MASSACHUSETTS HOUSING FINANCE AGENCY OPEB TRUST

FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTARY INFORMATION

FOR THE PERIOD JULY 1, 2022 THROUGH DECEMBER 31, 2022

(With Report of the Independent Auditor)



MASSACHUSETTS HOUSING FINANCE AGENCY OPEB TRUST FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTARY INFORMATION FOR THE PERIOD JULY 1, 2022 THROUGH DECEMBER 31, 2022

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Independent Auditors' Report

OPEB Committee Members Massachusetts Housing Finance Agency OPEB Trust

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the Massachusetts Housing Finance Agency OPEB Trust (the Trust), as of and for the six-month period 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 fiduciary net position of the Trust as of December 31, 2022, and the change in fiduciary net position for the period July 1, 2022, through December 31, 2022 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 (GAAS). 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 the Trust 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.

Emphasis of Matter - Change of Fiscal Year-End

In June of 2022, the Trust adopted a change in the date of its fiscal year-end from June 30 to December 31. As such, these financial statements are presented for the six-month period of July 1, 2022, through December 31, 2022. Our opinion is not modified with respect to this matter.

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 the Trust'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 GAAS 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 GAAS 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 the Trust'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 the Trust'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 and certain other postemployment benefits information be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, 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 basic financial statements, and other knowledge we obtained during our audit of the basic 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.

CliftonLarsonAllen LLP

Clifton Larson Allen LLP

Boston, Massachusetts August 4, 2023

Massachusetts Housing Finance Agency OPEB Trust

Annual Financial Report

Prepared by the Office of the Financial Director Rachel C. Madden, Financial Director Stephen E. Vickery, Comptroller

MANAGEMENT'S DISCUSSION AND ANALYSIS

Overview of the Financial Statements

The annual financial report of the Massachusetts Housing Finance Agency OPEB Trust ("Trust") consists of four sections: (1) management's discussion and analysis; (2) the financial statements; (3) notes to the financial statements; and (4) required supplementary information ("RSI").

The financial statements, notes to the financial statements and RSI were prepared in conformity with the accounting principles generally accepted in the Unites States of America ("GAAP") using the accounting standards promulgated by the Governmental Accounting Standards Board ("GASB").

Management's Discussion and Analysis

The following is an unaudited narrative overview of the results of the Trust's operations for the six-month period ended December 31, 2022. Readers are encouraged to consider the information presented in this discussion and analysis in conjunction with the financial statements, notes to the financial statements and the RSI, all of which follow this narrative overview.

This discussion and analysis is designed (1) to assist the reader in focusing on significant financial matters and activities and (2) to identify any significant changes in the Trust's financial status. The primary accounting policies followed by the Trust are outlined in Note B to the financial statements and are not repeated herein.

As discussed in Note A to the financial statements. in April 2022, the Trust Committee voted to recommend that the Members of the Agency (the "Board") change the fiscal year end of the Trust from June 30 to December 31. The Board approved the change in June 2022, and therefore the reporting period for these financial statements is for the six-month period of July 1, 2022 through December 31, 2022.

As discussed in Note C to the financial statements, the Trust has contracted with Meketa Fiduciary Management, LLC ("Meketa") to perform investment advisory and management services. Meketa is responsible for the day to-day management and control of the investable assets of the Trust, in line with the Massachusetts Housing Finance Agency OPEB Trust's Investment Policy ("Investment Policy"), as approved on June 23, 2022. Meketa is currently working to align the Trust's investment portfolio with the Target Allocation included in the Investment Policy, including investing in three new asset classes (Private Equity, Real Estate, and Infrastructure).

The Financial Statements

The two basic financial statements provide different views of the Trust.

- The statement of fiduciary net position provides information about the Trust's assets, liabilities, deferred outflows and inflows of resources, if any, and the resulting fiduciary net position restricted for other postemployment benefits at December 31, 2022. It also provides information about the fair value and composition of fiduciary net position.
- The statement of changes in fiduciary net position includes information about the additions to, deductions from, and net increase (or decrease) in fiduciary net position for the six-month period.

