

**Hampshire County  
Retirement System**

**Independent Auditors' Report and  
Management's Financial Statements**

**December 31, 2022**

**Ron L. Beaulieu & Company**  

---

**CERTIFIED PUBLIC ACCOUNTANTS**

HAMPSHIRE COUNTY RETIREMENT SYSTEM

DECEMBER 31, 2022

CONTENTS

	PAGE
INDEPENDENT AUDITORS' REPORT	1 - 2
MANAGEMENT'S DISCUSSION AND ANALYSIS	3.1 - 3.6
MANAGEMENT'S FINANCIAL STATEMENTS	
STATEMENT OF FIDUCIARY NET POSITION	4
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION	5
NOTES TO FINANCIAL STATEMENTS	6 – 15
MANAGEMENT'S REQUIRED SUPPLEMENTARY INFORMATION	
SCHEDULE OF CHANGES IN NET PENSION LIABILITY – LAST TEN FISCAL YEARS	16
SCHEDULE OF NET PENSION LIABILITY – LAST TEN FISCAL YEARS	17
SCHEDULE OF CONTRIBUTIONS – LAST TEN FISCAL YEARS	18
SCHEDULE OF INVESTMENT RETURNS – LAST TEN FISCAL YEARS	19
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION	20

# Ron L. Beaulieu & Company

CERTIFIED PUBLIC ACCOUNTANTS

[www.rlbco.com](http://www.rlbco.com)  
[accting@rlbco.com](mailto:accting@rlbco.com)

41 Bates Street  
Portland, Maine 04103

Tel: (207) 775-1717  
Fax: (207) 775-7103

## INDEPENDENT AUDITORS' REPORT

To the Retirement Board of  
Hampshire County Retirement System  
Northampton, Massachusetts

### **Opinion**

We have audited the accompanying financial statements of Hampshire County Retirement System, as of and for the year ended December 31, 2022, and the related notes to the financial statements, as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Hampshire County Retirement System, as of December 31, 2022, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### **Basis for Opinion**

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Hampshire County Retirement System, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Responsibilities of Management for the Financial Statements**

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Hampshire County Retirement System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

### **Auditors' Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in

accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Hampshire County Retirement System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events considered in the aggregate, that raise substantial doubt about Hampshire County Retirement System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

### **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 3.6 and the post employment benefit schedules on pages 16 through 19 be presented to supplement the financial statements. Such information is the responsibility of management and, 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 and comparing 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.

*Ron L. Beaulieu & Co.*

Portland, Maine  
December 18, 2023

# Management's Discussion and Analysis

Year ended December 31, 2022

As management of the Hampshire County Retirement System, we offer readers of these financial statements this narrative overview and analysis of the financial activities for the year ended December 31, 2022. The System complies with financial reporting requirements issued by the Governmental Accounting Standards Board (GASB).

## Financial Highlights

The System's net position for the year ended December 31, 2022 was \$427.10 million. Total Assets of the fund were \$428.40 million with outstanding liabilities of \$1.30 million.

There was an accounting change in 2022 with the implementation of GASB 87. GASB 87 requires us to recognize intangible right of use leases as an asset and to amortize the lease liability over the term of the lease. Hampshire County Retirement System leases the office space for its operation. Right of use lease asset for the remaining term expiring 5/31/2024 was \$66,498 with offsetting current liability of \$46,628 and long-term liability of 19,870.

Total additions to the Fund were \$42.44 million including employer contributions of \$30.20 million, member contributions of \$9.4 million and \$2.84 million received from other systems and non-employer entities. Total investment loss was \$51.55 million resulting in a net revenue loss of \$9.12 million.

Total deductions from the Fund includes retirement benefits paid (\$34.34 million), refunds paid to terminated members (\$633,032), and transfers to other systems (\$3.37 million). Administrative expenses were \$788,434. Total deductions from the fund was \$39.14 million.

Total Net position was decreased by \$48.25 million primarily due to investment losses of 10.39%

Total pension liability is based on liabilities developed in the actuarial valuation of January 1, 2022 rolled forward to measurement date of December 31, 2022. As of December 31, 2022, total pension liability was \$628.53 million with net pension liability of \$200.05 million.

For reporting purposes in accordance with the Government Accounting Standards Board (GASB), the Plan's fiduciary net position as a percentage of the total pension liability decreased to 68.2%.

The Plan's assets are reserved and held in trust to meet future benefit payments.

## 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, 68 and 87.

## Assets and Liabilities – Fiduciary Net Position

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 and amortized value of right of use leases. Total Assets as of December 31, 2022 was \$428.40 million, a 10.12% decrease of \$48.24 million from prior year.

Total liabilities as of December 31, 2022 was \$1.30 million an overall increase of \$15,098 from prior year. Total liabilities are generally comprised of payables for benefits payments due, accrued employee payroll and accrued but unpaid compensated absences, right to use lease liability, and the unpaid liability of \$1.16 million due to 2021 transfer of members and retirees of the Hampshire Council of Governments to the State Retirement Board.

Fiduciary net position was the residual of the Plan's assets in excess of the Plan's liabilities as of the specific date, December 31, 2022 of the Statements of Fiduciary Net Position. Net Fiduciary Position was 427.10 million

The fiduciary net position as a percentage of actuarial pension liability was 68.2% on December 31, 2022.

