# Massachusetts Teachers' Retirement System Audit Report

## July 1, 2014 - June 30, 2017

PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION
COMMONWEALTH OF MASSACHUSETTS

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October 8, 2020

The Public Employee Retirement Administration Commission has completed an examination of the Massachusetts Teachers' Retirement System pursuant to G.L. c. 32, § 21. The examination covered the period from July 1, 2013 to June 30, 2017. This audit was conducted in accordance with the accounting and management standards established by the Public Employee Retirement Administration Commission in regulation 840 CMR 25.00.

In our opinion, the financial records are being maintained and the management functions are being performed in conformity with the standards established by the Public Employee Retirement Administration Commission with the exception of those noted in the findings presented in this report.

In closing, I acknowledge the work of examiners Scott Henderson, Michael Nicolazzo, and Carol Poladian who conducted this examination, and express appreciation to the Board of Retirement and staff for their courtesy and cooperation.

Sincerely,

John W. Parsons, Esq.
Executive Director

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# EXPLANATION OF FINDINGS AND RECOMMENDATIONS

**1. Service Purchases:**

The Teachers' Board is overcharging members re-depositing refunds when paid pursuant to §3(6)(c). This section covers members who re-enter "the active service of the governmental unit in which he was formerly employed … within two years from the date of his separation …" The §1 definition of "Governmental unit" states that all members of the Teachers' Retirement System (MTRS) are "deemed to be employed by the same governmental unit", so any teacher who takes a refund and then later reinstates as a member of MTRS within two years should have interest calculated according to §3(6)(c). That interest is to be charged to "the date of reemployment". Teachers' currently charges these members interest up to the date of payment.

**Recommendation:** Relevant purchases should be reviewed for members who are either active or deferring retirement and if the member overpaid there should be a refund of the excess interest.

***Board Response:*** The MTRS agrees with PERAC's recommendation. When the Legislature amended §3(6)(c) in 1983, to eliminate the language making it mandatory for members who left service, refunded and then reinstated within two years to payback their refunds immediately, they apparently overlooked the sentence in that section pertaining to the interest. For a member mandated to payback their refund immediately upon re-employment, charging interest through the date of re-employment makes perfect sense. It does not make sense, however, and is inconsistent with the rest of Chapter 32, to only charge interest through the date of re-employment when a member does not repay their refund until many years, or even decades, later. Nonetheless, the statutory language is clear, and the MTRS will follow PERAC's recommendation to refund the additional interest charges.

If PERAC is inclined to file a technical correction to this section to bring it in line with the other sections of Chapter 32 pertaining to service purchase interest, the MTRS would support that effort.

**2. System Administration:**

The Board did not meet in February 2014. According to G.L. c. 32, § 20(5)(a), Boards are required to meet at least once each month.

**Recommendation:** The Board needs to ensure that 12 monthly meetings are held each year. In the event of weather closure or otherwise, a Board meeting should be rescheduled as soon as possible and noted as being held as a makeup date for the cancelled meeting.

***Board Response:*** MTRS acknowledges the validity of this finding, and will adopt a policy in accordance with PERAC's recommendation.

**FINAL DETERMINATION**:

***PERAC Audit staff will follow up in six (6) months to ensure appropriate actions have been taken regarding all findings.***

# STATEMENT OF LEDGER ASSETS AND LIABILITIES

| | AS OF JUNE 30, 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|
| **Net Assets Available For Benefits:** | | | | |
| Cash | $89,529,263 | $84,499,690 | $92,830,443 | $126,380,632 |
| PRIT Cash Fund | 24,277,482 | 22,315,100 | 25,844,400 | 30,966,884 |
| PRIT Core Fund | 26,932,054,215 | 24,744,674,611 | 25,215,178,708 | 25,293,748,003 |
| Intangible Software Costs | 7,385,793 | 10,916,801 | 15,220,975 | 15,095,812 |
| Prepaid Expenses | 277,403 | 302,164 | 254,408 | 298,529 |
| Accounts Receivable | 102,295,801 | 88,877,468 | 92,257,218 | 84,389,653 |
| Deferred Revenue | (4,135,084) | (6,244,894) | (7,006,768) | (8,524,620) |
| Accounts Payable | (13,076,252) | (3,268,681) | (5,511,199) | (3,709,563) |
| **Total** | $27,138,608,621 | $24,942,072,259 | $25,429,068,185 | $25,538,645,330 |
| **Fund Balances:** | | | | |
| Annuity Savings Fund | $7,552,916,713 | $7,160,338,512 | $6,431,101,388 | $6,136,293,889 |
| Annuity Reserve Fund | 2,255,262,992 | 2,394,870,213 | 2,497,337,278 | 2,532,361,548 |
| Pension Fund | 0 | 0 | 0 | 0 |
| Military Service Fund | 230,034 | 237,059 | 221,025 | 222,989 |
| Expense Fund | 0 | 0 | 0 | 0 |
| Pension Reserve Fund | 17,330,198,882 | 15,386,626,475 | 16,500,408,494 | 16,869,766,904 |
| **Total** | $27,138,608,621 | $24,942,072,259 | $25,429,068,185 | $25,538,645,330 |

