

PERAC AUDIT REPORT



Plymouth County
Contributory Retirement System



JAN. 1, 2013 - DEC. 31, 2016



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PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., *Chairman*

JOHN W. PARSONS, *Executive Director*

Auditor SUZANNE M. BUMP | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES M. MACHADO | ROBERT B. McCARTHY | JENNIFER F. SULLIVAN

July 30, 2019

The Public Employee Retirement Administration Commission has completed an examination of the Plymouth County Retirement System pursuant to G.L. c. 32, § 21. The examination covered the period from January 1, 2013 to December 31, 2016. 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. Additionally, all supplementary regulations approved by PERAC and on file at PERAC are listed in this report.

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 Elaine Pursley and Junior Yanga who conducted this examination, and express appreciation to the Board of Retirement and staff for their courtesy and cooperation.

Sincerely,



John W. Parsons
Executive Director



EXPLANATION OF FINDINGS AND RECOMMENDATIONS

I. Cash Reconciliations:

The Retirement Board employee who handled deposits and posted transactions in the General Ledger (GL) also prepared the cash reconciliations for the majority of our audit period through January 31, 2016. After this date, the responsibility was transferred to the County Treasurer's office for the purposes of segregating duties and improving internal controls over cash.

The Retirement Board used three bank accounts: 1) Accounts Payable account for vendor/staff payments, 2) General account for deposits, and 3) Retiree's payroll account. The Retirement Board employee prepared a single cash reconciliation which included all bank accounts. The cash reconciliations were not printed and kept with the bank statements. They did not include documentation of any review or approval. The outstanding checks listings did not include detail information such as check dates and payee names. Also, on the outstanding checks listings, we found duplicate checks, different dollar amounts for the same check number and arithmetic errors. There was no formal tracking of uncashed checks or voided and reissued checks.

The County Treasurer's office first prepared separate cash reconciliations for the Accounts Payable account and the General account in October 2016 and the Retirees' payroll account in December 2016. There were no cash reconciliations prepared between February 2016 and those dates. The cash reconciliations prepared by the County Treasurer's office were kept with the bank statements and were signed by the preparer and reviewer.

The December 31, 2016 cash reconciliation for the Retirees' payroll account had an unexplained variance between the bank and the GL of \$109,674. As of March 31, 2018, the variance had decreased to \$64,994. The County Treasurer's office is researching this and will take corrective action.

Recommendation: A lack of segregation of duties occurred when one Board employee handled deposits, posted transactions and prepared the cash reconciliations. Although this was improved when the cash reconciliations were transferred to the County Treasurer's office, the Board should establish written policies and procedures to ensure that proper internal controls remain present over cash. The Board should also have standard procedures to better track uncashed checks and to track voided and reissued checks. The Board should communicate this information to the County Treasurer's office in order for them to complete the monthly cash reconciliations on a timely basis and work with them to identify and resolve the unexplained variance with the GL.

Board Response:

The deficiency in the system's Cash Reconciliations was identified internally by the Board and staff and addressed as noted in 2016. Duties have since been properly segregated and the system has streamlined the entire cash operations. The system will continue to improve the overall efficiencies of the reconciliations, always attempting to modernize the operations whenever possible.

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

2. 91A Compliance and Overearnings:

There were 15 disability retirees that were not in compliance with c. 32, Section 91A from 2007 to 2013. This provision of the law requires the retiree to submit various tax return documents in addition to the Annual Statement of Earned Income to PERAC. Non-compliance results in termination of the retirement allowances. None of the 15 retirees had their allowance stopped.

In addition, there were eight disability retirees with 91A overearnings; however, we were only able to find evidence that three of them had made repayments to the Board.

Recommendation: The Retirement Board has been adhering to Section 91A requirements since 2016. However, the Retirement Board should address the retirees not in compliance prior to that date and review all retirees with overearnings and request repayments. All actions taken should be forwarded to the PERAC Fraud Prevention Unit.

Board Response:

91A compliance and over earnings is another area that was a problem but was addressed and corrected in 2016. The Board has officially determined that the system will address prior year issues and attempt to remedy non-compliant disability retirees as circumstances allow.

3. Executive Session Minutes:

The Retirement Board did not have any executive session minutes for the 19 executive session meetings held from October 2013 through December 2015. The executive session minutes from January 2016 through June 2018 were signed and approved by the Board members at the August 29, 2018 board meeting.

Recommendation: In accordance with the Open Meeting Law, public bodies are required to create and maintain accurate minutes of all meetings, including executive sessions. The minutes must be created and approved timely.

Board Response:

All Executive Sessions minutes have been recorded since 2016 and are now being approved and signed on a regular and timely basis.

4. Board Directed Investments and Due Diligence Meetings:

On May 13, 2016, the Retirement Board voted to open a subaccount at State Street Bank for the purpose of trading within the Commonwealth of Mass Division of Banks legal list of securities. A balance of \$100,000 was transferred into a new subaccount and stocks were purchased from four different companies in June 2016. These companies were Coca Cola, Johnson & Johnson, Pfizer, and Proctor & Gamble. PERAC's Compliance Unit notified the Retirement Board in July 2016 that this was prohibited by law. The securities were sold in August 2016.

Annual Due Diligence meetings with investment managers were not conducted at Board meetings (but outside of meetings) with the Director of Investments and/or the Executive Director or a

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

Board member. We also found that travel expense reimbursements from these meetings did not include details such as names of participants or meeting agendas, and an accounting of costs and expenses associated with these meetings.

