Hampshire County Retirement System

Independent Auditors' Report and Management's Financial Statements

December 31, 2016

Ron L. Beaulieu & Company CERTIFIED PUBLIC ACCOUNTANTS

HAMPSHIRE COUNTY RETIREMENT SYSTEM

DECEMBER 31, 2016

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INDEPENDENT AUDITORS' REPORT

To the Administrator of Hampshire County Retirement System Northampton, Massachusetts

Report on the Financial Statements

We have audited the accompanying financial statements of Hampshire County Retirement System as of and for the year ended December 31, 2016, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting polices used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Hampshire County Retirement System, as of December 31, 2016, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3.1 through 3.7 and the schedules of net pension liability on pages 12 through 16 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Rom 1. Beaulien & Co.

Portland, Maine December 18, 2017

Management's Discussion and Analysis

Year ended December 31, 2016

This section presents Management's Discussion and Analysis (MD&A) of the Hampshire County Retirement System's (HCRS or the "Plan") financial activity and performance as of and for the year ended December 31, 2016. The MD&A is unaudited and is intended to serve as an introduction to the Plan's basic financial statements, as well as to offer readers of the Plan's financial statements a narrative view and analysis of the HCRS' financial activities.

Overview of the Financial Statements

The basic financial statements consist of the: (1) Statements of Fiduciary Net Position; (2) Statements of Changes in Fiduciary Net Position; (3) Notes to the Financial Statements; and (4) Required Supplementary Information.

The Statements of Fiduciary Net Position report the Plan's assets, liabilities, and net position restricted for pensions at the end of the calendar year calculated using the following formula: Assets - Liabilities = Net position restricted for pensions.

The Statements of Fiduciary Net Position report the financial position of the Plan at a given point in time, in this case, December 31. Over time, the increase or decrease in fiduciary net position serves as a useful indicator of the Plan's financial health.

The Statements of Changes in Fiduciary Net Position report additions to and deductions from the Plan during the calendar year. The formula here is: Additions - Deductions = Net Increase (Decrease) in Plan Fiduciary Net Position. The Statements of Changes in Fiduciary Net Position report activity occurring over a specific period of time, in this case, the year beginning January 1 and ending December 31.

The Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the Plan's financial statements.

The Required Supplementary Information following the Notes to the Financial Statements consists of the schedules of changes in net pension liability and related ratios, investment returns, contributions, and notes to schedule of contributions.

These statements and schedules are prepared in conformity with U.S. generally accepted accounting principles, including the new accounting and financial reporting requirements found in GASB Statement No. 67.

Financial Highlights

The fiduciary net position of the Plan as of December 31, 2016 totaled \$275.3 million, an increase of \$18.5 million, or 7.19% from December 31, 2015. The increase in net fiduciary net position is due to primarily to positive returns on investments of 8.36%. There was an \$1.6 million (6.68%) increase in benefits paid with 81 new retirees and 42 deceased retirees. There was an increase of 192 new active members with 147 active members withdrawing or transferring to other systems. Refunds to terminated members and Transfers to other systems increased by \$21,020 (.94%). Total contributions increased by \$21.5 million (82.16%) and Total deductions increased by \$1.6 million (5.58%). Net investment earnings increased by \$19.0 million

Fiduciary net position is the residual of the Plan's assets in excess of the Plan's liabilities as of the date of the Statements of Fiduciary Net Position. The Plan's assets are held in trust to meet future benefit payments. For reporting purposes in accordance with the Government Accounting Standards Board (GASB), as of December 31, 2016, the Plan's fiduciary net position as a percentage of the total pension liability was 58.5% with a funding schedule to become 100% funded in 2034.

Financial Analysis – Assets and Liabilities

Total assets are comprised of cash and cash equivalents; investments at fair value; and receivables comprised of contributions due from plan members and investments sold but not yet received. Total Assets as of December 31, 2016 was \$275.4 million a increase of \$18.5 million (7.19%) from December 31, 2015.

Total liabilities as of December 31, 2016 were approximately \$89,308 a decrease from the total liabilities as of December 31, 2015 which were approximately \$97,240. Total liabilities are comprised of payables for benefits payments due, accrued employee payroll and accrued compensated absences.

Fiduciary net position is the residual of the Plan's assets in excess of the Plan's liabilities as of the date of the Statements of Fiduciary Net Position. Total fiduciary net position held in trust for payment of future pension benefits totaled \$275.3 million which represents an increase of \$18.5 million or 7.19% from 2015.