# STATEMENT OF CHANGES IN FUND BALANCES

| | Annuity Savings Fund | Annuity Reserve Fund | Pension Fund | Military Service Fund | Expense Fund | Pension Reserve Fund | Total All Funds |
|---|---|---|---|---|---|---|---|
| Beginning Balance July 2013 | $5,933,509,751 | $2,505,338,054 | $0 | $219,177 | $0 | $14,259,210,314 | $22,698,277,296 |
| Receipts | 706,317,313 | 79,644,451 | 1,056,685,083 | 3,812 | 173,839,873 | 3,648,986,190 | 5,665,476,722 |
| Interfund Transfers | (456,369,028) | 382,509,618 | 1,112,289,010 | 0 | 0 | (1,038,429,600) | 0 |
| Disbursements | (47,164,147) | (435,130,575) | (2,168,974,093) | 0 | (173,839,873) | 0 | (2,825,108,688) |
| Ending Balance June 2014 | 6,136,293,889 | 2,532,361,548 | 0 | 222,989 | 0 | 16,869,766,904 | 25,538,645,330 |
| Receipts | 724,934,873 | 78,540,492 | 1,159,936,725 | 11,807 | 176,921,715 | 720,532,701 | 2,860,878,313 |
| Interfund Transfers | (380,674,319) | 380,688,090 | 1,089,891,111 | (13,771) | 0 | (1,089,891,111) | 0 |
| Disbursements | (49,453,055) | (494,252,852) | (2,249,827,836) | 0 | (176,921,715) | 0 | (2,970,455,458) |
| Ending Balance June 2015 | 6,431,101,388 | 2,497,337,278 | 0 | 221,025 | 0 | 16,500,408,494 | 25,429,068,185 |
| Receipts | 757,498,692 | 76,124,546 | 1,272,528,474 | 24,483 | 172,424,406 | 318,273,182 | 2,596,873,783 |
| Interfund Transfers | 19,876,596 | 341,630,855 | 1,070,556,199 | (8,449) | 0 | (1,432,055,201) | 0 |
| Disbursements | (48,138,164) | (520,222,466) | (2,343,084,673) | 0 | (172,424,406) | 0 | (3,083,869,709) |
| Ending Balance June 2016 | 7,160,338,512 | 2,394,870,213 | 0 | 237,059 | 0 | 15,386,626,475 | 24,942,072,259 |
| Receipts | 776,461,100 | 72,514,394 | 1,416,613,727 | 1,655 | 203,939,293 | 2,959,989,972 | 5,429,520,141 |
| Interfund Transfers | (333,545,299) | 333,553,979 | 1,016,417,565 | (8,680) | 0 | (1,016,417,565) | 0 |
| Disbursements | (50,337,600) | (545,675,594) | (2,433,031,292) | 0 | (203,939,293) | 0 | (3,232,983,779) |
| Ending Balance June 2017 | $7,552,916,713 | $2,255,262,992 | $0 | $230,034 | $0 | $17,330,198,882 | $27,138,608,621 |

# STATEMENT OF RECEIPTS

| | FOR THE PERIOD ENDING JUNE 30, 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|
| **Annuity Savings Fund:** | | | | |
| Members Deductions | $730,699,407 | $699,421,905 | $669,941,211 | $653,327,864 |
| Transfers from Other Systems | 17,128,657 | 25,875,712 | 16,399,038 | 18,237,305 |
| Member Make Up Payments and Re-deposits | 10,258,376 | 15,270,866 | 16,296,203 | 16,405,508 |
| Member Payments from Rollovers | 11,598,326 | 10,889,016 | 16,592,254 | 12,870,651 |
| Investment Income Credited to Member Accounts | 6,776,334 | 6,041,193 | 5,706,167 | 5,475,985 |
| Sub Total | 776,461,100 | 757,498,692 | 724,934,873 | 706,317,313 |
| **Annuity Reserve Fund:** | | | | |
| Investment Income Credited to the Annuity Reserve Fund | 72,514,394 | 76,124,546 | 78,540,492 | 79,644,451 |
| **Pension Fund:** | | | | |
| 3 (8) (c) Reimbursements from Other Systems | 40,191,430 | 19,494,788 | 20,899,153 | 21,175,997 |
| Received from Commonwealth for COLA and Survivor Benefits | 241,574,978 | 225,120,921 | 208,707,358 | 192,314,768 |
| Pension Fund Appropriation | 1,134,616,815 | 1,027,796,079 | 930,307,642 | 843,153,232 |
| Settlement of Workers' Compensation Claims | 13,250 | 115,963 | 22,250 | 34,346 |
| Recovery of 91A Overearnings | 217,254 | 723 | 322 | 6,740 |
| Sub Total | 1,416,613,727 | 1,272,528,474 | 1,159,936,725 | 1,056,685,083 |
| **Military Service Fund:** | | | | |
| Contribution Received from Municipality on Account of Military Service | 1,425 | 24,246 | 11,583 | 3,590 |
| Investment Income Credited to the Military Service Fund | 230 | 237 | 224 | 222 |
| Sub Total | 1,655 | 24,483 | 11,807 | 3,812 |
| **Expense Fund:** | | | | |
| Investment Income Credited to the Expense Fund | 203,939,293 | 172,424,406 | 176,921,715 | 173,839,873 |
| **Pension Reserve Fund:** | | | | |
| Federal Grant Reimbursement | 3,172,830 | 2,789,767 | 3,618,410 | 3,431,861 |
| Interest Not Refunded | 121,298 | 147,655 | 225,100 | 305,777 |
| Miscellaneous Income | 0 | 0 | 0 | 1,443,260 |
| Excess Investment Income | 2,956,695,844 | 315,335,760 | 716,689,191 | 3,643,805,292 |
| Sub Total | 2,959,989,972 | 318,273,182 | 720,532,701 | 3,648,986,190 |
| **Total Receipts, Net** | $5,429,520,141 | $2,596,873,783 | $2,860,878,313 | $5,665,476,722 |