### Assets and Liabilities – Fiduciary Net Position 2022

	2022	2021	Total \$ Change	% Change
<b><u>Assets</u></b>				
Cash and cash equivalents	3,784,841	4,672,747	(887,906)	-19.00%
Investments	423,470,826	470,900,409	(47,429,583)	-10.07%
Receivables	1,082,194	1,075,053	7,141	0.66%
Lease Asset	66,498		66,498	100.00%
<b>Total Assets</b>	<b>428,404,359</b>	<b>476,648,209</b>	<b>(48,243,850)</b>	<b>-10.12%</b>
<b><u>Liabilities</u></b>				
Payables	37	55,815	(55,778)	-99.93%
Accrued payroll	6,290	6,029	261	4.33%
Accrued compensated absences	66,300	62,183	4,117	6.62%
Asset transfer (c. 316 of Acts 2020)	1,162,601	1,162,601	0	0.00%
Lease Liability - current	46,628		46,628	100.00%
Lease Liability - long term	19,870		19,870	100.00%
<b>Total Liabilities</b>	<b>1,301,726</b>	<b>1,286,628</b>	<b>15,098</b>	<b>1.17%</b>
<b>Fiduciary Net Position</b>	<b>427,102,633</b>	<b>475,361,581</b>	<b>(48,258,948)</b>	<b>-10.15%</b>

## 5 Year History Assets and Liabilities - Fiduciary Net Position

	2022	2021	2020	2019	2018
<b>Assets</b>					
Cash and cash equivalents	3,784,841	4,672,747	13,151,977	3,982,274	8,021,407
Investments	423,470,826	470,900,409	388,380,921	354,497,946	300,249,157
Receivables	1,082,194	1,075,053	1,116,318	611,839	763,485
Lease Asset	66,498				
<b>Total Assets</b>	<b>428,404,359</b>	<b>476,648,209</b>	<b>402,649,216</b>	<b>359,092,059</b>	<b>309,034,049</b>
<b>Liabilities</b>					
Payables	37	55,815	6,846	4,663	596
Accrued payroll	6,290	6,029	5,802	2,844	8,300
Accrued compensated absences	66,300	62,183	101,187	91,803	86,950
Asset transfer (c. 316 of Acts 2020)	1,162,601	1,162,601			
Lease Liability - current	46,628				
Lease Liability - long term	19,870				
<b>Total Liabilities</b>	<b>1,301,726</b>	<b>1,286,628</b>	<b>113,835</b>	<b>99,310</b>	<b>95,846</b>
<b>Fiduciary Net Position</b>	<b>427,102,633</b>	<b>475,361,581</b>	<b>402,535,381</b>	<b>358,992,749</b>	<b>308,938,203</b>

## 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 (loss). For plan year 2022 revenues were a net loss of \$9.12 million.

Member contributions comprised of regular contributions and makeup/redeposit purchases of prior service, totaled \$9.40 million, an increase of \$606,568 from prior year. Member contributions generally increase annually due to salary increases and net gain from new members paying a higher percentage of salary replacing retiring members contributing at a lower percentage of salary. There were 444 new members enrolled in 2022. Withdrawals and transfers of active and inactive members totaled 227 comprised of 156 withdrawals/transfers, 2 active member deaths and 69 new retirements. Net gain of 217 active members.

Required employer contributions were determined by the biennial actuarial valuation that established a funding schedule with the target date to reach full funding in 2033. Total employer contributions for plan year 2022 was \$30.2 million, an increase of \$2.11 million. Total required employer contributions were distributed to unit employers based on aggregate salary data as of September 30 of prior year.

Non-employer contributions are comprised primarily of Commonwealth's COLA reimbursement for pre-1996 retirees but also includes worker's compensation offset settlements and recovery of 91A overearnings. The Commonwealth's COLA reimbursement decreases annually due to the declining population of pre-1996 retirees. Additions from worker's compensation offset settlements and recovery of 91A overearnings are variable from year to year. For the plan year 2022 non-employer contributions totaled \$127,211, a decrease of \$15,660 from prior year.

Transfers from other systems are comprised of transfers of member annuity savings accounts for service with other Massachusetts retirement systems and 3(8)(c) reimbursements of pension payments for retirees with service liabilities in other Massachusetts retirement systems. Transfers from other systems varies annually depending on an increase or a decrease of employees/retirees who changed public employers. Transfers from other systems also varies by contribution levels and length of service of individual members transferred. Transfers from other systems totaled \$2.71million, an increase of \$525,536 from the prior year.

The asset allocation of investments is well diversified among domestic and global fixed income, domestic and international equities, real estate, private debt and private equities. 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. For the plan year 2022 net investment earnings, comprised of the net change in fair value of investments and interest earned on investments minus investment expenses was a negative \$51.55 million.

### Revenues - Additions to Plan Fiduciary Net Position 2022

	2022	2021	Total \$ change	% change
<b>Contributions</b>				
Employer contributions	30,200,925	28,089,796	2,111,129	7.52%
Member contributions	9,395,142	8,788,574	606,568	6.90%
Non-employer entities	127,211	142,871	(15,660)	-10.96%
Transfer from other systems	2,713,293	2,187,757	525,536	24.02%
<b>Total Contributions</b>	<b>42,436,571</b>	<b>39,208,998</b>	<b>3,227,573</b>	<b>8.23%</b>
<b>Investment earnings</b>				
Net increase(decrease) in fair value of investments	(49,218,425)	75,508,391	(124,726,816)	-165.18%
Interest	5,593	11,469	(5,876)	-51.23%
Gross investment earnings	(49,212,832)	75,519,859	(124,732,691)	-165.17%
Less investment expenses	2,341,887	2,604,622	(262,735)	-10.09%
<b>Net Investment Earnings</b>	<b>(51,554,719)</b>	<b>72,915,237</b>	<b>(124,469,956)</b>	<b>-170.71%</b>
<b>Total Additions (Revenues)</b>	<b>(9,118,148)</b>	<b>112,124,235</b>	<b>(121,242,383)</b>	<b>-108.13%</b>

