Michigan State Housing Development Authority

(a component unit of the State of Michigan)

Financial Report

with Supplemental Information

June 30, 2022

Contents

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Independent Auditor's Report

To the Board of Directors and
Mr. Doug A. Ringler, CPA, CIA,
Auditor General, State of Michigan
Michigan State Housing Development Authority

Report on the Audits of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and the discretely presented component unit of Michigan State Housing Development Authority (the "Authority"), a component unit of the State of Michigan, as of and for the years ended June 30, 2022 and 2021 and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities and the discretely presented component unit of the Authority as of June 30, 2022 and 2021 and the changes in its financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audits of the Financial Statements* section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

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 Authority's ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor’s Responsibilities for the Audits 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 auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that audits conducted in accordance with GAAS and *Government 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.

To the Board of Directors and
Mr. Doug A. Ringler, CPA, CIA,
Auditor General, State of Michigan
Michigan State Housing Development Authority

In performing audits in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audits.
- 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 audits 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 Authority'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 Authority'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 audits, significant audit findings, and certain internal control-related matters that we identified during the audits.

Required Supplemental Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and other required supplemental information, as identified in the table of contents, 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, which 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 supplemental 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 basic financial statements, and other knowledge we obtained during our audits 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.

Supplemental Information

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The other supplemental information, as identified in the table of contents, is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplemental information is fairly stated in all material respects in relation to the basic financial statements as a whole.

To the Board of Directors and
Mr. Doug A. Ringler, CPA, CIA,
Auditor General, State of Michigan
Michigan State Housing Development Authority

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 25, 2022 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

Plante & Moran, PLLC

October 25, 2022

The Michigan State Housing Development Authority (the "Authority") provides financial and technical assistance through public and private partnerships to create and preserve decent, affordable housing for low- and moderate-income Michigan residents. The Authority was created under the terms of Act 346, Public Acts of Michigan of 1966, as amended. The Authority is authorized to issue its bonds and notes to the investing public in order to create a flow of private capital through the Authority into mortgage loans to qualified housing sponsors and to certain qualified individuals.

The Authority offers a variety of programs to provide affordable housing opportunities, such as single-family lending, low-interest property improvement lending, multifamily lending, mortgage credit certificates, and pass-through obligations.

The enclosed financial statements present the Authority's net position, revenue, expenses, changes in net position, and cash flows. The following is a condensed summary of financial information as of and for the years ended June 30, 2022, 2021, and 2020:

Condensed Financial Information
(in thousands of dollars)

	2022	2021	2020
Assets			
Cash and cash equivalents	$ 506,645	$ 676,256	$ 381,627
Investments	908,434	778,501	911,016
Loans receivable - Net	3,747,263	3,588,127	3,434,781
Other assets	143,976	129,466	52,182
Capital assets	18,856	19,381	19,906
Total assets	5,325,174	5,191,731	4,799,512
Accumulated (Increase) Decrease in Fair Value of Hedging Derivative Instrum	(439)	46,074	72,187
Deferred Outflows of Resources	37,303	51,271	52,556
Total assets, hedging derivative instruments, and deferred outflows	**$ 5,362,038**	**$ 5,289,076**	**$ 4,924,255**
Liabilities			
Bonds payable	$ 3,754,341	$ 3,574,794	$ 3,357,712
Line of Credit	-	30,000	-
Hedging derivative instruments	(439)	46,074	72,187
Other liabilities	742,981	807,223	713,007
Total liabilities	4,496,884	4,458,091	4,142,906
Deferred Inflows of Resources	61,524	47,514	33,857
Net Position			
Net investment in capital assets	18,856	19,381	19,906
Restricted for bond repayment	543,237	527,154	482,890
Unrestricted	241,538	236,936	244,695
Total net position	803,631	783,471	747,491
Total liabilities, deferred inflows, and net position	**$ 5,362,038**	**$ 5,289,076**	**$ 4,924,255**

		2022		2021		2020
Operating Revenue						
Net investment income	$	35,894	$	68,637	$	69,109
Federal and state assistance programs revenue		1,346,736		760,498		584,990
Section 8 program administrative fees		20,161		17,980		19,466
Contract administration fees		12,380		11,246		8,247
Other income		41,844		16,864		19,949
Total revenue		1,457,015		875,225		701,761
Operating Expenses						
Federal and state assistance programs expenses		1,349,516		760,582		584,441
Salaries and benefits		26,565		20,946		32,890
Other general operating expenses		32,868		28,032		31,478
Other expenses		21,147		20,032		18,101
Total expenses		1,430,096		829,592		666,910
Nonoperating Expenses - Grants and subsidies		6,759		9,653		8,693
Change in Net Position	**$**	**20,160**	**$**	**35,980**	**$**	**26,158**

Financial Analysis

Total assets, hedging derivative instruments, and deferred outflows increased from $5.29 billion at June 30, 2021 to $5.36 billion at June 30, 2022. This was an increase of approximately $73.0 million, or 1.4%. Total assets, hedging derivative instruments, and deferred outflows increased from $4.92 billion at June 30, 2020 to $5.29 billion at June 30, 2021. This was an increase of approximately $364.8 million, or 7.4 percent.

Net loans receivable increased from $3.59 billion at June 30, 2021 to $3.75 billion at June 30, 2022. Loans receivable increased due to an increase in the closing of both multifamily and single-family mortgages (net increases of $48.6 million and $122.9 million, respectively).

Net loans receivable increased from $3.43 billion at June 30, 2020 to $3.59 billion at June 30, 2021. Loans receivable increased due to an increase in the closing of both multifamily and single-family mortgages (net increases of $37.7 million and $120.1 million, respectively).

Bonds payable increased from $3.6 billion at June 30, 2021 to $3.8 billion at June 30, 2022, a net increase of approximately $179.5 million. The increase in bonds outstanding for the year ended June 30, 2022 was due primarily to the issuance of $837.3 million in debt to fund the lending activities of the Authority, partially offset by early redemptions and maturities. Bonds payable were $3.4 billion at June 30, 2020 and $3.6 billion at June 30, 2021, a net increase of approximately $217.1 million. The increase in bonds outstanding for the year ended June 30, 2021 was due primarily to the issuance of $717.7 million in debt to fund the lending activities of the Authority, partially offset by early redemptions and maturities.

The Authority has entered into a revolving line of credit ("RLOC") for the purpose of funding single-family mortgages and down payment assistance loans prior to the issuance of long-term debt financing. The RLOC balances grow and are paid down based on the timing of long-term debt issuances. At June 30, 2022, the Authority had a zero balance. At June 30, 2021 the Authority had a balance due of $30 million.

Escrow funds, which are recorded in other liabilities, decreased by $66.6 million from June 30, 2021 to $465.2 million at June 30, 2022 due to an unrealized loss on investments. Escrow funds increased by $5.3 million from June 30, 2020 to $531.8 million at June 30, 2021 due to increased multifamily mortgage balances.

The Authority's net position totaled $803.6 million at June 30, 2022, equal to 15.1 percent of total assets and 17.9 percent of total liabilities. A significant portion of net position is restricted. At June 30, 2022, $543.2 million of net position was pledged for payment against the various bond indentures. In addition, $258.4 million is designated by board resolution to the Mortgage Resource Fund.

The Authority's net position totaled $783.5 million at June 30, 2021, equal to 15.1 percent of total assets and 17.6 percent of total liabilities. A significant portion of net position is restricted. At June 30, 2021, $527.2 million of net position was pledged for payment against the various bond indentures. In addition, $242.8 million is designated by board resolution to the Mortgage Resource Fund.

Operating Results

Operations for the year ended June 30, 2022 resulted in excess revenue over expenses of $20.2 million, compared to prior year results of excess revenues over expenses of $36.0 million. Operations for the year ended June 30, 2021 resulted in excess revenue over expenses of $36.0 million, compared to prior year results of excess revenues over expenses of $26.2 million. Under Governmental Accounting Standard Board ("GASB") Statement No. 31, the Authority is required to present investments at fair market value and reflect this adjustment in the statement of revenue, expenses, and change in net position. This presentation decreased revenues over expenses by approximately $33.2 million for the year ended June 30, 2022. This presentation decreased revenues over expenses by approximately $7.4 million for the year ended June 30, 2021. Currently, GASB Statement No. 31 has had a cumulative negative effect of $27.0 million on the Authority's net position; however, the Authority generally intends to hold these securities to maturity.

Net investment income decreased from $68.6 million in 2021 to $35.9 million in 2022, a decrease of $32.7 million. This decrease was due to the unrealized loss of $33.2 million due to the mark-to-market of the investment portfolio. Net investment income decreased from $69.1 million in 2020 to $68.6 million in 2021, a decrease of $0.5 million.

Total revenue increased from $875.2 million for the year ended June 30, 2021 to $1.46 billion for the year ended June 30, 2022, a net increase of $581.8 million. Total revenue increase is primarily due to federal and state assistance program revenue increase of approximately $586.2 million. Total revenue increased from $701.8 million for the year ended June 30, 2020 to $875.2 million for the year ended June 30, 2021, a net increase of $173.4 million. Total revenue increase is primarily due to federal and state assistance program revenue increase of approximately $175.5 million.

Total operating expenses increased from $829.6 million for the year ended June 30, 2021 to $1.43 billion for the year ended June 30, 2022, a net increase of $600.5 million. Total operating expenses increased due primarily to an increase in the federal and state assistance program expenses. Total operating expenses increased from $666.9 million for the year ended June 30, 2020 to $829.6 million for the year ended June 30, 2021, a net increase of $162.7 million. Total operating expenses increased due primarily to an increase in the federal and state assistance program expenses.

Economic Outlook

The United States and the State of Michigan declared a state of emergency in March 2020 due to the global Coronavirus Disease 2019 (COVID-19) pandemic. Our workforce and business operations continue at normal capacity, with most from remote locations. To minimize the impact of COVID-19 on the Authority and residents of the state of Michigan, Federal, State and Authority grants are being administered to provide support to homeowners and renters. The pandemic has not had a material financial impact on the Authority's financial position or results of operations to this point.

Requests for Further Information

This financial report is intended to provide a general overview of the Authority's finances and demonstrate the Authority's accountability for the money it receives. If you have questions about this report or need additional information, please contact Authority's Finance Division at 517-335-9970. This report and other financial information are available on the Authority's website at www.michigan.gov/mshda/.

Statement of Net Position
(in thousands of dollars)

June 30, 2022 and 2021

	June 30	
	2022	2021
Assets, Hedging Derivative Instruments, and Deferred Outflows		
Cash and Cash Equivalents (Note 3)	$ 506,645	$ 676,256
Investments (Note 3)	908,434	778,501
Loans Receivable (Note 4)		
Multifamily mortgage loans	1,658,911	1,610,351
Single-family mortgage loans	2,123,834	2,000,919
Home improvement and moderate rehabilitation loans	1,698	2,131
Total	3,784,443	3,613,401
Accrued loan interest receivable	77,702	80,383
Allowance on loans receivable (Note 4)	(114,882)	(105,657)
Net loans receivable	3,747,263	3,588,127
Other Assets		
Real estate owned - Net	4,673	2,863
Other miscellaneous receivables and other assets	139,303	126,603
Total other assets	143,976	129,466
Capital Assets - Net (Note 11)	18,856	19,381
Total assets	5,325,174	5,191,731
Accumulated (Increase) Decrease in Fair Value of Hedging Derivative Instruments (Note 15)	(439)	46,074
Deferred Outflows of Resources		
Deferred outflows related to pensions (Note 9)	3,370	2,934
Deferred outflows related to OPEB (Note 10)	10,774	12,871
Deferred charges on refunding - Reassigned swaps (Note 15)	23,159	35,466
Total deferred outflows of resources	37,303	51,271
Total assets, hedging derivative instruments, and deferred outflows	**$ 5,362,038**	**$ 5,289,076**
Liabilities, Deferred Inflows, and Net Position		
Liabilities		
Bonds payable (Notes 5 and 6)	$ 3,754,341	$ 3,574,794
Line of Credit (Notes 16)	-	30,000
Hedging derivative instruments (Note 15)	(439)	46,074
Accrued interest payable	16,331	14,394
Escrow funds	465,195	531,777
Unamortized mortgage interest income (Note 7)	10,971	11,240
Net pension liability (Note 9)	23,853	39,168
Net OPEB liability (Note 10)	30,059	41,374
Other liabilities	196,573	169,270
Total liabilities	4,496,883	4,458,091
Deferred Inflows of Resources		
Deferred inflows related to pensions (Note 9)	10,575	-
Deferred inflows related to OPEB (Note 10)	27,576	25,634
Loan origination fees	23,373	21,880
Total deferred inflows of resources	61,524	47,514
Net Position		
Net investment in capital assets	18,856	19,381
Restricted for bond repayment (Note 12)	543,237	527,154
Unrestricted	241,538	236,936
Total net position	803,631	783,471
Total liabilities, deferred inflows, and net position	**5,362,038**	**$ 5,289,076**

See notes to financial statements.

Statement of Revenue, Expenses, and Changes in Net Position

(in thousands of dollars)

Years Ended June 30, 2022 and 2021

	Year Ended June 30	
	2022	2021
Operating Revenue		
Investment income:		
Loan interest income	$ 169,381	$ 173,507
Investment interest income	11,017	9,794
Decrease in fair value of investments - Including change in unrealized loss of $33,164 in 2022 and unrealized loss of $7,370 in 2021	(33,164)	(7,370)
Total investment income	147,234	175,931
Less interest expense and debt financing costs	111,340	107,294
Net investment income	35,894	68,637
Other revenue:		
Federal and state assistance programs	1,346,736	760,498
Section 8 program administrative fees	20,161	17,980
Contract administration fees	12,380	11,246
Other income	41,844	16,864
Total other revenue	1,421,121	806,588
Total operating revenue	1,457,015	875,225
Operating Expenses		
Federal and state assistance programs	1,349,516	760,582
Salaries and benefits	26,565	20,946
Other general operating expenses	32,868	28,032
Loan servicing and insurance costs	13,397	10,391
Provision for possible losses on loans	7,750	9,641
Total operating expenses	1,430,096	829,592
Operating Income - Before nonoperating expenses	26,919	45,633
Nonoperating Expenses - Grants and subsidies	(6,759)	(9,653)
Change in Net Position	20,160	35,980
Net Position - Beginning of year	783,471	747,491
Net Position - End of year	**$ 803,631**	**$ 783,471**

See notes to financial statements.

Statement of Cash Flows
(in thousands of dollars)

Years Ended June 30, 2022 and 2021

	Year Ended June 30 2022	2021
Cash Flows from Operating Activities		
Loan receipts	$ 689,339	$ 554,416
Other receipts including federal funds	1,566,925	1,010,413
Loan disbursements	(691,096)	(558,866)
Payments to vendors	(40,847)	(60,151)
Payments to employees	(22,946)	(17,800)
Other disbursements including federal funds	(1,511,811)	(884,336)
Net cash (used in) provided by operating activities	(10,436)	43,676
Cash Flows from Investing Activities		
Purchase of investments	(555,500)	(410,927)
Proceeds from sale and maturities of investments	330,029	511,918
Interest received on investments	5,336	3,281
Net cash (used in) provided by investing activities	(220,135)	104,272
Cash Flows from Noncapital Financing Activities		
Proceeds from issuance of bonds - Less discounts	837,280	717,715
Principal repayments on bonds	(643,950)	(495,564)
Draws on line of credit	130,000	347,000
Repayment on line of credit	(160,000)	(317,000)
Interest paid	(102,370)	(105,470)
Net cash provided by noncapital financing activities	60,960	146,681
Net (Decrease) Increase in Cash and Cash Equivalents	(169,611)	294,629
Cash and Cash Equivalents - Beginning of year	676,256	381,627
Cash and Cash Equivalents - End of year	**$ 506,645**	**$ 676,256**

See notes to financial statements.