Recommendation: The Retirement Board should discuss new investment arrangements with PERAC's Compliance Unit to ensure they are in compliance. Annual Due Diligence meetings should be held with the full Retirement Board. All related travel expense reimbursements should include sufficient documentation to support all expenses paid.

Board Response:

On May 13, 2016, the Board voted to open a subaccount at State Street Bank for trading within the Commonwealth of Massachusetts Division of Banks legal list pursuant to Massachusetts General Law Chapter 167, Sections 15 and 15A, as allowed by the prudent investor rule outlined in Massachusetts General Law Chapter 203C. In July of 2016, PERAC notified the Board that the subaccount was allegedly prohibited by law, regardless of the fact that there is no prohibition against such an investment anywhere in Massachusetts General Law Chapter 32. As a result of the PERAC directive, despite potential lost dividends and general misgivings about closing out a positive position, the securities were sold for \$103,111.20, a profit of more than 3% in approximately three months. The Board believes that PERAC overstepped its authority by restricting the Board from investments allowed by Massachusetts General Law.

The Board takes its Fiduciary responsibility with regards to Due Diligence very seriously. In 2012, the Board decided to employ a full time Director of Investments who reports to the Board at least monthly or as regularly as circumstances dictate. The Director of Investments has significant experience in the field. The Director of Investments conducts portfolio holding due diligence by various methods, often including site visits to individual managers. PERAC auditors recommended a preferred alternative process of conducting due diligence as performed by other Boards that this Board will soon augment to their existing regular due diligence.

PERAC Response:

The conclusion of PERAC was not premised upon the assets in which the Board intended to invest but rather upon the following provisions of Chapter 32, Section 23 (2)(b):

“(b) The board of each system shall invest and reinvest the funds of the system in the PRIT Fund under subdivision (8) of section 22, in the PRIT Fund by purchasing shares of the fund, as provided for in the trust agreement adopted by the PRIM board under subdivision (2A), or under the standards in subdivision (3), provided that: (i) no investment of funds shall be made in stocks, securities or other obligations of a company which derives more than 15 per cent of its revenues from the sale of tobacco products; **(ii) in investing funds the board shall employ an investment manager or investment managers who shall invest the funds of the system;** and (iii) no funds shall be invested directly in mortgages or collateral loans.” (Emphasis Added)

The trading in the subaccount was to take place through internal management thus contradicting the statute.

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

5. Pooled Fund Investments with No Activity:

As of December 31, 2016, there were two pooled funds that had no activity for a significant amount of time. We noted that the Board voted to write off the Senior Tour Players investment back in December 2014 but this was not done and there was still a balance of \$179,265 as of December 31, 2016. The Board voted to write off the Rimco Productions and write down the Rimco Royalty Partners investment from \$348,240 to \$1.00 at the July 25, 2018 meeting. The entries to write off and write down these investments were made in 2018.

Recommendation: The Retirement Board should closely monitor investments and determine if investments with no activity need to be written off the GL in a timelier manner.

Board Response:

The Senior Tours investment has since been written off as previously approved at an earlier Board meeting. To state that the Rimco Productions investment was written off and down is misleading. The entire Rimco investment has been a tremendous addition to the portfolio of the system which continues to pay generous royalties to this day. The decision to value the investment at \$1.00 was simply made as a placeholder upon learning the exorbitant cost to determine an estimated market value of an investment which the system has no intention of selling, because it continues to provide a valuable revenue stream to the fund.

PERAC Response:

The finding notes that at calendar year end 2016 Senior Tour Players was recorded as having a balance of \$179,265 although the Board had voted to value it at \$0 in December 2014. As referenced in the Plymouth Response the write off of Senior Tour Players took place on July 31, 2018.

The Board actions regarding Rimco Productions and Rimco Royalty Partners took place at its July 25, 2018 meeting long after the end date for the Audit period. The Plymouth Response fails to note that its investments encompassed two Rimco entities (Rimco Productions and Rimco Royalty Partners) and references "The entire Rimco investment...". Rimco Productions was acquired by Whittier Energy Corporation on June 15, 2005. Filings by Plymouth make no mention of Whittier Energy or that transaction, however, filings in 2006, 2013, and 2014 reference Rimco Productions. In addition, Rimco Productions is listed on Annual Statements submitted by Plymouth during this period. There is no dispute that the Rimco Royalty Partners value was reduced, apparently at Plymouth's request, from \$348,420 to \$1.00. PERAC's recommendation remains that the Retirement Board should more closely monitor investments and address investments with no activity in a timelier manner.

6. New Retirement Allowance Calculations:

During our review of retirement allowance calculations, we requested payroll support from the employing units for our testing, but did not get payroll information from the member unit for 11 out of 43 new retirees tested.

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

We found the following errors in the 32 members that were tested:

- One retiree's regular compensation was determined using earnings reported through their software package, which is based on an 8% member deduction rate divided by the amount of deductions. Our review of payroll revealed that this member was actually contributing at 9%, instead of 8%. Since the calculation of earnings in the software used the amount of deductions withheld, which were increased by the extra 1%, the regular compensation was also increased. This retiree has been overpaid by approximately \$1,000 per year since June 30, 2017.
- One firefighter's accidental disability retirement allowance used only base salary and not additional holiday pay. This retiree is underpaid by approximately \$3,800 per year since February 3, 2016. In addition, it appears that this retirement allowance calculation was never submitted to PERAC for approval.