### 5 Year History – Contributions - Additions to Plan

	2022	2021	2020	2019	2018
<b>Contributions</b>					
Employer contributions	30,200,925	28,089,796	26,114,304	24,294,506	22,597,993
Member contributions	9,395,142	8,788,574	8,632,409	8,422,814	8,103,147
Non-employer entities	127,211	142,871	193,587	163,506	259,558
Transfer from other systems	2,713,293	2,187,757	1,949,877	1,959,926	2,170,184
<b>Total Contributions</b>	<b>42,436,571</b>	<b>39,208,998</b>	<b>36,890,177</b>	<b>34,840,752</b>	<b>33,130,882</b>
<b>Investment earnings</b>					
Net increase(decrease) in fair value of investments	(49,218,425)	75,508,391	44,313,890	52,262,607	-7,646,331
Interest	5,593	11,469	19,159	34,988	16,299
Gross investment earnings	(49,212,832)	75,519,859	44,333,049	52,297,595	-7,630,032
Less investment expenses	2,341,887	2,604,622	2,129,137	2,168,313	2,226,111
<b>Net Investment Earnings</b>	<b>(51,554,719)</b>	<b>72,915,237</b>	<b>42,203,912</b>	<b>50,129,282</b>	<b>-9,856,143</b>
<b>Total Additions (Revenues)</b>	<b>(9,118,148)</b>	<b>112,124,235</b>	<b>79,094,089</b>	<b>84,970,034</b>	<b>23,274,739</b>

## 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 2022 totaled \$39.14 million, a decrease of 157,235. Benefits paid totaled \$34.34 million, an increase of \$1.25 million. For plan year 2022, there were 69 new retirees and 42 deaths. For the plan year 2022, 227 members terminated from the system by either withdrawal of contributions or transfer to other systems.

Refunds to members terminating employment and withdrawing contributions totaled \$633,032, a decrease of \$92,314 from prior year. Refunds to withdrawing members include only the members' contributions and statutory interest based on service credit forfeited. Employer contributions for withdrawing members are retained by the System and pension liability for withdrawing members is terminated.

Transfers to other systems of annuity savings accounts of former members and 3(8)(c) reimbursement of benefit payments to former members retired from other retirement systems totaled \$3.37 million, a decrease of \$171,619 from prior year.

Cost of living adjustment for retirees was granted at 3% on the first \$13,000 (maximum increase of \$390).

Administrative expenses totaled \$788,434, an increase of \$15,305 from prior year.

### Expenses – Deductions to Plan Fiduciary Net Position - 2022

	2022	2021	Total \$ change	Total % change
Benefits Paid	34,344,808	33,090,814	1,253,994	3.79%
Refunds to terminated members	633,032	725,346	(92,314)	-12.73%
Transfers to other systems	3,374,525	3,546,144	(171,619)	-4.84%
Asset transfer (c. 316 of Acts 2020)	0	1,162,601	(1,162,601)	-100.00%
Administrative expenses	788,434	773,129	15,305	1.98%
<b>Total Deductions (Expenses)</b>	<b>39,140,799</b>	<b>39,298,034</b>	<b>(157,235)</b>	<b>-0.40%</b>

### 5 Year History Expenses – Deductions to Plan Fiduciary Net Position

	2022	2021	2020	2019	2018
Benefits Paid	34,344,808	33,090,814	31,618,423	29,700,339	28,249,381
Refunds to terminated members	633,032	725,346	683,575	1,271,210	538,578
Transfers to other systems	3,374,525	3,546,144	2,368,922	3,101,567	2,903,327
Asset transfer (c. 316 of Acts 2020)	0	1,162,601			
Administrative expenses	788,434	773,129	880,534	842,372	879,770
<b>Total Deductions (Expenses)</b>	<b>39,140,799</b>	<b>39,298,034</b>	<b>35,551,454</b>	<b>34,915,488</b>	<b>32,571,056</b>

## Changes to Fiduciary Net Position – Summary

Changes in fiduciary net position as of December 31, 2022 was a net decrease of \$48.25 million. Revenues decreased by \$121.12 million due to investment losses while deductions increased by \$1.01 million due to increase in benefits paid from prior year.

### Changes to Fiduciary Net Position – Summary 2022

	2022	2021	Total \$ change	% change
Total Additions (Revenues)	(9,118,148)	112,124,235	(121,242,383)	-108.13%
Total Deductions (Expenses)	39,140,799	39,298,034	(157,235)	-0.40%
<b>Net Position Change</b>	<b>(48,258,947)</b>	<b>72,826,201</b>	<b>(121,085,148)</b>	<b>-166.27%</b>

## 5 Year History - Changes to Fiduciary Net Position

	2022	2021	2020	2019	2018
Total Additions (Revenues)	(9,118,148)	112,124,235	79,094,089	84,970,034	23,274,739
Total Deductions (Expenses)	39,140,799	39,298,034	35,551,454	34,915,488	32,571,056
<b>Net Position Change</b>	<b>(48,258,947)</b>	<b>72,826,201</b>	<b>43,542,635</b>	<b>50,054,546</b>	<b>(9,296,317)</b>

## TOTAL FUND BALANCE AT FAIR VALUE

As of December 31, 2022, the Total Fund Balance at Fair Value was \$427.10 million, decrease of \$48.26 million (-10.14%) from prior year primarily due to investment losses,

### Total Fund Balance at Fair Value 2022

	2022	2021	Total \$ change	Total % change
Beginning Fund Balance	475,361,581	402,535,381	72,826,200	18.09%
<b>Ending Fund Balance</b>	<b>427,102,633</b>	<b>475,361,581</b>	<b>(48,258,948)</b>	<b>-10.15%</b>

### 5 Year History - Total Fund Balance at Fair Value

	2022	2021	2020	2019	2018
Beginning Fund Balance	475,361,581	402,535,381	358,992,749	308,938,203	318,234,520
<b>Ending Fund Balance</b>	<b>427,102,633</b>	<b>475,361,581</b>	<b>402,535,381</b>	<b>358,992,749</b>	<b>308,938,203</b>

## 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 maintains a relatively conservative asset allocation 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 is the Plan exposed to unreasonable risk levels.