	<u>2016</u>	<u>2015</u>	Total \$ Change	Total % Change
Assets				
Cash and cash equivalents	2,934,088	15,207,180	-12,273,092	-80.71%
Investments	271,800,130	240,599,412	31,200,718	12.97%
Receivables	688,513	1,151,029	-462,516	-40.18%
Total Assets	275,422,731	256,957,621	18,465,110	7.19%
Liabilities				
Payables	450	12,432	-11,982	-96.38%
Accrued payroll	6,978	5,511	1,467	26.62%
Accrued compensated absences	81,880	79,297	2,583	3.26%
Total Liabilities	89,308	97,240	-7,932	-8.16%
Fiduciary Net Position	275,333,423	256,860,381	18,473,042	7.19%

Assets and Liabilities - Fiduciary Net Position 2016

Assets and Liabilities - Fiduciary Net Position 2015

	2015	2014	Total \$ Change	Total % Change
Assets				
Cash and cash equivalents	15,207,180	2,141,887	13,065,293	609.99%
Investments	240,599,412	255,811,148	-15,211,736	-5.95%
Receivables	1,151,029	513,655	637,374	124.08%
Total Assets	256,957,621	258,466,690	-1,509,069	-0.58%
Liabilities				
Payables	12,432	1,031	11,401	1105.82%
Accrued payroll	5,511	3,954	1,557	39.38%
Accrued compensated absences	79,297	75,273	4,024	5.35%
Total Liabilities	97,240	80,258	16,982	21.16%
Fiduciary Net Position	256,860,381	258,386,432	-1,526,051	-0.59%

Assets and Liabilities – Fi	uuciai y Net	1 05101011 20	17	
Assets	<u>2014</u>	<u>2013</u>	<u>Total \$ Change</u>	<u>Total % Change</u>
Cash and cash equivalents	2,141,887	4,932,273	-2,790,386	-56.6%
Investments	255,811,148	239,127,751	16,683,397	7.0%
Receivables	513,655	2,674,385	-2,160,731	-80.8%
Total Assets	258,466,690	246,734,409	11,732,280	4.8%
Liabilities				
Payables	1,031	39,317	-38,286	-97.4%
Accrued payroll	3,954	2,511	1,443	57.5%
Accrued compensated absences	75,273	70,537	4,736	6.7%
Total Liabilities	80,258	112,365	-32,107	-28.6%
Fiduciary Net Position	258,386,432	246,622,045	11,764,386	4.8%

Assets and Liabilities – Fiduciary Net Position 2014

Revenues - Additions to Plan Fiduciary Net Position

Revenue (Additions to the HCRS' fiduciary net position) includes contributions from active members, employers, non-employer entities, transfers in from other retirement systems and net investment income. For plan year 2016 revenues totaled approximately \$47.8 million compared to \$26.2 million in 2015. The difference primarily due to significant increases in gross investment earnings combined with a decrease in investment expenses.

Employer contributions are determined by the actuary based on a biennial evaluation and funding schedule. The funding schedule is a 4% increasing phase-in schedule with a target date for full funding in 2034. Employer contributions for calendar year 2016 totaled \$19.7 million, an increase of \$1 million (5.73%) over calendar year 2015. Distribution for Employer contributions are based on aggregate salaries as of September 30 of the prior year.

Member contributions comprised of regular contributions and makeup/redeposit purchases of prior service totaled approximately \$7.4 million, an increase of 1.7%. There were 192 new members enrolled in 2016 with withdrawals/transfers to other systems of 147 members, 1 death and 72 retirements. There was also a decline in inactive membership due to withdrawals/transfers. Member contributions are expected to increase annually as new members paying a higher percentage of salary replace retiring members contributing at a lower percentage of salary and due to increases in annual salaries of current active members.

Non-employer contributions, comprised primarily of Commonwealth's COLA reimbursement for pre-1996 retirees but also included worker's compensation offset settlements and recovery of 91A overearnings, totaled \$331,313, an increase of \$195,349 (143.68%). Commonwealth's COLA reimbursement is expected to decrease annually due to declining population of eligible retirees. Additions from worker's compensation offset settlements and recovery of 91A overearnings are situational and not anticipated on an annual basis.

Transfers from other systems are comprised of both member contributions (annuity savings) of members transferring to HCRS and 3(8)(c) reimbursements of pension payments for retirees with service liabilities from other retirement systems. Transfers from other systems totaled \$1.2 million, an increase of \$21,421 (1.72%). Transfers from other systems varies with numbers of employees changing jobs and employers within the Commonwealth.

Net Investment Earnings, comprised of the net change in fair value of investments and interest earned on investments minus investment expenses was \$19.0 million, a significant increase over 2015. Investments are well diversified into domestic and global fixed income, domestic and international

equities, real estate and alternative investments. Overall investment performance for 2016 was a positive 8.36%. Increase in investment performance is primarily relative to overall increase in the global market environment. HCRS maintains a well-diversified portfolio in a relatively conservative approach with a long-term (30 year) horizon. Actuarially, investment gains/losses are smoothed over a 5 year period. HCRS's long-term target return rate is 7.875%. 1985-2016 annualized returns are 8.19%.