Recommendation: The Retirement Board should review payroll support to determine regular compensation to use in retirement allowance calculations. The Board should review all errors noted during the audit and make all necessary corrections. All disability allowances calculations must be submitted to PERAC for approval.

Board Response:

The Board accepts this finding and will continue to work with the software vendor and member units to improve all aspects of the calculations process. The referenced firefighter's disability allowance was an error of the system that has since been corrected.

7. Appropriations:

We noted missing appropriation payments from the Halifax Housing Authority for fiscal years 2014, 2015 and 2016. Only about half of the total appropriations due were paid for those three years, resulting in a total of \$43,654 not paid.

Recommendation: The Unit should make appropriation payments timely and in full. If a payment is late or missing the Board should send the Unit an updated bill with interest at the assumed rate of investment return.

Board Response:

The appropriations due from the Halifax Housing Authority were the result of the system incorrectly attributing the employment of two employees solely to Housing Authority instead of a splitting their time between the Town and the Housing Authority. This resulted in an actuarial over charge to the Housing Authority and an under charge to the Town. This issue has since been addressed and corrected.

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 DECEMBER 31,			
	2016	2015	2014	2013
Net Assets Available For Benefits:				
Cash	\$3,126,639	\$58,156,747	\$46,169,755	\$29,199,185
Short Term Investments	6,632,517	6,408,053	7,789,490	7,190,345
Fixed Income Securities	134,004,160	116,813,272	125,064,819	96,359,551
Equities	195,303,843	209,631,464	208,492,138	208,232,088
Pooled Domestic Equity Funds	119,887,492	88,170,157	87,593,041	83,272,308
Pooled International Equity Funds	81,812,890	55,111,970	55,373,947	58,109,363
Pooled Global Equity Funds	143,448,771	94,739,437	100,618,713	105,690,858
Pooled International Fixed Income Funds	32,920,483	30,106,302	21,994,656	47,761,043
Pooled Alternative Investment Funds	25,002,942	30,798,741	36,405,975	44,604,008
Pooled Real Estate Funds	111,742,432	113,371,956	118,466,211	103,898,812
Hedge Funds	26,634,364	26,610,869	26,080,302	24,805,880
Interest Due and Accrued	1,157,441	1,204,693	1,153,501	955,275
Prepaid Expenses	31,675	31,675	31,675	31,675
Accounts Receivable	8,251,710	4,732,751	4,600,011	5,627,362
Accounts Payable	<u>(3,900,129)</u>	<u>(3,250,598)</u>	<u>(5,252,264)</u>	<u>(4,723,904)</u>
Total	<u>\$886,057,231</u>	<u>\$832,637,491</u>	<u>\$834,581,969</u>	<u>\$811,013,848</u>
Fund Balances:				
Annuity Savings Fund	\$255,389,045	\$247,920,435	\$240,172,586	\$233,296,888
Annuity Reserve Fund	87,167,033	85,563,525	82,488,180	78,998,914
Pension Fund	1,865,913	0	0	0
Military Service Fund	13,532	13,518	13,505	13,491
Expense Fund	0	0	0	0
Pension Reserve Fund	<u>541,621,709</u>	<u>499,140,012</u>	<u>511,907,698</u>	<u>498,704,556</u>
Total	<u>\$886,057,231</u>	<u>\$832,637,491</u>	<u>\$834,581,969</u>	<u>\$811,013,848</u>

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 (2013)	\$225,555,247	\$76,746,575	\$0	\$13,478	\$0	\$400,502,392	\$702,817,691
Receipts	24,016,424	2,294,755	57,238,313	13	7,734,124	110,718,042	202,001,672
Interfund Transfers	(12,358,255)	12,370,738	12,503,395	0	0	(12,515,878)	0
Disbursements	(3,916,528)	(12,413,155)	(69,741,709)	0	(7,734,124)	0	(93,805,515)
Ending Balance (2013)	233,296,888	78,998,914	0	13,491	0	498,704,556	811,013,848
Receipts	25,239,225	2,360,787	59,044,561	13	7,501,245	28,862,985	123,008,815
Interfund Transfers	(14,504,731)	14,526,973	15,637,600	0	0	(15,659,842)	0
Disbursements	(3,858,796)	(13,398,493)	(74,682,161)	0	(7,501,245)	0	(99,440,695)
Ending Balance (2014)	240,172,586	82,488,180	0	13,505	0	511,907,698	834,581,969
Receipts	26,624,016	2,458,062	69,836,398	14	7,746,434	(5,959,414)	100,705,510
Interfund Transfers	(14,827,621)	14,850,378	6,785,515	0	0	(6,808,272)	0
Disbursements	(4,048,546)	(14,233,096)	(76,621,913)	0	(7,746,434)	0	(102,649,988)
Ending Balance (2015)	247,920,435	85,563,525	0	13,518	0	499,140,012	832,637,491
Receipts	27,545,374	2,518,673	71,956,054	14	8,109,048	52,185,655	162,314,817
Interfund Transfers	(15,932,056)	14,497,824	11,138,190	0	0	(9,703,958)	0
Disbursements	(4,144,708)	(15,412,988)	(81,228,332)	0	(8,109,048)	0	(108,895,077)
Ending Balance (2016)	\$255,389,045	\$87,167,033	\$1,865,913	\$13,532	\$0	\$541,621,709	\$886,057,231