In accordance with Massachusetts General Laws, Chapter 32, Section 22 (6a), the Plan performs actuarial valuations biennially and adopts a funding schedule to achieve a 100% funding level prior to the year 2040. The Board has adopted the funding schedule with a full funding target date of 2032 with the long-term target rate of investment return of 6.9%.

As of December 31, 2022, the funded ratio for the Plan was 68.2%.

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
STATEMENT OF FIDUCIARY NET POSITION  
DECEMBER 31, 2022

ASSETS

Cash	\$ 3,784,841
Investments at fair value:	
External investment pools	416,239,384
Limited partnerships	7,231,442
Total investments at fair value	<u>423,470,826</u>
Receivables:	
Members receivable, net	1,082,194
Total receivables	<u>1,082,194</u>
Lease asset, net of amortization	<u>66,498</u>
TOTAL ASSETS	<u>428,404,359</u>

LIABILITIES

Accounts payable	37
Accrued payroll	6,290
Accrued transfer	1,162,601
Accrued compensated absences	66,300
Lease liability, current	46,628
Lease liability, long-term	19,870
TOTAL LIABILITIES	<u>1,301,726</u>

NET POSITION

Restricted for pension benefits	<u>\$ 427,102,633</u>
---------------------------------	-----------------------

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

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
YEAR ENDED DECEMBER 31, 2022

ADDITIONS TO NET POSITION ATTRIBUTED TO

Contributions:	
Employer	\$ 30,200,925
Plan member	9,395,142
Nonemployer entities	127,211
Transfers from other systems	2,713,293
Total contributions	<u>42,436,571</u>
Investment earnings	
Net increase (decrease) in fair value of investments	(49,218,425)
Interest	5,593
Total investment income	(49,212,832)
Less investment expenses	(2,341,887)
Net investment earnings	(51,554,719)
TOTAL ADDITIONS	<u>(9,118,148)</u>

DEDUCTIONS TO NET POSITION ATTRIBUTED TO

Benefits paid	34,344,808
Refunds of contributions	633,032
Transfers to other systems	3,374,525
Administrative expenses	788,434
TOTAL DEDUCTIONS	<u>39,140,799</u>

NET INCREASE (DECREASE) IN NET POSITION	(48,258,947)
NET POSITION RESTRICTED FOR PENSIONS - BEGINNING	<u>475,361,580</u>
NET POSITION RESTRICTED FOR PENSIONS - ENDING	<u>\$ 427,102,633</u>

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

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

NOTE 1 - DESCRIPTION OF PLAN

The following description of the Hampshire County Retirement System, a Massachusetts regional public employee pension plan, is provided for general information purposes only. Participants should refer to Chapter 32 of the Massachusetts General Laws for a more detailed description of the pension plan provisions.

General

The Hampshire County Retirement System (the Plan) is a cost-sharing, multiple-employer, defined benefit pension plan maintained to provide retirement, disability, and death benefits to all member unit employees and beneficiaries deemed eligible by the Retirement Board, with the exception of the school department employees who serve in a teaching capacity. The Plan has 37 participating employers. The Plan was established and is governed in accordance with Chapter 32 and Chapter 34B, Section 19 of the Massachusetts General Laws (M.G.L), and is further regulated by the Code of Massachusetts Regulations 840 CMR 1.00-27.00: Public Employee Retirement Administration (PERAC).

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 who shall be a member of the regional retirement board advisory council and is elected 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.

Plan Amendments

The Plan did not adopt any significant plan amendments during 2022.

Plan Membership

Participation in the plan is required for nearly all employees who are regularly employed on a full-time basis. 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.

At December 31, 2022, Plan membership consisted of the following:

Group	Inactive members receiving benefits	Inactive members entitled to benefits but not yet receiving benefits		Active Members	Total
Group 1	1,186	731		1,854	3,771
Group 2 & 4	258	113		374	745
	1,444	844		2,228	4,516

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

NOTE 1 - DESCRIPTION OF PLAN (CONTINUED)

Benefits Provided

Pursuant to M.G.L. Chapter 32, members are eligible to receive benefits once they have met one of the conditions below:

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

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

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

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

The annual amount of a member's retirement allowance is calculated as the member's highest 3-year (5-year for members hired after April 2, 2012) average annual rate of regular compensation multiplied by the member's creditable service and multiplied by a benefit rate. The benefit rate is based upon a member's age at retirement and group classification. The annual retirement allowance may not exceed 80% of the member's highest 3-year (or 5-year) average annual rate of regular compensation.

An annual cost of living adjustment may be voted on and granted by the Retirement Board. The amount of increase will be based upon the Consumer Price Index, limited to a maximum of 3% on the base amount of the first \$13,000 of a member's benefit.

Contributions

The contributions of plan members and participating employers are governed by Chapter 32 of M.G.L. Member contribution rates vary depending on the most recent date of membership as follows:

Prior to 1975:	5% of compensation
1975 - 1983:	7% of compensation
1984 - 6/30/96:	8% of compensation
7/1/96 - present:	9% of compensation
1979 to present:	an additional 2% of compensation in excess of \$30,000
Group 1 members hired on or after April 2, 2012:	6% of compensation with 30 or more years of creditable service

Participating employer contributions are set by annual appropriations as determined by the Plan's actuary. For the year ended December 31, 2022, employers were required to contribute \$30,200,925. In addition to member and employer contributions, the Commonwealth of Massachusetts currently reimburses the Plan for cost of living adjustments granted to members after 1981 and prior to July 1, 1998.