	<u>2016</u>	<u>2015</u>	<u>Total \$ change</u>	<u>Total % change</u>
Contributions				
Employer contributions	19,693,436	18,626,735	1,066,701	5.73%
Member contributions	7,446,905	7,322,347	124,558	1.70%
Non-employer entities	331,313	135,964	195,349	143.68%
Transfer from other systems	1,268,799	1,247,378	21,421	1.72%
Total Contributions	28,740,453	27,332,424	1,408,029	5.15%
Investment earnings				
Net increase(decrease) in fair				
value of investments	20,818,249	943,203	19,875,046	2107.19%
Interest	22,284	22,340	-56	-0.25%
Gross investment earnings	20,840,533	965,543	19,874,990	2058.43%
Less investment expenses	1,804,554	2,070,064	-265,510	-12.83%
Net Investment Earnings	19,035,979	-1,104,521	20,140,500	1823.46%
Total Additions (Revenues)	47,776,432	26,227,903	21,548,529	82.16%

Revenues - Additions To Plan Fiduciary Net Position 2016

Revenues - Additions To Plan Fiduciary Net Position 2015

	2015	2014	Total \$ change	Total % change
Contributions				
Employer contributions	18,626,735	17,436,197	1,190,538	6.83%
Member contributions	7,322,347	7,177,431	144,916	2.02%
Non-employer entities	135,964	227,088	-91,124	-40.13%
Transfer from other systems	1,247,378	1,067,545	179,833	16.85%
Total Contributions	27,332,424	25,908,261	1,424,163	5.50%
Investment earnings				
Net increase(decrease) in fair value of investments	943,203	14,029,972	-13,086,769	-93.28%
Interest	22,340	21,476	864	4.02%
Gross investment earnings	965,543	14,051,488	-13,085,905	-93.13%
Less investment expenses	2,070,064	2,092,209	-22,145	-1.06%
Net Investment Earnings	-1,104,521	11,959,239	-13,063,760	-109.24%
Total Additions (Revenues)	26,227,903	37,867,500	-11,639,597	-30.74%

Revenues - Additions To Plan Fiduciary Net Position 2014

	<u>2014</u>	<u>2013</u>	<u>Total \$ change</u>	<u>Total % change</u>
Contributions				
Employer contributions	17,436,197	16,004,397	1,431,800	8.9%
Member contributions	7,177,431	7,040,511	136,920	1.9%
Non-employer entities	227,088	252,013	-24,925	-9.9%
Transfer from other systems	1,067,545	1,317,726	-250,181	-19%
Total Contributions Investment earnings	25,908,261	24,614,647	1,293,614	5.3%
Net increase(decrease) in fair value of investments	14,029,972	28,208,660	-14,178,688	-50.3%
Interest	21,476	16,403	5,073	30.9%
Gross investment earnings	14,051,488	28,225,063	-14,173,615	-50.2%
Less investment expenses	2,092,209	2,134,192	-41,983	-2.0%
Net Investment Earnings	11,959,239	26,090,871	-14,131,632	-54.2%
Total Additions (Revenues)	37,867,500	50,705,518	-12,838,018	-25.3%

Expenses – Deductions to Plan Fiduciary Net Position

Deductions to HCRS' fiduciary net position include benefits paid, refund of contributions to terminated members, transfers to other retirement systems and administrative expenses. Total Deductions for 2016 totaled approximately \$29.3 million compared to \$27.7 million in 2015, an overall increase of 5.58%.

Benefits paid totaled \$24.9 million, an increase of \$1.6 million (6.68%) due to new retirees and cost of living adjustments (3% on first \$13,000). There was a net increase of 39 retirees (81 new retirees/survivors and 42 deceased retirees/survivors).

Overall 147 members terminated from the system by either taking a refund of contributions or transferring to other systems. Refunds to members terminating employment and withdrawing contributions totaled approximately \$741,840 a decrease of \$205,030 from 2015 (-21.7%). Members who withdraw from service decreases pension liability.

Transfers to other systems are comprised of member contributions (annuity savings) of active members and 3(8)(c) reimbursement of benefit payments (service liability) of former members who retired from other systems. Transfers to other systems totaled approximately \$2.7 million, an increase of \$226,050 (8.8%). The increase in transfers to other systems was offset by the decline in refunds to members.

