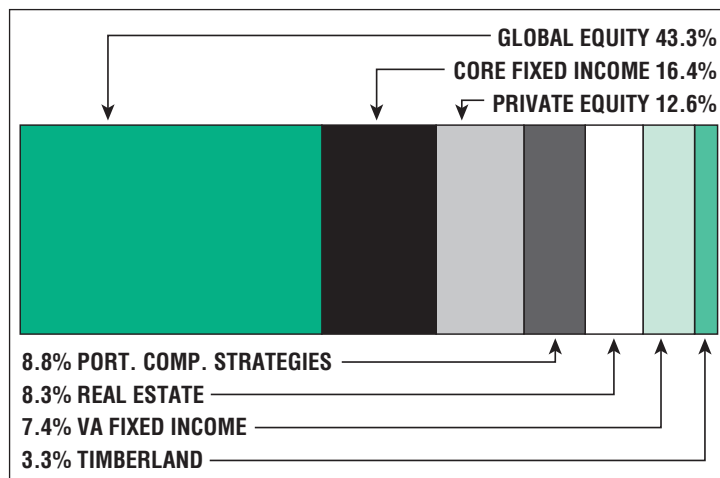
2036

Fully Funded

**9.63% Total
Increasing**

Funding Schedule

Asset Allocation (12/31/20)



\$2.4 B

Unfunded Liability

\$163.0 M
(FY2021)

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 Service12.5

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees57
Reported Earnings15
Excess Earners1
Refund Due\$50

Last Valuation: 1/1/20
Actuary: KMS



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\$252.6 M
Market Value

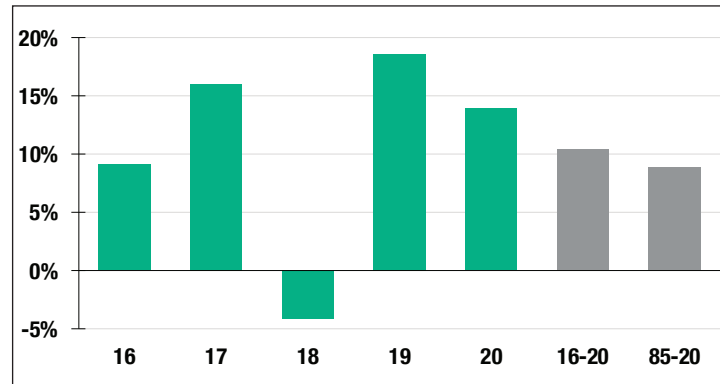
13.91%
2020 Returns

8.29%
2011-2020
[Annualized]

8.80%
1985-2020
[Annualized]

Investment Returns

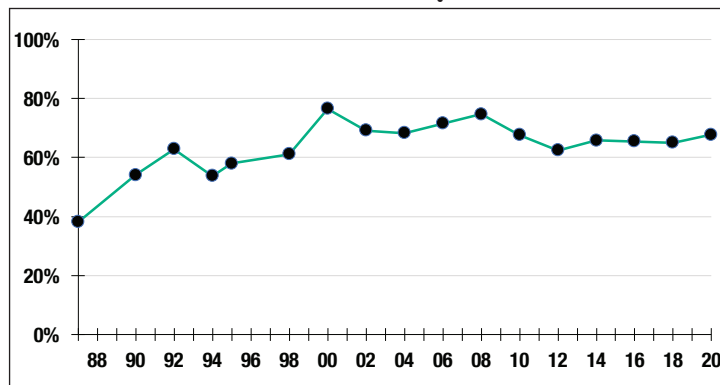
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.65%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



67.7%

Funded Ratio

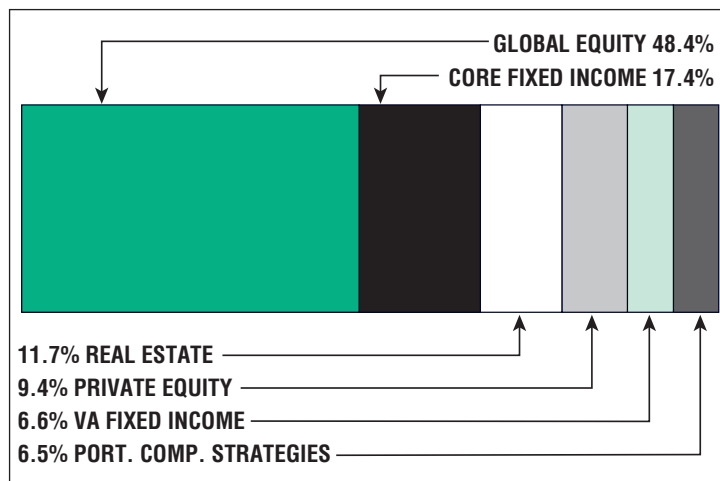
2033

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$104.7 M

Unfunded Liability

\$12.5 M
[FY2021]

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 Service11.5

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees228
Reported Earnings69
Excess Earners3
Refund Due\$10,980

Last Valuation: 1/1/20
Actuary: Stone



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\$818.2 M
Market Value

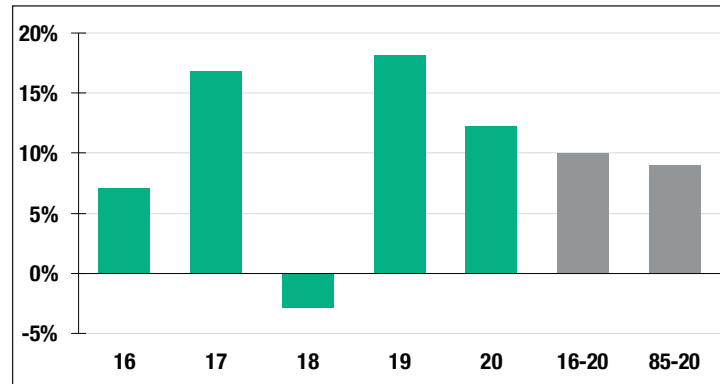
12.21%
2020 Returns

8.68%
2011-2020
[Annualized]

8.99%
1985-2020
[Annualized]

Investment Returns

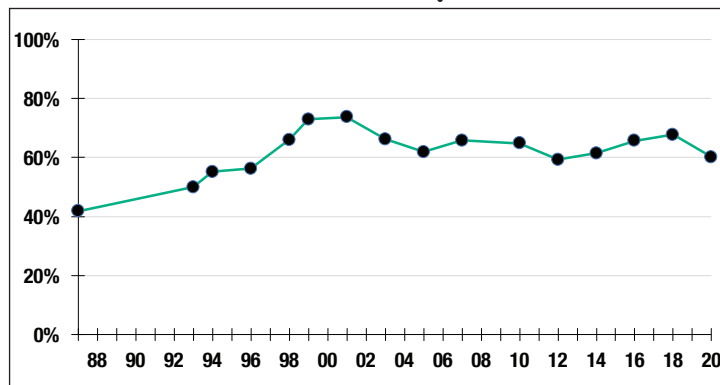
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



60.1%

Funded Ratio

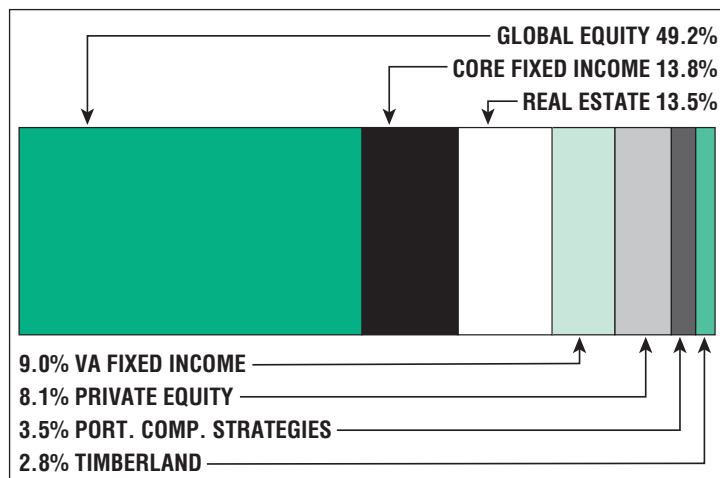
2034

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$482.1 M

Unfunded Liability

\$45.7 M
[FY2021]

Total Pension
Appropriation

Brockton

CONTACT INFORMATION

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

BOARD MEMBERS

AnnMarie Raymond
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 Service11.3

Retired Members1,293
Benefits Paid\$44.5 M
Average Benefit\$34,400
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees151
Reported Earnings40
Excess Earners3
Refund Due\$62,782

Last Valuation: 1/1/20
Actuary: KMS



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\$470.6 M
Market Value

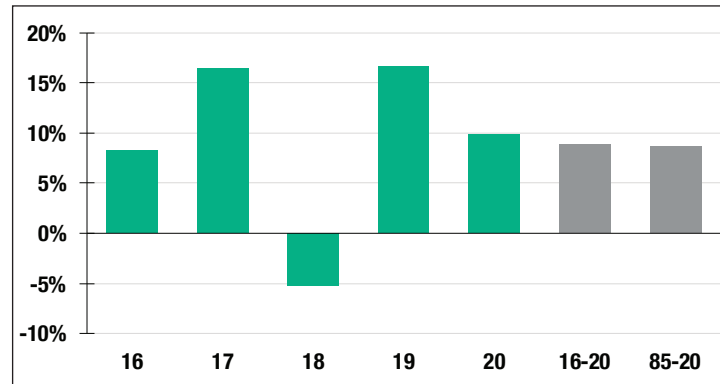
9.87%
2020 Returns

7.32%
2011-2020
[Annualized]

8.65%
1985-2020
[Annualized]

Investment Returns

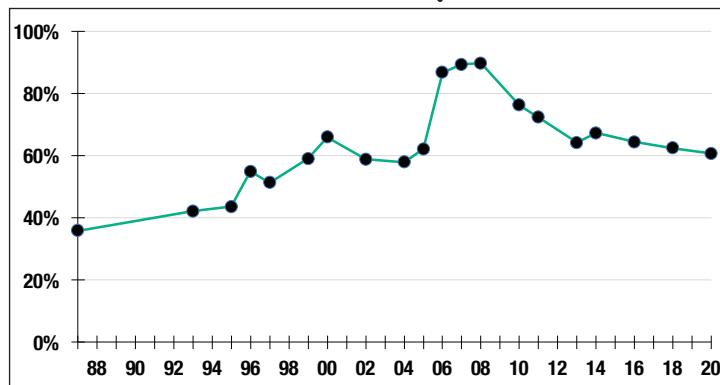
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



60.6%

Funded Ratio

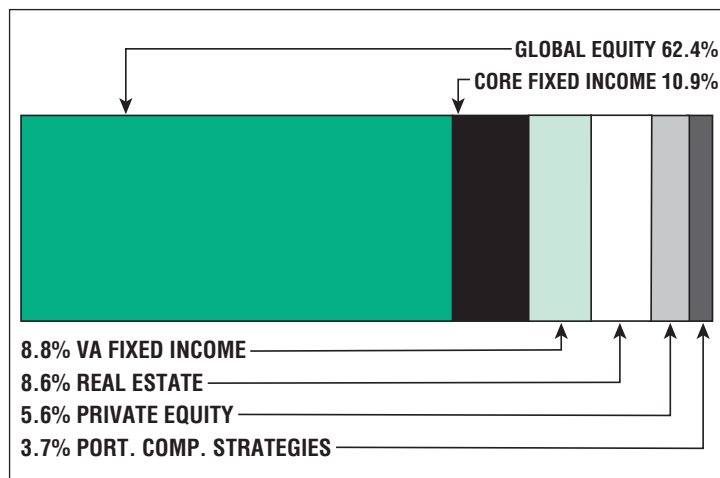
2032

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$282.9 M

Unfunded Liability

\$30.4 M
[FY2021]

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
Jeana Franconi
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 153
Reported Earnings 34
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/20
Actuary: Segal



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\$386.7 M
Market Value

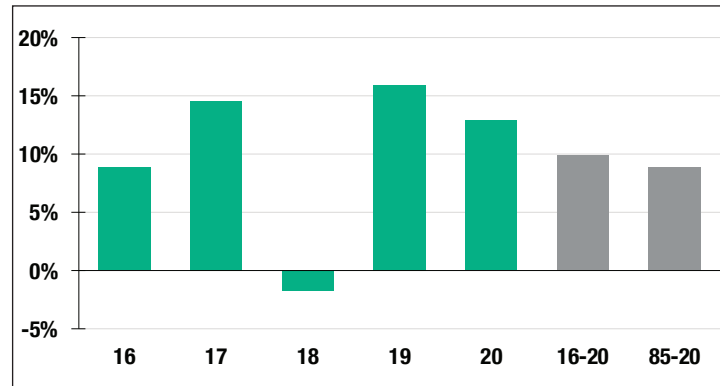
12.81%
2020 Returns

7.93%
2011-2020
[Annualized]

8.77%
1985-2020
[Annualized]

Investment Returns

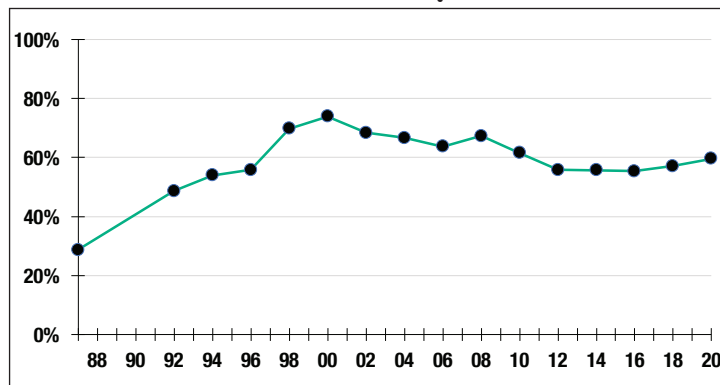
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.20%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



59.6%

Funded Ratio

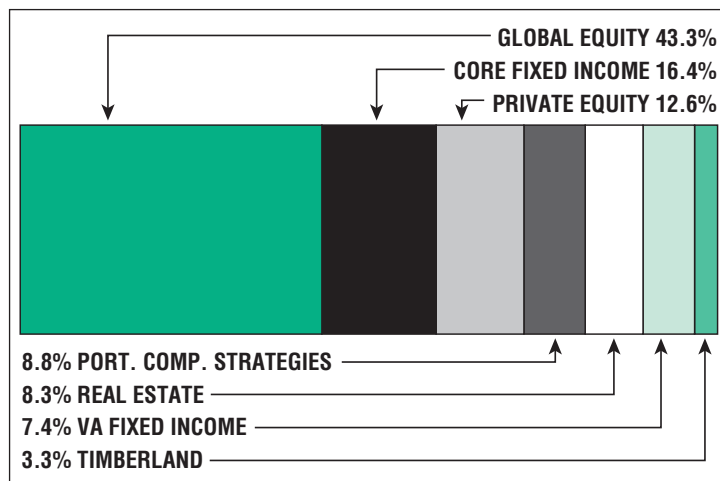
2030

Fully Funded

**7.85% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$227.9 M

Unfunded Liability

\$27.4 M
[FY2021]

Total Pension
Appropriation

Cambridge

CONTACT INFORMATION

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

BOARD MEMBERS

James Monagle
Michael Gardner
John Shinkwin
Francis Murphy*
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 Service13.8

Retired Members2,247
Benefits Paid\$87.0 M
Average Benefit\$38,700
Average Age72

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees232
Reported Earnings54
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$1.6 B
Market Value

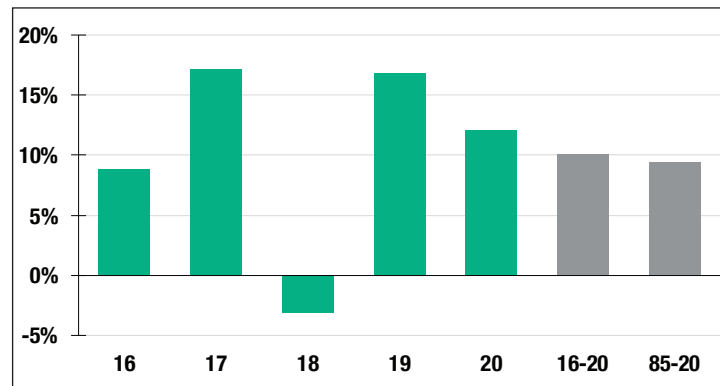
12.08%
2020 Returns

9.05%
2011-2020
[Annualized]

9.35%
1985-2020
[Annualized]

Investment Returns

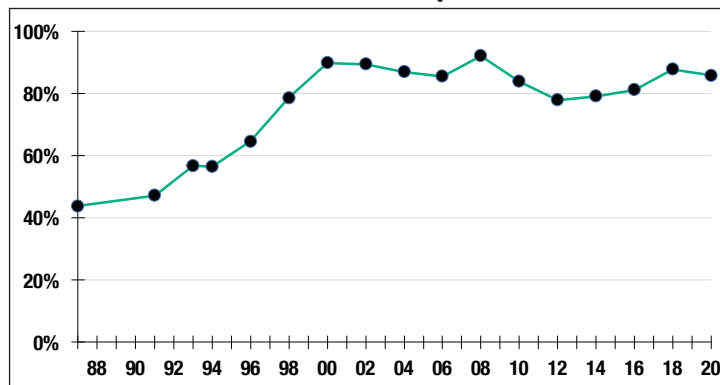
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



85.8%

Funded Ratio

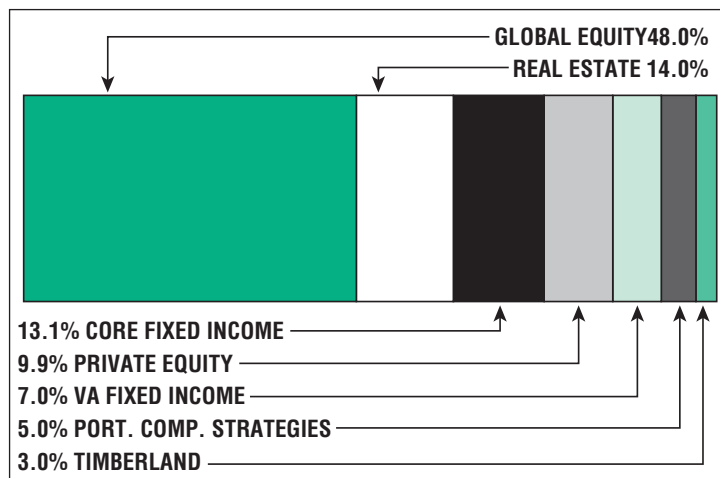
2026

Fully Funded

**12.1% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$239.9 M

Unfunded Liability

\$48.0 M
[FY2021]

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

Barbara O'Brien

SYSTEM MEMBERS

Active Members715
Total Payroll\$39.7 M
Average Salary\$55,600
Average Age45
Average Service12.1

Retired Members395
Benefits Paid\$11.6 M
Average Benefit\$29,400
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees61
Reported Earnings26
Excess Earners1
Refund Due\$2,053

Last Valuation: 1/1/19

Actuary: PERAC



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\$226.1 M
Market Value

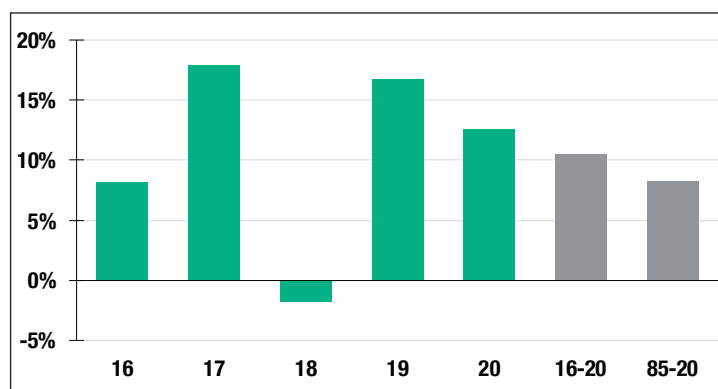
12.53%
2020 Returns

8.97%
2011-2020
[Annualized]

8.22%
1985-2020
[Annualized]

Investment Returns

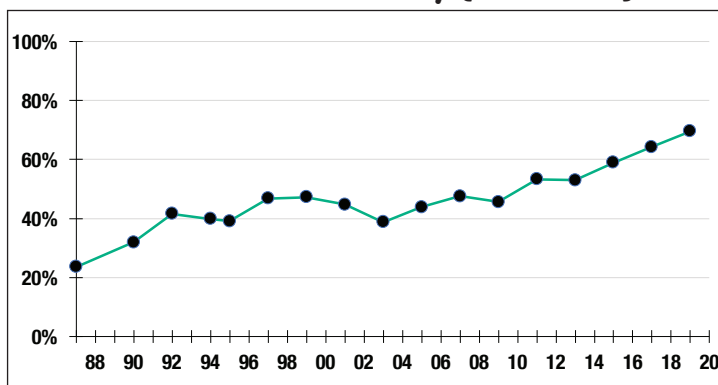
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



69.6%

Funded Ratio

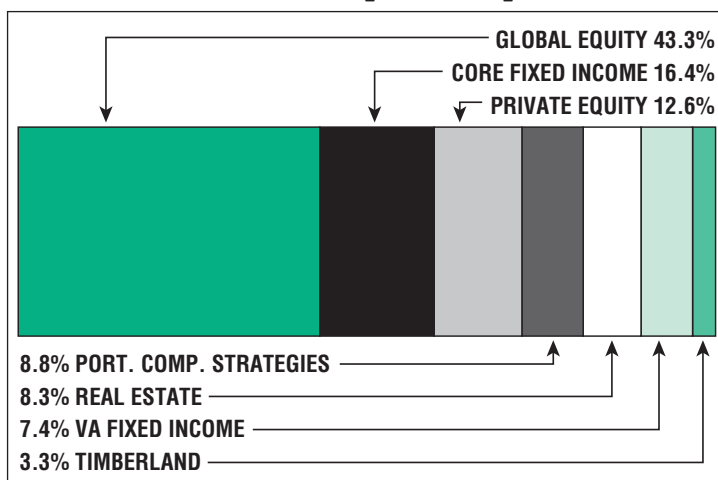
2029

Fully Funded

**5.7% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$74.5 M

Unfunded Liability

\$13.7 M
[FY2021]

Total Pension
Appropriation

Chicopee

CONTACT INFORMATION

274 Front Street
City Hall, Market Square
Chicopee, MA 01013-2685
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 Members1,179
Total Payroll\$53.2 M
Average Salary\$45,200
Average Age47
Average Service13.3

Retired Members845
Benefits Paid\$22.1 M
Average Benefit\$26,100
Average Age72

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees93
Reported Earnings29
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: Stone



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\$403.7 M
Market Value

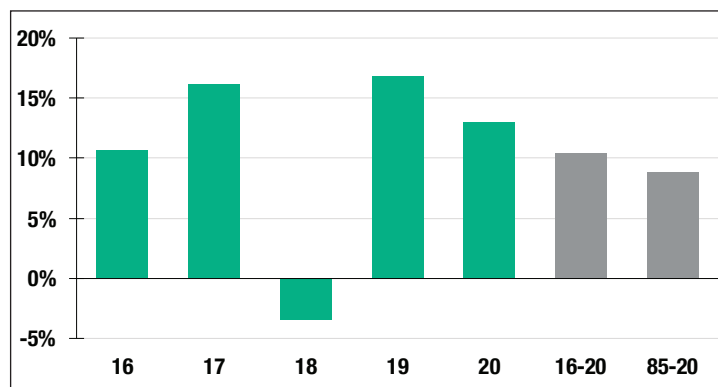
12.91%
2020 Returns

9.19%
2011-2020
[Annualized]

8.81%
1985-2020
[Annualized]

Investment Returns

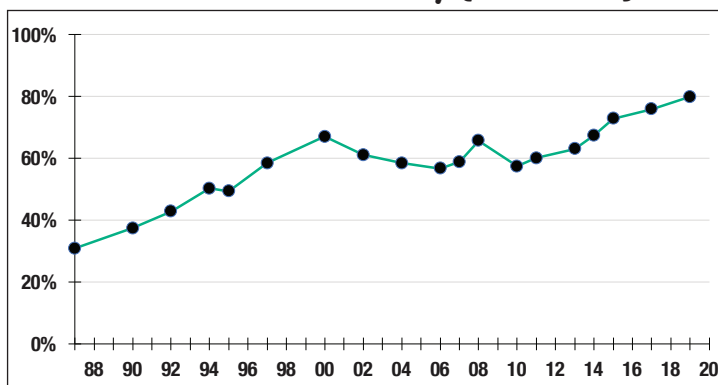
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



79.9%

Funded Ratio

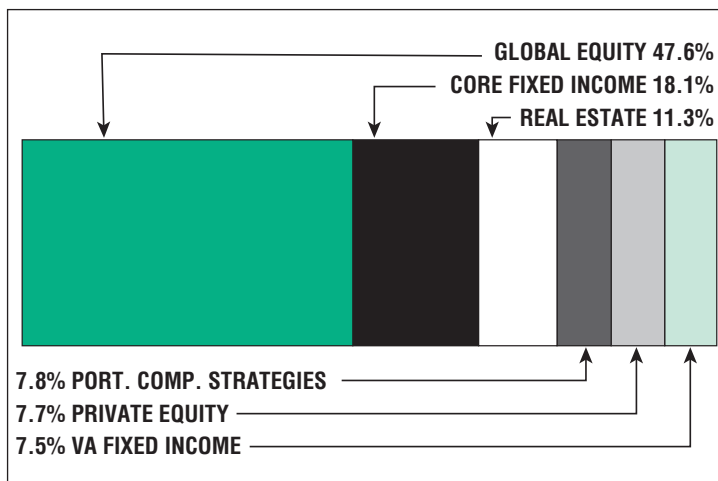
2027

Fully Funded

**3.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$82.9 M

Unfunded Liability

\$19.4 M
[FY2021]

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 Members248
Total Payroll\$11.6 M
Average Salary\$46,600
Average Age48
Average Service12.2

Retired Members132
Benefits Paid\$3.6 M
Average Benefit\$27,000
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees11
Reported Earnings3
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$63.9 M
Market Value

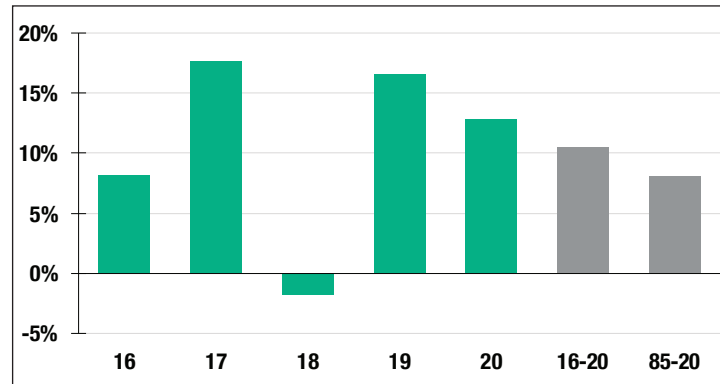
12.80%
2020 Returns

8.90%
2011-2020
[Annualized]

8.01%
1985-2020
[Annualized]

Investment Returns

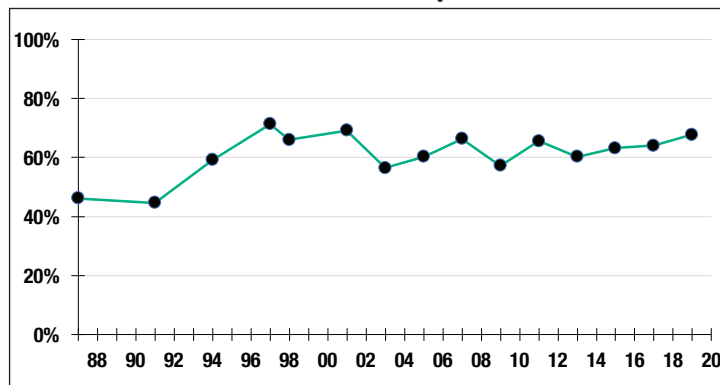
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



67.7%

Funded Ratio

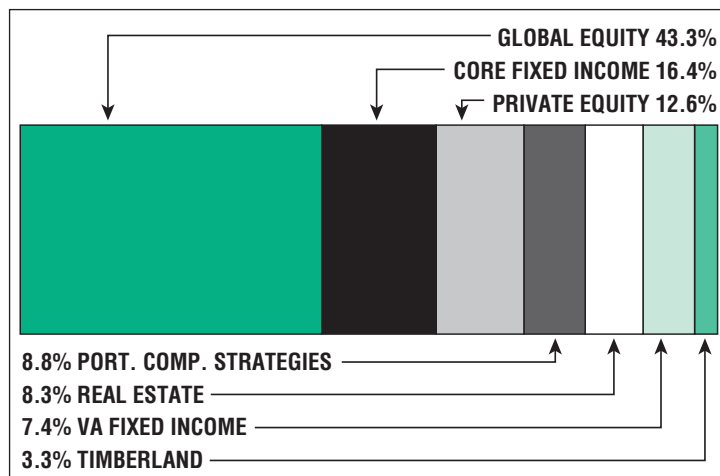
2035

Fully Funded

**5.58% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$24.1 M

Unfunded Liability

\$3.2 M
[FY2021]

Total Pension
Appropriation

Concord

CONTACT INFORMATION

55 Church Street
West Concord, MA 01742
Phone 978-318-3068
Fax 978-318-3160

BOARD MEMBERS

Mary Barrett
Kerry Lafleur
Peter Fulton*
Brian Whitney
Arnold Roth
*indicates Chairperson

BOARD ADMINISTRATOR

Linda Boucher

SYSTEM MEMBERS

Active Members544
Total Payroll\$35.3 M
Average Salary\$64,800
Average Age49
Average Service11.3

Retired Members315
Benefits Paid\$9.4 M
Average Benefit\$30,000
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees19
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$201.7 M
Market Value

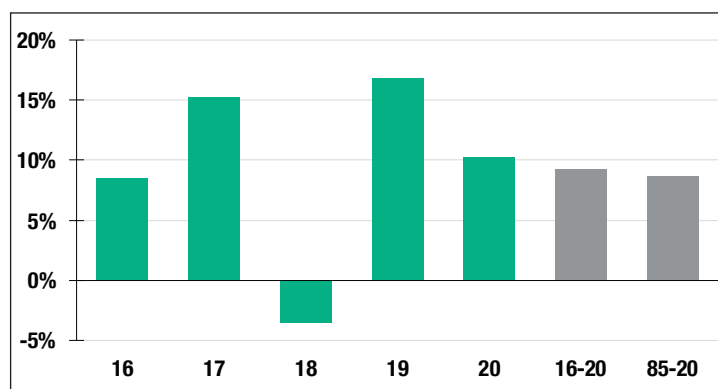
10.23%
2020 Returns

8.68%
2011-2020
[Annualized]

8.65%
1985-2020
[Annualized]

Investment Returns

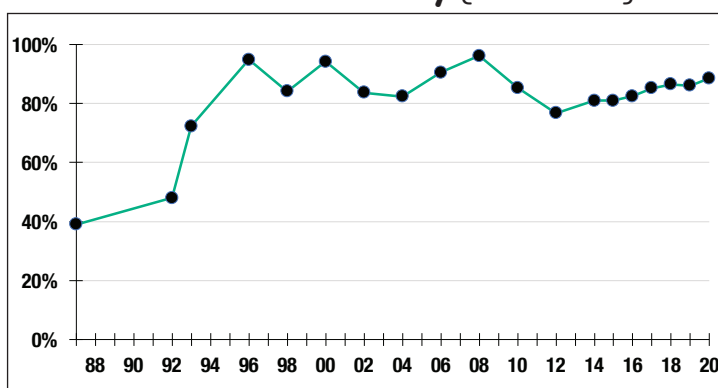
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



6.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



88.6%

Funded Ratio

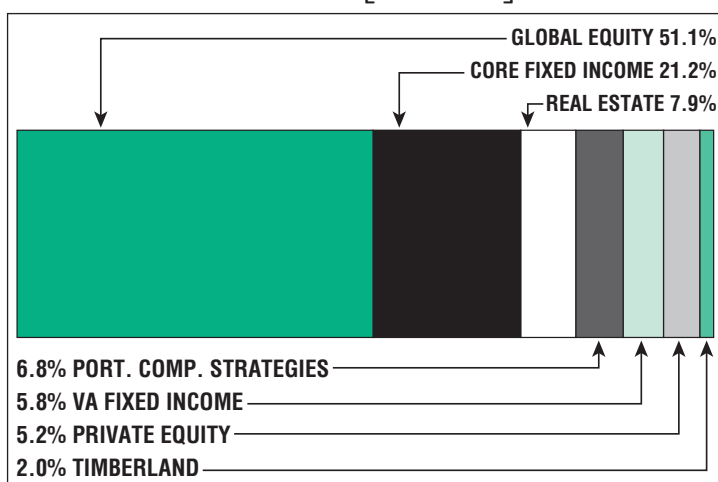
2029

Fully Funded

Level Dollar

Funding Schedule

Asset Allocation [12/31/20]



\$23.2 M

Unfunded Liability

\$6.4 M
[FY2021]

Total Pension
Appropriation

Danvers

CONTACT INFORMATION

Town Hall
1 Sylvan Street
Danvers, MA 01923
Phone 978-777-0001 Ext 3044
Fax 978-406-4196

BOARD MEMBERS

Heather Varney
Wayne Marquis*
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 Members413
Benefits Paid\$12.6 M
Average Benefit\$30,600
Average Age75

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees26
Reported Earnings7
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: KMS



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\$140.0 M
Market Value

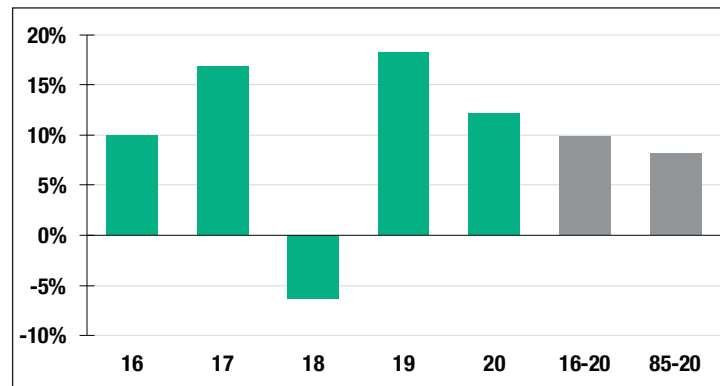
12.16%
2020 Returns

7.52%
2011-2020
[Annualized]

8.15%
1985-2020
[Annualized]

Investment Returns

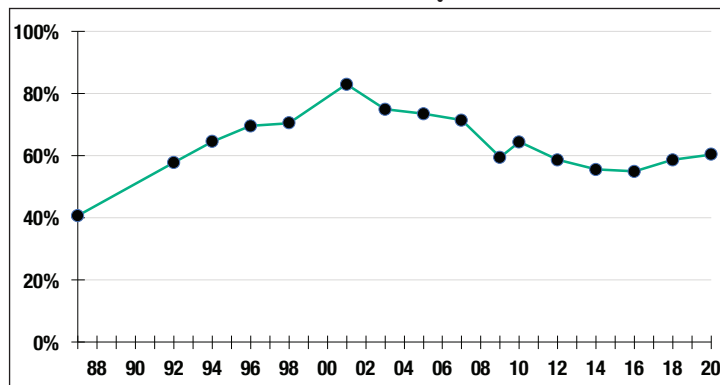
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



60.3%

Funded Ratio

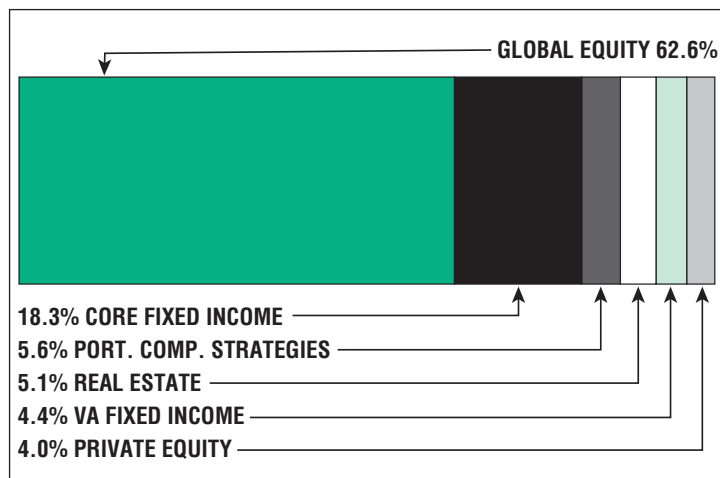
2035

Fully Funded

**4.0% Increasing
Phase-In**

Funding Schedule

Asset Allocation [12/31/20]



\$82.5 M

Unfunded Liability

\$7.9 M
[FY2021]

Total Pension
Appropriation

Dedham

CONTACT INFORMATION

202 Bussey St.
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 Service10.8

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees48
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



Click/Scan for website

\$171.8 M
Market Value

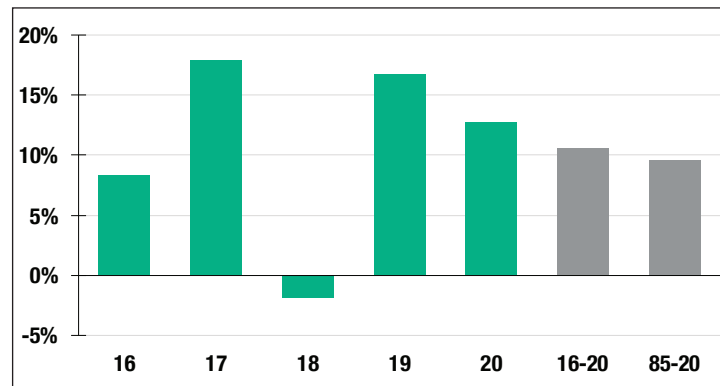
12.71%
2020 Returns

9.05%
2011-2020
[Annualized]

9.62%
1985-2020
[Annualized]

Investment Returns

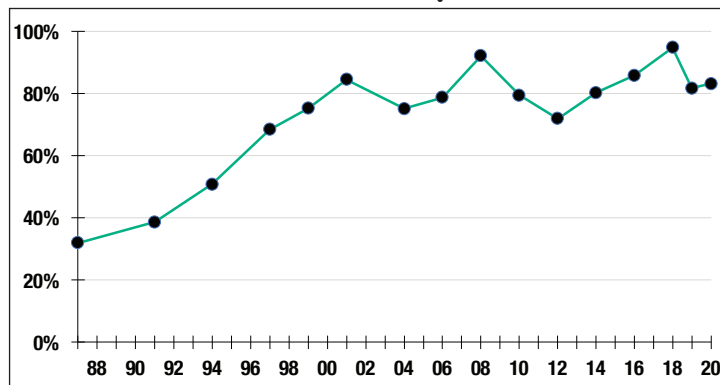
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



83.1%

Funded Ratio

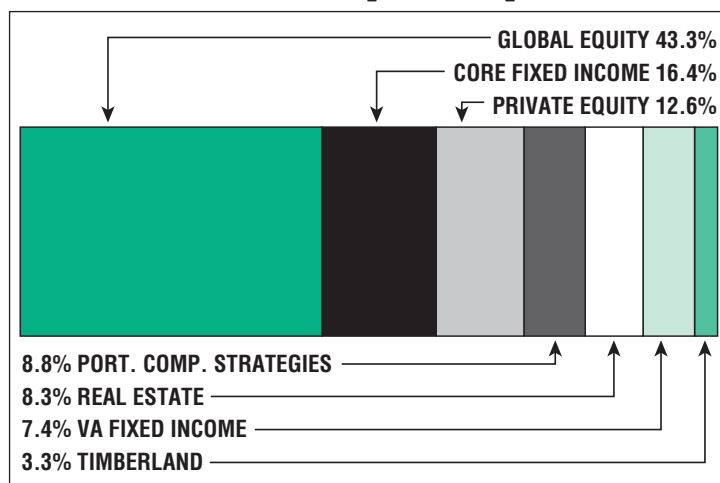
2030

Fully Funded

**4.97% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$30.8 M

Unfunded Liability

\$4.3 M
[FY2021]

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

Ann Metcalf*
Roger Wey
Jo Ann Murphy
David Rossi
Melanie Becker
*indicates Chairperson

BOARD ADMINISTRATOR

Kelly McCracken

SYSTEM MEMBERS

Active Members666
Total Payroll\$44.4 M
Average Salary\$66,700
Average Age49
Average Service10.3

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees28
Reported Earnings11
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: KMS



Click/Scan for website

\$209.5 M
Market Value

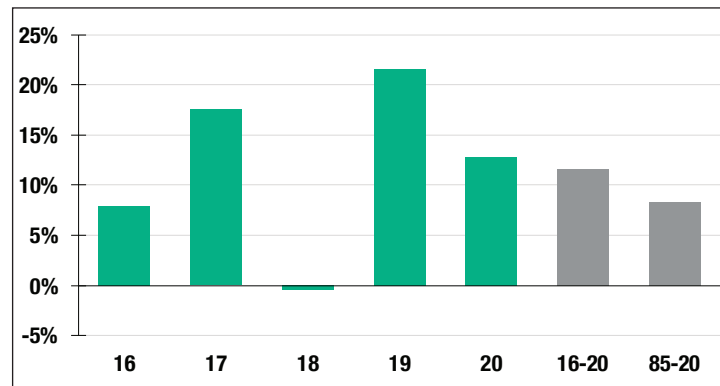
12.77%
2020 Returns

10.24%
2011-2020
[Annualized]

8.29%
1985-2020
[Annualized]

Investment Returns

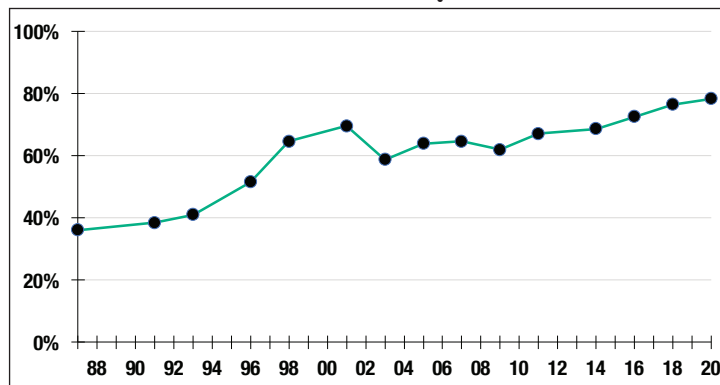
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



78.2%

Funded Ratio

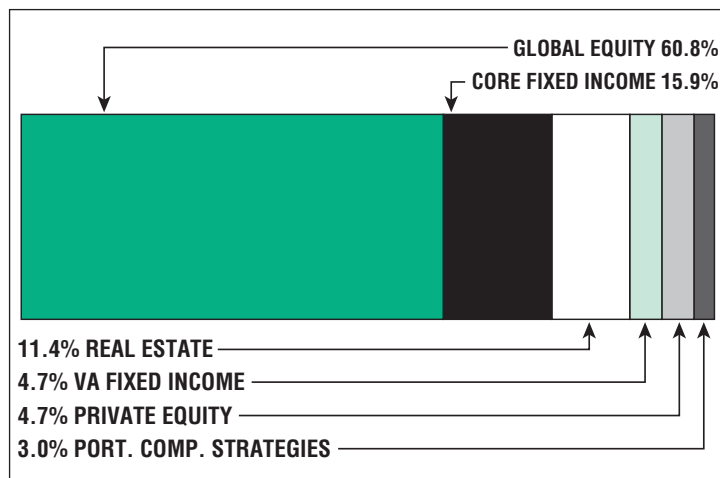
2031

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$48.3 M

Unfunded Liability

\$7.6 M
[FY2021]

Total Pension
Appropriation

Easthampton

CONTACT INFORMATION

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

BOARD MEMBERS

Hetal Patel
Jennifer Gallant
James Dunham*
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 Members178
Benefits Paid\$4.4 M
Average Benefit\$24,800
Average Age71

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees19
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$66.3 M
Market Value

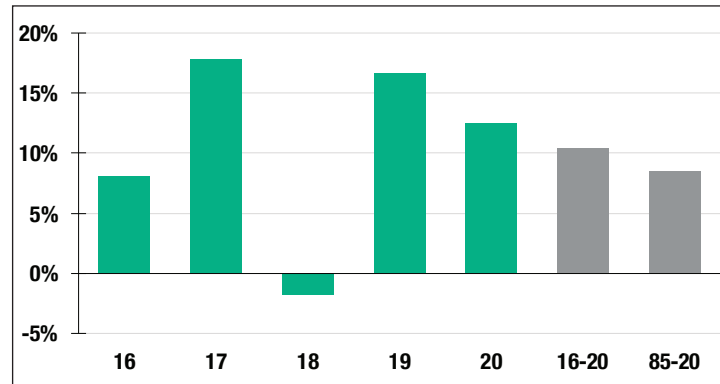
12.47%
2020 Returns

8.96%
2011-2020
[Annualized]

8.49%
1985-2020
[Annualized]

Investment Returns

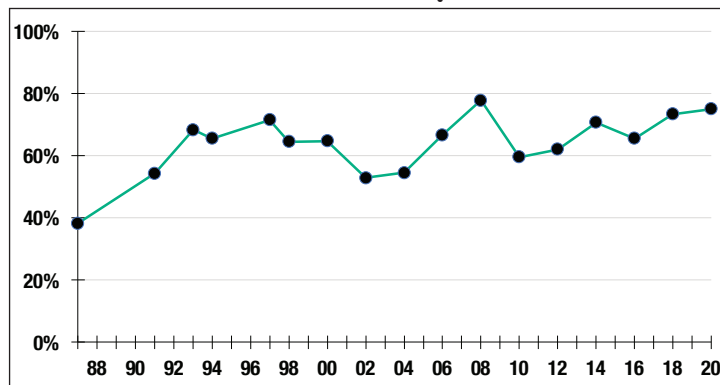
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