Statement of Cash Flows (Continued)

(in thousands of dollars)

Years Ended June 30, 2022 and 2021

	Year Ended June 30	
	2022	2021
Reconciliation of Operating Income to Net Cash from Operating Activities		
Operating income	$ 26,919	$ 45,633
Adjustments to reconcile operating income to net cash from operating activities:		
Change in deferred items	5,061	(2,488)
Arbitrage rebate expense	(755)	(3,052)
Investment interest income	(9,296)	(10,427)
(Increase) decrease in realized and unrealized gain on market value of investments	33,164	10,422
Interest expense on bonds and debt financing expense	95,013	96,788
Provision for possible losses on loans	7,750	9,641
Depreciation and amortization expense	5,314	525
Grants and subsidies	(6,759)	(9,653)
Changes in assets and liabilities:		
Accrued loan interest receivable	2,692	(4,325)
Loans receivable	(171,042)	(157,004)
Other assets	(20,917)	(6,385)
Escrow funds	(249)	33,586
Other liabilities	22,670	40,415
Net cash (used in) provided by operating activities	**$ (10,436)**	**$ 43,676**

Noncash Financing and Investing Activities - During the years ended June 30, 2022 and 2021, the Authority foreclosed on various properties with mortgage values of approximately $4.2 million and $2.5 million, respectively.

Statement of Net Position – Michigan Homeowner Assistance Nonprofit Housing Corporation (Discretely Presented Component Unit)

(in thousands of dollars)

June 30, 2022 and 2021

	June 30	
	2022	2021
Assets		
Cash and Cash Equivalents (Note 3)	$ 1,411	$ 8,505
Other Assets - Prepaid and other	2	2
Total assets	**$ 1,413**	**$ 8,507**
Liabilities and Net Position		
Liabilities		
Accounts payable	$ 144	$ 280
Unearned revenue	-	8,142
Total liabilities	144	8,422
Net Position		
Restricted for Hardest Hit Program	-	85
Unrestricted	1,269	-
Total net position	1,269	85
Total liabilities and net position	**$ 1,413**	**$ 8,507**

Statement of Revenue, Expenses, and Changes in Net Position
Michigan Homeowner Assistance Nonprofit Housing Corporation
(Discretely Presented Component Unit)
(in thousands of dollars)

Years Ended June 30, 2022 and 2021

	Year Ended June 30	
	2022	2021
Operating Revenue - Other income	$ 1,257	$ 5
Operating Expenses		
Program (recoveries) expenses	(463)	6,325
Contracted services	265	1,771
Other operating expenses	271	6,279
Total operating expenses	73	14,375
Change in Net Position	1,184	(14,370)
Net Position - Beginning of year	85	14,455
Net Position - End of year	**$ 1,269**	**$ 85**

Statement of Cash Flows – Michigan Homeowner Assistance Nonprofit Housing Corporation (Discretely Presented Component Unit) (in thousands of dollars)

Years Ended June 30, 2022 and 2021

	Year Ended June 30	
	2022	2021
Cash Flows from Operating Activities		
Lien recoveries (payments) to grantees	$ 463	$ (6,325)
Payments to suppliers	(8,509)	(1,215)
Payments to contractors	(305)	(1,989)
Other receipts	1,257	5
Net Decrease in Cash and Cash Equivalents	(7,094)	(9,524)
Cash and Cash Equivalents - Beginning of year	8,505	18,029
Cash and Cash Equivalents - End of year	**$ 1,411**	**$ 8,505**
Reconciliation of Change in Net Position to Net Cash from Operating Activities		
Change in net position	$ 1,184	$ (14,370)
Adjustments to reconcile change in net position to net cash from operating activities -		
Changes in assets and liabilities:		
Prepaid expenses and other assets	-	9
Accounts payable	(136)	(305)
Unearned revenue	(8,142)	5,142
Net cash and cash equivalents provided by (used in) operating activities	**$ (7,094)**	**$ (9,524)**

See notes to financial statements.

Note 1 - Authorizing Legislation and Reporting Entity

Michigan State Housing Development Authority (MSHDA or the "Authority") was created by the Michigan Legislature under the provisions of the State Housing Development Authority Act of 1966, as amended (the "Act"). The Authority, as a special purpose entity, is a component unit of the State of Michigan and is reported as an enterprise fund in the State's Annual Comprehensive Financial Report. The Act empowers the Authority, among other things, to issue notes and bonds to finance housing for sale or rental to families with low and moderate income and to finance home improvements. The enabling legislation, along with the various bond and note resolutions adopted by the Authority, contains specific provisions pertaining to (a) the use of the proceeds from the sale of the notes and bonds, (b) the application of the revenue from mortgages, and (c) the creation of certain funds along with the accounting policies for such funds. Effective April 2, 2020, the Authority is authorized by statute to have notes and bonds outstanding up to a total of $5.0 billion. The limit prior to April 2, 2020 was $3.4 billion.

Component Unit

Michigan Homeowner Assistance Nonprofit Housing Corporation

The Authority formed a nonprofit entity to operate the federal Hardest Hit Program. The entity, Michigan Homeowner Assistance Nonprofit Housing Corporation (the "Nonprofit"), was created on April 7, 2010 pursuant to the provisions of Act 162, Public Acts of 1982, and was formed as a 501(c)(3) of the Internal Revenue Code. The entity provides loans and grants; facilitates community development and revitalization in the state; and provides counseling, financial literacy education, and other services to prevent, reduce, and mitigate foreclosures and stabilize home values and does not provide services to the Authority. The Authority is responsible for appointing, removing, and replacing the five members that make up the board of directors and can do so at will for any cause or without cause. The Authority's board of directors is not substantially the same as the Nonprofit's board of directors. The Nonprofit is considered a discretely presented component unit of Michigan State Housing Development Authority and separately issues its own financial statements. The Nonprofit's separately issued financial statements can be obtained by contacting the Authority's management. The discretely presented component unit is reported in separate financial statements following the Authority's financial statements to emphasize that it is legally separate from the Authority. See Note 2 regarding the Hardest Hit Program closeout. The Nonprofit may be used to manage other grant programs in the future, but there are no immediate plans to obtain new grant funding.

Note 2 - Significant Accounting Policies

Accounting and Reporting Principles

The Authority follows accounting principles generally accepted in the United States of America (GAAP), as applicable to governmental units. Accounting and financial reporting pronouncements are promulgated by the Governmental Accounting Standards Board (GASB). The Authority follows the business-type activities reporting requirements of GASB Statement No. 34, which provides a comprehensive look at the Authority's financial activities.

Basis of Accounting

Proprietary funds use the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

Report Presentation

This report includes the fund-based statements of the Authority. In accordance with government accounting principles, a government-wide presentation with program and general revenue is not applicable to special purpose governments engaged only in business-type activities. The Authority presents all funds in a single-column presentation.

Note 2 - Significant Accounting Policies (Continued)

Specific Balances and Transactions

Cash and Cash Equivalents

The Authority considers all highly liquid investments with an original maturity of three months or less to be cash and cash equivalents. The Authority also considers the U.S. government money market funds to be cash and cash equivalents.

Investments

The Authority reports investments at fair value. The net change in the fair value of investments includes both realized and unrealized gains and losses.

Single-family Mortgage Loans Receivable

Single-family mortgage loans receivable consist of the remaining principal due from each first mortgage and down payment assistance loan outstanding. Under the Authority's single-family program, participating lending institutions originate mortgages within underwriting parameters developed and provided by the Authority. Unless a mortgage loan meets the qualifying loan-to-value ratio, it must have private primary mortgage insurance or be insured by Federal Housing Administration (FHA) or guaranteed by the Veterans Administration (VA) or the United States Department of Agriculture. To date, the Authority has contracted with a subservicer to service the single-family mortgage portfolio.

Multifamily Mortgage Loans Receivable

Multifamily mortgage loans receivable consist of the remaining principal due from mortgagors of each completed development and construction advances for each development under construction under the multifamily program. Housing developments securing multifamily loans are subject to Regulatory Agreements under which the Authority has certain powers relating to rents, cash distributions, occupancy, management, and operations. Moneys representing escrow funds for reserves for the payment of property taxes, insurance, property repairs and replacements, and income in excess of allowable cash distributions are required to be deposited with the Authority. Investment income earned on the deposited funds is credited to the respective mortgagor's escrow accounts. Prepayment fees are charged if the mortgagor pays off their loan early. Prepayment fees are included in other income when incurred.

Allowance on Loans Receivable

It is the Authority's policy to provide for future losses on mortgage loans based on an evaluation of the loan portfolio, current economic conditions, and such other factors that, in the Authority's judgment, require consideration in estimating future mortgage loan losses. The allowance is maintained at a level considered by management to be adequate to provide for probable mortgage loan losses inherent in the portfolio.

Capital Assets

Capital assets are defined by the Authority as assets with an initial individual cost of more than $100,000 (except for land and land improvements at any cost and office furniture and intangible assets of more than $5,000) and an estimated useful life in excess of one year. Such assets are recorded at fair value, historical cost, or estimated historical cost if purchased or constructed.

Real Estate Owned

The Authority acquires real estate through foreclosure proceedings and holds that property until it can be sold at a fair price. These properties are valued at the lower of cost or fair market value and recorded net of estimated uncollectible amounts.

Note 2 - Significant Accounting Policies (Continued)

Bonds Payable

Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method; bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are expensed at the time they are incurred.

Line of Credit

The Authority may enter into a revolving line of credit for the purpose of funding single-family mortgages prior to the issuance of long-term debt financing. This revolving line of credit would then be paid down after closing long-term financing through bonds.

Compensated Absences

The Authority's employees accrue vacation and sick leave in varying amounts for each biweekly period worked. Employees may accumulate, subject to certain limitations, vacation and sick leave and, upon retirement, termination, or death, may be compensated for certain accumulated amounts at their then-current rates of pay. The Authority records an expense for all accumulated vacation and sick leave that the Authority would be required to pay if all employees terminated their employment. The compensated absences included in other liabilities at June 30, 2022 and 2021 totaled $2,760,000 and $2,582,000, respectively.

Arbitrage Rebate

Federal income tax rules limit the investment and loan yields that the Authority may retain for its own use from investing the proceeds from certain of its tax-exempt bond issues. The excess yields are payable to the U.S. Treasury and are recorded in other liabilities.

Loan Origination Fees

The Authority charges the mortgagor of each multifamily development a loan origination fee equal to 2 percent of the mortgage loan. These fees are amortized over the term of the loan receivable using the interest method.

Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expense/expenditure) until then. The Authority has four items that qualify for reporting in this category: the deferred outflows of resources related to the pension, deferred outflows of resources related to the other postemployment benefit costs, deferred charges on refunding - reassigned swaps, and the accumulated (increase) decrease in the fair value of hedging derivative instruments.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (revenue) until that time. The Authority has three items that qualify for reporting in this category: the deferred inflows of resources related to the pension, deferred inflows of resources related to the other postemployment benefit costs, and loan origination fees.

Note 2 - Significant Accounting Policies (Continued)

Net Position

Net position of the Authority is classified in three components. Net investment in capital assets consists of capital assets net of accumulated depreciation and is reduced by the current balances of any outstanding borrowings used to finance the purchase or construction of those assets. The restricted component of net position consists of amounts pledged for payment against the various bond indentures. All of the net position of the component unit is restricted for eligible federal program expenditures prior to the program closeout. Unrestricted net position is the remaining net position that does not meet the definition of invested in capital or restricted. When an expense is incurred for a purpose for which both restricted and unrestricted net position are available, the Authority's policy generally is to first apply restricted resources.

Federal and State Assistance Programs

The Authority administers various federal and state programs and initiatives in its efforts to create decent affordable housing for low- to moderate-income families.

- Section 8 Program - The Authority receives federal financial assistance through various housing and rental programs to provide rental subsidies and tenant vouchers.
- Hardest Hit Program - A component unit of the Authority, Michigan Homeowner Assistance Nonprofit Housing Corporation, administers funds under this program to prevent, reduce, and mitigate foreclosures and stabilize home values. Effective October 29, 2021, the Hardest Hit Program remitted the final payment of $8,163,000 to the United States Department of the Treasury, officially closing out the program. The intention of the Michigan Homeowner Assistance Nonprofit Housing Corporation is to remain as a dormant organization until Michigan Homeowner Assistance Nonprofit Housing Corporation concludes to manage other grant programs in the future. There are no immediate plans to obtain new grant funding.
- Eviction Diversion Program - The Authority receives federal financial assistance through funding from the Coronavirus Relief Fund (CRF) to assist with rental payments that are behind due to the COVID-19 pandemic.
- COVID-19 Emergency Rental Assistance (CERA) - The Authority receives federal financial assistance through the Consolidated Appropriations Act passed in December 2020 to assist with paying rental and utility expenses during the COVID-19 pandemic. Federal payments received before eligible program expenses are incurred are deferred in other liabilities. Payments made by the Authority to subrecipients in excess of required amounts are recorded as advances within other miscellaneous receivables.

Pensions and Postemployment Benefits Other Than Pensions (OPEB)

For the purpose of measuring the net pension liability, net OPEB liability, deferred outflows of resources and deferred inflows of resources related to pensions and OPEB, and pension and OPEB expense, information about the fiduciary net position and additions to/deductions from fiduciary net position of the State Employees' Retirement System (SERS) or the postemployment life insurance benefits plan (the "Plan") have been determined on the same basis as they are reported by SERS or the Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Note 2 - Significant Accounting Policies (Continued)

Operating Revenue and Expenses

The Authority was created with the authority to issue bonds to the investing public in order to create a flow of private capital through the Authority into mortgage loans to qualified housing sponsors and to certain qualified individuals. The Authority's primary operation is to borrow funds in the bond market and use those funds to make single-family and multifamily loans. Its primary operating revenue is derived from loan interest income and the investment income from proceeds of bond funds. The primary cost of the program is interest expense on bonds outstanding. Net investment income is an important measure of performance under the Authority's primary operation. Investment income, interest expense, and net investment income are shown as operating revenue in the statement of revenue, expenses, and changes in net position.

Nonoperating Expenses

The nonoperating expenses are made up of nonfederal, nonrepayable grants and subsidies that the Authority awards on a discretionary basis. The awards are based on the amount of available authority funds and are not related to the operating activities of the Authority.

Use of Estimates

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

Upcoming Accounting Pronouncements

In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*, which clarifies the existing definition of conduit debt, provides a single method of reporting conduit debt obligations by issuers, and eliminates diversity in practice associated with commitments extended by issuers, arrangements associated with conduit debt obligations, and related note disclosures. As a result, issuers should not recognize a liability for items meeting the definition of conduit debt; however, a liability should be recorded for additional or voluntary commitments to support debt service if certain recognition criteria are met. The standard also addresses the treatment of arrangements where capital assets are constructed or acquired with the proceeds of a conduit debt obligation and used by a third-party obligor. The provisions of this statement were originally effective for the Authority's financial statements for the year ended June 30, 2022 but were extended to June 30, 2023 with the issuance of GASB Statement No. 95, *Postponement of the Effective Date of Certain Authoritative Guidance*.

In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates*. With the London Interbank Offered Rate (LIBOR) expecting to cease existence in its current form at the end of 2021, this statement addresses accounting and financial reporting implications that result from the replacement of an interbank offered rate (IBOR) in hedging derivative instruments and leases. The removal of LIBOR as an appropriate benchmark interest rate for a hedging derivative instrument is effective for the Authority's financial statements once LIBOR goes away.

In May 2020, the Governmental Accounting Standards Board issued Statement No. 96, *Subscription-Based Information Technology Arrangements (SBITAs)*, which defines SBITAs and provides accounting and financial reporting for SBITAs by governments. This statement requires a government to recognize a subscription liability and an intangible right-to-use subscription asset for SBITAs. The Authority is currently evaluating the impact this standard will have on the financial statements when adopted. The provisions of this statement are effective for the Authority's financial statements for the June 30, 2023 fiscal year.

Note 2 - Significant Accounting Policies (Continued)

In June 2022, the Governmental Accounting Standards Board issued Statement No. 101, *Compensated Absences*, which updates the recognition and measurement guidance for compensated absences under a unified model. This statement requires that liabilities for compensated absences be recognized for leave that has not been used and leave that has been used but not yet paid in cash or settled through noncash means and establishes guidance for measuring a liability for leave that has not been used. It also updates disclosure requirements for compensated absences. The provisions of this statement are effective for the Authority's financial statements for the year ending June 30, 2025.