Administrative expenses totaled \$800,877 a decrease of \$34,602 (-4.14%)

Expenses – Deductions To Plan Fiduciary Net Position - 2016

	<u>2016</u>	<u>2015</u>	Total \$ change	Total % change
Benefits Paid	24,973,457	23,410,439	1,563,018	6.68%
Refunds to terminated members	741,840	946,870	-205,030	-21.65%
Transfers to other systems	2,787,216	2,561,166	226,050	8.83%
Administrative expenses	800,877	835,479	-34,602	-4.14%
Total Deductions (Expenses)	29,303,390	27,753,954	1,549,436	5.58%

Expenses – Deductions To Plan Fiduciary Net Position - 2015

		-		
	<u>2015</u>	<u>2014</u>	<u>Total \$ change</u>	<u>Total % change</u>
Benefits Paid	23,410,439	22,164,495	1,245,944	5.62%
Refunds to terminated members	946,870	801,315	145,555	18.16%
Transfers to other systems	2,561,166	2,382,307	178,859	7.51%
Administrative expenses	835,479	754,997	80,482	10.66%
Total Deductions (Expenses)	27,753,954	26,103,114	1,650,840	6.32%

Expenses - Deductions To Plan Fiduciary Net Position - 2014

	<u>2014</u>	<u>2013</u>	Total \$ change	Total % change
Benefits Paid	22,164,495	20,768,313	1,396,182	6.7%
Refunds to terminated members	801,315	771,934	29,381	3.8%
Transfers to other systems	2,382,307	2,185,893	196,414	9.0%
Administrative expenses	754,997	751,211	3,786	0.5%
Total Deductions (Expenses)	26,103,114	24,477,351	1,625,763	6.6%

Changes in Fiduciary Net Position – Summary

Changes in fiduciary net position as of December 31, 2016 were a net increase of \$18.5 million, bringing net asset balance to \$275.3 million. The increase in total additions of 82.16% is primarily due to the investment performance in global markets from 2015. The increase is total deductions of 5.58% is primarily due to increase in benefits paid with net gain of 39 retirees/survivors.

Changes In Fiduciary Net Position – Summary 2016

	<u>2016</u>	2015	Total \$ change	Total % change
Total Additions (Revenues)	47,776,432	26,227,903	21,548,529	82.16%
Total Deductions (Expenses)	29,303,390	27,753,954	1,549,436	5.58%
Net Position Change	18,473,042	-1,526,051	19,999,093	1310.51%

Changes In Fiduciary Net Position – Summary 2015

	<u>2015</u>	<u>2014</u>	<u>Total \$ change</u>	<u>Total % change</u>
Total Additions (Revenues)	26,227,903	37,867,500	11,639,597	-30.74%
Total Deductions (Expenses)	27,753,954	26,103,114	1,650,840	6.32%
Net Position Change	-1,526,051	11, 764,386	-13,290,437	-112.97%

Changes In Fiduciary Net Position – Summary 2014

	<u>2014</u>	2013	<u>Total \$ change</u>	Total % change
Total Additions (Revenues)	37,867,500	50,705,518	-12,838,018	-25.3%
Total Deductions (Expenses)	26,103,114	24,477,351	1,625,763	6.6%
Net Position Change	11, 764,386	26,228,167	-14,463,781	-55.1%

TOTAL FUND BALANCE AT FAIR VALUE

Total ending fund balance as of December 31, 2016 was \$275.3 million; an overall net gain of approximately \$18.5 million (7.19%) from December 31, 2015.

Total Fund Balance At Fair Value 2016

	<u>2016</u>	<u>2015</u>	<u>Total \$ change</u>	<u>Total % change</u>		
Beginning Fund Balance	256,860,381	258,386,432	-1,526,051	-0.59%		
Ending Fund Balance	275,333,423	256,860,381	18,473,042	7.19%		
Total Fund Balance At Fair Value 2015						
	<u>2015</u>	<u>2014</u>	Total \$ change	<u>Total % change</u>		
Beginning Fund Balance	258,386,432	246,622,046	11,764,386	4.77%		
Ending Fund Balance	256,860,381	258,386,432	-1,526,051	-0.59%		
Total Fund Balance At Fair Value 2014						
	<u>2014</u>	<u>2013</u>	Total \$ change	Total % change		
Beginning Fund Balance	246,622,046	220,393,879	26,228,167	11.8%		
Ending Fund Balance	258,386,432	246,622,046	11,764,386	4.8%		

OVERALL FINANCIAL POSITION

HCRS maintains a well-diversified portfolio of assets in domestic and global fixed income, domestic and international equities, real estate and alternative investments (private debt and private equity). The Board has as its primary purpose to grow Plan assets at a rate sufficient to meet promised benefits to members while minimizing the risks associated with achieving that growth. The Board's asset allocation is relatively conservative with an emphasis on protecting assets in down markets rather than capturing all up markets. The Board attempts to outperform actuarial assumptions to reduce the unfunded liability as soon as practicable. However, at no time should the Plan be exposed to unreasonable risk levels.

The Board has adopted a funding schedule in accordance with Massachusetts General Laws, Chapter 32, Section 22 (6a) in order to be 100% funded in the year 2034. Actuarially, investment gains/losses are smoothed over a 5 year period. HCRS's long-term target return rate is 7.875%. 1985-2016 annualized returns are 8.19%. As of December 31, 2016, the Plan's funding ratio was 55.6%.