74.9%

Funded Ratio

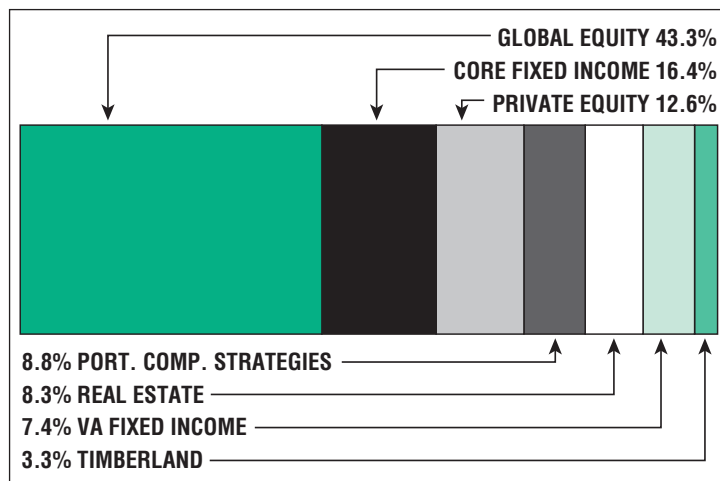
2032

Fully Funded

**5.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$20.0 M

Unfunded Liability

\$3.4 M
[FY2021]

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 Service10.8

Retired Members1,900
Benefits Paid\$48.4 M
Average Benefit\$25,500
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees118
Reported Earnings38
Excess Earners1
Refund Due\$27,067

Last Valuation: 1/1/20
Actuary: Segal



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\$586.1 M
Market Value

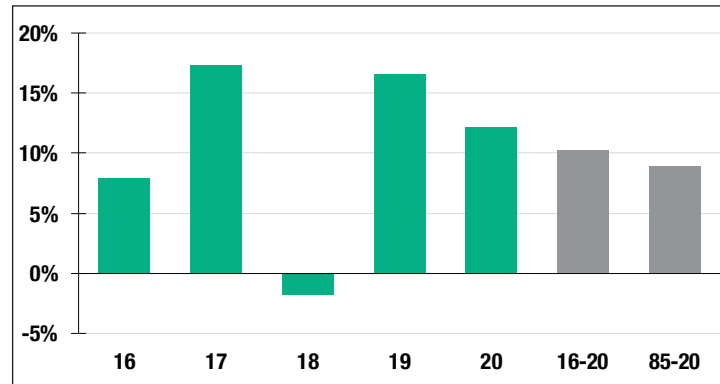
12.17%
2020 Returns

9.01%
2011-2020
[Annualized]

8.90%
1985-2020
[Annualized]

Investment Returns

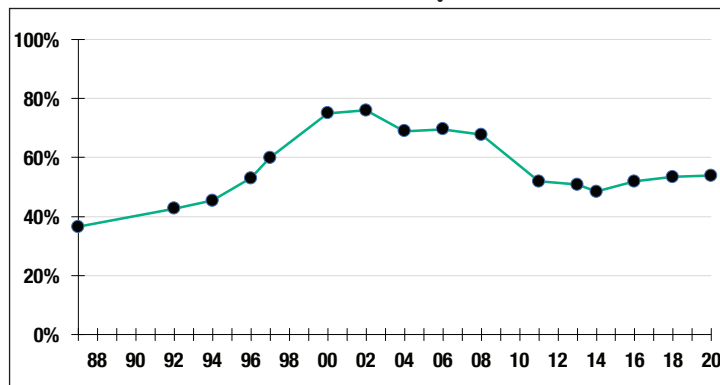
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.30%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



53.8%

Funded Ratio

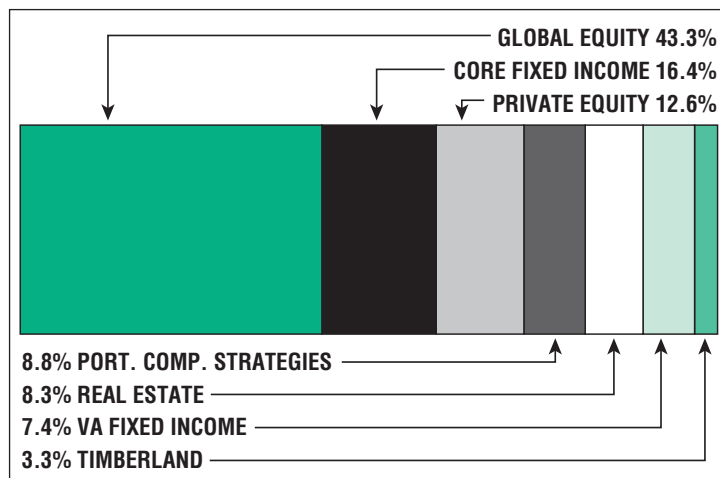
2035

Fully Funded

**Varies Increasing
Phase-In**

Funding Schedule

Asset Allocation [12/31/20]



\$437.1 M

Unfunded Liability

\$38.6 M
[FY2021]

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*
Michael Matarazzo
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees67
Reported Earnings16
Excess Earners1
Refund Due\$22,720

Last Valuation: 1/1/20
Actuary: PERAC



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\$215.8 M
Market Value

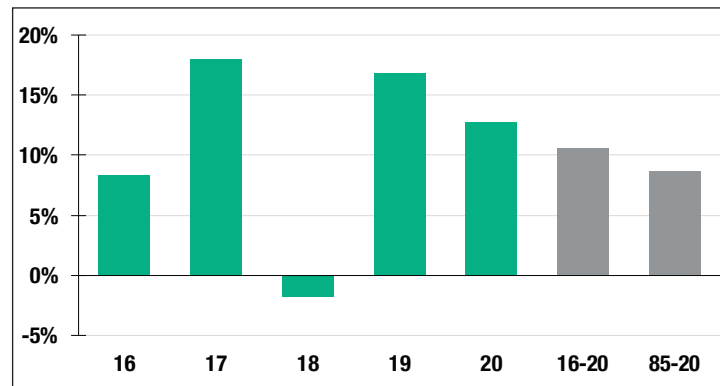
12.68%
2020 Returns

9.07%
2011-2020
[Annualized]

8.67%
1985-2020
[Annualized]

Investment Returns

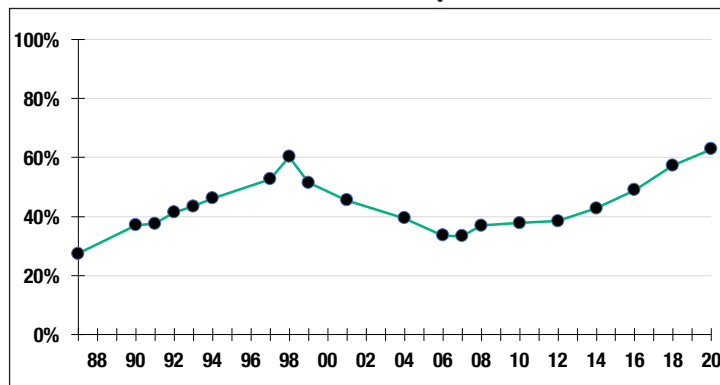
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.38%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



62.9%

Funded Ratio

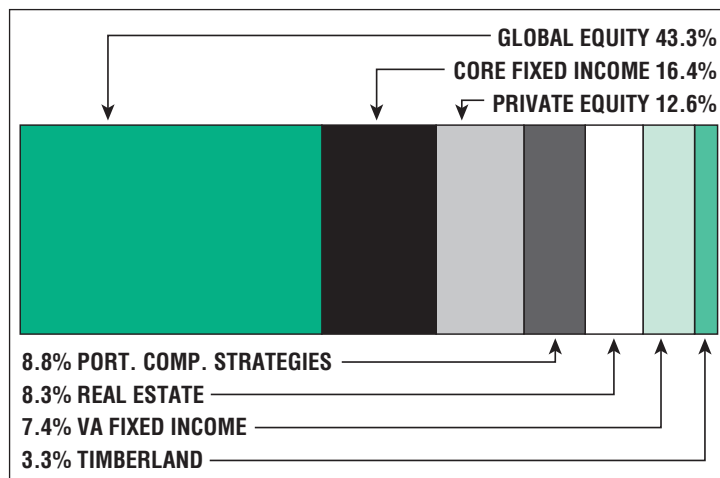
2030

Fully Funded

**5.01% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$105.0 M

Unfunded Liability

\$17.3 M
[FY2021]

Total Pension
Appropriation

Fairhaven

CONTACT INFORMATION

Town Hall
40 Centre Street
Fairhaven, MA 02719
Phone 508-979-4023, Ext. 121
Fax 508-993-9486

BOARD MEMBERS

Anne Carreiro*
Mark Rees
Wally Therrien
Joyce Shepard
Alfred Robichaud
*indicates Chairperson

BOARD ADMINISTRATOR

Mary Sturgeon

SYSTEM MEMBERS

Active Members250
Total Payroll\$13.0 M
Average Salary\$52,100
Average Age48
Average Service12.7

Retired Members197
Benefits Paid\$4.7 M
Average Benefit\$24,000
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees22
Reported Earnings11
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$78.6 M
Market Value

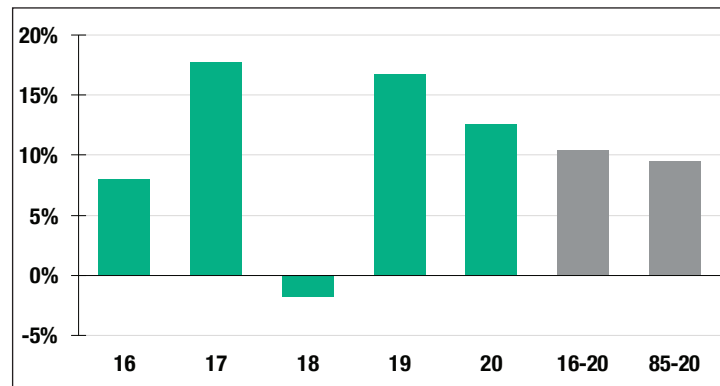
12.54%
2020 Returns

8.98%
2011-2020
[Annualized]

9.41%
1985-2020
[Annualized]

Investment Returns

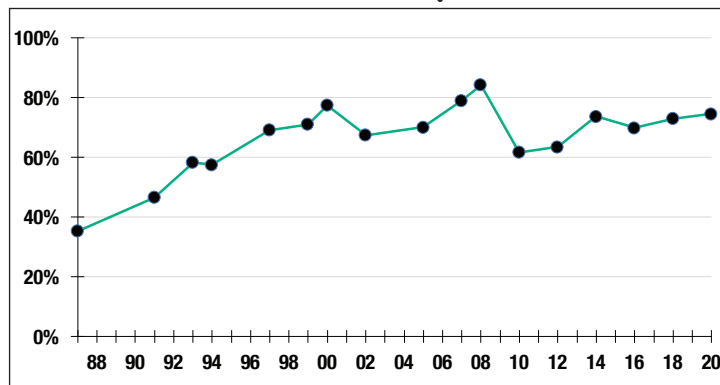
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



74.5%

Funded Ratio

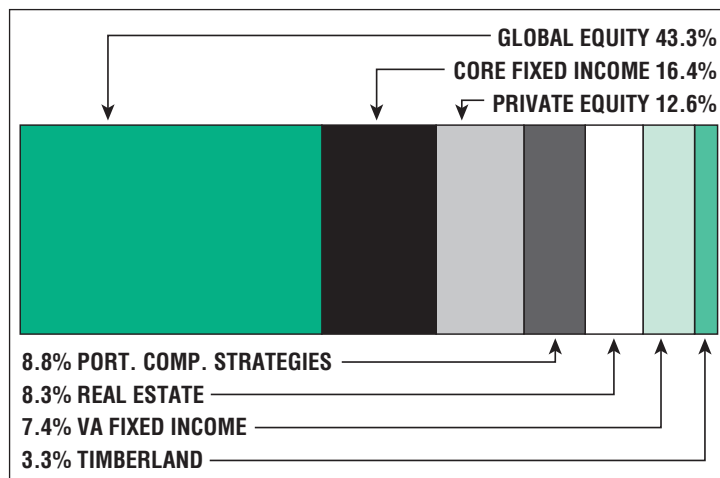
2034

Fully Funded

**5.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$23.1 M

Unfunded Liability

\$3.5 M
[FY2021]

Total Pension
Appropriation

Fall River

CONTACT INFORMATION

21 Father DeValles Boulevard
Suite GR101, Box 14
Fall River, MA 02723
Phone 508-646-9120
Fax 508-646-9123

BOARD MEMBERS

Jennifer Argo
Mark Nassiff
Robert Camara
David Machado
Arthur Viana*

*indicates Chairperson

BOARD ADMINISTRATOR

Michael Pasternak

SYSTEM MEMBERS

Active Members1,544
Total Payroll\$77.6 M
Average Salary\$50,200
Average Age46
Average Service12.9

Retired Members1,539
Benefits Paid\$40.3 M
Average Benefit\$26,200
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees202
Reported Earnings55
Excess Earners2
Refund Due\$96,051

Last Valuation: 1/1/19
Actuary: PERAC



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\$324.8 M
Market Value

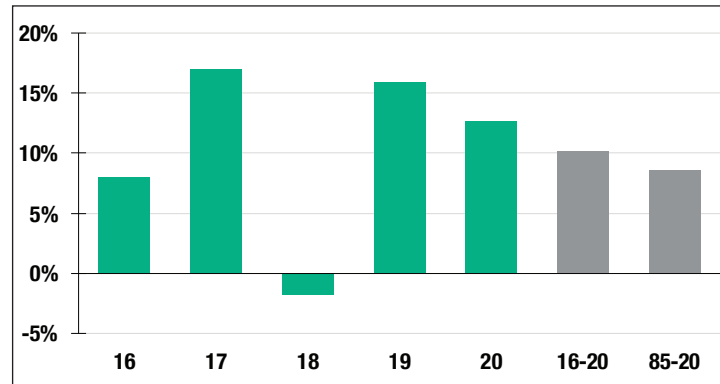
12.61%
2020 Returns

8.82%
2011-2020
[Annualized]

8.55%
1985-2020
[Annualized]

Investment Returns

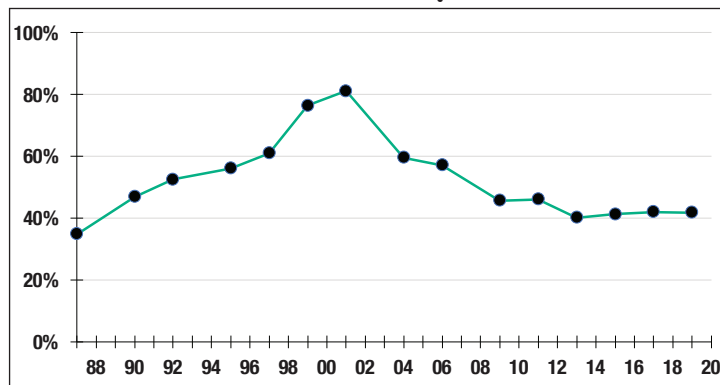
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



41.8%

Funded Ratio

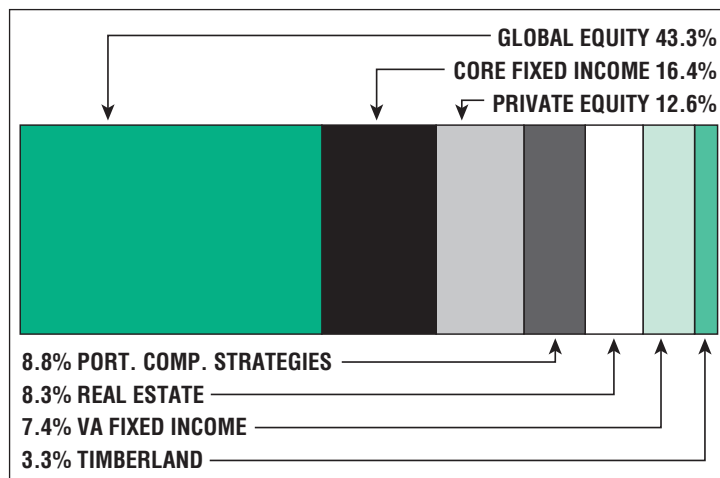
2035

Fully Funded

**7.5% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$388.8 M

Unfunded Liability

\$35.1 M
[FY2021]

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

SYSTEM MEMBERS

Active Members581
Total Payroll\$32.2 M
Average Salary\$55,400
Average Age49
Average Service12.6

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees37
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



Click/Scan for website

\$171.1 M
Market Value

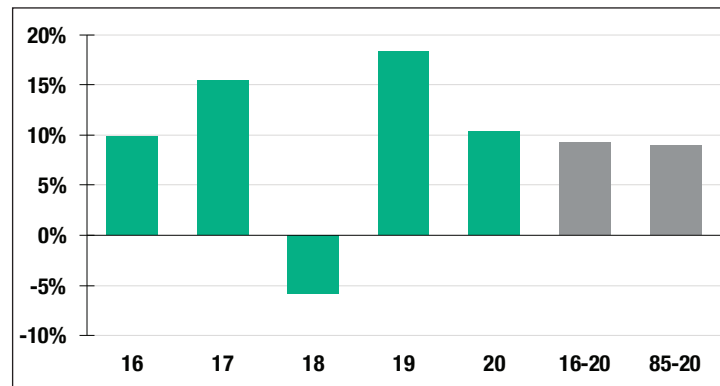
10.36%
2020 Returns

8.73%
2011-2020
[Annualized]

8.99%
1985-2020
[Annualized]

Investment Returns

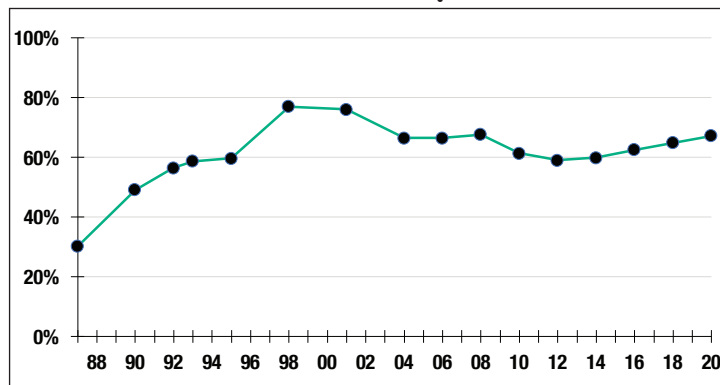
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



67.1%

Funded Ratio

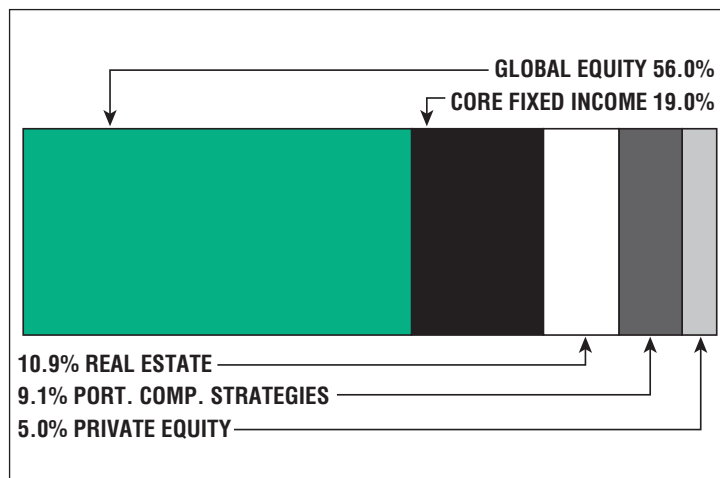
2033

Fully Funded

**6.31% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$74.6 M

Unfunded Liability

\$9.2 M
[FY2021]

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.
John Curran
Norman LeBlanc

*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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees53
Reported Earnings12
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



Click/Scan for website

\$149.4 M
Market Value

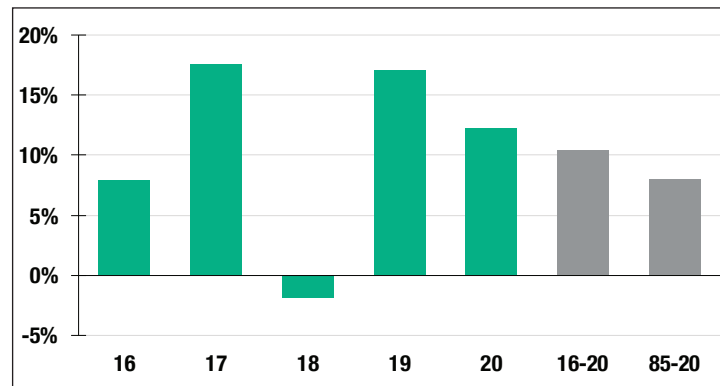
12.27%
2020 Returns

8.83%
2011-2020
[Annualized]

7.92%
1985-2020
[Annualized]

Investment Returns

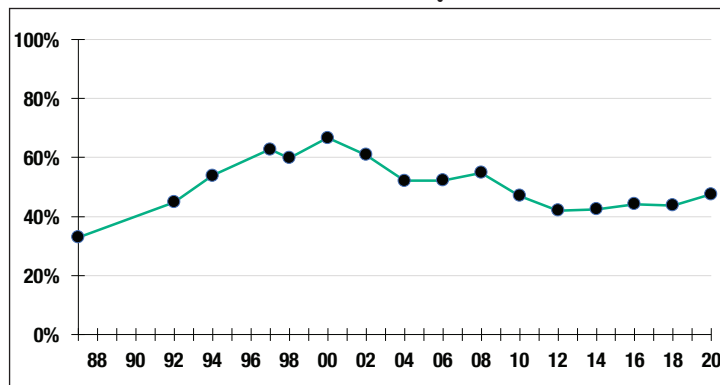
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



47.6%

Funded Ratio

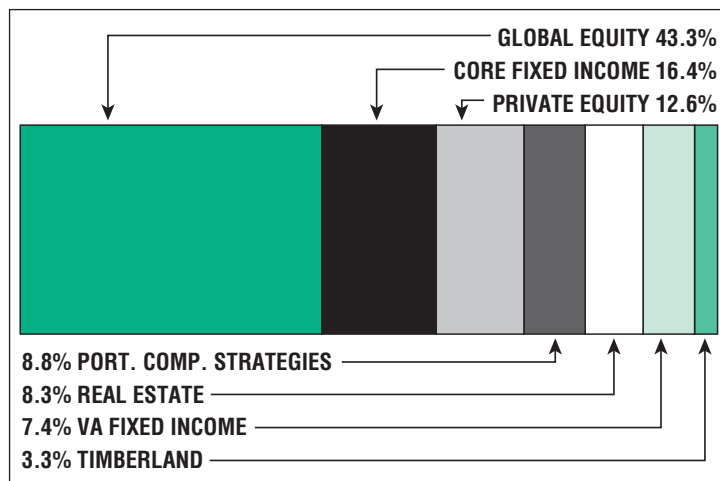
2033

Fully Funded

**6.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$144.6 M

Unfunded Liability

\$14.4 M
[FY2021]

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.*
Mary Ellen Kelley
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 Service11.1

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees63
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$375.0 M
Market Value

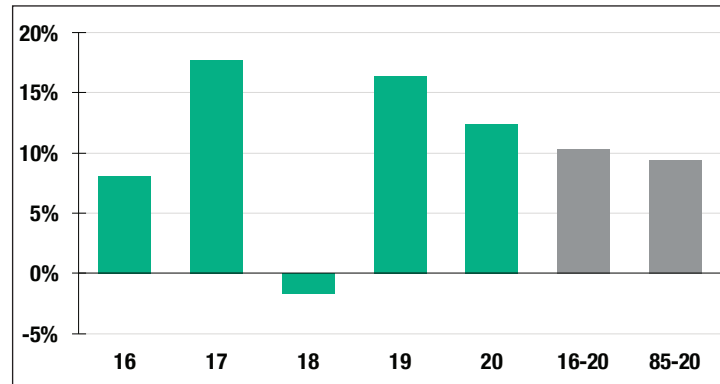
12.39%
2020 Returns

8.94%
2011-2020
[Annualized]

9.38%
1985-2020
[Annualized]

Investment Returns

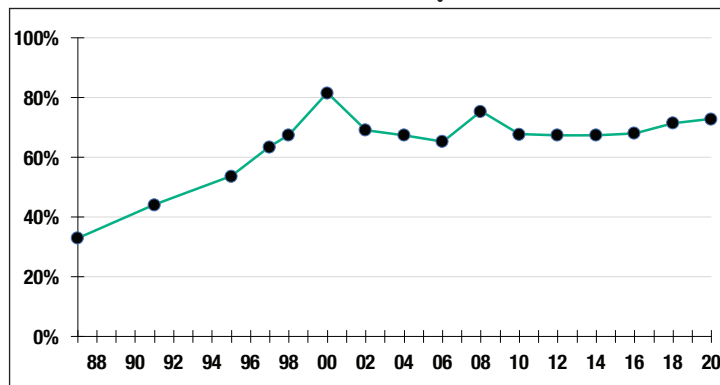
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



72.8%

Funded Ratio

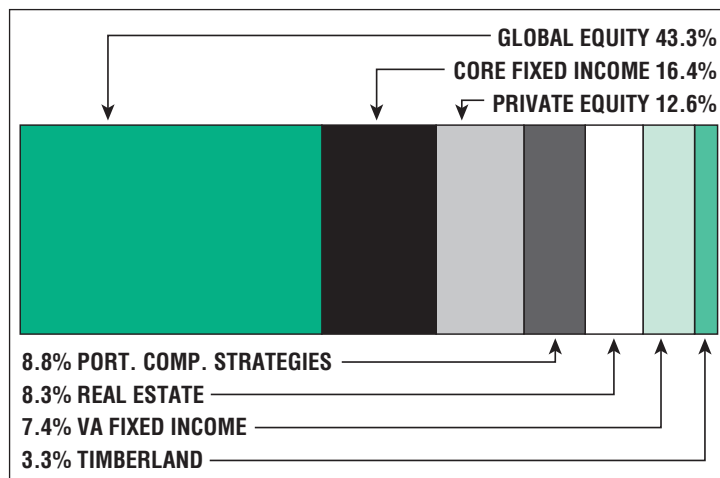
2030

Fully Funded

**6.95% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$126.5 M

Unfunded Liability

\$18.5 M
[FY2021]

Total Pension
Appropriation

Franklin Regional

CONTACT INFORMATION

278 Main Street
Suite 311
Greenfield, MA 01301
Phone 413-774-4837
Fax 413-774-5677

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Dale Kowacki

SYSTEM MEMBERS

Active Members1,044
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees24
Reported Earnings5
Excess Earners1
Refund Due\$8,147

Last Valuation: 1/1/20
Actuary: KMS



Click/Scan for website

\$175.7 M
Market Value

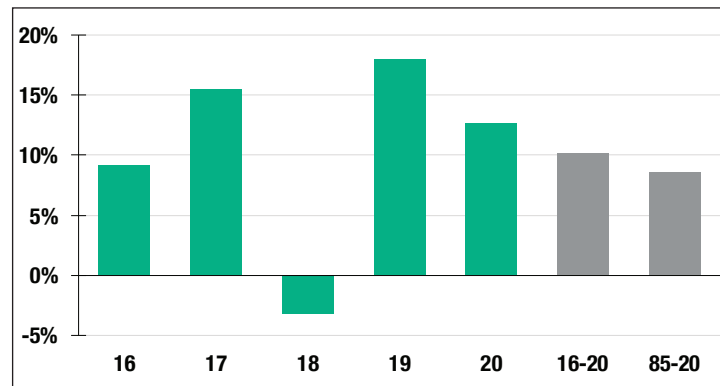
12.65%
2020 Returns

9.31%
2011-2020
[Annualized]

8.59%
1985-2020
[Annualized]

Investment Returns

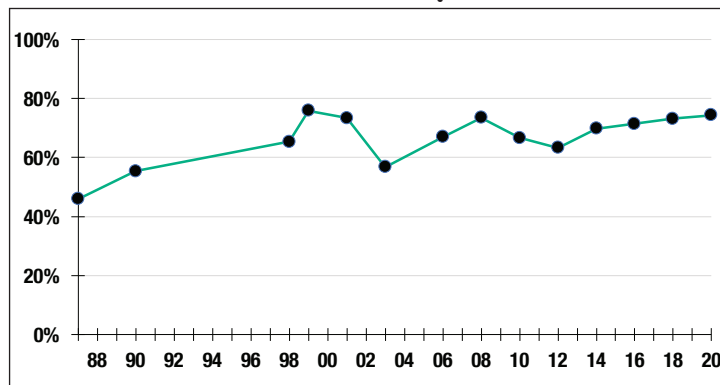
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



74.4%

Funded Ratio

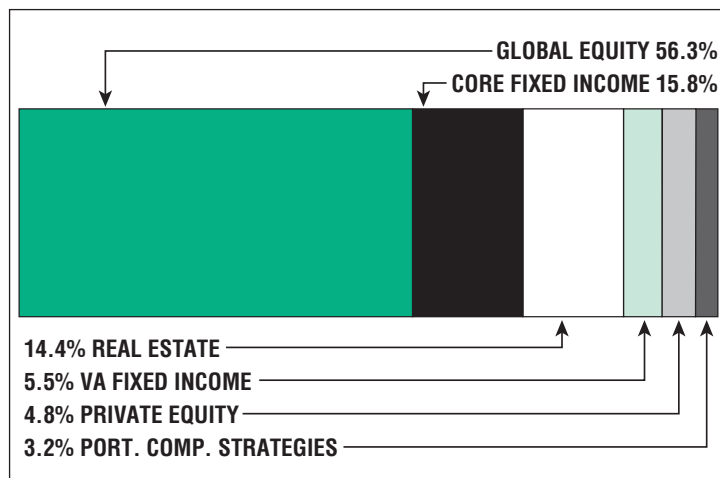
2034

Fully Funded

**5.75% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$52.8 M

Unfunded Liability

\$7.4 M
[FY2021]

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 McNerney
Robert Newton
Denise Merriam*
Neil Janssens
*indicates Chairperson

BOARD ADMINISTRATOR

Cheryl Bosse

SYSTEM MEMBERS

Active Members308
Total Payroll\$14.4 M
Average Salary\$46,600
Average Age45
Average Service10.3

Retired Members259
Benefits Paid\$6.5 M
Average Benefit\$24,900
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees19
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



Click/Scan for website

\$66.8 M
Market Value

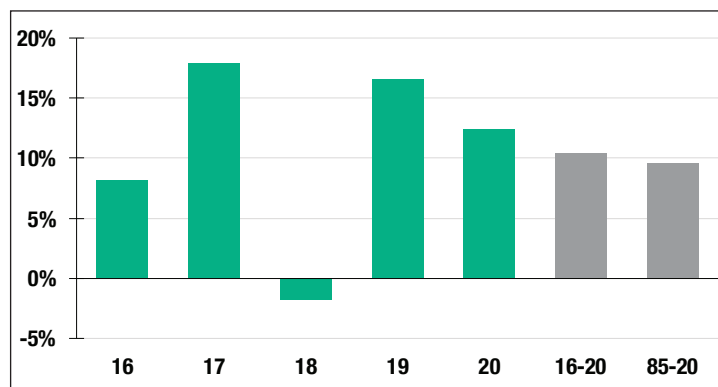
12.37%
2020 Returns

8.95%
2011-2020
[Annualized]

9.49%
1985-2020
[Annualized]

Investment Returns

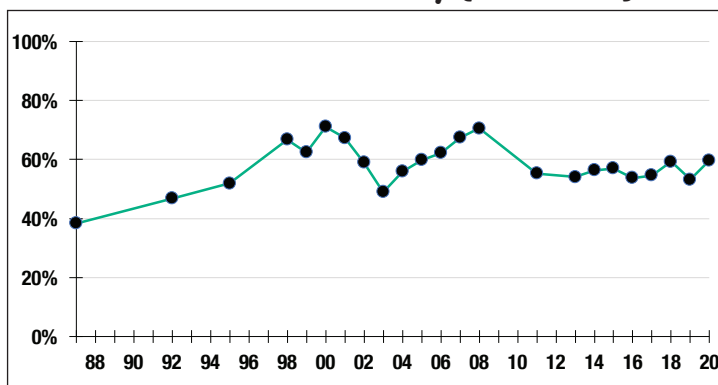
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



59.7%

Funded Ratio

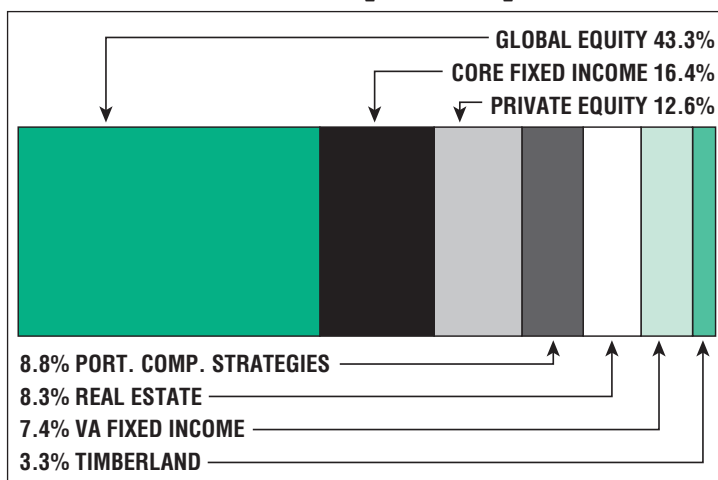
2031

Fully Funded

**8.44% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$40.8 M

Unfunded Liability

\$4.6 M
[FY2021]

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 Service11.9

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees36
Reported Earnings12
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$134.6 M
Market Value

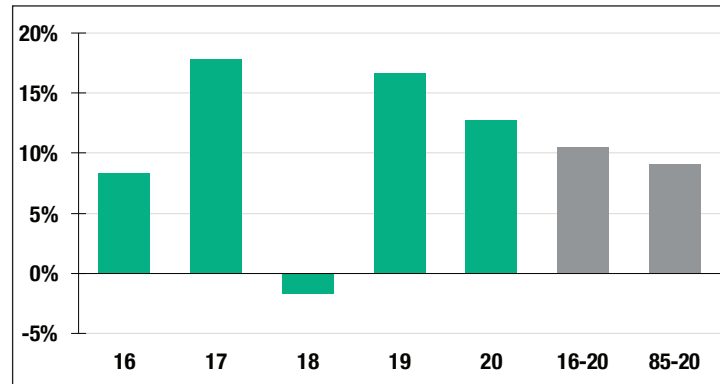
12.69%
2020 Returns

9.02%
2011-2020
[Annualized]

9.03%
1985-2020
[Annualized]

Investment Returns

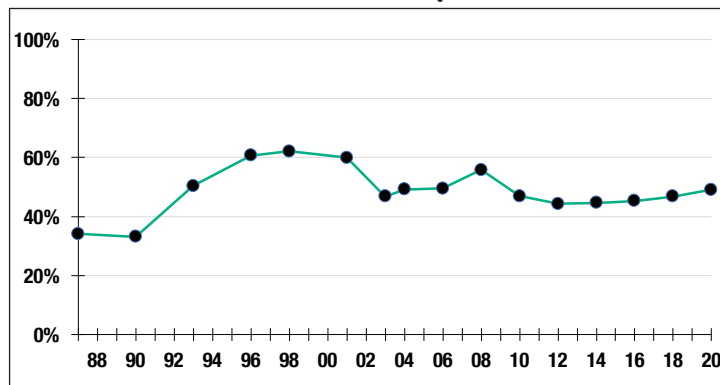
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



49.1%

Funded Ratio

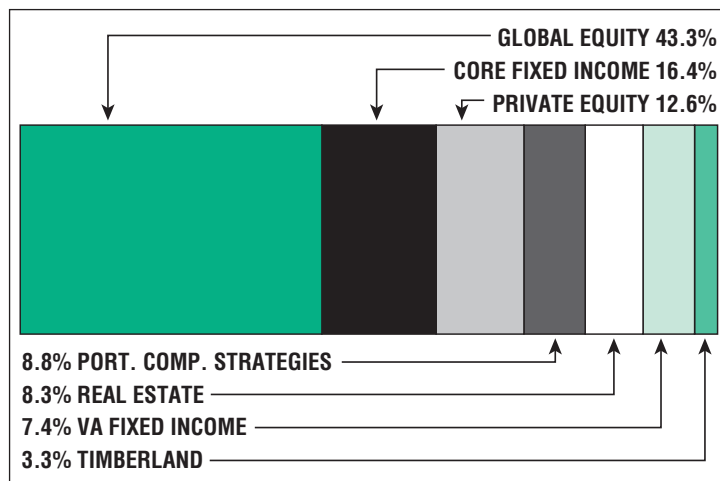
2034

Fully Funded

**6.8% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$120.9 M

Unfunded Liability

\$10.9 M
[FY2021]

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\$2.9 M
Average Salary\$72,000
Average Age52
Average Service17.9

Retired Members27
Benefits Paid \$838 K
Average Benefit\$31,000
Average Age71

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees1
Reported Earnings1
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$24.2 M
Market Value

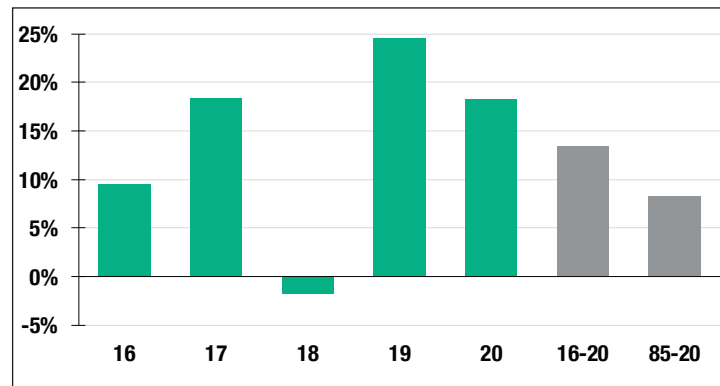
18.28%
2020 Returns

10.32%
2011-2020
[Annualized]

8.27%
1985-2020
[Annualized]

Investment Returns

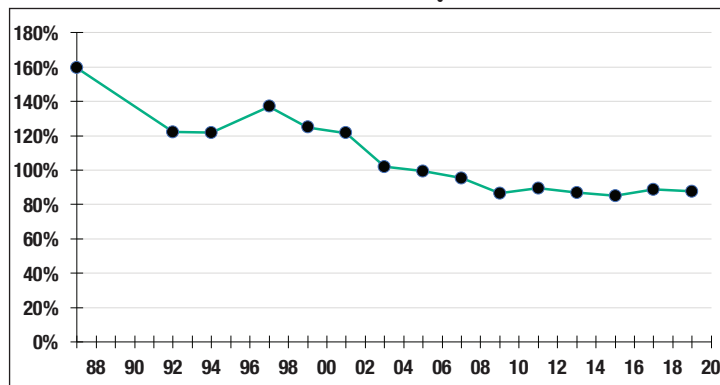
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20*]



6.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



87.6%

Funded Ratio

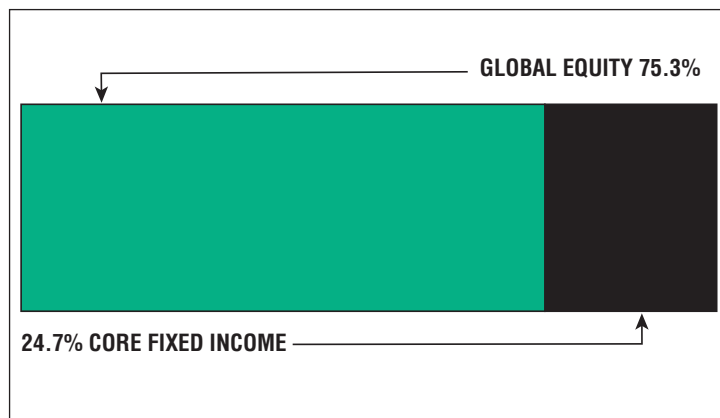
2034

Fully Funded

**9.73% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$2.6 M

Unfunded Liability

\$392 K
[FY2021]

Total Pension
Appropriation

* 2019, 5-year, 10-year, and 36-year returns have been revised due to an adjustment in the 2019 return.