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

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

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.

Change in Accounting Principle

*Adoption of New Accounting Standards* – Effective January 1, 2022, the Plan adopted GASB Statement No. 87 *Leases*. The standard was issued to establish a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset, and to disclose key information about leasing arrangements. The Plan's adoption of *Leases* resulted in the recognition of a lease asset and liability on the statement of fiduciary net position. There was no effect on the change in net position for the current period, or prior periods, as a result of the change.

NOTE 3 - RISKS AND UNCERTAINTIES

Nature of Operations

The operations of the Plan are subject to the M.G.L and to the administrative directives, rules and regulations of state regulatory agencies, including, but not limited to the Public Employee Retirement Administration Commission (PERAC). Such laws and 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.

Deposit and Investment Risk

*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, 2022, the Plan held deposits of \$4,050,327 at a local bank. The Federal Deposit Insurance Corporation (FDIC) insures \$250,000 of that balance. The remaining balance was collateralized by an irrevocable standby letter of credit.

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

NOTE 3 - RISKS AND UNCERTAINTIES (CONTINUED)

*Investments*

The Plan invests in various financial instruments. Financial instruments are exposed to various risks such as credit risk, custodial credit risk, concentrations of credit risk, interest rate risk, and foreign currency risk. The Plan does not have an investment policy to manage these risks. Due to the level of risk associated with certain financial instruments, it is at least reasonably possible that changes in the values of financial instruments will occur in the near term and that such changes could materially affect the amounts reported in the statement of fiduciary net position.

a). Custodial Credit Risk. For an investment, custodial credit risk is the risk that, in the event of the failure of a counterparty, the Plan will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Plan has \$0 in unit investment trusts that are held by the trust's agent.

b). Credit Risk. Credit risk exists when there is a possibility the issuer or other counterparty to an investment may be unable to fulfill its obligations. The Plan's investments as of December 31, 2022, if rated, are presented below using the Standard and Poor's rating scale:

Investment Type	Fair Value	AAA	AA	A	BBB	BB	B	Not Rated
External Investment Pools	\$416,239,384	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$416,239,384
Total	\$416,239,384	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$416,239,384

c). Concentration of Credit Risk. The Plan does not have investments in any one issuer that represent 5% or more of total investments, excluding external investment pools.

d). Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Plan's exposure to interest rate risk is presented below at December 31, 2022:

Investment Type	Fair Value	< 1 yr	1 to 5 yrs	6 to 10 yrs	> 10 yrs	Unknown
External Investment Pools	\$ 95,820,213	\$ -	\$ -	\$ -	\$ -	\$ 95,820,213
Total	\$ 95,820,213	\$ -	\$ -	\$ -	\$ -	\$ 95,820,213

e). Foreign Currency Risk. Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The Plan's exposure to foreign currency risk is presented below at December 31, 2022:

Investment:	
PRIM International Equity (various currencies)	\$ 51,320,844
Total	<u>\$ 51,320,844</u>

Estimates

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.

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

NOTE 4 - INVESTMENTS

*Investment policy.* The provisions of M.G.L 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 policy guidelines are reviewed annually by the Board after consideration of the advice and recommendation of the investment consultant. All modifications of investment policy guidelines are in writing and signed by each Board member. The following was the Retirement Board's adopted asset allocation policy as of December 31, 2022:

<b>Asset Class</b>	<b>Target Allocation</b>
Domestic Stocks - Large	15.5%
Domestic Stocks - Small/Mid	4.5%
International Stocks	16.5%
Emerging Markets Stocks	6.0%
Domestic Bonds	20.0%
Opportunistic Fixed Income	6.0%
Emerging Markets Debt (Local Currency)	6.0%
Real Estate (Equity)	12.0%
Alternative Investments	11.5%
Cash	2.0%
<b>Total</b>	<b>100.0%</b>

There were no significant investment policy changes during the reporting period.

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

NOTE 4 - INVESTMENTS (CONTINUED)

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.

*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:

Investment Type	Fair Value	December 31, 2022		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant un- observable inputs (Level 3)
Investments measured by input level:				
Limited partnerships	\$ 7,231,442	\$ -	\$ -	\$ 7,231,442
Total investments by input level	7,231,442	-	-	7,231,442
Investments measured by NAV:				
External investment pools	416,239,384	n/a	n/a	n/a
Total investments by NAV	416,239,384	-	-	-
Total investments	\$ 423,470,826	\$ -	\$ -	\$ 7,231,442

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

NOTE 4 - INVESTMENTS (CONTINUED)

The following table presents the unfunded commitments, redemption terms, and fair value of the investments measured at NAV:

	Investments measured at NAV			
	Fair Value	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
External investment pools	\$ 416,239,384	\$ 27,183,554	Monthly	n/a
Total	<u>\$ 416,239,384</u>	<u>\$ 27,183,554</u>		

External Investment Pools. This type includes investment in the Pension Reserves Investment Trust (PRIT) fund that invests in 1). private equity and alternative debt, with managers representing various investment styles and concentrating on a variety of industries and locations 2). opportunities that offer long-term growth of capital, primarily through a diversified portfolio of non-US equity securities 3). domestic high quality, and substantially leased properties typically in the following property types: apartment, office, retail, industrial and R& D office 4). bonds, short-term fixed income, long duration treasury, and inflation-linked bonds. The PRIT fund is an external investment pool, as defined by GASB, and it is not registered with the Securities and Exchange Commission, but is subject to oversight by the Pension Reserves Investment Management Board (the PRIM Board). The PRIT fund issues separate audited financial statements that may be obtained on their website. The fair value of the position in the pool is the same as the value of pool shares.