The Notes to Financial Statements

- The Notes to Financial Statements ("notes") provide information that is useful to the reader in understanding the Trust's financial statements, including a description of the Trust and the OPEB substantive plan it serves, as well as its accounting methods and policies.
- The notes include details of the Trust's investments and cash equivalents and their related risks.
- The notes also provide information on contributions to the Trust and its funded status, as well as
 information taken from the most recent actuarial valuation, including the methods and assumptions
 used.

Required Supplementary Information

The Required Supplementary Information ("RSI") is presented in conformity with GAAP using the accounting standards promulgated by GASB. The three schedules provide additional information about the Trust's funding progress, employer contributions, and investment returns.

Background

The Massachusetts Housing Finance Agency OPEB substantive plan (the plan understood by the employer and the plan participants – "substantive plan") is a single-employer contributory defined benefit healthcare plan, which is open to all regular full-time and certain regular part-time employees of the Massachusetts Housing Finance Agency ("MassHousing" or the "Agency"). The substantive plan also provides \$5,000 of life insurance coverage to all eligible retirees and their beneficiaries. Benefit provisions and all other requirements are established by MassHousing and Chapter 32B of the General Laws of the Commonwealth of Massachusetts. Benefits vest after ten years of service, either at MassHousing alone or in combination with certain other Massachusetts public employers.

On June 26, 2008, MassHousing established the Trust as an irrevocable trust dedicated solely to administering the investments of and providing the benefits under the terms of the substantive plan. Provision is made in the Massachusetts retirement law for the withholding of monthly premiums for continued coverage in a group health and life insurance program at the time of retirement. Continuation of insurance coverage for retirees is an optional benefit provided by governmental employers.

A committee comprised of key staff members of the Agency (the "OPEB Committee"), one member designated by the Agency's Board and one member designated by the Agency's Executive Director, administers the Trust.

Since inception of the Trust through December 31, 2022, the Agency has transferred \$39.7 million from its Working Capital Fund to the Trust.

As of December 31, 2022, the substantive plan was partially funded. The Total OPEB liability for benefits was \$42.4 million as of that date and the plan fiduciary net position was \$42.0 million, resulting in a Net OPEB liability of \$308 thousand and a funded ratio of 99.3 percent.

Financial Markets

The Trust relies on its ability to gain orderly access to financial markets to invest its assets. The Trust's assets and the long-term investment yield earned on investments are expected to be used to finance the payment of benefits. While the Trust believes that the financial impact of recent market events have not had a material adverse impact on its assets, no assurance can be given that future events will not have an adverse impact on the Trust's assets or its ability to access financial markets or to obtain financial products.

Summarized Financial Information – Statements of Fiduciary Net Position (in thousands of dollars)

The table below represents summarized comparative statements of fiduciary net position at December 31, 2022 and June 30, 2022, which were derived from the respective audited statements of fiduciary net position:

Statements of Fiduciary Net Position

December 31, 2022 and June 30, 2022 (in thousands of dollars)

	Change from 6/30/22						
	Decembe	er 31, 2022		\$	%	June	30, 2022
Assets							
Cash and cash equivalents	\$	88	\$	(12)	-12.0%	\$	100
Investments							
Bond mutual funds		13,549		(363)	-2.6%		13,912
Equity mutual funds		29,152		416	1.4%		28,736
Total investments		42,701		53	0.1%		42,648
Total assets		42,789		41	0.1%		42,748
Liabilities							
Accounts payable		746		66	9.7%		680
Fiduciary net position restricted for other							
postemployment benefits	\$	42,043	\$	(25)	-0.1%	\$	42,068

Discussion of Fiduciary Net Position

Assets

Cash and Cash Equivalents

The cash and cash equivalents balance was \$88 thousand at December 31, 2022 and \$100 thousand at June 30, 2022. The December 31, 2022 balances in cash and cash equivalents decreased by \$12 thousand from June 30, 2022, which was the result of \$894 thousand of net purchases of mutual fund investments and \$685 thousand in payments of expenses and fees, partially offset by \$896 thousand of net investment income (excluding net appreciation) and the Trust receiving \$671 thousand from MassHousing.