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees19
Reported Earnings7
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21

Actuary: PERAC



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\$85.1 M
Market Value

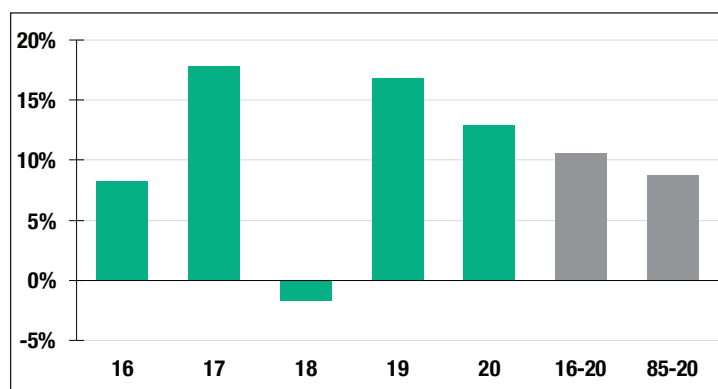
12.88%
2020 Returns

9.13%
2011-2020
[Annualized]

8.71%
1985-2020
[Annualized]

Investment Returns

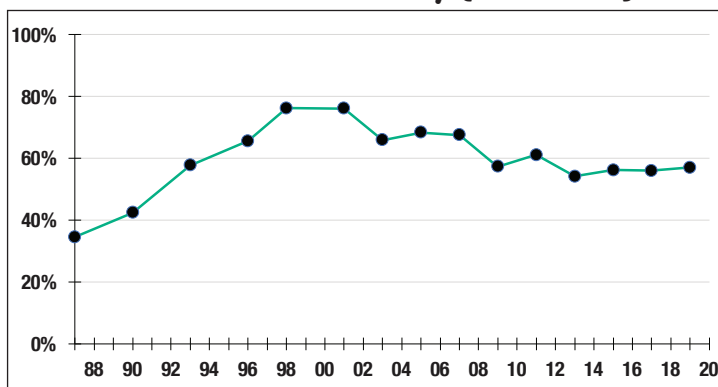
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



59.9%

Funded Ratio

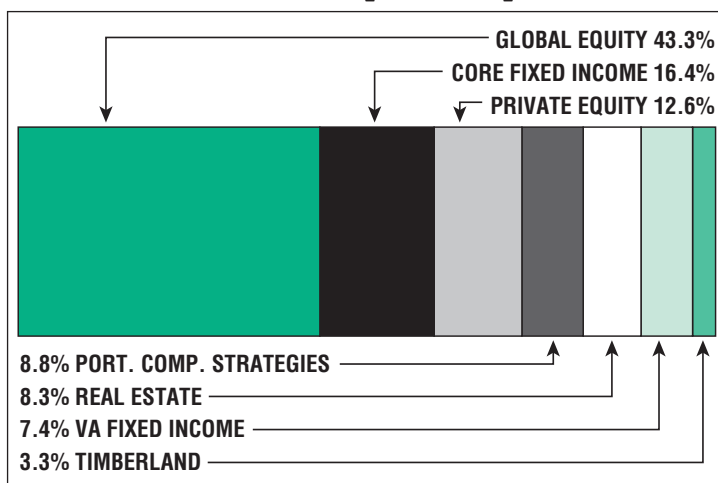
2035

Fully Funded

**7.1% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$54.3 M

Unfunded Liability

\$5.6 M
[FY2021]

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

Richard Theroux*
Thomas Sullivan
Patricia Donovan
Karl Schmaelzle
Patrick O'Neil

*indicates Chairperson

BOARD ADMINISTRATOR

Julianne Bartley

SYSTEM MEMBERS

Active Members2,784
Total Payroll\$120.1 M
Average Salary\$43,100
Average Age48
Average Service10.7

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees99
Reported Earnings29
Excess Earners1
Refund Due\$1,417

Last Valuation: 1/1/20

Actuary: Segal



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\$455.4 M

Market Value

12.24%

2020 Returns

8.85%

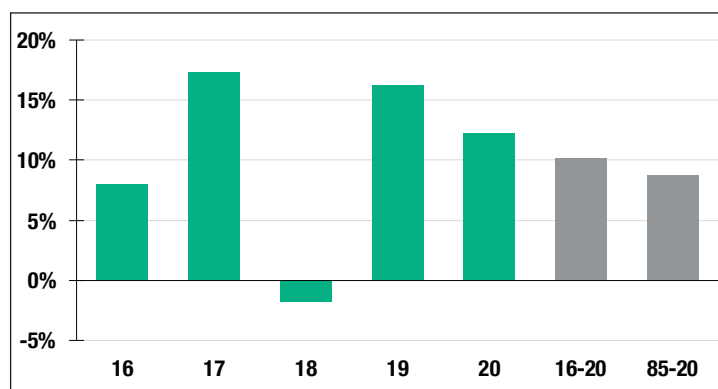
2011-2020
[Annualized]

8.76%

1985-2020
[Annualized]

Investment Returns

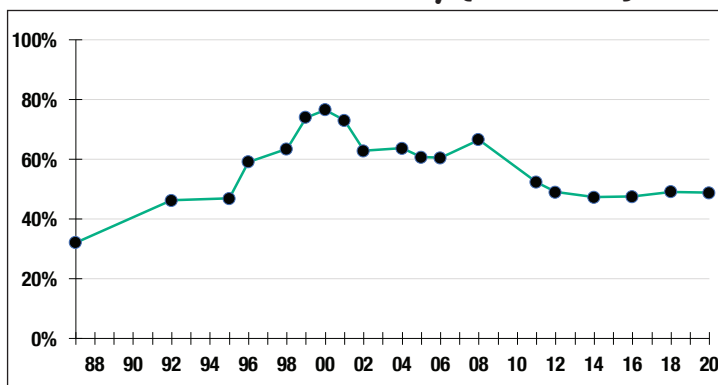
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



48.7%

Funded Ratio

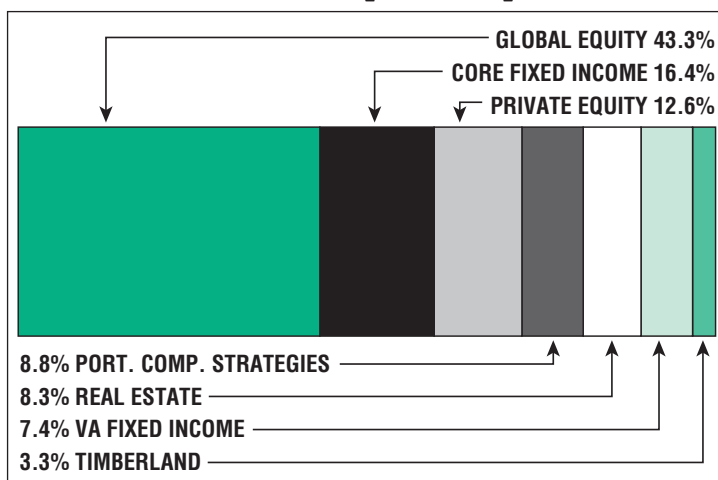
2036

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$418.9 M

Unfunded Liability

\$33.9 M
[FY2021]

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
Joseph Wilhelm
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 Age 47
Average Service 10.6

Retired Members 1,357
Benefits Paid \$30.4 M
Average Benefit \$22,400
Average Age 72

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 76
Reported Earnings 34
Excess Earners 1
Refund Due \$19,407

Last Valuation: 1/1/20
Actuary: KMS



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\$400.9 M
Market Value

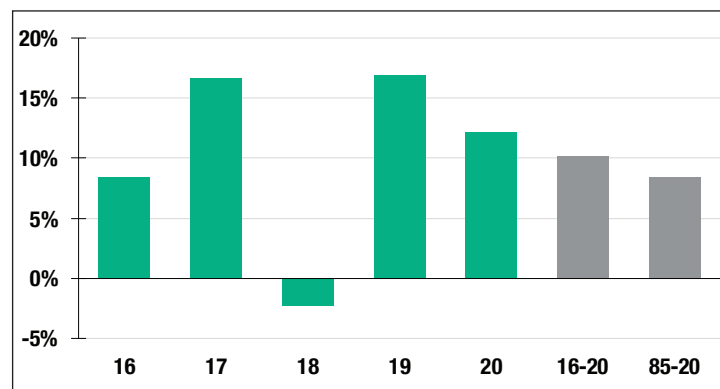
12.19%
2020 Returns

8.29%
2011-2020
[Annualized]

8.45%
1985-2020
[Annualized]

Investment Returns

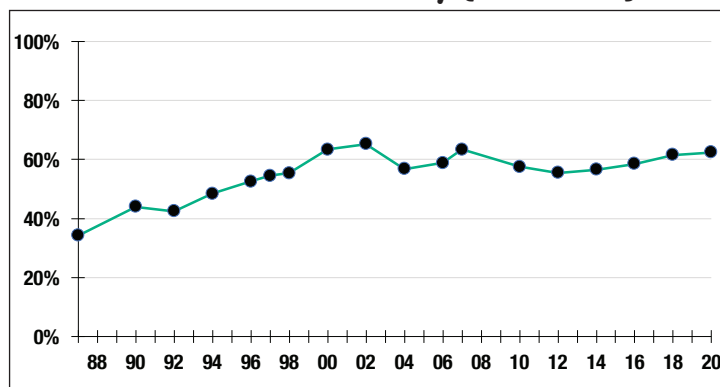
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



62.4%

Funded Ratio

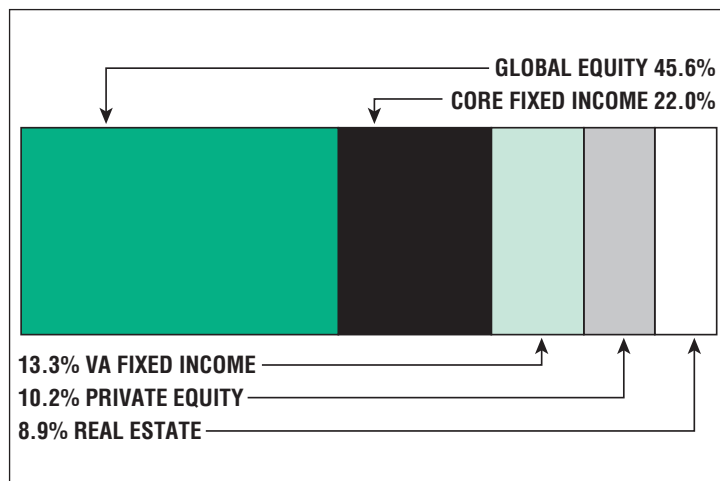
2033

Fully Funded

**4.0% Increasing
Phase-In**

Funding Schedule

Asset Allocation [12/31/20]



\$210.3 M

Unfunded Liability

\$26.6 M
[FY2021]

Total Pension
Appropriation

Haverhill

CONTACT INFORMATION

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

BOARD MEMBERS

Charles Benevento
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 Service10.6

Retired Members1,075
Benefits Paid\$26.8 M
Average Benefit\$24,900
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees64
Reported Earnings15
Excess Earners1
Refund Due\$1,826

Last Valuation: 1/1/20
Actuary: KMS



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\$244.5 M
Market Value

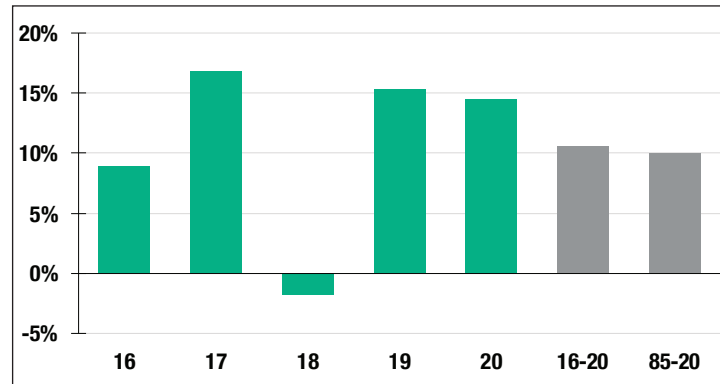
14.45%
2020 Returns

8.70%
2011-2020
[Annualized]

9.97%
1985-2020
[Annualized]

Investment Returns

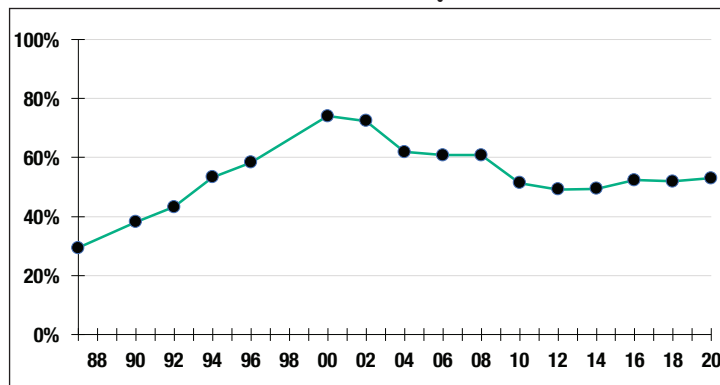
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



53.0%

Funded Ratio

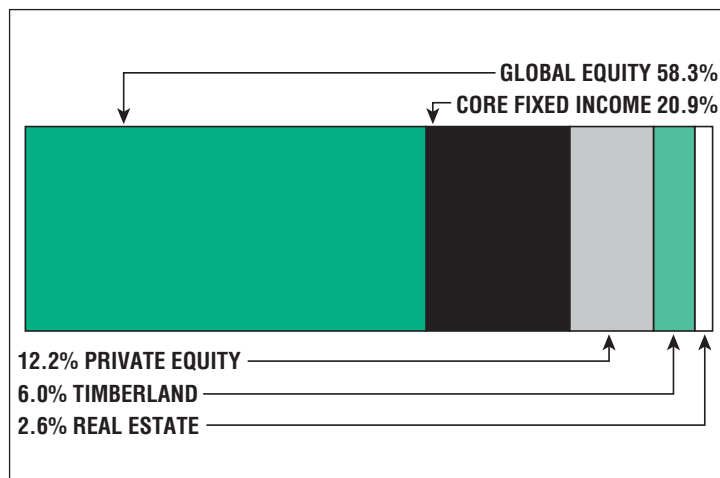
2032

Fully Funded

**6.06% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$188.5 M

Unfunded Liability

\$21.2 M
[FY2021]

Total Pension
Appropriation

Hingham

CONTACT INFORMATION

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

BOARD MEMBERS

Susan Nickerson*
Eileen McCracken
Jean Montgomery
David Jones
Charles Cristello

*indicates Chairperson

BOARD ADMINISTRATOR

Aksana Holmes

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees10
Reported Earnings1
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: KMS



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\$146.9 M
Market Value

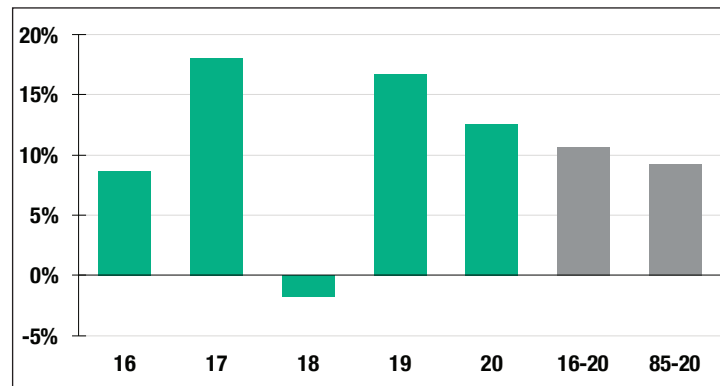
12.59%
2020 Returns

8.44%
2011-2020
[Annualized]

9.23%
1985-2020
[Annualized]

Investment Returns

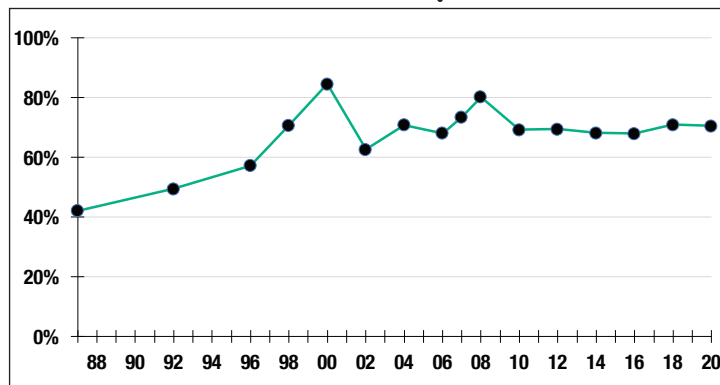
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.40%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



70.4%

Funded Ratio

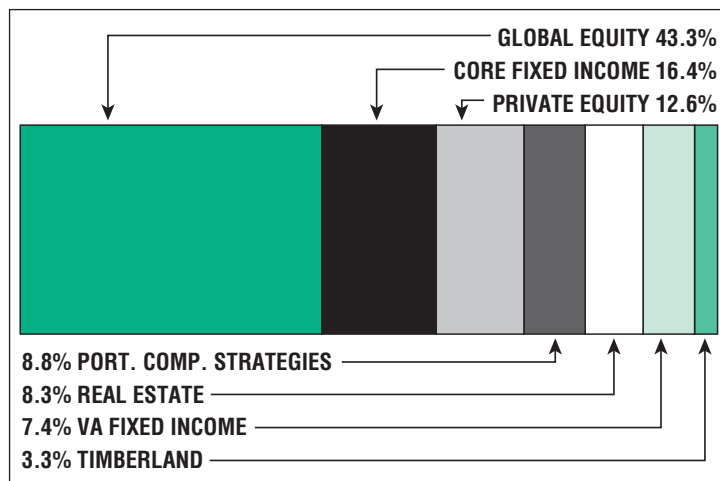
2035

Fully Funded

**7.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$53.5 M

Unfunded Liability

\$5.7 M
[FY2021]

Total Pension
Appropriation

Holyoke

CONTACT INFORMATION

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

BOARD MEMBERS

Tanya Wdowiak
Brian Smith
John McCarthy*
Anthony Dulude
Michele Aubrey
*indicates Chairperson

BOARD ADMINISTRATOR

Cheryl Dugre

SYSTEM MEMBERS

Active Members1,122
Total Payroll\$58.4 M
Average Salary\$52,000
Average Age45
Average Service11.7

Retired Members966
Benefits Paid\$27.3 M
Average Benefit\$28,200
Average Age72

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees74
Reported Earnings16
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$361.3 M
Market Value

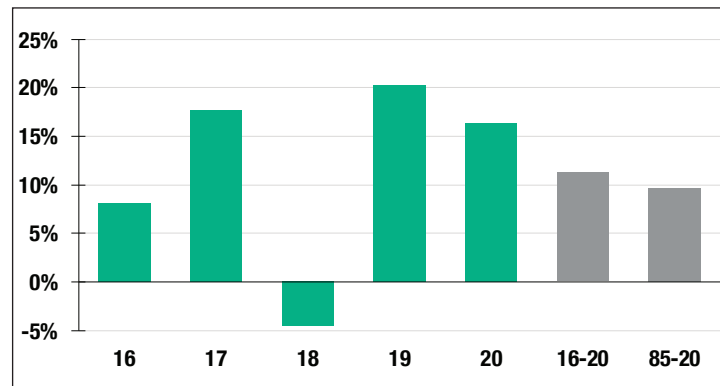
16.42%
2020 Returns

10.23%
2011-2020
[Annualized]

9.63%
1985-2020
[Annualized]

Investment Returns

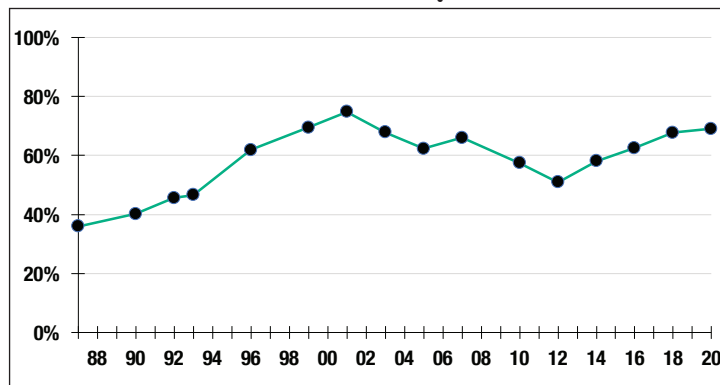
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



69.0%

Funded Ratio

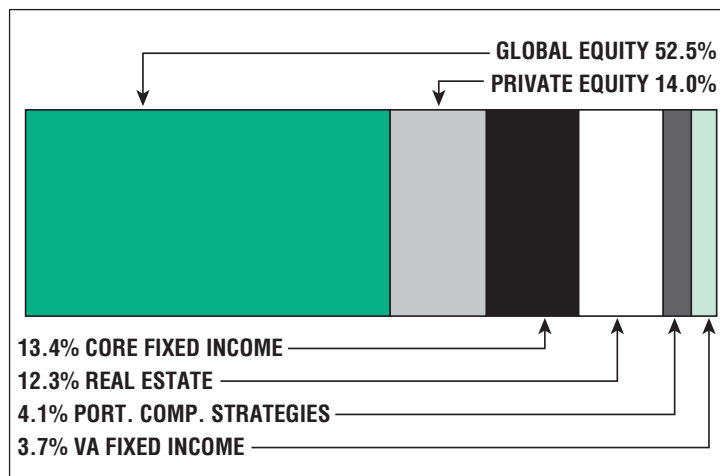
2035

Fully Funded

**3.07% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$142.3 M

Unfunded Liability

\$17.3 M
[FY2021]

Total Pension
Appropriation

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 15
Reported Earnings 4
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$62.2 M
Market Value

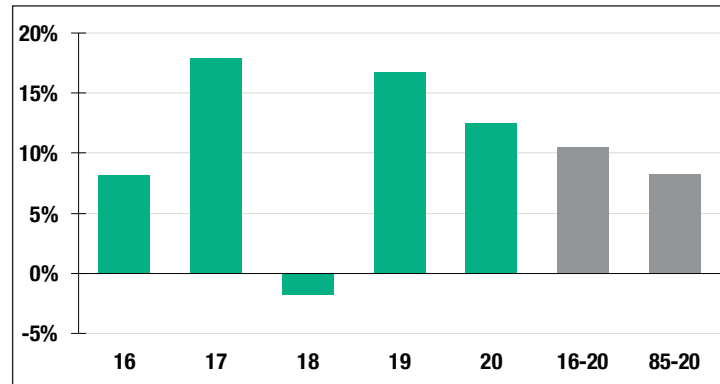
12.43%
2020 Returns

8.97%
2011-2020
[Annualized]

8.18%
1985-2020
[Annualized]

Investment Returns

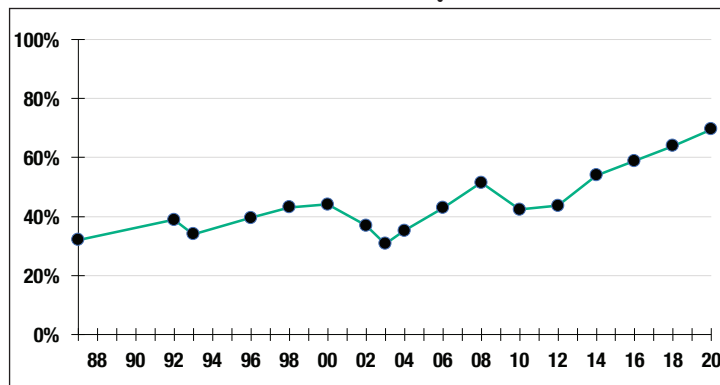
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.40%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



69.6%

Funded Ratio

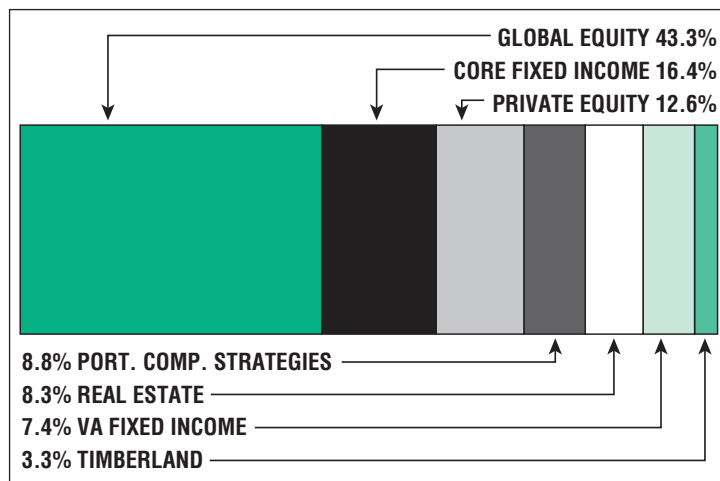
2031

Fully Funded

**4.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$24.2 M

Unfunded Liability

\$4.1 M
[FY2021]

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
Kevin Loughlin
Gina Rizzo
Vacant*

*indicates Chairperson

BOARD ADMINISTRATOR

Diane Cockroft

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 104
Reported Earnings 22
Excess Earners 1
Refund Due \$1,176

Last Valuation: 1/1/20
Actuary: Stone



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\$287.9 M
Market Value

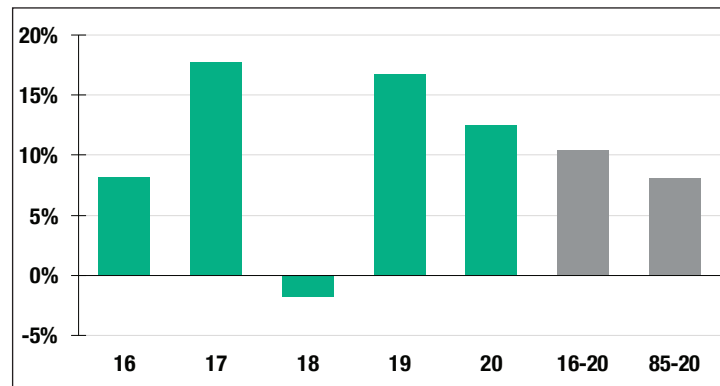
12.45%
2020 Returns

8.95%
2011-2020
[Annualized]

8.07%
1985-2020
[Annualized]

Investment Returns

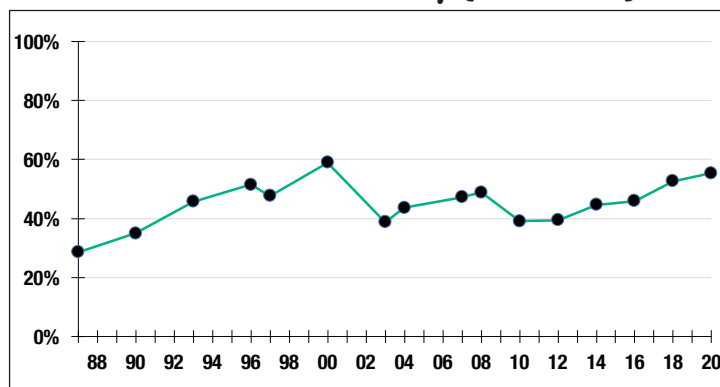
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



55.4%

Funded Ratio

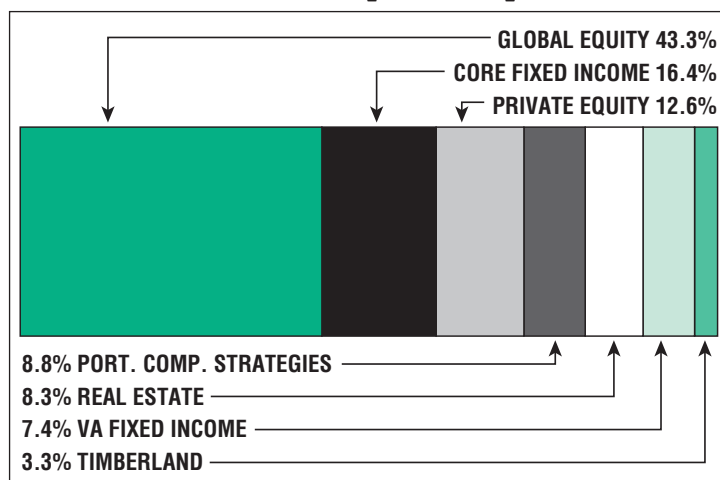
2037

Fully Funded

3.65% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$205.9 M

Unfunded Liability

\$22.1 M
[FY2021]

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 Members665
Total Payroll\$31.7 M
Average Salary\$47,700
Average Age44
Average Service9.6

Retired Members431
Benefits Paid\$11.2 M
Average Benefit\$25,900
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees36
Reported Earnings16
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$256.8 M
Market Value

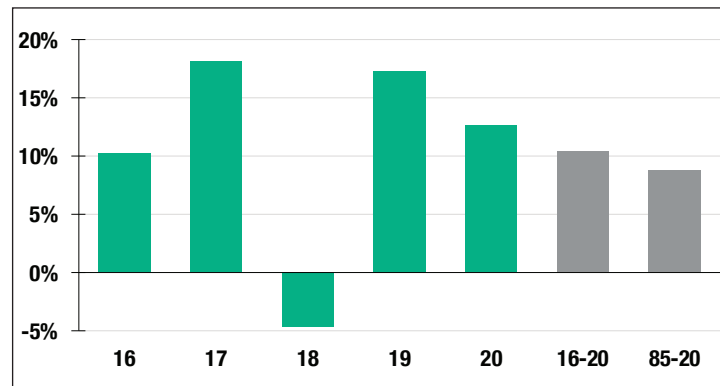
12.63%
2020 Returns

9.31%
2011-2020
[Annualized]

8.76%
1985-2020
[Annualized]

Investment Returns

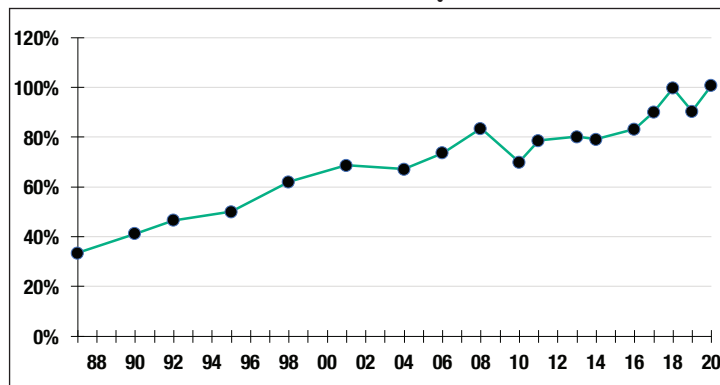
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



5.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



100.9%

Funded Ratio

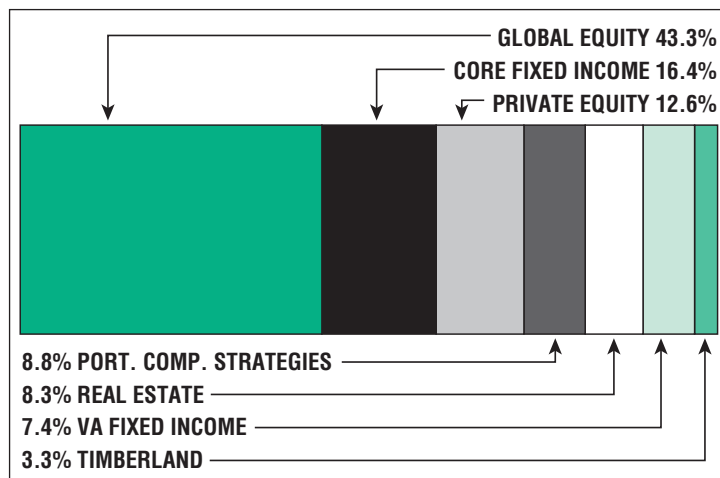
2021

Fully Funded

Fully Funded/
Normal Cost

Funding Schedule

Asset Allocation [12/31/20]



-\$1.9 M

Unfunded Liability

\$9.1 M
[FY2021]

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 Members756
Total Payroll\$43.9 M
Average Salary\$58,000
Average AgeNA
Average ServiceNA

Retired Members464
Benefits Paid\$13.8 M
Average Benefit\$29,700
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees23
Reported Earnings12
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



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\$205.6 M
Market Value

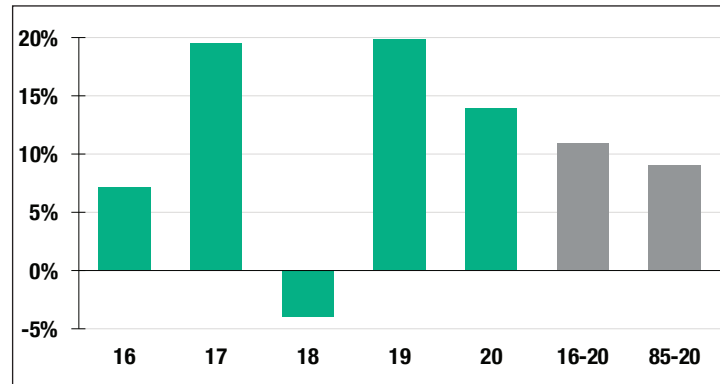
13.86%
2020 Returns

8.30%
2011-2020
[Annualized]

9.00%
1985-2020
[Annualized]

Investment Returns

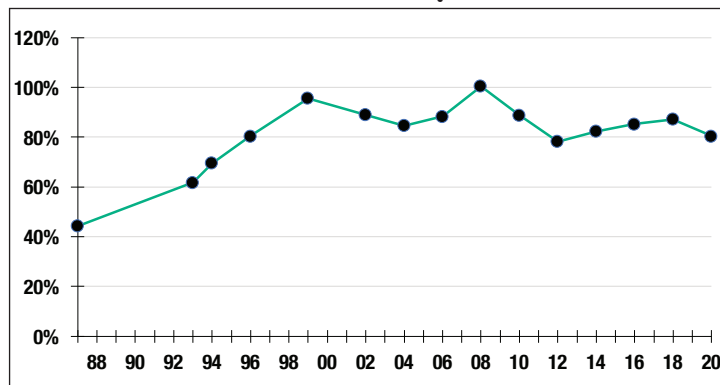
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



80.4%

Funded Ratio

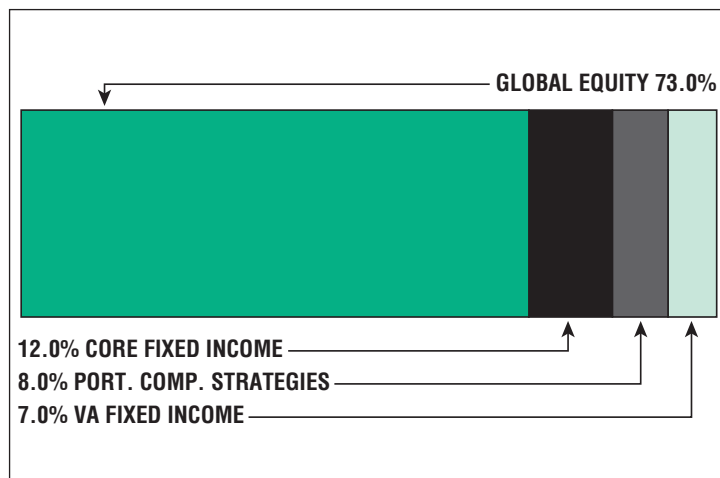
2028

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$43.4 M

Unfunded Liability

\$6.8 M
[FY2021]

Total Pension
Appropriation

Lowell

CONTACT INFORMATION

City Hall, Room 3
375 Merrimack Street
Lowell, MA 01852-5998
Phone 978-674-4094
Fax 978-446-7019

BOARD MEMBERS

Sheryl Wright
David Keene
William Desrosiers*
Robert Littlefield
Michael Brennan
*indicates Chairperson

BOARD ADMINISTRATOR

Shannon Dowd

SYSTEM MEMBERS

Active Members1,746
Total Payroll\$98.5 M
Average Salary\$56,400
Average Age46
Average Service12.6

Retired Members1,255
Benefits Paid\$39.0 M
Average Benefit\$31,100
Average Age72

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees163
Reported Earnings48
Excess Earners1
Refund Due\$3,581

Last Valuation: 1/1/19
Actuary: KMS



Click/Scan for website

\$463.8 M
Market Value

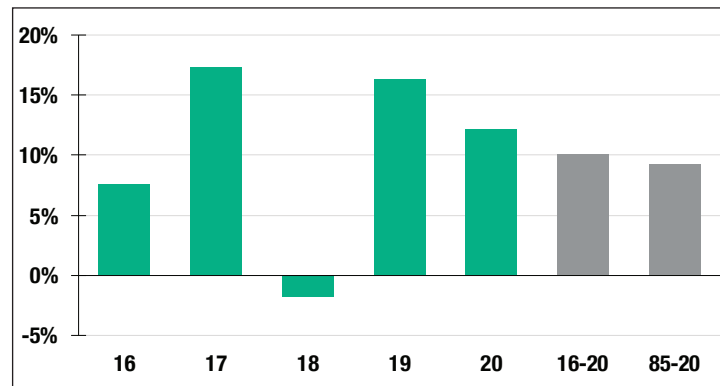
12.13%
2020 Returns

8.74%
2011-2020
[Annualized]

9.18%
1985-2020
[Annualized]

Investment Returns

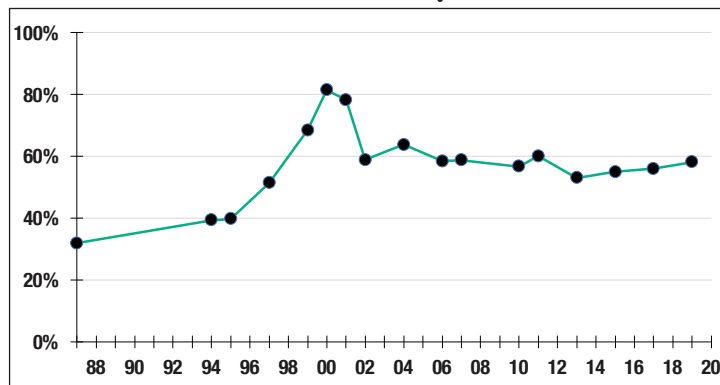
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.65%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



58.2%

Funded Ratio

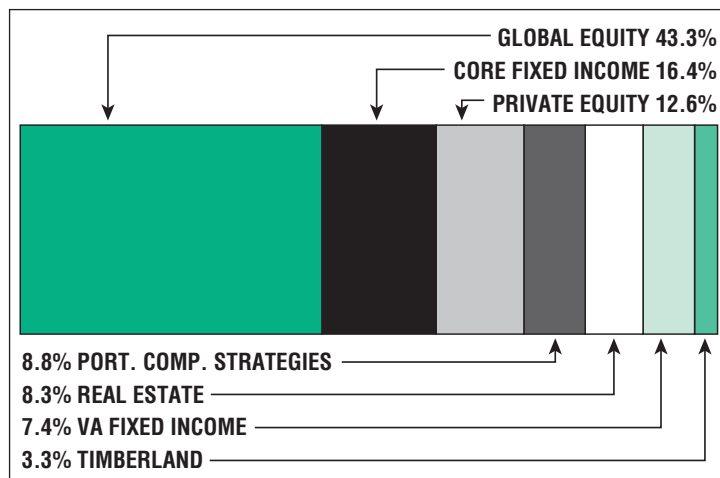
2036

Fully Funded

**4.0% Increasing
Phase-In**

Funding Schedule

Asset Allocation [12/31/20]



\$277.4 M

Unfunded Liability

\$30.3 M
[FY2021]

Total Pension
Appropriation

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 Members1,317
Total Payroll\$77.1 M
Average Salary\$58,500
Average Age49
Average Service14.5

Retired Members1,190
Benefits Paid\$39.5 M
Average Benefit\$33,200
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees149
Reported Earnings32
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$451.7 M
Market Value

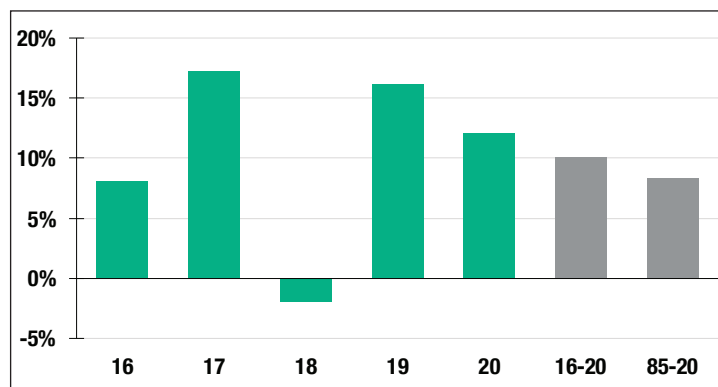
12.11%
2020 Returns

9.01%
2011-2020
[Annualized]

8.24%
1985-2020
[Annualized]

Investment Returns

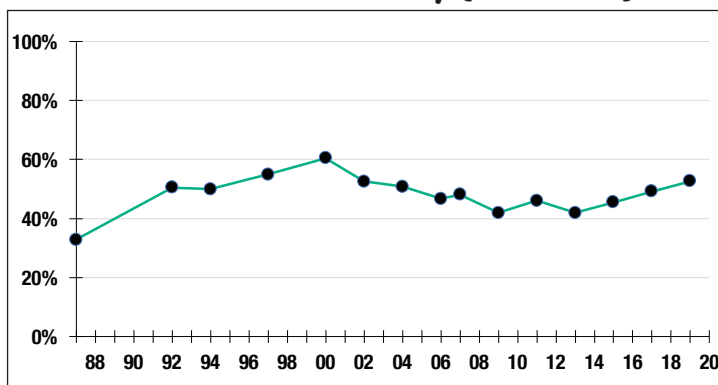
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



52.7%

Funded Ratio

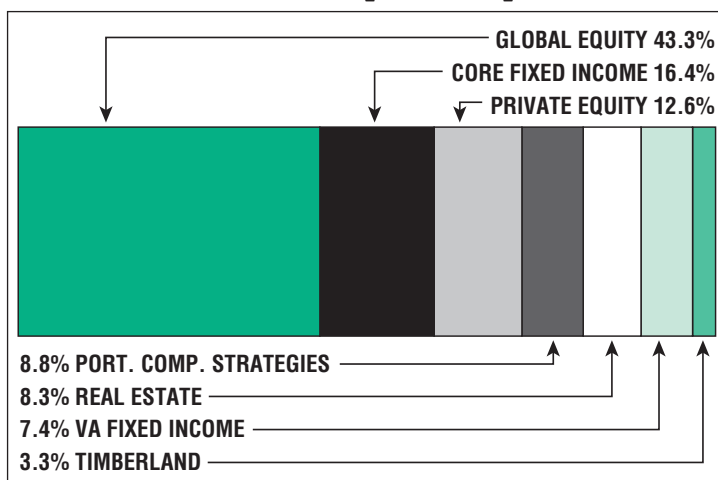
2034

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$326.1 M

Unfunded Liability

\$36.0 M
[FY2021]

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees84
Reported Earnings22
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$326.0 M
Market Value

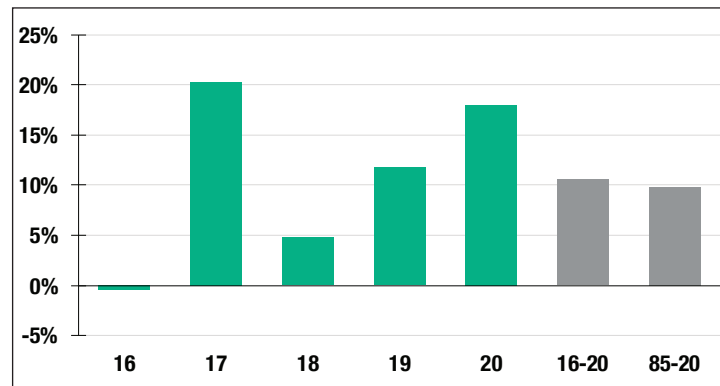
18.02%
2020 Returns

9.43%
2011-2020
[Annualized]

9.82%
1985-2020
[Annualized]

Investment Returns

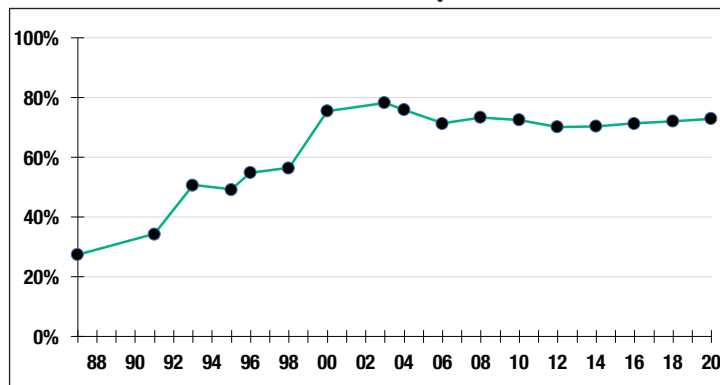
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



72.9%

Funded Ratio

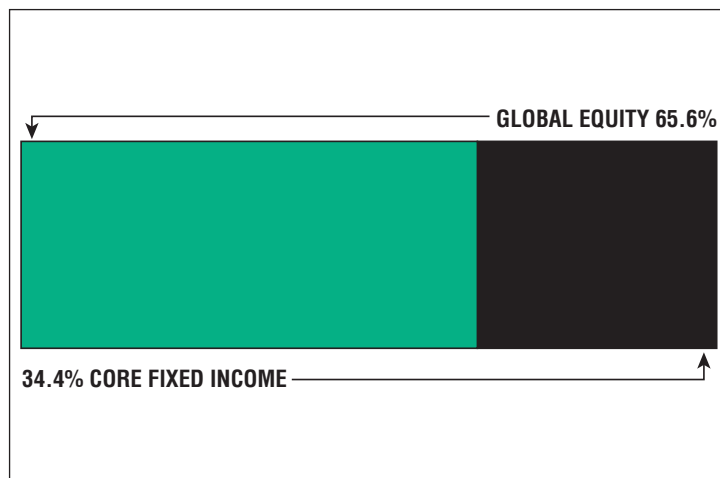
2030

Fully Funded

**8.6% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$100.2 M

Unfunded Liability

\$14.0 M
[FY2021]

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

Stephen Poulos
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 Service11.2

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees20
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$114.6 M
Market Value

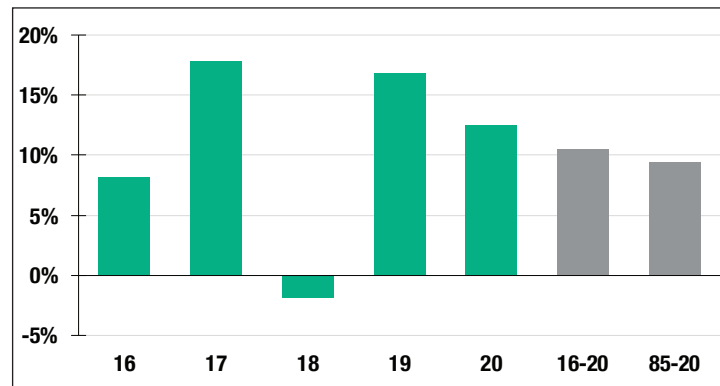
12.43%
2020 Returns

8.98%
2011-2020
[Annualized]

9.34%
1985-2020
[Annualized]

Investment Returns

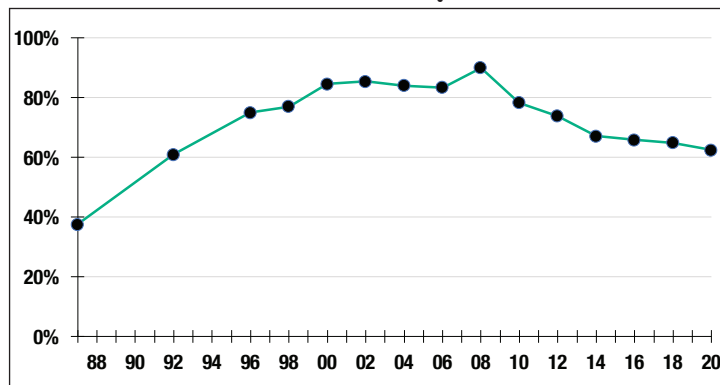
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



62.3%

Funded Ratio

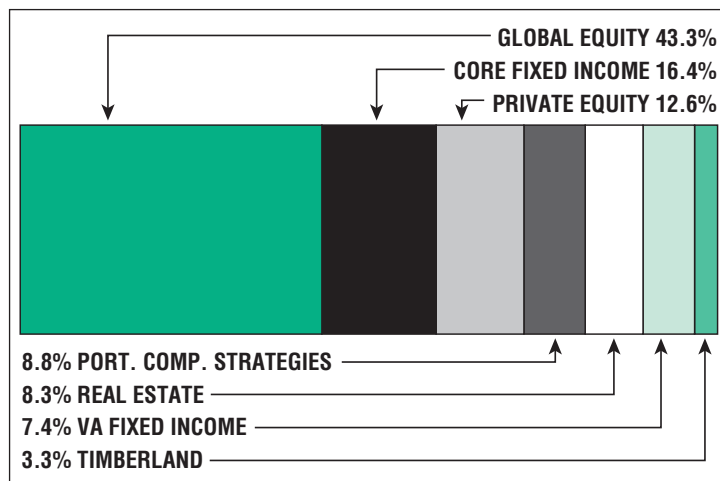
2039

Fully Funded

**8.6% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$61.0 M

Unfunded Liability

\$4.4 M
[FY2021]

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

Margaret Shea

SYSTEM MEMBERS

Active Members644
Total Payroll\$36.0 M
Average Salary\$55,800
Average AgeNA
Average ServiceNA

Retired Members434
Benefits Paid\$13.3 M
Average Benefit\$30,700
Average Age72

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees29
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: Sherman



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\$212.1 M
Market Value

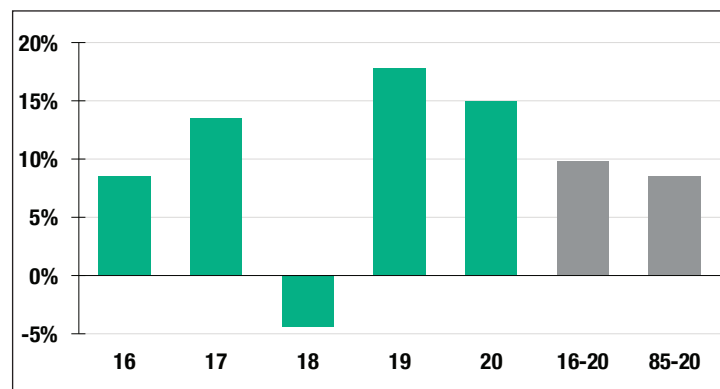
14.98%
2020 Returns

8.11%
2011-2020
[Annualized]

8.51%
1985-2020
[Annualized]