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

PRIM Domestic Equity	\$ 99,901,537
PRIM Emerging Markets	26,689,113
PRIM International Equity	51,320,844
PRIM Value-Added Fixed Income	49,681,016
PRIM Core Fixed Income	46,139,198
PRIM Core Real Estate	76,777,125

*Rate of return.* For the year ended December 31, 2022, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was -10.78%. This money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changed amounts actually invested.

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, 2022.

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

**NOTE 6 – LONG-TERM LIABILITIES**

The following is a summary of changes in long-term liabilities:

	Balance 1/1/22	Additions	Deletions	Balance 12/31/2022	Current Portion
Accrued Vacation	\$ 18,926	\$ 27,867	\$ 24,258	\$ 22,535	\$ 22,535
Accrued Sick	43,257	3,959	3,451	43,765	43,765
Premise Lease	-	66,498	-	66,498	46,628
Totals	<u>\$ 62,183</u>	<u>\$ 98,324</u>	<u>\$ 27,709</u>	<u>\$ 132,798</u>	<u>\$ 112,928</u>

**NOTE 7 - NET PENSION LIABILITY OF THE PARTICIPATING EMPLOYERS**

The net pension liability is the actuarial total liability less the plan fiduciary net position. The components of the net pension liability of the participating employers at December 31, 2022, were as follows:

	2022
Total pension liability	<u>\$ 627,371,370</u>
Plan fiduciary net position	<u>427,102,633</u>
Employer's net pension liability (asset)	<u>\$ 200,268,737</u>

Plan fiduciary net position as a % of total pension liability 68.1%

*Actuarial assumptions.* The total pension liability as of the December 31, 2022 measurement date was determined by an actuarial valuation as of January 1, 2022, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.4 %
Salary increases	Group 1: 6% - 4.25%, based on service Group 4: 7% - 4.75%, based on service
Investment rate of return	6.9% of pension plan investment, net of expense, including inflation

Mortality rates were based on the RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2020. For disabled lives, the mortality rates were based on the RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2020.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

HAMPSHIRE COUNTY RETIREMENT SYSTEM  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2022

**NOTE 7 - NET PENSION LIABILITY OF THE PARTICIPATING EMPLOYERS (CONTINUED)**

Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2022 (see the discussion of the pension plan's investment policy) are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Cash	2.0%	0.00%
Dometic Equity	22.0%	4.50%
Non-US Developed Equity	11.0%	4.30%
Emerging Equity	6.0%	7.00%
Private Equity	18.0%	7.60%
Core Bonds	11.0%	2.10%
Value Add Fixed Income - Public	12.0%	5.20%
Real Estate	18.0%	3.10%
Total	100.0%	

*Discount rate.* The discount rate used to measure the total pension liability is 6.9%. The discount rate at the Plan's prior fiscal year end was 6.9%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from participating employers will be made in accordance with Sections 22D and 22F of Chapter 32 of the Massachusetts General Laws. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The municipal bond rate used was 3.72%, based on the December 2022 Bond Buyer Index as published by the Federal Reserve.

*Sensitivity of the net pension liability to changes in the discount rate.* The following presents the net pension liability of the participating employers calculated using the discount rate of 6.9%, as well as what the participating employers' net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.9%) or 1-percentage-point higher (7.9%) than the current rate:

	1% Decrease (5.9%)	Current Discount Rate (6.9%)	1% Increase (7.9%)
Employer's net pension liability (asset)	\$ 270,720,268	\$ 200,268,737	\$ 138,052,420

**HAMPSHIRE COUNTY RETIREMENT SYSTEM**  
**NOTES TO FINANCIAL STATEMENTS**  
**DECEMBER 31, 2022**

**NOTE 8 – LEGALLY REQUIRED FUNDS**

The balances in the Plan's legally required funds per M.G.L. Chapter 32, Section 22 at December 31, 2022:

	<u>2022</u>	<u>Purpose</u>
Annuity Savings Fund	\$ 88,445,407	Active members' contribution balance
Special Fund for Military Service Credit	53,828	Members' contribution while on military leave
Annuity Reserve Fund	29,428,832	Retired members' contribution account
Pension Fund	5,758,898	To fund current pension benefits
Pension Reserve Fund	<u>303,415,668</u>	To fund future pension benefits
	<u>\$ 427,102,633</u>	

**NOTE 9 – COMMITMENTS**

As of December 31, 2022, the Plan had unfunded capital commitments on its limited partnerships totaling \$3,132,427 and unfunded capital commitments on its external investment pools totaling \$27,183,554.

**NOTE 10 - TAX STATUS**

The Plan is a qualified plan under the Internal Revenue Code of 1986, as amended and, therefore, is exempt from federal income taxes. The Plan administrator believes the Plan is designed and is currently being operated in substantial compliance with the applicable requirements of the Internal Revenues Code and will retain its status as a qualified plan.

**NOTE 11 – LEASE COMMITMENTS**

The Plan has entered into a lease commitment for space. At December 31, 2022, the total lease asset was \$217,604 and accumulated amortization was \$151,106. The annual lease / rent expense for the leased facilities was \$46,866 for the year ended December 31, 2022. The lease expires in 2024. The discount rate used in the valuation of the lease asset and liability was 2.60%.