Investments

The Trust's investments are invested in Vanguard Mutual Funds. The investments balances were \$42.7 million at December 31, 2022 and \$42.6 million at June 30, 2022. The \$53 thousand increase in investments from June 30, 2022 to December 31, 2022 was primarily the result of a reinvestment of \$894 thousand of dividend income and a net gain on the sale of investments of \$39 thousand, partially offset by a \$880 thousand decrease in the fair market value of investments

Liabilities

Accounts Payable

The accounts payable balances represent the following accrued expenses: healthcare premiums, investment fees, actuary fees, and audit expenses for the audit of the Trust's financial statements.

Net Position Restricted for Other Postemployment Benefits

The Trust's fiduciary net position restricted for other postemployment benefits consisted primarily of Vanguard Mutual Funds at December 31, 2022 and June 30, 2022, with balances of \$42.0 million and \$42.1 million, respectively. The \$25 thousand decrease from June 30, 2022 to December 31, 2022 was primarily the result of an \$880 thousand decrease in the fair market value of investments, \$685 thousand in payments of expenses and fees, and a \$66 thousand increase in accounts payable, partially offset by \$896 thousand of net investment income (excluding net appreciation), employer contributions (excluding the implicit subsidy) of \$671 thousand, and a net gain on the sale of investments of \$39 thousand.

Summarized Financial Information – Statements of Changes in Fiduciary Net Position (in thousands of dollars)

The table below represents summarized comparative statements of changes in fiduciary net position for the six-months ended December 31,2022 and the twelve-months ended June 30, 2022, which were derived from the respective audited statements of changes in net position:

Discussion of Changes in Fiduciary Net Position Restricted for Other Postemployment Benefits

The changes in fiduciary net position for the six-months ended December 31,2022 and the twelve-months ended June 30,2022 were the result of several major items that positively or negatively affected the change in net position restricted for other postemployment benefits, as described below:

	Change from 6/30/22						
	12/3	1/2022 (1)		\$	%	6/30	/2022 ⁽²⁾
Additions							
Contributions							
Employer contributions	\$	817	\$	(718)	-46.8%	\$	1,535
Net investment income		_					_
Interest and dividends		896		(427)	-32.3%		1,323
Gain on the sale of							
investments		39		(179)	-82.1%		218
Net (depreciation) in fair value							
of investments		(880)		8,474	-90.6%		(9,354)
Total investment income (loss)		55		7,868	-100.7%		(7,813)
Less investment expense		24		(1)	-4.0%		25
Net investment income (loss)		31		7,869	-100.4%		(7,838)
Total additions (deductions)		848		7,151	-113.5%		(6,303)
Deductions							
Benefits		836		(706)	-45.8%		1,542
Administrative expenses		37		2	5.7%		35
Total deductions		873		(704)	-44.6%		1,577
Net (decrease) Net position restricted for		(25)		7,855	-99.7%		(7,880)
other postemployment benefits							
Beginning of fiscal period		42,068		(7,880)	-15.8%		49,948
End of fiscal period	\$	42,043	\$	(25)	-0.1%	\$	42,068

⁽¹⁾ Data represents the six-month period, July 1, 2022 through December 31, 2022.

⁽²⁾ Data represents the twelve-month period, July 1, 2021 through June 30, 2022.

Employer Contributions

The Actuarial Determined Contributions ("ADC") for the six-months ended December 31, 2022 and for the twelve-months ended June 30, 2022 were the result of the actuarial accrued liability per the actuarial valuation dated 1/1/21. The ADC includes an implicit subsidy of \$146 thousand for the six-months ended December 31, 2022 and \$253 thousand for the twelve-months ended June 30, 2022, resulting from a uniform healthcare insurance premium rate being applied to both active and retired participants.

MassHousing is required to contribute approximately 80% of the basic cost of group health insurance for retirees (and, in some cases, dependents) who retired after January 31, 2010, 85% for those who retired after July 1, 1994 and before February 1, 2010 and 90% for those retirees who retired prior to July 2, 1994; the remaining cost is withheld from the retiree's or beneficiary's monthly pension benefit, which is remitted directly to the group insurance commission, and is not reflected in these financial statements. Active and Inactive Plan Members are not required to contribute to the plan.

Net Investment Income

Net Investment Income for the six-month period totaled \$31 thousand, which includes interest and dividends of \$896 thousand and a net gain on the sale of investments of \$39 thousand, partially offset by a net decrease in the fair value of investments of \$880 thousand and investment fees of \$24 thousand.

