

Message from the Chairman and Executive Director

On behalf of the Board and Staff of MassHousing, we are pleased to present this annual report for fiscal year 2019.

Housing costs continue to rise dramatically -- especially in eastern Massachusetts. The increases take a financial toll on our citizens, strain the quality of life and deepen the divide between the well-off and the less fortunate.

Since 2013, the median sale price for a single-family home in the Commonwealth has increased by 19%; a condominium by 22%. Sale prices in Greater Boston have risen at an even faster pace. In Suffolk county, the median sale price for a single-family home rose by 49% in the same time period, while the price of a condominium rose by 45%. Massachusetts is the seventh least affordable state in the country; the median price of a home here is almost 5 times higher than the median income.

Massachusetts has struggled with rising housing costs, at varying degrees of intensity, for half a century. But in recent years, the crisis has worsened. While the economy is strong, the supply of homes has not kept pace with demand. Since 2000, only 266,500 new housing units have been built, just half the number built in the 20 years prior.

MassHousing has continued confronting these housing challenges. We provided more than \$1.5 billion in affordable housing financing in Fiscal Year 2019. It was one of the largest annual lending volumes in the Agency's 53-year history. The financing helped to ensure that more than 9,000 Massachusetts households have an affordable place to call home.

MassHousing's Down Payment Assistance program, the only statewide program of its kind in the Commonwealth, provided more than \$10 million in down payment and closing cost assistance to just over 1,500 borrowers who might have had to wait for decades to buy their first home. In all, during FY19, MassHousing closed 4,611 mortgage loans for \$792.1 million to help Massachusetts homebuyers and homeowners purchase or refinance their home and make improvements to their properties.

The need to preserve the existing affordable rental stock while producing new opportunities continues to be strong. In FY19 MassHousing's \$688.7 million in rental lending financed 30 developments with 4,182 units, 87% of which are affordable. Of those, 3,814 units were preservation and 368 were new construction. Using our previous allocation of \$100 million for workforce housing, we funded numerous developments with units for both low- and middle-income earners. Due to that success, the Governor announced that the Commonwealth will support our workforce program with an infusion of \$86 million.

In addition to our robust lending for homeownership and rental housing, we continue to work with many for-profit, non-profit and community partners to improve housing communities and the lives of our citizens. We remain committed to things like sober housing grants; environmental sustainability; innovative partnerships with law enforcement; educational programs for property managers and residents; capacity-building for small and disadvantaged businesses; innovative ways to prevent evictions of vulnerable residents, and more.

We extend our heartfelt thanks to our many partners in the home mortgage lending, affordable housing development, property management, government and non-profit sectors, for their collaboration and

shared dedication to affordable housing. We also thank and salute the professional women and men on the MassHousing staff for their many accomplishments this past year.



Michael J. Dirrane
Chairman



Chrystal Kornegay
Executive Director



Report of Independent Auditors

To the Members of the Agency
Massachusetts Housing Finance Agency and Affiliates:

We have audited the accompanying financial statements of Massachusetts Housing Finance Agency and Affiliates (the "Agency"), which comprise the statements of net position as of June 30, 2019 and 2018, and the related statements of revenues, expenses, and changes in net position and cash flows for the years then ended.

Management's Responsibility 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; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Massachusetts Housing Finance Agency and Affiliates as of June 30, 2019 and 2018, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.



Other Matters

The accompanying Management's Discussion and Analysis ("MD&A") for the years ended June 30, 2019, 2018 and 2017 on pages 1 through 15 and the Massachusetts Housing Finance Agency Employees' Retirement System Plan Schedules of Required Supplementary Information: Schedule of changes in the Agency's Net Pension Liability and related ratios and the Schedule of Agency Contributions; and Massachusetts Housing Finance Agency OPEB Trust Schedules of Required Supplementary Information: Schedule of changes in the Agency's Net OPEB Liability and related ratios and the Schedule of Agency Contributions (collectively Required Supplementary Information) on pages 72 through 75 (collectively referred to as the "information") are required by accounting principles generally accepted in the United States of America to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the 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.

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Agency's basic financial statements. Supplemental Schedule 2: Mortgage / Construction Loan Obligations and Commitments and the Supplemental Schedule 7: Combining Financial Statements by Program (collectively referred to as "Supplementary Information") are presented for purposes of additional analysis and are not a required part of the basic financial statements. The Supplementary Information is the responsibility of management and was derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. The Supplementary Information has been subjected to the auditing procedures applied in the audit 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 Supplementary Information is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

PricewaterhouseCoopers LLP

September 23, 2019

Massachusetts Housing Finance Agency

Annual Financial Report

June 30, 2019

Prepared by the

Office of the Financial Director

Charles C. Karimbakas, Financial Director

Stephen E. Vickery, Comptroller

MANAGEMENT'S DISCUSSION AND ANALYSIS

Overview of the Annual Financial Report

This annual financial report of the Massachusetts Housing Finance Agency ("MassHousing" or "Agency") consists of six sections: (1) management's discussion and analysis; (2) audited combined financial statements (the "financial statements"); (3) notes to the financial statements; (4) required supplemental schedules; (5) supplemental schedules; and (6) schedules.

The management's discussion and analysis, financial statements, notes to the financial statements and schedules, required supplemental schedules and supplemental schedules were all prepared in conformity with the accounting principles generally accepted in the United States of America ("GAAP") using the accounting standards promulgated by the Governmental Accounting Standards Board ("GASB").

Background

MassHousing is a body politic and corporate and a public instrumentality of The Commonwealth of Massachusetts (the "Commonwealth") established by Chapter 708 of the Acts of 1966, as amended (the "Act"), to increase the supply of residential housing in the Commonwealth for occupancy by persons and families of low and moderate income.

MassHousing is empowered by the Act, among other things, to issue bonds and notes to finance owner-occupied, residential housing for persons and families of low and moderate income and to make mortgage loans to sponsors of rental housing projects containing two or more dwelling units having promise of supplying well-planned, well-designed apartment units for low-income persons or families in locations where there is a need for such housing. Pursuant to the Act, MassHousing has the power to issue bonds and notes to finance construction and permanent mortgage loans, to utilize various lending programs to finance mortgage loans including Federal National Mortgage Association ("Fannie Mae") mortgage-backed securities ("MBS"), Government National Mortgage Association ("Ginnie Mae") MBS, Federal Home Loan Mortgage Corporation ("Freddie Mac") programs, Federal Home Loan Bank ("FHLB") programs and Federal Financing Bank ("FFB") programs and to enter into agreements and perform other functions in furtherance of its public purposes.

The Massachusetts Legislature has authorized MassHousing to issue bonds and notes up to an aggregate outstanding combined single debt limit of \$4.9 billion for both multifamily and single-family purposes. The Agency's bonds and notes do not constitute obligations of the Commonwealth or any political subdivision thereof.

Financial Markets

MassHousing relies on its ability to gain orderly access to financial markets so it can meet its mission of providing and sustaining affordable housing and improving the lives of people in the Commonwealth. MassHousing meets its mission by: (1) issuing bonds and notes in order to fund its various programs, (2) utilizing government and government sponsored enterprise lending programs to sustain affordable housing and (3) investing a certain portion of its funds in the community to improve living conditions. MassHousing utilizes financial products such as (1) derivatives to be able to issue long-term debt at reasonable, synthetically fixed interest rates, as well as (2) mortgage-backed security forward contracts (“MBS Forward Contracts”) to securitize and service its qualified first mortgage loans originated by MassHousing-approved lenders into forward contracts to sell MBS to investors before the securities are ready for delivery.

Management’s Discussion and Analysis

The following is an unaudited narrative overview of MassHousing’s financial position and the results of its operations for the fiscal years ended June 30, 2019 (“FY 2019”) and June 30, 2018 (“FY 2018”), with selected comparative information for the fiscal year ended June 30, 2017 (“FY 2017”). Readers are encouraged to consider the information presented in this discussion and analysis in conjunction with the information presented in the audited financial statements, notes to the financial statements, supplemental schedules, schedules, and unaudited required supplemental schedules, all of which follow this narrative overview.

This discussion and analysis is designed to (1) assist the reader in focusing on significant financial matters and activities of the Agency and (2) identify and discuss significant changes in the Agency’s financial position and results of its operations during the indicated fiscal years. The primary accounting policies followed by the Agency are presented in Note B to the financial statements.

The Financial Statements

- The statement of net position provides information about the Agency’s financial condition at the end of the fiscal year by indicating the nature and amounts of its investments in resources (assets), its deferred outflows of resources, its obligations to outside creditors (liabilities), its deferred inflows of resources, and its resulting net position at the date of the statement of net position. Net position represents total assets, plus deferred outflows of resources, less total liabilities, less deferred inflows of resources. The organization of the statement of net position separates assets and liabilities into their current and non-current components.
- The statement of revenues, expenses, and changes in net position provides information about the Agency’s revenues and expenses for the fiscal year in order to measure the results of the Agency’s operations over the fiscal year.
- The statement of cash flows provides information about the net change in the Agency’s cash and cash equivalents for the fiscal year resulting from four principal types of activities: operating activities, non-capital financing activities, capital financing activities and investing activities. Cash collections (receipts) and payments (disbursements) are presented in this statement to arrive at the net increase or decrease in cash and cash equivalents for the fiscal years.

The Notes to Financial Statements

- The Notes to Financial Statements provide information that is useful to the reader in understanding the Agency's financial statements. Descriptions of the Agency's programs and its accounting methods and policies are contained in Notes A and B of the financial statements.
- The notes include details of the Agency's investments and contractual obligations as well as future commitments and contingencies.
- The notes also include information regarding events or developments that did have or could have a material impact upon the Agency's financial condition, results of operations, changes in net position and cash flows.

Required Supplementary Schedules, Supplemental Schedules, and Schedules

- Required Supplementary Information represents information required by GASB, which supplements the basic financial statements and notes. It is presented in conformity with GAAP using the accounting standards promulgated by GASB. These schedules provide additional information about the Agency's pension plan and the Other Post-Employment Benefits ("OPEB") Trust, which administers the investments of, and provides funding for benefits under the terms of, the Agency's healthcare plan for retirees. Required Supplemental Schedules 1, 2, 3, and 4 are unaudited.
- Supplemental Schedule 2, which provides detailed information on the Agency's loan receivables and loan commitments, is presented to facilitate additional analysis of the information included herein, and is not part of the basic financial statements. The information contained in Supplemental Schedule 2 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. This schedule provides additional information included in Note D.
- The audited Schedules 1, 3, 4, 5 & 6 provide detailed information on the Agency's: investments and cash equivalents; bonds and notes payable; and MBS Forward Contracts. These schedules provide additional information included in Notes C, H and I.
- In addition to the Agency's basic financial statements, presented on a combined basis, unaudited combining financial statements that provide details of each separate bond resolution and the Working Capital Fund ("WCF") and Affiliates (as defined in Note A) are presented in Supplemental Schedule 7 for both FY 2019 and FY 2018, in accordance with the financial reporting requirements of the various bond resolutions. These detailed unaudited combining financial statements include eliminating entries. The information contained in Supplemental Schedule 7 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.

Summarized Financial Information – Statement of Net Position (in millions)

The table below presents summarized comparative statements of net position at June 30:

	Change from FY 2018			Change from FY 2017			Jun. 30, 2017
	Jun. 30, 2019	\$	%	Jun. 30, 2018	\$	%	
Assets - Working Capital Fund and Affiliates (WCF)							
Cash, cash equivalents, investments	\$ 639	\$ (43)	-6.3%	\$ 682	\$ 57	9.1%	\$ 625
Loans receivable (net)	405	41	11.3%	364	9	2.5%	355
Other assets	621	15	2.5%	606	35	6.1%	571
Total Assets – WCF and Affiliates	\$ 1,665	\$ 13	0.8%	\$ 1,652	\$ 101	6.5%	\$ 1,551
Total Deferred Outflow of Resources - WCF and Affiliates	\$ 26	\$ 8	44.4%	\$ 18	\$ 4	28.6%	\$ 14
Total Assets and Deferred Outflow of Resources – WCF and Affiliates	\$ 1,691	\$ 21	1.3%	\$ 1,670	\$ 105	6.7%	\$ 1,565
Assets - Bond Programs							
Cash, cash equivalents, investments	\$ 1,480	\$ 163	12.4%	\$ 1,317	\$ 132	11.1%	\$ 1,185
Loans receivable (net)	2,321	(125)	-5.1%	2,446	(118)	-4.6%	2,564
Derivative instruments	-	(1)	-100.0%	1	1		-
Other assets	16	(2)	-11.1%	18	(6)	-25.0%	24
Total Assets – Bond Programs	\$ 3,817	\$ 35	0.9%	\$ 3,782	\$ 9	0.2%	\$ 3,773
Total Deferred Outflow of Resources - Bond Programs	\$ 14	\$ 5	55.6%	\$ 9	\$ (5)	-35.7%	\$ 14
Total Assets and Deferred Outflow of Resources – Bond Programs	\$ 3,831	\$ 40	1.1%	\$ 3,791	\$ 4	0.1%	\$ 3,787
Total Assets and Deferred Outflow of Resources	\$ 5,522	\$ 62	1.1%	\$ 5,461	\$ 110	2.1%	\$ 5,352
Liabilities - WCF and Affiliates							
Debt (net)	\$ 236	\$ (66)	-21.9%	\$ 302	\$ 39	14.8%	\$ 263
Derivative instruments	1	1		-	-		-
Other liabilities	657	23	3.6%	634	52	8.9%	582
Total Liabilities – WCF and Affiliates	\$ 894	\$ (42)	-4.5%	\$ 936	\$ 91	10.8%	\$ 845
Total Deferred Inflow of Resources - WCF and Affiliates	\$ 9	\$ (2)	-18.2%	\$ 11	\$ 9	450.0%	\$ 2
Total Liabilities and Deferred Inflow of Resources – WCF and Affiliates	\$ 903	\$ (44)	-4.6%	\$ 947	\$ 100	11.8%	\$ 847
Liabilities – Bond Programs							
Debt (net)	\$ 3,250	\$ (16)	-0.5%	\$ 3,266	\$ 31	1.0%	\$ 3,235
Derivative instruments	17	8	88.9%	9	(5)	-35.7%	14
Other liabilities	11	(1)	-8.3%	12	(1)	-7.7%	13
Total Liabilities – Bond Programs	\$ 3,278	\$ (9)	-0.3%	\$ 3,287	\$ 25	0.8%	\$ 3,262
Total Deferred Inflow of Resources - Bond Programs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Liabilities and Deferred Inflow of Resources – Bond Programs	\$ 3,278	\$ (9)	-0.3%	\$ 3,287	\$ 25	0.8%	\$ 3,262
Total Liabilities and Deferred Inflow of Resources	\$ 4,181	\$ (53)	-1.3%	\$ 4,234	\$ 125	3.0%	\$ 4,109
Net Position – WCF and Affiliates							
Restricted by contractual or statutory agreements	\$ 239	\$ 18	8.1%	\$ 221	\$ 3	1.4%	\$ 218
Unrestricted	550	49	9.8%	501	-	0.0%	501
Total Net Position – WCF and Affiliates	\$ 789	\$ 67	9.3%	\$ 722	\$ 3	0.4%	\$ 719
Net Position – Bond Programs							
Restricted by bond resolutions	\$ 552	\$ 47	9.3%	\$ 505	\$ (19)	-3.6%	\$ 524
Total Net Position – Bond Programs	\$ 552	\$ 47	9.3%	\$ 505	\$ (19)	-3.6%	\$ 524
Total Net Position							
Restricted by bond resolutions	\$ 552	\$ 47	9.3%	\$ 505	\$ (19)	-3.6%	\$ 524
Restricted by contractual or statutory agreements	239	18	8.1%	221	3	1.4%	218
Unrestricted	550	49	9.8%	501	-	0.0%	501
Total Net Position	\$ 1,341	\$ 114	9.3%	\$ 1,227	\$ (16)	-1.3%	\$ 1,243

Due to rounding, numbers presented in the table of summarized financial information may not sum precisely to the totals provided and percentages may not precisely reflect the absolute figures.

Discussion of Changes in Statements of Net Position

Reference is made to the comparative statements of net position at June 30, 2019, 2018 and 2017 and the year-over-year increases and decreases presented on the prior page and the consolidated Statements of Net Position and Supplemental Schedule 7, Combining Statements of Net Position.

Assets

Cash and Cash Equivalents

Cash and Cash Equivalents decreased to \$822 million at June 30, 2019 from \$973 million at June 30, 2018, a decrease of approximately \$151 million or 18% for the year. This can be compared with a decrease to \$973 million at June 30, 2018 from \$974 million at June 30, 2017, a decrease of approximately \$879 thousand or less than 1% for the year. The decrease in Cash and Cash Equivalents in FY 2019 is largely due to an increased allocation of funds into investments, an increase in bond and note retirements, and line of credit pay downs. There were no significant changes to Cash and Cash Equivalents in FY 2018. Disclosure for Cash and Cash Equivalents is contained in Note C to the FY 2019 audited Annual Financial Report.

Investments

MassHousing's investments increased by approximately \$272 million, or 27%, to \$1.30 billion at June 30, 2019 from \$1.03 billion at June 30, 2018. This can be compared with an increase of approximately \$190 million, or 23%, to \$1.03 billion at June 30, 2018 from \$836 million at June 30, 2017. The increase in both years was largely the result of the purchase of MBS and U.S Treasury Notes, which are recorded as investments, as described below. Disclosure for Investments is contained in Note C to the financial statements.

At June 30, 2019, 2018 and 2017, MBS totaling approximately \$888 million, \$715 million and \$675 million, respectively, were held as investments in the WCF, the Single-Family Housing Revenue Bond ("SFHRB") Program and the Residential Mortgage Revenue Bond ("RMRB") Program. At June 30, 2019, the fair value of these investments exceeded its cost basis by approximately \$30 million. At June 30, 2018, the fair value of these investments was less than the cost basis by approximately \$3 million. At June 30, 2017, the fair value of these investments exceeded the cost basis by approximately \$18 million. These amounts were recorded to reflect the current value that is the result of a changing interest rate environment. MBS held in the WCF are recorded as investments, pledged as security for the Federal Home Loan Bank of Boston's "Helping to House New England" program loans and are not expected to be sold prior to maturity. MBS held under the SFHRB and RMRB Resolutions are recorded as investments, pledged as security for bonds issued under the SFHRB and RMRB Programs, respectively, and are not expected to be sold prior to maturity. Because the Agency expects to hold these MBS to maturity, it does not expect to realize gains or losses from these investments, other than interest income.