Note 3 - Deposits and Investments

Cash, cash equivalents, and investments held by the Authority were as follows (in thousands of dollars):

	2022			
	MSHDA			Component Unit
	Cash and Cash Equivalents	Investments	Total	Cash and Cash Equivalents
Deposits	$ 67,907	$ -	$ 67,907	$ 1,411
Investments	438,738	908,434	1,347,172	-
Total	$ 506,645	$ 908,434	$ 1,415,079	$ 1,411

	2021			
	MSHDA			Component Unit
	Cash and Cash Equivalents	Investments	Total	Cash and Cash Equivalents
Deposits	$ 61,727	$ -	$ 61,727	$ 4,572
Investments	614,529	778,501	1,393,030	3,933
Total	$ 676,256	$ 778,501	$ 1,454,757	$ 8,505

The investments noted above within the component unit as of June 30, 2021 relate to an investment pool valued at amortized cost under GASB 79. There are no limitations or restrictions on participant withdrawals for the investment pool recorded at amortized cost.

The Authority has designated six banks for the deposit of its funds. The investment policy adopted by the board in accordance with state statutes has authorized investment of funds held in reserve or sinking funds, or moneys not required for immediate use or disbursement in obligations of the State of Michigan or the United States government, in obligations of which the principal and interest are guaranteed by the State of Michigan or the United States government and in other obligations as may be approved by the state treasurer, bank accounts, and CDs. The Authority’s deposits and investment policies are in accordance with state statutes, and any exceptions have had special approval from the state treasurer.

The Authority's cash and investments are subject to several types of risk, which are examined in more detail below:

Custodial Credit Risk of Bank Deposits

Custodial credit risk is the risk that, in the event of a bank failure, the Authority’s deposits may not be returned to it. The Authority does not have a deposit policy for custodial credit risk.

Note 3 - Deposits and Investments (Continued)

At June 30, 2022, the Authority had approximately $96,119,000 of bank deposits (checking, certificates of deposit, and savings accounts), and, of that balance, approximately $2,370,000 was uninsured and uncollateralized. In addition, the Authority had $275,686,000 of government money market funds. The component unit does not have a deposit policy for custodial credit risk. At June 30, 2022, the component unit had approximately $1,411,000 of bank deposits (checking accounts), and, of that balance, approximately $1,161,000 was uninsured and uncollateralized.

At June 30, 2021, the Authority had approximately $67,931,000 of bank deposits (checking and savings accounts), and, of that balance, approximately $2,267,000 was uninsured and uncollateralized. In addition, the Authority had $528,035,000 of government money market funds. The component unit does not have a deposit policy for custodial credit risk. At June 30, 2021, the component unit had approximately $4,572,000 of bank deposits (checking accounts), and, of that balance, approximately $4,322,000 was uninsured and uncollateralized.

The Authority believes that, due to the dollar amounts of cash deposits and the limits of the FDIC insurance, it is impractical to insure all deposits. At June 30, 2022 and 2021, $92,499,000 and $64,663,000, respectively, of deposits were collateralized with securities held by the Federal Reserve Bank or held in safekeeping for the Authority at a financial institution's trust department but not in the Authority's name. To also limit its risk, the Authority evaluates each financial institution with which it deposits funds and assesses the level of risk of each institution; only those institutions with an acceptable estimated risk level are used as depositories.

Custodial Credit Risk of Investments

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Authority will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Authority does not have a policy for custodial credit risk. At year end, the following investment securities were uninsured and unregistered, with securities held by the counterparty's trust department or agent but not in the Authority's name:

	Fair Value (in thousands of dollars)		
Investment Type	2022	2021	How Held
MSHDA:			
U.S. government securities	$ 444,333	$ 86,861	Counterparty's trust dept.
Mortgage-backed securities	387,626	492,821	Counterparty's trust dept.
U.S. government agency securities	201,239	259,198	Counterparty's trust dept.
U.S. government money market funds	275,686	528,035	Counterparty's trust dept.
Certificate deposits	33,879	23,430	Counterparty's trust dept.
Component unit - U.S. government money market funds	-	3,933	Counterparty's trust dept.

Interest Rate Risk

Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates. The Authority's investment policy does not restrict investment maturities. At year end, the average maturities of investments are as follows (in thousands of dollars):

	2022				
Type of Investment	Fair Value	Less Than 1 Year	1-5 Years	6-10 Years	More Than 10 Years
MSHDA:					
U.S. government securities	$ 444,333	$ 388,221	$ 31,629	$ 22,756	$ 1,727
Mortgage-backed securities	387,626	9	1,660	223	385,734
U.S. government agency securities	201,239	-	111,500	17,377	72,362
U.S. government money market funds	275,686	275,686	-	-	-
Certificate deposits	33,879	33,879	-	-	-

Note 3 - Deposits and Investments (Continued)

	2021				
Type of Investment	Fair Value	Less Than 1 Year	1-5 Years	6-10 Years	More Than 10 Years
MSHDA:					
U.S. government securities	$ 86,861	$ 1,800	$ 53,329	$ 29,713	$ 2,019
Mortgage-backed securities	492,821	-	5,088	2,373	485,360
U.S. government agency securities	259,198	129,489	84,763	35,260	9,686
U.S. government money market funds	528,035	528,035	-	-	-
Certificate deposits	23,430	23,430	-	-	-
Component unit - U.S. government money market funds	3,933	3,933	-	-	-

Credit Risk

The Authority has no investment policy that would limit its investment choices except as noted in the state statute. As of year end, the credit quality ratings of debt securities are as follows (in thousands of dollars):

	2022			2021		
Investment	Fair Value	Rating	Rating Organization	Fair Value	Rating	Rating Organization
MSHDA:						
U.S. government securities	$ 444,333	AA+	S&P	$ 86,861	AA+	S&P
Mortgage-backed securities	387,626	AA+	S&P	492,821	AA+	S&P
U.S. government agency securities	201,239	AA+	S&P	259,198	AA+	S&P
U.S. government money market funds	275,686	Not rated		528,035	Not rated	
Certificate deposits	33,879	Not rated		23,430	Not rated	
Component unit - U.S. government money market funds	-			3,933	Not rated	

Concentration of Credit Risk

The Authority has 22 percent and 18 percent of its investment portfolio invested in the securities of government-sponsored enterprises as of June 30, 2022 and 2021, respectively. These include securities issued by the Federal Home Loan Banks, the Federal Home Loan Mortgage Corporation, and the Federal National Mortgage Corporation. Excluding U.S. government securities, no other issuer represents over 5 percent of the Authority's investment portfolio.

Escrow Funds

Included in investments are funds held in trust for mortgagors with a carrying value of approximately $485,344,000 and $558,873,000 at June 30, 2022 and 2021, respectively.

Fair Value Measurements

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets, Level 2 inputs are significant other observable inputs, and Level 3 inputs are significant unobservable inputs.

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The Authority's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset.

Note 3 - Deposits and Investments (Continued)

The Authority has the following recurring fair value measurements as of June 30, 2022 and 2021:

	Investments Measured at Fair Value on a Recurring Basis at June 30, 2022			
	Level 1	Level 2	Level 3	Fair Value
Type of Investment				
U.S. government securities	$ 444,333	$ -	$ -	$ 444,333
Mortgage-backed securities	-	387,626	-	387,626
U.S. government agency securities	-	201,239	-	201,239
U.S. government money market funds	-	275,686	-	275,686
Certificate deposits	33,879	-	-	33,879

	Investments Measured at Fair Value on a Recurring Basis at June 30, 2021			
	Level 1	Level 2	Level 3	Fair Value
Type of Investment				
U.S. government securities	$ 86,861	$ -	$ -	$ 86,861
Mortgage-backed securities	-	492,821	-	492,821
U.S. government agency securities	-	259,198	-	259,198
U.S. government money market funds	-	528,035	-	528,035
Certificate deposits	23,430	-	-	23,430

U.S. government securities and certificate deposits classified in Level 1 are valued using prices quoted in active markets for those securities.

The fair value of mortgage-backed securities, U.S. government agency securities, and U.S. government money market funds is determined primarily based on Level 2 inputs. The Authority estimates the fair value of these investments using other inputs, such as interest rates and yield curves, that are observable at commonly quoted intervals.

The Authority also has interest rate swaps reported as liabilities on the statement of net position based on Level 2 inputs. The methodology used to determine the fair values of these swaps, as well as the fair values of investments, is shown in Note 15.

Note 4 - Loans Receivable

All loans receivable are collateralized by first liens on the real property developed or purchased with the proceeds of the loans, except for certain home improvement and moderate rehabilitation loans. Substantially all single-family loans are insured by the Federal Housing Administration or private mortgage insurance companies or are guaranteed by the Veterans Administration or the United States Department of Agriculture. Substantially all multifamily loans are uninsured.

A summary of loans receivable is as follows (in thousands of dollars):

	2022	2021
FHA insured or VA or U.S. Department of Agriculture guaranteed	$ 1,270,399	$ 1,237,622
Insured by private mortgage insurance companies	687,743	603,208
Uninsured	1,826,301	1,772,571
Total loans receivable	$ 3,784,443	$ 3,613,401

Note 4 - Loans Receivable (Continued)

A summary of the allowance for possible loan losses is as follows:

	2022	2021
Beginning balance	$ 105,657	$ 97,674
Provision for possible losses	7,750	9,641
Write-offs of uncollectible losses - Net of recoveries	1,475	(1,658)
Ending balance	$ 114,882	$ 105,657

Note 5 - Bonds Payable

The Authority issues revenue bonds to fund loans to finance multifamily housing developments and single-family housing units for persons of low and moderate income within the state of Michigan. Such bonds constitute a direct obligation of the Authority and are not a debt of the State of Michigan. Each bond issue is secured by the pledge of all repayments to the Authority of loans issued with the proceeds of the bond issue and all income earned by the Authority relating to those bonds. The bonds are full faith and credit general obligations of the Authority. Interest on fixed-rate bonds is payable semiannually, while interest on variable-rate debt can be payable semiannually, quarterly, or monthly. All bonds are subject to a variety of redemption provisions set forth in the official statements for each of the issues. One such redemption provision is that each of the bond resolutions contains cross-default provisions that permit the acceleration of the maturity of all such bonds, as well as certain other remedies, in the event of a default by the Authority in the payment of principal or interest on any bond of the Authority.

Changes in bonds are as follows (in thousands of dollars) as of June 30, 2022 and 2021:

	2022				
	Beginning Balance	Additions	Payments	Ending Balance	Due within One Year
Revenue bonds:					
Single-family mortgage	$ 1,928,755	$ 622,235	$ (490,875)	$ 2,060,115	$ 55,235
Rental housing	1,590,977	215,045	(162,039)	1,643,983	58,350
Total revenue bonds	$ 3,519,732	$ 837,280	$ (652,914)	$ 3,704,098	$ 113,585

	2021				
	Beginning Balance	Additions	Payments	Ending Balance	Due within One Year
Revenue bonds:					
Single-family mortgage	$ 2,002,600	$ 244,690	$ (318,535)	$ 1,928,755	$ 42,980
Rental housing	1,292,265	473,025	(174,313)	1,590,977	51,174
Total revenue bonds	$ 3,294,865	$ 717,715	$ (492,848)	$ 3,519,732	$ 94,154

Note 5 - Bonds Payable (Continued)

Bonds payable at June 30, 2022 and 2021 are as follows (in thousands of dollars):

	2022	2021
Single-family Mortgage Revenue Bonds:		
2006 Series C, 2035, variable rate (Note 6)	$ 47,815	$ 49,140
2007 Series B, 2038, variable rate (Note 6)	56,860	70,075
2007 Series D, E, and F, 2038, variable rate (Note 6)	70,195	88,640
2009 Series D, 2030, variable rate (Note 6)	20,590	26,385
2015 Series A, 2022 to 2046, 2.55% to 4.00%	11,530	24,945
2016 Series A, 2022 to 2046, 2.10% to 4.00%	31,970	51,585
2016 Series B and C, 2022 to 2047, 1.90% to 3.50%	155,700	201,390
2017 Series A, 2043, variable rate #	-	45,000
2017 Series B, 2022 to 2048, 1.90% to 3.50%	33,750	54,745
2018 Series A, 2022 to 2048, 2.30% to 4.00%	47,480	80,995
2018 Series B, 2044, variable rate #	50,000	50,000
2018 Series C, 2022 to 2049, 2.60% to 4.25%	103,810	171,530
2018 Series D, 2042, variable rate #	50,000	50,000
2019 Series A, 2022 to 2049, 2.00% to 4.25%	125,155	204,045
2019 Series B and C, 2022 to 2050, 1.50% to 3.75%	226,575	297,340
2020 Series A and B, 2022 to 2050, 0.65% to 3.739%	192,065	221,500
2020 Series C and D, 2022 to 2051, 0.40% to 3.565%	218,460	241,440
2021 Series A and B, 2022 to 2052, 0.25% to 3.00%	284,520	-
2022 Series A, 2022 to 2053, 1.50% to 5.00%	197,120	-
2022 Series B and C, 2046 to 2052, variable rate (Note 6)	136,520	-
Total Single-family Mortgage Revenue Bonds	2,060,115	1,928,755
Rental Housing Revenue Bonds:		
2000 Series A, 2035, variable rate (Note 6)	19,165	22,195
2002 Series A, 2037, variable rate (Note 6)	38,160	39,895
2003 Series A, 2023, variable rate #	1,475	2,865
2008 Series A, C, and D, 2023 to 2039, variable rate (Note 6)	57,350	95,860
2014 Series A, 2022 to 2050, 3.125% to 4.875%	47,650	49,070
2015 Series A and B, 2022 to 2052, 2.65% to 4.60%	86,660	91,205
2016 Series A and B, 2022 to 2052, 1.60% to 3.625%	87,005	109,355
2016 Series C, D, and E, 2040 to 2042, variable rate # (Note 6)	90,545	127,600
2017 Series A, 2022 to 2053, 1.70% to 4.00%	57,690	60,160
2018 Series A and B, 2022 to 2053, 2.25% to 4.15%	171,790	193,275
2018 Series C, 2040, variable rate (Note 6)	103,680	122,980
2019 Series A-1 and A-2, 2022 to 2060, 1.00% to 3.60%	201,879	203,977
2020 Series A-1, A-2 and B, 2022 to 2063, 0.45% to 3.00%	146,274	151,450
2021 Series A and B, 2022 to 2059, 0.258% to 3.108%	319,615	321,090
2022 Series A, 2024 to 2059, 2.65% to 4.45%	135,045	-
2022 Series B, 2062, variable rate (Note 6)	80,000	-
Total Rental Housing Revenue Bonds	1,643,983	1,590,977
Total revenue bonds	$ 3,704,098	$ 3,519,732

These bonds include a private-placement portion.

	2022	2021
Total revenue bonds	$ 3,704,098	$ 3,519,732
Off-market borrowings (Note 15)	23,159	35,466
Deferred charges - Bond discounts and premiums net of amortization	27,084	19,596
Total	$ 3,754,341	$ 3,574,794

Note 5 - Bonds Payable (Continued)

The annual requirements to service debt outstanding, including both principal and interest (in thousands of dollars), are as follows. Interest on variable-rate bonds is based on the effective rate as of June 30, 2022.