Investment Returns

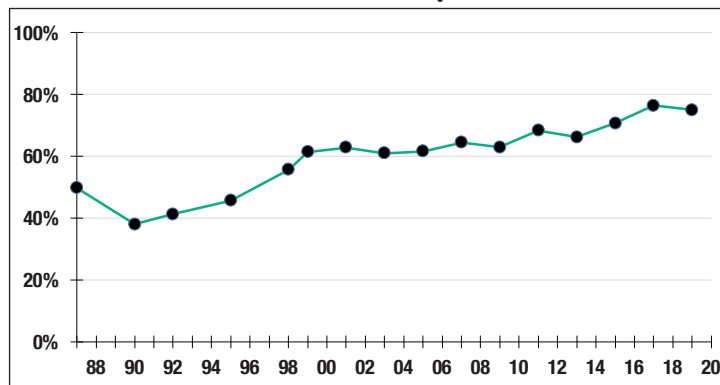
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



75.0%

Funded Ratio

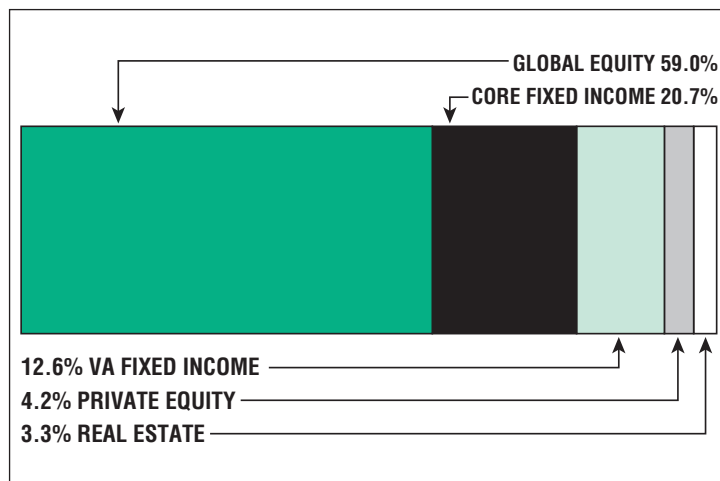
2028

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$58.4 M

Unfunded Liability

\$9.2 M
[FY2021]

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

Lisa Serafin*
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 Service15.2

Retired Members194
Benefits Paid\$9.4 M
Average Benefit\$48,600
Average Age72

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees1
Reported Earnings0
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: Stone



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\$207.9 M
Market Value

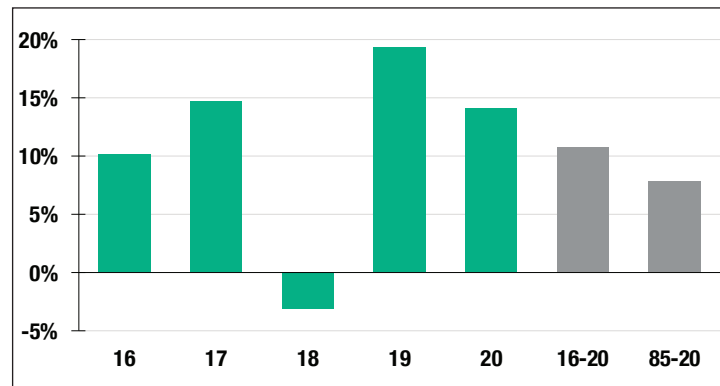
14.02%
2020 Returns

8.12%
2011-2020
(Annualized)

7.76%
1985-2020
(Annualized)

Investment Returns

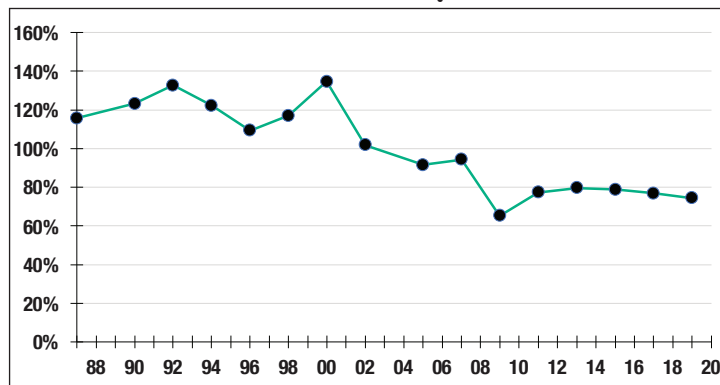
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.00%

Assumed Rate
of Return

Funded Ratio History (1987-2020)



94.8%

Funded Ratio

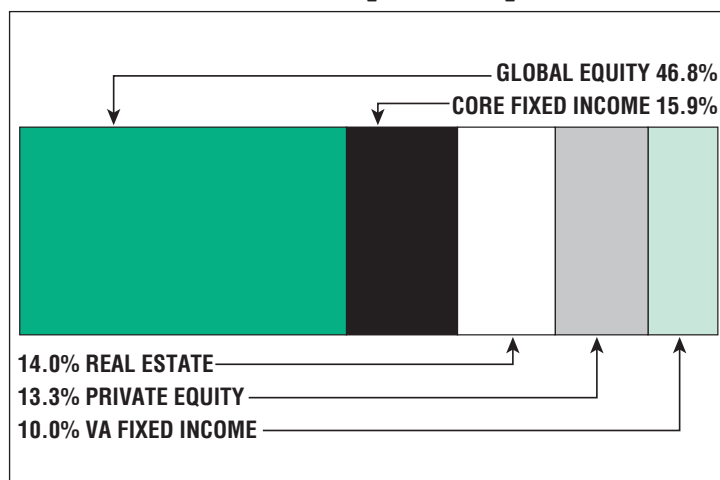
2021

Fully Funded

**Fully Funded/
Normal Cost**

Funding Schedule

Asset Allocation (12/31/20)



\$11.5 M

Unfunded Liability

\$12.2 M
(FY2021)

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 Pranckevicius
Michael Grieco
Michael O'Brien
Betsy Taylor
James Hoyte*

*indicates Chairperson

BOARD ADMINISTRATOR

Irene Moran

SYSTEM MEMBERS

Active Members1,348
Total Payroll\$123.2 M
Average Salary\$91,400
Average Age47
Average Service13

Retired Members872
Benefits Paid\$36.0 M
Average Benefit\$41,300
Average Age70

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees46
Reported Earnings12
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$811.2 M
Market Value

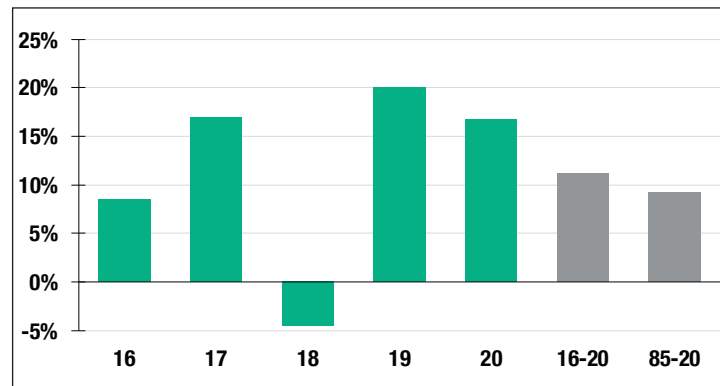
16.78%
2020 Returns

9.08%
2011-2020
[Annualized]

9.24%
1985-2020
[Annualized]

Investment Returns

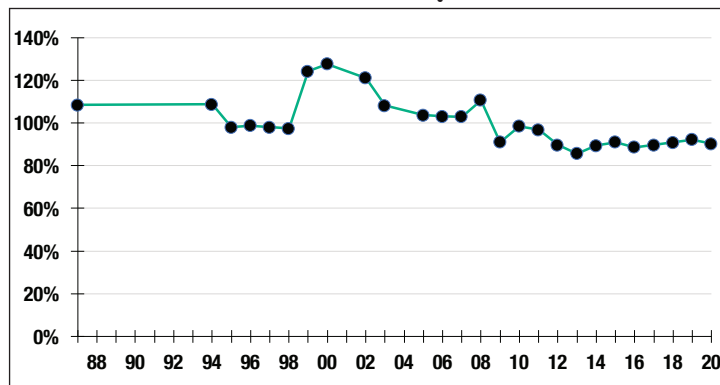
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



90.2%

Funded Ratio

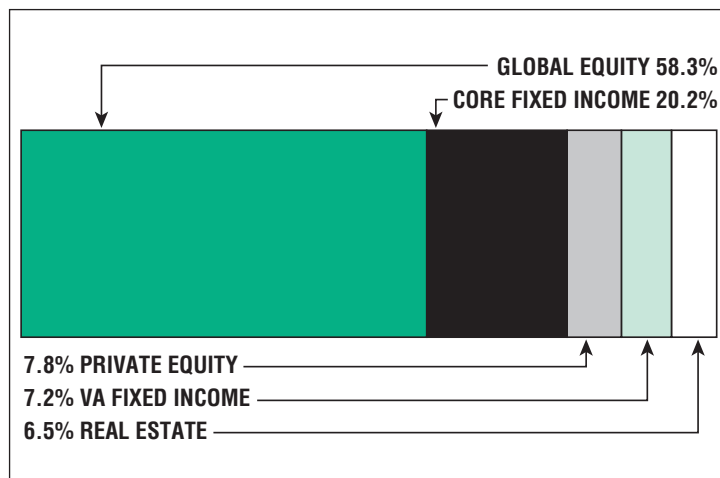
NA

Fully Funded

Frozen Entry Age

Funding Schedule

Asset Allocation [12/31/20]



\$73.9 M

Unfunded Liability

\$14.6 M
[FY2021]

Total Pension
Appropriation

MTRS [Mass. Teachers' Retirement System]

CONTACT INFORMATION

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

BOARD MEMBERS

Ventura Rodriguez*
State Treasurer,
Deborah Goldberg
(Nicola Favorito, designee)
State Auditor Suzanne Bump
(Alicia Fay Daniel, Designee)
Anne Wass
Jacqueline Gorrie
Dennis Naughton
Richard Liston
*indicates Chairperson

BOARD ADMINISTRATOR

Erika Glaster

SYSTEM MEMBERS

Active Members94,103
Total Payroll \$7.1 B
Average Salary\$75,200
Average Age44
Average Service 13.2

Retired Members.....67,110
Benefits Paid \$3.0 B
Average Benefit\$45,100
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees543
Reported Earnings108
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$33.5 B
Market Value

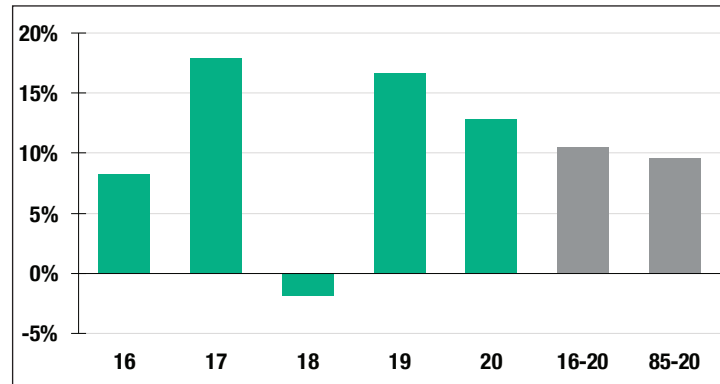
12.78%
2020 Returns

9.04%
2011-2020
[Annualized]

9.56%
1985-2020
[Annualized]

Investment Returns

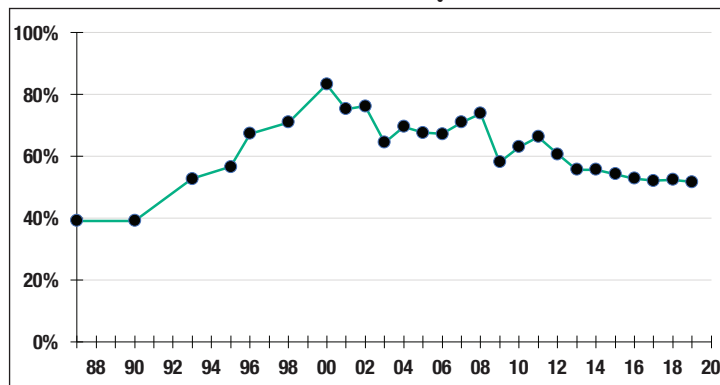
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



51.7%

Funded Ratio

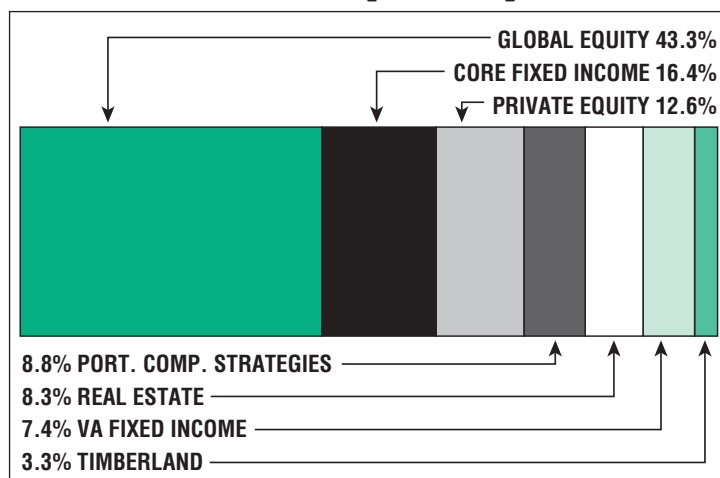
2036

Fully Funded

**9.63% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$26.0 B

Unfunded Liability

\$1.7 B
[FY2021]

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 Age 51
Average Service 17.5

Retired Members 702
Benefits Paid \$28.5 M
Average Benefit \$40,500
Average Age 71

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 70
Reported Earnings 15
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/21
Actuary: Segal



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\$648.7 M
Market Value

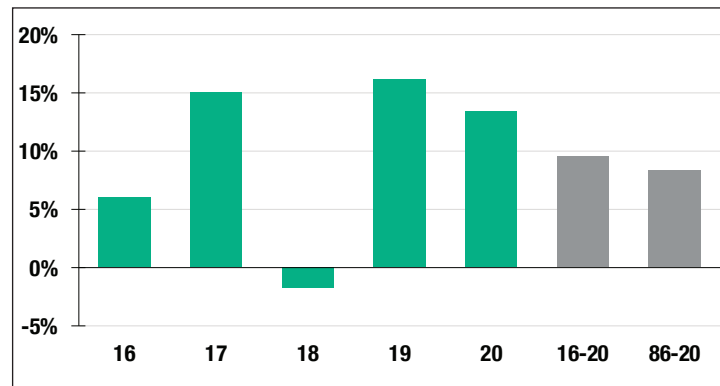
13.42%
2020 Returns

8.48%
2011-2020
[Annualized]

8.33%
1986-2020
[Annualized]

Investment Returns

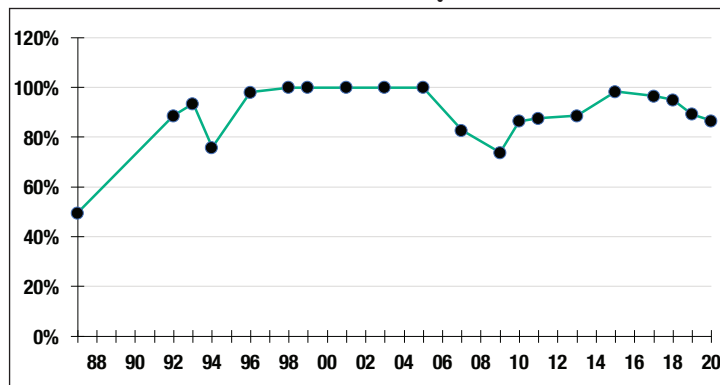
[2016-2020, 5-Year & 35-Year Averages, as of 12/31/20]



6.90%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



88.2%

Funded Ratio

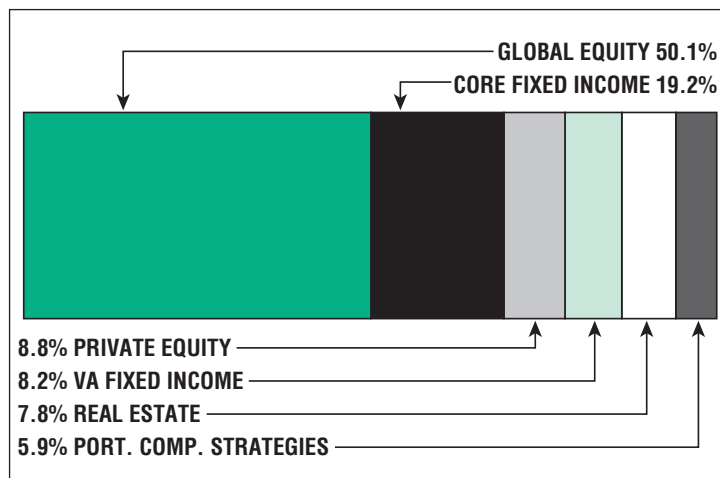
2030

Fully Funded

**12.05% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$83.9 M

Unfunded Liability

\$10.0 M
[FY2021]

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 Members212
Total Payroll\$10.0 M
Average Salary\$47,400
Average Age46
Average Service10.1

Retired Members117
Benefits Paid\$3.1 M
Average Benefit\$26,600
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees6
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$56.0 M
Market Value

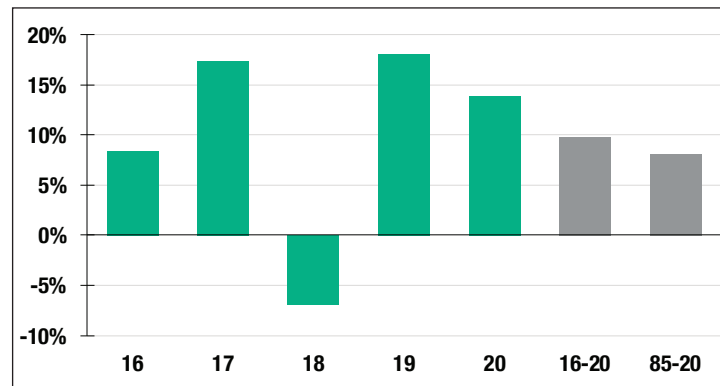
13.87%
2020 Returns

8.89%
2011-2020
[Annualized]

8.12%
1985-2020
[Annualized]

Investment Returns

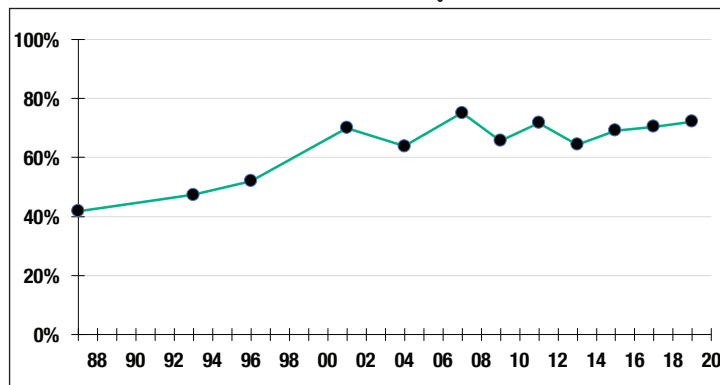
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



6.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



72.2%

Funded Ratio

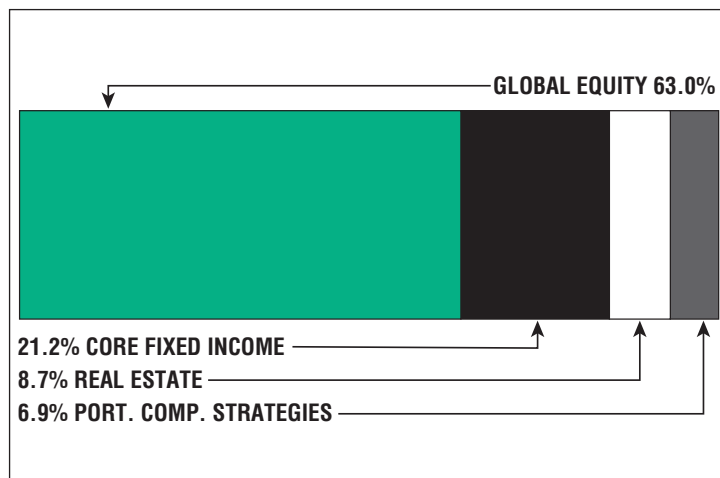
2035

Fully Funded

**6.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$17.4 M

Unfunded Liability

\$2.6 M
[FY2021]

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 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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees96
Reported Earnings21
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



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\$225.3 M
Market Value

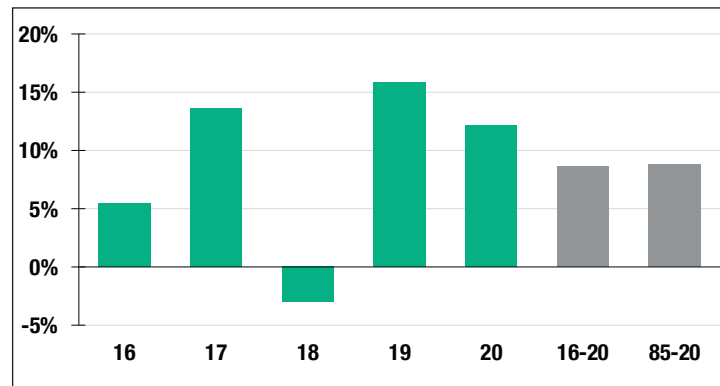
12.18%
2020 Returns

7.40%
2011-2020
[Annualized]

8.77%
1985-2020
[Annualized]

Investment Returns

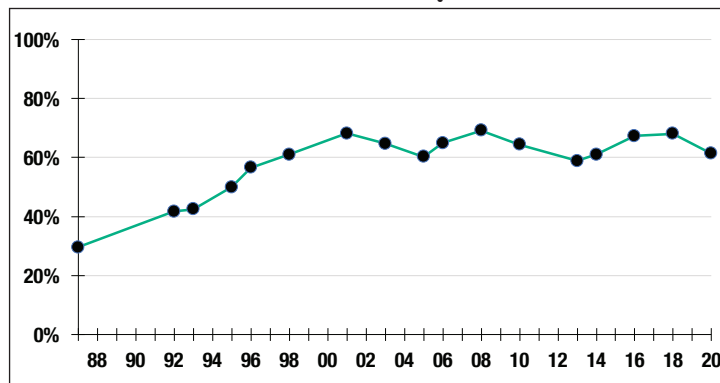
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



61.3%

Funded Ratio

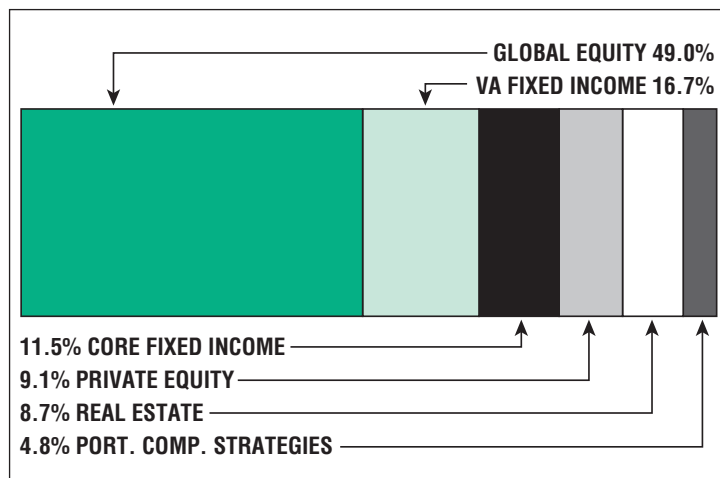
2033

Fully Funded

**8.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$129.5 M

Unfunded Liability

\$13.0 M
[FY2021]

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 Members426
Total Payroll\$21.6 M
Average Salary\$50,600
Average Age46
Average Service10

Retired Members398
Benefits Paid\$9.5 M
Average Benefit\$24,000
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings3
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: Stone



Click/Scan for website

\$103.6 M
Market Value

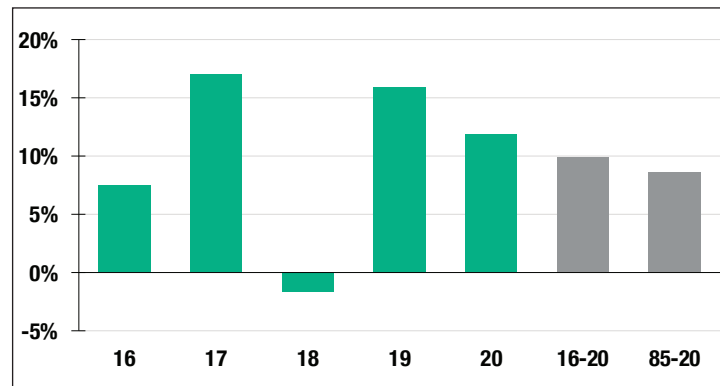
11.82%
2020 Returns

8.54%
2011-2020
[Annualized]

8.53%
1985-2020
[Annualized]

Investment Returns

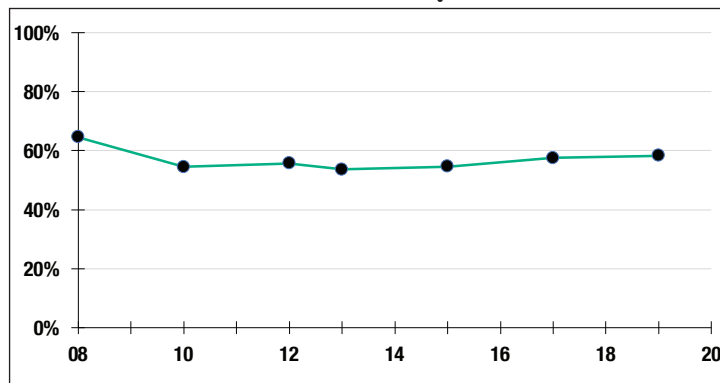
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



58.3%

Funded Ratio

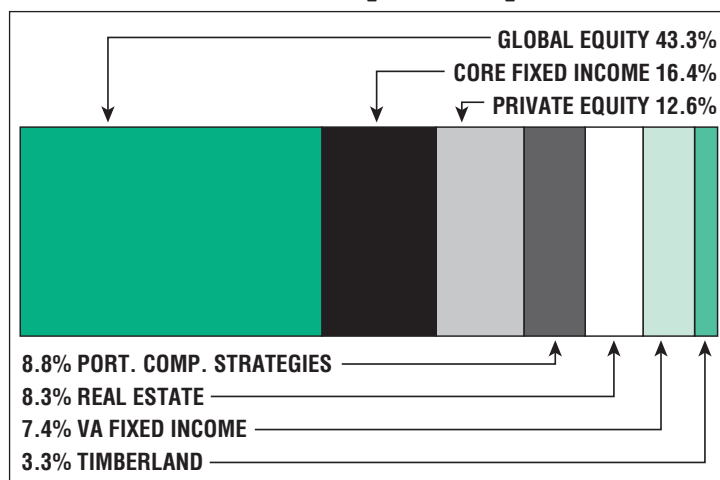
2037

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$63.4 M

Unfunded Liability

\$6.5 M
[FY2021]

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
Robert Sheehan
*indicates Chairperson

BOARD ADMINISTRATOR

Kaitlyn Doucette

SYSTEM MEMBERS

Active Members625
Total Payroll\$37.3 M
Average Salary\$59,700
Average Age47
Average Service13.6

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees51
Reported Earnings16
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



Click/Scan for website

\$198.7 M
Market Value

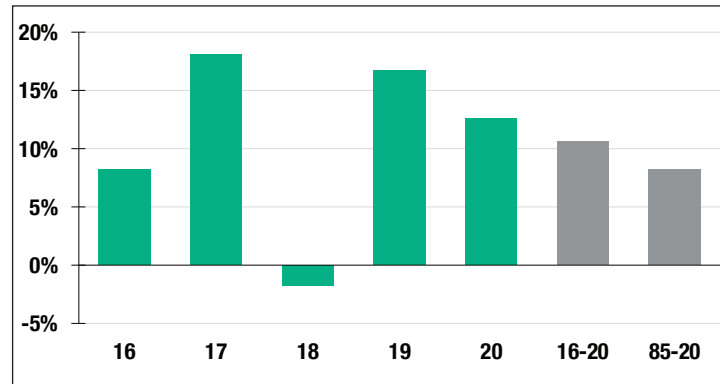
12.60%
2020 Returns

9.38%
2011-2020
[Annualized]

8.27%
1985-2020
[Annualized]

Investment Returns

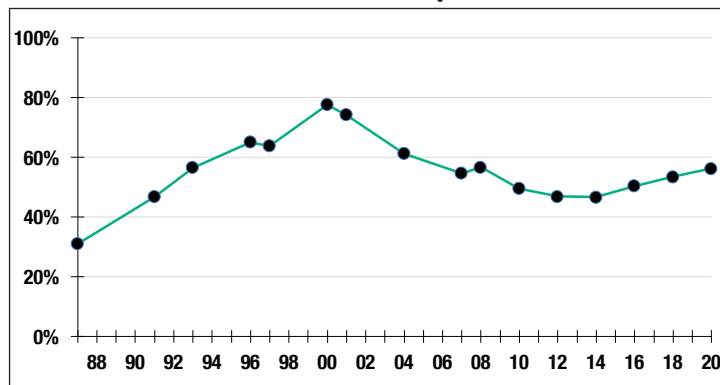
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



56.2%

Funded Ratio

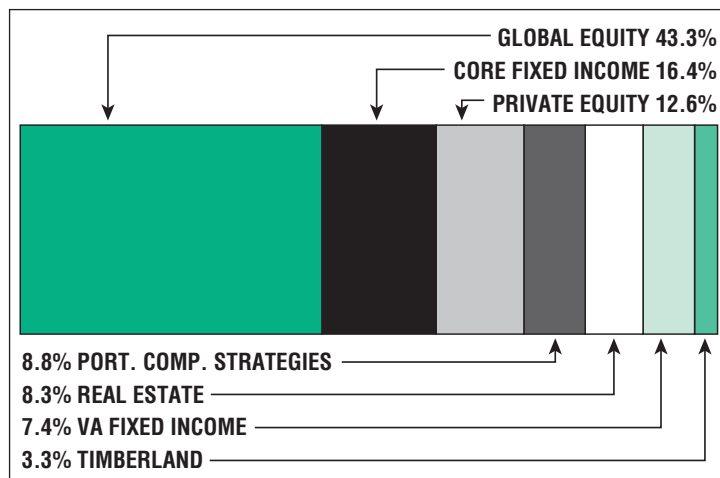
2036

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$130.6 M

Unfunded Liability

\$13.8 M
[FY2021]

Total Pension
Appropriation

Middlesex County

CONTACT INFORMATION

25 Linnell Circle
P.O. Box 160
Billerica, MA 01865
Phone 978-439-3000
Phone 800-258-3805
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 Service11.2

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees363
Reported Earnings123
Excess Earners3
Refund Due\$67,348

Last Valuation: 1/1/20
Actuary: Segal



Click/Scan for website

\$1.8 B
Market Value

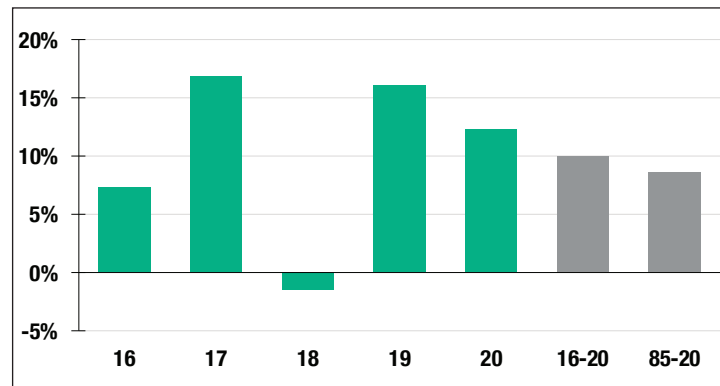
12.26%
2020 Returns

8.72%
2011-2020
[Annualized]

8.56%
1985-2020
[Annualized]

Investment Returns

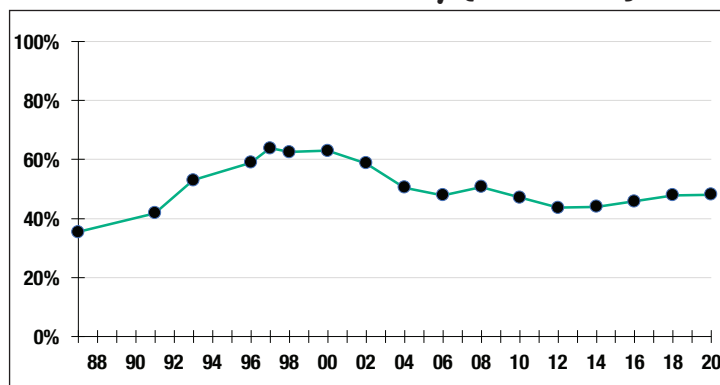
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.30%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



48.1%

Funded Ratio

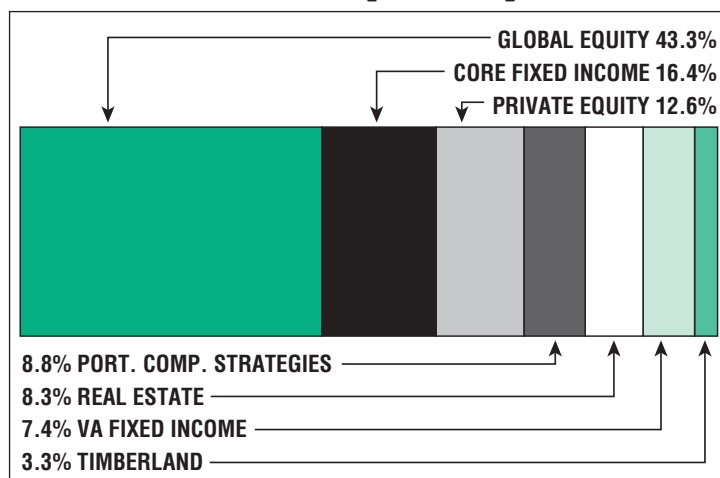
2037

Fully Funded

**4.0% Increasing
Phase-In**

Funding Schedule

Asset Allocation [12/31/20]



\$1.6 B

Unfunded Liability

\$137.8 M
[FY2021]

Total Pension
Appropriation

Milford

CONTACT INFORMATION

Town Hall, Room 17
52 Main Street
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

Alberta Farley

SYSTEM MEMBERS

Active Members489
Total Payroll\$22.6 M
Average Salary\$46,300
Average Age49
Average Service12

Retired Members.....304
Benefits Paid\$8.2 M
Average Benefit\$26,900
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees30
Reported Earnings11
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



Click/Scan for website

\$117.4 M
Market Value

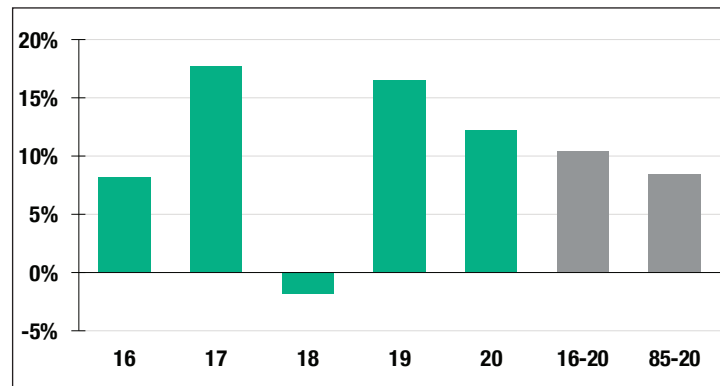
12.20%
2020 Returns

8.85%
2011-2020
[Annualized]

8.43%
1985-2020
[Annualized]

Investment Returns

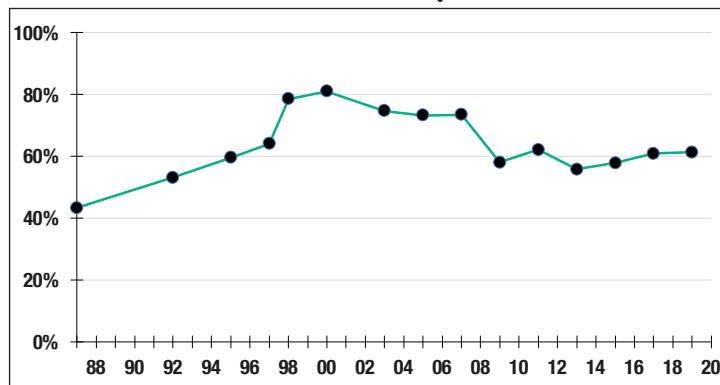
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



61.3%

Funded Ratio

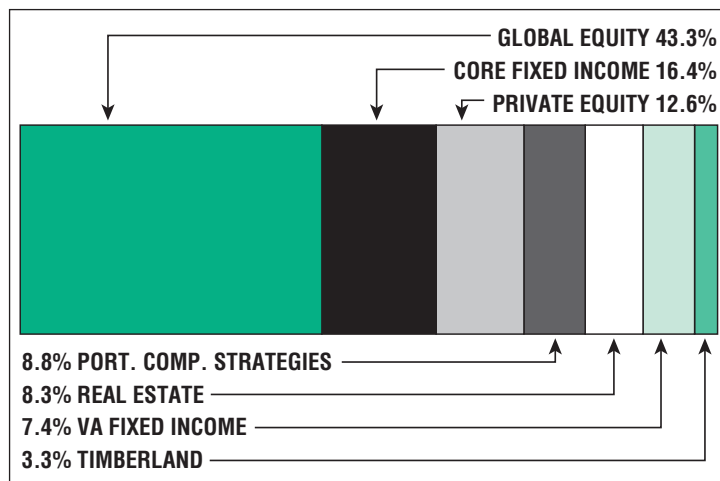
2036

Fully Funded

**7.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$60.2 M

Unfunded Liability

\$6.0 M
[FY2021]

Total Pension
Appropriation

Milton

CONTACT INFORMATION

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

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Jeanne Darcy

SYSTEM MEMBERS

Active Members404
Total Payroll\$23.8 M
Average Salary\$58,900
Average Age46
Average Service11.8

Retired Members274
Benefits Paid\$8.8 M
Average Benefit\$32,200
Average Age75

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings10
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$169.8 M
Market Value

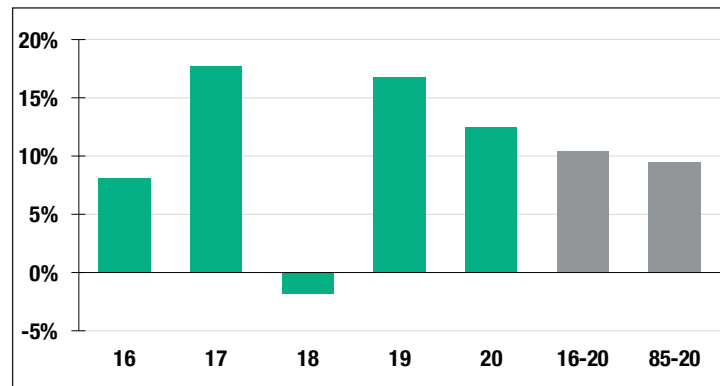
12.46%
2020 Returns

8.97%
2011-2020
[Annualized]

9.47%
1985-2020
[Annualized]

Investment Returns

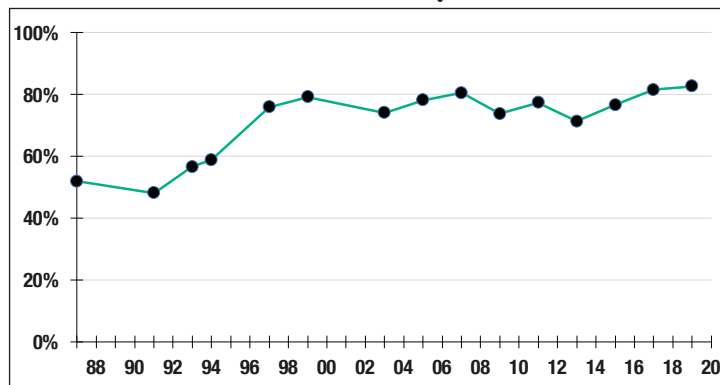
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



82.6%

Funded Ratio

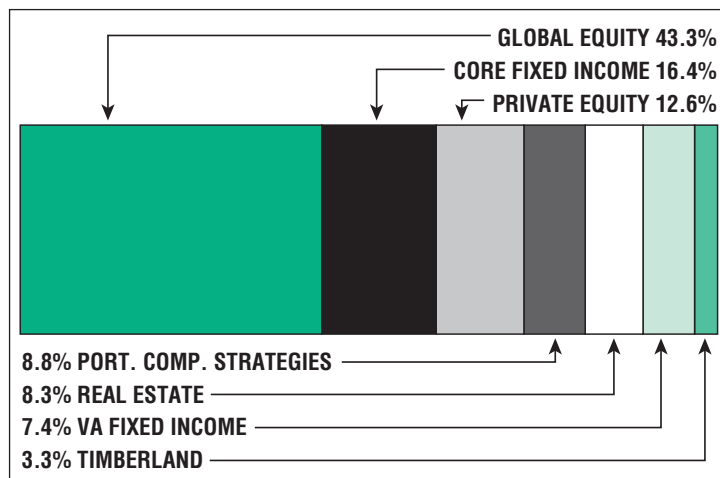
2027

Fully Funded

**6.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$28.6 M

Unfunded Liability

\$7.1 M
[FY2021]

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
Kevin Mahoney*
Maria Oliveira
Cheryl Mixon
Norman Cohen
*indicates Chairperson

BOARD ADMINISTRATOR

Sandor Zapolin

SYSTEM MEMBERS

Active Members49
Total Payroll\$2.3 M
Average Salary\$46,200
Average Age48
Average Service8.2

Retired Members40
Benefits Paid\$1.1 M
Average Benefit\$27,900
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees1
Reported Earnings0
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$15.7 M
Market Value

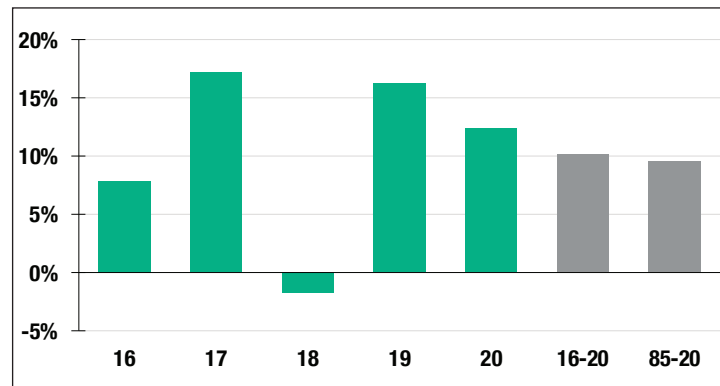
12.33%
2020 Returns

8.71%
2011-2020
[Annualized]

9.52%
1985-2020
[Annualized]

Investment Returns

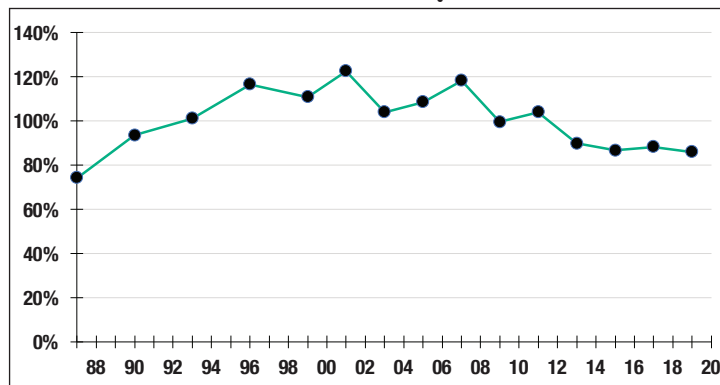
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



86.0%

Funded Ratio

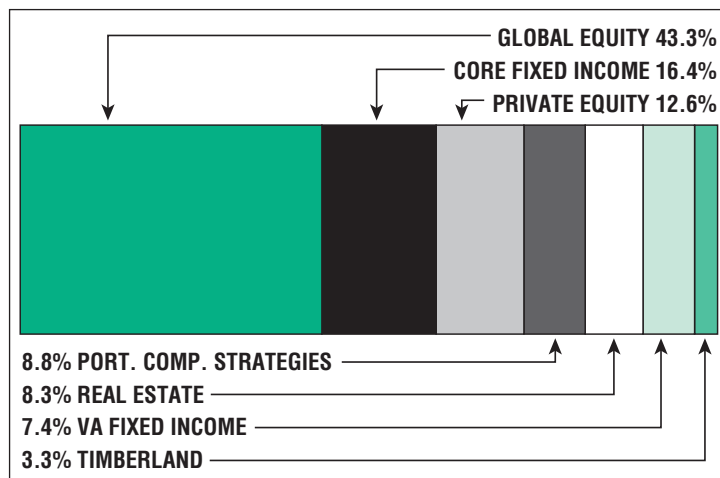
2035

Fully Funded

**10.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$2.2 M

Unfunded Liability

\$297 K
[FY2021]

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 12
Reported Earnings 3
Excess Earners 0
Refund Due \$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$52.4 M
Market Value

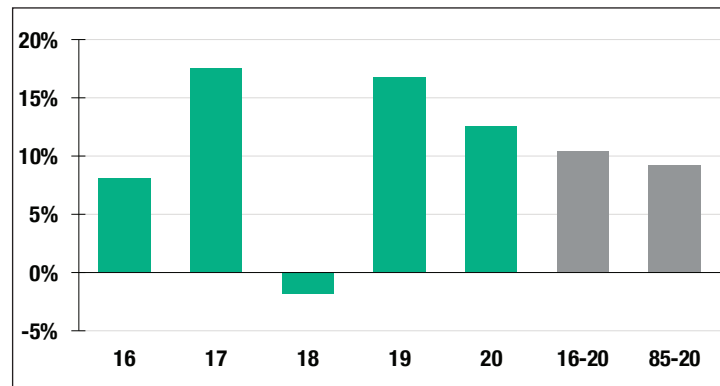
12.49%
2020 Returns

8.95%
2011-2020
[Annualized]