Loan Portfolios

Total multifamily and single-family mortgage loans, after adjustment for allowances for uncollectible amounts, decreased to \$2.73 billion at June 30, 2019 from \$2.81 billion at June 30, 2018, a decrease of approximately \$84 million or 3% for the year. This can be compared with a decrease to \$2.81 billion at June 30, 2018 from \$2.92 billion at June 30, 2017, a decrease of approximately \$108 million or 4%. The net decrease in the mortgage loan portfolios in both years was primarily the result of the prepayment of single-family and multifamily loans, partially offset by new lending activity, particularly in the multifamily programs. The following are key highlights of comparative loan related activities for the years ended June 30, 2019, 2018 and 2017:

Multifamily Loans

MassHousing originated approximately \$689 million, \$786 million and \$729 million of multifamily loans in FY 2019, FY 2018 and FY 2017, respectively, as detailed in the table below:

Multifamily Loan Originations

(in millions)

Year ended June 30	2019	2018	2017
Loans retained in Bond Resolutions or WCF	\$ 237.8	\$ 171.4	\$ 375.6
Loans sold to Federal Financing Bank	89.0	222.0	173.3
Loans securitized as MBS and sold to Investors	200.2	257.0	144.3
Conduit Loans ¹	161.7	135.6	35.8
	<u>\$ 688.7</u>	<u>\$ 786.0</u>	<u>\$ 729.0</u>

1 Originations for which neither the bonds nor the mortgage loans securing those bonds are in the Agency's financial statements.

The total multifamily portfolio, net of allowances for uncollectible loans, decreased to \$2.41 billion at June 30, 2019 from \$2.46 billion at June 30, 2018, a decrease of approximately \$46 million or 2% for the year. This can be compared with a decrease to \$2.46 billion at June 30, 2018 from \$2.51 billion at June 30, 2017, a decrease of approximately \$51 million or 2% for the year. The decrease in the mortgage loan portfolio in FY 2019 was primarily the result of a combination of the prepayment of multifamily loans, partially offset by new lending activity and a reduction in the allowance for uncollectible accounts. The decrease in the mortgage loan portfolio in FY 2018 was primarily the result of a combination of the prepayment of multifamily loans and an increased allowance for uncollectible accounts, partially offset by new lending activity.

Certain mortgage loans and other receivable balances are reported net of allowances for uncollectible amounts. The evaluation of the multifamily loan portfolio takes into consideration the entire loan portfolio, primarily utilizing an impairment assessment model that employs the most recent or readily available net operating income data along with capitalization rates, property location, costs to sell, capital needs assessments and other data in assessing potential impairment to establish a reserve that complies with GAAP and therefore presents loans at their estimated net realizable value. In certain instances, independent appraisals and other pertinent data such as loan repayment status or physical property status is obtained to assist management's decision in determining the estimated fair value of the property which serves as collateral on the loan. At June 30, 2019, the total multifamily allowance for uncollectible amounts decreased to approximately \$200 million from approximately \$229 million at June 30, 2018. The decrease in the allowance for FY 2019 was mainly due to an increase in property value assessments generally driven by increases in Net Operating Income and lower capitalization rate assessments in certain regions. At June 30, 2018, the total multifamily allowance for uncollectible amounts increased to approximately \$229 million from approximately \$225 million at June 30, 2017. The increase in the allowance for FY 2018 was mainly the result of reduced operating performance, specifically decreased Net Operating Income at a few of the projects.

Single-Family Loans

The total single-family loan portfolio, net of the allowances for uncollectible amounts, decreased to \$317 million at June 30, 2019 from \$355 million at June 30, 2018, a decrease of approximately \$38 million or 11% for the year. This can be compared with a decrease to \$355 million at June 30, 2018 from \$412 million at June 30, 2017, a decrease of approximately \$57 million, or 14% for the year. Both the FY 2019 and FY 2018 decreases were the result of the conversion of the Agency's Home Ownership Division ("Home Ownership") program from a whole loan purchase program to

a program primarily financed through the purchase of MBS, which are recorded as investments, and prepayments of single-family loans.

During each of the last three fiscal years, Home Ownership purchased single-family loans from participating lenders. These purchases were initially funded through the WCF. The WCF serves as a temporary funding source for Home Ownership lending activity, pending subsequent sale of the loans, or loans wrapped by MBS, either to outside investors or to one or more of MassHousing's bond programs. The table below summarizes the WCF warehouse activity for each of the years ended June 30, 2019, 2018 and 2017, including the purchases of loans and the sales of the loans, or loans wrapped by MBS, to Fannie Mae, the SFHRB Program, the WCF, Freddie Mac, and other loan sales. MassHousing has retained the servicing rights for all loans sold or loans wrapped by MBS to Fannie Mae, the SFHRB Program, the RMRB Program, and Freddie Mac.

WCF Loan Activity

(in millions)

Year ended June 30	2019	2018	2017
Loan beginning balance	\$ 42.3	\$ 44.9	\$ 89.3
Loan purchases	788.6	533.3	662.1
MBS backed by loans or loans sold to Fannie Mae	(485.1)	(352.6)	(549.5)
MBS backed by loans or loans sold to SFHRB Program	(188.4)	(127.2)	(141.2)
Loans sold to Freddie Mac	(118.8)	(55.6)	(13.2)
Loans transferred to WCF	(3.2)	-	(1.8)
Other loan sales and principal receipts	(2.0)	(0.5)	(0.8)
Ending balance	\$ 33.4	\$ 42.3	\$ 44.9

MassHousing's Mortgage Service Center ("MSC"), which was established in 1996 within Home Ownership, services the Home Ownership loan portfolio. As of June 30, 2019, 2018 and 2017, the MSC serviced a portfolio with a principal balance of approximately \$4.2 billion, \$3.8 billion, and \$3.8 billion, respectively, for each of the three years, as detailed more fully in the table below:

Home Ownership Servicing Portfolio

(in millions)

Year ended June 30	2019	2018	2017
Beginning Balance	\$ 3,842.4	\$ 3,792.1	\$ 3,803.8
New loans	792.1	536.5	665.0
Loans Paid in Full	(306.0)	(390.4)	(578.6)
Amortization and Curtailments	(98.5)	(89.7)	(87.0)
Foreclosures, Writeoffs and Adjustments	(3.7)	(6.1)	(11.1)
Ending Balance	\$ 4,226.3	\$ 3,842.4	\$ 3,792.1

MassHousing offers predominantly 30-year fixed rate mortgage loans and uses prudent lending standards to ensure the creditworthiness of borrowers and to minimize the risk to MassHousing and its bondholders. The Agency's Home Ownership Asset Management Group actively manages the loan portfolio in an effort to minimize losses. Non-performing SFHRB loans delinquent greater than 90 days totaled \$4.6 million, \$5.2 million and \$4.9 million at June 30, 2019, 2018 and 2017, respectively. The delinquency rates at June 30, 2019, 2018 and 2017 were 8.14%, 6.82% and 6.05%, respectively.

Certain single-family mortgage loans are reported net of allowances for uncollectible amounts. At June 30, 2019, the total single-family allowance for uncollectible amounts decreased to approximately \$3.3 million from \$3.4 million at June 30, 2018, a decrease of approximately \$104 thousand, or 3% for the year. This can be compared with a decrease to \$3.4 million at June 30, 2018 from \$3.5 million at June 30, 2017, a decrease of approximately \$84 thousand, or 2% for the year. Lower unemployment rates and continued strength in the Massachusetts economy, which led to a reduction in the more serious loan delinquency categories, along with increases in home values and a reduction of the loan portfolio due to loan prepayments, resulted in a reduction in the allowance for FY 2019 and FY 2018.

Total Assets

MassHousing's combined Total Assets, consisting primarily of mortgage loans, increased to \$5.48 billion at June 30, 2019 from \$5.43 billion at June 30, 2018, an increase of approximately \$48 million or 1% for the year. This can be compared with an increase to \$5.43 billion at June 30, 2018 from \$5.32 billion at June 30, 2017, an increase of approximately \$110 million or 2% for the year. There were no significant changes to Total Assets in FY 2019 or FY 2018.

Liabilities

Debt Payable

MassHousing's total debt payable, which includes bonds, notes and other debt obligations, comprised approximately 84%, 85% and 85% of total liabilities at June 30, 2019, 2018 and 2017, respectively. All bonds are special obligations of MassHousing and all notes are either special obligations or general obligations of MassHousing, depending on the terms of the applicable resolution. All other debt obligations are general obligations of MassHousing. General obligations of MassHousing are secured by the full faith and credit of MassHousing and are payable out of any of its moneys or revenues, subject to lawful expenditures and to the provisions of any other resolutions or agreements now or hereafter pledging particular moneys or revenues to particular notes, bonds or other obligations of MassHousing. Special obligations are payable solely from and secured solely by a pledge of certain Revenues and Funds established under a specific bond resolution. Funds generated from the sales of bonds and notes are used to fund or purchase mortgages or MBS. Principal and interest payments received from such loans and MBS are used to fund the debt service (principal and interest payments) due on MassHousing's bonds and notes. Total debt payable decreased to approximately \$3.49 billion at June 30, 2019 from \$3.57 billion at June 30, 2018, a decrease of approximately \$82 million or 2% for the year. This can be compared with an increase to approximately \$3.57 billion at June 30, 2018 from \$3.5 billion at June 30, 2017, an increase of approximately \$70 million or 2% for the year. The decrease of total debt payable in FY 2019 was mainly due to bond and note retirements and line of credit pay downs. The increase of total debt payable in FY 2018 was mainly due to issuances in the WCF Construction Loan Notes ("CLN") Program and the SFHRB Program.

Bond and Note Activity

MassHousing incurred approximately \$463 million, \$524 million and \$668 million of new bond and note debt in FY 2019, FY 2018 and FY 2017, respectively, to fund multifamily and single-family loans, as detailed more fully in the table below:

New Debt Fundings (in millions)

Year ended June 30

<u>Program</u>	2019		2018		2017	
	<u>Total</u>	<u>Number of Series</u>	<u>Total</u>	<u>Number of Series</u>	<u>Total</u>	<u>Number of Series</u>
WCF CLN	\$ -	-	\$ 85.4	3	\$ 63.1	3
WCF Direct Purchase CLN	65.8	6	15.8	4	66.3	5
General Rental Development Bonds ("GRDB")	23.7	1	-	-	-	-
Housing Bonds ("HB") and Notes	226.2	5	158.9	3	383.2	10
SFHRB	147.0	12	263.9	10	155.1	4
Total New Debt Fundings	\$ 462.7	24	\$ 524.0	20	\$ 667.7	22

MassHousing had unscheduled bond redemptions or defeasance of approximately \$419 million, \$336 million and \$590 million in FY 2019, FY 2018 and FY 2017, respectively, resulting in no gain or loss, as detailed more fully in the table below:

Unscheduled Debt Redemptions/Defeasance (in millions)

Year ended June 30

<u>Program</u>	2019	2018	2017
WCF CLN	\$ 31.1	\$ 1.2	\$ 41.6
WCF Direct Purchase CLN	39.3	13.8	9.3
Rental Housing Mortgage Revenue Bonds ("RHMRB")	32.4	8.7	-
Multi-Family Development Bonds ("MFDB")	-	-	20.3
GRDB	16.2	2.0	11.7
HB	202.6	130.8	326.7
SFHRB	97.2	179.2	180.1
Total Unscheduled Debt Redemptions/Defeasance	\$ 418.8	\$ 335.7	\$ 589.7

Total Liabilities

MassHousing's combined Total Liabilities, consisting primarily of bonds and notes, decreased to \$4.17 billion at June 30, 2019 from \$4.22 billion at June 30, 2018, a decrease of approximately \$51 million, or 1% for the year. This can be compared with an increase to \$4.22 billion at June 30, 2018 from \$4.11 billion at June 30, 2017, an increase of approximately \$116 million, or 3% for the year. The decrease in Total Liabilities in FY 2019 was primarily the result of bond and note retirements and line of credit pay downs. The increase in Total Liabilities in FY 2018 was primarily the result of an increase in debt payable and the establishment of a balance sheet liability for OPEB, as a result of the implementation of GASB 75.

Total Net Position

Changes in Net Position

Total net position increased to approximately \$1.34 billion at June 30, 2019 from \$1.23 billion at June 30, 2018, an increase of approximately \$115 million, or 9%. This can be compared with a decrease to \$1.23 billion at June 30, 2018 from \$1.24 billion at June 30, 2017, a decrease of approximately \$17 million, or 1%. Restricted net position is that portion of net position on which constraints have been placed that are either (1) externally imposed by creditors, grantors, laws or regulations of other governments or (2) imposed by law through constitutional provisions or enabling legislation. These are presented as restricted net position on the combined Statements of Net Position. MassHousing management designates a portion of unrestricted net position balances for specific purposes that further MassHousing's mission. MassHousing Board members ("Members") may also choose to remove or modify such designations at any time.

WCF and Affiliates

Net position of the WCF and Affiliates increased by approximately \$67 million or 9%, to approximately \$789 million at June 30, 2019 from approximately \$722 million at June 30, 2018. This can be compared with an increase to \$722 million at June 30, 2018 from \$719 million at June 30, 2017, an increase of approximately \$4 million, or 1%.

The restricted portion of net position increased to \$239 million at June 30, 2019 from \$221 million at June 30, 2018, an increase of approximately \$18 million, or 8%. This can be compared with an increase in the restricted portion to \$221 million at June 30, 2018 from \$218 million at June 30, 2017, an increase of approximately \$2 million, or 1%. The increase in the restricted net position in FY 2019 was primarily the result of increased collateral requirements by Federal Home Loan Bank of Boston for "Helping to House New England" program loans, as well as an increase in Mortgage Insurance Fund Net Position. The increase in the restricted net position in FY 2018 was primarily the result of an increase in Mortgage Insurance Fund Net Position. The following table presents the restricted net position on which constraints have been externally imposed by creditors, grantors and laws or regulations in the WCF at June 30, 2019, 2018 and 2017, respectively, and the amount of those restrictions (in thousands):

<u>WCF and Affiliates Restricted Net Position</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Federal Home Loan Bank of Boston Collateral (Helping to House New England)	\$ 20,555	\$ 11,017	\$ 11,854
MassHousing Mortgage Insurance Funds (MIF)	113,224	104,558	101,498
Minimum net position covenants	100,000	100,000	100,000
Restricted by Note Resolutions	1,331	1,361	1,112
Single family co-insurance	3,796	3,796	3,796
Total WCF and Affiliates Restricted Net Position	\$ 238,906	\$ 220,732	\$ 218,260

The unrestricted portion of net position that may be used to finance day-to-day operations increased by approximately \$48 million or 10%, to approximately \$550 million at June 30, 2019 from approximately \$502 million at June 30, 2018. This can be compared with an increase in the unrestricted portion to \$502 million at June 30, 2018 from \$501 million at June 30, 2017, an increase of approximately \$1 million or less than 1%. The following table presents the WCF's unrestricted net position at June 30, 2019, 2018 and 2017, respectively, which has been designated by vote of MassHousing Members for specified purposes that further the Agency's mission, and the amount of those designations (in thousands):

<u>WCF and Affiliates Unrestricted Designations Net Position</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Designation of Equity of Affiliates (Center for Community Recovery Initiatives and Property Acquisition and Disposition Corporation)	\$ 1,731	\$ 1,536	\$ 1,753
Funding for loan purchases and loan advances and unrestricted net position requirements	234,624	202,073	213,785
Funding of the Center for Community Recovery Innovations	700	700	700
Funding of the Construction Security Fund	14,000	14,000	14,000
Funding of the New Lease for Homeless Families initiative	50	50	50
Funding of the Tenancy Preservation Project	660	660	660
Lease Commitments	53,655	58,363	62,058
Opportunity Fund	244,331	224,312	207,516
Total WCF and Affiliates Unrestricted Designations of Net Position	<u>549,751</u>	<u>501,694</u>	<u>500,522</u>
Total WCF and Affiliates Restricted and Unrestricted Designations Net Position	<u>\$ 788,657</u>	<u>\$ 722,426</u>	<u>\$ 718,782</u>

The increase in total net position of the WCF and Affiliates for the year ended June 30, 2019 was primarily the result of three factors: operating income of \$25 million before provision for loan losses, a net transfer of net position from bond programs of \$21 million, and a \$21 million decrease to the provision for loan losses. The increase in total net position of the WCF and Affiliates for the year ended June 30, 2018 was primarily the result of four factors: operating income of \$9 million before provision for loan losses, a net transfer of net position from bond programs of \$20 million, partially offset by a \$23 million reduction in net position due to the implementation of GASB 75 in FY 2018 as described more fully in Notes B, K, and M of the financial statements, and a \$2 million increase to the provision for loan losses and other items.

Bond-Funded Programs

The net position of all bond-funded programs (all of which is restricted) increased by approximately \$49 million on a combined basis, or 10%, to \$553 million at June 30, 2019 from \$504 million at June 30, 2018. This can be compared with a decrease to \$504 million at June 30, 2018 from \$524 million at June 30, 2017, a decrease of approximately \$20 million on a combined basis, or 4%. The increase in net position of the bond-funded programs for the year ended June 30, 2019 was primarily the result of four factors: operating income before provision for loan losses of \$66 million and a decrease to the provision for loan losses and other items of \$6 million, which were partially offset by net transfers to the WCF of \$21 million and Special Items of \$2 million. The decrease in net position of the bond-funded programs for the year ended June 30, 2018 was primarily the result of four factors: net transfers to the WCF of \$20 million, Special Items of \$6 million and an increase to the provision for loan losses and other items of \$6 million, which were partially offset by operating income before provision for loan losses of \$12 million.