STATEMENT OF RECEIPTS

	FOR THE PERIOD ENDING DECEMBER 31,			
	2016	2015	2014	2013
Annuity Savings Fund:				
Members Deductions	\$24,987,922	\$23,858,498	\$23,016,539	\$22,033,489
Transfers from Other Systems	1,625,574	2,037,717	1,563,022	1,242,764
Member Make Up Payments and Re-deposits	514,054	363,309	309,902	431,423
Investment Income Credited to Member Accounts	417,824	364,492	349,761	308,748
Sub Total	<u>27,545,374</u>	<u>26,624,016</u>	<u>25,239,225</u>	<u>24,016,424</u>
Annuity Reserve Fund:				
Investment Income Credited to the Annuity Reserve Fund	2,518,673	2,458,062	2,360,787	2,294,755
Sub Total	<u>2,518,673</u>	<u>2,458,062</u>	<u>2,360,787</u>	<u>2,294,755</u>
Pension Fund:				
3 (8) (c) Reimbursements from Other Systems Received from Commonwealth for COLA and Survivor Benefits	2,832,102	1,951,530	2,215,414	1,582,002
Pension Fund Appropriation	631,164	626,706	548,203	1,377,371
Settlement of Workers' Compensation Claims	68,441,504	67,162,327	56,266,944	54,253,665
Recovery of 91A Overearnings	49,784	95,425	14,000	22,500
	<u>1,500</u>	<u>410</u>	<u>0</u>	<u>2,774</u>
Sub Total	<u>71,956,054</u>	<u>69,836,398</u>	<u>59,044,561</u>	<u>57,238,313</u>
Military Service Fund:				
Investment Income Credited to the Military Service Fund	14	14	13	13
Sub Total	<u>14</u>	<u>14</u>	<u>13</u>	<u>13</u>
Expense Fund:				
Investment Income Credited to the Expense Fund	8,109,048	7,746,434	7,501,245	7,734,124
Sub Total	<u>8,109,048</u>	<u>7,746,434</u>	<u>7,501,245</u>	<u>7,734,124</u>
Pension Reserve Fund:				
Federal Grant Reimbursement	65,368	64,898	78,235	57,284
Pension Reserve Appropriation	(25,646)	2,500	(13,274)	16,366
Interest Not Refunded	111,626	35,050	48,200	39,090
Miscellaneous Income	17,619	25,022	19,578	18,901
Excess Investment Income	<u>52,016,689</u>	<u>(6,086,885)</u>	<u>28,730,245</u>	<u>110,586,401</u>
Sub Total	<u>52,185,655</u>	<u>(5,959,414)</u>	<u>28,862,985</u>	<u>110,718,042</u>
Total Receipts, Net	<u>\$162,314,817</u>	<u>\$100,705,510</u>	<u>\$123,008,815</u>	<u>\$202,001,672</u>

STATEMENT OF DISBURSEMENTS

FOR THE PERIOD ENDING DECEMBER 31,				
	2016	2015	2014	2013
Annuity Savings Fund:				
Refunds to Members	\$1,879,678	\$2,260,050	\$1,953,524	\$1,605,269
Transfers to Other Systems	<u>2,265,031</u>	<u>1,788,496</u>	<u>1,905,272</u>	<u>2,311,259</u>
Sub Total	<u>4,144,708</u>	<u>4,048,546</u>	<u>3,858,796</u>	<u>3,916,528</u>
Annuity Reserve Fund:				
Annuities Paid	15,207,231	14,233,096	13,293,385	12,202,101
Option B Refunds	<u>205,758</u>	<u>0</u>	<u>105,108</u>	<u>211,053</u>
Sub Total	<u>15,412,988</u>	<u>14,233,096</u>	<u>13,398,493</u>	<u>12,413,155</u>
Pension Fund:				
Pensions Paid:				
Regular Pension Payments	61,083,560	57,819,859	54,944,291	51,723,044
Survivorship Payments	3,449,210	3,323,603	3,092,804	2,798,439
Ordinary Disability Payments	655,503	707,340	648,899	628,912
Accidental Disability Payments	10,098,737	9,878,251	9,377,828	9,333,751
Accidental Death Payments	1,519,354	1,388,285	1,434,264	1,228,706
Section 101 Benefits	730,415	692,878	641,327	610,422
3 (8) (c) Reimbursements to Other Systems	<u>3,691,553</u>	<u>2,811,696</u>	<u>4,542,746</u>	<u>3,418,435</u>
Sub Total	<u>81,228,332</u>	<u>76,621,913</u>	<u>74,682,161</u>	<u>69,741,709</u>
Expense Fund:				
Board Member Stipend	20,000	17,083	15,000	16,250
Salaries	837,722	778,701	800,415	832,991
Legal Expenses	69,135	22,396	48,754	85,443
Medical Expenses	0	0	306	146
Travel Expenses	25,736	21,193	9,752	25,613
Administrative Expenses	383,573	359,734	335,616	249,855
Professional Services	58,575	58,441	53,469	41,783
Actuarial Services	8,000	16,811	625	11,000
Accounting Services	30,184	37,500	21,500	25,092
Education and Training	7,745	2,120	2,930	2,800
Furniture and Equipment	0	996	0	0
Management Fees	5,891,526	5,756,848	5,572,539	5,795,706
Custodial Fees	252,787	260,713	237,664	271,101
Consultant Fees	261,425	175,000	168,750	150,000
Rent Expenses	137,682	136,858	134,329	116,655
Service Contracts	54,753	33,920	32,737	46,039
Fiduciary Insurance	<u>70,206</u>	<u>68,123</u>	<u>66,859</u>	<u>63,650</u>
Sub Total	<u>8,109,048</u>	<u>7,746,434</u>	<u>7,501,245</u>	<u>7,734,124</u>
Total Disbursements	<u>\$108,895,077</u>	<u>\$102,649,988</u>	<u>\$99,440,695</u>	<u>\$93,805,515</u>