Benefits Expense

Benefits expense for the six-month period totaled \$836 thousand, which includes an implicit subsidy of \$146 thousand.

Administrative Expenses

Administrative expenses for the six-month period totaled \$37 thousand, which is comprised of \$25 thousand of audit fees and \$12 thousand of actuarial fees. MassHousing does not allocate to the Trust the cost of any of the administrative services it provides to the Trust.

Request for Information

This financial report is designed to provide a general overview of the Trust's finances for all those with an interest in its finances. Questions concerning any of the information provided in this report or requests for additional information should be addressed to:

MassHousing Office of the Financial Director One Beacon Street Boston, MA 02108-3106

Massachusetts Housing Finance Agency OPEB Trust

Statement of Fiduciary Net Position December 31, 2022

In thousands of dollars

	December 31, 2022		
Assets			
Cash and cash equivalents	\$	88	
Investments			
Bond mutual funds		13,549	
Equity mutual funds		29,152	
Total investments	42,701		
Total assets		42,789	
Liabilities			
Accounts payable - administrative expenses		57	
Accounts payable - insurance premiums		689	
Total Accounts Payable	-	746	
Fiduciary net position restricted for other			
postemployment benefits	\$	42,043	

Massachusetts Housing Finance Agency OPEB Trust

Statement of Changes in Fiduciary Net Position For the six-months ended December 31, 2022

In thousands of dollars

For the six-months ended December 31, 2022

	Decem	001 01, 2022
Additions		
Contributions		
Employer contributions	\$	817
Net investment income		
Interest and dividends		896
Gain on the sale of investments		39
Net (depreciation) in fair value of investments		(880)
Total investment income		55
Less investment expense		24
Net investment income		31
Total additions		848
Deductions		
Benefits		836
Administrative expenses		37
Total deductions		873
Net (decrease) in fiduciary net position		(25)
Fiduciary net position restricted for other postemployment benefits		
Beginning of fiscal period		42,068
End of fiscal period	\$	42,043

Note A. Plan Description and Trust

Plan Administration

The Massachusetts Housing Finance Agency OPEB substantive plan (the plan understood by the employer and plan participants – "substantive plan") is a single-employer contributory defined benefit healthcare plan, which is open to all regular full-time and certain regular part-time employees of the Massachusetts Housing Finance Agency ("MassHousing" or the "Agency"). The substantive plan also provides \$5,000 of life insurance coverage to all eligible retirees and their beneficiaries. Benefit provisions and all other requirements are established by MassHousing and Chapter 32B of the General Laws of the Commonwealth of Massachusetts. Benefits vest after 10 years of service either at MassHousing alone or in combination with certain other public employers. MassHousing is required to contribute approximately 80% of the basic cost of group health insurance for retirees (and, in some cases, dependents) who retired after January 31, 2010, 85% for those who retired after July 1, 1994 and before February 1, 2010 and 90% for those retirees who retired prior to July 2, 1994; the remaining cost is withheld from the retiree's or beneficiary's monthly pension benefit, which is remitted directly to the group insurance commission and is not reflected in these financial statements. Active and Inactive Plan Members are not required to contribute to the plan.

On June 26, 2008, MassHousing established the Massachusetts Housing Finance Agency OPEB Trust (Trust), an irrevocable trust dedicated solely to both administering the investments of and providing the benefits under the terms of the substantive plan. Provision is made in the Massachusetts retirement law for withholding monthly premiums for continued coverage in a group health and life insurance program at the time of retirement. Continuation of insurance coverage for retirees is an optional benefit provided by governmental employers. These financial statements reflect the operations of the Trust and do not reflect the financial position of MassHousing's Retirement System.

A committee comprised of key staff members of the Agency (the "OPEB Committee"), one member designated by the Agency's Board and one member designated by the Agency's Executive Director, administers the Trust.

In April 2022, the Trust Committee voted to recommend that the Members of the Agency (the "Board") change the fiscal year end of the Trust from June 30 to December 31. The Board approved the change in June 2022, and therefore the reporting period for these financial statements is for the six-month period of July 1, 2022 through December 31, 2022.