Years Ending June 30	Principal - All Other Debt	Principal - Private Placement	Interest - All Other Debt	Interest - Private Placement	Total
2023	$ 111,390	$ 2,195	$ 107,378	$ 4,327	$ 225,290
2024	87,681	750	105,482	4,281	198,194
2025	157,001	790	103,527	4,255	265,573
2026	138,569	825	101,198	4,228	244,820
2027	82,375	870	97,493	4,200	184,938
2028-2032	427,268	4,995	454,153	20,525	906,941
2033-3037	576,659	6,310	380,119	19,586	982,674
2038-2042	552,719	38,855	290,860	16,299	898,733
2043-2047	533,768	69,145	207,643	1,901	812,457
2048-2052	596,462	-	100,932	-	697,394
2053-2057	178,023	-	31,366	-	209,389
2058-2063	137,448	-	8,980	-	146,428
Total	$ 3,579,363	$ 124,735	$ 1,989,131	$ 79,602	$ 5,772,831

Early Retirement of Debt

Under provisions of the Authority's bond issues, the Authority is able to retire bonds, without the payment of call premiums, prior to their maturity dates from the proceeds of loan prepayments and foreclosures and, for certain bonds, from excess program revenue and bond refundings. Bonds retired pursuant to such provisions totaled $556,630,000 and $433,045,000 during the years ended June 30, 2022 and 2021, respectively. Such bond retirements, in the aggregate, resulted in a net gain of $5,478,000 and $8,226,000 for the years ended June 30, 2022 and 2021, respectively.

Note 6 - Demand Bonds

The following table summarizes the demand bonds outstanding at June 30, 2022, which are included in the bonds payable disclosed in Note 5:

Debt Associated	Bonds Outstanding (in Thousands)	Remarketing Agent	Standby Bond Purchase Agreement Provider	Remarketing Fee (1)	Liquidity Fee	Note	Expiration Date of Agreement
Single-family Mortgage Revenue Bonds:							
2006 Series C	$ 47,815	US Bank National Association	US Bank National Association	0.08%	0.28%	(2)	05/11/23
2007 Series B	56,860	TD Securities (USA) LLC	TD Bank, N.A.	0.07%	0.20%	(3)	06/21/27
2007 Series E	36,765	RBC Capital Markets, LLC	Royal Bank of Canada	0.07%	0.32%	(7)	10/25/24
2007 Series F	33,430	TD Securities (USA) LLC	TD Bank, N.A.	0.07%	0.20%	(3)	06/21/27
2009 Series D	20,590	TD Securities (USA) LLC	TD Bank, N.A.	0.07%	0.20%	(3)	06/21/27
2022 Series B	81,280	Barclays Capital Inc.	Barclays Bank PLC	0.08%	0.23%	(5)	06/22/26
2022 Series C	55,240	Barclays Capital Inc.	Barclays Bank PLC	0.08%	0.23%	(5)	06/22/26
Rental Housing Revenue Bonds:							
2000 Series A	19,165	Barclays Bank PLC	Barclays Bank PLC	0.08%	0.28%	(5)	05/12/23
2002 Series A	38,160	BofA Securities, Inc.	Bank of America, N.A.	0.06%	0.27%	(4)	05/12/23
2008 Series A	27,435	Barclays Bank PLC	Barclays Bank PLC	0.08%	0.28%	(5)	05/12/23
2008 Series C	505	PNC Bank, National Association	PNC Bank, National Association	0.07%	0.31%	(6)	07/25/22
2008 Series D	29,410	PNC Bank, National Association	PNC Bank, National Association	0.07%	0.31%	(6)	07/25/22
2016 Series C	51,615	RBC Capital Markets, LLC	Royal Bank of Canada	0.07%	0.29%	(7)	02/27/23
2016 Series D	15,670	BofA Securities, Inc.	Bank of America, N.A.	0.06%	0.27%	(4)	05/12/23
2016 Series E	23,260	UBS Financial Services Inc.	UBS AG	0.05%	0.17%	(8)	09/30/24
2018 Series C	103,680	BofA Securities, Inc.	Bank of America, N.A.	0.06%	0.27%	(4)	05/12/23
2022 Series B	80,000	BofA Securities, Inc.	Bank of America, N.A.	0.06%	0.23%	(4)	05/25/26

Note 6 - Demand Bonds (Continued)

(1) Fee is per annum based on the outstanding principal amount of the bonds.

(2) While US Bank National Association (US Bank) is holding the bonds, they will bear interest at the bank rate, which is the base rate for the first 90 days, the base rate plus 1.00 percent for day 91 through 180, and the base rate plus 2.00 percent after day 181. The base rate is the higher of 8 percent, the federal funds rate plus 2.50 percent, or the prime rate plus 2.50 percent. Once US Bank becomes the bondholder, the bonds become subject to mandatory redemption over six equal semiannual payments. The Authority shall pay US Bank a liquidity fee per annum on outstanding bonds plus 187 days of interest at 12 percent based on a 365-day year. The Standard & Poor’s rating on US Bank National Association is AA-/A-1+ at June 30, 2022.

(3) While the TD Bank, N.A. is holding the bonds, they will bear interest at the bank rate, which is the base rate for the first 365 days, then the base rate plus 1.00 percent for day 366 and after. The base rate is equal to the higher of 7 percent, Federal Funds Rate plus 2.00 percent, or the prime rate plus 1.50 percent. Once TD Bank becomes the bondholder, the bonds are subject to mandatory redemption over six equal semiannual payments. The Authority shall pay TD Bank, N.A. a liquidity fee per annum on outstanding bonds plus 185 days of interest at 12 percent based on a 365-day year. Standard & Poor’s rating on TD Bank, N.A. is AA-/A-1 at June 30, 2022.

(4) While Bank of America, N.A. (Bank of America) is holding the bonds, they will bear interest at the bank rate, which is the base rate for the first 90 days, then the base rate plus 1.00 percent for day 91 and after. The base rate is equal to the higher of 7 percent, the federal funds rate plus 2.00 percent, or the prime rate plus 1.00 percent. Once Bank of America becomes the bondholder, the bonds are subject to mandatory redemption over six equal semiannual payments. The Authority shall pay Bank of America a liquidity fee per annum on outstanding bonds plus 217 days of interest at 12 percent based on a 365-day year. The Standard & Poor’s rating on Bank of America, N.A. is A+/A-1 at June 30, 2022.

(5) While Barclays Bank PLC (Barclays) is holding the bonds, they will bear interest at the bank rate, which is the base rate for the first 90 days, the base rate plus 1.00 percent for day 91 through 180, and the base rate plus 2.00 percent after day 181. The base rate is the higher of 8 percent, the federal funds rate plus 2.50 percent, the prime rate plus 2.50 percent, or 150 percent of the yield on actively traded 30-year U.S. Treasury bonds. Once Barclays becomes the bondholder, the bonds become subject to mandatory redemption over six equal semiannual payments. The Authority shall pay Barclays a liquidity fee per annum on outstanding bonds plus 214 days of interest at 12 percent based on a 365-day year. The Standard & Poor’s rating on Barclays is A/A-1 at June 30, 2022.

(6) While PNC Bank, National Association (PNC) is holding the bonds, they will bear interest at the bank rate, which is the base rate plus 1.00 percent for the first 90 days and the base rate plus 2.00 percent thereafter. The base rate is the higher of 7.5 percent, the federal funds rate plus 3.00 percent, the daily LIBOR plus 5.00 percent, or the prime rate plus 1.00 percent. Once PNC becomes the bondholder, the bonds become subject to mandatory redemption over six equal semiannual payments. The Authority shall pay PNC a liquidity fee per annum on outstanding bonds plus 34 days of interest at 14 percent based on a 365-day year. The Standard & Poor’s rating on PNC is A/A-1 at June 30, 2022. On July 6, 2022, the 2008 Series D facility was amended to extend the expiration date. All outstanding Series C bonds have been retired prior to July 6, 2022.

(7) While Royal Bank of Canada (RBC) is holding the bonds, they will bear interest at the bank rate, which is the base rate for the first 90 days, the base rate plus 1.00 percent for day 91 through 180, and the base rate plus 2.00 percent after day 181. The base rate is the higher of 8 percent, the federal funds rate plus 2.50 percent, or the prime rate plus 2.50 percent. Once RBC becomes the bondholder, the bonds become subject to mandatory redemption over six equal semiannual payments. The Authority shall pay RBC a liquidity fee per annum on outstanding bonds plus 185 days of interest at 12 percent based on a 365-day year. The Standard & Poor’s rating on Royal Bank of Canada is AA-/A-1+ at June 30, 2022.

Note 6 - Demand Bonds (Continued)

(8) While the UBS AG is holding the bonds, they will bear interest at the bank rate, which is the base rate for the first 90 days, the base rate plus 1.00 percent for day 91 through 180, and the base rate plus 2.00 percent after day 181. The base rate is the higher of 8 percent, the federal funds rate plus 2.50 percent, or the prime rate plus 2.50 percent. Once UBS becomes the bondholder, the bonds become subject to mandatory redemption over six equal semiannual payments. The Authority shall pay UBS a liquidity fee per annum on outstanding bonds plus 185 days of interest at 12 percent based on a 365-day year. The Standard & Poor's rating on UBS AG is AA-/A-1+ at June 30, 2022.

Note 7 - Unamortized Mortgage Interest Income

Since 1990, the Authority has refunded a substantial amount of high-yielding multifamily bond issues with lower-yielding bonds. In conjunction with the sale of certain refunding bonds, the Authority has sold additional bonds to provide funds for new multifamily mortgage loans, generally with interest rates below the interest rates on the bonds. The Authority is deferring the interest income on mortgage loans funded by the new bonds to the extent that the total exceeds the total interest income that would have been earned if the average interest rate on such loans was equal to the average interest rate paid on the new bonds plus approximately 1.5 percent. This interest income is and will continue to be amortized to income in the future as the average rate on the outstanding mortgage loans drops to a rate that is less than 1.5 percent above the average rate on the new bonds. The average rate will decline primarily because the higher-yielding mortgage loans have average remaining lives substantially shorter than the lower-yielding mortgage loans.

Note 8 - Limited Obligation Bonds

The Act, as amended, authorizes the Authority to issue limited obligation bonds to finance multifamily housing. Such bonds are not general obligations of the Authority, and the Authority has no liability for this debt. Such bonds are secured solely by revenue and property derived from or obtained in connection with the housing projects. Thus, with the exception of limited obligation bond financing fees, transactions related to these bonds are not reflected in the Authority’s financial statements. At June 30, 2022, limited obligation bonds had been issued totaling approximately $998,361,000, of which 89 issues totaling $836,222,000 have been retired. At June 30, 2021, limited obligation bonds had been issued totaling approximately $975,576,000, of which 87 issues totaling $821,272,000 have been retired.

Note 9 - Pension Plans

Plan Description

The Michigan State Employees' Retirement System (the "System") is a single-employer, statewide, defined benefit public employee retirement plan governed by the State of Michigan (the "State") and created under Public Act 240 of 1943, as amended. Section 2 of this act established the board's authority to promulgate or amend the provisions of the System. Executive Order 2015-13, signed by the governor on October 27, 2015, established the State of Michigan Retirement Board. The board consists of nine members - five appointed by the governor (which consist of two members of the State Employees' Retirement System, at least one of whom is a retirant; one member of the Judges Retirement System; one current or former officer or enlisted person in the Michigan Military Establishment who is a member or retirant under the Military Retirement Provisions; and one member of the general public), the attorney general, the state treasurer, the legislative auditor general, and the state personnel director.

The Michigan State Employees' Retirement System is accounted for in a separate pension trust and issues a publicly available financial report that includes financial statements and required supplemental information. That report is available on the web at http://www.michigan.gov/ors or by calling the Office of Retirement Services (ORS) at (517) 322-5103 or (800) 381-5111.

Note 9 - Pension Plans (Continued)

Benefits Provided

Benefit provisions of the defined benefit (DB) pension plan are established by state statute, which may be amended. Public Act 240 of 1943, State Employees' Retirement Act, as amended, establishes eligibility and benefit provisions for the defined benefit plan. Retirement benefits are determined by final average compensation and years of service. Members are eligible to receive a monthly benefit when they meet certain age and service requirements. The System also provides duty disability, nonduty disability, and survivor benefits.

A member who has separated from employment may request a refund of his or her member contribution account. A refund may cancel a former member's rights to future benefits. However, former members who return to employment and who previously received a refund of their contributions may reinstate their service through repayment of the refund upon satisfaction of certain requirements.

Effective March 31, 1997, Public Act 487 of 1996 (the "Public Act") closed the plan to new entrants. All new employees become members of the defined contribution (DC) plan. The Public Act allows returning employees and members who left state employment on or before March 31, 1997 to elect the defined benefit plan instead of the defined contribution plan.

Pension Reform of 2012

On December 15, 2011, the governor signed Public Act 264 of 2011 into law. The legislation granted members a choice regarding their future retirement plan. They had the following options:

Option 1: DB Classified. Members voluntarily elected to remain in the DB plan for future service and contribute 4 percent of their annual compensation to the pension fund until they terminate state employment. The 4 percent contribution began on April 1, 2012.

Option 2: DB 30. Members voluntarily elected to remain in the DB plan for future service and contribute 4 percent of pay until they reach 30 years of service. When they reach 30 years of service, they will switch to the State's DC plan. The 4 percent contribution began on April 1, 2012 and continues until they switch to the DC plan or terminate employment, whichever comes first.

Option 3: DB/DC Blend. Members voluntarily elected not to pay the 4 percent and, therefore, became participants in the DC plan for future service beginning on April 1, 2012. As a DC plan participant, they receive a 4 percent employer contribution to their 401(k) account and are eligible for an additional dollar-for-dollar employer match of up to 3 percent of pay to the plan.

Deferred members of the DB plan (with 10 or more years of service) who are reemployed by the State on or after January 1, 2012 become participants in the DC plan. Their pension calculation is determined by their final average compensation (FAC) and years of service as of March 31, 2012. They retain their eligibility for the retiree health insurance premium subsidy offered by the State.

Former nonvested members of the DB plan (with less than 10 years of service) who are reemployed by the State on or after January 1, 2012 and before January 1, 2014 become participants in the DC plan. When they have earned sufficient service credit for vesting (10 years), they would be eligible for a pension based on their FAC and years of service in the DB plan as of March 31, 2012. They retain their eligibility for the retiree health insurance premium subsidy offered by the State.

Note 9 - Pension Plans (Continued)

Former nonvested members (with less than 10 years of service) of the DB plan who are reemployed by the State on or after January 1, 2014 become members of the DC plan. Any service credit previously earned would count toward vesting for the DC plan. They will not be eligible for any pension or retiree health insurance coverage premium but will become participants in the Personal Healthcare Fund where they will contribute up to 2 percent of their compensation to a 401(k) or 457 account, earning a matching 2 percent employer contribution. They will also receive a credit into a health reimbursement account (HRA) at termination if they terminate employment with at least 10 years of service. The credit will be $2,000 for participants who are at least 60 years old or $1,000 for participants who are less than 60 years old at termination.

Regular Retirement

The retirement benefit is based on a member's years of credited service (employment) and FAC. The normal benefit equals 1.5 percent of a member's FAC multiplied by the years and partial year of credited service and is payable monthly over the member's lifetime.

Under PA 264 of 2011, the FAC is initially determined as the annual average of the highest three years of compensation (including overtime paid before January 1, 2012 but excluding overtime paid after December 31, 2011). If the end date for the initial FAC calculation is between January 1, 2012 and January 1, 2015, then a prorated amount of post-2008 average overtime will be added to the initial FAC calculation. If the end date for the initial FAC calculation is January 1, 2015 or later, then an annual average of overtime - for the six-year period ending on the FAC calculation date - will be added to that initial FAC calculation to get the final FAC number.

For members who switch to the DC plan for future service, the pension calculation FAC times 1.5 percent times years of service will be determined as of the point the member switches to the DC plan. If the FAC period includes the date of the switch to the DC plan, then the FAC will include up to 240 hours of accrued annual leave multiplied by the rate of pay as of the date of the switch. The hours will be paid at separation. A member may retire and receive a monthly benefit after attaining the following:

(1) Age 60 with 10 or more years of credited service

(2) Age 55 with 30 or more years of credited service

(3) Age 55 with at least 15 but less than 30 years of credited service. The benefit allowance is permanently reduced 0.5 percent for each month from the member's age on the effective date of retirement to the date the member will attain age 60.

Employees in covered positions are eligible for supplemental benefits and may retire after attaining the following:

(1) Age 51 with 25 or more years in a covered position
(2) Age 56 with 10 or more years in a covered position

In either case, the 3 years immediately preceding retirement must have been in a covered position.