INVESTMENT INCOME

	FOR THE PERIOD ENDING DECEMBER 31,			
	2016	2015	2014	2013
Investment Income Received From:				
Cash	\$456,901	\$0	\$184,010	\$214,790
Short Term Investments	10,961	0	0	0
Fixed Income	5,015,633	4,766,364	2,179,635	4,421,038
Equities	2,347,665	2,234,670	4,855,599	2,230,404
Pooled or Mutual Funds	<u>5,998,647</u>	<u>6,310,628</u>	<u>7,548,161</u>	<u>7,528,675</u>
Total Investment Income	<u>13,829,808</u>	<u>13,311,663</u>	<u>14,767,404</u>	<u>14,394,907</u>
Plus:				
Realized Gains	16,041,184	23,254,524	11,835,835	29,662,774
Unrealized Gains	88,561,602	52,214,812	63,800,347	108,285,727
Interest Due and Accrued - Current Year	<u>1,157,441</u>	<u>1,204,693</u>	<u>1,153,501</u>	<u>955,275</u>
Sub Total	<u>105,760,227</u>	<u>76,674,028</u>	<u>76,789,683</u>	<u>138,903,776</u>
Less:				
Paid Accrued Interest on Fixed Income Securities	(355,346)	(294,704)	(740,999)	(224,636)
Realized Loss	(18,086,133)	(11,300,278)	(9,803,134)	(2,963,623)
Unrealized Loss	(36,881,617)	(72,755,092)	(41,115,629)	(28,275,447)
Interest Due and Accrued - Prior Year	<u>(1,204,693)</u>	<u>(1,153,501)</u>	<u>(955,275)</u>	<u>(910,935)</u>
Sub Total	<u>(56,527,789)</u>	<u>(85,503,575)</u>	<u>(52,615,036)</u>	<u>(32,374,642)</u>
Net Investment Income	<u>63,062,246</u>	<u>4,482,117</u>	<u>38,942,052</u>	<u>120,924,042</u>
Income Required:				
Annuity Savings Fund	417,824	364,492	349,761	308,748
Annuity Reserve Fund	2,518,673	2,458,062	2,360,787	2,294,755
Military Service Fund	14	14	13	13
Expense Fund	<u>8,109,048</u>	<u>7,746,434</u>	<u>7,501,245</u>	<u>7,734,124</u>
Total Income Required	<u>11,045,558</u>	<u>10,569,001</u>	<u>10,211,806</u>	<u>10,337,641</u>
Net Investment Income	<u>63,062,246</u>	<u>4,482,117</u>	<u>38,942,052</u>	<u>120,924,042</u>
Less: Total Income Required	<u>11,045,558</u>	<u>10,569,001</u>	<u>10,211,806</u>	<u>10,337,641</u>
Excess Income (Loss) To The Pension Reserve Fund	<u>\$52,016,689</u>	<u>(\$6,086,885)</u>	<u>\$28,730,245</u>	<u>\$110,586,401</u>

SCHEDULE OF ALLOCATION OF INVESTMENTS OWNED

(percentages by category)

AS OF DECEMBER 31, 2016		
	MARKET VALUE	PERCENTAGE OF TOTAL ASSETS
Cash	\$3,126,639	0.4%
Short Term Investments	6,632,517	0.8%
Fixed Income Securities	134,004,160	15.2%
Equities	195,303,843	22.2%
Pooled Domestic Equity Funds	119,887,492	13.6%
Pooled International Equity Funds	81,812,890	9.3%
Pooled Global Equity Funds	143,448,771	16.3%
Pooled International Fixed Income Funds	32,920,483	3.7%
Pooled Alternative Investment Funds	25,002,942	2.8%
Pooled Real Estate Funds	111,742,432	12.7%
Hedge Funds	<u>26,634,364</u>	<u>3.0%</u>
Grand Total	<u>\$880,516,534</u>	<u>100.0%</u>

For the year ending December 31, 2016, the rate of return for the investments of the Plymouth County Retirement System was 7.50%. For the five-year period ending December 31, 2016, the rate of return for the investments of the Plymouth County Retirement System averaged 8.47%. For the 32-year period ending December 31, 2016, since PERAC began evaluating the returns of the retirement systems, the rate of return on the investments of the Plymouth County Retirement System was 9.00%.

The composite rate of return for all retirement systems for the year ending December 31, 2016 was 8.08%. For the five-year period ending December 31, 2016, the composite rate of return for the investments of all retirement systems averaged 9.12%. For the 32-year period ending December 31, 2016, since PERAC began evaluating the returns of the retirement systems, the composite rate of return on the investments of all retirement systems averaged 9.11%.