Plan Membership

Membership of the substantive plan consisted of the following at December 31, 2022:

Active plan members	316
Retired, Disabled, Survivors and Beneficiaries receiving benefits	191
Inactive plan members entitled to but not yet receiving benefit payments	28
Total	535

Note B. Summary of Significant Accounting Policies

Basis of Presentation

The Trust's financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America.

Basis of Accounting

The Trust accounts for and reports its activities by applying Standards of Governmental Accounting and Financial Reporting, as promulgated by the Governmental Accounting Standards Board ("GASB").

The Trust's financial statements have been prepared using the accrual basis of accounting in accordance with GASB Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other than Pension Plans". This statement establishes standards for the measurement, recognition, and display of the assets, liabilities, deferred outflows and inflows of resources, if any, and, where applicable, net position restricted for other postemployment benefits and changes in net position restricted for other postemployment benefits of the Trust and for related disclosures.

Employer contributions are recognized as received and as provided through MassHousing's annual budgeting process approved by MassHousing Members. Benefits, investment income, and administrative expenses are all recognized on the accrual basis. Administrative expenses are financed by investment income.

Cash and Cash Equivalents

The Trust held no cash deposits as of December 31, 2022.

The Trust's cash equivalents were \$88 thousand as of December 31, 2022. Cash equivalents include cash held in money market mutual funds. The Trust's cash equivalent is the JP Morgan US Government Money Market Fund.

Investments

Investments are reported at fair value. Quoted market prices for long-term investments are used to determine the fair value at the close of each reporting period.

The Securities Investor Protection Corporation ("SIPC") is a nonprofit corporation established by the federal government that provides limited protection, in certain circumstances, for securities and cash held in a brokerage account. The coverage only applies when a firm shuts down because of financial circumstances and customer assets are missing or at risk because of the firm's failure. The Vanguard Group ("Vanguard") is a member of SIPC. SIPC provides brokerage customers up to \$500,000 of coverage for cash and securities held by brokerage firms with cash coverage limited to \$250,000.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America at times requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Note C. Investment Policy, Investments and Cash Equivalents

The Trust has contracted with Meketa Fiduciary Management, LLC ("Meketa") to perform investment advisory and management services. Meketa is responsible for the day-to-day management and control of the investable assets of the Trust, in line with the Massachusetts Housing Finance Agency OPEB Trust's Investment Policy ("Investment Policy"), as approved on June 23, 2022.

The Investment Policy is designed to ensure the prudent management of funds, and the availability of operating funds when required, while earning a competitive return within the policy framework. The primary objectives of investment activity, in order of priority, are safety, liquidity, and yield.

The Investment Policy regarding the allocation of invested OPEB Trust assets is established and may be amended by the OPEB Committee by a majority of its members. It is the policy of the OPEB Committee to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. Based on these investment objectives, the OPEB Committee conducts an annual review of the asset allocations to obtain a targeted long-term rate of return.

The OPEB Committee reviewed and approved an updated target asset allocation. The following is the adopted targeted asset allocation, targeted range, and actual asset allocation, as of December 31, 2022:

cation 1%
9%
8%
7%
3%
)%
)%
)%
9%
3%
)%
00%

As of December 31, 2022, the Trust had the following investments and cash equivalents, at fair value (in thousands of dollars):

		Invest (in				
	Fair	Less	,		More	
Investment Type	Value	Than	1 1 - 5	6 - 10	Than 10	
<u>Debt Securities:</u> Money market mutual funds	\$ 88	\$ 8	38 \$ -	\$ -	\$ -	
Bond mutual funds	13,549		- 3,621	6,986	2,942	
Total debt securities	\$13,637	\$ 8	\$ 3,621	\$ 6,986	\$ 2,942	
Other Investments:						
Equity mutual funds	29,152					
Total investments	\$42,789					

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments in bonds are subject to the chance that bond prices will decline because of rising interest rates. Interest rate risk for cash equivalents is minimized by investing in U.S. Government money market funds. Interest rate risk for mutual funds is minimized by the selection of mutual funds that invest primarily in investment grade short-and intermediate-term bonds, whose prices are less sensitive to interest rate changes than are the prices of long-term bonds.