Deferred Retirement

Any member with 10 or more years of credited service who terminates employment but has not reached the age of retirement is a deferred member and is entitled to receive a monthly pension upon reaching age 60, provided the member's accumulated contributions have not been refunded. Deferred retirement is available after 5 years of service for state employees occupying unclassified positions in the executive and legislative branches and certain Department of Community Health employees subject to reduction in force layoffs by reason of deinstitutionalization.

Note 9 - Pension Plans (Continued)

Nonduty Disability Benefit

A member with 10 or more years of credited service who becomes totally and permanently disabled not due to performing duties as a state employee is eligible for a nonduty disability pension. The nonduty disability benefit is computed in the same manner as an age and service allowance based upon service and salary at the time of disability.

Duty Disability Benefit

A member who becomes totally and permanently disabled from performing duties as a state employee as a direct result of state employment and who has not met the age and service requirement for a regular pension is eligible for a duty disability pension. Public Act 109 of 2004 amended the State Employees' Retirement Act to change the calculation of the pension benefit and increase the minimum annual payment. If the member is under age 60, the duty disability allowance is now a minimum of $6,000 payable annually. At age 60, the benefit is recomputed under service retirement.

Survivor Benefit

Upon the death of a member who was vested, the surviving spouse shall receive a benefit calculated as if the member had retired the day before the date of death and selected a survivor pension. Certain designated beneficiaries can be named to receive a survivor benefit. Public Act 109 of 2004 amended the State Employees' Retirement Act to change the calculation of duty death benefits and redefined eligibility for deceased members' survivors. The new minimum duty-related death benefit has been increased to $6,000.

Pension Payment Options

When applying for retirement, an employee may name a person other than his or her spouse as a beneficiary if the spouse waives this right. If a beneficiary is named, the employee must choose whether the beneficiary will receive 100 percent, 75 percent, or 50 percent of the retiree's pension benefit after the retiree's death. The decision is irrevocable. A description of the options follows:

Regular Pension

The pension benefit is computed with no beneficiary rights. If the retiree made contributions while an employee and has not received the total accumulated contributions before death, a refund of the balance of the contributions is made to the beneficiary of record. If the retiree did not make any contributions, there will not be payments to beneficiaries.

100 Percent Survivor Pension

Under this option, after the retiree's death, the beneficiary will receive 100 percent of the pension for the remainder of the beneficiary's lifetime. If this option is elected, the normal retirement benefit is reduced by a factor based upon the ages of the retiree and of the beneficiary. If the beneficiary predeceases the retiree, the pension pops up to the regular pension amount; another beneficiary cannot be named.

75 Percent Survivor Pension

Under this option, after the retiree's death, the beneficiary will receive 75 percent of the pension for the remainder of the beneficiary's lifetime. If this option is elected, the normal retirement benefit is reduced by a factor based upon the ages of the retiree and of the beneficiary. The reduction factor is lower than the factor used in the 100 percent option previously described. If the beneficiary predeceases the retiree, the pension pops up to the regular pension amount; another beneficiary cannot be named.

Note 9 - Pension Plans (Continued)

50 Percent Survivor Pension

Under this option, after the retiree's death, the beneficiary will receive 50 percent of the pension for the remainder of the beneficiary's lifetime. If this option is elected, the normal retirement benefit is reduced by a factor based upon the ages of the retiree and of the beneficiary. The reduction factor is lower than the factor used in the 100 percent or 75 percent options previously described. If the beneficiary predeceases the retiree, the pension pops up to the regular pension amount; another beneficiary cannot be named.

Equated Pension

An equated pension may be chosen by any member under age 65 except a disability retiree and an early supplemental retiree. Equated pensions provide an additional amount until age 65 and may be combined with the regular, 100 percent, 75 percent, or 50 percent options. At age 65, the monthly amount is permanently reduced. The initial and reduced amounts are based on an estimate of Social Security benefits at age 65, provided by the Social Security Administration Office. In order to calculate this benefit, members choosing this option must provide ORS with an estimate from the Social Security Administration Office. The actual amount received from Social Security may vary from the estimate.

Postretirement Adjustments

One-time upward benefit adjustments were made in 1972, 1974, 1976, 1977, and 1987. Beginning on October 1, 1988, a 3 percent noncompounding increase, up to a maximum of $25 monthly, is paid each October to recipients who have been retired 12 full months. Beginning in 1983, eligible benefit recipients share in a distribution of investment income earned in excess of 8 percent annually. This distribution is known as the supplemental payment. The supplemental payment is offset by one year's cumulative increases received after the implementation of the annual 3 percent increase in benefits. These adjustment payments were not issued during fiscal years 1991 through 1994. Members who retired on or after October 1, 1987 are not eligible for the supplemental payment.

Member Contributions

Under Public Act 264 of 2011, members who voluntarily elected to remain in the DB plan contribute 4 percent of compensation to the retirement system. In addition, members may voluntarily contribute to the System for the purchase of creditable service, such as military service or maternity leave, or a universal buy-in. If a member terminates employment before a retirement benefit is payable, the member's contribution and interest on deposit may be refunded. If the member dies before being vested, the member's contribution and interest are refunded to the designated beneficiaries.

Employer Contributions

The statute requires the employer to contribute to finance the benefits of plan members. These employer contributions are determined annually by the System's actuary and are based upon level-dollar value funding principles, so the contribution rates do not have to increase over time.

For fiscal year 2022, the Authority's contribution rate ranged from 23.9 to 24.0 percent of the defined benefit employee wages and 18.9 to 19.1 percent of the defined contribution wages. The Authority's contribution to SERS for the fiscal year ended June 30, 2022 was $4,359,000.

For fiscal year 2021, the Authority's contribution rate was 23.8 to 23.9 percent of the defined benefit employee wages and 17.0 to 18.9 percent of the defined contribution employee wages. The Authority's contribution to SERS for the fiscal year ended June 30, 2021 was $3,713,000.

Note 9 - Pension Plans (Continued)

Net Pension Liability

At June 30, 2022, the Authority reported a liability of $23,853,140 for its proportionate share of SERS' net pension liability. The net pension liability was measured as of September 30, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of September 30, 2020, which used update procedures to roll forward the estimated liability to September 30, 2021. The Authority's proportion of the net pension liability was based on the Authority's required pension contributions received by SERS during the measurement periods from October 1, 2020 through September 30, 2021, relative to the total required employer contributions from all of SERS' participating employers. At September 30, 2021, the Authority's proportion was 0.587 percent.

At June 30, 2021, the Authority reported a liability of $39,168,380 for its proportionate share of SERS' net pension liability. The net pension liability was measured as of September 30, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of September 30, 2019, which used update procedures to roll forward the estimated liability to September 30, 2020. The Authority's proportion of the net pension liability was based on the Authority's required pension contributions received by SERS during the measurement periods from October 1, 2019 through September 30, 2020, relative to the total required employer contributions from all of SERS' participating employers. At September 30, 2020, the Authority's proportion was 0.581 percent.

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the years ended June 30, 2022 and 2021, the Authority recognized pension recovery of $812,555 and $1,601,919, respectively. At June 30, 2022 and 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	2022		2021	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual investment earnings	$ -	$ 10,575,281	$ 90,934	$ -
Authority's contributions subsequent to the measurement date	3,370,063	-	2,843,061	-
Total	$ 3,370,063	$ 10,575,281	$ 2,933,995	$ -

Amounts reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending June 30, 2023. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

Years Ending June 30	Amount
2023	$ (2,816,333)
2024	(2,331,273)
2025	(2,600,453)
2026	(2,827,222)

Note 9 - Pension Plans (Continued)

Actuarial Assumptions

The Authority's net pension liability for the year ended June 30, 2022 was measured as of September 30, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of September 30, 2020 and rolled forward using generally accepted actuarial procedures. The Authority's net pension liability for the year ended June 30, 2021 was measured as of September 30, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of September 30, 2019 and rolled forward using generally accepted actuarial procedures. The total pension liability was determined using the following actuarial assumptions at the measurement dates:

	September 30, 2021	September 30, 2020
Valuation date	September 30, 2020	September 30, 2019
Wage inflation rate	2.75 percent	2.75 percent
Projected salary increases	2.75 through 11.75 percent	2.75 through 11.75 percent
Investment rate of return	6.7 percent	6.7 percent
Cost of living pension adjustment	3 percent annual noncompounded with maximum annual increase of $300 for those eligible	3 percent annual noncompounded with maximum annual increase of $300 for those eligible
Mortality	RP-2014 Male and Female Employee Annuitant Mortality Table, adjusted for mortality improvements using the projection scale MP-2017 from 2006	RP-2014 Male and Female Employee Annuitant Mortality Table, adjusted for mortality improvements using the projection scale MP-2017 from 2006
Notes	The actuarial assumptions were based upon the results of an experience study for the periods from 2012 through 2017.	The actuarial assumptions were based upon the results of an experience study for the periods from 2012 through 2017.

Discount Rate

A discount rate of 6.7 percent was used to measure the total pension liability as of September 30, 2021 and 2020. This discount rate was based on the long-term expected rate of return on pension plan investments of 6.7 percent as of September 30, 2021 and 2020. The projection of cash flows used to determine this discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate.

Based on these assumptions, the pension 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 rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Note 9 - Pension Plans (Continued)

Investment Rate of Return

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. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2021 and 2020 are summarized in the following table:

	2021		2020	
Asset Class	Target Allocation	Long-term Expected Real Rate of Return*	Target Allocation	Long-term Expected Real Rate of Return*
Domestic equity pools	25.00 %	5.40 %	25.00 %	5.50 %
Private equity pools	16.00	9.10	16.00	9.30
International equity pools	15.00	7.50	15.00	7.40
Fixed-income pools	10.50	(0.70)	10.50	0.50
Real estate and infrastructure pools	10.00	5.40	10.00	4.90
Absolute return pools	9.00	2.60	9.00	3.20
Real return and opportunistic	12.50	6.10	12.50	6.60
Short-term investment pools	2.00	(1.30)	2.00	(0.10)
Total	100.00 %		100.00 %	

*Long-term rates of return are net of administrative expense and inflation of 2.0 and 2.1 percent as of September 30, 2021 and 2020, respectively.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the Authority's proportionate share of the net pension liability calculated using the discount rate, as well as what the proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current discount rate:

	2022		
	1 Percentage Point Decrease (5.7 Percent)	Current Discount Rate (6.7 Percent)	1 Percentage Point Increase (7.7 Percent)
Authority's proportionate share of the net pension liability	$ 34,498,187	$ 23,853,140	$ 14,785,892

	2021		
	1 Percentage Point Decrease (5.7 Percent)	Current Discount Rate (6.7 Percent)	1 Percentage Point Increase (7.7 Percent)
Authority's proportionate share of the net pension liability	$ 49,986,519	$ 39,168,380	$ 29,957,148

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the SERS Annual Comprehensive Financial Report that may be obtained by visiting www.michigan.gov/ors.

Note 9 - Pension Plans (Continued)

Defined Contribution Plan

The Authority participates in the State of Michigan's defined contribution plan system. The Authority is required to contribute to the defined contribution plan 4.0 percent of payroll with an additional match of up to 3.0 percent. The contribution requirements of plan members and the Authority are established and may be amended by the state Legislature. The state Legislature establishes the extent to which the employer and employees are required to make contributions and establishes the benefit provisions for the plan. The Authority's contributions to the plan were $1,263,952 and $910,365 for the years ended June 30, 2022 and 2021, respectively, and are recorded in salaries and benefits expense.

Note 10 - Other Postemployment Benefit Plans

Defined Benefit OPEB Plan - Health Care

Plan Description

The Michigan State Employees' Retirement System is a single-employer, statewide, defined benefit public employee retirement plan governed by the State of Michigan and created under Public Act 240 of 1943, as amended. Section 2 of this act established the board's authority to promulgate or amend the provisions of the System. Executive Order 2015-13, signed by the governor on October 27, 2016, established the State of Michigan Retirement Board. The board consists of nine members - five appointed by the governor (which consist of two members of the State Employees' Retirement System, at least one of whom is a retirant; one member of the Judges Retirement System; one current or former officer or enlisted person in the Michigan Military Establishment who is a member or retirant under the Military Retirement Provisions; and one member of the general public), the attorney general, the state treasurer, the legislative auditor general, and the state personnel director. The System's OPEB plan provides all retirees with the option of receiving health, dental, and vision coverage under the Michigan State Employees' Retirement Act.

The Michigan State Employees' Retirement System is accounted for in a separate OPEB trust fund and also issues a publicly available financial report that includes financial statements and required supplemental information. That reports may be obtained by visiting www.michigan.gov/ors or by calling the Office of Retirement Services at (517) 322-5103 or (800) 381-5111.

Benefits Provided

Benefit provisions of the other postemployment benefit plan are established by state statute, which may be amended. Public Act 240 of 1943, as amended, establishes eligibility and benefit provisions for the OPEB plan. Defined benefit (Tier 1) members are eligible to receive health, prescription drug, dental, and vision coverage on the first day they start receiving pension benefits. Defined contribution (Tier 2) participants who elected to retain the graded premium subsidy benefit under the reform elections of Public Act 264 of 2011 are also eligible to receive subsidized health prescription drug, dental, and vision coverage after terminating employment if they meet eligibility requirements. Retirees with the premium subsidy benefit contribute 20 percent of the monthly premium amount for the health (including prescription coverage), dental, and vision coverage. Retirees with a graded premium subsidy benefit accrue credit toward insurance premiums in retirement, earning a 30 percent subsidy with 10 years of service, with an additional 3 percent subsidy for each year of service thereafter, not to exceed the maximum allowed by statute or 80 percent. There is no provision for ad hoc or automatic increases. The State Employees' Retirement Act requires joint authorization by DTMB and the Civil Service Commission to make changes to retiree medical benefit plans. Defined contribution (Tier 2) participants who elected the Personal Healthcare Fund under Public Act 264 of 2011 and those hired on or after January 1, 2012 are not eligible for any subsidized health, prescription drug, dental, or vision coverage in retirement but may purchase it at their own expense (certain conditions apply).

Note 10 - Other Postemployment Benefit Plans (Continued)

Former nonvested members of the DB plan who are reemployed by the State on or after January 1, 2014 are not eligible for retiree health insurance coverage premium subsidy but will become participants in the Personal Healthcare Fund. This plan is closed to new hires.

Contributions

The statute requires the employer to contribute to finance the benefits of plan members. These employer contributions are determined annually by the System's actuary and are based upon level percent of payroll value funding principles, so the contribution rates do not have to increase over time.

For fiscal year 2022, the Authority's contribution rate was 17.3 to 23.1 percent of the defined benefit employee wages and 17.3 to 23.1 percent of the defined contribution employee wages. The Authority's contribution to SERS for the fiscal year ended June 30, 2022 was $4,075,000. Active employees are not required to contribute to SERS OPEB.

For fiscal year 2021, the Authority's contribution rate was 20.7 to 23.1 percent of the defined benefit employee wages and 20.7 to 23.1 percent of the defined contribution employee wages. The Authority's contribution to SERS for the fiscal year ended June 30, 2021 was $4,270,000. Active employees are not required to contribute to SERS OPEB.

Net OPEB Liability

At June 30, 2022, the Authority reported a liability of $22,105,170 for its proportionate share of SERS' net OPEB liability. The net OPEB liability was measured as of September 30, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2020 and rolled forward using generally accepted actuarial procedures. The Authority's proportion of the net OPEB liability was based on the Authority's required pension contributions received by SERS during the measurement period from October 1, 2020 through September 30, 2021, relative to the total required employer contributions from all of SERS' participating employers. At September 30, 2021, the Authority's proportion was 0.579 percent.

At June 30, 2021, the Authority reported a liability of $33,218,419 for its proportionate share of SERS' net OPEB liability. The net OPEB liability was measured as of September 30, 2020, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2019 and rolled forward using generally accepted actuarial procedures. The Authority's proportion of the net OPEB liability was based on the Authority's required pension contributions received by SERS during the measurement period from October 1, 2019 through September 30, 2020, relative to the total required employer contributions from all of SERS' participating employers. At September 30, 2020, the Authority's proportion was 0.569 percent.