9.25%
1985-2020
[Annualized]

Investment Returns

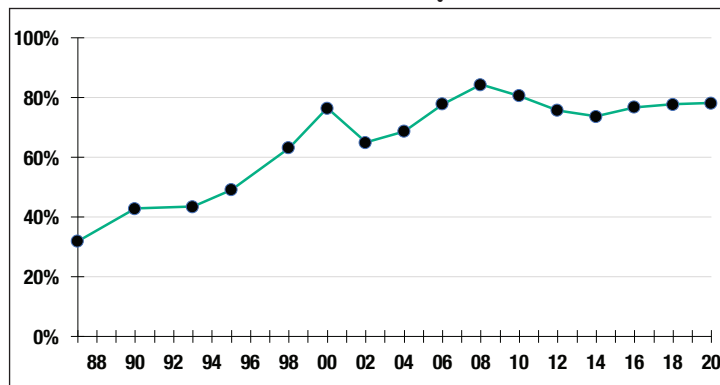
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



78.1%

Funded Ratio

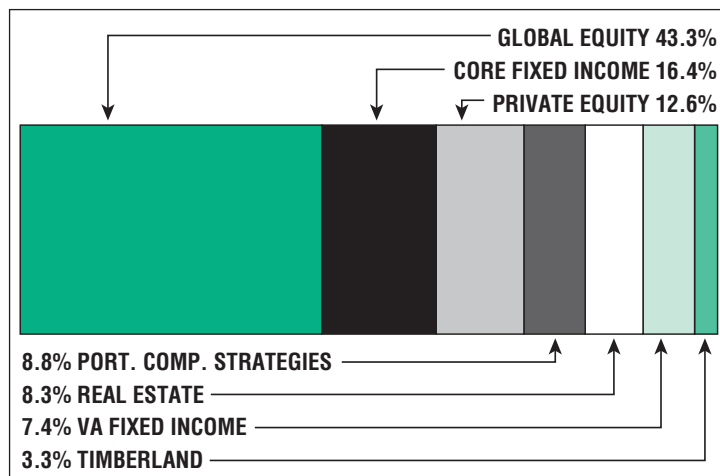
2033

Fully Funded

**5.2% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$12.6 M

Unfunded Liability

\$2.1 M
[FY2021]

Total Pension
Appropriation

Natick

CONTACT INFORMATION

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

BOARD MEMBERS

Arti Mehta
Eliot Lurier
Nicholas Mabardy
Michael Melchiorri*
B. Michael Reardon
*indicates Chairperson

BOARD ADMINISTRATOR

Kathleen Bacon

SYSTEM MEMBERS

Active Members651
Total Payroll\$37.3 M
Average Salary\$57,300
Average Age46
Average Service11.2

Retired Members419
Benefits Paid\$12.4 M
Average Benefit\$29,700
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees14
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: Segal



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\$186.8 M
Market Value

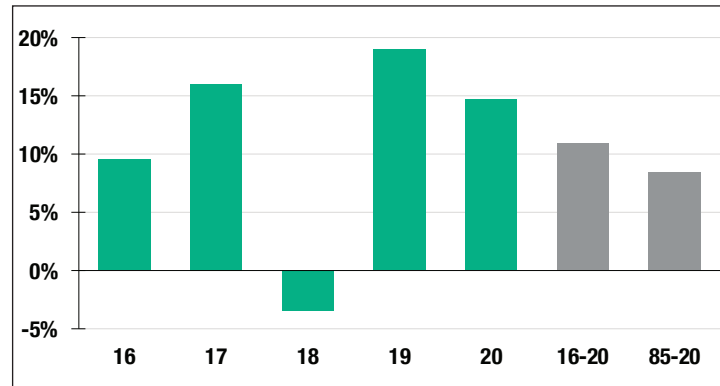
14.74%
2020 Returns

9.54%
2011-2020
[Annualized]

8.41%
1985-2020
[Annualized]

Investment Returns

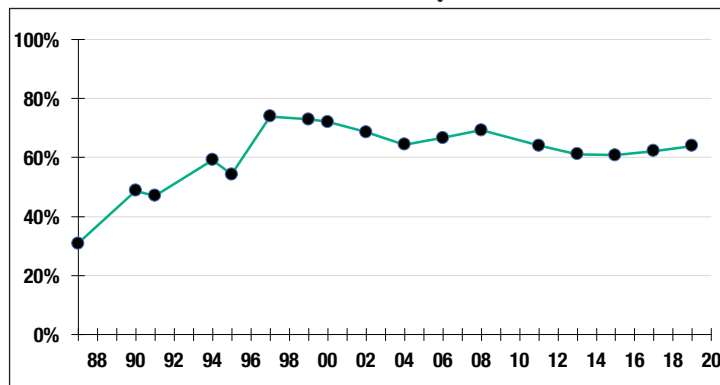
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



63.9%

Funded Ratio

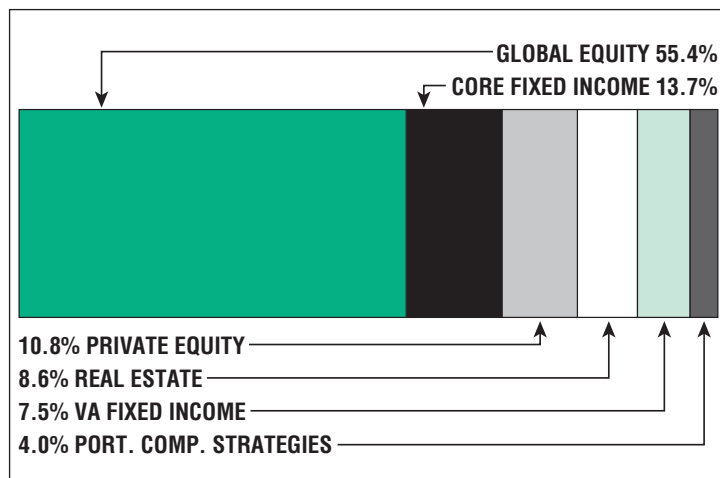
2030

Fully Funded

**8.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$85.4 M

Unfunded Liability

\$11.4 M
[FY2021]

Total Pension
Appropriation

Needham

CONTACT INFORMATION

Town Hall
1471 Highland Ave.
Needham, MA 02492
Phone 781-455-7500 Ext. 231
Fax 781-449-4569

BOARD MEMBERS

Evelyn Poness*
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 Service10.6

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees28
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



Click/Scan for website

\$203.6 M
Market Value

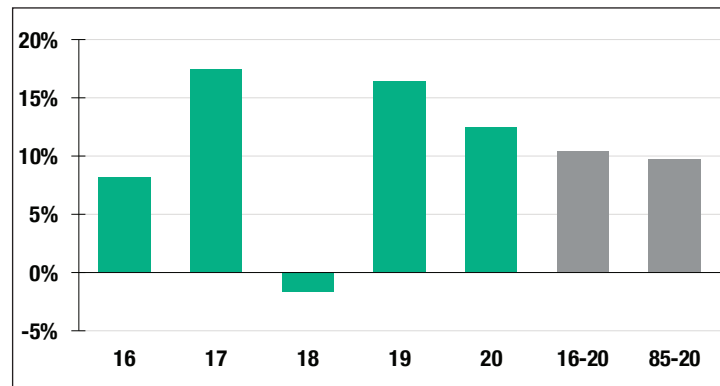
12.48%
2020 Returns

8.88%
2011-2020
[Annualized]

9.70%
1985-2020
[Annualized]

Investment Returns

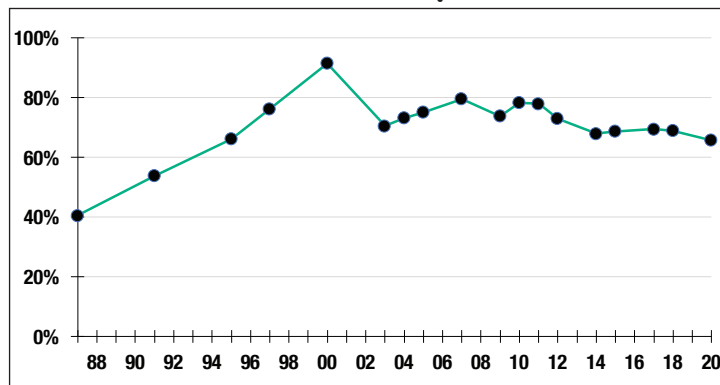
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



6.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



65.6%

Funded Ratio

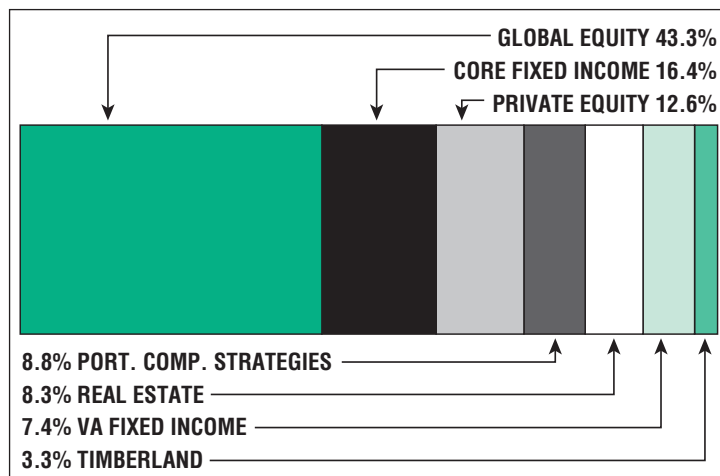
2033

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$92.2 M

Unfunded Liability

\$9.5 M
[FY2021]

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

Brennan Morsette
Angela Natho
Leonard Baillargeon
James Allen*
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 Service11.2

Retired Members1,854
Benefits Paid\$48.7 M
Average Benefit\$26,200
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees263
Reported Earnings62
Excess Earners1
Refund Due\$299

Last Valuation: 1/1/20
Actuary: KMS



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\$407.9 M
Market Value

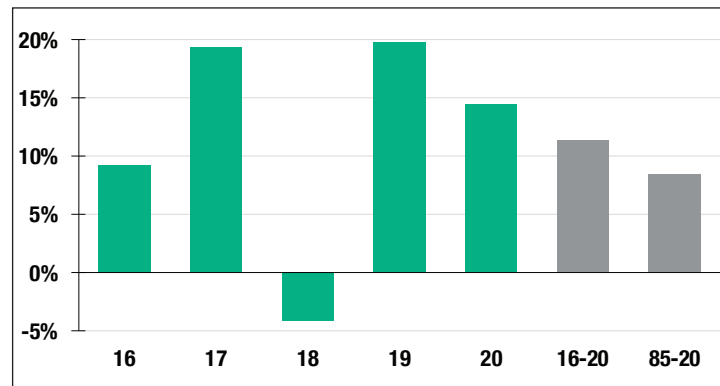
14.40%
2020 Returns

9.08%
2011-2020
[Annualized]

8.40%
1985-2020
[Annualized]

Investment Returns

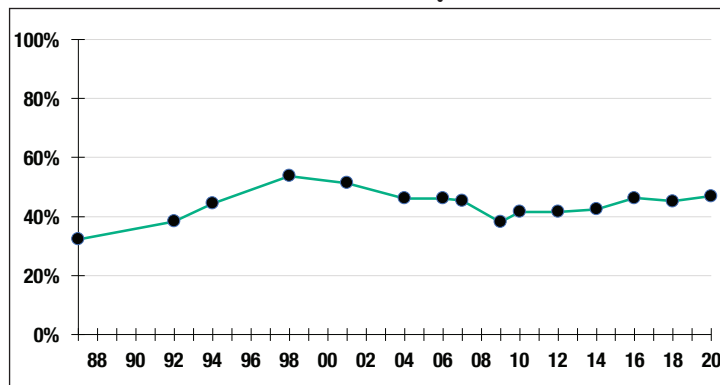
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



46.9%

Funded Ratio

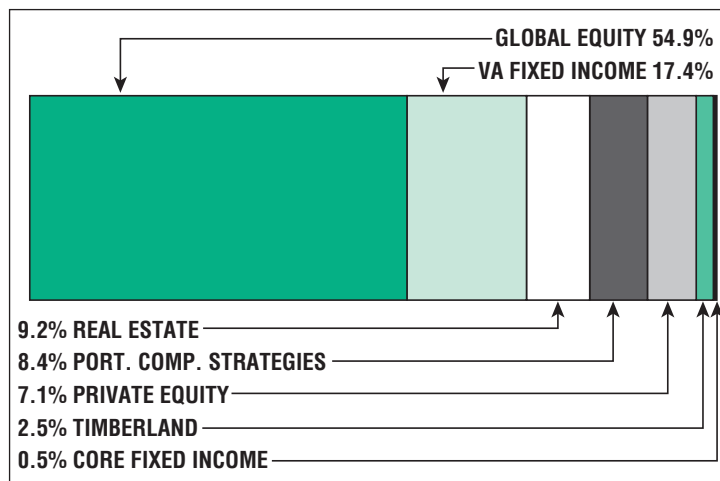
2035

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$394.7 M

Unfunded Liability

\$36.8 M
[FY2021]

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees23
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$104.2 M
Market Value

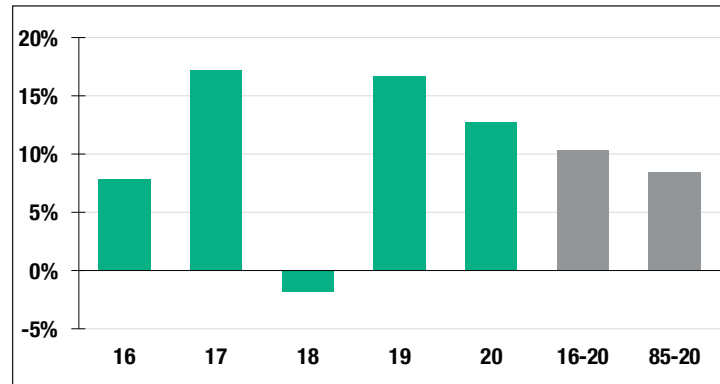
12.71%
2020 Returns

8.86%
2011-2020
[Annualized]

8.43%
1985-2020
[Annualized]

Investment Returns

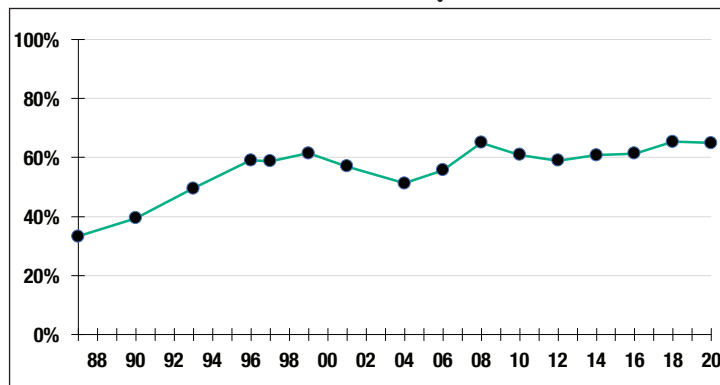
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



64.9%

Funded Ratio

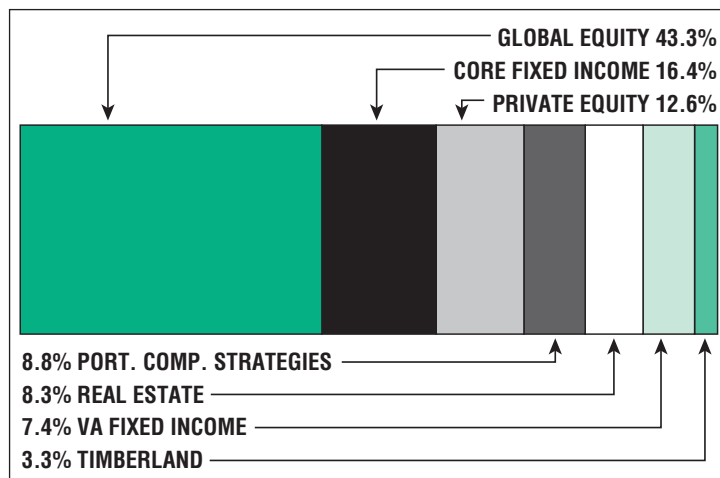
2038

Fully Funded

**5.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$48.2 M

Unfunded Liability

\$5.4 M
[FY2021]

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

Susan Dzikowski
Anthony Logalbo
Thomas Lopez*
Paul Bianchi
Lisa Maloney
*indicates Chairperson

BOARD ADMINISTRATOR

Kelly Byrne

SYSTEM MEMBERS

Active Members1,611
Total Payroll\$102.9 M
Average Salary\$63,900
Average Age46
Average Service11.8

Retired Members1,339
Benefits Paid\$40.6 M
Average Benefit\$30,300
Average Age75

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees128
Reported Earnings28
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$439.3 M
Market Value

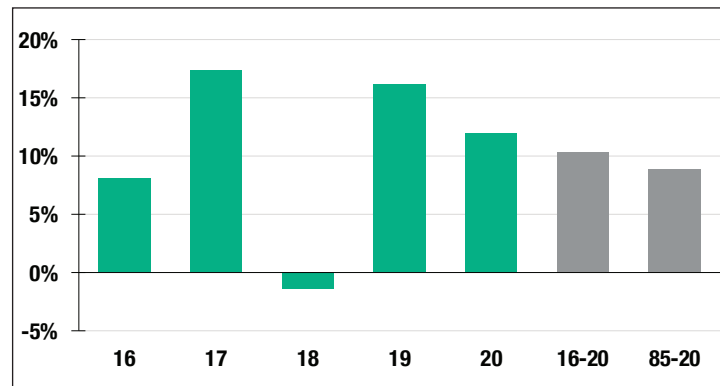
11.98%
2020 Returns

8.89%
2011-2020
[Annualized]

8.78%
1985-2020
[Annualized]

Investment Returns

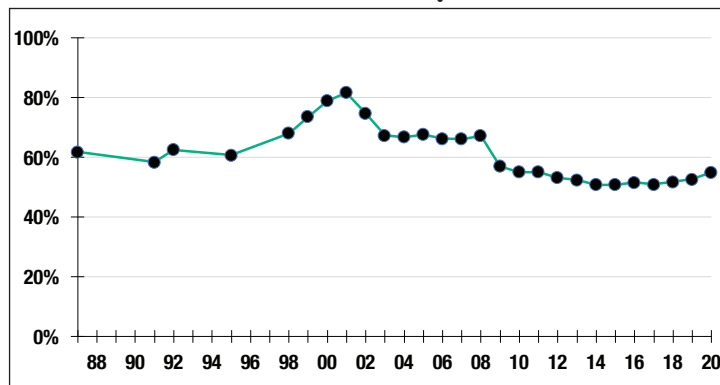
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



54.9%

Funded Ratio

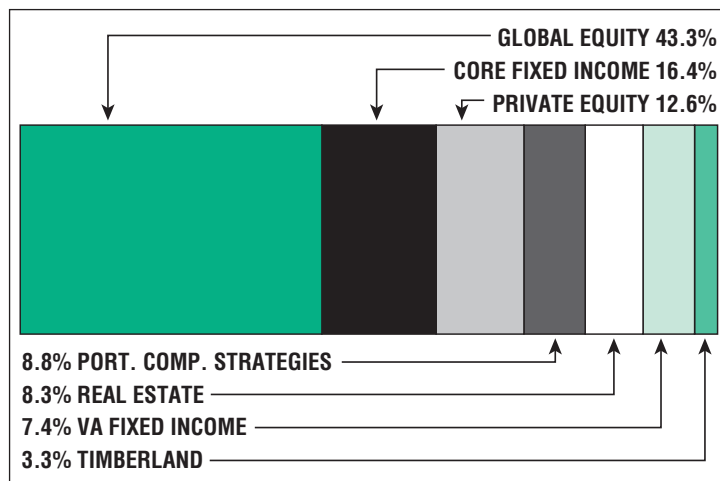
2031

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$317.0 M

Unfunded Liability

\$32.5 M
[FY2021]

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees286
Reported Earnings88
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



Click/Scan for website

\$1.2 B
Market Value

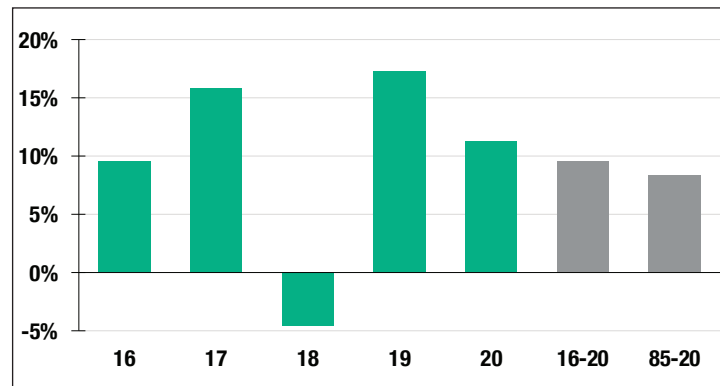
11.23%
2020 Returns

8.34%
2011-2020
[Annualized]

8.67%
1985-2020
[Annualized]

Investment Returns

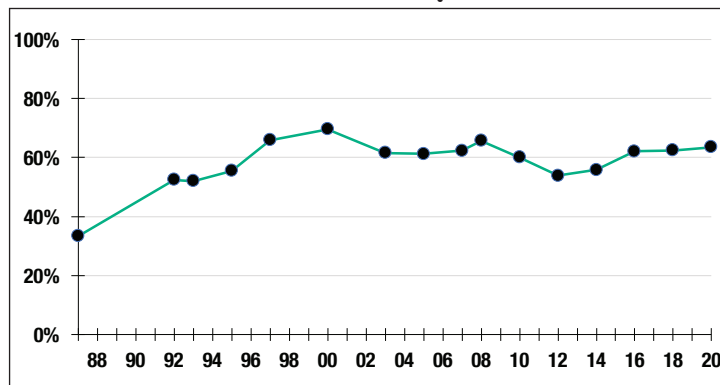
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



63.5%

Funded Ratio

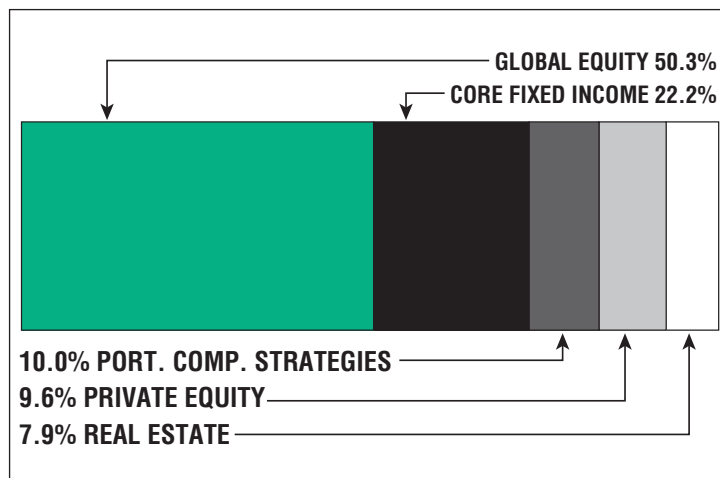
2029

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$605.3 M

Unfunded Liability

\$81.6 M
[FY2021]

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

Beth Matson

SYSTEM MEMBERS

Active Members312
Total Payroll\$11.8 M
Average Salary\$37,800
Average Age46
Average Service10.7

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees33
Reported Earnings15
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$83.5 M
Market Value

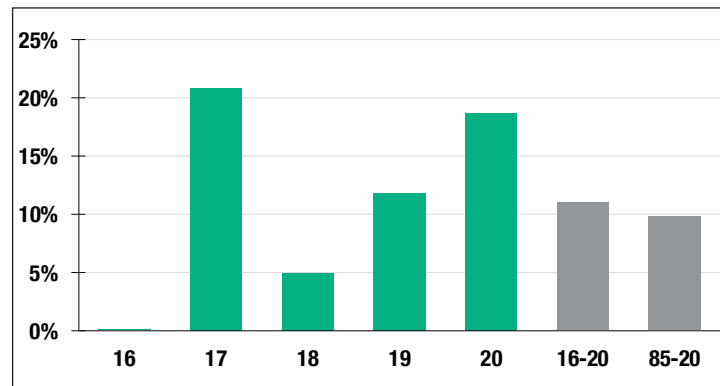
18.62%
2020 Returns

9.95%
2011-2020
[Annualized]

9.80%
1985-2020
[Annualized]

Investment Returns

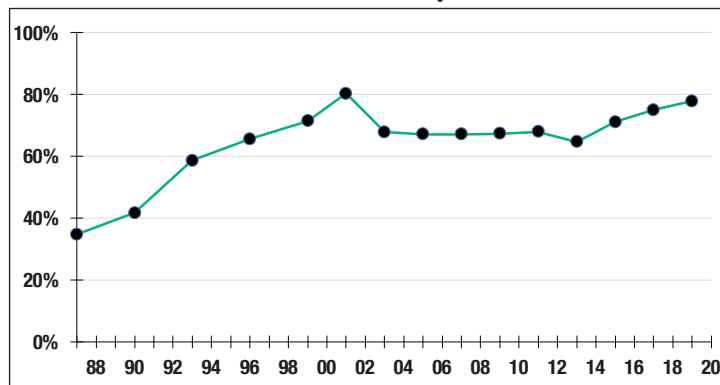
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



83.3%

Funded Ratio

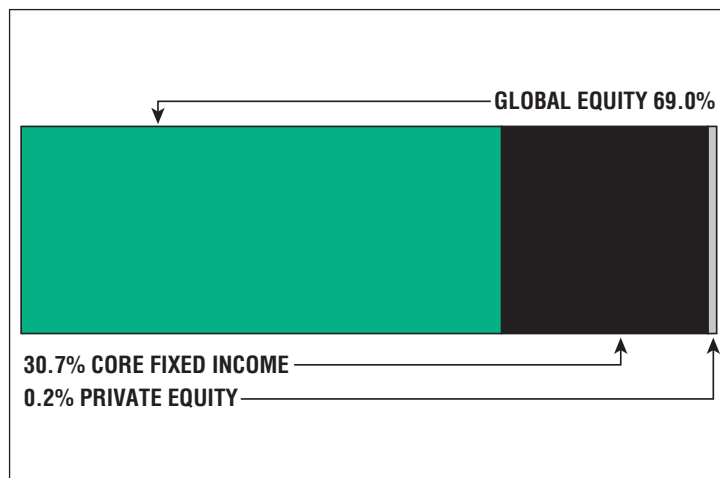
2029

Fully Funded

**4.9% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$15.1 M

Unfunded Liability

\$3.5 M
[FY2021]

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
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 Service11.8

Retired Members301
Benefits Paid\$8.2 M
Average Benefit\$27,100
Average Age71

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees25
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Segal



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\$149.3 M
Market Value

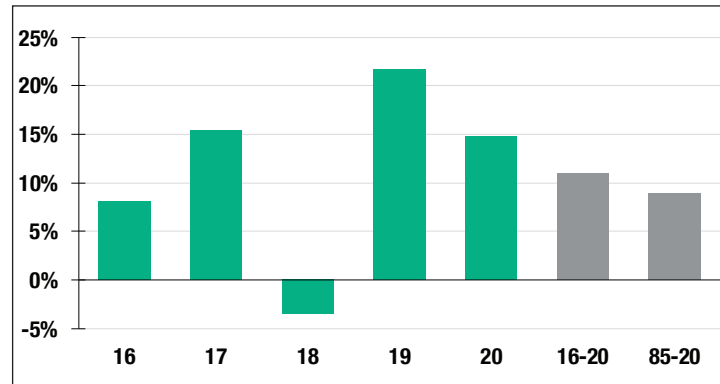
14.82%
2020 Returns

9.86%
2011-2020
[Annualized]

8.93%
1985-2020
[Annualized]

Investment Returns

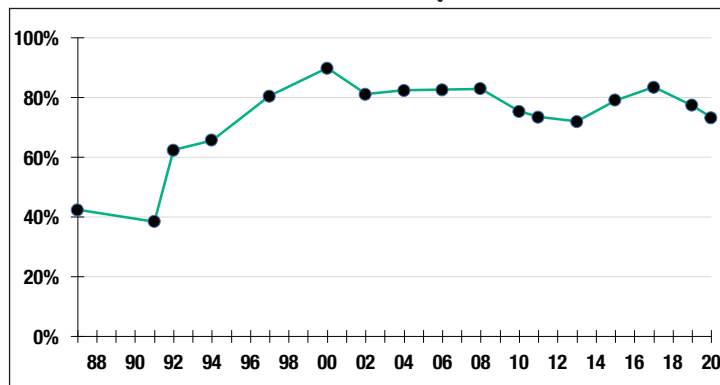
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



73.2%

Funded Ratio

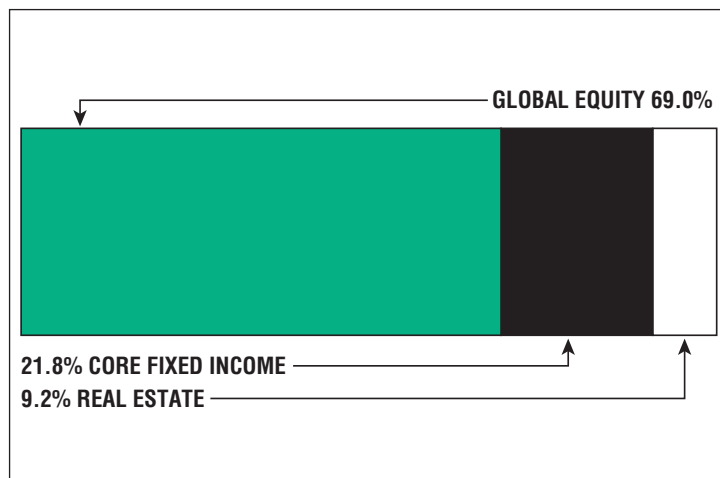
2034

Fully Funded

**5.6% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$46.0 M

Unfunded Liability

\$4.2 M
[FY2021]

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
Michael Lyons
Thomas Sullivan

*indicates Chairperson

BOARD ADMINISTRATOR

David Shipka

SYSTEM MEMBERS

Active Members645
Total Payroll\$30.9 M
Average Salary\$47,800
Average Age47
Average Service10.4

Retired Members451
Benefits Paid\$11.2 M
Average Benefit\$24,800
Average Age71

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees30
Reported Earnings13
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$164.2 M
Market Value

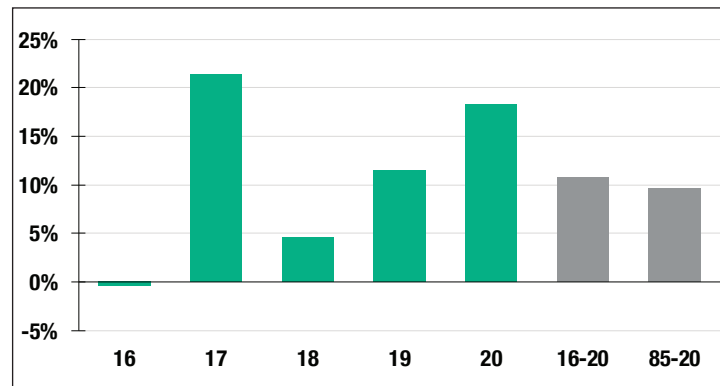
18.39%
2020 Returns

9.84%
2011-2020
[Annualized]

9.63%
1985-2020
[Annualized]

Investment Returns

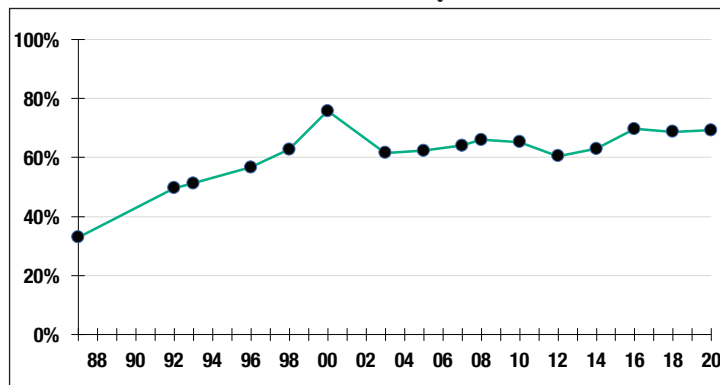
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.13%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



69.2%

Funded Ratio

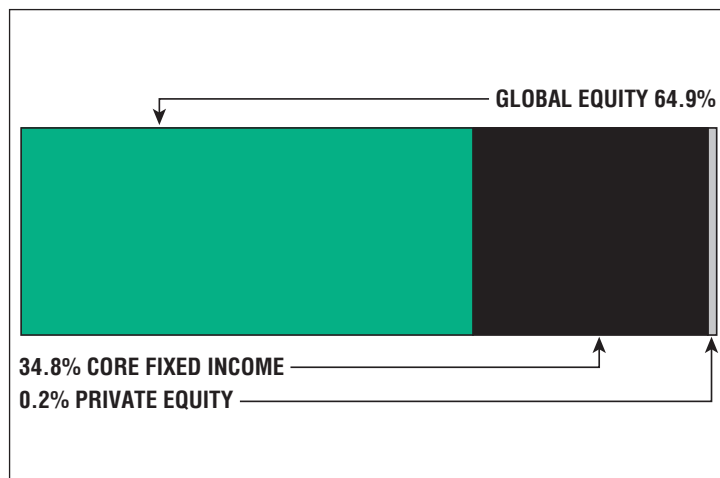
2037

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$60.8 M

Unfunded Liability

\$6.9 M
[FY2021]

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 Service10.5

Retired Members113
Benefits Paid\$2.7 M
Average Benefit\$23,700
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees10
Reported Earnings3
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$45.3 M
Market Value

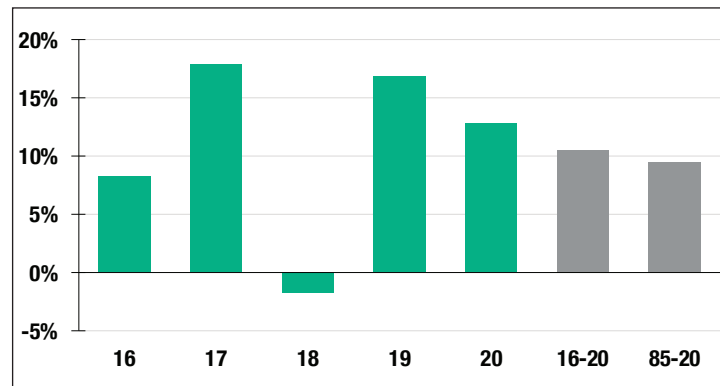
12.75%
2020 Returns

9.06%
2011-2020
[Annualized]

9.46%
1985-2020
[Annualized]

Investment Returns

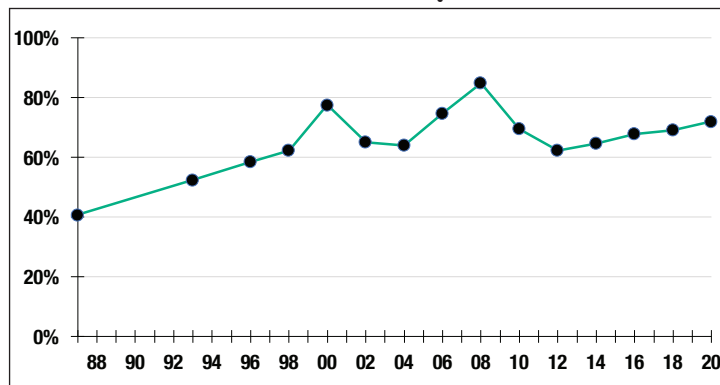
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



71.9%

Funded Ratio

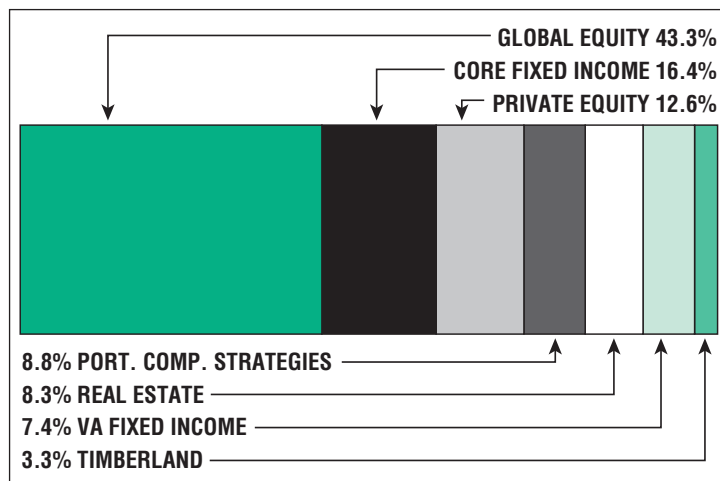
2035

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$15.3 M

Unfunded Liability

\$2.0 M
[FY2021]

Total Pension
Appropriation

Norwood

CONTACT INFORMATION

566 Washington Street
Norwood, MA 02062
Phone 781-762-1240 Ext. 157
Fax 781-278-3024

BOARD MEMBERS

Thomas McQuaid
Edmund Mulvehill*
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees36
Reported Earnings14
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



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\$199.6 M
Market Value

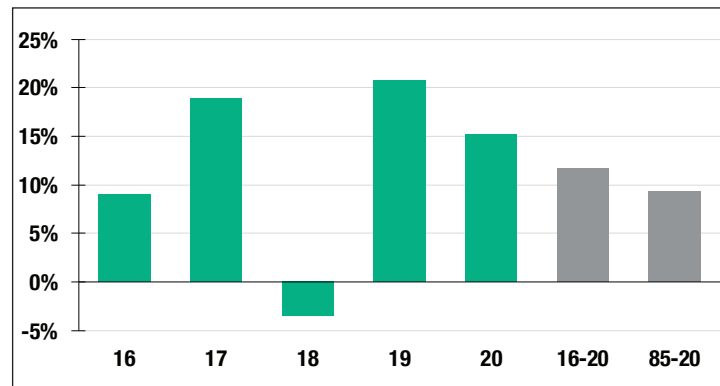
15.29%
2020 Returns

9.27%
2011-2020
[Annualized]

9.36%
1985-2020
[Annualized]

Investment Returns

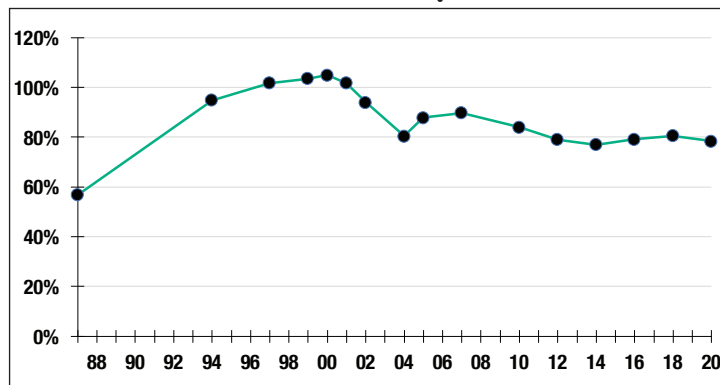
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.60%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



78.4%

Funded Ratio

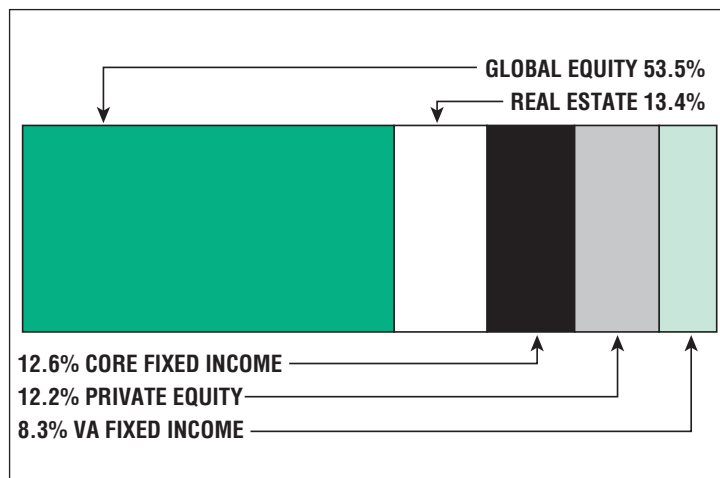
2032

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$46.9 M

Unfunded Liability

\$5.5 M
[FY2021]

Total Pension
Appropriation

Peabody

CONTACT INFORMATION

City Hall
24 Lowell Street
Peabody, MA 01960
Phone 978-538-5911
Fax 978-538-5989

BOARD MEMBERS

Michael Gingras
Edward Lomasney
Linda Cavallon
Joseph DiFranco
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees44
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



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\$178.9 M
Market Value

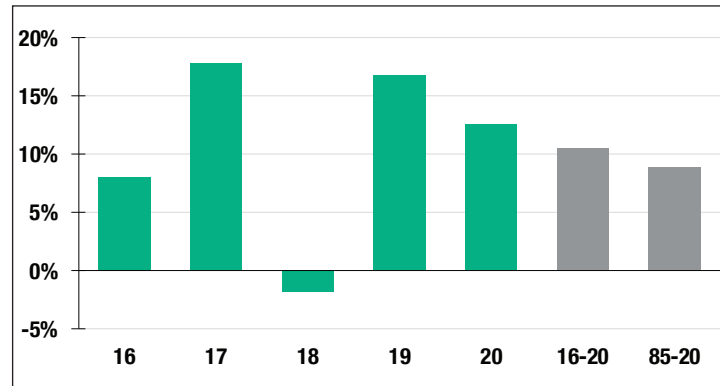
12.56%
2020 Returns

9.00%
2011-2020
[Annualized]

8.81%
1985-2020
[Annualized]

Investment Returns

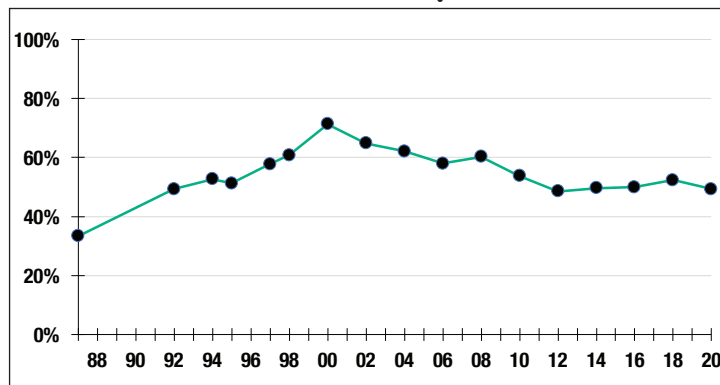
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



49.3%

Funded Ratio

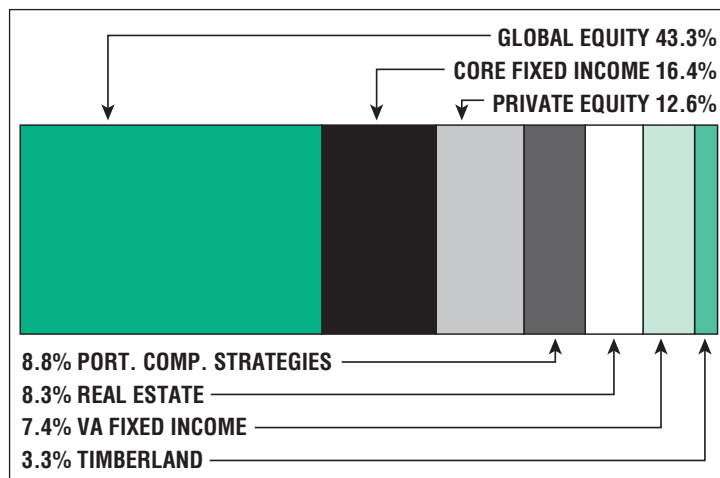
2036

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$169.3 M

Unfunded Liability

\$13.2 M
[FY2021]

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 Members917
Total Payroll\$35.7 M
Average Salary\$38,900
Average Age48
Average Service11

Retired Members797
Benefits Paid\$18.4 M
Average Benefit\$23,000
Average Age75

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees62
Reported Earnings18
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$168.7 M
Market Value

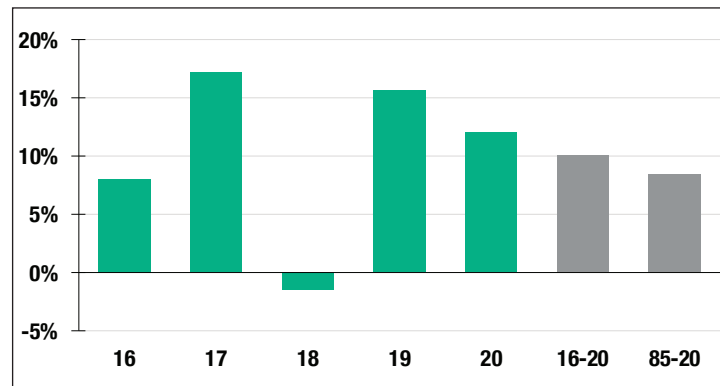
12.04%
2020 Returns

8.86%
2011-2020
[Annualized]

8.38%
1985-2020
[Annualized]