Summarized Financial Information – Statement of Revenues, Expenses, and Changes in Net Position (in millions)

The table below represents summarized comparative statements of revenues, expenses, and changes in net position for the fiscal years ended June 30:

	Change from FY 2018			Change from FY 2017			Fiscal 2017
	Fiscal 2019	\$	%	Fiscal 2018	\$	%	
Operating Revenues – WCF and Affiliates							
Interest on loans	\$ 13	\$ (1)	-7.1%	\$ 14	\$ 1	7.7%	\$ 13
Investment earnings	18	10	125.0%	8	4	100.0%	4
Fee income	78	5	6.8%	73	1	1.4%	72
Miscellaneous income	5	1	25.0%	4	1	33.3%	3
Total Revenues - WCF and Affiliates	\$ 114	\$ 15	15.2%	\$ 99	\$ 7	7.6%	\$ 92
Operating Revenues – Bond Programs							
Interest on loans	\$ 116	\$ (10)	-7.9%	\$ 126	\$ (9)	-6.7%	\$ 135
Investment earnings	69	59	590.0%	10	5	100.0%	5
Fee income	3	(1)	-25.0%	4	1	33.3%	3
Miscellaneous income	-	-	-	-	(1)	-100.0%	1
Total Revenues - Bond Programs	\$ 188	\$ 48	34.3%	\$ 140	\$ (4)	-2.8%	\$ 144
Total Revenues	\$ 302	\$ 63	26.4%	\$ 239	\$ 3	1.3%	\$ 236
Operating Expenses – WCF and Affiliates							
Interest on bonds and notes, net of discount/premium	\$ 7	\$ 1	16.7%	\$ 6	\$ 1	20.0%	\$ 5
Administrative expenses	83	3	3.8%	80	-	0.0%	80
Miscellaneous expenses	1	(4)	-80.0%	5	3	150.0%	2
Total Expenses - WCF and Affiliates	\$ 91	\$ -	0.0%	\$ 91	\$ 4	4.6%	\$ 87
Operating Expenses – Bond Programs							
Interest on bonds and notes, net of discount/premium	\$ 112	\$ (4)	-3.4%	\$ 116	\$ (8)	-6.5%	\$ 124
Administrative expenses	4	-	0.0%	4	-	0.0%	4
Miscellaneous expenses	7	-	0.0%	7	(3)	-30.0%	10
Total Expenses - Bond Programs	\$ 123	\$ (4)	-3.1%	\$ 127	\$ (11)	-8.0%	\$ 138
Total Expenses	\$ 214	\$ (4)	-1.8%	\$ 218	\$ (7)	-3.1%	\$ 225
Operating income before provision for loan losses and other items - WCF and Affiliates	\$ 23	\$ 15	187.5%	\$ 8	\$ 3	60.0%	\$ 5
Operating income before provision for loan losses and other items - Bond Programs	\$ 65	\$ 52	400.0%	\$ 13	\$ 7	116.7%	\$ 6
Total operating income before provision for loan losses and other items	\$ 88	\$ 67	319.0%	\$ 21	\$ 10	90.9%	\$ 11
Provision for (reduction to) loan losses	\$ (28)	\$ (36)	-450.0%	\$ 8	\$ 29	-138.1%	\$ (21)
Other items	-	-	-	-	1	-100.0%	(1)
Total provision for (reduction to) loan losses and other items	\$ (28)	\$ (36)	-450.0%	\$ 8	\$ 30	-136.4%	\$ (22)
Total operating income	\$ 116	\$ 103	792.3%	\$ 13	\$ (20)	-60.6%	\$ 33
Special Items	\$ (2)	\$ 4	-66.7%	\$ (6)	\$ (6)	-	\$ -
Changes in net position	\$ 114	\$ 107	1528.6%	\$ 7	\$ (26)	-78.8%	\$ 33
Cumulative effect of GASB 75 adjustment of beginning Net OPEB Liability	\$ -	\$ 23	-100.0%	\$ (23)	\$ (23)	-	\$ -
Net position at beginning of the fiscal year	\$ 1,227	\$ (16)	-1.3%	\$ 1,243	\$ 33	2.7%	\$ 1,210
Total net position at end of the fiscal year	\$ 1,341	\$ 114	9.3%	\$ 1,227	\$ (16)	-1.3%	\$ 1,243

Due to rounding, numbers presented in the table of summarized financial information may not sum precisely to the totals provided and percentages may not precisely reflect the absolute figures.

Discussion of Operating Results

Reference is made to the statements of revenues, expenses, and changes in net position for the fiscal years ended June 30, 2019, 2018 and 2017, and the year-over-year increases and decreases presented on the prior page. Changes in Operating Income before Special Items are the result of several major items that positively or negatively affected Operating Income as described below:

Operating Revenues

Interest on Loans

Interest on loans for the years ended June 30, 2019 and 2018 decreased as compared with FY 2018 and FY 2017, respectively. The decreases for the years ended June 30, 2019 and 2018, as compared to the prior respective year, were due to the prepayment of several multifamily loans and fewer single-family loans due to the conversion of MassHousing's Home Ownership Program to an MBS program.

Investment Earnings

Investment Earnings consist of interest income and increases or decreases in the fair value of investments. Investment Earnings for the year ended June 30, 2019 increased as compared with FY 2018 due to an increase in the total fair value of investments and increased investment balances. Investment Earnings for the year ended June 30, 2018 increased as compared with FY 2017 due to increased balances and increasing interest rates, partially offset by a decrease in the fair value of investments.

Fee Income

Fee Income includes fees received from loan originations, securitization premiums, loan servicing fees, insurance premiums, and Section 8 administrative fees received from the U.S. Department of Housing and Urban Development ("HUD"), including administrative fees that are paid by HUD to MassHousing in consideration for serving as HUD's contract administrator with respect to the Performance-Based Contract Administration ("PBCA") contract and the Traditional Contract Assistance ("TCA"). Fee Income for the year ended June 30, 2019 as compared with FY 2018 increased primarily due to a higher balance of loans incurring servicing fees. Fee Income for the year ended June 30, 2018 as compared with FY 2017 increased due to higher multifamily premiums on loans sold and a higher balance of loans incurring servicing fees, partially offset by lower Section 8 recap fees.

As noted above, MassHousing receives fee income in consideration for serving as HUD's contract administrator with respect to project-based Section 8 subsidy programs in the Commonwealth, including both the TCA and the PBCA programs. Starting in 2011, HUD sought to achieve cost savings in the PBCA program and initiated the first of several processes for re-bidding PBCA administration in multiple states. Each such process has been withdrawn or overturned following legal challenges. On June 14, 2019, MassHousing executed a seventh amendment to the Annual Contributions Contract ("ACC") as PBCA Administrator for HUD. The amendment extends the term of the ACC from June 30, 2019 to September 30, 2019, with no changes from the sixth amendment to the scope of work to be performed or the compensation to be received, subject to the availability of sufficient appropriations. See Note O, "Subsequent Events" for additional disclosure pertaining to the ACC.

Miscellaneous Income

Miscellaneous Income primarily includes insurance claim receipts on foreclosed properties, reinsurance receipts received by the MassHousing Mortgage Insurance Fund (“MIF”) on insurance claims paid, miscellaneous recoveries on multifamily loans and various unusual income items. Miscellaneous income for the years ended June 30, 2019 and 2018, was flat as compared with the corresponding prior years.

Operating Expenses**Interest Expense on Bonds and Notes, net of premium/discount**

Interest Expense on Bonds and Notes, net of premium/discount, for both years ended June 30, 2019 and June 30, 2018, as compared with their corresponding prior years, decreased due to savings from bond refundings and lower balances.

Financing Costs

The costs of issuing bonds (other than bond discount or premium) are recognized as expense in the year incurred as Financing Costs. Financing Costs for the years ended June 30, 2019 and 2018, as compared with their corresponding prior years, decreased due to fewer bond issuances.

Administrative Expenses

Administrative Expenses for the year ended June 30, 2019, as compared with FY 2018, increased due to an increase in pension expense. Administrative Expenses for the year ended June 30, 2018, as compared with FY 2017, were flat.

Adjusted Operating Income

Adjusted Operating income is a non-GAAP measure, defined as the Change in Net Position before adjusting for the provision for loan losses, Special Items, and net changes in the fair value of investments. Adjusted Operating Income for the year ended June 30, 2019 increased primarily as a result of higher Interest Income on Investments and Fee Income. Adjusted Operating Income for the year ended June 30, 2018 increased as a result of higher Interest Income on Investments and lower Interest Expense on Bonds and Notes, offset by a decrease in Interest on Loans.

Provision for Loan Losses

The Provision for Loan Losses for the year ended June 30, 2019, as compared with FY 2018, decreased mainly due to the result of improved operating performance, specifically increased Net Operating Income, in many of the projects, as well as a reduction of capitalization rates. The Provision for Loan Losses for the year ended June 30, 2018, as compared with the corresponding prior year, increased mainly due to the result of reduced operating performance, specifically reduced Net Operating Income, of a few projects.

Special Items

The Agency recorded a \$1.8 million Special Item in FY 2019 and a \$6.2 million Special Item in FY 2018 related to the termination of existing interest rate swap agreements, as discussed in Note I, “Derivative Instruments.”

MassHousing Mortgage Insurance Fund (“MIF”)

The following table summarizes the MIF activity for the respective fiscal year ended June 30.

(in thousands)	2019	2018	2017
Net insurance premium revenue	\$ 5,701	\$ 5,119	\$ 5,266
Investment Earnings	2,301	1,705	1,329
Net increase (decrease) in fair value of investments	2,612	(1,529)	(1,348)
Underwriting and Administrative expenses	(1,960)	(1,785)	(1,631)
Claims expense	(196)	(266)	(560)
Reduction to (provision for) allowance for potential claims	207	(184)	228
Operating Income	\$ 8,665	\$ 3,060	\$ 3,284

Reserves for insurance claims are generated internally from operating surplus and proceeds from reinsurance claims. The MIF is part of the Agency’s WCF and Affiliates.

Legislative Developments

From time to time, bills may be introduced into the Commonwealth legislature that could affect government operations generally or seek to impose financial and other obligations on MassHousing, including requiring the transfer of funds or assets from MassHousing to the Commonwealth or other Commonwealth agencies. Furthermore, measures and legislation may be considered by the Federal government, or the Commonwealth legislature, which measures could affect MassHousing’s programs. While some of these measures may benefit the programs, no assurance can be given that the programs will not be adversely affected by such measures. In addition, the United States Congress or the Commonwealth legislature could enact legislation that would adversely affect the timing and amount of MassHousing’s recoveries from mortgage loans and thereby adversely affect the availability of amounts for the payment of debt service on obligations. MassHousing cannot predict whether any such legislation will be enacted or, if it were enacted, what effect it would have on the revenues received by MassHousing from mortgage loans. There can be no assurance that any such legislation will not be enacted or that such legislation, if enacted, will not have an adverse impact on the operations of MassHousing, its financial condition or any of its contractual obligations.

COMBINED STATEMENTS OF NET POSITION

June 30, 2019 and 2018

In thousands

	June 30, 2019	June 30, 2018
Assets		
Current assets		
Cash and cash equivalents (Notes C & N)	\$ 821,858	\$ 973,372
Investments (Notes C & N)	327,053	172,431
Interest and fees receivable on construction and mortgage loans, net (Note D)	10,065	10,839
Current portion of loans receivable, net (Note D)	136,754	174,935
Other assets (Note F)	15,033	16,292
Total current assets	1,310,763	1,347,869
Non-current assets		
Investments (Notes C & N)	970,279	852,931
Non-current portion of loans receivable, net (Notes D & E)	2,589,464	2,635,423
Escrowed funds (Note G)	553,176	539,537
Investment derivative instruments (Note I)	40	1,225
Other assets (Note F)	57,964	56,696
Total non-current assets	4,170,923	4,085,812
Total assets	5,481,686	5,433,681
Deferred outflow of resources		
Pension and OPEB (Note M)	25,522	17,233
Hedging derivative instruments (Note I)	14,926	9,766
Total deferred outflow of resources	40,448	26,999
Total assets and deferred outflow of resources	\$ 5,522,134	\$ 5,460,680
Liabilities		
Current liabilities		
Current portion of long term debt, net (Note H)	\$ 121,009	\$ 229,579
Obligation line of credit (Note H)	50,000	75,000
Accrued interest payable	10,868	11,018
Other liabilities (Note N)	16,254	18,009
Hedging derivative instruments (Note I)	547	405
Total current liabilities	198,678	334,011
Non-current liabilities		
Non-current portion of long term debt, net (Note H)	3,298,273	3,253,935
Long term- loan (Note H)	16,363	9,180
Net pension and OPEB liability (Note M)	58,820	45,933
Other liabilities (Note N)	29,737	30,884
Escrowed funds payable (Note G)	553,176	539,537
Hedging derivative instruments (Note I)	14,379	9,361
Investment derivative instruments (Note I)	2,676	138
Total non-current liabilities	3,973,424	3,888,968
Total liabilities	4,172,102	4,222,979
Deferred inflow of resources		
Pension and OPEB (Note M)	8,587	11,136
Total deferred inflow of resources	8,587	11,136
Total liabilities and deferred inflow of resources	4,180,689	4,234,115
Commitments and contingencies (Note N)		
Net position (Notes A & K)		
Restricted by bond resolutions	552,788	504,139
Restricted by contractual or statutory agreements	238,906	220,732
Unrestricted	549,751	501,694
Total net position	\$ 1,341,445	\$ 1,226,565

Massachusetts Housing Finance Agency and Affiliates

**COMBINED STATEMENTS OF REVENUES,
EXPENSES, AND CHANGES IN NET POSITION**

For the fiscal years ended: June 30, 2018 and 2019

In thousands	Fiscal Year Ended	
	June 30, 2019	June 30, 2018
Operating revenues		
Interest on loans (Notes B & D)	\$ 129,368	\$ 139,515
Investment earnings: (Notes B & C)		
Interest income	54,481	41,175
Net increase (decrease) in fair value of investments	32,401	(23,507)
Fee income (Note B)	81,217	76,961
Miscellaneous income (Note B)	4,909	5,049
Total operating revenues	302,376	239,193
Operating expenses		
Interest on bonds and notes, net of discount/premium (Notes B & H)	119,041	122,356
Financing costs	6,333	8,353
Administrative expenses	87,015	84,073
Miscellaneous expenses (Note B)	936	3,912
Total operating expenses	213,325	218,694
Operating income before provision for (reduction to) loan losses	89,051	20,499
Provision for (reduction to) loan losses (Notes B & D)	(27,593)	8,247
Total provision for (reduction to) loan losses	(27,593)	8,247
Operating income after provision for (reduction to) loan losses	116,644	12,252
Special Items (Note I)	(1,764)	(6,186)
Change in net position	114,880	6,066
Net position at the beginning of the fiscal year	1,226,565	1,243,175
Cumulative effect of GASB 75 adjustment of beginning Net OPEB Liability (Note M)	-	(22,676)
Net position at the beginning of the fiscal year, as restated	1,226,565	1,220,499
Net position at the end of the fiscal year	\$ 1,341,445	\$ 1,226,565

COMBINED STATEMENTS OF CASH FLOWS

For the fiscal years ended: June 30, 2019 and 2018

In thousands	Fiscal Year Ended	
	June 30, 2019	June 30, 2018
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		
Cash flows from operating activities:		
Collections on mortgage loans, construction loan repayments and loan sales	\$ 1,446,360	\$ 1,306,332
Loan advances to borrowers	(1,205,995)	(1,060,915)
Interest collections on construction loans	2,284	3,210
Fees collected	77,986	75,989
Cash payments to employees for services	(34,616)	(34,851)
Cash payments to other suppliers of goods and services	(41,901)	(42,801)
Miscellaneous disbursements	(1,996)	(9,163)
Transfer to escrows	(13,624)	(32,704)
Federal and state subsidy receipts	81,588	80,256
Federal and state subsidy disbursements	(80,060)	(81,781)
Escrow receipts, net	12,096	34,228
Net cash provided by operating activities	242,122	237,800
Cash flows from non-capital financing activities:		
Sale of bonds and notes and draw down on line of credit	497,954	529,535
Bond issuance / redemption costs	(6,422)	(8,382)
Retirement of bonds and notes and pay down on line of credit	(576,664)	(456,388)
Interest on bonds and notes	(122,543)	(127,080)
Net cash (used for) non-capital financing activities	(207,675)	(62,315)
Cash flows from capital financing activities:		
Acquisition of capital assets	(3,832)	(2,014)
Net cash (used for) capital financing activities	(3,832)	(2,014)
Cash flows from investing activities:		
Purchase of investments	(607,491)	(462,490)
Proceeds from sales of investments	374,431	250,314
Investment earnings, net of rebate	50,931	37,826
Net cash (used for) investing activities	(182,129)	(174,350)
Net (decrease) in cash and cash equivalents	(151,514)	(879)
Cash and cash equivalents at the beginning of the fiscal year	973,372	974,251
Cash and cash equivalents at end of the fiscal year	\$ 821,858	\$ 973,372

COMBINED STATEMENTS OF CASH FLOWS (continued)

For the fiscal years ended: June 30, 2019 and 2018

In thousands	Fiscal Year Ended	
	June 30, 2019	June 30, 2018
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income	\$ 116,644	\$ 12,252
Adjustments to reconcile operating income to net cash provided by operating activities:		
Amortization of bond original discount (premium) and deferred issue costs, net	(3,339)	(2,956)
Depreciation and amortization	20,609	17,026
Provision for (reduction to) losses on loans	(27,593)	8,247
Loss on property dispositions	6	129
Recognition of fee income	(4,025)	(3,659)
Investment earnings	(54,481)	(41,175)
Change in fair value of investments	(32,401)	23,507
Interest expense on bonds and notes	122,380	125,312
Financing expenses	6,333	8,353
Changes in assets and liabilities		
Decrease in loans and other receivables and mortgage-backed securities	111,518	100,028
Decrease in interest and fees receivable on loans	775	643
Increase in other assets and other receivables	(27,753)	(51,057)
Increase in accounts payable and other liabilities	13,449	41,150
Total adjustments	125,478	225,548
Net cash provided by operating activities	\$ 242,122	\$ 237,800

Note A. Authorizing Legislation and Programs and Affiliates of the Massachusetts Housing Finance Agency (“MassHousing” or the “Agency”)

MassHousing is a self-supporting, independent authority created by Chapter 708 of the Acts of 1966 of the Commonwealth of Massachusetts (“Commonwealth”), as amended (“the Act”). The Agency’s statutory mission is to finance affordable home mortgage loans for low- and moderate- income homebuyers and to finance the construction and preservation of affordable rental housing in the Commonwealth. MassHousing does not use taxpayer dollars to support its operations. Generally, MassHousing funds its loan programs through the sale of bonds and notes to investors, government entities, and Government Sponsored Enterprises (“GSEs”).

MassHousing commenced operations in December 1968. The Act was amended in 1982 to place the then existing Massachusetts Home Mortgage Finance Agency under the direction of the Agency’s Members and Executive Director.

MassHousing is authorized to make or purchase loans to increase the supply of both multifamily, residential rental housing and owner-occupied, single-family housing in the Commonwealth. The Massachusetts Legislature has authorized MassHousing to issue bonds and notes up to an aggregate outstanding debt limit of \$4.9 billion for financing both multifamily and single-family loans. Bonds and notes issued by the Agency are not obligations of the Commonwealth or any political subdivision thereof.

The Agency’s affiliates set forth below are blended component units of MassHousing. Component units are defined as legally separate organizations for which MassHousing is financially accountable.

Listed below is a summary of MassHousing’s major programs and affiliates:

(1) Working Capital Fund (“WCF”) and Affiliates

The Working Capital Fund (“WCF”) is MassHousing’s general operating fund. The WCF derives its revenues primarily from interest and fee income. Operating expenses include payroll, rent, and other related administrative expenses. The Agency’s affiliates are listed below. Summarized Financial Information of the WCF and Affiliates is presented in Note L.

MassHousing Mortgage Insurance Fund (“MIF”)

The MassHousing Mortgage Insurance Fund (“MIF”) was established within the WCF to provide an additional source of primary mortgage insurance for certain borrowers. MIF is the primary insurer for single-family loans made by MassHousing and is also an insurer approved by the Federal Home Loan Mortgage Corporation (“Freddie Mac”), the Federal National Mortgage Association (“Fannie Mae”) and Massachusetts community banks and credit unions. MIF and its operations are more fully described in Note N; summarized financial information is presented in Note L. MIF is included in a separate account within the WCF, and its net position is included in Restricted Net Position on the combining Statements of Net Position.

MassHousing Property Acquisition and Disposition Corporation (“PADCO”)

MassHousing formed the Property Acquisition and Disposition Corporation (“PADCO”) to take title to properties that serve as collateral on mortgage loans financed by the Agency’s various multifamily bond programs and the WCF in the event of a foreclosure

or other actions taken on the loan by MassHousing. The Agency's Members and Executive Director comprise PADCO's Board of Directors and President, respectively. When necessary, PADCO may establish separate limited liability companies to acquire, own, manage and sell properties acquired through foreclosure of the related loans. Reference is made to Note B for PADCO's significant accounting policies. Summarized financial information is presented in Note L. PADCO's net position is included in Unrestricted (Designated) Net Position on the combining Statements of Net Position.