HAMPSHIRE COUNTY RETIREMENT SYSTEM STATEMENT OF FIDUCIARY NET POSITION DECEMBER 31,

ASSETS	2016
Cash Investments at fair value	\$ 2,934,088 271,800,130
Receivables: Members receivable, net Total receivables	<u>688,513</u> 688,513
TOTAL ASSETS	275,422,731
LIABILITIES Accounts payable Accrued payroll Accrued compensated absences TOTAL LIABILITIES	450 6,978 <u>81,880</u> 89,308
NET POSITION Restricted for pension benefits	\$ 275,333,423

See accompanying independent auditors' report and notes to financial statements.

HAMPSHIRE COUNTY RETIREMENT SYSTEM STATEMENT OF CHANGES IN FIDUCIARY NET POSITION YEAR ENDED DECEMBER 31,

ADDITIONS TO NET ASSETS ATTRIBUTED TO		2016
Contributions:		
Employer	\$	19,693,436
Plan member	Ψ	7,446,905
Nonemployer entities		331,313
Transfers from other systems		1,268,799
Total contributions		28,740,453
Investment earnings		
Net increase (decrease) in fair value of investments		20,818,249
Interest		22,284
Total investment earnings		20,840,533
Less investment expenses		1,804,554
Net investment earnings		19,035,979
TOTAL ADDITIONS		47,776,432
DEDUCTIONS TO NET ASSETS ATTRIBUTED TO		
Benefits paid		24,973,457
Refunds of contributions		741,840
Transfers to other systems		2,787,216
Administrative expenses		800,877
TOTAL DEDUCTIONS		29,303,390
NET INCREASE (DECREASE) IN NET POSITION		18,473,042
NET POSITION - BEGINNING		256,860,381
NET POSITION - ENDING	\$	275,333,423

See accompanying independent auditors' report and notes to financial statements.

NOTE 1 - DESCRIPTION OF PLAN

The following description of the Hampshire County Retirement System (the Plan), a cost sharing multiemployer plan serving 37 employers, provides only general information. Participants should refer to the Plan agreement for a complete description of the Plan's provisions.

<u>General</u>

The Plan is a defined benefit plan covering all member unit employees deemed eligible by the retirement board, with the exception of the school department employees who serve in a teaching capacity.

Plan Amendments

The Plan did not adopt any significant plan amendments during 2016.

Administration of the Plan

The Plan is administered by a five person Board of Retirement consisting of the Chairperson who shall be appointed by the other four board members, a second member appointed by the Advisory Council, a third and fourth member who shall be elected by the members in or retired from the service of the Plan, and a fifth member, who shall not be a member of the Plan, appointed by the other four board members. The Board of Retirement has the authority to amend or establish policies that are not governed by Massachusetts Law or the Public Employee Retirement Administration Commission.

Contributions

Participation in the plan is required for all full-time employees. There are three classes of membership:

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.

NOTE 1 - DESCRIPTION OF PLAN (CONTINUED)

Membership of each group as of December 31, 2016:

		Inactive	Inactive (retired) members entitleld to	
		(retired)	benefits	
		members	but not yet	
	Active	receiving	receiving	
Group	members	benefits	benefits	Total
Group 1	1,616	1,025	501	3,142
Group 2 & 4	377	218	142	737
	1,993	1,243	643	3,879

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

5% of compensation
7% of compensation
8% of compensation
9% of compensation
an additional 2% of compensation in excess of \$30,000

Upon termination, a member may withdraw their contributions plus statutory interest.

Employers were required to contribute \$19,693,436, for the years ended December 31, 2016.

Payment of Benefits

Once a member has met one of the conditions below, they are eligible to receive benefits:

Tier 1 (Membership prior to April 2, 2012):

- 1) Completion of 20 years of service, or
- 2) Reach age 55 if hired prior to 1978, or classified as Group 4, or
- 3) Reach age 55 with 10 years of service, if hired after 1978, and if classified in Group 1 and 2, or
- 4) Disabled or death

Tier 2 (Membership on or after April 2, 2012):

- 1) If classified as Group 1, attain age 60 with 10 years of creditable service, or
- 2) If classified as Group 2, attain age 55 with 10 years creditable service, or
- 3) If classified as Group 4, attain age 55, or
- 4) Disabled or death

NOTE 1 - DESCRIPTION OF PLAN (CONTINUED)

The amount of benefit is determined by their benefit rate and cannot exceed 80% of the member's highest three year average compensation. The benefit amount may be adjusted for a cost of living adjustment by annual vote of the Retirement Board. Cost of Living adjustment may be granted in an amount determined by the Retirement Board up to a maximum of 3% on the first \$13,000.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements are prepared using the accrual method of accounting.