Investment Returns

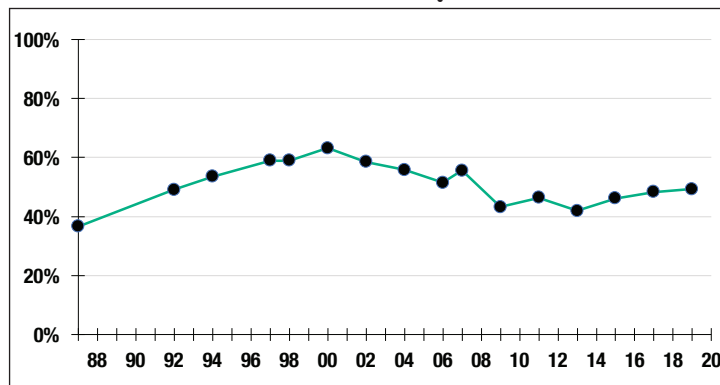
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



49.3%

Funded Ratio

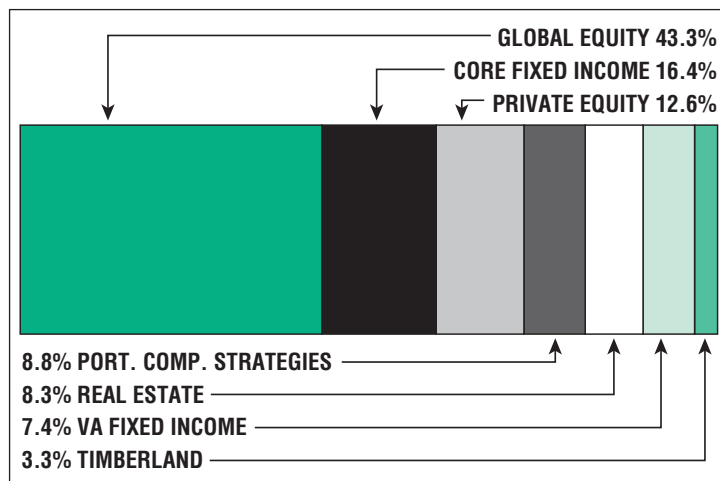
2037

Fully Funded

**5.2% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$145.1 M

Unfunded Liability

\$14.7 M
[FY2021]

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 Service11.8

Retired Members763
Benefits Paid\$19.8 M
Average Benefit\$26,000
Average Age71

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees77
Reported Earnings29
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: KMS



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\$215.7 M
Market Value

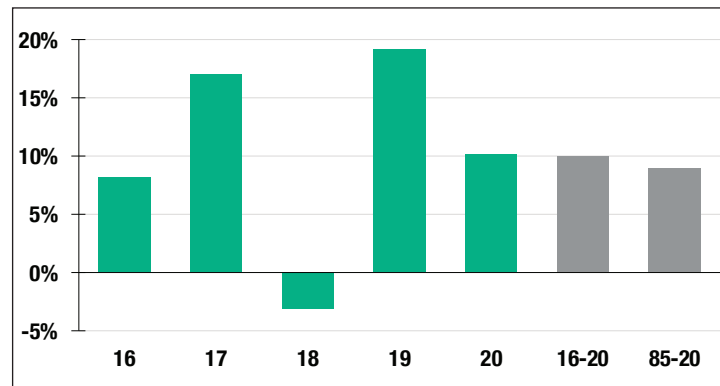
10.07%
2020 Returns

9.19%
2011-2020
[Annualized]

8.93%
1985-2020
[Annualized]

Investment Returns

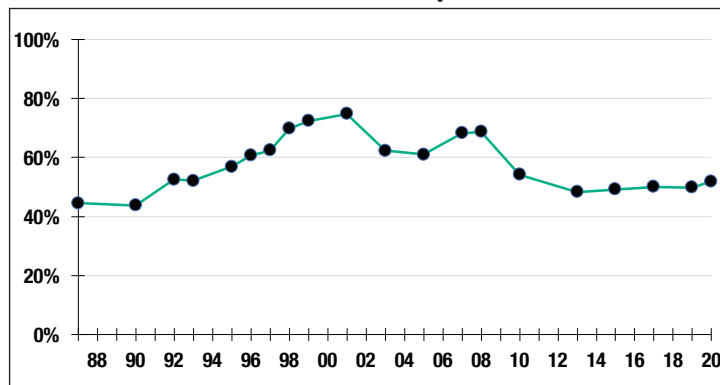
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



51.9%

Funded Ratio

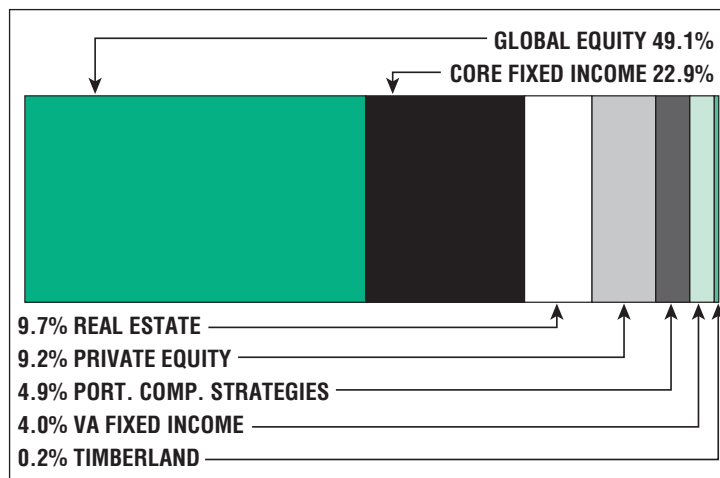
2035

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$176.0 M

Unfunded Liability

\$15.8 M
[FY2021]

Total Pension
Appropriation

Plymouth County

CONTACT INFORMATION

10 Cordage Park Circle
Suite 234
Plymouth, MA 02360
Phone 508-830-1803
Fax 508-830-1875

BOARD MEMBERS

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

BOARD ADMINISTRATOR

David Sullivan

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees316
Reported Earnings119
Excess Earners2
Refund Due\$22,961

Last Valuation: 1/1/20
Actuary: Sherman



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\$1.2 B
Market Value

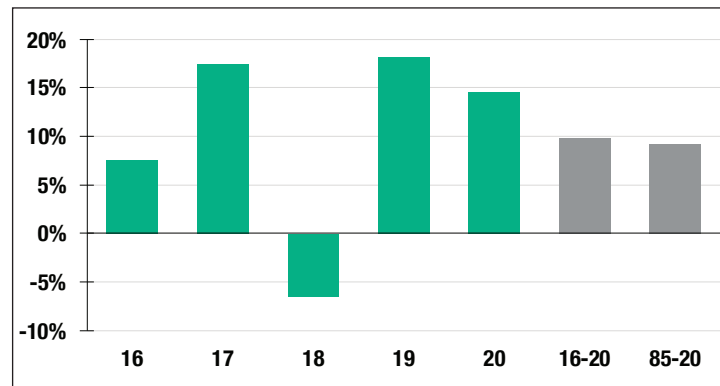
14.62%
2020 Returns

8.42%
2011-2020
[Annualized]

9.16%
1985-2020
[Annualized]

Investment Returns

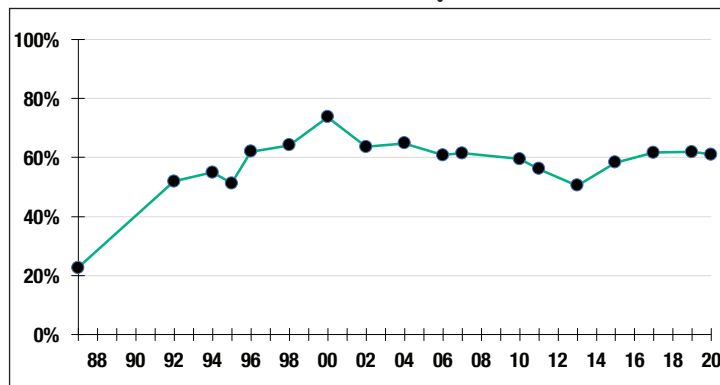
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.88%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



61.0%

Funded Ratio

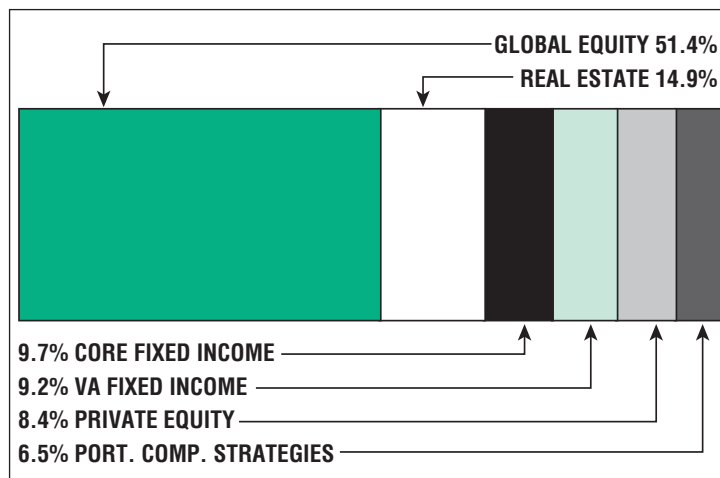
2029

Fully Funded

**8.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$693.3 M

Unfunded Liability

\$81.2 M
[FY2021]

Total Pension
Appropriation

Quincy

CONTACT INFORMATION

1245 Hancock Street
Suite 39
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

Brigid Gaughan

SYSTEM MEMBERS

Active Members1,546
Total Payroll\$101.7 M
Average Salary\$65,800
Average Age49
Average Service12.4

Retired Members1,521
Benefits Paid\$47.6 M
Average Benefit\$31,300
Average Age75

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees134
Reported Earnings31
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone

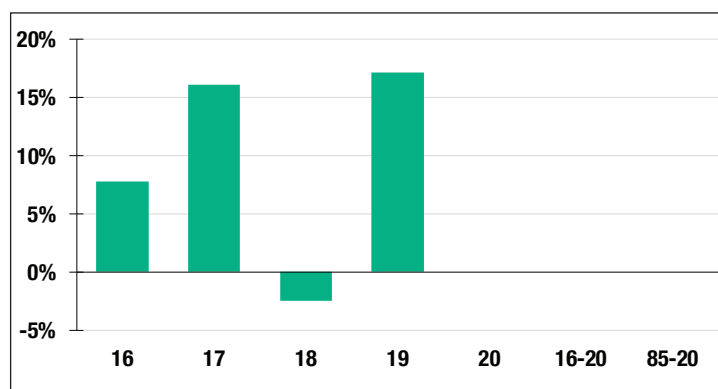


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2020 investment return data not available at time of publication.

Investment Returns

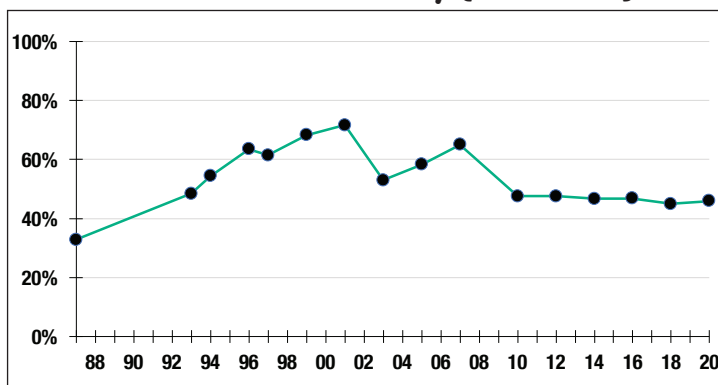
[2016-2019 Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



45.9%

Funded Ratio

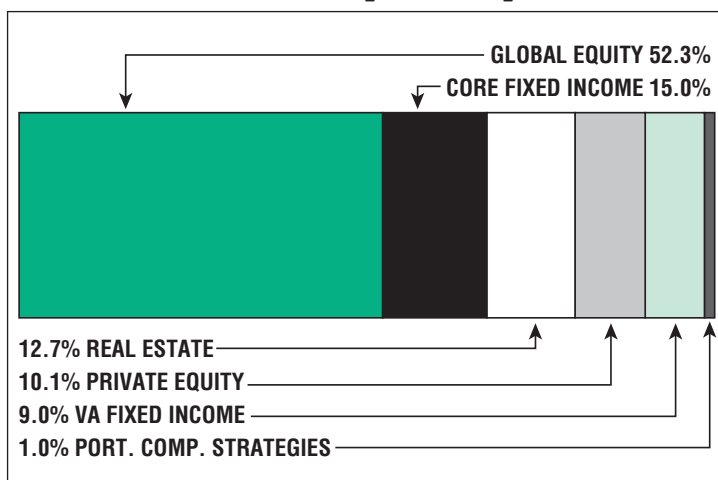
2036

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$426.3 M

Unfunded Liability

\$35.6 M
(FY2021)

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
Joseph Coughlin
David Gentile*
John Halsey
*indicates Chairperson

BOARD ADMINISTRATOR

Colleen Loughlin

SYSTEM MEMBERS

Active Members355
Total Payroll\$27.4 M
Average Salary\$77,100
Average Age47
Average Service12.8

Retired Members363
Benefits Paid\$11.6 M
Average Benefit\$31,900
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings9
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: KMS



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\$168.3 M
Market Value

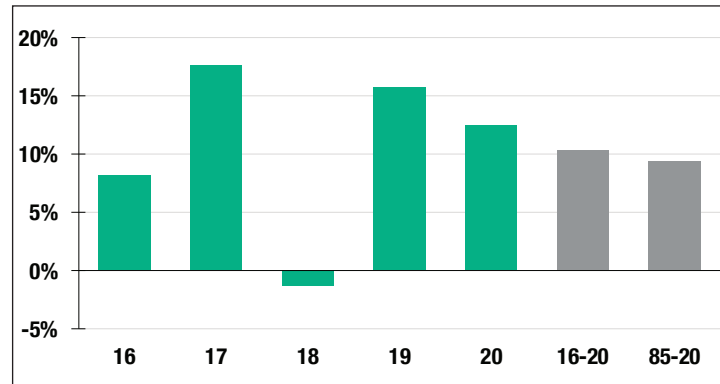
12.44%
2020 Returns

8.95%
2011-2020
[Annualized]

9.36%
1985-2020
[Annualized]

Investment Returns

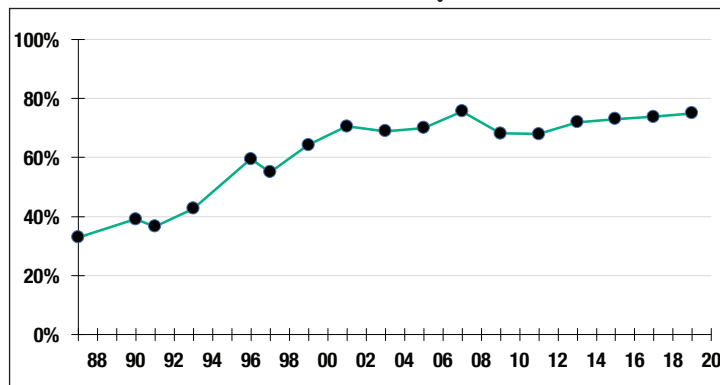
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



75.0%

Funded Ratio

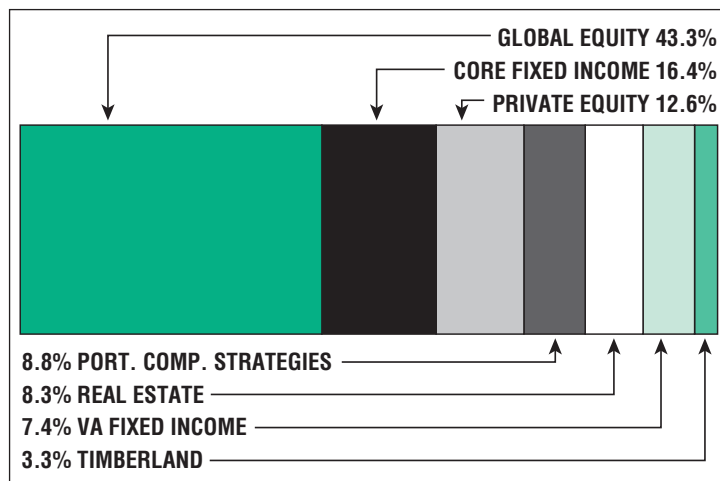
2029

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$47.4 M

Unfunded Liability

\$7.6 M
[FY2021]

Total Pension
Appropriation

Revere

CONTACT INFORMATION

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

BOARD MEMBERS

Richard Viscay*
John Henry
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 Service11.9

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees91
Reported Earnings32
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$206.1 M
Market Value

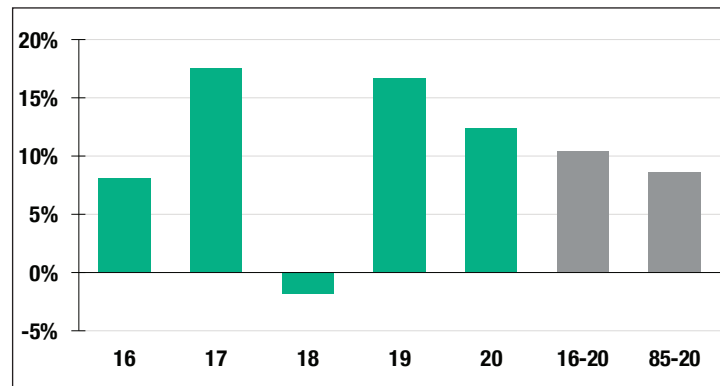
12.36%
2020 Returns

8.86%
2011-2020
[Annualized]

8.57%
1985-2020
[Annualized]

Investment Returns

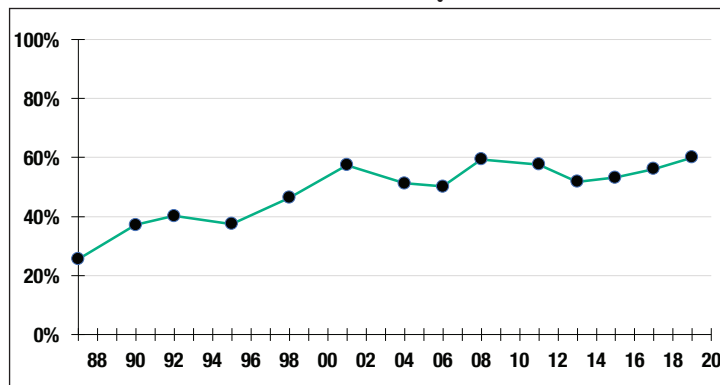
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



63.5%

Funded Ratio

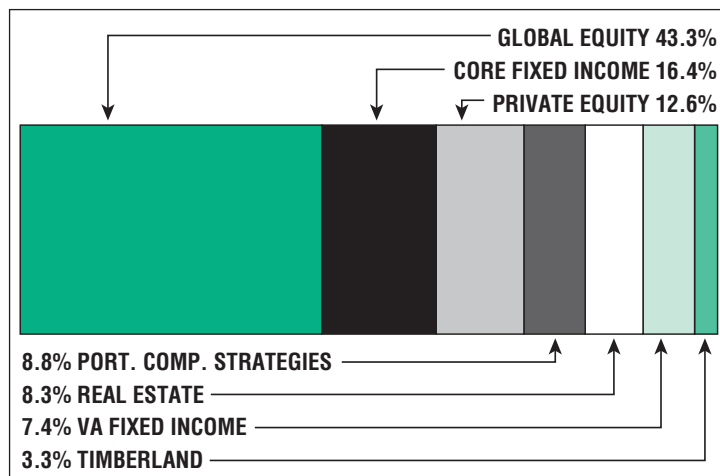
2033

Fully Funded

**6.32% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$111.2 M

Unfunded Liability

\$14.3 M
[FY2021]

Total Pension
Appropriation

Salem

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 Hayes
Marcia Pelletier
Matthew Veno

*indicates Chairperson

BOARD ADMINISTRATOR

Paul Findlen

SYSTEM MEMBERS

Active Members922
Total Payroll\$50.1 M
Average Salary\$54,400
Average Age48
Average Service11.3

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees46
Reported Earnings14
Excess Earners1
Refund Due\$29,580

Last Valuation: 1/1/20
Actuary: Segal



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\$231.3 M
Market Value

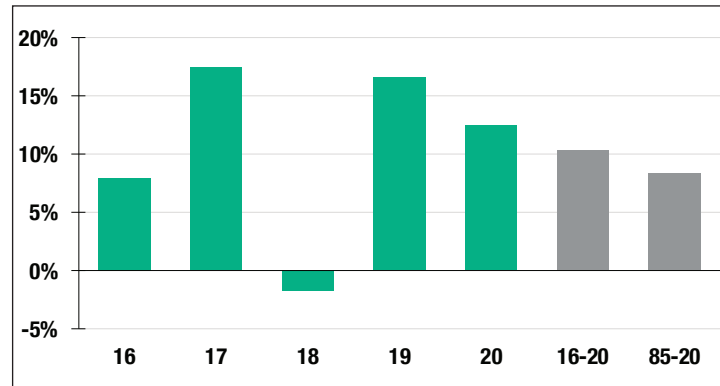
12.41%
2020 Returns

8.73%
2011-2020
[Annualized]

8.34%
1985-2020
[Annualized]

Investment Returns

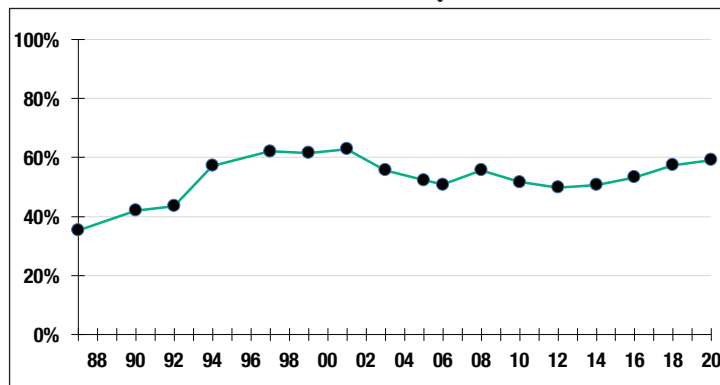
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



59.2%

Funded Ratio

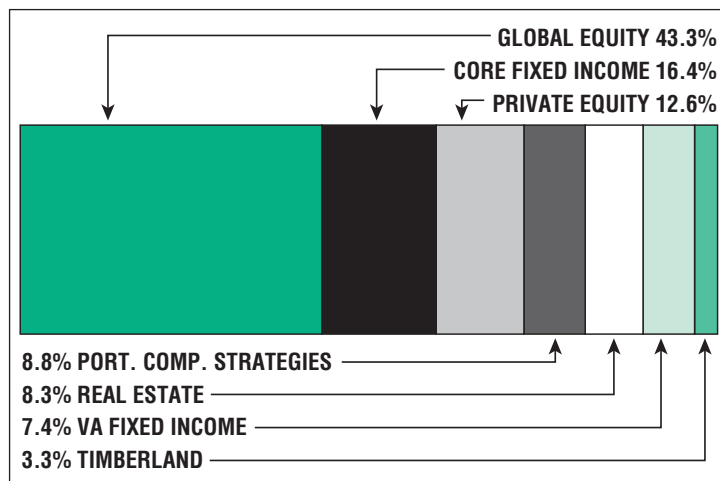
2032

Fully Funded

**5.55% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$136.8 M

Unfunded Liability

\$15.4 M
[FY2021]

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 Members347
Total Payroll\$18.3 M
Average Salary\$52,900
Average Age47
Average Service12.3

Retired Members293
Benefits Paid\$8.0 M
Average Benefit\$27,200
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees27
Reported Earnings8
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: PERAC



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\$130.3 M
Market Value

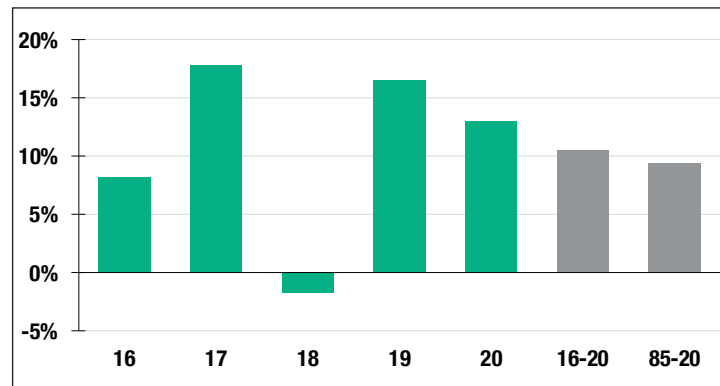
12.89%
2020 Returns

9.02%
2011-2020
[Annualized]

9.34%
1985-2020
[Annualized]

Investment Returns

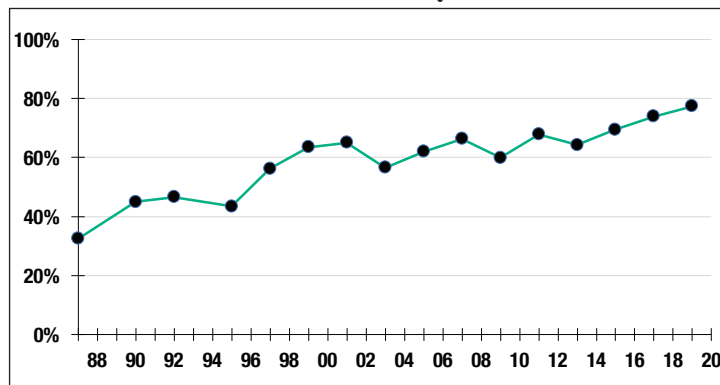
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



77.4%

Funded Ratio

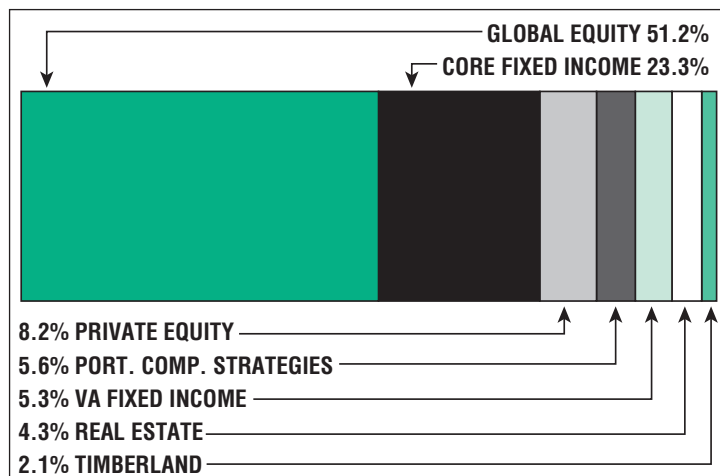
2026

Fully Funded

**5.2% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$31.2 M

Unfunded Liability

\$7.5 M
[FY2021]

Total Pension
Appropriation

Shrewsbury

CONTACT INFORMATION

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

BOARD MEMBERS

Mary Thompson
Thomas Kennedy*
Ralph Iaccarino
David Hodgerney
Alice Ferro

*indicates Chairperson

BOARD ADMINISTRATOR

Gregory Gatsogiannis

SYSTEM MEMBERS

Active Members453
Total Payroll\$26.2 M
Average Salary\$57,700
Average AgeNA
Average ServiceNA

Retired Members287
Benefits Paid\$8.4 M
Average Benefit\$29,100
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees22
Reported Earnings10
Excess Earners1
Refund Due\$5,564

Last Valuation: 1/1/20
Actuary: SAS



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\$158.7 M
Market Value

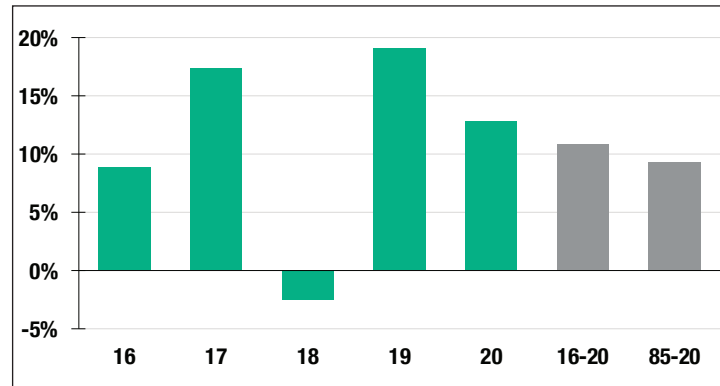
12.74%
2020 Returns

9.59%
2011-2020
[Annualized]

9.31%
1985-2020
[Annualized]

Investment Returns

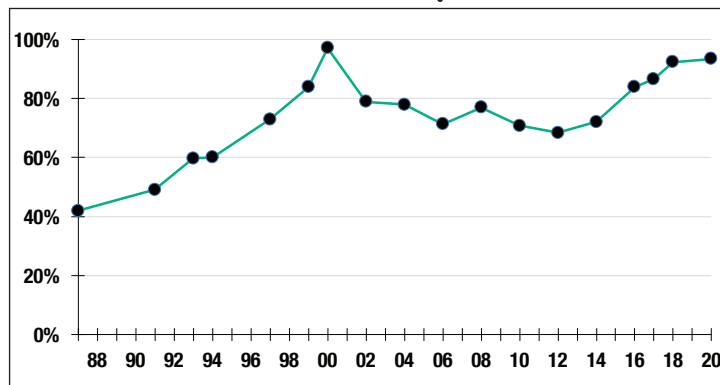
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



93.4%

Funded Ratio

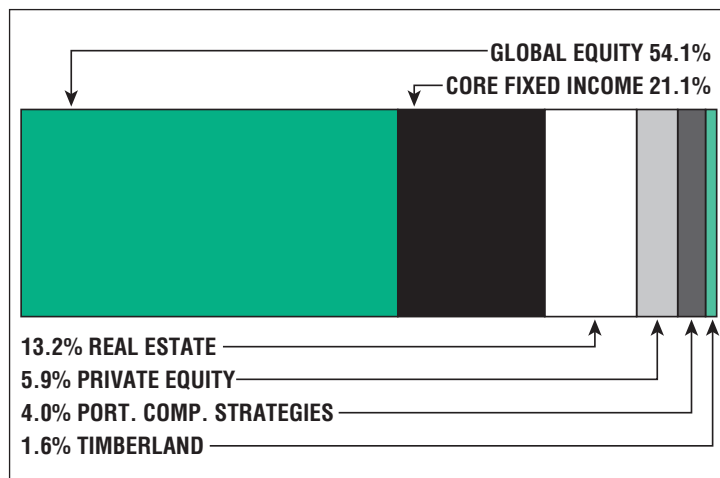
2024

Fully Funded

Level Dollar

Funding Schedule

Asset Allocation [12/31/20]



\$9.7 M

Unfunded Liability

\$4.4 M
[FY2021]

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 1,186
Total Payroll \$75.5 M
Average Salary \$63,700
Average Age NA
Average Service NA

Retired Members 927
Benefits Paid \$27.9 M
Average Benefit \$30,100
Average Age 74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees 99
Reported Earnings 34
Excess Earners 2
Refund Due \$13,917

Last Valuation: 1/1/19
Actuary: Sherman



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\$384.0 M
Market Value

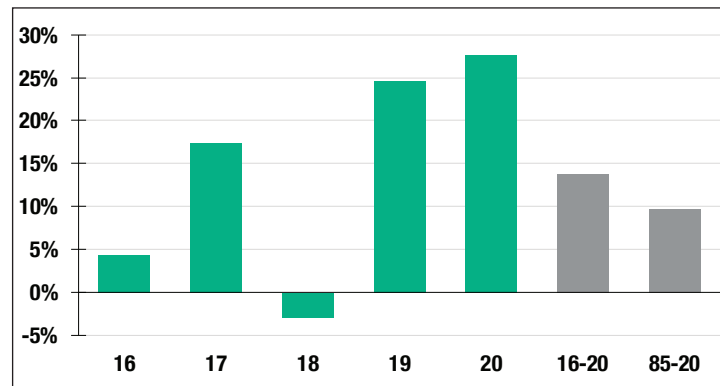
27.59%
2020 Returns

11.31%
2011-2020
[Annualized]

9.60%
1985-2020
[Annualized]

Investment Returns

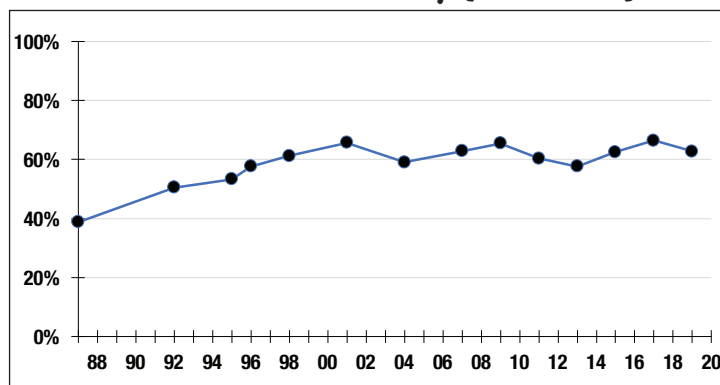
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



62.7%

Funded Ratio

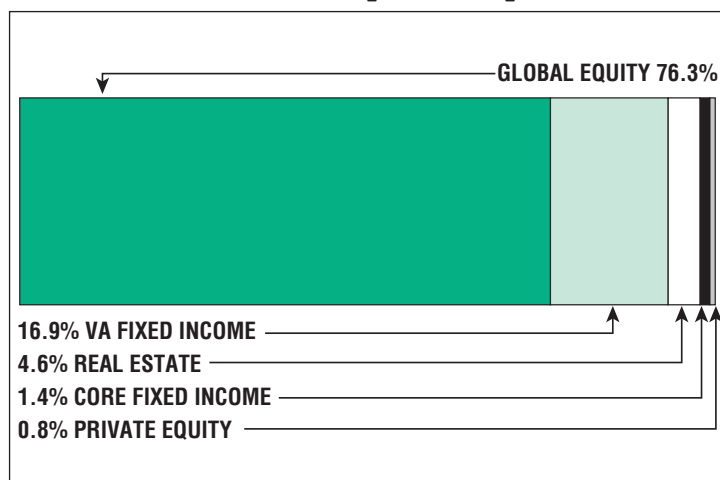
2033

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$167.4 M

Unfunded Liability

\$15.8 M
[FY2021]

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*
Wilfrid Cournoyer
Julie Pena
James Philbrook
Pamela Leduc

*indicates Chairperson

BOARD ADMINISTRATOR

Vacant

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees18
Reported Earnings8
Excess Earners1
Refund Due\$1,233

Last Valuation: 1/1/20
Actuary: PERAC



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\$69.2 M
Market Value

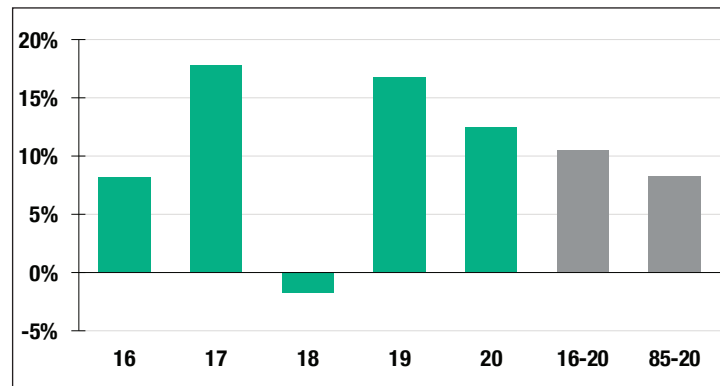
12.46%
2020 Returns

8.83%
2011-2020
[Annualized]

8.28%
1985-2020
[Annualized]

Investment Returns

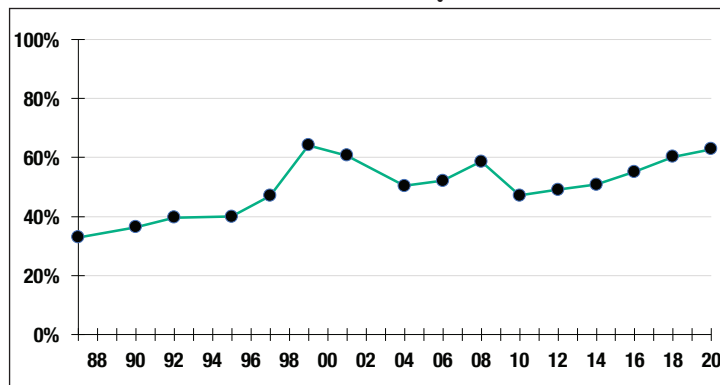
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.15%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



62.9%

Funded Ratio

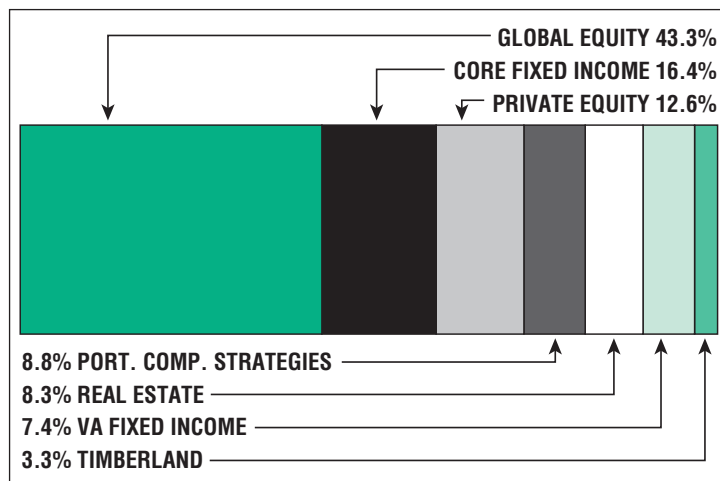
2035

Fully Funded

**5.5% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$34.5 M

Unfunded Liability

\$4.5 M
[FY2021]

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
Philip Manton

*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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees388
Reported Earnings125
Excess Earners4
Refund Due\$68,173

Last Valuation: 1/1/20
Actuary: PERAC



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\$415.9 M
Market Value

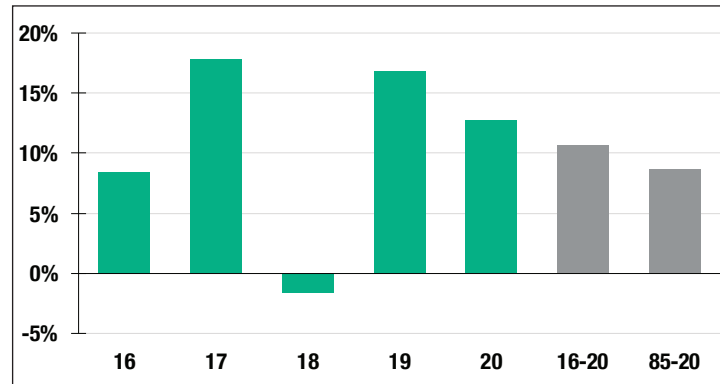
12.70%
2020 Returns

9.16%
2011-2020
[Annualized]

8.62%
1985-2020
[Annualized]

Investment Returns

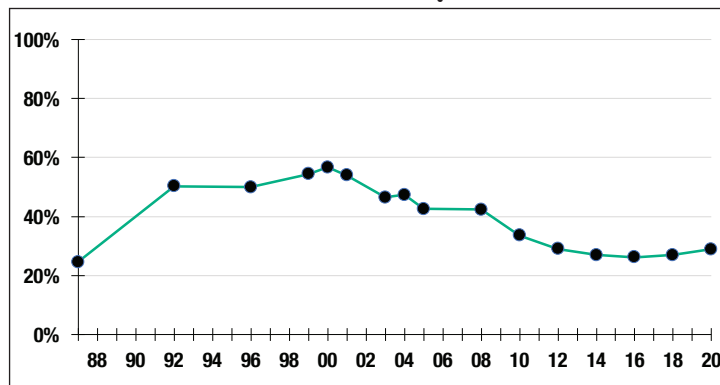
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



28.9%

Funded Ratio

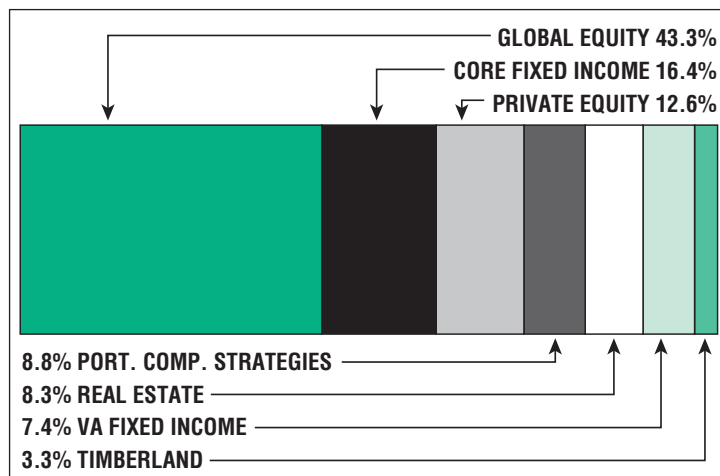
2033

Fully Funded

**9.2% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$938.1 M

Unfunded Liability

\$78.1 M
[FY2021]

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*
Patricia Deal
Theresa McGoldrick
Frank Valeri
Archie Gormley
*indicates Chairperson

BOARD ADMINISTRATOR

Nicola Favorito

SYSTEM MEMBERS

Active Members87,969
Total Payroll \$6.4 B
Average Salary\$72,200
Average Age47
Average Service 12.5

Retired Members....64,758
Benefits Paid \$2.3 B
Average Benefit\$36,100
Average Age72

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees.....3,400
Reported Earnings987
Excess Earners.....30
Refund Due\$438,062

Last Valuation: 1/1/19
Actuary: PERAC



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\$32.4 B
Market Value

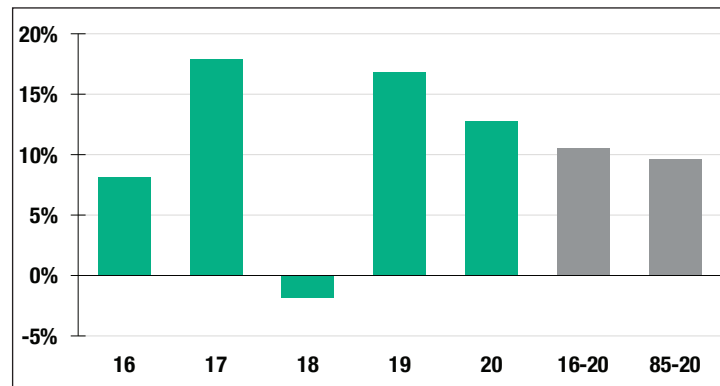
12.69%
2020 Returns

9.05%
2011-2020
[Annualized]

9.55%
1985-2020
[Annualized]

Investment Returns

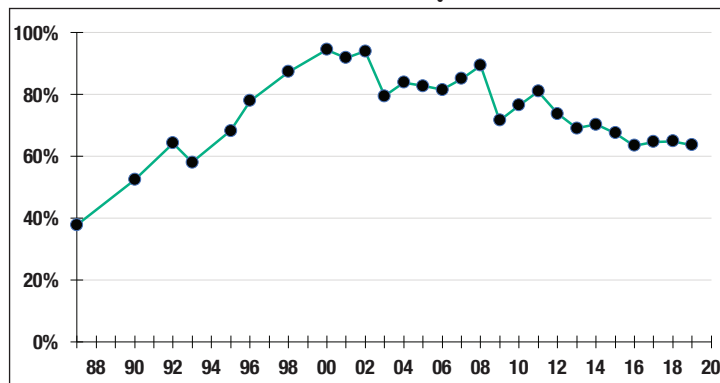
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



63.7%

Funded Ratio

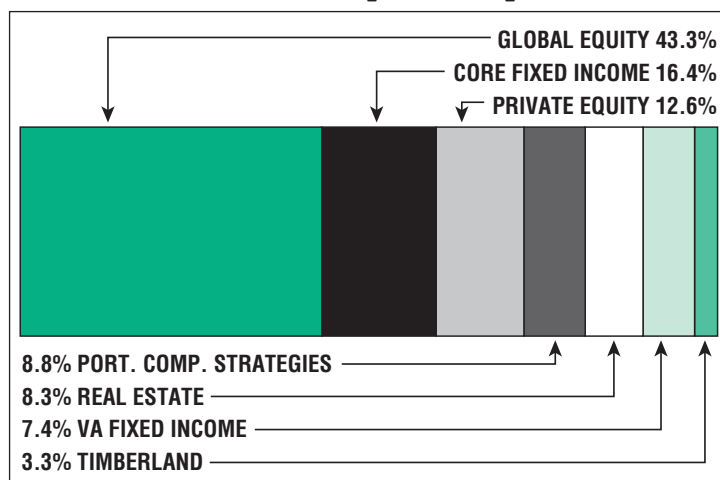
2036

Fully Funded

**9.63% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$15.5 B

Unfunded Liability

\$1.2 B
[FY2021]

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees17
Reported Earnings5
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$109.7 M
Market Value

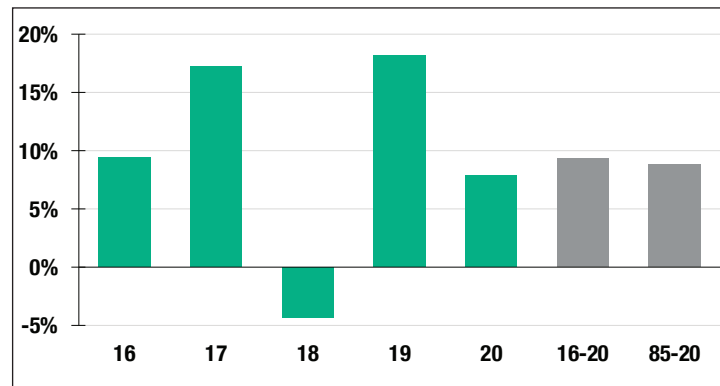
7.85%
2020 Returns

8.46%
2011-2020
[Annualized]

8.82%
1985-2020
[Annualized]