Credit Risk and Custodial Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Custodial credit risk is the risk that, in the event of the failure of the issuer or counterparty to a transaction, the Trust will not be able to recover the value of its investment. Credit risk and custodial risk are minimized by the selection of mutual funds that purchase bonds that are issued by the U.S. Treasury, or are of investment grade quality or, if below investment grade quality, constitute a diverse range of bond investments thereby mitigating any significant credit risk. As of December 31, 2022, the Trust was not exposed to custodial credit risk.

As of December 31, 2022, the credit quality ratings of the Trust's debt securities were as follows (in thousands of dollars):

Investment Type	<u>Fai</u>	r Value	<u>AAAm</u>		<u>Unrate d</u>	
Money market mutual funds Bond mutual funds	\$	88 13,549	\$	88	\$	- 13,549
Total investments and cash equivalents	\$	13,637	\$	88	\$	13,549

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of an investment in a single security. The Trust diversifies its investment portfolio to minimize the impact of potential losses from one type of security. As of December 31, 2022, the OPEB Trust was not exposed to concentration of credit risk.

Rate of Return

For the six-months ended December 31, 2022, the annual money-weighted rate of return on investments, net of expenses was 0.08 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The long-term expected real rate of return on the OPEB 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 investment expense and inflation) over the next 20 years are developed for each major asset class. The ranges are combined to produce the long-term expected rate of return by weighting expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of December 31, 2022 are summarized in the following table:

Asset Class	Real Rate of Return (Geometric Average)
Private Equity	7.6%
International Emerging Markets Equity Assets	6.1%
International Developed Markets Equity (Large) Assets	5.2%
Core Infrastructure	5.0%
Domestic Equity Assets	4.5%
Core Private Real Estate	3.8%
High Yield Bond Assets	2.2%
Long Term Government Bonds	0.6%
Investment Grade Bond Assets	0.2%
TIPS Assets	0.2%

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Foreign currency risk is minimized by the selection of mutual funds that employ an indexing investment approach designed to track the performance of the FTSE Developed All Cap ex US Index and the FTSE Emerging Markets All Cap China A Inclusion Index. The Funds invest by sampling the index, meaning that it holds a broadly diversified collection of securities that, in the aggregate, approximates the index in terms of key characteristics. The Trust is exposed (indirectly) to foreign currency risk. As of December 31, 2022 the Trust had foreign equity mutual funds of \$15.8 million.

Note D. Fair Value Measurement

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. The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into the following three levels:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities at the measurement date.

Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for an asset or liability, either directly or indirectly.

Level 3 inputs are significant unobservable inputs.

The Trust has the following recurring fair value measurements as of December, 31, 2022:

Bond mutual funds and equity mutual funds of \$42.7 million are valued using quoted market prices (Level 1 inputs).

Note E. <u>Employer Contributions</u>

Contributions from MassHousing for healthcare benefits to retirees are provided through MassHousing's annual budgeting process as approved by MassHousing Members. Employer contributions for the six-months ended December 31, 2022 were \$817 thousand. The employer contributions included cash of \$671 thousand, plus an implicit subsidy of \$146 thousand, which is the result of applying a uniform healthcare premium rate to both active and retired participants.

On June 14, 2022, MassHousing members voted to transfer \$1.3 million to the Trust during MassHousing's fiscal year 2023. MassHousing funds the OPEB annual required contribution on a quarterly basis at the beginning of each quarter. Future contributions to be received depend on the funding schedule adopted by Agency Board vote and may be changed or eliminated by future votes of Agency Members.

Note F. Net OPEB Liability

The components of the net OPEB liability as of December 31, 2022 were as follows:

Total OPEB Liability	\$ 42,351
Plan Fiduciary Net Position	42,043
Net OPEB Liability	\$ 308

Plan Fiduciary Net Position as a percentage

of the total OPEB Liability 99.3%

Note G. Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of January 1, 2023 (rolled back to the December 31, 2022 measurement date), using the following assumptions, applied to all periods including the measurement period:

Salary Scale 3.50% overall payroll increase rate, including new entrants at

3.00% per year.

Interest Rate 7.00%, net of OPEB plan investment expense

Inflation CPIU-1 of 2.50% per year

Healthcare cost trend rate 6.4% to 8.0% initial graded down to 5% in 2032

Mortality rates:

Actives – The Pri.H-2012 Private Retirement Headcount-Weighted White Collar Mortality Tables, sex-distinct, for Employees projected using generational mortality and scale MP-2021.