Center for Community Recovery Innovations, Inc. ("CCRI")

MassHousing formed CCRI to study and develop creative strategies for dealing with issues of drug and alcohol addiction in housing communities. Its Board of Directors includes the Members of the Agency; certain Agency employees are its principal officers. CCRI has been funded with contributions from MassHousing since fiscal year 1995. Summarized financial information is presented in Note L. Reference is also made to Notes K and N for current and future MassHousing commitments to CCRI. CCRI's net position is included in Unrestricted (Designated) Net Position on the combining Statements of Net Position.

(2) Multifamily Bond Programs

MassHousing issues bonds to finance multifamily rental housing under several separate bond resolutions. Each general and series specific bond resolution requires that certain funds and accounts be established and maintained for that respective bond program. The following multifamily development bond programs were active in fiscal years 2019 and 2018.

(a) Rental Housing Mortgage Revenue Bond Program - Federal Housing Administration (FHA) Insured Mortgage Loans

The Rental Housing Mortgage Revenue Bond Program ("RHMRB") was established to provide funds for the acquisition and rehabilitation of FHA insured and other multifamily developments.

The general resolution requires bond insurance covering the principal and interest on certain bonds issued thereunder. The insurance is non-cancelable and is intended to provide assurance of timely payment of principal and interest to bondholders on regularly scheduled payment dates, including mandatory sinking fund redemption dates. National Public Finance Guarantee Corporation, a wholly owned subsidiary of MBIA, Inc., and Assured Guaranty Municipal Corporation ("Assured") have provided bond insurance policies under the Rental Housing Mortgage Revenue Bond Program. Rental Housing Mortgage Revenue Bond Program, 2003 Series A is a general obligation secured by the full faith and credit of MassHousing.

(b) General Rental Development Bond Program

The General Rental Development Bond Program ("GRDB") was established to provide permanent financing for several multifamily residential developments, each of which may be secured on a series-by-series basis.

(c) Multi-Family Housing Bond Program

The Multi-Family Housing Bond Program ("MFHB") was established to provide permanent financing for certain multifamily residential developments selected by MassHousing. In October 2009, the U.S. Department of the Treasury (the Treasury), the Federal Housing Finance Agency, Fannie Mae and Freddie Mac

(and collectively with Fannie Mae, the “GSEs”), announced availability of the Federal New Issue Bond Program (the “Federal NIBP”), under authority of the Housing and Economic Recovery Act of 2008.

Pursuant to the Federal NIBP, the GSEs purchased bonds from housing finance agencies (“HFAs”) and packaged them into GSE guaranteed securities for delivery to and purchase by the Treasury. The HFA bonds are issued to finance multifamily residential mortgage loans.

(d) Housing Bond Program

The Housing Bond Program (“HB”) was established to provide financing for various loans and loan participations for multifamily residential and single-family properties as well as for the refunding of existing bond programs and for other housing financing purposes. Currently the Housing Bond Program does not hold any single-family loans.

(3) Single-Family Housing Bond Programs

MassHousing has issued bonds to finance the purchase of mortgage-backed securities or loans made to single-family borrowers from participating lenders under two separate general resolutions. Each general and series specific bond resolution requires that certain funds and accounts be established and maintained for that respective bond program. The following is a description of the Single-Family Housing Revenue Bond Program and the Residential Mortgage Revenue Bond Program, which were active in fiscal years 2019 and 2018.

(a) Single-Family Housing Revenue Bond Program

The Single-Family Housing Revenue Bond Program (“SFHRB”) was established to finance the purchase of single-family loans and Fannie Mae MBS that are backed by single-family loans from participating lenders at competitive lending rates to finance the purchase of single-family loans in targeted areas. The program supports mortgage loans to first-time homebuyers as well as refinancing existing loans to responsible and performing borrowers.

(b) Residential Mortgage Revenue Bond Program

The Residential Mortgage Revenue Bond Program (“RMRB”) was established in September 2012 to finance mortgage loans under the HomeOwnership Program exclusively through the purchase of Fannie Mae MBS that are backed by single-family mortgage loans.

Note B. Summary of Significant Accounting Policies**Basis of Presentation**

MassHousing's financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The combining financial statements include all MassHousing's programs and affiliates described in Note A. All interprogram and interfund transactions and balances have been eliminated and are summarized in Note J. Detailed financial information for each individual bond program is presented in accompanying Supplemental Schedule 7 to the financial statements.

Basis of Accounting

MassHousing accounts for and reports its activities by applying Standards of Governmental Accounting and Financial Reporting, as promulgated by the Governmental Accounting Standards Board ("GASB"). The statements are prepared utilizing the economic resources measurement focus and the accrual basis of accounting, wherein revenues are recognized when earned and expenses when incurred.

Operating revenues and expenses result from providing services in connection with MassHousing's ongoing operations, as outlined in Note A. Principal operating revenues consist of mortgage loan interest and investment income of all programs as well as fee income, which is primarily received in the WCF. Operating expenses represent the cost of providing the services and include bond and note interest expense, administrative expenses and a provision for uncollectible amounts.

PADCO Accounting Policies

Properties acquired by PADCO are carried at the lower of cost or market. The related mortgage loans receivable are included in Other Assets on the Statements of Net Position of either the applicable bond programs or the WCF, with an offset to Other Liabilities on the WCF's Statements of Net Position and have been eliminated in the combining Statements of Net Position. Rent and other revenues from properties owned by PADCO were included in Miscellaneous Income. Expenses of operating the properties were included in Miscellaneous Expenses. No depreciation or amortization was being recorded.

Use of Estimates

The preparation of financial statements in conformity with GAAP at times requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates are based on management's best knowledge of current events, historical experience, actions that MassHousing may undertake in the future, and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates. Significant estimates, when used, are more fully described in the applicable following notes.

Cash, Cash Equivalents, Investments and Investment Earnings

Cash includes cash on hand and amounts on deposit in checking and savings accounts. Cash equivalents include investments with maturities of three months or less at the date of purchase, including repurchase agreements, U.S. Treasury and agency securities, and various other investments such as money-market mutual fund shares.

U.S. Government Obligation securities with maturities of one year or less at the time of purchase are carried at amortized cost which approximates fair market value. Investments in Guaranteed Investment Contracts (“GICs”) are carried at cost.

Certain investments are carried at their fair values at the date of the Statements of Net Position. These investments are typically long-term, with more than one year to maturity at the time of purchase. MassHousing uses quoted market prices, where available, to determine the fair value of long-term investments at the close of each reporting period. For non-trading long-term investments, MassHousing uses composite quotes set by a third party and evaluated by management. The change in the fair value of investments from one period to the next is a separately stated component of investment income and is presented in the combining Statements of Revenues, Expenses, and Changes in Net Position as a change in fair value of investments.

Investments of individual bond programs are those permitted by the various MassHousing general and series specific bond resolutions. Certain bond resolutions include reserve fund requirements; investments in such reserve funds are generally not available for the funding of mortgage loans.

Interest income is accrued as earned and is presented in the combining Statements of Revenues, Expenses, and Changes in Net Position net of any applicable arbitrage rebate owed to or received from the U.S. Treasury. There were no arbitrage rebates received or paid in 2019 and 2018.

Mortgage Loans

Multifamily and single-family mortgage loans are primarily recorded at cost, or in certain instances such as a significant refinancing, at the negotiated face value of the first or subordinated note, net of an allowance for uncollectible loans, which approximates net realizable value.

Allowance for Uncollectible Loans

The allowance for uncollectible loans is a valuation allowance that reflects an estimate on loan losses related to the Agency’s multifamily and single-family loan portfolios. The allowance for uncollectible loans is based upon separate evaluations of the multifamily and single-family loan portfolios.

The evaluation of the multifamily loan portfolio takes into consideration the entire loan portfolio primarily utilizing an impairment assessment model. MassHousing’s model and estimation process provides a materially consistent methodology of assessment for all projects and takes a more streamlined and standardized approach to its assessment of loan impairment. The model employs recent or readily available net operating income data along with capitalization rates, property location, costs to sell, capital needs assessments and other data in assessing potential impairment to establish a reserve that complies with GAAP and therefore presents loans at their estimated net realizable value. In certain instances, independent appraisals and other pertinent data such as loan repayment status or physical property status is obtained to assist management’s decision in determining the estimated fair value of the property which serves as collateral on the loan.

Evaluation of the single-family loan portfolio takes into consideration such factors as historical recovery rates of delinquencies, property value trends and insurance coverage.

Based upon MassHousing's periodic review of the loan portfolios, an allowance for uncollectible loans is established when deemed necessary.

Derivative Instruments

The fair values of both hedging derivatives and investment derivatives, if any, are presented on the combining Statements of Net Position, either as a derivative liability (negative fair value) or as a derivative asset (positive fair value). The change in the total fair value of derivatives that are determined to be effective hedges (and, therefore, hedging derivatives) is recorded as a deferred inflow or outflow of resources on the Agency's combining Statements of Net Position. If a derivative was determined to be an ineffective hedge, it would be classified as an investment derivative, and the change in the total fair value would be presented as part of investment earnings. The Agency currently has three types of derivatives outstanding: interest rate cap agreement, interest rate swaps and MBS forward contracts. The interest rate swaps are a mix of effective hedges, which are presented as hedging derivative instruments on the Statements of Net Position, and ineffective hedges, which are presented as investment derivative instruments on the Statements of Net Position. The interest rate cap is deemed to be an ineffective hedge and is presented as an investment derivative instrument on the Statements of Net Position. MBS forward contracts are effective hedges and are presented as hedging derivative instruments on the Statements of Net Position. Reference is made to Note I for further details of these derivatives.

Other Assets

Other Assets, Current on the combining Statements of Net Position include accounts receivable - various, investment income receivable, deferred expenses and prepaid assets.

WCF Other Assets, Non-current on the combining Statements of Net Position include office equipment, leasehold improvements, mortgage servicing rights, mortgage reinsurance premiums, deferred expenses and computer software all net of accumulated depreciation or amortization where applicable. These assets are being depreciated or amortized, where applicable, over their expected lives, or lease period, whichever is less. Also included in WCF Other Assets, Non-Current, are participation interests in certain loans made by the Commonwealth's Affordable Housing Trust Fund. Discounts recorded by the Agency upon its purchases of the participation interests are being accreted over the life of each participation interest. Reference is made to Note N for further information.

Other Assets, Non-current on the combining Statements of Net Position include real estate owned and Mortgagors' Capital Reserve Fund Obligations ("MCRFO") and Mortgagors' Mortgage Reserve Fund Obligations ("MMRFO"). MCRFO and MMRFO arose as a result of mortgagors' obligations (incurred at the time of the initial bond funding) to reimburse the Agency for a proportional share of the funding of Capital Reserve Fund or Mortgage Reserve Fund deposits. As a result of subsequent refundings of the initial funding bonds, these obligations are being amortized on a straight-line basis over the original lives of the initial funding bonds. The difference between the reductions in these obligations and the related interest and fees collected is recognized on a straight-line basis as a reduction in fee income on the combined Statements of Net Position. Reference is made to Note F for further details of Other Assets.

Mortgage Servicing Rights

Mortgage servicing rights purchased by the Agency are capitalized and amortized over the expected life of the related cash flows.

Excess mortgage servicing rights for mortgage loans pooled into Mortgage-Backed Securities (“MBS”) under the terms of which the stated servicing fee rate differs from a current (normal) servicing are capitalized and amortized over the expected life of the related cash flows.

Long-Term Debt**Bond Issuance Costs, Discounts and Premiums**

The costs of issuing bonds (other than bond discount and premium) are recognized as an expense in the period incurred as financing costs. Bond discounts and premiums are both deferred and amortized. MassHousing utilizes the effective interest method to amortize all discounts and premiums of new debt. The amortization is reflected as a component of interest expense. The amortization period used for each new bond issue is equal to the first optional redemption date for that new bond offering.

Interest and Fee Revenues on Mortgage Loans**Interest on Loans**

Interest on loans is accrued as earned. When borrowers on multifamily and single-family loans are more than ninety days delinquent in their scheduled loan payments, the loans are considered to be non-performing. At that point, any existing interest and fee revenue accruals are fully allowed against and no further accruals are recorded until such time as the loans either have been restored to performing status or have been restructured.

Fee Income

Fee income is accrued as earned and includes administrative fees received from developments financed by MassHousing as well as Section 8 administrative fees received from U.S. Department of Housing and Urban Development (“HUD”) and MIF premiums earned, net of reinsurance premiums incurred. Fee income of the multifamily bond programs is presented net of amortization of the MCRFO. Fees collected in connection with the origination and closing of new multifamily loans, net of related direct costs, are recognized as revenue in the period received. Fees collected in connection with the restructuring of troubled multifamily loans are initially reflected as a prepaid fee on the WCF’s Statement of Net Position and are not recognized as fee income until the loans are no longer considered to be troubled, have been foreclosed, or have been paid off. In connection with a recapitalization program, MassHousing receives distributions of excess residual receipts and excess replacement reserves from certain Section 8 subsidized developments, which are included in fee income of the WCF. Multifamily fee income in the WCF includes loan origination, loan servicing and securitization profits from the utilization of government and government sponsored enterprise lending programs used by MassHousing to sustain affordable housing.

WCF fee income also includes premiums collected and discounts paid from the sale of single family mortgages sold into MBS.

Miscellaneous Income and Miscellaneous Expenses

Miscellaneous income and expenses are accrued as earned or incurred. Miscellaneous income primarily includes insurance claim receipts on foreclosed properties, reinsurance receipts received by MIF on insurance claims paid, miscellaneous recoveries on multifamily loans and various unusual income items. Miscellaneous expense primarily includes MIF insurance claims paid, losses on property dispositions and various unusual expense items.

Interprogram and Interfund Balances and Eliminations

In both fiscal years 2019 and 2018, MassHousing contributed to its affiliate CCRI. Additionally, the WCF engaged in interfund transactions with several of the bond programs. These transactions and resulting year-end interfund balances have been eliminated in the accompanying combining financial statements. Further details of these transactions and year-end balances are included in Notes J and L.

Net Position

Net Position is reported as restricted when constraints placed on the use of the net position have been either (1) externally imposed by creditors, grantors or laws and regulations of governments or (2) imposed by law through constitutional provisions or enabling legislation. Unrestricted net position that MassHousing Members have designated to be used for specific purposes are presented and identified as “designated” unrestricted net position in Note K. Such designated net position is considered to be specifically directed to be used for certain activities that are consistent with MassHousing’s mission. MassHousing anticipates that it will continue to designate unrestricted net position for specific purposes in furtherance of its affordable housing mission.

Recently Issued Accounting Standards

In June 2015, GASB approved Statement No. 75, “Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions” (“GASB 75”), which revises and establishes new financial reporting requirements for most governments and governmental agencies that provide postemployment benefits other than pensions to their employees. GASB 75 replaces the requirements of Statement No. 45, “Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended, and Statement No. 57, “OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans, for OPEB.” Statement No. 75 requires the Agency to recognize a liability for postemployment benefits other than pensions. GASB 75 also requires new note disclosures and new required supplementary information. The Agency implemented this standard in FY 2018. Reference is made in Note K and Note M for further details of GASB 75. The application of GASB 75 resulted in a cumulative adjustment to the opening balance of net position of \$22.7 million as of July 1, 2017, the beginning of FY 2018.

In January 2017, GASB approved Statement No. 84, “Fiduciary Activities” (“GASB 84”). This Statement establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. The effective date of this standard is for reporting

periods beginning after December 15, 2018. The Agency identified two fiduciary activities: (1) the Massachusetts Housing Finance Agency OPEB Trust and (2) the Massachusetts Housing Finance Agency Employees' Retirement System. The Agency intends to implement this standard on its FY 2020 financial statements.

In March 2017, GASB approved Statement No. 85, "Omnibus 2017" ("GASB 85"). This Statement addresses practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits). The effective date of this standard is for reporting periods beginning after June 15, 2017, but earlier application is encouraged. The Agency implemented this standard in FY 2018 with no significant impact to the Agency's financial statements.

In May 2017, GASB approved Statement No. 86, "Certain Debt Extinguishment Issues" ("GASB 86"). The primary objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources—resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. The effective date of this standard is for reporting periods beginning after June 15, 2017, earlier application is encouraged. The Agency implemented this standard in FY 2018 with no impact to the Agency's financial statements.

In June 2017, GASB approved Statement No. 87, "Leases" ("GASB 87"). The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases. This Statement increases the usefulness of financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. The effective date of this standard is for reporting periods beginning after December 15, 2019, but earlier application is encouraged. The Agency is currently assessing the impact of GASB 87 and the implementation issues.

In March 2018, GASB approved Statement No. 88 - Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements (GASB 88") which defines debt for purposes of disclosure in notes to financial statements and establishes additional financial statement note disclosure requirements related to debt obligations of governments, including direct borrowings and direct placements. Direct borrowings and direct placements have terms negotiated directly with the investor or lender and are not offered for public sale. The requirements of this Statement apply to the financial statements of all state and local governments. The requirements of this Statement were effective for reporting periods beginning after June 15, 2018. The Agency implemented this standard in the first quarter of FY 2019 with additional note disclosures.

In May 2019, GASB approved Statement No. 91, "Conduit Debt Obligations" ("GASB 91") The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt

obligations, and (3) related note disclosures. This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. Earlier application is encouraged. The Agency is currently assessing the impact of GASB 91 and the implementation issues.

Note C. Investments, Cash and Cash Equivalents

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

Under MassHousing's approved Investment Policy, authorized investments may include: (1) direct obligations of the U.S. Government or certain of its agencies as well as obligations of any state of the United States of America or of any political subdivision thereof; (2) bonds, debentures, participation certificates (representing a timely guaranty of principal and interest), notes, or similar evidences of indebtedness of any of the following: FFB, FHLB, Federal Farm Credit Bank, FannieMae (excluding "stripped" securities), Freddie Mac (excluding "stripped" securities), Resolution Funding Corporation, Ginnie Mae, or Student Loan Marketing Association; (3) obligations of any state of the United States of America or of any political subdivision or public agency or instrumentality thereof, provided that at the time of their purchase such obligations are rated by each Credit Rating Agency no lower than the then current rating assigned to the Bonds (or WCF, if applicable) by each Credit Rating Agency; (4) prime commercial paper of U. S. corporations having the highest rating from S&P Global Ratings ("S&P"), Moody's Investor Services, Inc. ("Moody's") or Fitch Ratings ("Fitch"); (5) interest-bearing time deposits and certificates of deposit with banks; (6) shares of diversified open-end money market funds that invest in the securities described in (1) and (4); (7) shares in the Massachusetts Municipal Depository Trust ("MMDT"); (8) repurchase agreements for obligations of the type specified in clauses 1 and 3 above; and (9) investment agreements with investment agreement providers with companies that have a rating of at least "AA-" from S&P, or at least "Aa3" from Moody's, or at least "AA-" from Fitch for investment durations of three or more years. Short term investments with durations of less than three years shall be invested with companies that have short term ratings of at least "SP-1" from S&P, or at least "VMIG1" from Moody's, or at least "F1" from Fitch. Ratings must otherwise satisfy any additional requirements imposed by the applicable bond resolution or such rating agencies.