# STATEMENT OF DISBURSEMENTS

| | FOR THE PERIOD ENDING JUNE 30, | | | |
|---|---|---|---|---|
| | 2017 | 2016 | 2015 | 2014 |
| **Annuity Savings Fund:** | | | | |
| Refunds to Members | $38,498,452 | $38,477,082 | $38,672,039 | $39,049,849 |
| Transfers to Other Systems | 11,839,148 | 9,661,082 | 10,781,016 | 8,114,298 |
| Sub Total | 50,337,600 | 48,138,164 | 49,453,055 | 47,164,147 |
| **Annuity Reserve Fund:** | | | | |
| Annuities Paid | 545,675,594 | 520,222,466 | 494,252,852 | 435,130,575 |
| **Pension Fund:** | | | | |
| Pensions Paid | 2,054,788,066 | 1,993,194,286 | 1,927,622,454 | 1,872,862,280 |
| 3 (8) (c) Reimbursements to Other Systems, includes Boston teachers | 136,663,412 | 124,765,541 | 113,494,867 | 103,787,767 |
| State Reimbursable COLA's Paid | 241,574,978 | 225,120,921 | 208,707,358 | 192,314,768 |
| QEBA | 4,836 | 3,925 | 3,157 | 9,278 |
| Sub Total | 2,433,031,292 | 2,343,084,673 | 2,249,827,836 | 2,168,974,093 |
| **Expense Fund:** | | | | |
| PERAC Expenses | 4,000,000 | 4,952,481 | 3,964,772 | 3,695,935 |
| Salaries | 8,483,808 | 7,990,472 | 7,981,494 | 7,297,592 |
| Legal Expenses | 15,998 | 57,329 | 36,462 | 55,766 |
| 3(8)(c) Receipts to General Fund | 40,191,430 | 19,494,789 | 20,899,153 | 21,175,997 |
| Travel Expenses | 29,574 | 25,646 | 31,144 | 26,685 |
| Administrative Expenses | 757,222 | 647,702 | 710,357 | 443,522 |
| Federal Grant Receipts Distributed | 3,172,830 | 2,789,767 | 3,618,410 | 3,431,861 |
| Education and Training | 17,164 | 33,253 | 15,684 | 4,676 |
| Furniture and Equipment | 422,828 | 108,831 | 161,865 | 179,554 |
| Management Fees | 139,695,049 | 128,709,642 | 132,578,123 | 132,164,821 |
| Rent Expenses | 945,945 | 848,291 | 786,750 | 755,218 |
| Service Contracts | 2,631,393 | 2,300,923 | 2,331,943 | 1,467,788 |
| Fiduciary Insurance | 45,044 | 37,434 | 0 | 0 |
| Depreciation | 3,531,008 | 4,427,846 | 3,805,558 | 3,140,458 |
| Sub Total | 203,939,293 | 172,424,406 | 176,921,715 | 173,839,873 |
| **Total Disbursements** | $3,232,983,779 | $3,083,869,709 | $2,970,455,458 | $2,825,108,688 |

# INVESTMENT INCOME

| | FOR THE PERIOD ENDING JUNE 30, 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|
| **Investment Income Received From:** | | | | |
| Cash | $439,810 | $433,246 | $188,218 | $173,080 |
| Pooled or Mutual Funds | 744,918,751 | 678,029,499 | 648,449,635 | 718,402,088 |
| **Total Investment Income** | 745,358,561 | 678,462,745 | 648,637,853 | 718,575,168 |
| **Plus:** | | | | |
| Realized Gains | 994,714,913 | 600,036,270 | 1,068,371,371 | 1,234,415,865 |
| Unrealized Gains | 2,271,732,509 | 1,958,518,982 | 959,676,401 | 2,937,694,770 |
| Sub Total | 3,266,447,422 | 2,558,555,252 | 2,028,047,772 | 4,172,110,635 |
| **Less:** | | | | |
| Realized Loss | 0 | (25,548,222) | 0 | 0 |
| Unrealized Loss | (771,879,888) | (2,641,543,633) | (1,698,827,836) | (987,919,980) |
| Sub Total | (771,879,888) | (2,667,091,855) | (1,698,827,836) | (987,919,980) |
| **Net Investment Income** | 3,239,926,095 | 569,926,142 | 977,857,789 | 3,902,765,823 |
| **Income Required:** | | | | |
| Annuity Savings Fund | 6,776,334 | 6,041,193 | 5,706,167 | 5,475,985 |
| Annuity Reserve Fund | 72,514,394 | 76,124,546 | 78,540,492 | 79,644,451 |
| Military Service Fund | 230 | 237 | 224 | 222 |
| Expense Fund | 203,939,293 | 172,424,406 | 176,921,715 | 173,839,873 |
| **Total Income Required** | 283,230,251 | 254,590,382 | 261,168,598 | 258,960,531 |
| Net Investment Income | 3,239,926,095 | 569,926,142 | 977,857,789 | 3,902,765,823 |
| Less: Total Income Required | 283,230,251 | 254,590,382 | 261,168,598 | 258,960,531 |
| **Excess Income (Loss) To The Pension Reserve Fund** | $2,956,695,844 | $315,335,760 | $716,689,191 | $3,643,805,292 |