SUPPLEMENTARY INVESTMENT REGULATIONS

The Plymouth County Retirement System submitted the following supplementary investment regulations, which were approved by the Public Employee Retirement Administration Commission on:

October 26, 2009

16.08:

In accordance with PERAC Investment Guideline 99-2, the Plymouth County Retirement Association is authorized to modify its domestic equity index mandate with RhumbLine Advisors. As part of a restructuring of its domestic equity portfolio, the Board will transfer assets from the RhumbLine Russell 200 Index Fund to the firm's Russell 1000 Growth Pooled Index Fund.

July 7, 2009

19.01(8):

The Plymouth County Retirement Association is authorized to increase its allocation to alternative investments from 5.0% to 7.5%. The Association has been investing in alternative investments for several years and may use the increased allocation to increase its exposure to perceived opportunities created by the credit and financial crisis.

June 7, 2009

19.01(4):

The Board is authorized to increase its allocation to real estate from 10% to 15% of the total market value of the portfolio at the time of investment. With the uncertain schedule of capital calls during a time of great financial market volatility, it is remotely possible that the allocation could rise as high as 20% as a result of market dislocations.

October 11, 2007

16.08:

Notwithstanding the provisions of any statute or regulation to the contrary, specifically including the provisions of 840 CMR 21.01, the Plymouth County Retirement Association is hereby granted an exemption from restrictions on investment for the purpose of investing \$20,000,000 of the Plymouth County Retirement Association's assets in the Eaton Vance Loan Opportunities Fund, Ltd., a private placement investment.

September 1, 2000

16.08:

In accordance with PERAC Investment Guideline 99-3, the Plymouth County Retirement Association may invest in Charles River Partnership XI. The Association has had a satisfactory and successful relationship with Charles River Ventures from its prior investments in Charles River Partnerships VI, VII, VIII, IX, and X, and has submitted the appropriate documentation in support of this request.

NOTES TO FINANCIAL STATEMENTS

NOTE I – SUMMARY OF PLAN PROVISIONS

The plan is a contributory defined benefit plan covering all Plymouth County Retirement System member unit employees deemed eligible by the retirement board, with the exception of school department employees who serve in a teaching capacity. The Teachers' Retirement Board administers the pensions of such school employees.

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.

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. Membership is optional for certain elected officials.

There are 4 classes of membership in the retirement system, but one of these classes, Group 3, is made up exclusively of the State Police. The other 3 classes are as follows:

Group 1:

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

Group 2:

Certain specified hazardous duty positions.

Group 4:

Police officers, firefighters, and other specified hazardous positions.

NOTES TO FINANCIAL STATEMENTS (Continued)

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
1979 to present:	an additional 2% of regular compensation in excess of \$30,000.

In addition, members of Group 1 who join the system on or after April 2, 2012 will have their withholding rate reduced to 6% after achieving 30 years of creditable service.

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

The mandatory retirement age for some Group 2 and Group 4 employees is age 65. Most Group 2 and Group 4 members may remain in service after reaching age 65. Group 4 members who are employed in certain public safety positions are required to retire at age 65. 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 if classified in Group 4, or
- attainment of age 55 with 10 years of service, if hired after 1978, and if classified in Group 1 or 2.

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 if classified in Group 1, or
- attainment of age 55 with 10 years of service if classified in Group 2, or
- attainment of age 55 if classified in Group 4.

NOTES TO FINANCIAL STATEMENTS (Continued)

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. 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, Group 2 employees who retire at or after age 60, and to Group 4 employees who retire at or after age 55. A .1% reduction is applied for each year of age under the maximum age for the member's group. For Group 2 employees who terminate from service under age 55, the benefit rate for a Group 1 employee shall be used.
- 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, Group 2 employees who retire at or after age 62, and to Group 4 employees who retire at or after age 57. A .15% reduction is applied for each year of age under the maximum age for the member's group.
- 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, Group 2 employees who retire at or after age 62, and to Group 4 employees who retire at or after age 57. A .125% reduction is applied for each year of age under the maximum age for the member's group.

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 70½.

NOTES TO FINANCIAL STATEMENTS (Continued)

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.

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.

For persons in Group 2 and Group 4 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 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 would have been entitled had they retired for superannuation.

NOTES TO FINANCIAL STATEMENTS (Continued)

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 (or \$312.00 per year in systems in which the local option contained in G.L. c. 32, s. 7(2)(a)(iii) has not been adopted), 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. For systems that have adopted Chapter 157 of the Acts of 2005, 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 (or \$312.00 per year in systems in which the local option contained in G.L. c. 32, s. 9(2)(d)(ii) has not been adopted), 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.

The surviving spouse of a member of a police or fire department or any corrections officer who, under specific and limited circumstances detailed in the statute, suffers an accident and is killed or sustains injuries while in the performance of his duties that results in his death, may receive a pension equal to the maximum salary for the position held by the member upon his death. In addition, an eligible family member may receive a one-time payment of \$150,000.00 from the State Retirement Board. This lump sum payment is also available to the family of a public prosecutor in certain, limited circumstances.