MMDT is an external investment pool not subject to U.S. Securities and Exchange Commission registration but regulated by the Treasurer of the Commonwealth. MMDT's manager seeks to maintain a net asset value at \$1.00 per share.

Investments and Cash Equivalents

At June 30, 2019 and 2018, MassHousing had the following investments and cash equivalents by type and by maturities with credit ratings when available (in thousands):

June 30, 2019	Investment Maturities (In Years)					Creditor Rating Range
	Total Cost, Amortized Cost or Fair Value	Less Than 1	1-5	6-10	More Than 10	
GSEs	\$ 936,487	\$ 50,154	\$ 25,996	\$ 8,226	\$ 852,111	Aaa
Cash Equivalents	774,459	774,459				N/A to AAA
U.S. Treasuries	299,121	236,824	62,297			AA+
Guaranteed Investment Contracts (GICs)	14,980		12,534	119	2,327	N/A
Commercial Paper	32,562	32,562				A-1+ to A-1
Certificates of Deposits	14,182	7,513	6,669			A-1+ to A+
Total Investments and Cash Equivalents	\$ 2,071,791	\$ 1,101,512	\$ 107,496	\$ 8,345	\$ 854,438	

June 30, 2018	Investment Maturities (In Years)					Creditor Rating Range
	Total Cost, Amortized Cost or Fair Value	Less Than 1	1-5	6-10	More Than 10	
Cash Equivalents	\$ 944,393	\$ 944,393				N/A to AAA
GSEs	747,152	13,785	\$ 36,926	\$ 8,082	\$ 688,359	Aaa
U.S. Treasuries	240,872	146,448	94,424			AA+
GICs	16,701		12,534	431	3,736	N/A
Certificates of Deposits	10,439	2,000	8,439			AA- to A+
Commercial Paper	10,198	10,198				BBB to A+
Total Investments and Cash Equivalents	\$ 1,969,755	\$ 1,116,824	\$ 152,323	\$ 8,513	\$ 692,095	

The Agency's accounting and valuation policies for investments, cash and cash equivalents are presented in Note B.

The total carrying amount of these items plus cash deposits (see below) equals the sum of all cash and cash equivalents and investments line items in the accompanying combining Statements of Net Position. Detailed information about the investments and cash equivalents of MassHousing's individual programs is contained in the accompanying Schedule 1 to the financial statements.

For the fiscal year ended June 30, 2019, the total cash equivalents and investments from the bond programs included in the table were \$322 million and \$1.1 billion respectively, all of which are restricted as to use. For the fiscal year ended June 30, 2018, the total cash equivalents and investments from the bond programs included in the table were \$440.9 million and \$850.4 million, respectively, all of which are restricted as to use.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Under MassHousing's Investment Policy, the investment portfolio is

structured so that the maturities of the securities are scheduled to meet the timing of cash requirements for ongoing operations, in order to minimize interest rate risk. The Agency thereby avoids the need to sell securities on the open market prior to their maturities. MassHousing also minimizes its interest rate risk by investing operating funds primarily in money-market funds and/or in the MMDT.

Credit Risk and Custodial Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Custodial credit risk is the risk that, in the event of the failure of the counterparty to a transaction, MassHousing will not be able to recover the value of its investment or collateral securities held by an outside party. MassHousing mitigates credit risk and custodial credit risk by limiting investments to the types of securities permitted by MassHousing's approved Investment Policy and by investing with institutions which meet specified criteria such as, but not limited to, minimum levels of capital and surplus and specified minimum ratings provided by recognized rating agencies. It is MassHousing's policy that funds held under a bond resolution or other security agreement shall be invested with investment agreement providers having a rating of at least "AA-" from S&P, "Aa3" from Moody's, or "AA" from Fitch and that otherwise satisfy any additional requirements imposed by the applicable bond resolution on such rating agencies.

The ratings of all financial institutions with which the Agency has GICs equal or exceed MassHousing's minimum rating requirements. None of the individual GIC investments has been rated by the national rating agencies.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of an investment in a single issuer. MassHousing diversifies its investment portfolio to minimize the impact of potential losses from one type of security or individual issuer, excluding U.S. Treasury securities, Federally Guaranteed Obligations, GSE securities, and the MMDT. MassHousing seeks to limit investment concentration to no more than 15% with any single counterparty. This limit may be exceeded under appropriate circumstances that mitigate risk, which may include, but are not limited to, the term of the investment, the amount and nature of the investment, the rating of the counterparty, or the collateral pledged by the counterparty.

MassHousing had GICs with the following issuers that represented over 5% of the respective bond program's total investments at June 30, 2019 and 2018 (in thousands):

	June 30, 2019		June 30, 2018	
	% of Total		% of Total	
	<u>Investments</u>	<u>Investments</u>	<u>Investments</u>	<u>Investments</u>
<u>Rental Housing Mortgage Revenue Bond Program</u>				
NATIXIS Funding Corp. (guaranteed by Caisse de Depots et Consignations)	\$	2,327 100%	\$	3,736 100%
<u>General Rental Development Bond Program</u>				
AIG Matched Funding Corp. (agreement is collateralized)		119 100%		431 100%
<u>Housing Bond Program</u>				
Berkshire Hathaway Inc.		12,534 9%		12,534 10%

Cash Deposits

MassHousing's cash deposits per the bank were approximately \$56.8 million and \$34.7 million at June 30, 2019 and 2018, respectively. Of those amounts, \$2.6 million and \$1.8 million, respectively, were fully insured by the Federal Deposit Insurance Corporation ("FDIC") or collateralized with securities held by the pledging financial institution, its trust department or its agent. Such securities were not held in MassHousing's name. Deposits totaling \$54.2 million and \$32.9 million, respectively, were not insured or collateralized. Cash balances reflected on the combining Statements of Net Position were approximately \$47.4 million and \$28.9 million at June 30, 2019 and 2018, respectively. The difference between the bank balances and the carrying amounts represents deposits in transit net of, outstanding checks and other transactions not recorded by the bank until after year-end.

Fair Value of Investments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market or, if none exists, the most advantageous market, for the specific asset or liability at the measurement date ("exit price"). The fair value hierarchy established by generally accepted accounting principles prioritizes the inputs to valuation techniques used to measure fair value are as follows:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities at the measurement date. Cash and cash equivalents are considered Level 1, and are not included in the table below.

Level 2 – Inputs, other than quoted prices included in Level 1 that are observable for the asset and liability, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3 – Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable.

MassHousing has the following recurring fair value measurements as of June 30, 2019 and June 30, 2018:

- U.S. Treasuries purchased with an initial maturity of more than one year are valued using quoted market prices (Level 1 inputs)
- U.S. Treasuries purchased with an initial maturity of one year or less are recorded at amortized cost (Level 2 inputs)
- GSE Obligations are valued using quoted market prices (Level 1 inputs)
- MBS Forward Contracts are valued using quoted market prices (Level 1 inputs)
- Certificates of Deposit ("CDs") with an initial maturity of more than one year are valued using quoted market prices (Level 1 inputs)
- CDs with an initial maturity of one year or less are recorded at amortized cost (Level 2 inputs)
- Commercial Paper is valued using amortized cost (Level 2 inputs)
- Interest Rate Cap agreement is valued using the zero-coupon valuation technique (Level 2 inputs)
- Interest Rate Swaps are valued using the zero-coupon valuation technique (Level 2 inputs)
- There were no transfers into or out of Level 2 and Level 3

MassHousing has the following Investment and Derivative Instruments, which are measured at fair value, as of June 30, 2019 and 2018:

Investment and Derivative Instruments Measured at Fair Value- Asset/(Liability)

(in thousands)

	June 30, 2019			
	Total Fair Value 06/30/19	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
Debt securities				
GSEs	936,487	\$ 936,487		
U.S. Treasuries	299,121	211,649	\$ 87,472	
Certificates of Deposit	14,182	12,182	2,000	
Commercial Paper	32,562		32,562	
Total Debt Securities	\$ 1,282,352	\$ 1,160,318	\$ 122,034	\$ -
Investment derivative instruments				
Interest Rate Cap Agreement	\$ 40		\$ 40	
Interest Rate Swaps	(17,054)		(17,054)	
MBS Forward Contracts	(547)	\$ (547)		
Total Derivative Instruments	\$ (17,561)	\$ (547)	\$ (17,014)	\$ -

Investment and Derivative Instruments Measured at Fair Value- Asset/(Liability)

(in thousands)

	June 30, 2018			
	Total Fair Value 06/30/18	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
Debt securities				
GSEs	\$ 747,152	\$ 747,152		
U.S. Treasuries	240,872	215,851	\$ 25,021	
Certificates of Deposit	10,439	8,439	2,000	
Commercial Paper	10,198		10,198	
Total Debt Securities	\$ 1,008,661	\$ 971,442	\$ 37,219	\$ -
Investment derivative instruments				
Interest Rate Cap Agreement	\$ 96		\$ 96	
Interest Rate Swaps	(8,370)		(8,370)	
MBS Forward Contracts	(405)	\$ (405)		
Total Derivative Instruments	\$ (8,679)	\$ (405)	\$ (8,274)	\$ -

Note D. Mortgage Loans Receivable and Allowances for Uncollectible Loans

Mortgage loan receivables are reported net of allowances for uncollectible loans. In addition, certain loans that have been restructured with borrowers include principal reductions in accordance with the GASB accounting provisions. In other cases, delinquent interest and fees have been added to the principal balances of the loans upon their restructuring. Also, certain loans have undergone other types of restructuring.

6/30/2019 (in thousands)	Mortgage Obligation	Unamortized Prem./Disc. Loans	Loan Loss Reserve	Total
WCF - Multifamily	\$ 539,990	\$ -	\$ (180,908)	\$ 359,082
RHMRB Program	30,644	-	-	30,644
GRDB Program	190,460	1	(431)	190,030
MFHB Program	296,872	-	(950)	295,922
HB Program	1,551,332	-	(18,057)	1,533,275
Subtotal Multifamily	<u>\$ 2,609,298</u>	<u>\$ 1</u>	<u>\$ (200,346)</u>	<u>\$ 2,408,953</u>
WCF - Single-family	\$ 45,313	\$ 499	\$ (223)	\$ 45,589
SFHRB Program	274,715	-	(3,039)	271,676
Subtotal Single-family	<u>\$ 320,028</u>	<u>\$ 499</u>	<u>\$ (3,262)</u>	<u>\$ 317,265</u>
Totals	<u>\$ 2,929,326</u>	<u>\$ 500</u>	<u>\$ (203,608)</u>	<u>\$ 2,726,218</u>

6/30/2018 (in thousands)	Mortgage Obligation	Unamortized Prem./Disc. Loans	Loan Loss Reserve	Total
WCF - Multifamily	\$ 514,877	\$ -	\$ (202,945)	\$ 311,932
RHMRB Program	57,120	-	-	57,120
GRDB Program	184,552	2	(430)	184,124
MFHB Program	300,549	-	(1,226)	299,323
HB Program	1,626,782	-	(24,078)	1,602,704
Subtotal Multifamily	<u>\$ 2,683,880</u>	<u>\$ 2</u>	<u>\$ (228,679)</u>	<u>\$ 2,455,203</u>
WCF - Single-family	\$ 51,322	\$ 770	\$ (221)	\$ 51,871
SFHRB Program	306,429	-	(3,145)	303,284
Subtotal Single-family	<u>\$ 357,751</u>	<u>\$ 770</u>	<u>\$ (3,366)</u>	<u>\$ 355,155</u>
Totals	<u>\$ 3,041,631</u>	<u>\$ 771</u>	<u>\$ (232,045)</u>	<u>\$ 2,810,358</u>

The Agency also reviews its off-balance sheet loans with risk share for potential loss exposure. As of June 30, 2019 and June 30, 2018, the Agency has recorded a loss reserve on off-balance sheet loans of \$277 thousand and \$0, respectively. Loans with risk sharing agreements are described more fully in Note N, "Commitments and Contingencies."

For FY 2019, the Agency updated its capitalization rate assumptions used in establishing the Loan Loss Reserve, by applying an internally sourced data set which more closely aligns with the geographically specific location of the mortgaged property.

Note E. Actions Taken on Mortgage Loans and Mortgage Servicing Rights

Included in the SFHRB Program portfolio, at June 30, 2019 and June 30, 2018, were 60 and 85, respectively, non-performing and in foreclosure single-family loans. The outstanding mortgage loan balances for these properties at June 30, 2019 and June 30, 2018 totaled \$7.2 million and \$9.5 million, respectively, and are included in the mortgage loans of the SFHRB Program.

Non-performing loans that cannot be cured, or otherwise successfully restructured, may proceed to foreclosure by the Agency. The Agency foreclosed on nine loans in fiscal year 2019 and eight loans in 2018, which were held in the SFHRB Program or the WCF. At June 30, 2019 and June 30, 2018, the total fair value of foreclosed loans was \$1.2 million and \$1.4 million, respectively.

There were two non-performing developments included in the multifamily loan portfolio at June 30, 2019 and there was one non-performing development included in the multifamily loan portfolio at June 30, 2018. The total principal balance for these non-performing loans at June 30, 2019 and 2018 was \$6.8 million and \$6.1 million, respectively. No multifamily loans were foreclosed in either fiscal year 2019 or 2018.

Mortgage servicing rights purchased by the Agency are capitalized and amortized over the expected life of the related cash flows. In fiscal years ending June 30, 2019 and June 30, 2018, respectively, the Agency paid \$5.9 million and \$4 million for servicing rights. The amortization for the fiscal years ending June 30, 2019 and June 30, 2018, respectively, was \$4.2 million and \$3.8 million.

Excess mortgage servicing rights for mortgage loans pooled into MBS, which are retained by the Agency for which the stated servicing fee rate differs from current (normal) servicing, are capitalized and amortized over the expected life of the related cash flows. For the fiscal years ended June 30, 2019 and June 30, 2018, \$3.7 million and \$1.3 million, respectively, were capitalized, and \$1.1 million and \$802 thousand, respectively, were amortized.

Note F. Other Assets

At June 30, 2019 and 2018, MassHousing had the following current and non-current other assets (in thousands):

	FY 2019	FY 2018
SF Service Rights and Excess Servicing Rights	\$ 35,213	\$ 30,945
Unamortized Reinsurance Premium - Mortgage Insurance Fund	12,141	13,334
Accounts receivable - various	7,449	8,787
Deferred Expense Lehman Swap	-	1,780
Investments in AHTF participation rights	7,329	6,904
Fixed assets, net of accumulated depreciation	3,812	3,384
Interest receivable on investments	4,891	4,129
Other R/E Owned, net of allowance	1,245	1,590
Prepaid items	756	1,546
MCRFO and MMRFO, net of allowance	161	589
Total Other Assets	\$ 72,997	\$ 72,988

Note G. Escrowed Funds

Escrowed funds consist of: (a) deposits received in both the WCF and the HB Program from mortgage loan borrowers to cover taxes, insurance, repair and replacement costs and other Agency required specific purpose reserves; (b) Section 8 assistance payments from HUD; (c) amounts received in connection with the administration of various other state and Federal subsidy programs; and (d) amounts received in connection with the Agency acting as a mortgage loan servicer for other public and private entities. The deposits are invested principally in money-market mutual fund shares which are held in segregated cash accounts.

Note H. Bond and Note Indebtedness

MassHousing issues bond and note indebtedness under various resolutions for the following purposes: (1) to provide permanent financing for qualified housing developments; (2) to provide financing for housing developments during their construction; (3) to provide financing for the purchase of mortgage loans on owner-occupied residential properties; and (4) for other related purposes.

Summaries of MassHousing's bond and note indebtedness activity for fiscal years 2019 and 2018 are as follows (in thousands):

2019	Beginning			Ending	Current
	Balance	New Issues	Retirements	Balance	Maturities ¹
Bonds (all programs)	\$3,242,281	\$ 372,070	\$ 388,406	\$3,225,945	\$ 88,669
Notes: HB Program	-	24,783	24,533	250	-
Notes: WCF	218,040	65,820	113,725	170,135	32,340
Totals	\$3,460,321	\$ 462,673	\$ 526,664	\$3,396,330	\$ 121,009
Unamortized Bond/Note Discount/Premium				22,952	
Bonds and Notes Payable, Net				\$3,419,282	

2018	Beginning			Ending	Current
	Balance	New Issues	Retirements	Balance	Maturities ¹
Bonds (all programs)	\$3,213,614	\$ 422,840	\$ 394,173	\$3,242,281	\$ 115,854
Notes: HB Program	250	-	250	-	-
Notes: WCF	178,821	101,184	61,965	218,040	113,725
Totals	\$3,392,685	\$ 524,024	\$ 456,388	\$3,460,321	\$ 229,579
Unamortized Bond/Note Discount/Premium				23,193	
Bonds and Notes Payable, Net				\$3,483,514	

¹ Current Maturities refers to Current Principal Maturities of long-term debt due and payable within the next twelve months.

Future principal and interest payments on bonds and notes for the years subsequent to June 30, 2019 through their final maturities are presented in the accompanying Schedule 5 to the financial statements; due dates, interest rates, sinking fund and mandatory redemption requirements, and other information relating to bond and note indebtedness of individual programs are presented in the accompanying Schedules 3 (Bonds) and 4 (Notes and Other Indebtedness) to the financial statements.

Bonds in each series that mature 10 or more years after the date of issuance are generally redeemable at the option of MassHousing on prescribed redemption dates at prices ranging from 100% to 103% of the outstanding principal balance.

In most cases, MassHousing obtains first (and in some cases second) mortgage liens on the real property of such housing developments and on residential properties. Liens on multifamily developments and residential properties permanently financed by Agency bonds and notes are assignable by MassHousing as additional collateral for its bonds and notes. Similar liens on multifamily developments for which interim financing is outstanding provide collateral to MassHousing in the event of default by the borrowers.