# SCHEDULE OF ALLOCATION OF INVESTMENTS OWNED

## (percentages by category)

| | AS OF JUNE 30, 2017 | |
|---|---|---|
| | MARKET VALUE | PERCENTAGE OF TOTAL ASSETS |
| Cash | $89,529,263 | 0.3% |
| PRIT Cash Fund | 24,277,482 | 0.1% |
| PRIT Core Fund | 26,932,054,215 | 99.6% |
| **Grand Total** | $27,045,860,960 | 100.0% |

For the year ending December 31, 2017, the rate of return for the investments of the Massachusetts Teachers' Retirement System was 17.86%. For the five-year period ending December 31, 2017, the rate of return for the investments of the Massachusetts Teachers' Retirement System averaged 10.01%. For the 33-year period ending December 31, 2017, since PERAC began evaluating the returns of the retirement systems, the rate of return on the investments of the Massachusetts Teachers' Retirement System was 9.62%.

The composite rate of return for all retirement systems for the year ending December 31, 2017 was 17.63%. For the five-year period ending December 31, 2017, the composite rate of return for the investments of all retirement systems averaged 9.83%. For the 33-year period ending December 31, 2017, since PERAC began evaluating the returns of the retirement systems, the composite rate of return on the investments of all retirement systems averaged 9.36%.

# SUPPLEMENTARY REGULATIONS

## INVESTMENT REGULATIONS

The Massachusetts Teachers' Retirement System is 100% invested in the PRIT Fund managed by the PRIM Board. As a result, there are no supplementary investment regulations that apply to these investments.

## MEMBERSHIP REGULATIONS

The Massachusetts Teachers' Retirement Board has adopted Supplemental Membership Regulations which are available on its web site at https://mtrs.state.ma.us/about/#regulations.

# NOTES TO FINANCIAL STATEMENTS

## NOTE 1 – SUMMARY OF PLAN PROVISIONS

### ADMINISTRATION

There are 104 contributory retirement systems for public employees in Massachusetts. Each system is governed by a retirement board and all boards, although operating independently, are governed by Chapter 32 of the Massachusetts General Laws. This law in general provides uniform benefits, uniform contribution requirements and a uniform accounting and funds structure for all systems. The Massachusetts Teachers' Retirement Board administers the pensions of school department employees who serve in a teaching, administrative, or other capacity deemed eligible by the Board.

### PARTICIPATION

Participation is mandatory for all full-time employees. Eligibility with respect to part-time, provisional, temporary, seasonal or intermittent employment is governed by regulations promulgated by the retirement board, and approved by PERAC.

There are 4 classes of membership in the Commonwealth. Members of the Massachusetts Teachers' Retirement System are classified in Group 1.

**Group 1**:

General employees, including clerical, administrative, technical and all other employees not otherwise classified.

### MEMBER CONTRIBUTIONS

Member contributions vary depending on the most recent date of membership:

| | |
|---|---|
| Prior to 1975: | 5% of regular compensation |
| 1975 - 1983: | 7% of regular compensation |
| 1984 to 6/30/96: | 8% of regular compensation |
| 7/1/96 to present: | 9% of regular compensation |
| 7/1/01 to present: | 11% of regular compensation (for members hired after 7/1/01 and those accepting provisions of Chapter 114 of the Acts of 2000) |
| 1979 to present: | an additional 2% of regular compensation in excess of $30,000, except members subject to Chapter 114 of the Acts of 2000. |

In addition, members of Group 1 who join the system on or after April 2, 2012 will have their withholding rate reduced by 3% after achieving 30 years of creditable service.

# NOTES TO FINANCIAL STATEMENTS (Continued)

## RATE OF INTEREST

Interest on regular deductions made after January 1, 1984 is a rate established by PERAC in consultation with the Commissioner of Banks. The rate is obtained from the average rates paid on individual savings accounts by a representative sample of at least 10 financial institutions.

## RETIREMENT AGE

There is no mandatory retirement age for employees in Group 1.

## SUPERANNUATION RETIREMENT

A person who became a member before April 2, 2012 is eligible for a superannuation retirement allowance (service retirement) upon meeting the following conditions:

- completion of 20 years of service, or
- attainment of age 55 if hired prior to 1978, or
- attainment of age 55 with 10 years of service, if hired after 1977.

A person who became a member on or after April 2, 2012 is eligible for a superannuation retirement allowance (service retirement) upon meeting the following conditions:

- attainment of age 60 with 10 years of service

## AMOUNT OF BENEFIT

A member's annual allowance is determined by multiplying average salary by a benefit rate related to the member's age and job classification at retirement, and the resulting product by his creditable service. A member who is subject to the provisions of Chapter 114 of the Acts of 2000, and who completes at least 30 years of creditable service will receive an additional 2% of the average salary for each full year of service above 24 (23 for members hired on or after 4/2/12). The amount determined by the benefit formula cannot exceed 80% of the member's highest three year (or five year as discussed below) average salary. For veterans as defined in G.L. c. 32, s. 1, there is an additional benefit of $15 per year for each year of creditable service, up to a maximum of $300.