NOTES TO FINANCIAL STATEMENTS (Continued)

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

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. For a member classified in Group 2 or Group 4, whose death occurred prior to the member's minimum superannuation retirement age, the benefit shall be calculated using an age 55 age factor. 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 \$3,000 unless the retirement system has accepted the local option increasing this minimum annual allowance to \$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

If a system has accepted Chapter 17 of the Acts of 1997, and the Retirement Board votes to pay a cost of living increase (COLA) for that year, the percentage is determined based on the increase in the Consumer Price Index used for indexing Social Security benefits, but cannot exceed 3.0%. Section 51 of Chapter 127 of the Acts of 1999, if accepted, allows boards to grant COLA increases greater than that determined by CPI but not to exceed 3.0%. Only a certain portion of a retiree's total allowance is subject to a COLA. The total COLA for periods from 1981 through 1996 is paid for by the Commonwealth of Massachusetts.

Under the provisions of Chapter 32, Section 103(j) inserted by Section 19 of Chapter 188 of the Acts of 2010, systems may increase the maximum base on which the COLA is calculated in multiples of \$1,000. For many years the COLA base was calculated based upon the first \$12,000 of a retiree's allowance. Now the maximum base upon which the COLA is calculated varies from system to system. Each increase in the base must be accepted by a majority vote of the Retirement Board and approved by the legislative body.

NOTES TO FINANCIAL STATEMENTS (Continued)

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.

NOTES TO FINANCIAL STATEMENTS (Continued)

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 retains an investment consultant to closely monitor the implementation and performance of their investment strategy and advise them of the 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.

NOTES TO FINANCIAL STATEMENTS (Continued)

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.

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 3 - SUPPLEMENTARY MEMBERSHIP REGULATIONS

The Plymouth County Retirement System submitted the following supplementary membership regulations, which were approved by the Public Employee Retirement Administration Commission:

Membership:

July 1, 2016

A. Employees of all member units of the Plymouth County Retirement Association who are regularly employed in a permanent position for a minimum of 20 hours per week and who earn a minimum of \$5,000 per year must become members of the retirement association.

B. Employees of all member units of the Plymouth County Retirement Association who are provisional, seasonal, temporary or intermittent, and who are regularly employed in a position for a minimum of 20 hours per week for a period of six consecutive months, and who earn a minimum of \$5,000 per year, must become members of the retirement association at the conclusion of the six-month period. Such members shall be allowed to purchase prior non membership service.

C. Employees of all member units of the Plymouth County Retirement Association who are employed less than 20 hours per week are ineligible for initial membership.

D. Employees and appointed and elected officials of all member units of the Plymouth County Retirement Association who earn less than \$5,000 per year are ineligible for initial membership.

E. For employees who do not qualify for membership in the Plymouth County Retirement Association and later become members in another Chapter 32 retirement system and subsequently seek to "buyback" their prior non-membership service with a member unit of the Plymouth County Retirement Association, the Plymouth County Retirement Association will not accept liability for such service.

Creditable Service:

October 13, 2005

Any eligible member entitled to purchase credit for military service must notify the Plymouth County Retirement Board not later than 180 days of being notified of eligibility. The Board requires lump sum if the amount due is less than \$500.00. If over this amount the Board will allow installment payments calculated as double the normal deductions. Interest will not be charged prior to the 180 days expiring. Interest will be charged on the unpaid balance of installment payments after the expiration of the 180 day period.

June 6, 1990

The retirement association will grant one full year of creditable service for retirement purposes to those employees of public school systems employed on a full time basis for a full academic year provided that such annual employment period consists of 180 days. This regulation shall apply to those clerical personnel, school nurses, aides and other employees eligible for membership in the

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 3 - SUPPLEMENTARY MEMBERSHIP REGULATIONS (Continued)

retirement association. For the purposes of this regulation, regularly scheduled school vacations, release periods and holidays shall count toward the 180-day employment period.

Travel Regulations:

The Plymouth County Retirement System has adopted Travel Supplemental Regulations under the provisions of G.L. c. 7, § 50 and G.L. c. 32, § 21(4). Regulations available upon written request, and are also available on the PERAC website <http://www.mass.gov/perac/Plymouth County>.

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 4 - ADMINISTRATION OF THE SYSTEM

The System is administered by a five-person Board of Retirement consisting of the County Treasurer who shall be a member ex-officio, a second member appointed by the County Commissioners, a third and fourth member who shall be elected by the members in or retired from the service of such system, and a fifth member appointed by the Advisory Council.

Ex-officio Member: Thomas J. O'Brien, Chairman

Appointed Member: James Harrington Term Expires: 02/21/20

Elected Member: Joseph F. McDonough Term Expires: 12/31/19

Elected Member: John F Sciara Term Expires: 12/31/21

Appointed Member: Mary Beth Carter Term Expires: 12/31/20

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 Board. All retirement allowances must be approved by the Retirement Board. The PERAC Actuary performs verification prior to payment, unless the system has obtained a waiver for superannuation calculations allowing them to bypass this requirement. All expenses incurred by the System must be approved by a majority vote of the Board. Payments shall be made only upon vouchers signed by two persons designated by 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 \$1,000,000 with a \$10,000 deductible issued through Travelers Casualty & Surety Company. The system also has Fiduciary coverage to a limit of \$50,000,000 under a blanket policy issued through the Massachusetts Association of Contributory Retirement Systems.

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 5 - ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Sherman Actuarial Services as of January 1, 2017.