Fixed Rate Bonds and Notes – Bonds are issued in the form of both serial bonds and term bonds. Term bonds and notes require the establishment of a sinking fund in the year preceding any scheduled mandatory redemption. Debt service requirements of the Agency’s outstanding fixed rate debt at June 30, 2019 are as follows (in thousands):

<u>Fiscal Year</u> <u>Ending June 30</u>	Fixed Rate Bonds and Notes					<u>Total</u>
	<u>Underwritten</u> <u>Principal</u>	<u>Underwritten</u> <u>Interest</u>	<u>Private Placement</u> <u>Principal</u>	<u>Private Placement</u> <u>Interest</u>		
FY20	\$ 113,340	\$ 100,286	\$ 1,150	\$ 11,509	\$ 226,285	
FY21	70,540	97,699	32,056	11,630	211,925	
FY22	133,238	95,194	42,069	9,926	280,427	
FY23	72,461	92,618	16,100	8,548	189,727	
FY24	75,450	90,367	1,350	8,501	175,668	
FY25 - FY29	342,591	416,685	7,685	41,714	808,675	
FY30 - FY34	436,165	346,238	11,645	40,135	834,183	
FY35 - FY39	434,435	257,612	31,720	36,832	760,599	
FY40 - FY44	434,404	172,251	66,285	29,108	702,048	
FY45 - FY49	315,471	92,436	84,685	17,197	509,789	
FY50 - FY54	201,272	44,180	55,505	3,763	304,720	
FY55 - FY59	77,565	8,270	1,945	180	87,960	
FY60 - FY64	6,790	305			7,095	
Totals	\$ 2,713,722	\$ 1,814,141	\$ 352,195	\$ 219,043	\$ 5,099,101	

Variable Rate Bonds

Listed in the table below are the outstanding Variable Rate Bonds as of June 30, 2019, including Remarketing Agent and Liquidity Providers, if applicable (in thousands):

Issue Name	Maturity Date	Variable Rate Bonds and Notes		Remarketing Agent	Remarketing Expiration Date	Liquidity Provider	Liquidity Expiration Date
		Bonds & Notes Outstanding	June 30, 2019				
RHMRB Series 2002D	01/01/2045	12,650		n/a	n/a	n/a	n/a
RHMRB Series 2002G	01/01/2046	7,830		n/a	n/a	n/a	n/a
RHMRB Series 2003A	07/01/2043	17,985		n/a	n/a	n/a	n/a
GRDB VRHB 2015A	01/01/2034	31,850		Raymond James	01/31/2034	Bank of America	01/31/2034
2018 Mill Road	11/01/2048	23,560		n/a	n/a	n/a	n/a
HB Series 2003F	12/01/2037	340		Merrill Lynch	12/01/2037	n/a	n/a
HB Series 2008A	05/01/2048	81,275		n/a	n/a	n/a	n/a
HB Series 2009B	01/01/2044	11,408		Merrill Lynch	01/01/2044	T.D. Bank	02/01/2021
HB Series 2013F	12/01/2038	24,380		Raymond James	12/01/2038	T.D. Bank	12/04/2023
HB Series 2016I	12/01/2056	25,000		n/a	n/a	n/a	n/a
HB Series 2018B	06/01/2058	25,000		n/a	n/a	n/a	n/a
HB 2018 Issue 2 Blk 2018A Notes	07/24/2020	250		n/a	n/a	n/a	n/a
SFHRB Series 76	12/01/2030	13,885		n/a	n/a	n/a	n/a
SFHRB Series 196	12/01/2048	15,000		n/a	n/a	n/a	n/a
SFHRB Series 200	12/01/2048	15,000		n/a	n/a	n/a	n/a
SFHRB Series 204	12/01/2048	10,000		n/a	n/a	n/a	n/a
SFHRB Series 208	06/01/2049	15,000		RBC Capital Markets	05/08/2024	Royal Bank of Canada	05/08/2024
Total		\$ 330,413					

Reference is made to Note I for a description of the interest rate swaps and caps that are outstanding on several variable rate bonds at year end. The total amounts of such hedged variable rate bonds outstanding at June 30, 2019 and 2018 were as follows (in thousands):

	June 30, 2019	June 30, 2018
HB Program	\$ 119,256	\$ 120,159
RHMRB Program	38,465	72,865
SFHRB Program	33,750	11,250
Total	\$ 191,471	\$ 204,274

The total amounts of such unhedged, or partially unhedged, variable rate bonds outstanding at June 30, 2019 and 2018 were as follows (in thousands):

Basis	June 30, 2019	June 30, 2018
One-month London Interbank Offered Rate (LIBOR) plus 60 basis points	\$ 13,885	\$ 14,555
One-month LIBOR plus 65 basis points	23,427	25,244
79% of one-month LIBOR plus 35 bps multiplied by 1.26582	250	-
70% of one-month LIBOR	7,500	3,750
SIFMA Municipal Swap Index (SIFMA) plus 55 bps	23,560	-
SIFMA plus 33 bps	10,000	-
Weekly rate set by the underwriter/remarketing agent, determined by current market conditions	60,320	57,681
Total	\$ 138,942	\$ 101,230

Certain bond series are subject to maximum interest rates as defined by their related series' resolutions. Some variable rate bonds are supported by stand-by bond purchase liquidity facilities with banks, which require that the applicable bank purchase any bonds that are tendered for purchase but which cannot be successfully remarketed. Unless and until the bonds can be remarketed, MassHousing would be required to pay to the bank interest on such bonds at an alternate rate. MassHousing also would be required to amortize the principal of such bonds on an accelerated schedule.

Debt Issuance

The following table summarizes new debt issues for the fiscal years ended June 30, 2019 and June 30, 2018:

FY 2019						
<u>Issue Name</u>	<u>Issue Date</u>	<u>Final Maturity Date</u>	<u>Original</u>			
			<u>Principal Amount</u>	<u>New Debt</u> ²	<u>Refunded Debt</u> ³	<u>Conduit</u> ⁴
Direct Purchase CLN, Issue 4 Blk 2018B	7/26/2018	6/18/2021	\$ 4,175	\$ 4,175		
Direct Purchase CLN, Issue 4 Blk 2018C	12/20/2018	12/20/2021	30,990	30,990		
Direct Purchase CLN, Issue 5 Blk 2018A	12/20/2018	12/20/2021	33,825	33,825		
Direct Purchase CLN, Issue 5 Blk 2019A	6/27/2019	6/27/2022	52,535	52,535		
Direct Purchase CLN, Issue 5 Blk 2019B (Taxable)	6/27/2019	6/27/2022	9,600	9,600		
Total Direct Purchase CLN Issues			\$ 131,125	\$ 131,125	\$ -	\$ -
GRDB Series VRHB 2018	10/23/2018	11/1/2048	\$ 23,675		\$ 23,675	
Total GRDB Issues			\$ 23,675	\$ -	\$ 23,675	\$ -
HB 2018 Issue 2 Blk 2018A Notes (Taxable)	7/26/2018	7/24/2020	\$ 250		\$ 250	
HB 2018 Issue 2 Blk 2018B Notes	9/18/2018	12/18/2018	24,533		24,533	
HB Series 2018 C	11/15/2018	6/1/2040	79,285		79,285	
HB Series 2018 D	12/20/2018	12/1/2058	51,235	\$ 51,235		
HB Series 2019A	6/27/2019	6/1/2061	70,855	70,855		
Total HB Issues			\$ 226,158	\$ 122,090	\$ 104,068	\$ -
SFHRB Series 197 (Taxable)	9/20/2018	6/1/2030	\$ 8,300	\$ 8,300		
SFHRB Series 198	9/20/2018	12/1/2034	8,970	43	\$ 8,927	
SFHRB Series 199	9/20/2018	12/1/2048	16,915	4,957	11,958	
SFHRB Series 200	9/20/2018	12/1/2048	15,000	15,000		
SFHRB Series 201 (Taxable)	12/20/2018	12/1/2037	12,400	12,400		
SFHRB Series 202	12/20/2018	6/1/2034	3,610	2	3,608	
SFHRB Series 203	12/20/2018	12/1/2048	12,325		12,325	
SFHRB Series 204	12/20/2018	12/1/2048	10,000	9,630	370	
SFHRB Series 205 (Taxable)	5/9/2019	6/1/2035	18,000	18,000		
SFHRB Series 206	5/9/2019	12/1/2036	6,610		6,610	
SFHRB Series 207	5/9/2019	6/1/2049	19,890	9,318	10,572	
SFHRB Series 208	5/9/2019	6/1/2049	15,000	15,000		
Total SFHRB Issues			\$ 147,020	\$ 92,650	\$ 54,370	\$ -
Multifamily Conduit Revenue Bonds (Orient Heights Phase Two Issue) Series 2018	10/31/2018	4/1/2022	\$ 26,000			\$ 26,000
Multifamily Conduit Revenue Bonds (Oak Woods Project) Series 2018	11/28/2018	6/1/2021	8,660			8,660
Multifamily Conduit Revenue Bonds (Olmsted Green Issue) Series 2018A	11/30/2018	11/30/2021	2,530			2,530
Multifamily Conduit Revenue Bonds (Olmsted Green Issue) Series 2018B	11/30/2018	11/30/2037	18,470			18,470
Multifamily Conduit Revenue Bonds (Chestnut Park Project) Series 2018A	12/13/2018	12/1/2023	12,100			12,100
Multifamily Tax-Exempt Mortgage-Backed Bonds (Chestnut Park Project) Series 2018A	12/13/2018	1/1/2039	32,900			32,900
Multi-Family Mortgage Revenue Note (Millers River Apts) Series 2018	12/28/2018	7/1/2053	52,000			52,000
Multi-Family Mortgage Revenue Note (Millers River Apts) Series 2019	3/22/2019	7/1/2053	30,000			30,000
Total Conduit Issues			\$ 182,660	\$ -	\$ -	\$ 182,660
Total			\$ 710,638	\$ 345,865	\$ 182,113	\$ 182,660

FY 2018						
<u>Issue Name</u>	<u>Issue Date</u>	<u>Final Maturity Date</u>	<u>Original Principal Amount</u>	<u>New Debt</u> ²	<u>Refunded Debt</u> ³	<u>Conduit</u> ⁴
CLN Series 2017 B	12/7/2017	12/1/2021	\$ 66,125	\$ 66,125		
CLN Series 2017 C (Taxable)	12/7/2017	6/1/2020	9,790	9,790		
Total CLN Issues			\$ 75,915	\$ 75,915	\$ -	\$ -
Direct Purchase CLN, Issue 3	8/10/2017	3/15/2018	\$ 7,500		\$ 7,500	
Direct Purchase CLN, Issue 4 Blk 2018A	6/19/2018	6/18/2021	38,643	\$ 38,643		
Total Direct Purchase CLN Issues			\$ 46,143	\$ 38,643	\$ 7,500	\$ -
HB Series 2017 D	12/7/2017	6/1/2059	\$ 106,445	\$ 106,445		
HB Series 2018 A	6/19/2018	6/1/2046	27,475	27,475		
HB Series 2018 B	6/19/2018	6/1/2058	25,000	25,000		
Total HB Issues			\$ 158,920	\$ 158,920	\$ -	\$ -
SFHRB Series 187	8/10/2017	12/1/2037	\$ 51,920		\$ 51,920	
SFHRB Series 188	8/10/2017	6/1/2043	44,355	\$ 44	44,311	
SFHRB Series 189	8/10/2017	12/1/2047	25,000	19,956	5,044	
SFHRB Series 190	12/20/2017	12/1/2048	62,065	14,390	47,675	
SFHRB Series 191	12/20/2017	12/1/2028	16,605	14	16,591	
SFHRB Series 192	12/20/2017	12/1/2022	14,800		14,800	
SFHRB Series 193	6/19/2018	12/1/2043	17,500		17,500	
SFHRB Series 194	6/19/2018	6/1/2019	560		560	
SFHRB Series 195	6/19/2018	12/1/2048	16,115	4,998	11,117	
SFHRB Series 196	6/19/2018	12/1/2048	15,000	15,000		
Total SFHRB Issues			\$ 263,920	\$ 54,402	\$ 209,518	\$ -
Multifamily Conduit Rev Bonds (Highland Glen Project), Series A	8/17/2017	8/1/2019	\$ 35,800			\$ 35,800
Multifamily Conduit Rev Bonds (BH EHT Issue), Series 2017	11/21/2017	11/1/2019	10,800			10,800
Multifamily Conduit Rev Bonds (Symphony Plaza Project), 2017 Series A	12/20/2017	2/1/2020	61,000			61,000
Multifamily Conduit Rev Bonds (Russell Apartments Project), 2017 Series A	12/22/2017	2/1/2021	13,950			13,950
Multifamily Conduit Rev Bonds (Van Brodie Mill Issue), 2017 Series A	12/28/2017	7/1/2020	14,000			14,000
Total Conduit Issues			\$ 135,550	\$ -	\$ -	\$ 135,550
			\$ 680,448	\$ 327,880	\$ 217,018	\$ 135,550

- 2 Funds used to finance new mortgage loans.
- 3 Funds used to refund and/or replace outstanding bonds.
- 4 Funds used to finance mortgage loans for which neither the bonds nor the mortgage loans securing those bonds are in the Agency’s financial statements. Each of such bond issues are separately secured from any other obligations issued by the Agency.

Working Capital Fund -Line of Credit

On November 9, 2017, MassHousing amended an existing revolving loan agreement with Bank of America, N.A. for a line of credit to provide funding for the Agency’s warehouse of single-family loans in the WCF. The revolving loan agreement was extended to November 8, 2019 with no change to the maximum line of credit amount of \$100 million. At June 30, 2019 and June 30, 2018, \$50 million and \$75 million, respectively, of the line of credit was drawn and outstanding. The agreement contains several provisions which would result in default, including, but not limited to, failure to pay the debt, bankruptcy, material breach of any rep or warranty, failure to pay other debt in excess of \$10 million and failure to maintain \$100 million of unrestricted net assets.

Helping to House New England Financing

In December 2016, MassHousing entered into an *Agreement for Advances, Collateral Pledge, and Security Agreement* (“Agreement”) with the Federal Home Loan Bank of

Boston's Helping to House New England Program, of which the Agency has posted certain investments as collateral as required under the program. The Agency is utilizing the program to provide funding for some of the Agency's multi-family loans. Each advance has a term of 10 years and a 0% interest rate. The Agreement contains several provisions which would result in default, including, but not limited to, failure to pay the debt, bankruptcy and material breach of any rep or warranty. At June 30, 2019 and 2018, \$16.4 million and \$9.2 million, respectively, had been advanced and was outstanding.

Conduit Debt

MassHousing issues bonds, from time to time, under its GRDB Resolution, to finance certain mortgage loans for which, due to the conduit nature of the obligations, neither the bonds nor the mortgage loans securing those bonds are included in MassHousing's financial statements. Each of such bond issues are separately secured from any other obligations issued by MassHousing. The issues of such conduit bonds, outstanding as of June 30, 2019, are listed in the table below (in thousands):

<u>Issue Name</u>	<u>Issue Date</u>	<u>Maturity Date</u>	<u>Original Principal Amount</u>
Conduit Revenue Bonds (Kenmore Abbey Development), 2012 Series B	6/21/2012	6/1/2030	\$ 42,700
Multi-Family Mort Rev Note (Orient Heights Phase One), 2016 Series A	11/23/2016	12/1/2019	26,500
Multifamily Conduit Rev Bonds (Highland Glen Project), Series A	8/17/2017	8/1/2019	35,800
Multifamily Conduit Rev Bonds (BH EHT Issue), Series 2017	11/21/2017	11/1/2019	10,800
Multifamily Conduit Rev Bonds (Symphony Plaza Project), 2017 Series A	12/20/2017	2/1/2020	61,000
Multifamily Conduit Rev Bonds (Russell Apartments Project), 2017 Series A	12/22/2017	2/1/2021	13,950
Multifamily Conduit Rev Bonds (Van Brodie Mill Issue), 2017 Series A	12/28/2017	7/1/2020	14,000
Multifamily Conduit Revenue Bonds, Orient Heights Phase Two Issue, Series 2018	10/31/2018	4/1/2022	26,000
Multifamily Conduit Revenue Bonds (Oak Woods Project), Series 2018	11/28/2018	6/1/2021	8,660
Multifamily Conduit Revenue Bonds, Olmsted Green Issue, Series 2018A	11/30/2018	11/30/2021	2,530
Multifamily Conduit Revenue Bonds, Olmsted Green Issue, Series 2018B	11/30/2018	11/30/2037	18,470
Multifamily Tax-Exempt Mortgage-Backed Bonds (M-TEBS) (Chestnut Park Project), Series 2018A	12/13/2018	1/1/2039	32,900
Multifamily Conduit Revenue Bonds (Chestnut Park Project), Series 2018A	12/13/2018	12/1/2023	12,100
Multi-Family Mortgage Revenue Note (Millers River Apartments), Series 2018	12/28/2018	7/1/2053	52,000
Multi-Family Mortgage Revenue Note (Millers River Apartments), Series 2019	3/22/2019	7/1/2053	30,000

As to the Conduit Bonds, updated information with respect to the bonds and related mortgage loan is available in accordance with the provisions of the Loan, Security and Trust Agreement and the Disbursing Agreement relating to such bonds.

Defeased Debt

MassHousing defeases certain multifamily bonds, from time to time, by placing the proceeds of new bonds into irrevocable trusts established to provide funds to call the defeased bond. These defeasance transactions are generally of short duration.

Prior-years' Defeased Debt

In 1992 and 1993, MassHousing defeased certain multifamily bonds of two resolutions by placing the proceeds of new bonds into irrevocable trusts established to provide for all future debt service payments on the old bonds until their scheduled maturities in 2021. Accordingly, the assets and the liabilities of these irrevocable trusts are not included in MassHousing's financial statements. At June 30, 2019 and 2018, \$12.9 million and \$17.8 million, respectively, of bonds outstanding were considered defeased.

Note I. Derivative Instruments

Derivative instruments are financial arrangements, often complex, used to manage specific risks or to make investments. By entering into these arrangements, organizations receive and/or make payments based on market prices or rates without actually entering into the related financial transactions. Derivative instruments associated with changing financial prices and rates result in changing cash flows and fair values that can be used as effective risk management or investment tools.

At June 30, 2019 and 2018 MassHousing had three types of derivative instruments outstanding: interest rate swaps, an interest rate cap agreement, and MBS Forward Contracts.

Interest Rate Swaps

On August 16, 2018, MassHousing partially terminated \$15.5 million of the notional amount of the interest rate swap agreement for its variable rate RHMRB, 2002 Series D at market. This interest rate swap agreement had an original notional value of \$32.2 million, was previously determined to be an ineffective hedge, and was recorded as an investment derivative instrument. In full consideration for the partial termination and amendment of the original transaction, the Agency received \$201,000.

On September 17, 2018, MassHousing exercised an early termination option of \$3.5 million of the notional amount of the interest rate swap agreement for its variable rate RHMRB, 2002 Series B (Mt. Pleasant) at market. This interest rate swap agreement had an original notional value of \$5.8 million, was previously determined to be an ineffective hedge, and was recorded as an investment derivative instrument. In full consideration for the partial termination and amendment of the original transaction, the Agency received \$67,500.

On September 17, 2018, MassHousing exercised an early termination option of \$7.4 million of the notional amount of the interest rate swap agreement for its variable rate RHMRB, 2002 Series B (Neptune) at market. This interest rate swap agreement had an original notional value of \$9.5 million, was previously determined to be an ineffective

hedge, and was recorded as an investment derivative instrument. In full consideration for the partial termination and amendment of the original transaction, the Agency received \$135,500.

On September 17, 2018, MassHousing partially terminated \$2.3 million of the notional amount of the interest rate swap agreement for its variable rate RHMRB, 2002 Series D at market. This interest rate swap agreement had an original notional value of \$32.2 million, was previously determined to be an ineffective hedge, and was recorded as an investment derivative instrument. In full consideration for the partial termination and amendment of the original transaction, the Agency received \$38,000.