For employees who become members after January 1, 2011, regular compensation is limited to 64% of the federal limit found in 26 U.S.C. 401(a)(17). In addition, regular compensation will be limited to prohibit "spiking" of a member's salary to increase the retirement benefit.

- For persons who became members prior to April 2, 2012, Average Salary is the average annual rate of regular compensation received during the 3 consecutive years that produce the highest average, or, if greater, during the last 3 years (whether or not consecutive) preceding retirement.

- For persons who became members on or after April 2, 2012, Average Salary is the average annual rate of regular compensation received during the 5 consecutive years that produce the highest average, or, if greater, during the last 5 years (whether or not consecutive) preceding retirement.

- The Benefit Rate varies with the member's retirement age. For persons who became members prior to April 2, 2012 the highest rate of 2.5% applies to Group 1 employees who retire at or after age 65. A .1% reduction is applied for each year of age under 65.

- For persons who became members on or after April 2, 2012 and retire with less than 30 years of creditable service, the highest rate of 2.5% applies to Group 1 employees who retire at or after age 67. A .15% reduction is applied for each year of age under 67.

- For persons who became members on or after April 2, 2012 and retire with more than 30 years of creditable service, the highest rate of 2.5% applies to Group 1 employees who retire at or after age 67. A .125% reduction is applied for each year of age under 67.

### DEFERRED VESTED BENEFIT

A participant who has attained the requisite years of creditable service can elect to defer his or her retirement until a later date. Certain public safety employees cannot defer beyond age 65. All participants must begin to receive a retirement allowance or withdraw their accumulated deductions no later than April 15 of the calendar year following the year they reach age 72.

### WITHDRAWAL OF CONTRIBUTIONS

Member contributions may be withdrawn upon termination of employment. The interest rate for employees who first become members on or after January 1, 1984 who voluntarily withdraw their contributions with less than 10 years of service will be 3%. Interest payable on all other withdrawals will be set at regular interest.

### DISABILITY RETIREMENT

The Massachusetts Retirement Plan provides 2 types of disability retirement benefits:

### ORDINARY DISABILITY

**Eligibility:** Non-veterans who become totally and permanently disabled by reason of a non-job related condition with at least 10 years of creditable service (or 15 years creditable service in systems in which the local option contained in G.L. c. 32, s. 6(1) has not been adopted).

Veterans with ten years of creditable service who become totally and permanently disabled by reason of a non-job related condition prior to reaching "maximum age". "Maximum age" applies only to those employees classified in Group 4 who are subject to mandatory retirement.

# NOTES TO FINANCIAL STATEMENTS (Continued)

**Retirement Allowance:** For persons who became members prior to April 2, 2012, the benefit is equal to the accrued superannuation retirement benefit as if the member was age 55. If the member is a veteran, the benefit is 50% of the member's final rate of salary during the preceding 12 months, plus an annuity based upon accumulated member contributions plus credited interest. If the member is over age 55, he or she will receive not less than the superannuation allowance to which he or she is entitled.

For persons in Group 1 who became members on or after April 2, 2012, the benefit is equal to the accrued superannuation retirement benefit as if the member was age 60. If the member is a veteran, the benefit is 50% of the member's final rate of salary during the preceding 12 months, plus an annuity based upon accumulated member contributions plus credited interest. If the member is over age 60, he or she will receive not less than the superannuation allowance to which he or she would have been entitled had they retired for superannuation.

## ACCIDENTAL DISABILITY

**Eligibility:** Applies to members who become permanently and totally unable to perform the essential duties of the position as a result of a personal injury sustained or hazard undergone while in the performance of duties. There are no minimum age or service requirements.

**Retirement Allowance:** 72% of salary plus an annuity based on accumulated member contributions, with interest. This amount is not to exceed 100% of pay. For those who became members in service after January 1, 1988 or who have not been members in service continually since that date, the amount is limited to 75% of pay. There is an additional pension of $871.56 per year, per child, who is under 18 at the time of the member's retirement, with no age limitation if the child is mentally or physically incapacitated from earning. The additional pension may continue up to age 22 for any child who is a full-time student at an accredited educational institution. Veterans, as defined in G.L. c. 32, s. 1, receive an additional benefit of $15 per year for each year of creditable service, up to a maximum of $300.

## ACCIDENTAL DEATH

**Eligibility:** Applies to members who die as a result of a work-related injury or if the member was retired for accidental disability and the death was the natural and proximate result of the injury or hazard undergone on account of which such member was retired.

**Allowance:** An immediate payment to a named beneficiary equal to the accumulated deductions at the time of death, plus a pension equal to 72% of current salary and payable to the surviving spouse, dependent children or the dependent parent, plus a supplement of $871.56 per year, per child, payable to the spouse or legal guardian until all dependent children reach age 18 or 22 if a full time student, unless mentally or physically incapacitated.