Note 10 - Other Postemployment Benefit Plans (Continued)

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the years ended June 30, 2022 and 2021, the Authority recognized OPEB recovery of $2,995,988 and $409,826, respectively. At June 30, 2022 and 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	2022		2021	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ -	$ 17,427,807	$ -	$ 18,269,601
Changes in assumptions	5,955,957	1,063,282	8,279,698	-
Net difference between projected and actual earnings on OPEB plan investments	-	3,030,815	189,806	-
Changes in proportionate share and differences between actual contributions and proportionate share of contributions	650,133	4,270,452	7,820	5,719,569
Authority's contributions subsequent to the measurement date	2,928,053	-	3,291,036	-
Total	$ 9,534,143	$ 25,792,356	$ 11,768,360	$ 23,989,170

Amounts reported as deferred outflows of resources related to OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ending June 30, 2023. Other amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Years Ending June 30	Amount
2023	$ (5,528,126)
2024	(5,024,521)
2025	(4,702,043)
2026	(3,436,130)
2027	(495,446)

Note 10 - Other Postemployment Benefit Plans (Continued)

Actuarial Assumptions

The Authority's net OPEB liability for the year ended June 30, 2022 was measured as of September 30, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2020 and rolled forward using generally accepted actuarial procedures. The Authority's net OPEB liability for the year ended June 30, 2021 was measured as of September 30, 2020, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2019 and rolled forward using generally accepted actuarial procedures. The total OPEB liability was determined using the following actuarial assumptions at the measurement dates:

	September 30, 2021	September 30, 2020
Valuation date	September 30, 2020	September 30, 2019
Wage inflation rate	2.75 percent	2.75 percent
Projected salary increases	2.75 through 11.75 percent	2.75 through 11.75 percent
Investment rate of return	6.9 percent	6.9 percent
Health care cost trend rate	Pre-65: 7.50 percent year 1 graded to 3.50 percent year 15; 3.00 percent year 120	
	Post-65: 6.25 percent year 1 graded to 3.50 percent year 15; 3.00 percent year 120	Pre and Post 65: 7.50 percent year 1 graded to 3.50 percent year 15; 3.00 percent year 120
Mortality	RP-2014 Male and Female Employee Annuitant Mortality Table, adjusted for mortality improvements using the projection scale MP-2017 from 2006	RP-2014 Male and Female Employee Annuitant Mortality Table, adjusted for mortality improvements using the projection scale MP-2017 from 2006
Notes	The actuarial assumptions were based upon the results of an experience study for the period from 2012 through 2017.	The actuarial assumptions were based upon the results of an experience study for the period from 2012 through 2017.

Discount Rate

A single discount rate of 6.9 percent was used to measure the total OPEB liability as of September 30, 2021 and 2020. This single discount rate was based on the expected rate of return on OPEB plan investments of 6.9 percent as of September 30, 2021 and 2020. The projection of cash flows used to determine this single discount rate assumed that, in the future, plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member (retiree) rate.

Based on these 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 rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Note 10 - Other Postemployment Benefit Plans (Continued)

Investment Rate of Return

The long-term expected rate of return on 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 OPEB 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 adding expected inflation. Best estimates of arithmetic real rates of return as of September 30, 2021 and 2020 are summarized in the following table:

	2021		2020	
Asset Class	Target Allocation	Long-term Expected Real Rate of Return*	Target Allocation	Long-term Expected Real Rate of Return*
Domestic equity	25.00 %	5.40 %	25.00 %	5.60 %
Private equity pools	16.00	9.10	16.00	9.30
International equity	15.00	7.50	15.00	7.40
Fixed-income pools	10.50	(0.70)	10.50	0.50
Real estate and infrastructure pools	10.00	5.40	10.00	4.90
Absolute return pools	9.00	2.60	9.00	3.20
Real return and opportunistic pools	12.50	6.10	12.50	6.60
Short-term investment pools	2.00	(1.30)	2.00	(0.10)
Total	100 %		100 %	

*Long-term rates of return are net of administrative expense and inflation of 2.0 and 2.1 percent as of September 30, 2021 and 2020, respectively

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the Authority's proportionate share of the net OPEB liability calculated using the discount rate, as well as what the Authority's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current discount rate:

	2022		
	1 Percentage Point Decrease (5.9 Percent)	Current Discount Rate (6.9 Percent)	1 Percentage Point Increase (7.9 Percent)
Authority's proportionate share of the net OPEB liability	$ 27,947,752	$ 22,105,170	$ 17,180,468

	2021		
	1 Percentage Point Decrease (5.9 Percent)	Current Discount Rate (6.9 Percent)	1 Percentage Point Increase (7.9 Percent)
Authority's proportionate share of the net OPEB liability	$ 39,555,891	$ 33,218,419	$ 27,896,680

Note 10 - Other Postemployment Benefit Plans (Continued)

Sensitivity of the Net OPEB Liability to Changes in the Health Care Cost Trend Rate

The following presents the Authority's proportionate share of the net OPEB liability of the Authority, calculated using the health care cost trend rate, as well as what the Authority's proportionate share of the net OPEB liability would be if it were calculated using a health care cost trend rate that is 1 percentage point lower or 1 percentage point higher than the current rate:

	2022		
	1 Percentage Point Decrease (6.50 to 2.50 Percent)	Current Health Care Cost Trend Rate (7.50 to 3.50 Percent)	1 Percentage Point Increase (8.50 to 4.50 Percent)
Authority's proportionate share of the net OPEB liability	$ 16,909,172	$ 22,105,170	$ 28,089,181

	2021		
	1 Percentage Point Decrease (6.50 to 2.00 Percent)	Current Health Care Cost Trend Rate (7.50 to 3.00 Percent)	1 Percentage Point Increase (8.50 to 4.00 Percent)
Authority's proportionate share of the net OPEB liability	$ 27,629,099	$ 33,218,419	$ 39,678,830

OPEB Plan Fiduciary Net Position

Detailed information about the OPEB plan's fiduciary net position is available in the SERS Annual Comprehensive Financial Report that may be obtained by visiting www.michigan.gov/ors.

Postemployment Life Insurance Benefits

Plan Description

The State of Michigan provides postemployment life insurance benefits to eligible individuals upon retirement from state employment. Members of the State Employees' Retirement System, the State Police Retirement System (SPRS), and the Judges Retirement System (JRS) and certain members of the Military Retirement Provisions (MMRP) may receive a life insurance benefit if they meet the benefit eligibility requirements. The Plan is a single-employer, statewide, defined benefit other postemployment benefit plan. The State contracts with Minnesota Life Insurance Company to administer the payout of life insurance benefits. The Plan is managed by the Michigan Civil Service Commission under Article XI, Section 5 of the Michigan Constitution of 1963 and Michigan Civil Service Commission Rule 5-11.

Activity of the Plan is accounted for in the State Sponsored Group Insurance Fund (the "Fund"), an internal service fund in the State of Michigan Annual Comprehensive Financial Report (SOMACFR). The Fund was administratively established to account for employee insurance benefit programs, which are largely self-funded. Five group insurance programs are offered to state employees: health, dental, vision, long-term disability, and life.

The Plan is not a trust and has no assets.

Note 10 - Other Postemployment Benefit Plans (Continued)

Benefits Provided

The State's group policy with Minnesota Life Insurance Company includes any active employee in the category of classified state service with an appointment of at least 720 hours duration but excludes employees with noncareer appointments and those working less than 40 percent of full time; any active official or active unclassified employee of the State who has been approved for coverage by the Michigan Civil Service Commission; any retired employee or official who was insured under this policy or the prior policies it replaced prior to entry into a State Retirement System; and Wayne County, Michigan employees who (a) were State Judicial Council employees on October 1, 1996 and whose employment was transferred to the Recorder's Court on October 1, 1996 and (b) whose employer subsequently became the Wayne County Clerk's Office.

Eligible retirees are provided with life insurance coverage equal to 25 percent of the active life insurance coverage (whose amount is rounded to the next higher $100 provided the retiree retired after July 1, 1974), $1,000 for spouse, and $1,000 for each dependent under age 23.

The active life insurance amount is either (a) two times the employee's basic annual salary, the result rounded to the next higher $1,000 if not already a multiple thereof, with a minimum of $10,000 and a maximum of $200,000 or (b) one times the employee's basic annual salary, the result rounded to the next higher $1,000 if not already a multiple thereof, with a minimum of $10,000 and a maximum of $50,000.

Contributions

The State contributes 100 percent of the premiums for employee and retiree life insurance coverage. The premium rate for fiscal years 2022 and 2021 was $0.28 for each $1,000 of coverage of active payroll per pay period. The employee contributes 100 percent of the premiums for dependent life coverage, and an employee must have been enrolled in dependent life insurance to maintain eligibility for dependent coverage as a retiree. The State is liable for benefit payments that exceed premiums paid.

More specific information concerning eligibility requirements, benefit level, and funding policies is included in employee collective bargaining agreements, benefit plan booklets, and rules and regulations issued by the Michigan Civil Service Commission.

Actuarial Valuations and Assumptions

The Authority's total OPEB liability for the year ended June 30, 2022 was measured as of September 30, 2021 and is based on an actuarial valuation performed as of September 30, 2021. The Authority's total OPEB liability for the year ended June 30, 2021 was measured as of September 30, 2020 and is based on an actuarial valuation performed as of September 30, 2019 and rolled forward using generally accepted actuarial procedures.

Projections of benefits for financial reporting purposes are based on the substantive plan (the Plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities consistent with the long-term perspective of the calculations.

The normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using an individual entry age actuarial cost method with these characteristics: (a) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement and (b) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Note 10 - Other Postemployment Benefit Plans (Continued)

The total OPEB liability was measured using the following actuarial assumptions:

Wage Inflation Rate

2.75 percent per year at September 30, 2021 and 2020

Investment Rate of Return (Discount Rate)

2.19 percent per year at September 30, 2021 and 2.41 percent per year at September 30, 2020

Mortality

Healthy Life and Disabled Life Mortality, with 110 percent of the rates used in the pension valuations for SERS plan members at September 30, 2021 and 2020

IBNR

A liability equal to 25 percent of expected first year cash flow was held for postemployment life insurance benefits claims incurred but not reported (IBNR).

Spouse Benefits for Future Retirees

The liabilities for active members were loaded to account for potential postemployment life insurance benefits payable to spouses of future retirees at 1.75 and 1.5 percent for SERS retirees at September 30, 2021 and 2020, respectively.

Spouse Benefits for Current Retirees

Liabilities for current retired members reported with a postemployment life benefit for a spouse were calculated based on the information provided in the data files at September 2021. Liabilities for current retired members were loaded to account for postemployment life insurance benefits payable to the spouses of current retirees at 2.0 percent for SERS retirees at September 2020.

Other

The face values of the plan policies currently in force were reported to the actuary beginning with the September 30, 2021 valuation. The face values of the plan policies currently in force were requested by the actuary but were not available for use in the September 30, 2020 valuation. The actuary estimated the value of the postemployment life insurance benefit policies for retirees as follows:

Individuals retired after July 1974: 50 percent times compensation at retirement (compensation reported for the 2019 retirement system valuation):

Spousal benefits: $1,000
Individuals retired on or before July 1974: $3,000
Spousal benefits: $1,000

Data for current retiree members of the Plan was not available for use in the September 30, 2020 valuation. All current retiree members of the retirement plans deemed eligible for postemployment life insurance benefits and reported in connection with the 2019 retirement valuation were included in these valuations of the Plan.

Discount Rate

A discount rate of 2.19 and 2.41 percent was used to measure the ending total OPEB liability for postemployment life insurance benefits as of September 30, 2021 and 2020, respectively. This discount rate was based on the tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date since the Plan has no assets.

Note 10 - Other Postemployment Benefit Plans (Continued)

Total OPEB Liability for Postemployment Life Insurance Benefits

As of June 30, 2022, the Authority reported a liability of $7,954,322 for its proportionate share of the State's postemployment life insurance benefits total OPEB liability. The total OPEB liability was measured as of September 30, 2021 based on an actuarial valuation as of that date. The Authority's proportion of the total OPEB liability was determined by dividing the Authority's actual contributions to the Plan during the measurement period from October 1, 2020 through September 30, 2021 by the percentage of OPEB actual contributions received from all applicable employers. At September 30, 2021, the Authority's proportion was 0.584 percent.

As of June 30, 2021, the Authority reported a liability of $8,155,753 for its proportionate share of the State's postemployment life insurance benefits total OPEB liability. The total OPEB liability was measured as of September 30, 2020 based on an actuarial valuation as of September 30, 2019 and rolled forward using generally accepted actuarial procedures. The Authority's proportion of the total OPEB liability was determined by dividing the Authority's actual contributions to the Plan during the measurement period from October 1, 2019 through September 30, 2020 by the percentage of OPEB actual contributions received from all applicable employers. At September 30, 2020, the Authority's proportion was 0.580 percent.

Sensitivity of the Total OPEB Liability for Postemployment Life Insurance Benefits

The following presents the Authority's proportionate share of the total OPEB liability calculated using the discount rate, as well as what the proportionate share of the total OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current discount rate:

	2022		
	1 Percentage Point Decrease (1.19 Percent)	Current Discount Rate (2.19 Percent)	1 Percentage Point Increase (3.19 Percent)
Authority's proportionate share of the total OPEB liability	$ 9,560,046	$ 7,954,322	$ 6,700,018

	2021		
	1 Percentage Point Decrease (1.41 Percent)	Current Discount Rate (2.41 Percent)	1 Percentage Point Increase (3.41 Percent)
Authority's proportionate share of the total OPEB liability	$ 9,756,136	$ 8,155,753	$ 6,915,804

Note 10 - Other Postemployment Benefit Plans (Continued)

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB for Postemployment Life Insurance Benefits

For the years ended June 30, 2022 and 2021, the Authority recognized OPEB expense of $56,996 and $103,413, respectively. At June 30, 2022 and 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	2022		2021	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 1,123	$ 996,125	$ 2,394	$ 523,137
Changes of assumptions	957,226	192,731	898,030	337,741
Changes in proportion and differences between actual contributions and proportion share of contributions	45,304	594,693	-	783,651
Authority's contributions subsequent to the measurement date	235,868	-	202,682	-
Total	$ 1,239,521	$ 1,783,549	$ 1,103,106	$ 1,644,529

Amounts reported as deferred outflows of resources related to OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the total OPEB liability in the year ending June 30, 2023. Other amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Years Ending	Amount
2023	$ (301,363)
2024	(217,010)
2025	(119,765)
2026	(84,257)
2027	(57,501)

Amounts reported for defined benefit postemployment benefits other than pensions and postemployment life insurance benefits are aggregated on the statement of net position as follows:

	2022		
	Net OPEB Liability	Deferred Outflows of Resources	Deferred Inflows of Resources
Postemployment benefits other than pensions - Health care	$ 22,105,170	$ 9,534,143	$ 25,792,356
Postemployment life insurance benefits	7,954,322	1,239,521	1,783,549
Total	$ 30,059,492	$ 10,773,664	$ 27,575,905

Note 10 - Other Postemployment Benefit Plans (Continued)

	2021		
	Net OPEB Liability	Deferred Outflows of Resources	Deferred Inflows of Resources
Postemployment benefits other than pensions - Health care	$ 33,218,419	$ 11,768,360	$ 23,989,170
Postemployment life insurance benefits	8,155,753	1,103,106	1,644,529
Total	$ 41,374,172	$ 12,871,466	$ 25,633,699

Defined Contribution OPEB Plan

Employees hired on or after January 1, 2012 will not be eligible for any retiree health insurance coverage but will become participants in the Personal Healthcare Fund wherein they will contribute up to 2 percent of their compensation into a 401(k) or 457 account, earning a matching 2 percent employer contribution. Also, employees will receive a credit into a health reimbursement at termination of employment if they have at least 10 years of service at termination. The credit will be $2,000 for participants who are at least 60 years old and $1,000 for participants who are less than 60 years old at termination.