Investment Policy

The provisions of Massachusetts General Laws Chapter 32, section 23(2) generally govern the investment practices of the system. The Board establishes the Investment Policy and Asset Allocation of the Plan. The Board retains an investment consultant to advise them on developing and implementing the Policy, and to closely monitor the individual performance of investment managers and the performance of the overall investment strategy.

Investment Valuation and Income Recognition

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Interest income is recorded on the accrual basis. Net appreciation (depreciation) includes the Plan's gains and losses on investments bought, sold, and held.

Payments of Benefits

Benefits are recorded when paid.

NOTE 3 - RISKS AND UNCERTAINTIES

Nature of Operations

The operations of the Plan are subject to the administrative directives, rules and regulations of state regulatory agencies, including, but not limited to Public Employee Retirement Administration Commission (PERAC). Such administrative directives, rules and regulations are subject to change by an act of Legislature and any administrative change mandated by PERAC. Such changes may occur with little notice or inadequate funding to pay for the related costs, including the additional administrative burden, to comply with a change.

NOTE 3 - RISKS AND UNCERTAINTIES (CONTINUED)

Current Vulnerabilities Due to Certain Concentrations

Deposits

Custodial credit risk for deposits is the risk that in an event of a bank failure, deposits may not be recovered. The Plan does not have a deposit policy to manage custodial credit risk.

At December 31, 2016, the Plan held deposits of \$3,197,811 at a local bank. The Federal Deposit Insurance Corporation (FDIC) insures \$250,000 of that balance. The remaining balance is collateralized.

Investments

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statement of fiduciary net position.

<u>Estimates</u>

The preparation of financial statements in conformity with generally accepted accounting principles requires the plan administrator to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

Significant Estimates

None of the estimates used in preparing the financial statements were significant.

NOTE 4 - INVESTMENTS

Investments are reported at their fair value at year end. Although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at year end.

The fair value measurement establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy has three levels which are described below.

Level 1 Fair Value Measurements

The fair value of commingled domestic and international investments is based on quoted prices of the funds held by the Plan at year-end.

NOTE 4 - INVESTMENTS (CONTINUED)

Level 2 Fair Value Measurements

Investments in certain preferred stocks are valued on the market approach using the quoted market price of the issuer's unrestricted common stock less an appropriate discount.

Level 3 Fair Value Measurements

The fair value of certain investments is not actively traded and significant other observable inputs are not available. In this case, management decides what the best valuation technique to use is.

The investments of the Plan consisted of the following as of:

		December 31, 2016					
			Qı	uoted prices			
				in active	Significant other	Significant un-	
			n	narkets for	observable	observable	
			ide	ntical assets	inputs	inputs	
Description		Fair Value		(Level 1)	(Level 2)	(Level 3)	
Commingled international investments	\$	19,499,680	\$	19,499,680	\$ -	\$ -	
Commingled domestic fixed income		10,851,872		10,851,872	-	-	
Pooled domestic equity (NAV)		51,111,658		N/A	N/A	N/A	
Commingled global equity (NAV)		18,450,200		N/A	N/A	N/A	
Pooled alternative investments (NAV)		30,327,055		N/A	N/A	N/A	
Hedge funds (NAV)		12,686,364		N/A	N/A	N/A	
Commingled international investments (NAV)		40,855,742		N/A	N/A	N/A	
Commingled real estate (NAV)		32,250,646		N/A	N/A	N/A	
Commingled global fixed investments (NAV)		24,423,002		N/A	N/A	N/A	
Commingled domestic fixed income (NAV)		31,343,911		N/A	N/A	N/A	
Total	\$ 2	271,800,130	\$	30,351,552	\$-	\$-	

The investments valued using the net asset value (NAV) method had no unfunded commitments. They are redeemable at quarterly intervals and a notice of 30-60 days is required.

The following investments represent 5% or more of fiduciary net position:

Colchester Local Markets Debt	16,357,776
Mellon Aggregate Bond Index Fund	16,952,607
Mellon Global Extened Alpha Fund	18,450,200
MFS International Equity Fund	19,499,680
PRIM Core Real Estate	31,796,314
PRIM Emerging Markets	20,403,530
RBC International Fund	20,452,212
Rhumbline S&P 500	32,028,947
Shenkman High Yeild Bond Fund	14,391,305

The annual money-weighted return for 2016 was 7.43%. This return is net of investment expenses and uses the average investment balance throughout the year.

NOTE 5 - PARTICIPANT CONTRIBUTIONS RECEIVABLE

Participant contributions receivable are stated at the amount the administrator expects to collect from balances outstanding at year-end. Balances that are still outstanding after the administrator has used reasonable collection efforts are written off through a charge to the valuation allowance and a credit to participant contributions receivable. The allowance for uncollectible accounts was estimated to be \$0 at December 31, 2016.