Retirees – The Pri.H-2012 Private Retirement Headcount-Weighted White Collar Mortality Tables, sex-distinct, for Healthy Annuitants projected using generational mortality and scale MP-2021.

Disabled – The Pri.H-2012 Private Retirement Headcount-Weighted White Collar Mortality Tables, sex-distinct, for Healthy Annuitants projected using generational mortality and scale MP-2021. Set forward 2 years.

Survivors – The Pri.H-2012 Private Retirement Headcount-Weighted White Collar Mortality Tables, sex-distinct, for Contingent Survivors projected using generational mortality and scale MP-2021.

Discount rate

The discount rate used to measure the total OPEB liability was 7.00 percent for the January 1, 2023 actuarial valuation. The projection of cash flows used to determine the discount rate assumed that MassHousing contributions will be made at rates equal to the actuarially determined contribution rate. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected real rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the net OPEB liability to changes in the discount rate.

The following presents the Agency's net OPEB liability at December 31, 2022 calculated using the discount rate of 7.00 percent, as well as what the Agency's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00 percent) or 1-percentage-point higher (8.00 percent) than the current rate (in thousands of dollars):

	1% Decrea (6.00%)		 scount (7.00%)	1% Increase (8.00%)
Net OPEB liability	\$	6,170	\$ 308	\$ (4,496)

Sensitivity of the net OPEB liability to changes in healthcare cost trend rates.

The following presents the Agency's net OPEB liability at December 31, 2022 calculated using the healthcare cost trend rates that are 1-percentage-point lower (8 percent initial graded down to 5 percent in 2032) or 1-percentage-point higher (10 percent initial graded down to 6 percent in 2032) than the current healthcare trend rates (in thousands of dollars):

			Hea	thcare Cost					
	1%	decrease	Tr	end Rates	1% increase				
	(5.4%-7.0	0% initial graded	(6.4%-8.	0% initial graded	(7.4%-9.0% initial graded				
	down t	o 4% in 2032)	down t	o 5% in 2032)	down to 6% in 2032)				
Net OPEB liability	\$	(4,885)	\$	308	\$	6,742			

Note H. Subsequent Events

On March 16, 2023, the MassHousing OPEB Committee voted to accept annual contributions to the Trust in July 2023 and July 2024, instead of quarterly contributions.

During the six-months ended June 30, 2023, the Agency has transferred \$0.7 million from its Working Capital Fund to the Trust.

On June 13, 2023, the Members of MassHousing voted to transfer another \$1.1 million to the Trust for MassHousing's fiscal year ending June 30, 2024. MassHousing funded the OPEB required contribution in July 2023.

Massachusetts Housing Finance Agency OPEB Trust Required Supplementary Information Schedule 1

Schedule of Changes in the Agency's Net OPEB Liability and Related Ratios (1) (Dollar amounts in thousands)

	12/3	31/2022 (2)	6/3	30/2022	6/3	0/2021 (3)	6/3	30/2020	6/3	30/2019	6/3	30/2018	6/3	0/2017
Total OPEB Liability														
Service Cost	\$	535	\$	1,039	\$	767	\$	1,137	\$	1,294	\$	1,430	\$	1,379
Interest		1,897		3,588		3,046		4,232		3,925		3,670		3,402
Differences between expected and actual experience		(7,448)		-		(10,923)		(534)		(326)		-		-
Changes of assumptions		(5,875)		-		(745)		(1,044)		929		-		-
Benefit payments		(836)		(1,542)		(1,517)		(1,327)		(1,531)		(1,175)		(1,264)
Net change in total OPEB liability		(11,727)		3,085		(9,372)		2,464		4,291		3,925		3,517
Total OPEB liability - beginning		54,078		50,993		60,365		57,901		53,610		49,685		46,168
Total OPEB liability - ending (a)	\$	42,351	\$	54,078	\$	50,993	\$	60,365	\$	57,901	\$	53,610	\$	49,685
Plan fiduciary net position														
Contributions - employer	\$	817	\$	1,535	\$	3,597	\$	3,421	\$	3,459	\$	3,115	\$	3,054
Net Investment Income		31		(7,838)		10,260		1,195		1,970		1,614		2,734
Benefit payments		(836)		(1,542)		(1,517)		(1,327)		(1,531)		(1,175)		(1,395)
Adminstrative expenses		(37)		(35)		(43)		(27)		(40)		(31)		(28)
Net change in plan fiduciary net position		(25)		(7,880)		12,297		3,262		3,858		3,523		4,365
Plan fiduciary net position - beginning		42,068		49,948		37,651		34,389		30,531		27,008		22,643
Plan fiduciary net position - ending (b)	\$	42,043	\$	42,068	\$	49,948	\$	37,651	\$	34,389	\$	30,531	\$	27,008
Net OPEB Liability - ending (a)-(b)	\$	308	\$	12,010	\$	1,045	\$	22,714	\$	23,512	\$	23,079	\$	22,677
Plan fiduciary net position as a percentage of total														
OPEB liability		99.3%		77.8%		98.0%		62.4%		59.4%		57.0%		54.4%