On September 24, 2018, MassHousing entered into a replacement interest rate swap agreement with a notional amount of \$11.4 million for its variable rate HB Series 2009B bonds. The purpose of the replacement swap agreement is to hedge an interest rate for the variable rate bonds at a lower synthetic fixed rate. The replacement swap agreement was effective as of January 1, 2019. The swap counterparty is obligated to pay MassHousing monthly based on an annualized amount equal to the 1 month LIBOR on the amortized notional amount of the contract and MassHousing is obligated to pay the counterparty monthly a stipulated annualized fixed rate of 4.77% on the amortized notional amount of the contract. The replacement interest rate swap agreement was determined to be an ineffective hedge and will be recorded as an investment derivative instrument.

On September 25, 2018, MassHousing exercised an early termination option without a termination fee with respect to an interest rate swap agreement in the RHMRB Program with a notional value of \$12.6 million previously used as an interest rate hedge for its variable rate RHMRB, 2002 Series G bonds. Also on September 25, 2018, MassHousing entered into a replacement interest rate swap agreement with a notional amount of \$11.0 million. The purpose of the replacement swap agreement is to hedge an interest rate for the variable rate bonds at a lower synthetic fixed rate. The swap counterparty is obligated to pay MassHousing monthly based on an annualized amount equal to the 1 month LIBOR plus 25 basis points on the amortized notional amount of the contract and MassHousing is obligated to pay the counterparty monthly a stipulated annualized fixed rate of 4.51% on the amortized notional amount of the contract. The replacement interest rate swap agreement was determined to be an ineffective hedge and is recorded as an investment derivative instrument. The terminated swap with Deutsche Bank was the replacement for a swap with Lehman Brothers Special Financing, Inc., which was terminated in 2009 as the result of the Lehman Brothers bankruptcy. The termination of the Lehman swap required a disbursement of funds to Lehman and the replacement swap resulted in the inflow of funds from Deutsche Bank because the swaps were priced off market. These payments were capitalized and were being amortized over the remaining lives of the respective bond series to which they related. As a result of the termination of the original replacement swap with Deutsche Bank, the write-off of the remaining unamortized balance of \$1.8 million was recorded as a Special Item due to the infrequent nature of this type of transaction.

On October 25, 2018, MassHousing entered into a swap agreement with a notional amount of \$11.3 million, effective November 1, 2018, as part of the financing for \$15 million of variable rate SFHRB Series 200 bonds. The purpose of the swap agreement is to hedge an interest rate for the variable rate bonds. The swap counterparty is obligated to pay MassHousing monthly based on an annualized amount equal to 70% of one-month LIBOR on the amortized notional amount of the contract and MassHousing is obligated to pay the

counterparty monthly a stipulated annualized fixed rate of 2.732% on the amortized notional amount of the contract. The interest rate swap agreement was determined to be an ineffective hedge and was recorded as an investment derivative instrument.

On December 1, 2018, MassHousing partially terminated \$2.8 million of the notional amount of the interest rate swap agreement for its variable rate RHMRB, 2002 Series G bonds at par, as a result of the bonds being called. This interest rate swap agreement had an original notional value of \$11.0 million.

On March 1, 2019, MassHousing partially terminated \$845,000 of the notional amount of the interest rate swap agreement for its variable rate RHMRB, 2002 Series D bonds at par, as a result of the bonds being called. This interest rate swap agreement had an original notional value of \$32.2 million.

On March 27, 2019, MassHousing amended its interest rate swap agreement for its variable rate RHMRB, 2002 Series G bonds, effective March 1, 2019. This agreement was originally effective September 25, 2018 with a notional amount of \$11.0 million. Per the amendment, the interest rate MassHousing is obligated to pay the counterparty monthly was reduced to a stipulated annualized fixed rate of 3.96% from 4.51% on the amortized notional amount of the contract. Additionally, the next cancellation option date has been changed to May 1, 2019 from July 1, 2018.

On April 30, 2019, MassHousing entered into a swap agreement with a notional amount of \$11.3 million, effective May 9, 2019, as part of the financing for \$15 million of SFHRB Series 208 bonds. The purpose of the swap agreement is to hedge an interest rate for the variable rate bonds. For the periods May 9, 2019 to (but excluding) December 1, 2028, the swap counterparty is obligated to pay MassHousing semi-annually based on an annualized amount equal to the SIFMA Municipal Swap Index on the amortized notional amount of the contract. For the periods including December 1, 2028 and thereafter, the swap counterparty is obligated to pay MassHousing semi-annually based on an annualized amount equal to 70% of one-month LIBOR on the amortized notional amount of the contract. MassHousing is obligated to pay the counterparty semi-annually a stipulated annualized fixed rate of 2.35% on the amortized notional amount of the contract. The interest rate swap agreement was determined to be an ineffective hedge and will be recorded as an investment derivative instrument.

Master Swap Policy (MS Policy) – MassHousing’s MS Policy sets guidelines for the use and management of variable rate debt and the use of various derivative financial products such as swaps, caps, floors, collars and options. The MS Policy governs the following: the appropriate usage of swaps and caps; acceptable swap and cap strategies; the procedure for entering into swaps and caps; standards for selection of swap and cap counterparties (including credit standards, diversification of exposure and collateral requirements); internal management of obligations and exposure; and the selection and procurement of swaps and caps.

The MS Policy permits MassHousing to enter into swaps and caps with qualified counterparties in connection with the issuance of debt obligations to reduce the amount and duration of rate, spread or similar risk and in connection with managing MassHousing’s assets. The MS Policy states that no swap or cap may be entered into prior to notification of appropriate bond rating agencies. The MS Policy contains guidelines for limiting

concentration of exposure to single counterparties and limiting overall derivative counterparty exposure in relation to MassHousing's net position.

Synthetic Fixed Rate Bonds – In connection with the issuance of certain variable rate bonds, MassHousing has entered into several separate pay-fixed, receive-variable interest rate hedging transactions (“interest rate swap”) generally in initial notional amounts equal to the initial aggregate principal amount of the related bonds. The interest rate swap counterparties are obligated to make periodic variable rate interest payments to MassHousing based on the notional amounts of the swaps at the then prevailing rates, and MassHousing is obligated to make interest payments to the counterparties at the fixed rates on the notional amounts specified in the interest rate swap agreements. Generally, only the net difference between the two interest payments is actually exchanged with the counterparty. MassHousing is also responsible for making the periodic interest payments to the variable rate bondholders. MassHousing's objective in entering into interest rate swap agreements is to effectively fix its interest payment obligations with respect to the variable rate bonds at a rate lower than possible if fixed rate bonds had been issued. MassHousing would be exposed to a variable rate under the following conditions: if the counterparties default; if the swap agreements are terminated; or if LIBOR exceeds a specified percentage rate. Termination of an interest rate swap agreement may also result in MassHousing either having to make or receive a termination payment.

Basis of Valuing Interest Rate Swaps – The interest rate swap fair values reflected on the combining Statement of Net Position were obtained from an independent pricing service which used acceptable methods and assumptions in compliance with the disclosure requirements of GASB pronouncements, subject to review and approval by MassHousing. The pricing service uses modeling systems to determine the values shown in this report. Unless stated otherwise, the values presented are mid-market levels and do not include accrued interest. The values are calculated based on the zero-coupon method. The zero-coupon method determines future net settlement payments assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. Future payments are then discounted using the spot rates implied by the yield curve as of the pricing date. Termination Option values are derived using the Black-Scholes model, taking into account variables such as interest rates, duration and implied volatility.

A positive fair value of an interest rate swap (an asset) implies that if the interest rate swap were terminated at midmarket pricing on the valuation date, MassHousing would be owed a payment from the interest rate swap provider. Conversely, a negative fair value of an interest rate swap (a liability) implies that MassHousing would owe a payment to the interest rate swap provider if the interest rate swap were terminated at midmarket pricing on the valuation date.

Terms, fair values, and credit ratings – The terms, including fair values and counterparty credit ratings, of the outstanding interest rate swaps at both June 30, 2019 and 2018 are provided below. The credit ratings were issued by S&P and Moody's, respectively. The maturity dates of hedged interest rate swap agreements and their related bonds are generally coterminous, maturing according to the dates shown below. The notional value of each interest rate swap and the principal amount of the associated debt declines over time.

June 30, 2019

Swap - Derivative Instruments (in thousands)

Associated Bond Series (Counterparty)	Derivative Type	Notional Amount 06/30/19	Effective Date	Swap Termination Date	Fixed Rate Paid	Variable Rate Received	Change in Fair Values from 06/30/18	
							Fair Values 06/30/19	[increase/ (decrease)]
Rental Housing Mortgage Revenue Bonds ("RHMRB") Series 2002D (4)	Investment	\$ 12,650	11/8/2017	1/1/2045	3.645%	LIBOR + .25% (a)	\$ (14)	\$ (854)
RHMRB Series 2002G (5)	Investment	7,830	3/1/2019	1/1/2046	3.960%	LIBOR + .25% (a)	(8)	n/a
RHMRB Series 2003A (1)	Hedge	17,985	9/3/2003	7/1/2043	6.729%	LIBOR (a)	(10,791)	(2,114)
Housing Bonds ("HB") Series 2008A -Block III (Briston Arms) (2)	Hedge	3,481	7/1/2009	5/1/2048	5.563%	LIBOR + .65% (a)	(3)	69
HB Series 2008A -Block III (Lebanese) (2)	Hedge	2,557	11/1/2009	5/1/2048	5.178%	LIBOR + .65% (a)	(335)	(149)
HB Series 2009B (5)	Investment	11,408	1/1/2019	1/1/2044	4.765%	LIBOR (a)	(23)	254
HB Series 2016I (3)	Hedge	25,000	12/15/2016	12/1/2041	3.655%	(70% * 3 mo. LIBOR) + 1.20% (b)	(1,089)	(1,540)
HB 2018B (3)	Hedge	25,000	6/19/2018	6/1/2053	3.845%	(70 % * LIBOR) + 1.05% (a)	(2,160)	(1,592)
SFHRB Series 196 (4)	Investment	11,250	6/19/2018	12/1/2048	2.573%	70% * LIBOR (a)	(866)	(728)
SFHRB Series 200 (6)	Investment	11,250	11/1/2018	12/1/2048	2.732%	70% * LIBOR (a)	(1,178)	n/a
SFHRB Series 208 (6)	Investment	11,250	5/9/2019	6/1/2049	2.350%	SIFMA (c)	(587)	n/a
		\$ 139,661					\$ (17,054)	\$ (6,654)

(a) LIBOR 1 month USD (2.40% at June 30, 2019)

(b) LIBOR 3 month USD (2.32% at June 30, 2019)

(c) USD SIFMA Municipal Swap Index (1.90% at June 30, 2019)

Counterparty	Counterparty Credit Rating	Notional Amount 06/30/19	Percentage of	
			Notional Amount	Fair Values 06/30/19
(1) JP Morgan Chase Bank	A+/Aa2	\$ 17,985	12.88%	\$ (10,791)
(2) Bank of America, N.A.	A+/Aa2	6,038	4.32%	(338)
(3) Barclays Bank PLC	A/A2	50,000	35.81%	(3,249)
(4) Citibank, N.A.	A+/Aa3	23,900	17.11%	(880)
(5) Wells Fargo Bank, N.A.	A+/Aa2	19,238	13.77%	(31)
(6) Royal Bank of Canada	AA-/A2	22,500	16.11%	(1,765)
		\$ 139,661	100.00%	\$ (17,054)

June 30, 2018

Swap - Derivative Instruments (in thousands)

Associated Bond Series	Derivative Type	Notional Amount 06/30/18	Effective Date	Swap Termination Date	Fixed Rate Paid	Variable Rate Received	Change in Fair Values from 06/30/17	
							Fair Values 06/30/18	[increase/ (decrease)]
RHMRB Series 2002B (Neptune) (4)	Investment	7,575	10/3/2017	7/1/2032	3.020%	LIBOR (a)	167	n/a
RHMRB Series 2002B (Mt. Pleasant) (4)	Investment	3,545	10/3/2017	1/1/2044	3.520%	LIBOR (a)	122	n/a
RHMRB Series 2002D (4)	Investment	31,840	11/8/2017	1/1/2045	3.645%	LIBOR + .25% (a)	840	n/a
RHMRB Series 2002G (7)	Hedge	13,270	6/25/2009	1/1/2046	5.360%	LIBOR + .25% (a)	(32)	519
RHMRB Series 2003A (1)	Hedge	18,270	9/3/2003	7/1/2043	6.729%	LIBOR (a)	(8,677)	2,183
HB Series 2008A -Block III (Briston Arms) (2)	Hedge	3,524	9/1/2009	5/1/2048	5.563%	LIBOR + .65% (a)	(72)	133
HB Series 2008A -Block III (Lebanese) (2)	Hedge	2,587	11/1/2009	5/1/2048	5.178%	LIBOR + .65% (a)	(186)	144
HB Series 2009B (1)	Hedge	11,608	1/1/2004	1/1/2044	7.080%	LIBOR (a)	(277)	686
HB Series 2016I (3)	Hedge	25,000	12/15/2016	12/1/2041	3.655%	(70% * 3 mo. LIBOR) + 1.20% (b)	451	1,035
HB 2018B (3)	Hedge	25,000	6/19/2018	6/1/2053	3.845%	(70 % * LIBOR) + 1.05% (a)	(568)	n/a
SFHRB Series 196 (4)	Investment	11,250	6/19/2018	12/1/2048	2.573%	70% * LIBOR (a)	(138)	n/a
		\$ 153,469					\$ (8,370)	\$ 4,700

(a) LIBOR 1 month USD (2.10% at June 30, 2018)

(b) LIBOR 3 month USD (2.34% at June 30, 2018)

Counterparty	Counterparty Credit Rating	Notional Amount 06/30/18	Percentage of	
			Notional Amount	Fair Values 06/30/18
(1) JP Morgan Chase Bank	A+/Aa2	\$ 29,878	19.47%	\$ (8,954)
(2) Bank of America, N.A.	A+/Aa3	6,111	3.98%	(258)
(3) Barclays Bank PLC	A/A2	50,000	32.58%	(117)
(4) Citibank N.A.	A+/A1	54,210	35.32%	991
(7) Deutsche Bank AG	BBB+/Baa2	13,270	8.65%	(32)
		\$ 153,469	100.00%	\$ (8,370)

Due to partial terminations of swap agreements, the changes in fair values in the tables above may not accurately depict actual market changes.

Interest Rate Swap payments and associated debt – As interest rates vary, variable-rate bond interest payments and net interest rate swap payments vary. Certain of the Agency’s interest rate swap agreements contain scheduled reductions in the notional amounts that are expected to approximately follow the scheduled or anticipated reductions in the principal balances of the associated bonds payable.

Using interest rates at June 30, 2019, debt service requirements of the Agency’s outstanding variable rate debt and net interest rate swap payments at June 30, 2019 are as follows (in thousands):

Fiscal Year Ending June 30	Hedged Variable Rate Bonds and Notes ⁵						Interest rate Swaps Net	Total
	Underwritten Principal	Underwritten Interest	Private Placement Principal	Private Placement Interest				
FY20	\$ 505	\$ 1,527	\$ 2,310	\$ 4,610	\$ 2,101	\$ 11,053		
FY21	520	1,502	2,445	4,532	2,074	11,073		
FY22	555	1,489	2,600	4,460	2,036	11,140		
FY23	570	1,475	2,420	4,388	1,999	10,852		
FY24	600	1,465	1,900	4,338	1,959	10,262		
FY25 - FY29	3,665	7,029	10,925	20,734	9,302	51,655		
FY30 - FY34	8,225	6,317	15,040	18,818	7,855	56,255		
FY35 - FY39	14,365	5,029	20,055	16,217	6,261	61,927		
FY40 - FY44	21,533	3,191	26,530	12,733	3,603	67,590		
FY45 - FY49	18,520	956	33,780	8,392	1,574	63,222		
FY50 - FY54			22,555	4,198	694	27,447		
FY55 - FY59			16,530	927		17,457		
Totals	\$ 69,058	\$ 29,980	\$ 157,090	\$ 104,347	\$ 39,458	\$ 399,933		

5 The variable rate bonds included in the above table include \$34.8 million of the unhedged portion of partially hedged bonds. At June 30, 2019, the following amounts were unhedged: HB Series 2008A- \$23.4 million, SFHRB Series 196- \$3.8 million, SFHRB Series 200- \$3.8 million, and SFHRB Series 208- \$3.8 million

Current Collateral Agreements – The outstanding interest rate swap agreements contain varying collateral requirements with the counterparties to mitigate the potential for credit risk. When these requirements are not met, collateral is posted with the counterparty. These requirements were met at June 30, 2019 and 2018, and as a result, the Agency did not have any collateral on deposit with any of its swap counterparties.

Interest Rate Cap Agreement

As an interest rate hedge of a certain variable rate bond, MassHousing entered into an interest rate cap (“cap agreement”) in the initial notional amount of \$54.7 million equal to the aggregate principal amount of the related bonds. The cap agreement counterparty is obligated to make monthly interest payments to MassHousing on the notional schedule at the then prevailing rates should the index rate exceed the strike rate.

Objective of the interest rate cap – MassHousing’s objective in entering into interest rate cap agreements is to provide rate protection with respect to the variable rate bonds.

Basis of Valuing Interest Rate Caps – The cap fair value reflected on the combining Statement of Net Position was obtained from an independent pricing service which used acceptable methods and assumptions in compliance with the disclosure requirements of GASB pronouncements, subject to review and approval by MassHousing.

MBS Forward Contracts are included on the combining Statements of Net Position as deferred outflows of resources if the fair value is negative and as deferred inflows of resources if the fair value adjustment is positive. Pursuant to the terms of the counterparty forward contract with Fannie Mae, when the aggregate negative value of the forward contracts exceeds \$3 million, the Agency is required to post collateral. The minimum transfer amount is \$50 thousand. Collateral is not returned until the aggregate negative value becomes positive. At June 30, 2019 and 2018, the Agency did not have any collateral on deposit with Fannie Mae.

Terms, fair values, and credit ratings – A summary of the MBS Forward Contracts outstanding at June 30, 2019 and 2018, are provided below. The terms, including fair values and counterparty credit ratings, of the MBS Forward Contracts at June 30, 2019 and 2018, are provided in Schedule 6. The credit rating was issued by Moodys. The fair values presented below and in Schedule 6 at June 30, 2019 and 2018 were obtained from an external pricing service which used acceptable methods and assumptions in compliance with GASB disclosure requirements, subject to review and approval by MassHousing.

MBS Forward Contracts at June 30, 2019 (dollars in thousands)

MBS Forward Contracts	Notional Amount Jun. 30, 2019	Coupon Rate Rate	Fair Value at Jun. 30, 2019	Counterparty Credit Rating
Fannie Mae	\$ 36,000	3.0-4.0%	\$ (245)	Aaa
Fannie Mae ¹	1,248	4.0%	(2)	Aaa
Freddie Mac	29,000	3.5%	(300)	Aaa
Total	<u><u>\$ 66,248</u></u>		<u><u>\$ (547)</u></u>	

¹ These MBS forward contracts relate to Ginnie Mae MBS to be issued. The HUD loans that eventually back the Ginnie Mae MBS are on a forward contract between MassHousing and Fannie Mae.