The actuarial liability for active members was	\$652,084,974
The actuarial liability for retired and inactive members was	<u>868,005,471</u>
The total actuarial liability was	\$1,520,090,445
System assets as of that date were (actuarial value)	<u>937,406,228</u>
The unfunded actuarial liability was	<u>\$582,684,217</u>
The ratio of system's assets to total actuarial liability was	61.7%
As of that date the total covered employee payroll was	\$265,029,194

The normal cost for employees on that date was 8.7% of payroll
 The normal cost for the employer was 2.2% of payroll

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

Investment Return: 8.00% per annum
 Rate of Salary Increase: 3.75% per annum

SCHEDULE OF FUNDING PROGRESS AS OF JANUARY 1, 2017

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)
1/1/2017	\$937,406,228	\$1,520,090,445	\$582,684,217	61.7%	\$265,029,194	219.9%
1/1/2015	\$826,923,777	\$1,417,490,110	\$590,566,333	58.3%	\$246,703,686	239.4%
1/1/2013	\$666,899,774	\$1,319,764,989	\$652,865,215	50.5%	\$238,655,485	273.6%
1/1/2011	\$666,730,812	\$1,181,508,931	\$514,778,119	56.4%	\$228,289,638	225.5%
1/1/2010	\$673,709,456	\$1,132,847,379	\$459,137,923	59.5%	\$227,507,647	201.8%
1/1/2009	\$579,877,224	\$1,159,210,636	\$579,333,412	50.0%	\$264,541,078	219.0%

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 6 - MEMBERSHIP EXHIBIT

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Retirement in Past Years										
Superannuation	30	34	161	168	163	170	160	217	186	199
Ordinary Disability	0	0	3	1	2	1	2	0	3	0
Accidental Disability	2	5	2	2	8	8	13	6	2	4
Total Retirements	32	39	173	178	173	179	175	223	198	203
 Total Retirees, Beneficiaries and Survivors	3,280	3,363	3,384	3,456	3,493	3,549	3,662	3,755	3,850	3,917
 Total Active Members	7,395	7,269	6,603	5,820	5,771	5,768	5,847	6,145	5,790	5,865
 Pension Payments										
Superannuation	\$35,420,273	\$38,178,989	\$41,011,239	\$43,912,918	\$46,192,632	\$48,665,696	\$51,723,044	\$54,944,291	\$57,819,859	\$61,083,560
Survivor/Beneficiary Payments	1,900,514	2,025,290	2,185,905	2,330,124	2,343,079	2,552,450	2,798,439	3,092,804	3,323,603	3,449,210
Ordinary Disability	556,342	574,212	594,305	630,121	642,117	666,321	628,912	648,899	707,340	655,503
Accidental Disability	7,309,685	7,592,738	7,843,454	8,293,663	8,639,215	9,044,443	9,333,751	9,377,828	9,878,251	10,098,737
Other	<u>3,976,670</u>	<u>2,824,027</u>	<u>5,539,145</u>	<u>2,359,311</u>	<u>6,673,924</u>	<u>4,743,876</u>	<u>5,257,563</u>	<u>6,618,337</u>	<u>4,892,860</u>	<u>5,941,322</u>
Total Payments for Year	<u>\$49,163,484</u>	<u>\$51,195,256</u>	<u>\$57,174,048</u>	<u>\$57,526,137</u>	<u>\$64,490,967</u>	<u>\$65,672,786</u>	<u>\$69,741,709</u>	<u>\$74,682,161</u>	<u>\$76,621,913</u>	<u>\$81,228,332</u>

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 7 – LEASED PREMISES

The Plymouth County Retirement Board leases approximately 7,453 square feet of space for its offices located at Suite 235, 10 Cordage Park Circle, Plymouth, MA. The Board signed an initial lease dated February 11, 2005 and amended April 16, 2010 and April 26, 2012 at \$17.00 per square foot. There was a third amendment dated May 30, 2018 at \$19.15 per square foot which will expire December 31, 2019. The landlord is JD Cordage, LLC.

The \$31,675 in prepaid expenses at December 31, 2016 is the security deposit of three months' rent.

The following schedule displays the minimum lease obligations on non-cancelable operating leases as of December 31, 2016:

<u>For the year ending:</u>	<u>Annual Rent</u>
2017	\$130,711.71 plus CPI increase
2018	\$142,743.84 plus CPI increase
2019	<u>\$142,743.84 plus CPI increase</u>
Total future minimum lease payments required	<u>\$416,199.39</u>

The Plymouth County Retirement Board is subletting approximately 1,000 square feet of office space at \$17.00 per square foot to the Mayflower Municipal Health Group.

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 8 - TRANSFER OF PLAN ADMINISTRATION SHERIFF'S DEPARTMENT

Chapter 61 of the Acts of 2009, as amended by Chapter 102 of the Acts of 2009, transferred active members of the county sheriffs' departments in Barnstable, Bristol, Dukes, Norfolk, Plymouth, and Suffolk Counties to the State effective January 1, 2010.

The Commonwealth established an annual amortization schedule to pay the unfunded pension liability of its retired sheriff's office employees in 12 years from FY11 to FY22. The full annual payments from FY11 to FY14 were not paid to the Plymouth County Retirement Association. A total of \$2,202,476 was not paid.

A settlement agreement between the Executive Office for Administration and Finance, the Plymouth County Retirement Association and its Actuary, PERAC Actuary, the Plymouth County Treasurer and Plymouth County was reached on November 17, 2014 pursuant to M.G.L. c. 64D, sec. 11. This agreement included terms to repay the missing amounts from FY11 to FY14 over the next 10 years beginning with the FY15 annual payment.

As of December 31, 2016, \$1,541,729 remains due to Plymouth County Retirement Association in accordance with the agreement.

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