The future minimum lease payments on the above lease for the year ending December 31, 2022 are as follows:

2023	\$ 47,665
2024	20,000
2025	-
2026	-
2027	-
Less: Imputed Interest	<u>(1,167)</u>
Total	<u>\$ 66,498</u>

**NOTE 12 - MANAGEMENT REVIEW**

Management has reviewed subsequent events as of December 18, 2023, 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, 2022**

	2022	2021	2020	2019	2018
<b>Total pension liability</b>					
Service cost	\$ 15,923,710	\$ 14,760,890	\$ 14,261,729	\$ 13,282,271	\$ 12,771,414
Interest	41,712,622	41,320,681	39,817,266	38,884,736	37,396,643
Changes of benefit terms	-	(13,562,414)	-	-	-
Differences between expected and actual experience	-	5,606,152	-	(6,620,290)	-
Changes of assumptions	-	11,289,119	-	20,488,858	-
Benefit payments, including refunds	(35,418,801)	(34,822,644)	(32,280,113)	(31,865,798)	(29,543,223)
<b>Net change in total pension liability</b>	<b>\$ 22,217,531</b>	<b>\$ 24,591,784</b>	<b>\$ 21,798,882</b>	<b>\$ 34,169,777</b>	<b>\$ 20,624,834</b>
<b>Total pension liability - beginning</b>	<b>605,153,839</b>	<b>580,562,055</b>	<b>558,763,173</b>	<b>524,593,396</b>	<b>503,968,562</b>
<b>Total pension liability - ending</b>	<b>\$ 627,371,370</b>	<b>\$ 605,153,839</b>	<b>\$ 580,562,055</b>	<b>\$ 558,763,173</b>	<b>\$ 524,593,396</b>
<b>Fiduciary net position</b>					
Contributions - employer	\$ 30,200,925	\$ 28,089,796	\$ 26,114,304	\$ 24,294,506	\$ 22,597,993
Contributions - member	9,395,142	8,788,574	8,632,409	8,422,814	8,103,147
Contributions - nonemployer	127,211	142,871	193,587	163,506	259,558
Transfers from other systems	2,713,293	2,187,757	1,949,877	1,959,926	2,170,184
Net investment income	(51,554,719)	72,915,237	42,203,912	50,129,282	(9,856,143)
Benefits paid	(34,344,808)	(33,090,814)	(31,618,423)	(29,700,339)	(28,249,381)
Refunds of contributions	(633,032)	(725,346)	(683,575)	(1,271,210)	(538,578)
Transfers to other systems	(3,374,525)	(4,708,745)	(2,368,922)	(3,101,567)	(2,903,327)
Administrative expenses	(788,434)	(773,129)	(880,534)	(842,372)	(879,770)
<b>Net change in fiduciary net position</b>	<b>\$ (48,258,947)</b>	<b>\$ 72,826,201</b>	<b>\$ 43,542,635</b>	<b>\$ 50,054,546</b>	<b>\$ (9,296,317)</b>
<b>Fiduciary net position - beginning</b>	<b>475,361,580</b>	<b>402,535,380</b>	<b>358,992,746</b>	<b>308,938,200</b>	<b>318,234,520</b>
<b>Fiduciary net position - ending</b>	<b>\$ 427,102,633</b>	<b>\$ 475,361,581</b>	<b>\$ 402,535,381</b>	<b>\$ 358,992,746</b>	<b>\$ 308,938,203</b>
<b>Net pension liability (asset) - ending</b>	<b>\$ 200,268,737</b>	<b>\$ 129,792,258</b>	<b>\$ 178,026,674</b>	<b>\$ 199,770,427</b>	<b>\$ 215,655,193</b>

	2017	2016	2015	2014	2013
<b>Total pension liability</b>					
Service cost	\$ 11,029,438	\$ 10,605,229	\$ 10,269,070	\$ 9,850,427	*
Interest	36,888,260	34,627,268	34,842,587	33,371,689	*
Changes of benefit terms	-	-	-	-	*
Differences between expected and actual experience	(434,874)	(4,348,736)	-	-	*
Changes of assumptions	(9,996,849)	16,610,092	-	-	*
Benefit payments, including refunds	(28,662,890)	(26,880,118)	(25,512,793)	(24,412,587)	*
<b>Net change in total pension liability</b>	<b>\$ 8,823,085</b>	<b>\$ 30,613,735</b>	<b>\$ 19,598,864</b>	<b>\$ 18,809,529</b>	<b>*</b>
<b>Total pension liability - beginning</b>	<b>495,145,477</b>	<b>464,531,742</b>	<b>444,932,878</b>	<b>426,123,349</b>	<b>*</b>
<b>Total pension liability - ending</b>	<b>\$ 503,968,562</b>	<b>\$ 495,145,477</b>	<b>\$ 464,531,742</b>	<b>\$ 444,932,878</b>	<b>*</b>
<b>Fiduciary net position</b>					
Contributions - employer	\$ 21,331,218	\$ 19,693,436	\$ 18,626,735	\$ 17,436,197	*
Contributions - member	7,792,063	7,446,905	7,322,347	7,177,431	*
Contributions - nonemployer	124,318	331,313	135,964	227,088	*
Transfers from other systems	1,618,180	1,268,799	1,247,378	1,067,545	*
Net investment income	43,357,379	19,035,979	(1,104,522)	11,959,239	*
Benefits paid	(26,616,377)	(24,973,457)	(23,410,439)	(22,164,495)	*
Refunds of contributions	(911,881)	(741,840)	(946,870)	(801,315)	*
Transfers to other systems	(2,979,750)	(2,787,216)	(2,561,166)	(2,382,307)	*
Administrative expenses	(814,052)	(800,877)	(835,479)	(754,997)	*
<b>Net change in fiduciary net position</b>	<b>\$ 42,901,098</b>	<b>\$ 18,473,042</b>	<b>\$ (1,526,052)</b>	<b>\$ 11,764,386</b>	<b>*</b>
<b>Fiduciary net position - beginning</b>	<b>275,333,422</b>	<b>256,860,381</b>	<b>258,386,433</b>	<b>246,622,046</b>	<b>*</b>
<b>Fiduciary net position - ending</b>	<b>\$ 318,234,520</b>	<b>\$ 275,333,423</b>	<b>\$ 256,860,381</b>	<b>\$ 258,386,432</b>	<b>*</b>
<b>Net pension liability (asset) - ending</b>	<b>\$ 185,734,042</b>	<b>\$ 219,812,054</b>	<b>\$ 207,671,361</b>	<b>\$ 186,546,446</b>	<b>*</b>