## DEATH AFTER ACCIDENTAL DISABILITY RETIREMENT

Effective November 7, 1996, Accidental Disability retirees were allowed to select Option C at retirement and provide a benefit for an eligible survivor. For Accidental Disability retirees prior to November 7, 1996, who could not select Option C, if the member's death is from a cause unrelated to the condition for which the member received accidental disability benefits, a surviving spouse will receive an annual allowance of $6,000. For Systems that accept the provisions of Section 28 of Chapter 131 of the Acts of 2010, the amount of this benefit is $9,000. For Systems that accept the provisions of Section 63 of Chapter 139 of the Acts of 2012, the amount of this benefit is $12,000.

## DEATH IN ACTIVE SERVICE (Option D)

**Allowance:** An immediate allowance equal to that which would have been payable had the member retired and selected Option C on the day before his or her death. For a member who became a member prior to April 2, 2012 whose death occurred prior to the member's superannuation retirement age, the age 55 benefit rate is used. For a member classified in Group 1 who became a member on or after April 2, 2012 whose death occurred prior to the member's superannuation retirement age, the age 60 benefit rate is used. If the member died after age 60, the actual age is used. The minimum annual allowance payable to the surviving spouse of a member in service who dies with at least two years of creditable service is $6,000, provided that the member and the spouse were married for at least one year and living together on the member's date of death.

The surviving spouse of such a member in service receives an additional allowance equal to the sum of $1,440 per year for the first child and $1,080 per year for each additional child until all dependent children reach age 18 or 22 if a full time student, unless mentally or physically incapacitated.

## COST OF LIVING

A cost of living adjustment is determined based on the increase in the Consumer Price Index used for indexing Social Security benefits, but cannot exceed 3.0% on the first $13,000 of a retiree's benefit.

## METHODS OF PAYMENT

A member may elect to receive his or her retirement allowance in one of 3 forms of payment.

**Option A:** Total annual allowance, payable in monthly installments, commencing at retirement and terminating at the member's death.

**Option B:** A reduced annual allowance, payable in monthly installments, commencing at retirement and terminating at the death of the member, provided, however, that if the total amount of the annuity portion received by the member is less than the amount of his or her accumulated deductions, including interest, the difference or balance of his accumulated deductions will be paid in a lump sum to the retiree's beneficiary or beneficiaries of choice.

**Option C:** A reduced annual allowance, payable in monthly installments, commencing at retirement. At the death of the retired employee, 2/3 of the allowance is payable to the member's designated beneficiary (who may be the spouse, or former spouse who has not remarried, child, parent, sister, or brother of the employee) for the life of the beneficiary. For members who retired on or after January 12, 1988, if the beneficiary pre-deceases the retiree, the benefit payable increases (or "pops up" to Option A) based on the factor used to determine the Option C benefit at retirement. For members who retired prior to January 12, 1988, if the System has accepted Section 288 of Chapter 194 of the Acts of 1998 and the beneficiary pre-deceases the retiree, the benefit payable "pops up" to Option A in the same fashion. The Option C became available to accidental disability retirees on November 7, 1996.

## ALLOCATION OF PENSION COSTS

If a member's total creditable service was partly earned by employment in more than one retirement system, the cost of the "pension portion" is allocated between the different systems pro rata based on the member's service within each retirement system. In certain circumstances, if a member received regular compensation concurrently from two or more systems on or after January 1, 2010, and was not vested in both systems as of January 1, 2010, such a pro-ration may not be undertaken. This is because such a person may receive a separate retirement allowance from each system.

## NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES

The accounting records of the System are maintained on a calendar year basis in accordance with the standards and procedures established by the Public Employee Retirement Administration Commission.

Cash accounts are considered to be funds on deposit with banks and are available upon demand.

Short Term Investments are highly liquid investments that will mature within twelve months from the date of acquisition.

Investments are reported at their fair value. Securities traded on recognized exchanges are valued at the most recent sales price at year end. If no sale was reported, the mean of the bid and asked price is used when available, or the most recent bid price. Mutual, commingled and pooled funds are valued based on the net asset or unit value at year end. Real estate and alternative investments are valued based on estimates provided by the managers of those respective investments. Purchases and sales of securities are reflected on the date the trade is initiated. Realized gain or loss is largely based on the difference between the cost or the value at the prior year end and the funds realized upon liquidation. Dividend income is generally recorded when received. Interest income is recorded as earned on an accrual basis. Income from alternative investments is recorded as reported by the managing partner. Appreciation or depreciation in the value of investments consists of the unrealized gains and losses reported as the difference between the previous period and the current value.

The system makes estimates and assumptions that affect the reported values of assets and liabilities and the reported amounts added and deducted during the reporting periods. The fair value of real estate and alternative investment holdings are generally estimated in the absence of reliable exchange values. The actual funds realized upon liquidation may differ from these estimates.

The provisions of Massachusetts General Laws Chapter 32, § 23(2) generally govern the investment practices of the system. The Board relies upon the investment strategy of the PRIM Board to maintain their progress toward full funding of the system. That strategy seeks to balance the exposure to common deposit and investment risks related to custody, credit concentrations, interest rate and foreign currency fluctuations.

Operating expenses include the ordinary and necessary cost of investment and professional services and the other miscellaneous administrative expenses of the system.