Investment Returns

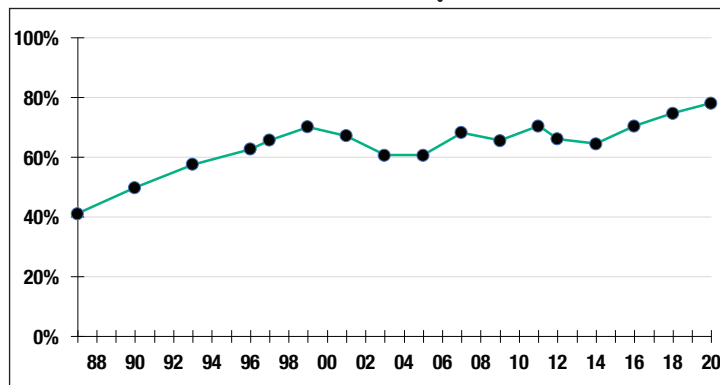
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



78.1%

Funded Ratio

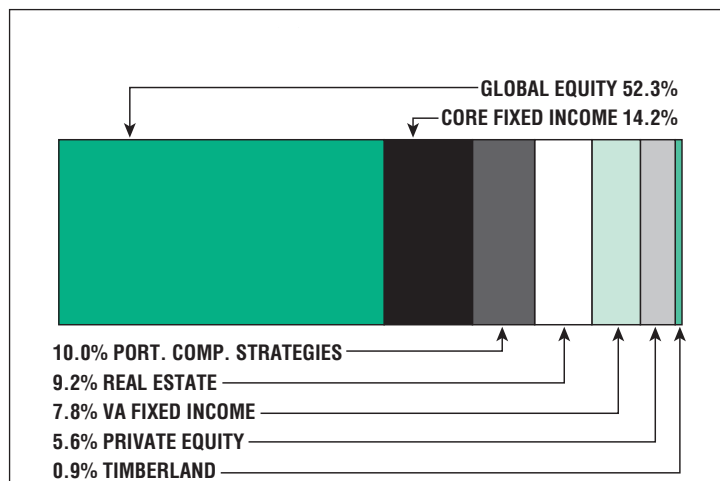
2026

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$28.0 M

Unfunded Liability

\$6.5 M
[FY2021]

Total Pension
Appropriation

Swampscott

CONTACT INFORMATION

22 Monument Ave.
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
*indicates Chairperson

BOARD ADMINISTRATOR

Nancy Lord

SYSTEM MEMBERS

Active Members252
Total Payroll\$13.4 M
Average Salary\$53,000
Average Age49
Average Service12.6

Retired Members214
Benefits Paid\$5.8 M
Average Benefit\$27,000
Average Age75

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees20
Reported Earnings5
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: Segal



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\$74.9 M
Market Value

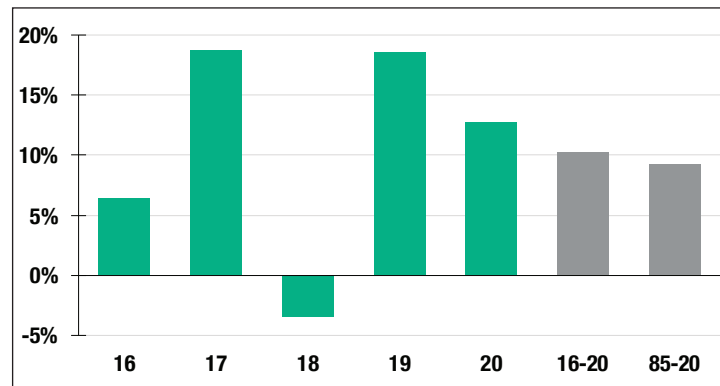
12.68%
2020 Returns

9.13%
2011-2020
[Annualized]

9.20%
1985-2020
[Annualized]

Investment Returns

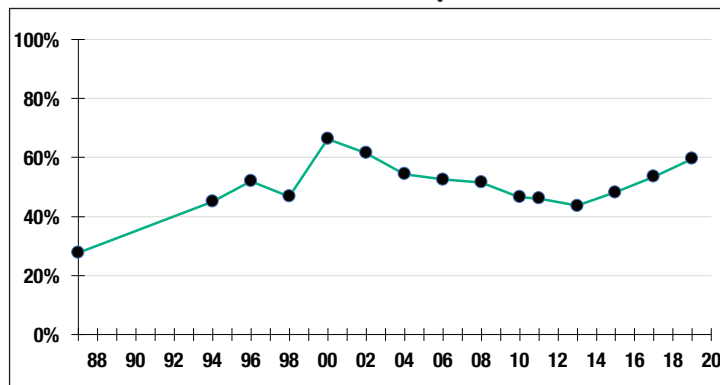
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.38%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



59.6%

Funded Ratio

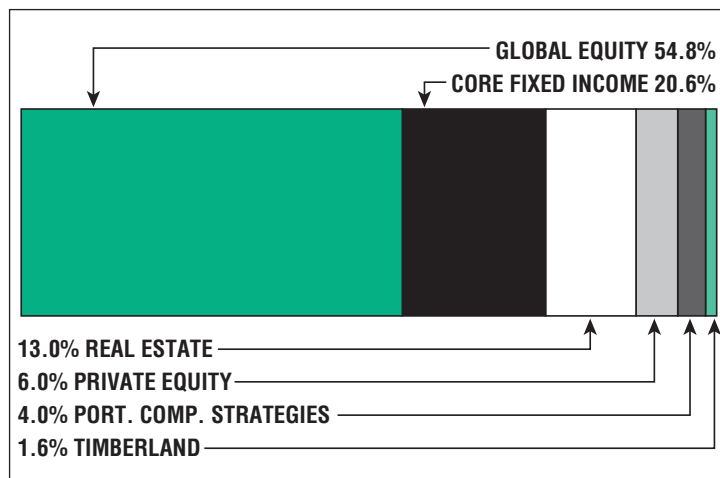
2031

Fully Funded

3.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$40.5 M

Unfunded Liability

\$5.6 M
[FY2021]

Total Pension
Appropriation

Taunton

CONTACT INFORMATION

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

BOARD MEMBERS

Ann Marie Hebert*
Gill Enos
Thomas Bernier
Dennis Smith
Barry Amaral
*indicates Chairperson

BOARD ADMINISTRATOR

Paul Slivinski

SYSTEM MEMBERS

Active Members1,061
Total Payroll\$67.2 M
Average Salary\$63,400
Average AgeNA
Average ServiceNA

Retired Members907
Benefits Paid\$27.8 M
Average Benefit\$30,700
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees82
Reported Earnings18
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



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\$385.6 M
Market Value

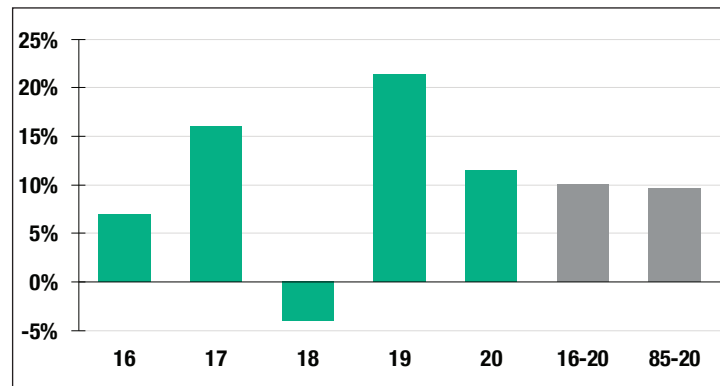
11.60%
2020 Returns

9.02%
2011-2020
[Annualized]

9.66%
1985-2020
[Annualized]

Investment Returns

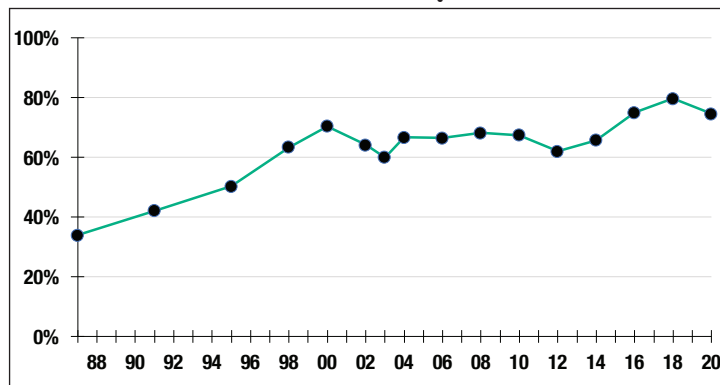
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



74.5%

Funded Ratio

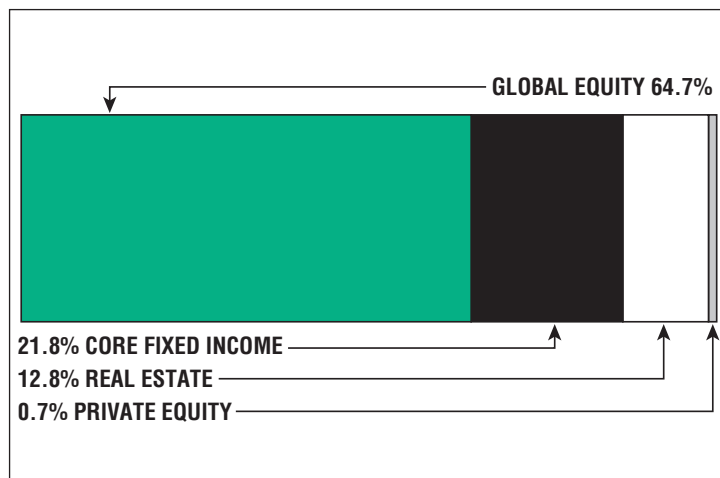
2030

Fully Funded

4.5% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$118.6 M

Unfunded Liability

\$17.0 M
[FY2021]

Total Pension
Appropriation

Wakefield

CONTACT INFORMATION

1 Lafayette Street
Wakefield, MA 01880
Phone 781-246-6352
Fax 339-219-4160

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 Service12.6

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees28
Reported Earnings4
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



Click/Scan for website

\$148.4 M
Market Value

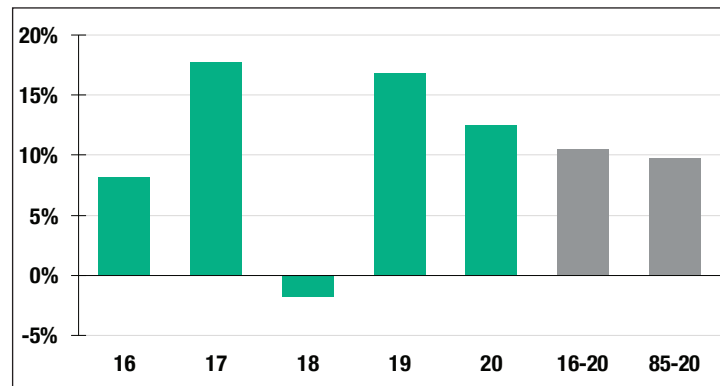
12.50%
2020 Returns

9.03%
2011-2020
[Annualized]

9.73%
1985-2020
[Annualized]

Investment Returns

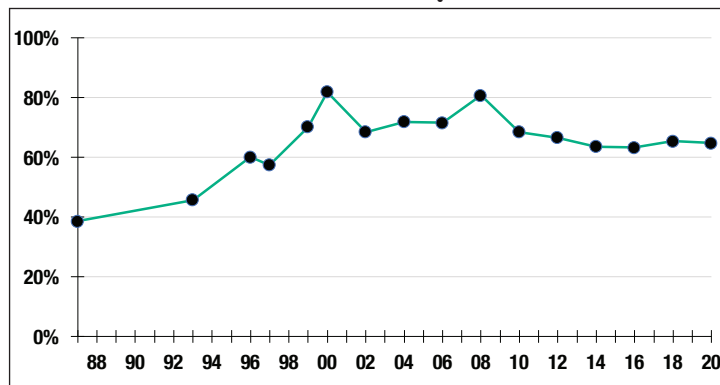
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.40%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



64.7%

Funded Ratio

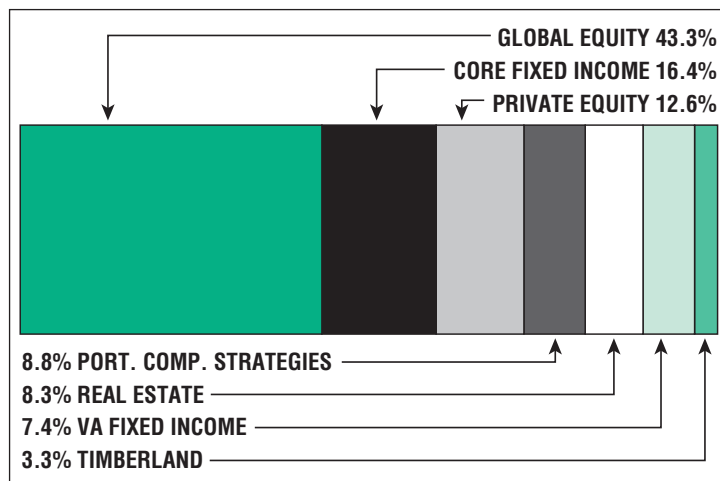
2036

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$69.8 M

Unfunded Liability

\$6.8 M
[FY2021]

Total Pension
Appropriation

Waltham

CONTACT INFORMATION

21-25 Lexington Street
2nd Floor
Waltham, MA 02452
Phone 781-314-3230
Fax 781-314-3236

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Andrew Malis

SYSTEM MEMBERS

Active Members937
Total Payroll\$66.3 M
Average Salary\$70,800
Average AgeNA
Average ServiceNA

Retired Members777
Benefits Paid\$25.8 M
Average Benefit\$33,200
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees69
Reported Earnings17
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/19
Actuary: Sherman



Click/Scan for website

\$307.4 M
Market Value

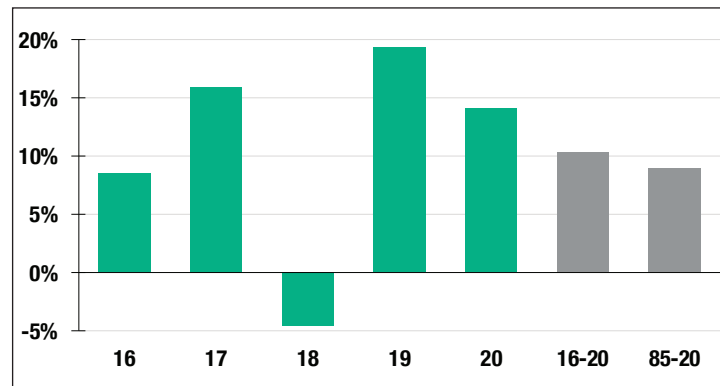
14.05%
2020 Returns

9.26%
2011-2020
[Annualized]

8.85%
1985-2020
[Annualized]

Investment Returns

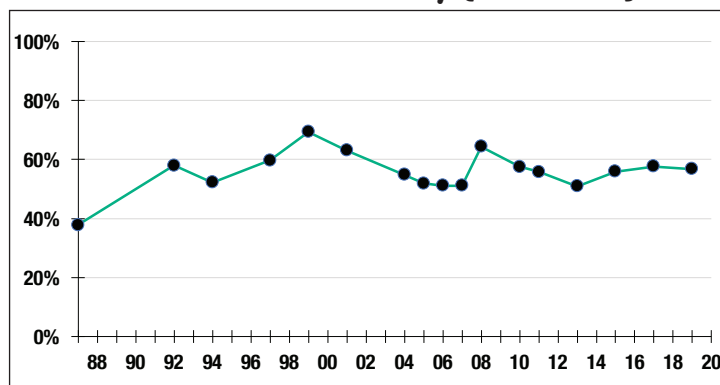
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.75%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



56.8%

Funded Ratio

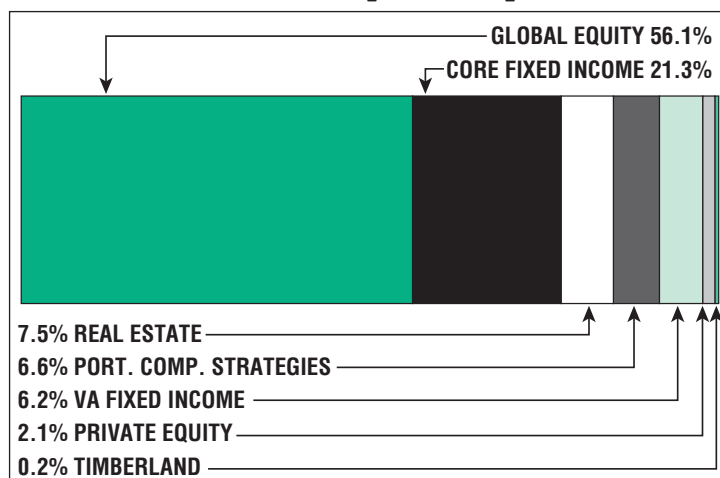
2032

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$191.4 M

Unfunded Liability

\$19.0 M
[FY2021]

Total Pension
Appropriation

Watertown

CONTACT INFORMATION

149 Main Street
P.O. Box 199
Watertown, MA 02471-0199
Phone 617-972-6456
Phone 888-972-6456
Fax 617-923-3531

BOARD MEMBERS

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

BOARD ADMINISTRATOR

Barbara Sheehan

SYSTEM MEMBERS

Active Members528
Total Payroll\$35.3 M
Average Salary\$66,900
Average AgeNA
Average ServiceNA

Retired Members426
Benefits Paid\$14.4 M
Average Benefit\$33,800
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees46
Reported Earnings15
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Sherman



Click/Scan for website

\$250.1 M
Market Value

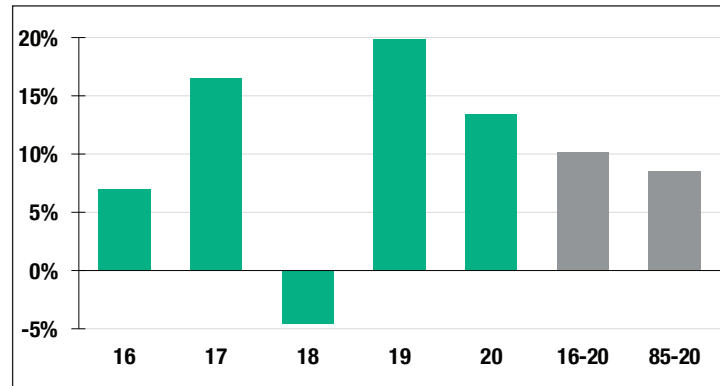
13.42%
2020 Returns

8.76%
2011-2020
[Annualized]

8.51%
1985-2020
[Annualized]

Investment Returns

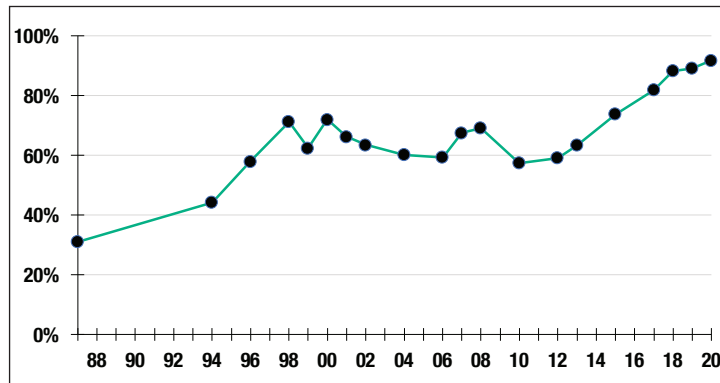
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.80%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



91.7%

Funded Ratio

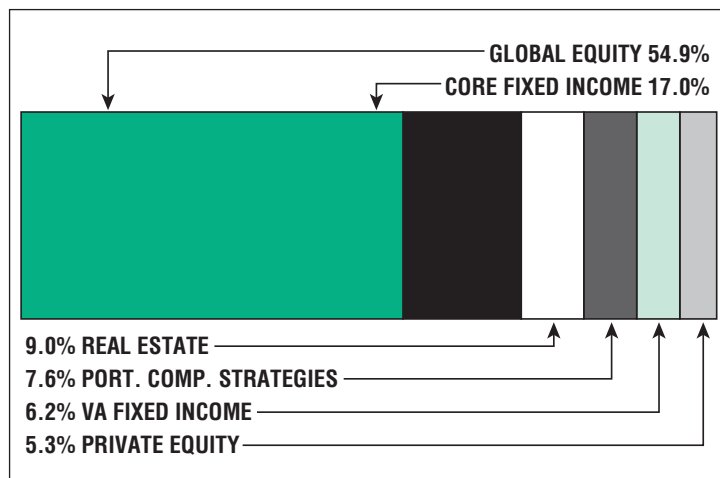
2023

Fully Funded

**Varies Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$19.3 M

Unfunded Liability

\$14.7 M
[FY2021]

Total Pension
Appropriation

Webster

CONTACT INFORMATION

350 Main Street
Suite 5
Webster, MA 01570
Phone 508-949-3800 Ext 1022
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees7
Reported Earnings1
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: PERAC



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\$49.8 M
Market Value

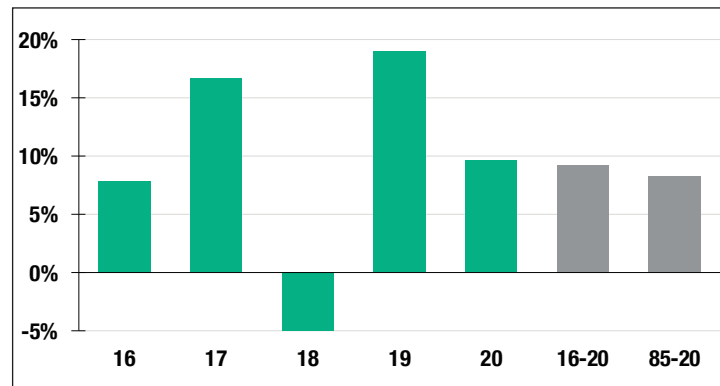
9.61%
2020 Returns

8.46%
2011-2020
[Annualized]

8.23%
1985-2020
[Annualized]

Investment Returns

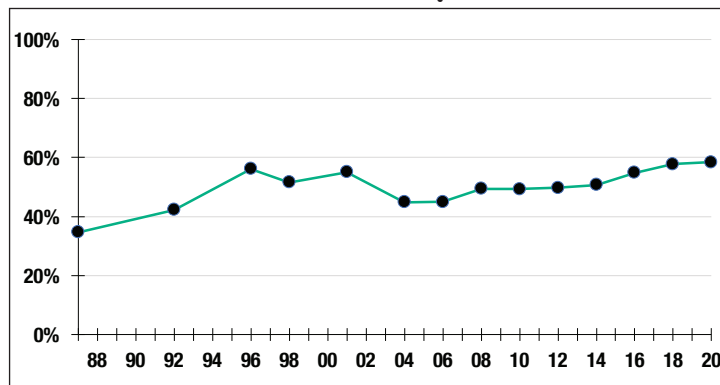
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.30%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



58.4%

Funded Ratio

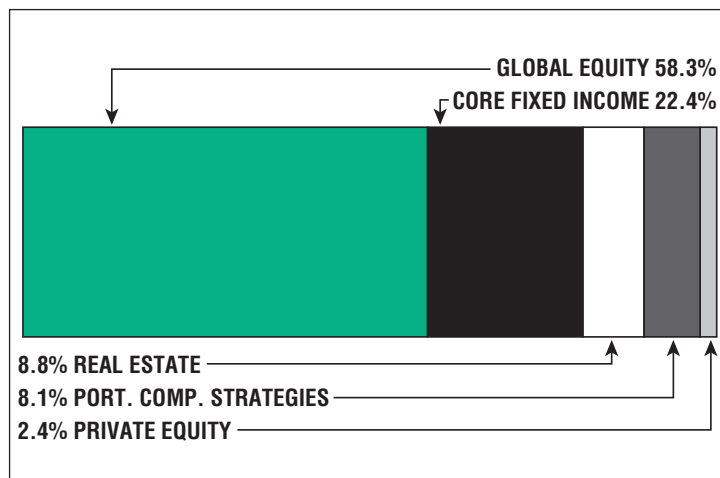
2033

Fully Funded

**6.5% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$31.0 M

Unfunded Liability

\$3.9 M
[FY2021]

Total Pension
Appropriation

Wellesley

CONTACT INFORMATION

Town Hall
525 Washington Street
Wellesley, MA 02482
Phone 781-431-1019 Ext. 2216
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 Members703
Total Payroll\$39.2 M
Average Salary\$55,700
Average Age46
Average Service10.6

Retired Members.....418
Benefits Paid\$12.1 M
Average Benefit\$28,900
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees29
Reported Earnings10
Excess Earners.....1
Refund Due\$1,976

Last Valuation: 1/1/19
Actuary: Segal



Click/Scan for website

\$243.0 M
Market Value

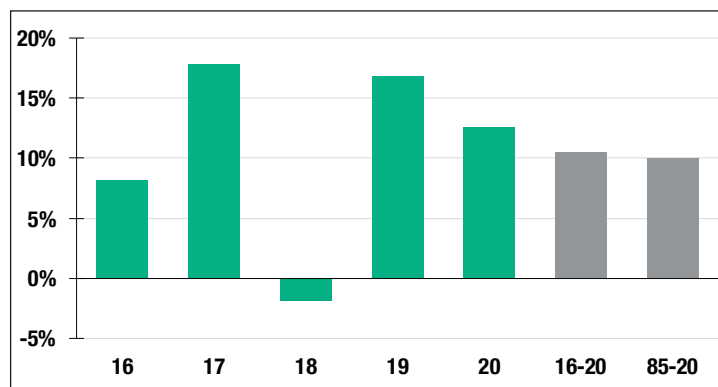
12.51%
2020 Returns

9.01%
2011-2020
[Annualized]

9.99%
1985-2020
[Annualized]

Investment Returns

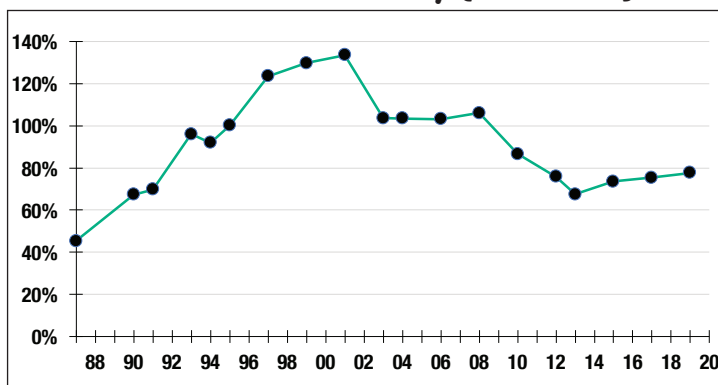
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



6.63%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



77.7%

Funded Ratio

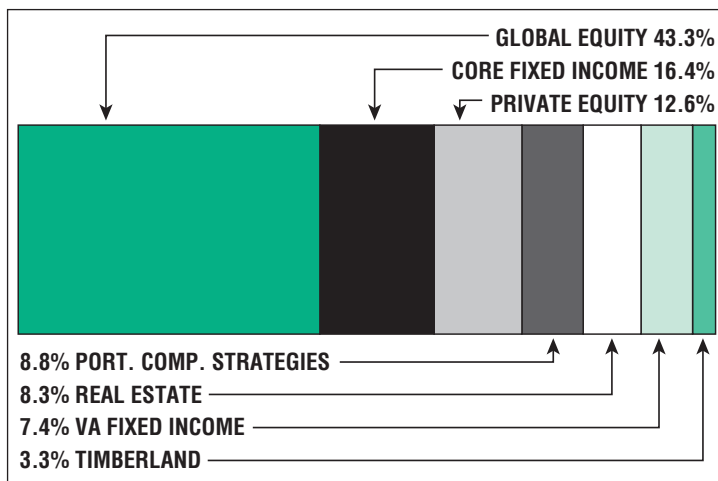
2030

Fully Funded

3.5% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$55.5 M

Unfunded Liability

\$9.4 M
[FY2021]

Total Pension
Appropriation

West Springfield

CONTACT INFORMATION

26 Central Street
Suite 26
West Springfield, MA 01089
Phone 413-495-1891 Ext 1019

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees33
Reported Earnings15
Excess Earners2
Refund Due\$55,792

Last Valuation: 1/1/20
Actuary: Stone



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\$152.8 M
Market Value

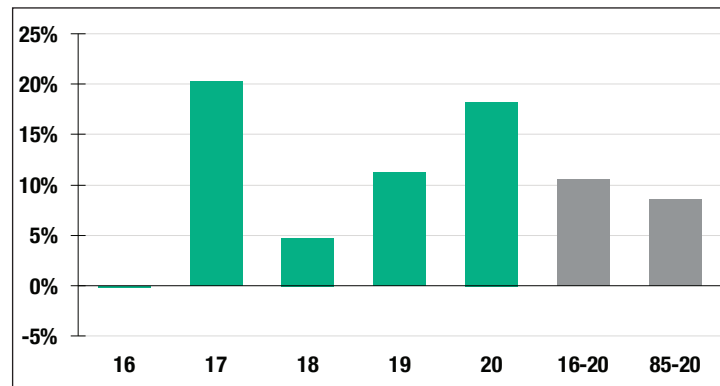
18.19%
2020 Returns

9.71%
2011-2020
[Annualized]

8.53%
1985-2020
[Annualized]

Investment Returns

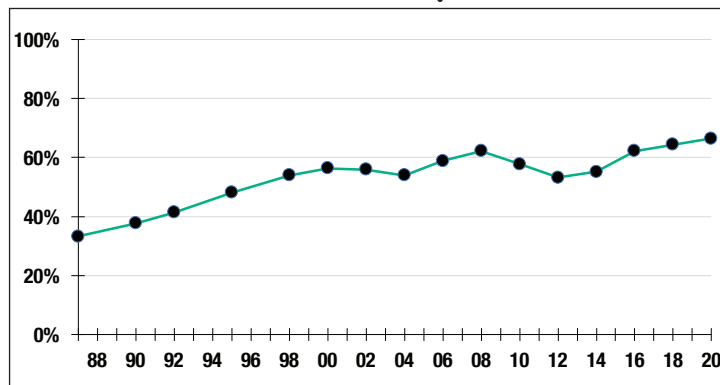
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



66.4%

Funded Ratio

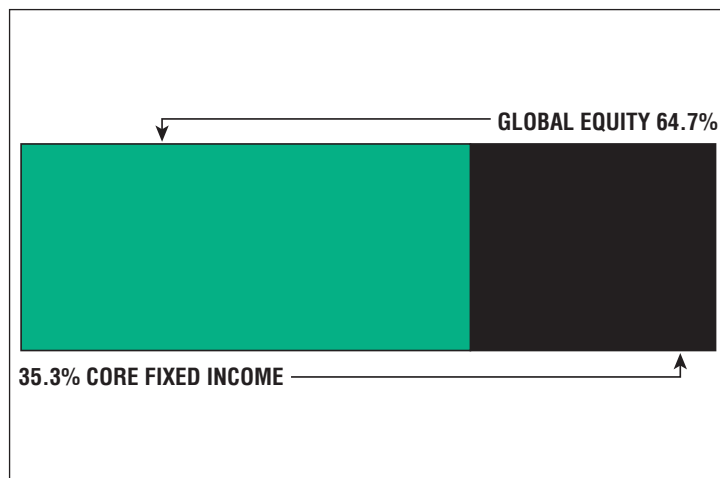
2033

Fully Funded

**4.2% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$65.5 M

Unfunded Liability

\$7.6 M
[FY2021]

Total Pension
Appropriation

Westfield

CONTACT INFORMATION

59 Court Street
P.O. Box 106
Westfield, MA 01086-0106
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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees51
Reported Earnings14
Excess Earners.....0
Refund Due\$0

Last Valuation: 1/1/21
Actuary: PERAC



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\$282.7 M
Market Value

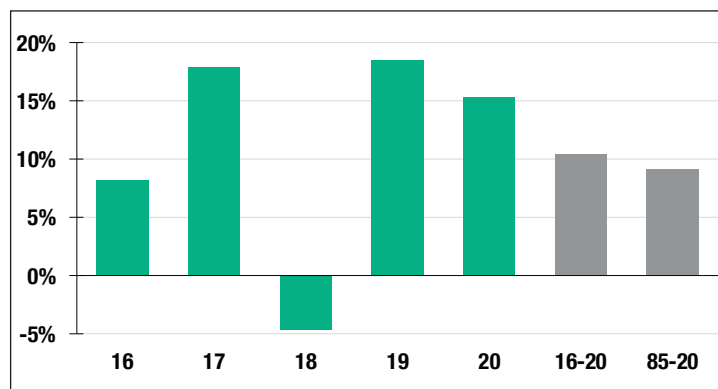
15.26%
2020 Returns

9.96%
2011-2020
[Annualized]

9.03%
1985-2020
[Annualized]

Investment Returns

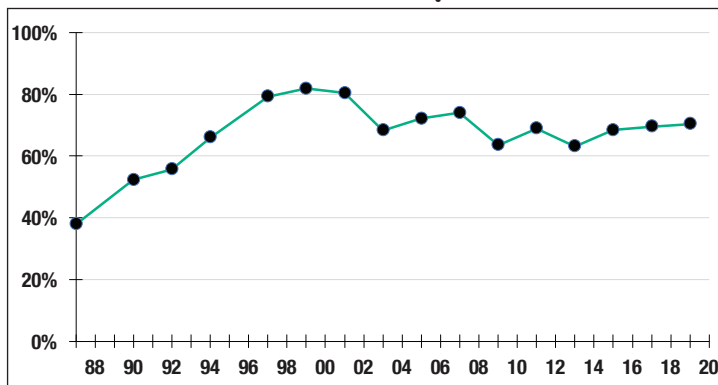
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



73.5%

Funded Ratio

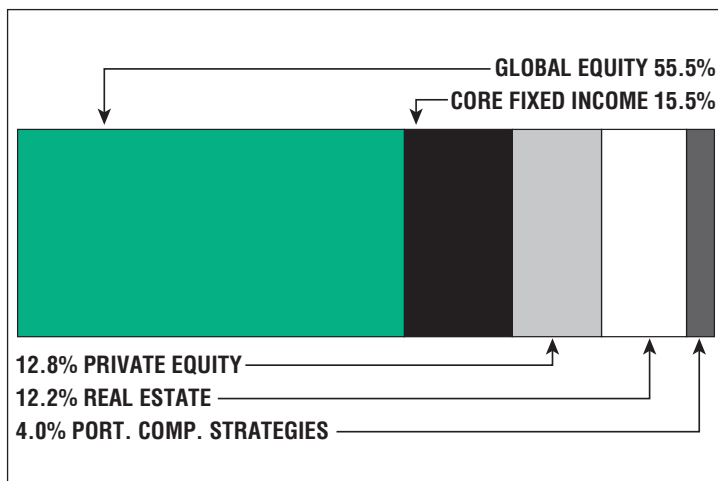
2036

Fully Funded

**4.96% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$94.7 M

Unfunded Liability

\$11.7 M
[FY2021]

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees76
Reported Earnings21
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Stone



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\$242.2 M
Market Value

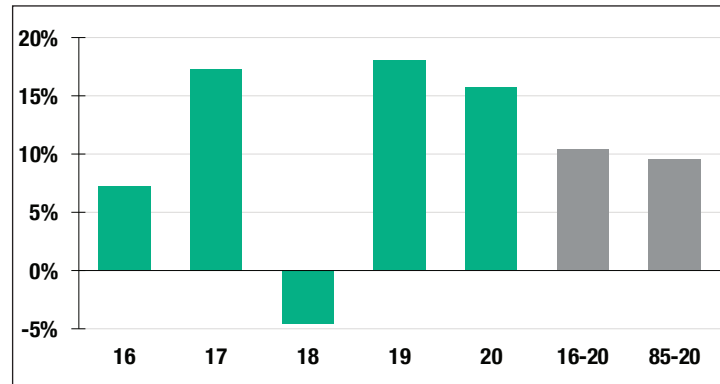
15.65%
2020 Returns

8.89%
2011-2020
[Annualized]

9.89%
1985-2020
[Annualized]

Investment Returns

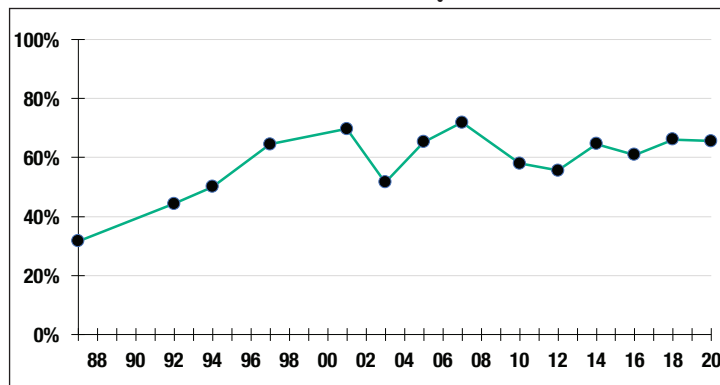
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.25%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



65.6%

Funded Ratio

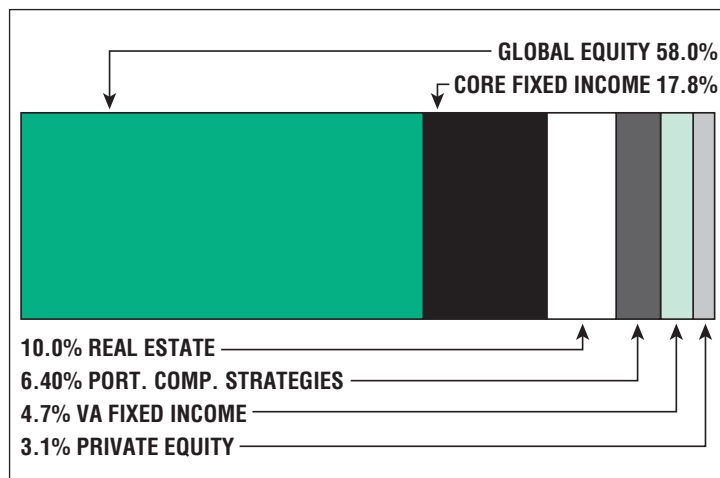
2036

Fully Funded

2.88% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$111.8 M

Unfunded Liability

\$12.1 M
[FY2021]

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
William Zink
Robert Frary
George Morrissey*
*indicates Chairperson

BOARD ADMINISTRATOR

Karen Manchuso

SYSTEM MEMBERS

Active Members364
Total Payroll\$20.9 M
Average Salary\$57,400
Average Age49
Average Service13

Retired Members274
Benefits Paid\$7.9 M
Average Benefit\$28,800
Average Age76

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees17
Reported Earnings4
Excess Earners1
Refund Due\$29,794

Last Valuation: 1/1/19
Actuary: PERAC



Click/Scan for website

\$148.8 M
Market Value

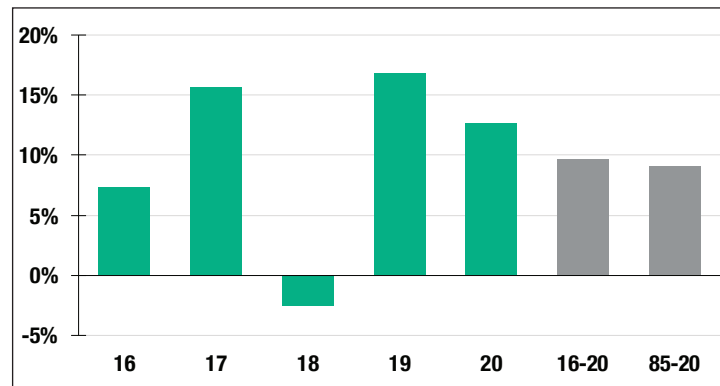
12.60%
2020 Returns

7.98%
2011-2020
[Annualized]

9.06%
1985-2020
[Annualized]

Investment Returns

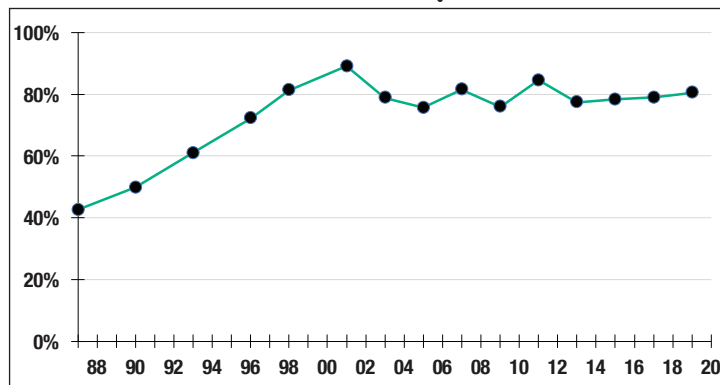
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



80.5%

Funded Ratio

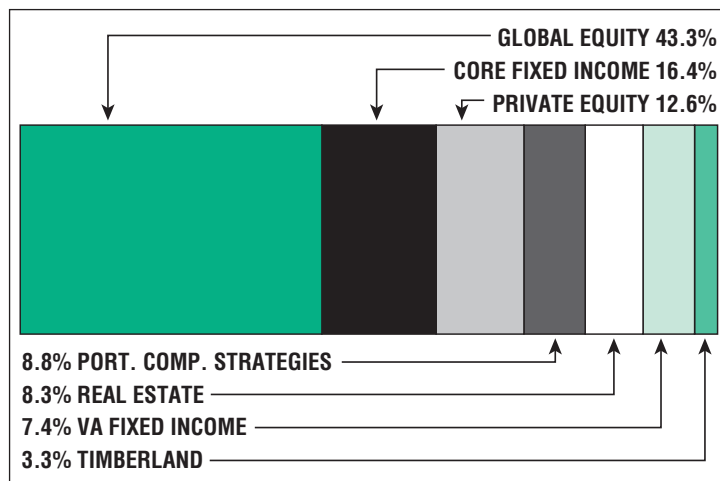
2029

Fully Funded

**7.75% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$30.1 M

Unfunded Liability

\$5.6 M
[FY2021]

Total Pension
Appropriation

Winthrop

CONTACT INFORMATION

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

BOARD MEMBERS

Francis Carberry*

James Feeley

Stacy Calla

Karin Chavis

*indicates Chairperson

BOARD ADMINISTRATOR

Michelle St. Jean

SYSTEM MEMBERS

Active Members260

Total Payroll\$13.2 M

Average Salary\$50,800

Average Age49

Average Service11.8

Retired Members.....196

Benefits Paid\$4.3 M

Average Benefit\$22,000

Average Age75

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees11

Reported Earnings3

Excess Earners.....2

Refund Due\$29,109

Last Valuation: 1/1/19

Actuary: PERAC



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\$88.9 M

Market Value

12.60%

2020 Returns

8.83%

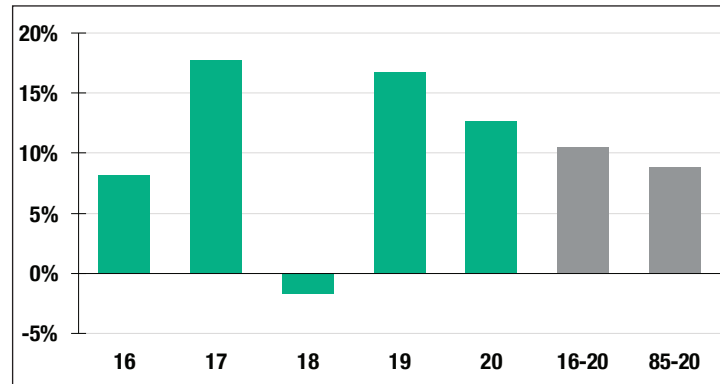
2011-2020
[Annualized]

8.83%

1985-2020
[Annualized]

Investment Returns

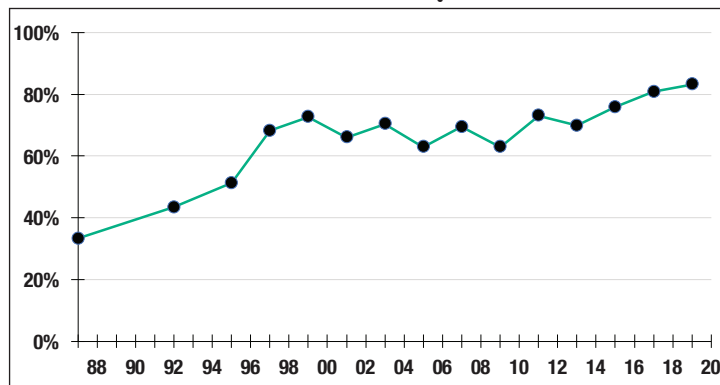
(2016-2020, 5-Year & 36-Year Averages, as of 12/31/20)



7.00%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



83.2%

Funded Ratio

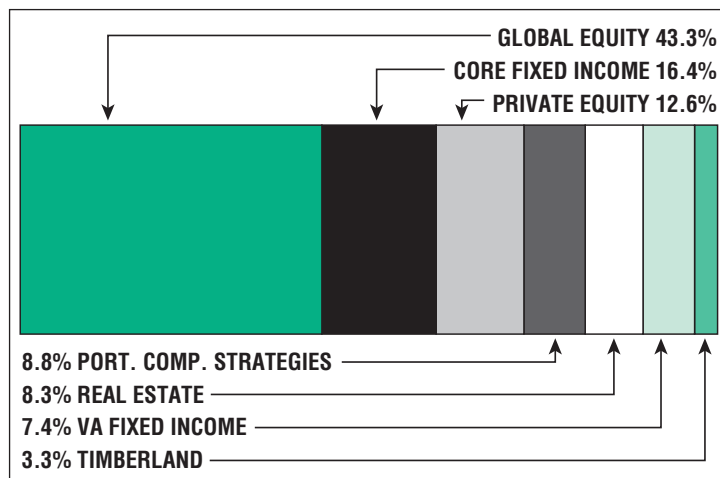
2030

Fully Funded

**4.0% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$14.3 M

Unfunded Liability

\$3.8 M
[FY2021]