⁽¹⁾ Data is being accumulated annually to present 10 years of the reported information.

See accompanying independent auditors' report

⁽²⁾ Data represents the six-month period, July 1, 2022 through December 31, 2022.

⁽³⁾ In FY 2021, the Agency identified an error in the FY 2019 and FY 2020 actuarial calculation of the Net OPEB Liability, which resulted in changes in the Schedule of Changes in the Agency's Net OPEB Liability and related ratios. Due to the overall immaterial impact to the Agency's financial statements, the cumulative effect is reflected in the FY 2021 reporting period.

Massachusetts Housing Finance Agency OPEB Trust Required Supplementary Information Schedule 2

Schedule of Agency Contributions (1) (Dollar amounts in thousands)

	12/31/	2022 (2)	6/30/2022		6/30/2021		6/30/2020		6/30/2019		6/30/2018		6/30/2017	
Actuarial Determined Contribution Contributions in relation to the	\$	817	\$	1,535	\$	3,597	\$	3,421	\$	3,459	\$	3,115	\$	3,054
Actuarially Determined Contribution		817		1,535		3,597		3,421		3,459		3,115		3,054
Contribution deficiency (excess)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

Notes to Schedule

Actuarially determined contributions consist of:

	12/31/2	2022 (2)	6/30/2022		6/30/2021		6/30/2020		6/30/2019		6/30/2018		6/30/2017	
Cash Contribution	\$	671	\$	1.282	\$	3,300	\$	3,160	\$	2,897	\$	2.901	\$	2,597
Implicit Subsidy	<u> </u>	146	Φ	253	φ	297	Φ	261	φ	562	φ	2,501	Ψ	457
Actuarial Determined Contribution	\$	817	\$	1,535	\$	3,597	\$	3,421	\$	3,459	\$	3,115	\$	3,054

Methods and assumption used to determine contribution rates:

Actuarial cost method Projected Unit Credit Level Dollar cost method Amortization method Level percentage of pay, closed basis

Remaining amortization period 14 years
Asset valuation method Market value
Overall payroll increase rate 3.5%

Healthcare cost trend rates
7.1% to 9.0% initial graded down to 5% in 2040
Interest and Discount rate
Retirement Age
7.1% to 9.0% initial graded down to 5% in 2040
7.00%, net of OPEB plan investment expense
Based on Tier classification, gender and hire dates.

Mortality RPH-2014 Headcount-Weighted White Collar Mortality Tables, adjusted to 2006, projected

using generational mortality and scale MP-2020.

See accompanying independent auditors' report

⁽¹⁾ Data is being accumulated annually to present 10 years of the reported information.

⁽²⁾ Data represents the six-month period, July 1, 2022 through December 31, 2022.

Massachusetts Housing Finance Agency OPEB Trust Required Supplementary Information Schedule 3

Schedule of Investment Returns $^{(1)}$

	12/31/2022 (2	6/30/2022	6/30/2021	6/30/2020	6/30/2019	6/30/2018	6/30/2017
Annual money-weighted rate of return,							
net of investment expense	0.08%	-15.40%	25.86%	3.28%	6.09%	7.52%	9.78%

See accompanying independent auditors' report

⁽¹⁾ Data is being accumulated annually to present 10 years of the reported information.

⁽²⁾ Data represents the six-month period, July 1, 2022 through December 31, 2022.