The Annuity Savings Fund is the fund in which members' contributions are deposited. Voluntary contributions, re-deposits, and transfers to and from other systems, are also accounted for in this fund. Members' contributions to the fund earn interest at a rate determined by PERAC. Interest for some members who withdraw with less than ten years of service is transferred to the Pension Reserve Fund. Upon retirement, members' contributions and interest are transferred to the Annuity Reserve Fund. Dormant account balances must be transferred to the Pension Reserve Fund after a period of ten years of inactivity.

The Annuity Reserve Fund is the fund to which a member's account is transferred upon retirement from the Annuity Savings Fund and Special Military Service Credit Fund. The annuity portion of the retirement allowance is paid from this fund. Interest is credited monthly to this fund at the rate of 3% annually on the previous month's balance.

The Special Military Service Credit Fund contains contributions and interest for members while on a military leave for service in the Armed Forces who will receive creditable service for the period of that leave.

The Expense Fund contains amounts transferred from investment income for the purposes of administering the retirement system.

The Pension Fund contains the amounts appropriated by the governmental units as established by PERAC to pay the pension portion of each retirement allowance.

The Pension Reserve Fund contains amounts appropriated by the governmental units for the purposes of funding future retirement benefits. Any profit or loss realized on the sale or maturity of any investment or on the unrealized gain of a market valued investment as of the valuation date is credited to the Pension Reserve Fund. Additionally, any investment income in excess of the amount required to credit interest to the Annuity Savings Fund, Annuity Reserve Fund, and Special Military Service Credit Fund is credited to this Reserve account.

The Investment Income Account is credited with all income derived from interest and dividends of invested funds. At year-end the interest credited to the Annuity Savings Fund, Annuity Reserve Fund, Expense Fund, and Special Military Service Credit Fund is distributed from this account and the remaining balance is transferred to the Pension Reserve Fund.

## NOTE 3 - ADMINISTRATION OF THE SYSTEM

The System is administered by a seven-person Board of Retirement consisting of the Commissioner Of Education or his designee who shall be a member ex-officio, a second member appointed by the Governor who shall be a retired teacher, a third and fourth member who shall be elected by the members in or retired from the service of such system, the State Treasurer and the State Auditor or the designee of each, and a seventh member appointed by the other six board members.

| | | |
|---|---|---|
| Ex-officio Member: | Dr. Ventura Rodriguez, Chairman | |
| Governor Appointee: | Anne Wass | Serves until a successor is appointed |
| Elected Member: | Dennis J. Naughton | Term Expires: 12/31/23 |
| Elected Member: | Jacqueline A. Gorrie | Term Expires: 12/31/23 |
| Treasurer Designee | Nicola Favorito | Serves until a successor is named |
| Auditor Designee | Michael P. Ruane | Serves until a successor is named |
| Appointed Member: | Richard L. Liston | Term Expires: 01/31/24 |

The Board members are required to meet at least once a month. The Board must keep a record of all of its proceedings. The Board must annually submit to the appropriate authority an estimate of the expenses of administration and cost of operation of the system. The board must annually file a financial statement of condition for the system with the Executive Director of PERAC.

The investment of the system's funds is the responsibility of the PRIM Board. All retirement allowances must be approved by the Retirement Board. The Board has a waiver for superannuation calculations. The annual budget for expenses estimated to be incurred by the System must be approved by a majority vote of the Board. Payments shall be made only upon vouchers signed by a designee of the Board.

Retirement board members and employees are bonded by an authorized agent representing a company licensed to do business in Massachusetts. Fidelity insurance is the only required policy coverage under Ch. 32 §21 and §23 as well as 840 CMR 17.01. The policy is designed to cover specific intentional acts such as theft, fraud or embezzlement and also specify who commits such acts, most commonly employees of the system. This coverage reimburses the system for the losses it suffers as a result of its employees' actions. It does not insure the employees for their illegal acts. Statutorily required coverage is provided by the current fidelity insurance policy to a limit of $500,000 subject to deductibles and sublimits issued through Hartford Fire Insurance Company and Hartford Casualty Insurance Company. The system also has Fiduciary coverage to a limit of $1,000,000 issued through National Union Fire Insurance.

## NOTE 4 - ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by the Public Employee Retirement Administration Commission as of January 1, 2019. Dollar amounts are in thousands.

| | |
|---|---|
| The actuarial liability for active members was | $22,387,633 |
| The estimated actuarial liability for inactive members was | 700,000 |
| The actuarial liability for retired members was | 30,776,508 |
| The total actuarial liability was | $53,864,141 |
| System assets as of that date were (actuarial value) | 27,854,444 |
| The unfunded actuarial liability was | $26,009,697 |
| The ratio of system's assets to total actuarial liability was | 51.7% |
| As of that date the total covered employee payroll was | $7,074,960 |

| | |
|---|---|
| The normal cost for employees on that date was | 10.2% of payroll |
| The normal cost for the employer (including expenses and transfers) was | 4.2% of payroll |

The principal actuarial assumptions used in the valuation are as follows:

| | |
|---|---|
| Investment Return: | 7.25% per annum |
| Rate of Salary Increase: | Varies by service |