NOTE 6 - ACCRUED COMPENSATED ABSENCES

Summarized below are the accrued vacation and sick leave liabilities at December 31, 2016:

	_	alance 1/1/16	Ad	ditions	Dele	etions	_	alance /31/2016	Cur Por	
Accrued compensated										
absences	\$	79,297	\$	2,583	\$	-	\$	81,880	\$	-
Totals	\$	79,297	\$	2,583	\$	-	\$	81,880	\$	-

NOTE 7 - NET PENSION LIABILITY

The net pension liability is the actuarial total liability less the fiduciary net position. The components of the net pension liability are as follows:

	2016
Total pension liability	\$495,145,477
Plan fiduciary net position	275,333,423
Net pension liability (asset)	\$219,812,054

Fiduciary net position as a % of total pension liability 55.6%

The following are significant assumptions used to measure the total pension liability and projected cash flows:

- 1) Discount rate is estimated to be 7.50% per year based on prior results.
- 2) Inflation is estimated to be 3%.
- 3) Asset allocation is estimated to be 25% fixed income; 37.5% equities; 28% alternatives; and 7.5% other.
- 4) Increase in salaries will be 4.25% per year.
- 5) Mortality was based upon the RP2000 Table projected with scale BB with base year of 2009.
- 6) Cost of Living Allowance base is fixed at \$13,000.
- 7) Experience studies are based on data provided from Hampshire County Retirement Board as of December 31, 2015.

NOTE 8 - OPERATING LEASE

The Plan leases office space. Future minimum annual rental payments are as follows:

2017	\$41,625
2018	\$43,844
2019	\$18,665
2020	\$ -
2021	\$ -

Operating lease rent expense totaled \$39,716 for the years ended December 31, 2016.

NOTE 9 - TAX STATUS

The internal Revenue Service has determined and informed the Plan by a letter, that the Plan and related trust are designed in accordance with applicable section of the Internal Revenue Code (IRC). The Plan Administrator and the Plan's Board believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC.

The plan is not subject to examinations by compliance authorities.

NOTE 10 - MANAGEMENT REVIEW

Management has reviewed subsequent events as of December 18, 2017, the date the financial statements were available to be issued. At that time, there were no material subsequent events.

HAMPSHIRE COUNTY RETIREMENT SYSTEM REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN NET PENSION LIABILITY - LAST TEN FISCAL YEARS DECEMBER 31, 2016

	2016	2015	2014	2013	2012
Total penion liability					
Service cost	\$ 10,605,229	\$ 10,269,070	\$ 9,850,427	*	*
Interest	34,627,268	34,842,587	33,371,689	*	*
Changes of benefit terms	-	-	-	*	*
Differences between expected and actual experience	(4,348,736)	-	-	*	*
Changes of assumptions	16,610,092	-	-	*	*
Benefit payments, including refunds	(26,880,118)	(25,512,793)	(24,412,587)	*	*
Net change in total pension liability	\$ 30,613,735	\$ 19,598,864	\$ 18,809,529	*	*
Total pension liability - beginning	464,531,742	444,932,878	426,123,349	*	*
Total pension liability - ending	\$ 495,145,477	\$ 464,531,742	\$ 444,932,878	*	*
Fiduciary net position					
Contributions - employer	\$ 19,693,436	\$ 18,626,735	\$ 17,436,197	*	*
Contributions - member	7,446,905	7,322,347	7,177,431	*	*
Contributions - nonemployer	331,313	135,964	227,088	*	*
Transfers from other systems	1,268,799	1,247,378	1,067,545	*	*
Net investment earnings	19,035,979	(1,104,522)	11,959,239	*	*
Benefits paid	(24,973,457)	(23,410,439)	(22,164,495)	*	*
Refunds of contributions	(741,840)	(946,870)	(801,315)	*	*
Transfers to other systems	(2,787,216)	(2,561,166)	(2,382,307)	*	*
Administrative expenses	(800,877)	(835,479)	(754,997)	*	*
Net change in fiduciary net position	\$ 18,473,042	\$ (1,526,052)	\$ 11,764,386	*	*
Fiduciary net position - beginning	256,860,381	258,386,433	246,622,046	*	*
Fiduciary net position - ending	\$ 275,333,423	\$ 256,860,381	\$ 258,386,432	*	*
Net pension liability (asset) - ending	\$ 219,812,054	\$ 207,671,361	\$ 186,546,446	*	*