Note 11 - Capital Assets

On May 30, 2018, the Authority purchased its office building for $21,000,000. The building has an estimated useful asset life of 40 years. Accumulated depreciation was $2,144,000 and $1,619,000 for the years ended June 30, 2022 and 2021, respectively. Depreciation expense was $525,000 for both the years ended June 30, 2022 and 2021.

Note 12 - Restricted Net Position

The components of restricted net position are as follows (in thousands of dollars):

	2022	2021
Pledged for payment of:		
All bond issues (capital reserve account)	$ 100,574	$ 106,784
Single-family Mortgage Revenue Bonds	157,370	154,802
Rental Housing Revenue Bonds	285,293	265,568
Total	$ 543,237	$ 527,154

Note 13 - Contingent Liabilities

The Authority is involved in various legal proceedings, claims, and disputes arising in the ordinary course of its financing activities with real estate developers and others. Management does not expect the amount of the ultimate liability, with respect to the disposition of these matters, will have any material adverse impact on the financial condition or results of operations of the Authority.

Note 14 - Commitments

As of June 30, 2022 and 2021, the Authority has commitments to issue multifamily mortgage loans in the amounts of $349,867,000 and $261,371,000, respectively, and single-family mortgage loans in the amounts of $87,807,000 and $56,301,000, respectively.

Note 14 - Commitments (Continued)

The Authority has committed up to approximately $1,055,000 per year for up to 30 years from the date of completion of the respective developments (subject to 3 years' advance notice of termination) from its accumulated reserves and future income to subsidize operations or rents for certain tenants occupying units in certain developments funded under the Authority's multifamily program. Such developments receive funds either for the purpose of subsidizing rents so that some units can be afforded by families with incomes at 50 percent or less of median income or to subsidize operations in general. Subsidy disbursements totaled approximately $34,000 and $71,000 for the years ended June 30, 2022 and 2021, respectively.

In addition, the Authority makes available up to approximately $1,000,000 per year for up to 30 years to subsidize rents in a similar fashion for 20 percent of the units in certain other developments financed or to be financed under its multifamily mortgage lending program. Under this program, the Authority is entitled to receive a portion of any excess cash flow generated by the developments, as well as a share of the profits from the sale of the developments, and is able to reduce the rent subsidies if the interest rates being charged by the Authority on the related mortgage loans are below certain preset levels. Subsidy repayment of $1,649,000 and $214,000 exceeded subsidy disbursements for the years ended June 30, 2022 and 2021, respectively.

Note 15 - Interest Rate Swaps

In connection with the issuance of various debt, the Authority has entered into interest rate swap contracts. To date, the interest rate swap contracts have all been the type whereby the Authority pays a fixed rate and receives a variable rate. No amount of compensation was paid or received at the time the contracts were executed. Interest rate swap agreements are important tools that the Authority utilizes to accomplish its goals. The Authority entered into the agreements in connection with the issuance of certain variable-rate debt, with the intent of creating a synthetic fixed-rate debt, at an interest rate that is lower than if fixed-rate debt were to have been issued directly. These contracts have reduced the Authority's cost of borrowing and reduced exposure to variable interest rate risk. This has allowed the Authority to finance developments, reduce single-family mortgage rates, and fund programs that otherwise would not have been feasible.

The Authority is issuing the June 30, 2022 and 2021 financial statements in accordance with Governmental Accounting Standards Board Statement No. 53. This standard is used to determine whether a derivative instrument will result in an effective hedge. Changes in the market value of effective hedges are recognized in the year to which they relate. Effective hedge changes do not affect investment income but are reported as deferrals in the statement of net position. Derivative instruments that are not deemed effective would be reported at fair market value and recognized as investments.

The fair values of the interest rate swaps were estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps.

Note 15 - Interest Rate Swaps (Continued)

The following table summarizes the interest rate swap contracts at June 30, 2022:

Associated Debt/Swap Agreement	Effective Date	Notional Amount as of June 30, 2022	Termination Date	Rate	Fixed Rate	Optional Termination Date without Payment (9)	Market (Payment) Receipt to Terminate Swap	GASB 53 Presentation in Statement of Net Position	Type of Risk Associated with Swap Contract (4)(5)(6)(8)
Rental Housing Revenue Bonds (effective hedges):									
2002 Series A (1)	07/03/02	$ 38,160,000	04/01/37	70% of 1 M LIBOR	4.560%	N.A.	$ (7,044,912)	$ (7,044,912)	
2008 Series A (1)(10)	04/01/01	3,925,000	04/01/23	SIFMA + 0.10%	5.350%	N.A.	(106,000)	(45,109)	
2008 Series C (1)(10)	04/01/01	680,000	04/01/23	SIFMA	4.770%	N.A.	(15,673)	(4,737)	
2008 Series D (3)(10)	11/18/04	10,805,000	10/01/39	65% of 1 M LIBOR + 0.23%	3.705%	10/01/24	(319,312)	(205,125)	
2008 Series D (3)(10)	11/18/04	18,005,000	10/01/39	65% of 3 M LIBOR + 0.16%	3.597%	10/01/24	(443,435)	(295,250)	
2016 Series C (3)(10)	03/16/06	51,615,000	10/01/40	65% of 3 M LIBOR + 0.16%	3.514%	04/01/26	(2,269,881)	4,118,120	
2016 Series D (3)(10)	07/25/06	15,700,000	04/01/41	61% of 1 M LIBOR + 0.40%	3.996%	10/01/26	(1,135,411)	1,363,765	
2016 Series E (3)(10)	07/02/07	23,260,000	04/01/42	65% of 3 M LIBOR + 0.16%	3.378%	04/01/27	(1,105,075)	1,846,951	
2018 Series C (3)(10)	09/22/05	43,820,000	04/01/40	65% of 1 M LOBIR + 0.23%	3.514%	10/01/25	(1,820,107)	502,771	
2018 Series C (3)(10)	01/23/08	60,760,000	10/01/42	61% of 1 M LIBOR + 0.40%	3.564%	10/01/22	(3,477,523)	600,425	
Subtotal		266,730,000					(17,737,329)	836,899	
Single-family Mortgage Revenue Bonds (effective hedges):									
2006 Series C (2)	12/01/19	33,080,000	12/01/27	SIFMA	2.703%	12/01/24	108,445	108,445	(7)
2007 Series E (2)	12/01/19	36,685,000	12/01/27	SIFMA	2.726%	12/01/24	137,023	137,023	(7)
2007 Series F (2)	12/01/08	13,895,000	12/01/38	Floating Rate	4.340%	N.A.	(2,228,939)	(2,228,939)	
2009 Series D (2)	12/01/19	17,515,000	06/01/30	SIFMA	2.746%	12/01/24	69,365	69,365	(7)
2018 Series B (2)	03/28/18	50,000,000	12/01/33	70% of 1 M LIBOR + 0.85%	3.351%	12/01/25	594,069	594,069	(7)
2018 Series D (2)	12/01/18	50,000,000	12/01/38	70% of 1 M LIBOR + 0.85%	3.696%	12/01/24	309,697	309,697	
2022 Series B (2)(10)	10/05/17	45,000,000	12/01/32	70% of 1 M LIBOR+1.00%	3.559%	12/01/29	418,303	611,992	
Subtotal		246,175,000					(592,037)	(398,348)	
Total interest rate swaps		$ 512,905,000					$ (18,329,366)	$ 438,551	

The cumulative increase in fair market value of hedging derivative instruments of $438,551 is a deferred outflow of resources per GASB Statement No. 53.

(1) Counterparty risk is the risk that the swap counterparty will not fulfill its obligations set forth under the terms and conditions of the swap contract. The counterparty associated with these bonds is Goldman Sachs Mitsui Marine Derivative Products, L.P. (GSMMDP). GSMMDP is currently rated AA- stable outlook by S&P and Aa2 by Moody's as of June 30, 2022.

(2) Counterparty risk is the risk that the swap counterparty will not fulfill its obligations set forth under the terms and conditions of the swap contract. The counterparty associated with these bonds is Barclays Bank PLC. Barclays is currently rated A+ outlook by S&P and A1 stable by Moody's as of June 30, 2022.

(3) Counterparty risk is the risk that the swap counterparty will not fulfill its obligations set forth under the terms and conditions of the swap contract. The counterparty associated with these bonds is Merrill Lynch Capital Services, Inc. (MLCS) or Merrill Lynch Derivative Products (MLDP). MLDP is currently rated AA stable outlook by S&P and Aa3 by Moody's as of June 30, 2022. MLCS is not rated by Moody's or S&P. MLCS' obligations under each agreement are guaranteed by Bank of America Corporation, which has a rating of A+ by S&P and Aa2 positive by Moody's as of June 30, 2022.

Note 15 - Interest Rate Swaps (Continued)

(4) Termination risk is the risk that the swap could be terminated by the counterparty due to any of several events, which may include an authority or counterparty ratings downgrade, covenant violation by either party, bankruptcy of either party, swap payment default by either party, and default events defined in the Authority's bond indentures. All contracts have this risk.

(5) Basis risk refers to a mismatch between the interest rate received from the swap contract and the interest actually paid on the Authority's debt. All contracts have this risk.

(6) Tax event risk is the risk that a change in the marginal income tax rates or a change in the tax code impacts the trading value of tax-exempt bonds. All contracts have this risk.

(7) Rollover risk is the risk that the swap contract is not coterminous with the related debt.

(8) Amortization risk is the risk that there is a mismatch or potential mismatch between the Authority's bonds and the notional amount of the swap outstanding. This mismatch could expose the Authority to variable interest rates if the swap amortizes quicker than the bonds or subject the Authority to a payment to the counterparty to terminate a portion of the swap contract early if the bonds are redeemed more quickly than anticipated. All contracts have this risk.

(9) The Authority has the option to terminate the contract in whole or in part without payment after the stated date.

(10) These interest rate swap agreements have either been reassigned from their original bond issue as part of an economic refunding or have been executed at terms that do not reflect current market terms. GASB Statement No. 53 has termed these off-market swaps to be in-substance hybrids. Essentially, the swaps have two components as follows:

a. On-market component - This is the component of the swap that requires a calculation on the effectiveness and to be valued at the market on an annual basis. In the case of the Authority, these swaps' on-market components have been determined to be effective based on the calculation and are included in interest rate swaps in the table.

b. Off-market component - This is the component of the swap that, at the time of the reassignment, is determined to be off-market and takes on the characteristics of a fixed contract. Therefore, at the time of reassignment, this component needs to be valued based on the rate differential, which compares the market rates to the original swap rates. This component is then considered a fixed contract and should be amortized over the life of the new debt and added to the deferred charges. See table below summarizing this component.

Note 15 - Interest Rate Swaps (Continued)

Further, total unamortized off-market borrowings as of June 30, 2022 are $23,158,753, as noted in the table below:

	Off-market Borrowing Rate	On-market Borrowing Rate	Unamortized Off-market Borrowing Balance
Rental Housing Revenue Bonds:			
2008 Series A	1.920%	3.433%	$ (55,670)
2008 Series D	0.404%	3.301%	(360,923)
2008 Series D	0.331%	3.266%	(496,563)
2016 Series C	2.143%	1.371%	(7,737,226)
2016 Series D	2.609%	1.387%	(3,061,367)
2016 Series E	2.122%	1.256%	(3,759,222)
2018 Series C	1.085%	2.429%	(3,085,420)
2018 Series C	1.079%	2.485%	(4,923,333)
Single-family Mortgage Revenue Bonds - 2022 Series B	0.430%	3.129%	320,971
Total			$ (23,158,753)

A comparative summary of the changes resulting from GASB Statement No. 53 is as follows:

	Changes in Fair Value		Fair Value at June 30		
	Classification	Amount	Classification	Amount	Notional
Cash flow hedges 2022:					
Pay-fixed interest rate swaps (receive-variable)	Deferred charge	$ 46,512,167	Hedging derivative instruments	$ 438,551	$ 512,905,000
Off-market borrowings	Deferred charges on refunding	12,307,338	Off-market borrowings	(23,158,753)	-
Cash flow hedges 2021:					
Pay-fixed interest rate swaps (receive-variable)	Deferred charge	26,113,062	Hedging derivative instruments	(46,073,616)	600,545,000
Off-market borrowings	Deferred charges on refunding	2,465,447	Off-market borrowings	(35,466,091)	-

Note 16 - Line of Credit and Short-term Facility

The Authority issues debt to fund single-family loans. At times it may be advantageous for the Authority to originate these loans with its own liquidity or a revolving line of credit prior to the closing of the long-term bond financing. For this reason, the Authority may enter into revolving credit facilities. Typically, the facilities will be paid down to a zero outstanding balance when bonds are sold.

On March 16, 2021, the Authority entered into a revolving credit agreement with US Bank. The agreement allows the Authority to borrow up to $100 million for the purpose of purchasing single-family mortgages. The agreement expires on March 14, 2023. On February 26, 2019, the Authority entered into a revolving credit agreement with TD Bank, N.A. The agreement allows the Authority to borrow up to $100 million for the purpose of purchasing single-family mortgages. The agreement expired on February 26, 2021.

The activity that occurred on the revolving line of credit as of June 30, 2022 and 2021 is as follows:

	Beginning Balance	Draws	Repayments	Ending Balance
June 30, 2022	$ 30,000,000	$ 130,000,000	$ (160,000,000)	$ -
June 30, 2021	-	347,000,000	(317,000,000)	30,000,000

Note 16 - Line of Credit and Short-term Facility (Continued)

Subsequent to year end, on July 1, 2022; August 12, 2022; and September 21, 2022, the Authority drew down $30 million, $40 million, and $30 million, respectively, bringing the total outstanding balance to $100 million.

Effective April 27, 2022, the Authority entered into a term loan agreement (TLA) with Barclays Bank PLC for the purpose of purchasing single-family mortgages and down payment assistance loans. The TLA was for the amount of $150,000,000 and was to be repaid the earlier of August 1, 2022 or when the Authority closed on the issuance of long-term financing. Once the funds were repaid, there is no longer an ability to borrow against the TLA. On April 28, 2022, the Authority borrowed $100,000,000, and, on May 12, 2022, the Authority borrowed the remaining $50,000,000 that was available. On June 22, 2022, the Authority issued the Single-family Mortgage Revenue Bonds, 2022 Series A, B, and C, and utilized a portion on these proceeds to pay the full $150,000,000 of principle outstanding. As of June 30, 2022, the TLA has a zero balance and additional funds can not be borrowed against this TLA.

Note 17 - Risk Management

The Authority is exposed to various risks of loss related to property loss, torts, errors and omissions, and employee injuries (workers' compensation), as well as medical benefits provided to employees. The State of Michigan is self-insured and provides coverage to the Authority for these potential losses. Additional information on risk management can be found in the footnotes of the State of Michigan Annual Comprehensive Financial Report. Settled claims related to the commercial insurance have not exceeded the amount of insurance coverage in any of the past three fiscal years.

Note 18 - Subsequent Events

Subsequent to year end, the Authority is in the process of issuing the Single-family Mortgage Revenue Bonds 2022 Series D and E in the amount of $338,190,000.

Also, see Note 16 related to subsequent draw downs on the revolving line of credit.

Required Supplemental Information

Required Supplemental Information
Schedule of the Authority's Proportionate Share of Net Pension Liability
State Employees' Retirement System

Last Eight Fiscal Years
Years Ended June 30
(in Thousands of Dollars)

	2022	2021	2020	2019	2018	2017	2016	2015
Authority's proportion of the net pension liability	0.58700 %	0.58100 %	0.63700 %	0.64800 %	0.66600 %	0.70000 %	0.70700 %	0.68500 %
Authority's proportionate share of the net pension liability	$ 23,853	$ 39,168	$ 42,492	$ 39,183	$ 34,606	$ 37,029	$ 38,909	$ 35,279
Authority's covered payroll	$ 19,097	$ 18,974	$ 19,591	$ 19,662	$ 20,269	$ 20,894	$ 20,749	$ 20,741
Authority's proportionate share of the net pension liability as a percentage of its covered payroll	124.90 %	206.43 %	216.90 %	199.28 %	170.73 %	177.22 %	187.52 %	170.09 %
Plan fiduciary net position as a percentage of total pension liability	78.08 %	64.07 %	64.71 %	67.22 %	69.45 %	67.48 %	66.11 %	68.07 %

The amounts presented for each fiscal year were determined as of the measurement date of September 30 of the previous year. This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, MSHDA presents information for those years for which information is available.