SCHEDULE OF FUNDING PROGRESS AS OF JANUARY 1, 2019
(Dollars in Thousands)

| Actuarial Valuation Date | Actuarial Value of Assets ( a ) | Actuarial Accrued Liability ( b ) | Unfunded AAL (UAAL) ( b-a ) | Funded Ratio ( a/b ) | Covered Payroll ( c ) | UAAL as a % of Cov. Payroll ( (b-a)/c ) |
|---|---|---|---|---|---|---|
| 1/1/2019 | $27,854,444 | $53,864,141 | $26,009,697 | 51.7% | $7,074,960 | 367.6% |
| 1/1/2018 | $27,057,700 | $51,653,285 | $24,595,585 | 52.4% | $6,829,012 | 360.2% |
| 1/1/2017 | $25,638,136 | $49,193,503 | $23,555,367 | 52.1% | $6,583,871 | 357.8% |
| 1/1/2016 | $24,593,787 | $46,562,807 | $21,969,020 | 52.8% | $6,388,732 | 343.9% |
| 1/1/2015 | $23,946,759 | $44,115,769 | $20,169,010 | 54.3% | $6,204,274 | 325.1% |

# NOTES TO FINANCIAL STATEMENTS (Continued)

## NOTE 5 - MEMBERSHIP EXHIBIT

| | 2008 | 2009 | 2010 | 2011 | 2012 | FY2014 | FY2015 | FY2016 | FY2017 |
|---|---|---|---|---|---|---|---|---|---|
| **Retirement in Past Years** | | | | | | | | | |
| Superannuation | 3,085 | 2,756 | 2,791 | 2,788 | 2,655 | 2,770 | 2,955 | 2,653 | 2,570 |
| Ordinary Disability | 12 | 16 | 9 | 12 | 13 | 14 | 16 | 16 | 14 |
| Accidental Disability | 3 | 5 | 5 | 1 | 3 | 13 | 10 | 10 | 4 |
| **Total Retirements** | 3,100 | 2,777 | 2,805 | 2,801 | 2,671 | 2,797 | 2,981 | 2,679 | 2,588 |
| Total Retirees, Beneficiaries and Survivors | 52,615 | 54,465 | 56,147 | 57,949 | 59,628 | 61,097 | 62,873 | 64,386 | 65,547 |
| Total Active Members | 86,421 | 82,779 | 87,037 | 85,854 | 88,634 | 85,181 | 88,814 | 91,500 | 90,897 |
| **Pension Payments** | | | | | | | | | |
| Superannuation | $1,364,371,566 | $1,464,456,507 | $1,556,989,363 | $1,647,559,978 | $1,731,941,224 | $1,872,862,280 | $1,927,622,454 | $1,993,194,286 | $2,054,788,066 |
| Other | 238,981,684 | 254,922,920 | 258,078,215 | 367,477,779 | 264,775,783 | 296,111,813 | 322,205,382 | 349,890,387 | 378,243,226 |
| **Total Payments for Year** | $1,603,353,250 | $1,719,379,427 | $1,815,067,578 | $2,015,037,757 | $1,996,717,007 | $2,168,974,093 | $2,249,827,836 | $2,343,084,673 | $2,433,031,292 |

Numbers are calendar year through 2012; changed to fiscal years in FY14

## NOTE 6 – LEASED PREMISES

The Massachusetts Teachers' Retirement Board leases approximately 19,000 square feet of space for its offices located at Suite 210, 500 Rutherford Avenue, Boston, MA. They signed an initial 10-year lease term ($41.74 per sq ft) which will expire August 26, 2026. The landlord is Hood Park LLC.

The following schedule displays the minimum lease obligations on non-cancelable operating leases as of June 30, 2017:

| For the fiscal year ending: | Annual Rent |
|---|---|
| 2018 | $ 798,515.83 |
| 2019 | 844,688.19 |
| 2020 | 858,419.65 |
| 2021 | 905,202.92 |
| 2022 | 919,253.11 |
| 2023 | 966,093.43 |
| 2024 | 980,722.84 |
| 2025 | 1,028,259.53 |
| 2026 | 1,043,192.27 |
| 2027 | 156,797.42 |
| Total future minimum lease payments required | $ 8,501,145.20 |

The Board leases approximately 2,700 square feet of space for its offices located at 1414 Main Street, Springfield, MA. The most recent extension will expire November 30, 2020. The landlord is Picknelly Family Limited Partnership.

The following schedule displays the minimum lease obligations on non-cancelable operating leases as of June 30, 2017:

| For the fiscal year ending: | Annual Rent |
|---|---|
| 2018 | $ 58,408.92 |
| 2019 | 58,408.92 |
| 2020 | 58,408.92 |
| 2021 | 24,337.05 |
| Total future minimum lease payments required | $199,563.81 |

## NOTE 7 – INFORMATION TECHNOLOGY ACQUISITION AND DEVELOPMENT COSTS

The Massachusetts Teachers' Retirement Board has made a significant investment in new technology to improve service to its members and retirees. The Board approved this technology initiative in 2008.

Capitalized costs consisted of the following components as of June 30, 2017:

| Asset Classification | Acquisition Cost | Accumulated Depreciation | Net Value | Remaining Amortization Period |
|---|---|---|---|---|
| Infrastructure | $ 936,319 | $ 702,816 | $ 233,503 | 1 year |
| Hardware | 163,171 | 123,612 | 39,559 | 1 year |
| Software | 27,582,698 | 20,469,967 | 7,112,731 | 3 years |
| Total | $28,682,188 | $21,296,395 | $7,385,793 | |

**COMMONWEALTH OF MASSACHUSETTS**
**Public Employee Retirement Administration Commission**
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