	2011	2010	2009	2008	2007
Total penion liability					
Service cost	*	*	*	*	*
Interest	*	*	*	*	*
Changes of benefit terms	*	*	*	*	*
Differences between expected and actual experience	*	*	*	*	*
Changes of assumptions	*	*	*	*	*
Benefit payments, including refunds	*	*	*	*	*
Net change in total pension liability	*	*	*	*	*
Total pension liability - beginning	*	*	*	*	*
Total pension liability - ending	*	*	*	*	*
Fiducionu not position					
Fiduciary net position Contributions - employer	*	*	*	*	*
Contributions - member	*	*	*	*	*
Contributions - member	*	*	*	*	*
Transfers from other systems	*	*	*	*	*
Net investment earnings	*	*	*	*	*
Benefits paid	*	*	*	*	*
Refunds of contributions	*	*	*	*	*
Transfers to other systems	*	*	*	*	*
Administrative expenses	*	*	*	*	*
Net change in fiduciary net position	*	*	*	*	*
Fiduciary net position - beginning	*	*	*	*	*
Fiduciary net position - ending	*	*	*	*	*
Net pension liability (asset) - ending	*	*	*	*	*

* - Information not available.

See accompanying independent auditors' report and management's notes to required supplementary information.

HAMPSHIRE COUNTY RETIREMENT SYSTEM REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF NET PENSION LIABILITY - LAST TEN FISCAL YEARS DECEMBER 31, 2016

	2016	2015	2014	2013	2012
Total pension liability	\$ 495,145,477	\$ 464,531,742	\$ 444,932,878	*	*
Fiduciary net position	275,333,423	256,860,381	258,386,432	*	*
Net pension liability (asset)	\$ 219,812,054	\$ 207,671,361	\$ 186,546,446	*	*
Fiduciary net position as a percentage of the total pension liability	55.6%	55.3%	58.1%	*	*
Covered-employee payroll	\$ 78,914,925	\$ 80,914,245	\$ 77,139,934	*	*
Net pension liability (asset) as a percentage of covered-employee payroll	278.5%	256.7%	241.8%	*	*

	2011	2010	2009	2008	2007
Total pension liability	*	*	*	*	*
Fiduciary net position	*	*	*	*	*
Net pension liability (asset)	*	*	*	*	*
Fiduciary net position as a percentage of the					
total pension liability	*	*	*	*	*
	*	*	*	*	*
Covered-employee payroll	-				
Net pension liability (asset) as a percentage of					
covered-employee payroll	*	*	*	*	*

^{* -} Information not available

See accompanying independent auditors' report and management's notes to required supplementary information.

HAMPSHIRE COUNTY RETIREMENT SYSTEM REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CONTRIBUTIONS - LAST TEN FISCAL YEARS DECEMBER 31, 2016

	2016	2015	2014	2013		2012
Actuarially determined contribution	\$ 19,693,436	\$ 18,620,753	\$ 17,349,877		*	*
Contributions in relation to the actuarially						
determined contribution	 19,693,436	 18,620,753	 17,349,877		*	*
Contribution deficiency (excess)	\$ -	\$ -	\$ -		*	*
Covered-employee payroll	\$ 78,914,925	\$ 80,914,245	\$ 79,029,000		*	*
Contributions as a percentage of covered-employee payroll	25.0%	23.0%	22.0%		*	*

	2011	2010	2009	2008	2007
Actuarially determined contribution	*	*	*	*	*
Contributions in relation to the actuarially					
determined contribution	*	*	*	*	*
Contribution deficiency (excess)	*	*	*	*	*
Covered-employee payroll	*	*	*	*	*
Contributions as a percentage of					
covered-employee payroll	*	*	*	*	*

^{* -} Information not available

See accompanying independent auditors' report and management's notes to required supplementary information.

HAMPSHIRE COUNTY RETIREMENT SYSTEM REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF INVESTMENT RETURNS - LAST TEN FISCAL YEARS DECEMBER 31, 2016

Annual money-weighted rate of return,	2016	2015	2014	2013	2012
net of investment expenses	7.43%	-0.68%	4.84%	*	*
Annual money-weighted rate of return,	2011	2010	2009	2008	2007
net of investment expenses	*	*	*	*	*

^{* –} Information not available

See accompanying independent auditors' report and management's notes to required supplementary information.

HAMPSHIRE COUNTY RETIREMENT SYSTEM NOTES TO REQUIRED SUPPLEMENTARY INFORMATION DECEMBER 31, 2016

NOTE 1 – METHODS AND ASSUMPTIONS USED IN CALCULATIONS OF ACTUARIALLY DETERMINED CONTRIBUTIONS

The actuarially determined contribution rates in the schedule of contributions are calculated as of December 31, 2015. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Actuarial cost method: Amortization method: Remaining amortization period: Asset valuation method:	Entry Age Normal 2 years of 7.254% increases, followed by 4.00% 17 years Market value adjusted by accounts payable and
	receivables adjusted to phase in over 5 years investment gains or losses above or below the expected rate of investment return. The actuarial value of assets must be no less than 90% of the adjusted market value nor more than 110% of the adjusted market value.
Inflation:	3.00%
Salary increases:	4.25%
Investment rate of return:	7.50%