Required Supplemental Information
Schedule of the Authority's Pension Contributions
State Employees' Retirement System

Last Eight Fiscal Years
Years Ended June 30
(in Thousands of Dollars)

	2022	2021	2020	2019	2018	2017	2016	2015
Statutorily required contribution	$ 4,359	$ 3,713	$ 3,463	$ 4,139	$ 4,252	$ 4,823	$ 5,030	$ 5,161
Contributions in relation to the statutorily required contribution	4,359	3,713	3,463	4,139	4,252	4,823	5,030	5,161
Contribution Deficiency (Excess)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Authority's Covered Payroll	$ 21,345	$ 19,597	$ 18,924	$ 19,535	$ 19,652	$ 20,580	$ 20,749	**$ 20,741**
Contributions as a Percentage of Covered Payroll	20.42 %	18.95 %	18.30 %	21.19 %	21.64 %	23.44 %	24.24 %	**24.88 %**

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, MSHDA presents information for those years for which information is available.

Notes to Schedule of the Authority's Pension Contributions

Actuarial valuation information relative to the determination of contributions:

Valuation date	Actuarially determined contribution rates are calculated as of September 30 each year. The September 30, 2018 valuation determined the contribution rate for the State of Michigan's fiscal year ended September 30, 2021.

Methods and assumptions used to determine contribution rates for State of Michigan fiscal year ended September 30, 2021:

Actuarial cost method	Entry age, normal
Amortization method	Level dollar, closed
Remaining amortization period	16 years, closed ending on September 30, 2036
Asset valuation method	5-year smoothed market
Inflation	2.25 percent
Salary increase	2.75 percent wage inflation
Investment rate of return	6.7 percent, net of investment and administrative expenses
Retirement age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	RP-2014 Employee Mortality Tables, scaled by 100% for males and females and adjusted for mortality improvements using projection scale MP-2017 from 2006

See note to required supplemental information.

Required Supplemental Information
Schedule of the Authority's Proportionate Share of the Net OPEB Liability
State Employees' Retirement System - Health Care

Last Five Fiscal Years
Years Ended June 30
(in Thousands of Dollars)

	2022	2021	2020	2019	2018
Authority's proportion of the net OPEB liability	0.57900 %	0.56900 %	0.63000 %	0.64300 %	0.66500 %
Authority's proportionate share of the net OPEB liability	$ 22,105	$ 33,218	$ 49,588	$ 51,038	$ 54,803
Authority's covered payroll	$ 19,097	$ 18,974	$ 19,591	$ 19,662	$ 20,269
Authority's proportionate share of the net OPEB liability as a percentage of its covered payroll	115.75 %	175.07 %	253.12 %	259.58 %	270.38 %
Plan fiduciary net position as a percentage of total OPEB liability	57.12 %	38.29 %	27.88 %	24.41 %	20.00 %

The amounts presented for each fiscal year were determined as of the measurement date of September 30 of the previous year. This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, MSHDA presents information for those years for which information is available.

See note to required supplemental information.

Required Supplemental Information
Schedule of the Authority's OPEB Contributions
State Employees' Retirement System - Health Care

Last Five Fiscal Years
Years Ended June 30
(in Thousands of Dollars)

	2022	2021	2020	2019	2018
Statutorily required contribution	$ 4,075	$ 4,270	$ 4,522	$ 4,436	$ 4,301
Contributions in relation to the actuarially determined contribution	4,075	4,270	4,522	4,436	4,301
Contribution Deficiency (Excess)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Authority's Covered Payroll	$ 21,345	$ 19,597	$ 18,924	$ 19,535	$ 19,652
Contributions as a Percentage of Covered Payroll	19.09 %	21.79 %	23.90 %	22.71 %	21.89 %

Notes to Schedule of Contributions

Actuarial valuation information relative to the determination of contributions:

Valuation date	Actuarially determined contribution rates are calculated as of September 30 each year. The September 30, 2018 valuation determined the contribution rate for the State of Michigan's fiscal year ended September 30, 2021.

Methods and assumptions used to determine contribution rates for State of Michigan fiscal year ended September 30, 2021:

Actuarial cost method	Entry age, normal
Amortization method	Level percent of payroll, closed
Remaining amortization period	16 years, closed ending on September 30, 2036
Asset valuation method	5-year smoothed
Health care cost trend rates	8.25 percent in year 1 graded to 3.5 percent in year 10
Salary increase	2.75 percent wage inflation
Investment rate of return	6.90 percent, net of OPEB plan investment expenses
Retirement age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	RP-2014 Employee Mortality Tables, scaled by 100% and adjusted for mortality improvements using projection scale MP-2017 from 2006

Required Supplemental Information
Schedule of the Authority's Proportionate Share of the Total OPEB Liability
Postemployment Life Insurance Benefit

Last Five Fiscal Years
Years Ended June 30
(in Thousands of Dollars)

	2022	2021	2020	2019	2018
Authority's proportion of the total OPEB liability	0.58400 %	0.58000 %	0.62700 %	0.64600 %	0.65900 %
Authority's proportionate share of the total OPEB liability	$ 7,954	$ 8,156	$ 7,674	$ 8,066	$ 8,426
Authority's covered-employee payroll	$ 20,557	$ 18,213	$ 19,009	$ 19,274	$ 19,374
Authority's proportionate share of the total OPEB liability as a percentage of its covered-employee payroll	38.69 %	44.78 %	40.37 %	41.85 %	43.49 %

The amounts presented for each fiscal year were determined as of the measurement date of September 30 of the previous year. This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, MSHDA presents information for those years for which information is available.

The Plan is not a trust and has no assets.

See note to required supplemental information.

Pension and OPEB Information

The comparability of trend information is affected by changes in actuarial assumptions, benefit provisions, actuarial funding methods, accounting policies, and other changes. Those changes usually affect trends in contribution requirements and in ratios that use the pension and other postemployment benefit obligations as a factor.

The schedules of MSHDA's contributions are presented to show the responsibility of the employer in meeting the actuarial requirements to maintain the System on a sound financial basis.

The schedules of the Authority's proportionate share of the net pension and OPEB liabilities and schedules of MSHDA's contributions are schedules that are required in implementing GASB Statement Nos. 68 and 75. The schedules of the proportionate share of the net pension and OPEB liabilities represent, in actuarial terms, the accrued liability less the market value of assets. The schedules of MSHDA's contributions are comparisons of the employer's contributions to the actuarially determined contributions.

The information presented in the schedules of MSHDA's contributions was used in the actuarial valuation for the purpose of determining the actuarially determined contribution rates.

Other Supplemental Information

Statement of Net Position Information
(in thousands of dollars)

June 30, 2022

	Activities						
	Single-family Mortgage Revenue Bonds	Rental Housing Revenue Bonds	General Operating	Capital Reserve	Mortgage Escrow and Reserve	Other	Combined
Assets, Hedging Derivative Instruments, and Deferred Outflows							
Cash and Investments							
Cash and cash equivalents	$ 96,473	$ 288,723	$ 41,048	$ 987	$ 23,434	$ 55,980	$ 506,645
Investments	84,085	261,372	43	99,587	463,347	-	908,434
Total cash and Investments	180,558	550,095	41,091	100,574	486,781	55,980	1,415,079
Loans Receivable							
Multifamily mortgage loans:							
Construction in progress	-	362,929	12,013	-	-		374,942
Completed construction	-	1,061,363	50,627	-	-	171,790	1,283,780
Housing development loans						189	189
Single-family mortgage loans	2,095,409	-	28,425	-	-	-	2,123,834
Home improvement and moderate rehabilitation loans	-	-	1,698	-	-	-	1,698
Total	2,095,409	1,424,292	92,763	-	-	171,979	3,784,443
Accrued loan interest receivable	11,381	32,771	7,679	-	-	25,871	77,702
Allowance on loans receivable	(64,319)	(21,792)	(4,793)	-	-	(23,978)	(114,882)
Net loans receivable	2,042,471	1,435,271	95,649	-	-	173,872	3,747,263
Capital Assets, net			18,856				18,856
Other Assets							
Real estate owned - net	92	3,115	1,466	-	-	-	4,673
Other	35,879	1,828	10,995	-	-	90,601	139,303
Interfund accounts	(11,200)	(36,281)	(22,774)	-	63,352	6,903	0
Total other assets	24,771	(31,338)	(10,313)	-	63,352	97,504	143,976
Total assets	2,247,800	1,954,028	126,427	100,574	550,133	327,356	5,325,174
Accumulated (Increase) Decrease in Fair Value of Hedging Derivative Instruments	398	(837)	-	-	-	-	(439)
Deferred Outflows of Resources							
Deferred outflows related to pensions	-	-	3,370	-	-	-	3,370
Deferred outflows related to OPEB	-	-	10,774	-	-	-	10,774
Deferred charges on refunding - Reassigned swaps	(321)	23,480		-	-	-	23,159
Total deferred outflows of resources	(321)	23,480	14,144	-	-	-	37,303
Total assets, hedging derivative instruments, and deferred outflows	**$ 2,247,877**	**$ 1,976,671**	**$ 159,427**	**$ 100,574**	**$ 550,133**	**$ 327,356**	**$ 5,362,038**

Statement of Net Position Information (continued)
(in thousands of dollars)

June 30, 2022

	Activities						
	Single-family Mortgage Revenue Bonds	Rental Housing Revenue Bonds	General Operating	Capital Reserve	Mortgage Escrow and Reserve	Other	Combined
Liabilities, Deferred Inflows, and Net Position							
Liabilities							
Bonds payable and line of credit	$ 2,084,336	$ 1,670,005	$ -	$ -	$ -	$ -	$ 3,754,341
Hedging derivative instruments	398	(837)	-	-	-	-	(439)
Accrued interest payable	5,773	10,558	-	-	-	-	16,331
Escrow funds	-	681	198	-	550,133	(85,817)	465,195
Unamortized mortgage interest income	-	10,971		-	-	-	10,971
Net pension liability	-	-	23,853	-	-	-	23,853
Net OPEB liability	-	-	30,059	-	-	-	30,059
Other liabilities	-	-	41,767	-	-	154,805	196,572
Total liabilities	2,090,507	1,691,378	95,877	-	550,133	68,988	4,496,883
Deferred Inflow of Resources							
Deferred inflows related to pensions	-	-	10,575	-	-	-	10,575
Deferred inflows related to OPEB	-	-	27,576	-	-	-	27,576
Loan origination fees	-	-	23,373	-	-	-	23,373
Total deferred inflows of resources	-	-	61,524	-	-	-	61,524
Net Position	157,370	285,293	2,026	100,574		258,368	803,631
Total liabilities, deferred inflows, and net position	**$ 2,247,877**	**$ 1,976,671**	**$ 159,427**	**$ 100,574**	**$ 550,133**	**$ 327,356**	**$ 5,362,038**

Statement of Revenue, Expenses, and Changes in Net Position Information

(in thousands of dollars)

June 30, 2022

	Activities					
	Single-family Mortgage Revenue Bonds	Rental Housing Revenue Bonds	General Operating	Capital Reserve	Other	Combined
Operating Revenue						
Investment income:						
Loan interest income	80,552	76,349	7,234	-	5,246	169,381
Investment interest income	3,416	3,140	66	2,108	2,287	11,017
Decrease in fair value of investments - Including change in unrealized gains	(17,161)	(7,685)	-	(8,318)	-	(33,164)
Total investment income	66,807	71,804	7,300	(6,210)	7,533	147,234
Less interest expense and debt financing costs	54,071	56,079	1,190	-	-	111,340
Net investment income	12,736	15,725	6,110	(6,210)	7,533	35,894
Other revenue:						
Federal and state assistance programs	-	-	-	-	1,346,736	1,346,736
Section 8 program administrative fees	-	-	20,161	-	-	20,161
Contract administration fees	-	-	12,380	-	-	12,380
Other income	-	18,013	22,585	-	1,246	41,844
Total operating revenue	12,736	33,738	61,236	(6,210)	1,355,515	1,457,015
Operating Expenses (Revenue)						
Federal and state assistance programs	-	-	-	-	1,349,516	1,349,516
Salaries and benefits	-	-	26,565	-	-	26,565
Other general operating expenses	-	-	32,868	-	-	32,868
Loan servicing and insurance costs	4,764	-	8,633	-	-	13,397
Provision for possible losses on loans	5,886	4,013	(1,178)	-	(971)	7,750
Total operating expenses (revenue)	10,650	4,013	66,888	-	1,348,545	1,430,096
Operating Income (Loss) - Before nonoperating expenses	2,086	29,725	(5,652)	(6,210)	6,970	26,919
Nonoperating Expenses - Grants and subsidies	-	-	1,531	-	(8,290)	(6,759)
Change in Net Position	2,086	29,725	(4,121)	(6,210)	(1,320)	20,160
Net Position - Beginning of year	154,802	265,568	13,559	106,784	242,758	783,471
Transfers to Other Funds for Payment of Operating Fund Expenses	-	(10,000)	10,000	-	-	-
Funding to Provide Additional Cash Flow and				-		
Payment of Bond Issuance Costs	482	-	(17,412)	-	16,930	-
Net Position - End of year	**$ 157,370**	**$ 285,293**	**$ 2,026**	**$ 100,574**	**$ 258,368**	**$ 803,631**

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Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Independent Auditor's Report

To Management; the Board of Directors; and
Mr. Doug A. Ringler, CPA, CIA,
Auditor General, State of Michigan
Michigan State Housing Development Authority

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities and the discretely presented component unit of Michigan State Housing Development Authority (the "Authority") as of and for the year ended June 30, 2022 and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated October 25, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Michigan State Housing Development Authority's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the Authority's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies, and, therefore, material weaknesses or significant deficiencies may exist that were not identified. We identified a certain deficiency in internal control, described in the accompanying schedule of findings as Finding 2022-001, that we consider to be a material weakness.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

The Authority's Response to the Finding

The Authority's response to the finding identified in our audit is described in the accompanying schedule of findings. The Authority's response was not subjected to the auditing procedures applied in the audit of the financial statements, and, accordingly, we express no opinion on it.

To Management; the Board of Directors; and
Mr. Doug A. Ringler, CPA, CIA,
Auditor General, State of Michigan
Michigan State Housing Development Authority

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Plante & Moran, PLLC

October 25, 2022

Reference Number	Finding
2022-001	**Finding Type** - Material weakness

Criteria - Good business practices would state having a timely year-end close process and the general ledger being complete and free of adjustments before financial statement audits begin. The manual financial statements should be completed and reviewed during the year-end close process.

Condition - Monthly and year-end close process was not performed timely resulting in delayed reconciliations and interim reporting. Also, certain general ledger account balances were not appropriately stated on the trial balance and manual financial statements received.

Context - Various cash reconciliations and other account reconciliations were performed multiple months after the month that was being closed. Various accounts were adjusted or proposed to be adjusted after review of the manual financial statements received during the audit process.

Cause - Components of the year-end close process are completed in manual schedules outside of the general ledger system to produce the financial statements, and there was not a process to reconcile certain grant activity to program records.

Effect - Journal entry adjustments were provided late in the audit process subsequent to the trial balance being received.

Recommendation - The Authority should implement additional procedures to ensure a timely closing process, including the preparation of the financial statements. We recommend recording entries from manual schedules in the general ledger system to streamline the year-end close process and developing a process to reconcile grant activity to program records, such as federal reporting.

Views of Responsible Officials and Planned Corrective Actions - The Authority agrees with this finding. The finance department experienced turnover that led to delays in reconciliations and the production of the financial statements. Finance will be reevaluating the staffing needs and processes related to the Authority's accounting functions. Finance will be utilizing an IT product to track the timing of reconciliations and the production of financial statements and reports.