\* – 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, 2022**

	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
Total pension liability	\$ 627,371,370	\$ 605,153,839	\$ 580,562,055	\$ 558,763,173	\$ 524,593,396
Fiduciary net position	427,102,633	475,361,581	402,535,381	358,992,749	308,938,203
Net pension liability (asset)	<u>\$ 200,268,737</u>	<u>\$ 129,792,258</u>	<u>\$ 178,026,674</u>	<u>\$ 199,770,424</u>	<u>\$ 215,655,193</u>

Fiduciary net position as a percentage of the total pension liability	68.1%	78.6%	69.3%	64.2%	58.9%
---	-------	-------	-------	-------	-------

Covered payroll	\$ 96,766,143	\$ 90,501,248	\$ 87,719,692	\$ 85,426,619	\$ 84,192,999
-----------------	---------------	---------------	---------------	---------------	---------------

Net pension liability (asset) as a percentage of covered payroll	207.0%	143.4%	202.9%	233.9%	256.1%
--	--------	--------	--------	--------	--------

	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Total pension liability	\$ 503,968,562	\$ 495,145,477	\$ 464,531,742	\$ 444,932,878	*
Fiduciary net position	318,234,520	275,333,423	256,860,381	258,386,432	*
Net pension liability (asset)	<u>\$ 185,734,042</u>	<u>\$ 219,812,054</u>	<u>\$ 207,671,361</u>	<u>\$ 186,546,446</u>	<u>*</u>

Fiduciary net position as a percentage of the total pension liability	63.1%	55.6%	55.3%	58.1%	*
---	-------	-------	-------	-------	---

Covered payroll	\$ 76,767,518	\$ 78,914,925	\$ 80,914,245	\$ 77,139,934	*
-----------------	---------------	---------------	---------------	---------------	---

Net pension liability (asset) as a percentage of covered payroll	241.9%	278.5%	256.7%	241.8%	*
--	--------	--------	--------	--------	---

\* – 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, 2022**

	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
Actuarially determined contribution	\$ 30,200,925	\$ 28,089,796	\$ 26,114,304	\$ 24,294,506	\$ 22,597,993
Contributions in relation to the actuarially determined contribution	30,200,925	28,089,796	26,114,304	24,294,506	22,597,993
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 96,766,143	\$ 90,501,248	\$ 87,719,692	\$ 85,426,619	\$ 84,192,999
Contributions as a percentage of covered payroll	31.2%	31.0%	29.8%	28.4%	26.8%

	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Actuarially determined contribution	\$ 21,331,218	\$ 19,693,436	\$ 18,620,753	\$ 17,349,877	*
Contributions in relation to the actuarially determined contribution	21,331,218	19,693,436	18,620,753	17,349,877	*
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>*</u>
Covered payroll	\$ 76,767,518	\$ 78,914,925	\$ 80,914,245	\$ 79,029,000	*
Contributions as a percentage of covered payroll	27.8%	25.0%	23.0%	22.0%	*

\* – 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, 2022

	2022	2021	2020	2019	2018
Annual money-weighted rate of return, net of investment expenses	-10.78%	18.36%	11.64%	16.30%	-3.02%

	2017	2016	2015	2014	2013
Annual money-weighted rate of return, net of investment expenses	15.77%	7.43%	-0.68%	4.84%	*

\* – 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, 2022

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

The actuarially determined contributions in the schedule of employers' contributions were calculated as of July 1 of the fiscal year in which contributions were reported. The following actuarial methods and assumptions were used to determine contributions reported in that schedule:

Actuarial cost method:	Entry Age Normal
Amortization method:	Increasing dollar amount at 4.00%
Remaining amortization period:	11 years
Asset valuation method:	<p>The Actuarial Value of Assets is the market value of assets as of the valuation date reduced by the sum of:</p> <ul style="list-style-type: none"><li>a). 80% of gains &amp; losses of the prior year,</li><li>b). 60% of gains &amp; losses of the second prior year,</li><li>c). 40% of gains &amp; losses of the third prior year,</li><li>d). 20% of gains &amp; losses of the fourth prior year.</li></ul> <p>Investment gains and losses are determined by the excess or deficiency of the expected return over the actual return on the market value. The actuarial valuation of assets is further constrained to be not less than 90% or more than 110% of market value.</p>
Inflation:	2.4% per year
Salary increases:	Group 1: 6% - 4.25%, based on service Group 4: 7% - 4.75%, based on service
Payroll growth:	3.25% per year
Investment rate of return:	6.9%, net of pension plan investment expense including inflation

**NOTE 2 – FACTORS THAT SIGNIFICANTLY AFFECT TRENDS IN THE AMOUNTS REPORTED ON THE SCHEDULES**

All of the actuarial assumptions and methods used in these disclosures are the same as the last measurement date.

All benefit provisions remained the same from the prior measurement date.