Total Pension
Appropriation

Woburn

CONTACT INFORMATION

City Hall, 2nd Floor
10 Common Street
Woburn, MA 01801-4139
Phone 781-897-5820
Fax 781-935-0695

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 Service13.6

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

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees29
Reported Earnings6
Excess Earners0
Refund Due\$0

Last Valuation: 1/1/20
Actuary: Buck



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\$168.9 M
Market Value

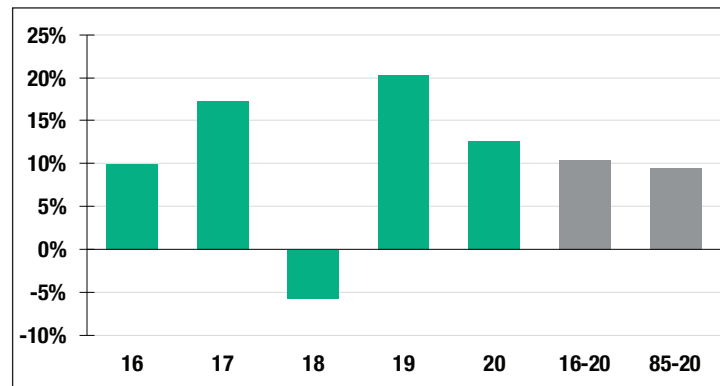
12.58%
2020 Returns

9.08%
2011-2020
[Annualized]

9.45%
1985-2020
[Annualized]

Investment Returns

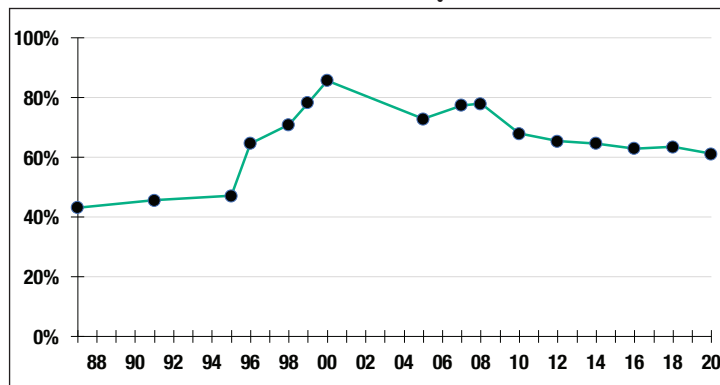
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.50%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



61.1%

Funded Ratio

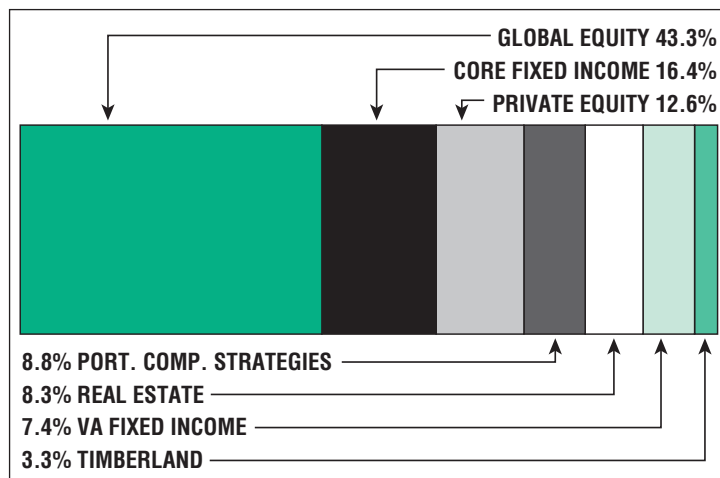
2035

Fully Funded

4.0% Increasing

Funding Schedule

Asset Allocation [12/31/20]



\$98.2 M

Unfunded Liability

\$9.1 M
[FY2021]

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
Stephen Wentzell*
Elizabeth Early
John Mahan
Tamara Cullen

*indicates Chairperson

BOARD ADMINISTRATOR

Lisa Poske

SYSTEM MEMBERS

Active Members3,506
Total Payroll\$197.0 M
Average Salary\$56,200
Average Age46
Average Service12.2

Retired Members2,738
Benefits Paid\$86.6 M
Average Benefit\$31,600
Average Age74

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees323
Reported Earnings68
Excess Earners2
Refund Due\$17,672

Last Valuation: 1/1/20
Actuary: Segal



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\$1.1 B

Market Value

11.87%

2020 Returns

8.03%

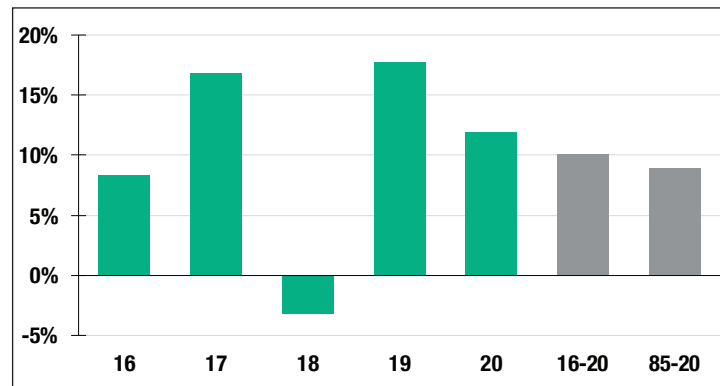
2011-2020
[Annualized]

8.89%

1985-2020
[Annualized]

Investment Returns

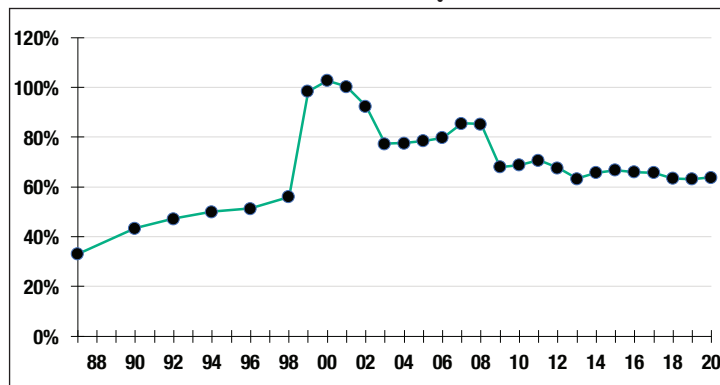
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



6.90%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



63.9%

Funded Ratio

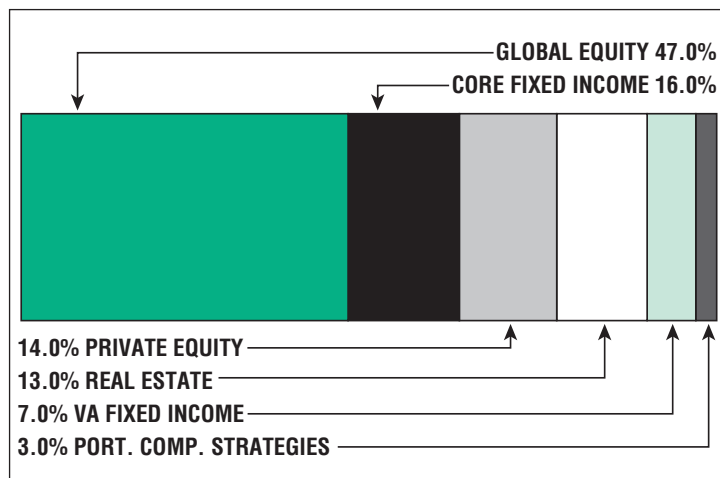
2034

Fully Funded

**6.33% Total
Increasing**

Funding Schedule

Asset Allocation [12/31/20]



\$560.9 M

Unfunded Liability

\$55.5 M
[FY2021]

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 L. 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 Members3,802
Benefits Paid\$86.8 M
Average Benefit\$22,800
Average Age73

2019 EARNED INCOME OF DISABILITY RETIREES:

Disability Retirees242
Reported Earnings92
Excess Earners1
Refund Due\$829

Last Valuation: 1/1/20
Actuary: KMS



Click/Scan for website

\$904.8 M
Market Value

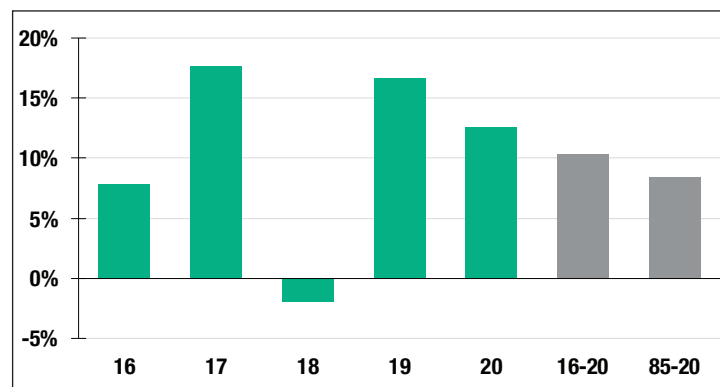
12.53%
2020 Returns

8.82%
2011-2020
[Annualized]

8.39%
1985-2020
[Annualized]

Investment Returns

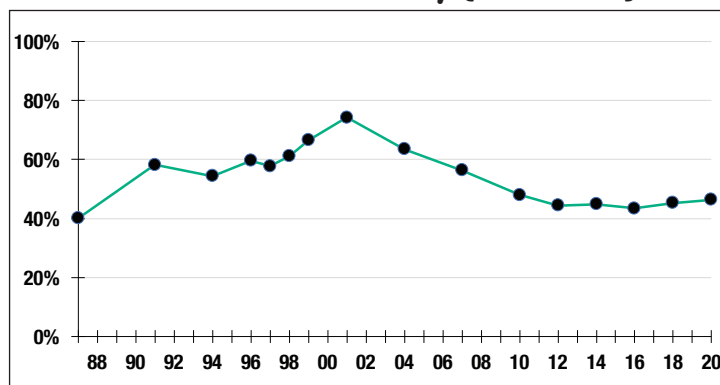
[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



7.65%

Assumed Rate
of Return

Funded Ratio History [1987-2020]



46.4%

Funded Ratio

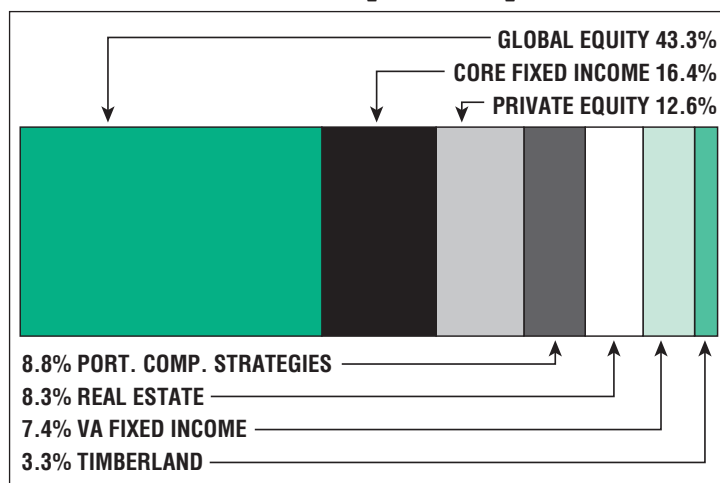
2036

Fully Funded

**4.0% Increasing
Phase-In**

Funding Schedule

Asset Allocation [12/31/20]



\$898.6 M

Unfunded Liability

\$68.4 M
[FY2021]

Total Pension
Appropriation

CONTACT INFORMATION

84 State Street
Suite 250
Boston, MA 02109
Phone 617-946-8401
Fax 617-946-8475

BOARD MEMBERS

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

EXECUTIVE DIRECTOR/CIO

Michael G. Trotsky, CFA

\$86.9 B
Market Value

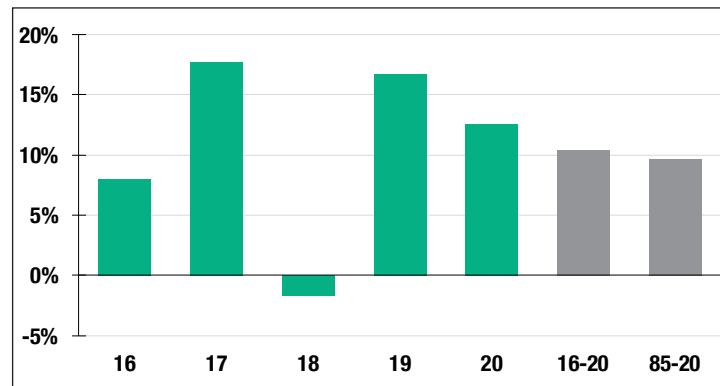
12.61%
2020 Returns

8.97%
2011-2020
[Annualized]

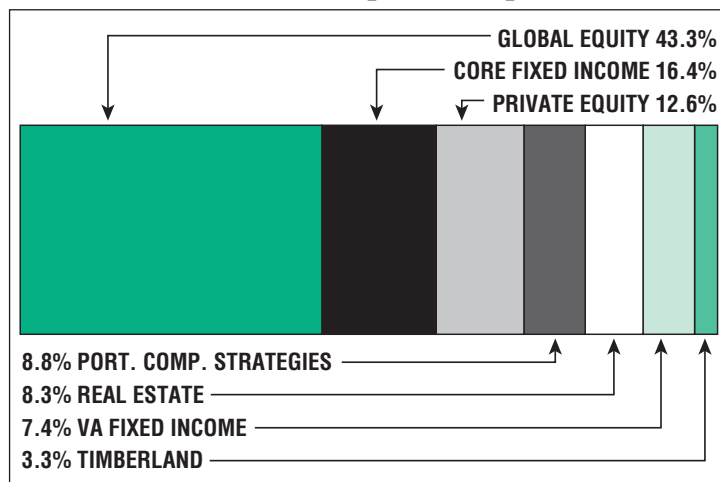
9.62%
1985-2020
[Annualized]

Investment Returns

[2016-2020, 5-Year & 36-Year Averages, as of 12/31/20]



Asset Allocation [12/31/20]



Click/Scan for website

DISABILITY RETIREMENT STATISTICS

[As of 12/31/20]

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

DISABILITY RETIREMENT STATISTICS

[As of 12/31/20]

RETIREMENT BOARDS WITH 600-899 ACTIVE MEMBERS	MEDICAL PANEL REQUESTS	DISABILITY RETIREMENT APPROVALS	ACCIDENTAL DEATH APPROVALS	CME REVIEWS	CME RE-EXAMS
Andover Retirement Board	3	4	0	5	0
Arlington Retirement Board	3	3	0	9	0
Attleboro Retirement Board	1	1	0	5	0
Beverly Retirement Board	0	1	0	3	0
Braintree Contributory Retirement Board	0	1	0	0	0
Chelsea Retirement Board	2	1	0	6	0
Dukes County Contributory Retirement Board	4	5	1	1	0
Everett Retirement Board	5	3	2	3	0
Fitchburg Retirement Board	1	4	0	4	0
Hingham Retirement Board	0	0	0	0	0
Leominster Retirement Board	1	0	0	6	0
Lexington Retirement Board	1	0	0	2	0
Malden Contributory Retirement Board	1	0	0	4	0
Marlborough Retirement Board	3	2	0	3	0
Medford Retirement Board	4	4	0	10	0
Methuen Contributory Retirement Board	2	2	0	6	0
Natick Retirement Board	0	1	0	1	0
Needham Contributory Retirement Board	3	0	0	0	0
Northampton Retirement Board	1	0	0	4	0
Norwood Contributory Retirement Board	4	2	0	3	0
Peabody Retirement Board	0	1	0	2	0
Revere Retirement Board	11	3	1	7	0
Wellesley Retirement Board	0	0	0	2	0
West Springfield Retirement Board	3	0	0	2	0
Westfield Retirement Board	3	2	0	7	0
RETIREMENT BOARDS WITH 900-2,399 ACTIVE MEMBERS					
Berkshire County Retirement Board	2	0	0	1	0
Brockton Retirement Board	10	9	0	20	0
Brookline Retirement Board	0	0	0	9	0
Chicopee Retirement Board	4	1	0	6	0
Fall River Retirement Board	7	4	0	18	0
Framingham Retirement Board	7	3	0	7	0
Franklin Regional Retirement Board	2	2	0	1	0
Hampshire County Regional Retirement Board	2	2	0	11	0
Haverhill Retirement Board	3	1	0	5	0
Holyoke Retirement Board	1	0	0	7	0
Lawrence Retirement Board	19	4	0	5	0
Lowell Retirement Board	0	2	0	17	0
Lynn Retirement Board	9	2	0	10	0

DISABILITY RETIREMENT STATISTICS

[As of 12/31/20]

RETIREMENT BOARDS WITH 900-2,399 ACTIVE MEMBERS (Cont'd)	MEDICAL PANEL REQUESTS	DISABILITY RETIREMENT APPROVALS	ACCIDENTAL DEATH APPROVALS	CME REVIEWS	CME RE-EXAMS
Mass Port Authority Employees' Retirement Board	0	0	0	5	0
Mass Water Resources Authority Retirement Board	3	3	0	5	0
New Bedford Retirement Board	13	14	0	21	0
Newton Retirement Board	1	5	0	6	0
Pittsfield Retirement Board	10	5	0	3	0
Plymouth Contributory Retirement Association	3	2	0	5	0
Quincy Retirement Board	6	7	0	10	0
Salem Contributory Retirement Board	1	2	0	8	0
Somerville Retirement Board	4	7	0	9	0
Taunton Retirement Board	2	5	0	7	0
Waltham Retirement Board	2	5	0	4	0
Weymouth Retirement Board	3	3	0	5	0
RETIREMENT BOARDS WITH 2,400-10,000 ACTIVE MEMBERS					
Barnstable County Retirement Board	14	17	1	29	0
Bristol County Retirement Board	1	3	0	29	0
Cambridge Retirement Board	9	8	0	26	0
Essex Regional Retirement Board	2	0	0	16	0
Hampden County Regional Retirement Board	3	6	0	16	0
Middlesex County Retirement Board	19	23	0	46	0
Norfolk County Retirement Board	34	22	1	20	0
Plymouth County Retirement Board	10	9	0	32	0
Springfield Retirement Board	23	15	0	47	0
Worcester Regional Retirement Board	18	10	0	30	0
Worcester Retirement Board	17	11	0	26	0
RETIREMENT BOARDS WITH 10,001-100,000 ACTIVE MEMBERS					
Boston Retirement Board	28	50	1	75	0
State Retirement Board	119	171	4	371	0
State Teachers	16	26	0	45	0
Total All Retirement Boards	511	527	11	1181	0

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

Everett Retirement Board 1	Norfolk County Retirement Board 1	Worcester Retirement Board 1
Boston Retirement Board 1	Springfield Retirement Board 1	State Retirement Board 5

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	<ul style="list-style-type: none"> PRIT 		
Amesbury	<ul style="list-style-type: none"> PRIT 		
Andover ▶ Consultant: Dahab Associates	<ul style="list-style-type: none"> PRIT 	<ul style="list-style-type: none"> RhumbLine Advisers 	
Arlington ▶ Custodian: People's United Bank	<ul style="list-style-type: none"> PRIT 		
Attleboro ▶ Custodian: People's United Bank ▶ Consultant: Dahab Associates Inc.	<ul style="list-style-type: none"> Amalgated Bank BTG Pactual Timberland Investment Group Copeland Capital Management Fidelity Institutional Asset Management Frontier Capital Management Co., LLC 	<ul style="list-style-type: none"> Hancock Timber Resource Group, Inc. Intercontinental Real Estate Corp. Invesco Core Real Estate USA, LP Invesco National Trust Company Peregrine Capital 	<ul style="list-style-type: none"> PRIT RhumbLine Advisers State Street Global Advisors Van Eck
Barnstable County	<ul style="list-style-type: none"> PRIT 		
Belmont ▶ Custodian: People's United Bank ▶ Consultant: NEPC, LLC	<ul style="list-style-type: none"> AEW Capital Management, LP Atlanta Capital Carillion Tower Advisors 	<ul style="list-style-type: none"> HarbourVest Partners, LLC Loomis, Sayles & Company Pacific Investment Management Company, LLC 	<ul style="list-style-type: none"> PRIT RhumbLine Advisers Rothschild Asset Management Inc.
Berkshire County	<ul style="list-style-type: none"> PRIT 		
Beverly	<ul style="list-style-type: none"> PRIT 		
Blue Hills Regional	<ul style="list-style-type: none"> PRIT 		
Boston (City) ▶ Custodian: State Street Bank & Trust ▶ Consultant: NEPC, LLC	<ul style="list-style-type: none"> 57 Stars, LLC AEW Capital Management, LP Alcentra NY, LLC Aberdeen Asset Management Angelo, Gordon & Co., LP Arlight 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. Blue Point Capital Partners, LLC 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 DDJ Capital Management D.E. Shaw Investment Management, LLC DRC Capital, LLP Dune Capital Management, LP Energy Spectrum Partners 	<ul style="list-style-type: none"> EnTrust Global Partners Goldentree Asset Management, LP Grosvenor Capital Management, LP Hamilton Lane HarbourVest Partners, LLC Hearthstone Inc. H.I.G. Capital 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 Loomis, Sayles & Company Main Capital Partners B.V. Mesirow 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 	<ul style="list-style-type: none"> 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 Sterling Fund Management Summit Partners, LP TA Realty TH Lee Putnam 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. W Capital Partners Wells Capital Management, Inc. Western Technology Westfield Capital Management Company, LP Westport Capital Partners, LLC Z Capital Partners, LLC Zevenbergen Capital Investments, LLC

INVESTMENT VENDORS

Retirement Board	Investment Vendors		
Boston Teachers	<ul style="list-style-type: none"> PRIT 		
Braintree ▶ Custodian: SEI Private Trust Company	<ul style="list-style-type: none"> Lexington Partners, LP 	<ul style="list-style-type: none"> PRIT 	<ul style="list-style-type: none"> SEI Investments Management Corporation
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. 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 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 Mesirow Financial Private Equity Advisors, Inc. Pacific Investment Management Company (PIMCO) Polaris Capital Management, LLC PRIT RBC Global Asset Management (U.S.), Inc. RREEF Management, LLC Stone Harbor Investment Partners TerraCap Management, LLC Timberland Investment Resources, LLC WL Ross & Co., LLC
Brockton ▶ Custodian: SEI Private Trust Company ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> Aberdeen Asset Management Ascent Venture Partners HealthPoint, LLC 	<ul style="list-style-type: none"> Invesco Private Capital Landmark Partners, LLC Mesirow Financial Investment Management, Inc. 	<ul style="list-style-type: none"> Oppenheimer Alternative Investment Management SEI Investments Management Corp. Siguler Guff Advisers, LLC
Brookline	<ul style="list-style-type: none"> Hancock Timber Resource Group, Inc. HarbourVest Partners, LLC 	<ul style="list-style-type: none"> Invesco Private Capital, Inc. Lexington Partners, LP 	<ul style="list-style-type: none"> PRIT Sustainable Woodlands Partners, LLC
Cambridge ▶ Custodian: People's United Bank ▶ Consultant: Segal Marco Advisors	<ul style="list-style-type: none"> Aberdeen Asset Management AEW Capital Management, LP Ascent Venture Partners BlackRock Investment Management, LLC Brandywine Global Investment Management, LLC Campbell Global LLC Fidelity Institutional Asset Management Hamilton Lane Hancock Natural Resource Group, Inc. 	<ul style="list-style-type: none"> IFM Investors (US) Advisor, LLC Income Research & Management Intercontinental Real Estate Corp. J.P. Morgan Investment Management Landmark Partners, LLC Lazard Asset Management, LLC Lexington Partners, LP Loomis Sayles & Co. Mellon Investments Corporation 	<ul style="list-style-type: none"> Penn Square Global Real Estate Group, LLC PineBridge Investments, LLC Polaris Capital Management, LLC PRIT 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 		
Chicopee ▶ Custodian: SEI Private Trust Company	<ul style="list-style-type: none"> PRIT 	<ul style="list-style-type: none"> SEI Investments Management Corp. 	
Clinton ▶ Consultant: Trust Advisory Group, Ltd.	<ul style="list-style-type: none"> PRIT 		
Concord ▶ Custodian: People's United Bank ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> Acadian Asset Management, LLC PRIT 	<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 PRIT RhumbLine Advisers 	<ul style="list-style-type: none"> TA Realty Western Asset Management Co.

INVESTMENT VENDORS

Retirement Board	Investment Vendors		
Dedham	<ul style="list-style-type: none"> • PRIT 		
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
Easthampton	<ul style="list-style-type: none"> • PRIT 		
Essex County	<ul style="list-style-type: none"> • Ascent Venture Partners • BlackRock Investment Management, LLC 	<ul style="list-style-type: none"> • Boston Millennia Partners • Levine Leichtman Capital Partners, Inc.. 	<ul style="list-style-type: none"> • PRIT
Everett	<ul style="list-style-type: none"> • PRIT 		
Fairhaven	<ul style="list-style-type: none"> • PRIT 		
Fall River	<ul style="list-style-type: none"> • PRIT 		
Falmouth ▶ Custodian: People's United Bank ▶ Consultant: Wainwright Investment Counsel, LLC	<ul style="list-style-type: none"> • Aristotle Capital Management, LLC • Dimensional Fund Advisors, LP • Hamilton Lane • HGK Asset Management, Inc. • Lexington Partners, LP 	<ul style="list-style-type: none"> • LMCG Investments, LLC • Lord Abbett & Co., LLC • Mesirrow Financial Private Equity Advisors, Inc. • PRIT • Principal Real Estate Investors, LLC 	<ul style="list-style-type: none"> • RhumbLine Advisers • SEI Trust Company • Siguler Guff Advisers, LLC • State Street Global Advisors • TerraCap Partners
Fitchburg	<ul style="list-style-type: none"> • PRIT 		
Framingham	<ul style="list-style-type: none"> • PRIT 		
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
Gardner	<ul style="list-style-type: none"> • PRIT 		
Gloucester	<ul style="list-style-type: none"> • PRIT 		
Greater Lawrence ▶ Custodian: BNY Mellon Asset Servicing	<ul style="list-style-type: none"> • PRIO Weatlh, LLC 		
Greenfield	<ul style="list-style-type: none"> • PRIT 		
Hampden County ▶ Consultant: Segal Marco Advisors	<ul style="list-style-type: none"> • GCM Customized Fund Investment Group 	<ul style="list-style-type: none"> • PRIT 	
Hampshire County ▶ Consultant: NEPC, LLC	<ul style="list-style-type: none"> • Ascent Venture Partners • Barings LLC • Colchester Global Investors • Glouston Capital Partners, LLC • Lexington Partners, LP 	<ul style="list-style-type: none"> • Massachusetts Financial Services Company • Perella Weinberg Partners Capital Management, LP • Polaris Capital Management, LLC • Portfolio Advisors, LLC 	<ul style="list-style-type: none"> • PRIT • RBC Global Asset Management (U.S.) Inc. • RhumbLine Advisers • Shenkman Capital Management, Inc.
Haverhill ▶ Custodian: People's United Bank ▶ Consultant: Wainwright Investment Counsel, LLC	<ul style="list-style-type: none"> • Fisher Investments • Global Forest Partners, LP • Globespan Capital Management, Inc. • GrandBanks Capital 	<ul style="list-style-type: none"> • Income Research & Management • Mesirrow Financial Institutional Real Estate • Molpus Woodlands Group, LLC • PRIT 	<ul style="list-style-type: none"> • Putnam Advisory Company, LLC • Stafford Private Equity, Inc. • TerraCap Management • The DSF Group
Hingham ▶ Consultant: Meketa Investment Group	<ul style="list-style-type: none"> • PRIT 		

INVESTMENT VENDORS

Retirement Board	Investment Vendors		
Holyoke ▶ Consultant: Segal Marco Advisors	<ul style="list-style-type: none"> Aberdeen Asset Management Acadian Asset Management, LLC Aristotle Capital Management Constitution Capital Partners, LLC Fidelity Institutional Asset Management Long Wharf Real Estate Partners, LLC 	<ul style="list-style-type: none"> Loomis, Sayles & Company Mellon Investments Mesirow Financial Private Equity Advisors, Inc. Monroe Capital Oberweis Asset Management, Inc. Polaris Capital Management, LLC PRIT Putnam Investment Management, LLC 	<ul style="list-style-type: none"> RBC Global Asset Management (U.S.) Inc. Seizert Capital Partners, LLC State Street Global Advisors TerraCap Management, LLC Wasatch Advisors, Inc. Wells Capital Management, Inc. Western Asset
Hull	<ul style="list-style-type: none"> PRIT 		
Lawrence	<ul style="list-style-type: none"> PRIT 		
Leominster	<ul style="list-style-type: none"> PRIT 		
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 RhumbLine Advisers Wellington Management Company, LLP White Oak Global Advisors, LLC
Lowell ▶ Custodian: People's United Bank	<ul style="list-style-type: none"> Ascent Venture Partners 	<ul style="list-style-type: none"> Boston Millennia Partners 	<ul style="list-style-type: none"> PRIT
Lynn	<ul style="list-style-type: none"> Ascent Venture Partners BlackRock Investment Management, LLC 	<ul style="list-style-type: none"> BlackRock Realty Advisors, Inc. 	<ul style="list-style-type: none"> PRIT
Malden ▶ Custodian: State Street Bank & Trust	<ul style="list-style-type: none"> De Burlo Group, Inc. 		
Marblehead	<ul style="list-style-type: none"> PRIT 		
Marlborough ▶ Custodian: Comerica Bank ▶ Consultant: Meketa Investment Group, Inc.	<ul style="list-style-type: none"> Clarion Partners Colony Realty Partners Constitution Capital Partners, LLC Dimensional Fund Advisors LP Driehaus Capital Management, LLC 	<ul style="list-style-type: none"> Fiduciary Management, Inc. 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 Dimensional Fund Advisors, LP 	<ul style="list-style-type: none"> GQC Partners, LLC Goldman Sachs Asset Management, LP HarbourVest Partners, LLC IFM Investors Advisor Intercontinental Real Estate Corporation 	<ul style="list-style-type: none"> Longfellow Investment Management 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 	<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]	<ul style="list-style-type: none"> PRIT 		

INVESTMENT VENDORS

Retirement Board	Investment Vendors		
MWRA ► Custodian: People's United Bank ► Consultant: NEPC, LLC	<ul style="list-style-type: none"> Alcentra NY, LLC Ascent Venture Partners Baillie Gifford Baxter Street Boston Company Asset Management, LLC Boston Partners CarVal Investors Cerberus Capital Management, LP Coho Partners, Ltd. Constitution Capital Partners LLC Corbin Capital Partners LP EnTrust Global Partners Foundry Group, LLP 	<ul style="list-style-type: none"> Garcia Hamilton & Associates LP Hamilton Lane HarbourVest Partners, LLC Invesco Private Capital, Inc. 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 Private Advisors, LLC RhumbLine Advisers Schroders Investment Management North America, Inc. SEI Trust Corporation TA Realty TerraCap Management, LLC UBS Hedge Fund Solutions, LLC
Maynard ► Custodian: People's United Bank	<ul style="list-style-type: none"> Boston Advisors, LLC 	<ul style="list-style-type: none"> PRIT 	
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 	<ul style="list-style-type: none"> RhumbLine Advisers Western Asset Management Company William Blair & Company, LLC
Melrose	<ul style="list-style-type: none"> Ascent Venture Partners 	<ul style="list-style-type: none"> Invesco Private Capital, Inc. 	<ul style="list-style-type: none"> PRIT
Methuen	<ul style="list-style-type: none"> BlackRock Investment Management, LLC 	<ul style="list-style-type: none"> PRIT 	
Middlesex County ► Custodian: State Street Bank & Trust	<ul style="list-style-type: none"> Ascent Venture Partners Boston Millennia Partners 	<ul style="list-style-type: none"> Global Forest Partners, LP Globespan Capital Management, Inc. 	<ul style="list-style-type: none"> PRIT
Milford	<ul style="list-style-type: none"> PRIT 		
Milton	<ul style="list-style-type: none"> PRIT 		
Minuteman Regional	<ul style="list-style-type: none"> PRIT 		
Montague	<ul style="list-style-type: none"> PRIT 		
Natick ► Custodian: People's United Bank ► Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> PRIT 	<ul style="list-style-type: none"> SEI Investments Management Corp. 	
Needham	<ul style="list-style-type: none"> PRIT 		
New Bedford ► Consultant: Segal Marco Advisors	<ul style="list-style-type: none"> Aberdeen Asset Management, Inc. Acadian Asset Management, LLC Hamilton Lane Hancock Natural Resource Group, Inc. Intercontinental Real Estate Corp. 	<ul style="list-style-type: none"> Lexington Advisors, Inc. Loomis, Sayles & Company Mellon Investments Mesirow Private Equity Advisors, Inc. Pacific Investment Management Company (PIMCO) 	<ul style="list-style-type: none"> Neuberger Berman Management SEI Trust Company State Street Global Advisors Limited UBS Realty Investors, LLC Westfield Capital Management Company, LP
Newburyport	<ul style="list-style-type: none"> PRIT 		
Newton	<ul style="list-style-type: none"> PRIT 		

INVESTMENT VENDORS

Retirement Board	Investment Vendors		
Norfolk County ► Custodian: People's United Bank ► Consultant: Wainwright Investment Counsel, LLP	<ul style="list-style-type: none"> Amundi Pioneer Institutional Asset Mgmt., Inc. Arclight Capital Partners, LLC Aristotle Capital Management, LLC Ascend Ventures Group, LLC BNY Mellon Asset Management N.A. Boston Millennia Partners Constitution Capital Partners, LLC Corsair Capital LLC Dalton Greniere Asset Management, Inc. 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 Loomis, Sayles & Company Mesirow Capital Partners IX, LP Mesirow Financial Institutional Real Estate MFS International Advisors, Inc. PRIT RhumbLine Advisers Seizert Capital Partners, LLC Siguler Guff Advisors, LLC TerraCap Management Wellington Management Company, LLP
North Adams ► Custodian: People's United Bank	<ul style="list-style-type: none"> De Burlo Group, Inc. 	<ul style="list-style-type: none"> PRIT 	
North Attleboro ► 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 Blackrock Realty Advisors, Inc. 	<ul style="list-style-type: none"> Brandes Investment Partners, LP Chicago Equity Partners, LLC 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.
Northampton ► Custodian: People's United Bank	<ul style="list-style-type: none"> De Burlo Group, Inc. 	<ul style="list-style-type: none"> PRIT 	
Northbridge	<ul style="list-style-type: none"> PRIT 		
Norwood ► 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 Boston Company Asset Management, LLC 	<ul style="list-style-type: none"> Columbia Management Investment Advisors, LLC Constitution Capital Partners Dimensional Fund Advisors, LP HabourVest Partners, LLC IFM Investors Advisor 	<ul style="list-style-type: none"> Landmark Partners, LLC PRIT RhumbLine Advisers State Street Global Advisors
Peabody	<ul style="list-style-type: none"> PRIT 		
Pittsfield	<ul style="list-style-type: none"> PRIT 		
Plymouth ► Custodian: People's United Bank ► Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> Acadian Asset Management Aristotle Capital Management, LLC Barings LLC BlackRock Advisors, LLC Boston Trust Investment Management, Inc. 	<ul style="list-style-type: none"> Columbia Management Investment Advisors Invesco Trust Company PRIT Rhumbline Advisers 	<ul style="list-style-type: none"> Robeco Institutional Asset Management Inc. Templeton Investment Counsel Wellington Management Company, LLP Westfield Capital Management Company, LP

INVESTMENT VENDORS

Retirement Board	Investment Vendors		
Plymouth County ► 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 • Ascent Venture Partners • Audax Management Company (NY), LLC • Basalt Infrastructure Partners • Boston Company Asset Management, LLC • BTG Pactual Timberland Investment Group • Carlyle Investment Management • Charlesbank Capital Partners, LLC • Constitution Capital Partners, LLC • Copper Rock Capital Partners • DN Partners • Driehaus Capital Management, LLC • Eaton Vance Investment Counsel • Entrust Global Partners • Fisher Investments • First Eagle Investment Management • Franklin Templeton Investment Management 	<ul style="list-style-type: none"> • Freeman Spogoli Management • Global Infrastructure Management, LLC • Globespan Capital Management, Inc. • HarborVest Partner • HGK Asset Management, Inc. • IFM Investors Advisor • Income Research & Management • Invesco Trust Company • John Hancock Trust Company • J.P. Morgan Investment Management, Inc. • KBI Global Investors (North America Ltd.) • Kopernik Global Investors • Landmark Partners, LLC • Leeds Equity Partner • Lexington Partners, LP • LLR Management • Lord Abbett & Company • Mesirow Financial Capital Partners X, LP 	<ul style="list-style-type: none"> • Mesirow Financial Institutional Real Estate • Old Farm Partners • Prudential Real Estate Investors • RhumbLine Advisers • Ridgemont Equity Partners • Rockpoint Capital • Searchlight Capital Partners • SEI Trust Company • Siguler Guff Advisers, LLC • Summit Partners, LP • TA Realty • THL Credit Advisors, LLC • TimberVest, LLC • Trilantic Capital Management L.P. • Waud Capital Partners • Wellington Management • Wellspring Capital Management, LLC
Quincy ► Custodian: People's United Bank ► Consultant: Meketa Investment Group, Inc.	<ul style="list-style-type: none"> • Aberdeen • 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 	<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
Reading ► Custodian: Fiducient Advisors, LLC	<ul style="list-style-type: none"> • PRIT 		
Revere	<ul style="list-style-type: none"> • PRIT 		
Salem	<ul style="list-style-type: none"> • Ascent Venture Partners 	<ul style="list-style-type: none"> • PRIT 	
Saugus ► Custodian: People's United Bank ► Consultant: Wainwright Investment Counsel, LLP	<ul style="list-style-type: none"> • Aristotle Capital Management, LLC • Lord Abbett & Co., LLC • LMCG Investment 	<ul style="list-style-type: none"> • Massachusetts Financial Services Co. • PRIT 	<ul style="list-style-type: none"> • RhumbLine Advisers • SEI Trust
Shrewsbury ► Custodian: People's United Bank ► Consultant: Dahab Associates, Inc.	<ul style="list-style-type: none"> • Atlanta Capital • Earnest Partners 	<ul style="list-style-type: none"> • Fiera Capital Inc. 	<ul style="list-style-type: none"> • PRIT

INVESTMENT VENDORS

Retirement Board	Investment Vendors		
Somerville ▶ Custodian: Comerica Securities	<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 	<ul style="list-style-type: none"> • RhumbLine Advisers • UBS Realty Investors, LLC
Southbridge	<ul style="list-style-type: none"> • PRIT 		
Springfield ▶ Custodian: People's United Bank	<ul style="list-style-type: none"> • Boston Millennia Partners 	<ul style="list-style-type: none"> • PRIT 	
State	<ul style="list-style-type: none"> • PRIT 		
Stoneham ▶ Custodian: SEI Private Trust Company ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> • PRIT 	<ul style="list-style-type: none"> • SEI Investments Management Corp. 	
Swampscott ▶ Custodian: People's United Bank ▶ Consultant: Dahab Associates	<ul style="list-style-type: none"> • Aristotle Capital Management, LLC • Intercontinental Real Estate Corporation 	<ul style="list-style-type: none"> • LMCG Investments, LLC • PRIT 	<ul style="list-style-type: none"> • TA Realty
Taunton ▶ Custodian: People's United Bank ▶ Consultant: Dahab Associates, Inc.	<ul style="list-style-type: none"> • Aberdeen Asset Management • BlackRock Investment Management, LLC • Boston Millennia Partners • Boston Partners • Brandywine Global Investment Management, LLC • Ceres Partners, LLC • C.S. McKee, LP • Frontier Capital Management Co., LLC 	<ul style="list-style-type: none"> • GAM International Management Limited • Intercontinental Real Estate Corporation • Invesco Core Real Estate USA, LP • John Hancock Trust Company • LMCG Investments, LLC • Molpus Woodlands Group, LLC • Polen Capital Management, LLC • PRIT 	<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 • Wells Capital Management, Inc.
Wakefield	<ul style="list-style-type: none"> • PRIT 		
Waltham ▶ Custodian: SEI Private Trust Company ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> • Precision Capital Advisors, LLC 	<ul style="list-style-type: none"> • PRIT 	<ul style="list-style-type: none"> • RCP Advisors, LLC • SEI Investments Management Corporation
Watertown ▶ Custodian: People's United Bank ▶ Consultant: Fiduciary Investment Advisors, LLC	<ul style="list-style-type: none"> • Acadian Asset Management, LLC • American Realty Advisors • Ascent Venture Partners • Brandywine Global Investment Management, LLC • Columbia Management Investment Advisors, LLC • Earnest Partners, LLC 	<ul style="list-style-type: none"> • Eaton Vance Management • Income Research & Management • LMCG Investment • Massachusetts Financial Services Company • Pinebridge Investment, LLC • PRIT 	<ul style="list-style-type: none"> • RCP Advisors, LLC • SEI Trust Company • TA Realty • TerraCap Management, LLC • Wellington Management Company, LLP
Webster ▶ Custodian: People's United Bank ▶ Consultant: Wainwright Investment Counsel, LLC	<ul style="list-style-type: none"> • Aristotle Capital Management, LLC • HGK Asset Management Inc. 	<ul style="list-style-type: none"> • LMCG Investments • Loomis, Sayles & Company 	<ul style="list-style-type: none"> • PRIT • RhumbLine Advisers
Wellesley	<ul style="list-style-type: none"> • PRIT 		

INVESTMENT VENDORS

Retirement Board	Investment Vendors		
West Springfield ▶ Custodian: Comerica	<ul style="list-style-type: none"> De Burlo Group, Inc. 		
Westfield ▶ Custodian: Fiducient Advisors, LLC	<ul style="list-style-type: none"> Boston Company Asset Management, LLC 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 Long Wharf Real Estate Partners, LLC Loomis, Sayles & Company Polaris Capital Management, LLC PRIT 	<ul style="list-style-type: none"> RBC Global Asset Management (U.S.), Inc. SEI Trust Company State Street Global Advisors TerraCap Management Wasatch Advisors, Inc. Wells Capital Management, Inc.
Weymouth ▶ Custodian: Comerica ▶ Consultant: Fiducient Advisors, LLC	<ul style="list-style-type: none"> Acadian Asset Management, LLC Adams Street Partners Amundi Pioneer Institutional Asset Mgmt., Inc. Ashmore Investment Advisors BlackRock Advisors, LLC Boston Company Asset Management, LLC Brandywine Global Investment Management, LLC Constitution Capital Partners, LLC 	<ul style="list-style-type: none"> Harbor Capital Advisors Inc. HarbourVest Partners, LLC Invesco Private Capital, Inc. Landmark Partners, LLC Loomis, Sayles & Company OFI Global Institutional, Inc. Principal Global Investors LLC 	<ul style="list-style-type: none"> PRIT RhumbLine Advisers Riverbridge Partners, LLC Sigular Guff Advisers, LLC Stockbridge Core and Value Advisors TerraCap Management, LLC Wasatch Advisors
Winchester	<ul style="list-style-type: none"> PRIT 		
Winthrop	<ul style="list-style-type: none"> PRIT 		
Woburn ▶ Custodian: People's United Bank	<ul style="list-style-type: none"> Charlesbank Capital Partners, LLC PRIT 	<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 Global Infrastructure Management, LLC 	<ul style="list-style-type: none"> Hancock Natural Resource Group, Inc. Harvest Partners, LP IFM Investors (US) Advisor, LLC Income Research & Management Invesco Private Capital, Inc. Lazard Asset Management, LLC Lee Munder Capital Group, LLC Loomis, Sayles & Company Newstone Capital Partners, LLC 	<ul style="list-style-type: none"> Northstar Company, LLC PRIT Ridgemont Equity Partners Riverside Company SL Capital Partners, LLP State Street Global Advisors TA Associates Management Vitruvian Partners, LLP White Deer Energy
Worcester Regional	<ul style="list-style-type: none"> AEW Capital Management, LP 	<ul style="list-style-type: none"> Ascent Venture Partners 	<ul style="list-style-type: none"> PRIT

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
- ▶ International Woodland Company - Timberland Advisory Services
- ▶ KPMG LLP - Auditor
- ▶ NEPC, LLC - Asset Allocation Advisory Services
- ▶ NewAlpha Asset Management - Portfolio Completion Strategies Advisory Services

Domestic Equity Managers

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

- Frontier Capital Management
- Goldman Sachs Investment Management
- Lord, Abnett & Co., LLC

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

International Equity Managers

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

- 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 Co. (PIMCO)
- Pugh Capital Management
- RBC Global Asset

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
- Pacific Investment Management Co. (PIMCO)
- Shenkman Capital Management
- Voya Financial

Alternative Investments—Real Estate Managers

- AEW Capital Management
- 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
- Goldman Sachs Asset Management
- Investcorp Investment Advisors, LLC
- JEN Partners, LLC
- Land and Buildings Investment Management

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

PRIM INVESTMENT VENDORS

[Organized by Service Provider Type, Continued]

Alternative Investments—Private Equity and Distressed Debt Managers

PRIVATE EQUITY:

- Acon Investments
- Advent International
- 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, Hennessey & 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
- Medici 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
- StonePoint Capital
- Summit Ventures
- SV Life Sciences Advisors
- TA Associates
- Technology Crossover Ventures
- Tenaska Capital
- Texas Pacific Group
- The Gores Group
- Thoma Bravo
- Thoma Cressey Partners
- Thomas H. Lee Equity Partners, LP
- Thompson Street Capital
- 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

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