MBS Forward Contracts at June 30, 2018 (dollars in thousands)

MBS Forward Contracts	Notional Amount Jun. 30, 2018	Coupon Rate Rate	Fair Value at Jun. 30, 2018	Counterparty Credit Rating
Fannie Mae	\$ 124,110	3.5-4.5%	\$ (405)	Aaa
Total	<u><u>\$ 124,110</u></u>		<u><u>\$ (405)</u></u>	

Derivative Instrument Risk

Credit Risk – Credit risk is the risk that a counterparty will not fulfill its settlement obligations. The fair values of the interest rate swaps at June 30, 2019 and 2018 represent MassHousing’s credit exposure to the various counterparties with which the swaps were executed. Swap terms often expose MassHousing to credit risk for those swaps with positive fair values. The term “positive fair value” implies that the swap provider would owe a payment to MassHousing if the swap were terminated at a midmarket price on the valuation date. The term “negative fair value” implies that MassHousing would owe a payment to the swap provider if the swap were terminated at a midmarket price on the

valuation date. At June 30, 2019, the Agency had no exposure to credit risk on its outstanding interest rate swaps, as no interest rate swaps had a positive value. At June 30, 2018, the Agency was exposed to credit risk on outstanding swaps with positive fair values with two providers. One of the providers is rated A/A2 by S&P and Moody's, respectively. The other provider is rated A+/A1 by S&P and Moody's, respectively. The Agency believes that if these ratings were to deteriorate, it has protections within its agreements to manage this credit risk exposure. As a result, the Agency believes the credit risk exposure is low for these counterparties.

MBS Forward Contract terms often expose MassHousing to credit risk. On both June 30, 2019 and 2018, the Agency was exposed to credit risk on one of its then outstanding MBS Forward Contracts due to a positive fair value on such MBS Forward Contract. However, the net fair value to the counterparty at June 30, 2019 and 2018 was negative, and the counterparty was rated Aaa by Moody's on both dates. As such, the Agency does not believe it was exposed to credit risk on its MBS Forward Contracts at June 30, 2019 and 2018.

Basis risk – Basis risk is the risk that arises when variable rates or prices of a hedging derivative instrument and a hedged item are based on different reference rates. If a change occurs that results in the rates not being equal, the expected interest cost savings may not be realized.

At June 30, 2019 and 2018, the Agency was not exposed to basis risk on its interest rate swaps, its interest rate cap, or its MBS Forward Contracts.

Market-access risk – MassHousing would be exposed to market-access risk if a termination event occurred and the Agency was unable to obtain replacement interest rate swaps, caps or forwards because the market had suffered a loss of liquidity or had collapsed. The Agency utilizes these agreements knowing that the risk of failure exists, although that risk is generally thought to be remote. The Agency may consider redeeming the underlying bonds or remarketing bonds to fixed rates as possible alternative solutions to a lack of swaps or caps.

Termination risk – The interest rate swap contract MassHousing uses is the International Swap Dealers Association Master Agreement, which includes provisions for standard termination events. Either MassHousing or the counterparty may terminate any interest rate swap if the other party fails to perform under the terms of the contract.

MassHousing has the option to terminate the interest rate swap agreements on the dates listed in the table below. If a termination event occurs due to reasons other than MassHousing exercising its standard termination option, MassHousing would be liable to the counterparty for a settlement amount to be established using the "Second Method and Market Quotation" determination. Under these terms, if the interest rate swap has a negative fair value at the time of termination, MassHousing would be liable to the counterparty for a payment equal to the interest rate swap's fair value; if the interest rate swap has a positive value, the counterparty would be liable for a payment to MassHousing.

Interest rate risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the interest rate swaps. The Agency is not exposed to significant interest rate risk on its pay-fixed, receive variable interest rate swaps. As the LIBOR rates

change, the Agency's net interest rate swap payment to the counterparty changes in an approximately equal, but opposite, direction of the payment to the bondholders.

The Agency is exposed to interest rate risk on its interest rate cap. As the LIBOR rates increase, the Agency's payment to the variable-rate bond holder increases until the interest rate cap strike rate is reached.

The Agency is not exposed to interest rate risk on its MBS Forward Contracts.

Rollover risk – MassHousing is exposed to rollover risk on interest rate swaps that mature or may be terminated prior to the maturity of the associated debt. When these interest rate swaps terminate, or if MassHousing exercises its elective termination option, the risk is that MassHousing will not realize the synthetic rate offered by the interest rate swaps on the underlying debt issues. The debt that is exposed to rollover risk at June 30, 2019 and 2018 is as follows:

Debt exposed to Rollover risk - June 30, 2019

<u>Associated Debt Issuance</u>	<u>Debt Maturity Dates</u>	<u>Swap Early Termination Date</u>
RHMRB 2002D	01/01/45	07/01/18
RHMRB 2002G	01/01/46	05/01/19
HB 2008A Block III (Briston Arms)	05/01/48	06/17/19
HB 2008A Block III (Lebanese)	05/01/48	10/18/24
HB 2009B	01/01/44	07/01/19
HB 2016I	12/01/56	12/01/25
HB 2018B	06/01/58	06/01/27
SFHRB 196	12/01/48	06/01/27
SFHRB 200	12/01/48	12/01/28
SFHRB 208	06/01/49	12/01/28

Debt exposed to Rollover risk - June 30, 2018

<u>Associated Debt Issuance</u>	<u>Debt Maturity Dates</u>	<u>Swap Early Termination Date</u>
RHMRB 2002B (Neptune)	01/01/44	06/01/18
RHMRB 2002B (Mt. Pleasant)	01/01/44	03/01/18
RHMRB 2002D	01/01/45	07/01/18
RHMRB 2002G	01/01/46	07/01/18
HB 2008A Block III (Briston Arms)	05/01/48	06/17/19
HB 2008A Block III (Lebanese)	05/01/48	10/18/24
HB 2009B	01/01/44	01/01/19
HB 2016I	12/01/56	12/01/25
HB 2018B	06/01/58	06/01/27
SFHRB 196	12/01/48	06/01/27

Note J. Interfund Receivable (Payable) Balances and Interfund Transfers

For cash flow purposes in meeting the liquidity requirements of various affiliated entities and bond programs, the WCF may provide or receive cash or other resources which are recorded on the combining Statements of Net Position as an interfund account receivable or (payable). Interfund transfers of net position may be made from time to time among the WCF and bond programs as provided by the requirements of the various bond resolutions and their related indentures. The Agency may make interfund transfers to the extent that such transfers are not required to meet the Agency’s debt obligations and if such transfers are not in violation of the terms of bond resolutions or indentures. These transfers are made for the following purposes: to make initial contributions to new bond series and/or to cover any debt service shortfalls of the new bond series; to receive from the bond programs amounts no longer restricted by bond resolution requirements; and in order to facilitate tax compliance.

The following tables provide the interfund receivable (payable) balances at June 30, 2019 and 2018 and the interfund transfers for fiscal years 2019 and 2018 (in thousands):

Interfund Receivable (Payable) Balances at June 30, 2019						
	WCF & Affiliates	RHMRB Program	GRDB Program	HB Program	SFHRB Program	Totals
WCF & Affiliates	\$ -	\$ (16)	\$ (3)	\$ -	\$ (206)	\$ (225)
RHMRB Program	16	-	-	15	-	31
GRDB Program	3	-	-	-	-	3
HB Program	-	(15)	-	-	-	(15)
SFHRB Program	206	-	-	-	-	206
Totals	\$ 225	\$ (31)	\$ (3)	\$ 15	\$ (206)	\$ -

Interfund Receivable (Payable) Balances at June 30, 2018

	WCF & Affiliates	RHMRB Program	GRDB Program	SFHRB Program	Totals
WCF & Affiliates	\$ -	\$ (16)	\$ (10)	\$ (284)	\$ (310)
RHMRB Program	16	-	-	-	16
GRDB Program	10	-	-	-	10
SFHRB Program	284	-	-	-	284
Totals	\$ 310	\$ (16)	\$ (10)	\$ (284)	\$ -

Interfund Transfers for Fiscal Year 2019

	WCF & Affiliates	RHMRB Program	GRDB Program	MFHRB Program	HB Program	SFHRB Program	RMRB Program	Totals
WCF & Affiliates	\$ -	\$ (2,220)	\$ 20,657	\$ (3,013)	\$ (39,466)	\$ 3,003	\$ (218)	\$ (21,257)
RHMRB Program	2,220	-	-	-	-	-	-	\$ 2,220
GRDB Program	(20,657)	-	-	-	23,675	-	-	\$ 3,018
MFHRB Program	3,013	-	-	-	-	-	-	\$ 3,013
HB Program	39,466	-	(23,675)	-	-	-	-	\$ 15,791
SFHRB Program	(3,003)	-	-	-	-	-	-	\$ (3,003)
RMRB Program	218	-	-	-	-	-	-	\$ 218
Totals	\$ 21,257	\$ (2,220)	\$ (3,018)	\$ (3,013)	\$ (15,791)	\$ 3,003	\$ (218)	\$ -

Interfund Transfers for Fiscal Year 2018

	WCF & Affiliates	GRDB Program	MFHRB Program	HB Program	RMRB Program	Totals
WCF & Affiliates	\$ -	\$ (1,667)	\$ (3,048)	\$ (15,002)	\$ (250)	\$ (19,967)
GRDB Program	1,667	-	-	-	-	\$ 1,667
MFHRB Program	3,048	-	-	-	-	\$ 3,048
HB Program	15,002	-	-	-	-	\$ 15,002
RMRB Program	250	-	-	-	-	\$ 250
Totals	\$ 19,967	\$ (1,667)	\$ (3,048)	\$ (15,002)	\$ (250)	\$ -

Note K. Net Position

(1) Restricted by Contractual or Statutory Agreements

In accordance with the accounting policy outlined in Note B, all funds and accounts established by the various MassHousing bond resolutions are restricted as to their use. Portions of the net position of the WCF and Affiliates are restricted by contract or externally imposed requirements.

(2) Designated Unrestricted Net Position

In accordance with the accounting policy outlined in Note B, MassHousing has adopted, at its discretion, certain designations of the unrestricted net position in the WCF.

Designated unrestricted net position at June 30, 2019 and 2018 consist of the following (in thousands):

	June 30, 2019	June 30, 2018
Equity of Affiliates (Center for Community Recovery Initiatives, Property Acquisition and Disposition Corporation)	\$ 1,731	\$ 1,536
Funding for loan purchases and advances and unrestricted net position requirements	234,624	202,073
Funding of the Center for Community Recovery Innovations	700	700
Funding of the Construction Security Fund	14,000	14,000
Funding of the New Lease for Homeless Families Initiative	50	50
Funding of the Tenancy Preservation Project	660	660
Lease Commitments	53,655	58,363
Opportunity Fund	244,331	224,312
	<hr/>	<hr/>
Total Designations	\$ 549,751	\$ 501,694

(3) Cumulative Adjustment to Opening Net Position

At July 1, 2017, the Agency reported an adjustment to opening net position of \$22.7 million for cumulative beginning net OPEB liability as a result of the implementation of GASB 75.

Note L. Summarized Financial Information of the Working Capital Fund and Affiliates

Included in the financial statements of the WCF and Affiliates are the following blended component units: MIF, PADCO and CCRI. Their condensed Statements of Net Position and Statements of Revenues, Expenses, and Changes in Net Position are presented below for fiscal years 2019 and 2018 (in thousands):

	Fiscal 2019				Combined Totals
	WCF	MIF	PADCO	CCRI	
<u>STATEMENTS OF NET POSITION at June 30, 2019</u>					
Total assets	\$ 1,527,042	\$ 136,762	\$ -	\$ 1,731	\$ 1,665,535
Deferred outflow of resources	26,069	-	-	-	26,069
Total assets and deferred outflow of resources	\$ 1,553,111	\$ 136,762	\$ -	\$ 1,731	\$1,691,604
Total liabilities	\$ 870,822	\$ 23,538	\$ -	\$ -	\$ 894,360
Deferred inflow of resources	8,587	-	-	-	8,587
Total net position	673,702	113,224	-	1,731	788,657
Total liabilities, deferred inflow of resources, and net position	\$ 1,553,111	\$ 136,762	\$ -	\$ 1,731	\$1,691,604

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**For the fiscal year ended June 30, 2019**

Total revenues	\$ 102,894	\$ 11,075	\$ -	\$ 749	\$ 114,718
Total expenses	66,781	2,410	-	553	69,744
Changes in net position	\$ 36,113	\$ 8,665	\$ -	\$ 196	\$ 44,974

	Fiscal 2018				Combined Totals
	WCF	MIF	PADCO	CCRI	
<u>STATEMENTS OF NET POSITION at June 30, 2018</u>					
Total assets	\$ 1,520,896	\$ 129,264	\$ -	\$ 1,536	\$ 1,651,696
Deferred outflow of resources	17,638	-	-	-	17,638
Total assets and deferred outflow of resources	\$ 1,538,534	\$ 129,264	\$ -	\$ 1,536	\$1,669,334
Total liabilities	\$ 911,066	\$ 24,706	\$ -	\$ -	\$ 935,772
Deferred inflow of resources	11,136	-	-	-	11,136
Total net position	616,332	104,558	-	1,536	722,426
Total liabilities, deferred inflow of resources, and net position	\$ 1,538,534	\$ 129,264	\$ -	\$ 1,536	\$1,669,334

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**For the fiscal year ended June 30, 2018**

Total revenues	\$ 93,830	\$ 6,191	\$ -	\$ 728	\$ 100,749
Total expenses	90,320	3,131	-	945	94,396
Changes in net position	\$ 3,510	\$ 3,060	\$ -	\$ (217)	\$ 6,353

Note M. Employee Benefit Plans**Defined Benefit Pension Plan**

Plan Description – The Agency’s defined benefit pension plan, The Massachusetts Housing Finance Agency Employees’ Retirement System Plan (“MHFAERS”) is a single-employer contributory defined benefit pension plan that covers all employees of MassHousing who elected to join on July 1, 1974 and all regular full-time and certain part-time employees employed subsequent to that date. The Plan came into existence on July 1, 1974, pursuant to the Massachusetts Legislative Acts of 1973. The Plan is a member of the Commonwealth’s Public Employee Retirement Systems, which is overseen by the Public Employee Retirement Administration Commission. An independent retirement board administers the Plan and is bound by Chapter 32 of the Massachusetts General Laws (Chapter 32), which establishes benefits, contribution requirements, and an accounting and funding structure for all participating systems with certain provisions subject to retirement board amendment.

A copy of the Pension Plan’s standalone financial statements can be obtained at www.masshousingretirement.com.

Benefits Provided – The MHFAERS provides retirement, disability and death benefits to participants and their beneficiaries. Benefits vest after 10 years of a participant’s service at MassHousing alone or in combination with service at certain other Massachusetts public employers. Participants are always vested in their individual contributions. An employee who leaves Agency service may withdraw his or her contributions, plus any accumulated interest. Benefit provisions and all other requirements are established by statute. Retirement eligibility is based upon the following conditions:

- Entered state service before April 2, 2012 and have 20 years of full-time creditable service at any age, or
- Entered state service before April 2, 2012 and attain the age of 55 with ten years of creditable service, or
- Entered state service on or after April 2, 2012 and attain the age of 60 with ten years of creditable service.

Benefit amounts are calculated based upon a formula which includes the participant’s age at retirement, average annual salary, and years of creditable service. The amount of retirement allowance depends upon the following:

- age, as of last birthday
- length of creditable service
- highest 36 consecutive months of regular compensation for members hired before April 2, 2012, or highest 5 consecutive years of regular compensation for members hired on or after April 2, 2012.
- Compensation basis limited to \$179,200 for members hired after January 1, 2011

On April 9, 2019, the MHFAERS Members voted to authorize a cost-of-living adjustment (“COLA”) of 3% on the first \$15,000 of annual benefits. On June 11, 2019 MassHousing Members approved these provisions with an effective date of July 1, 2019.

Employees covered by benefit terms. At January 1, 2017, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	151
Inactive employees entitled to but not yet receiving benefits	57
Active Employees	<u>340</u>
Total	<u><u>548</u></u>

Contributions – Active participants (current employees covered by the Plan) are required to contribute between 5% and 9% of their annual salaries (members hired after 1978 contribute an additional 2% of pay over \$30,000) to the Plan, depending on their initial employment date in a Commonwealth’s Public Employee Retirement Systems plan in accordance with Chapter 32. MassHousing is required to contribute the remaining amounts necessary to fund the Plan, using the actuarial basis specified by statute. Contributions to the pension plan from the Agency were \$6.5 million in both FY 2019 and FY 2018.

Net Pension Liability

The Agency’s net pension liability was measured as of December 31, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2017.

Actuarial Assumptions – The total pension liability in the January 1, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3%
Salary Increases	5 % grading down to 3.75%
Investment rate of return	7.50 %, including inflation, net of pension plan investment expense

Mortality rates for the actuarial valuation as of January 1, 2017 were based on the RP-2014 White Collar Mortality Table projected generationally from the year 2006 using MP-2016

The actuarial assumptions used in the January 1, 2017 valuation were based on the results of an actuarial experience study for the period January 1, 2016 through December 31, 2016.

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. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

Asset Class	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return (Geometric Average)</u>
Public Domestic Equity	25%	5.4%
Public Foreign Equity (Large Dev.)	7%	5.8%
Public Foreign Equity (Small Dev.)	3%	5.0%
Public Emerging Markets Equity	10%	7.6%
Investment Grade Bonds	10%	1.3%
High Yield Bonds	6%	3.8%
Treasury Inflation Protection Securities	6%	1.0%
Emerging Markets Debt	5%	2.6%
Real Estate	10%	4.3%
Private Equity	10%	7.3%
Natural Resources & Commodities	3%	6.2%
Core Infrastructure	5%	3.8%
Total	<u>100%</u>	

Discount rate - The discount rate used to measure the total pension liability for the FY 2019 and FY 2018 financial statements was 7.50%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and contributions from the Agency will be made at current statutorily required rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The components of the net pension liability is detailed below (in thousands):

Changes in the Net Pension Liability

	<u>Total Pension Liability</u>	<u>Plan Fiduciary Net Position</u>	<u>Net Pension Liability</u>
Beginning Balance at 12/31/17	\$ 172,134	\$ 149,280	22,854
Changes for the year:			
Service Cost	3,566		3,566
Interest	12,909		12,909
Differences between expected and actual experience			
Change in assumptions			
Contributions - employer		6,527	(6,527)
Contributions - employee		3,483	(3,483)
Net Investment Income		(5,543)	5,543
Benefit payments, including refunds of employee contributions	(7,182)	(7,182)	-
Administrative expenses		(446)	446
Net Changes	<u>9,293</u>	<u>(3,161)</u>	<u>12,454</u>
Balance at 12/31/18	<u>\$ 181,427</u>	<u>\$ 146,119</u>	<u>\$ 35,308</u>

Sensitivity of the Agency's net pension liability to changes in the discount rate

The following presents the Agency's net pension liability calculated using the discount rate of 7.50%, as well as what the Agency's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate (in thousands):

	1% Decrease to 6.50%	Current Discount Rate (7.50%)	1% Increase to 8.50%
Net pension liability	\$ 51,326	\$ 35,308	\$ 23,512

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

At June 30, 2019, the Agency reported a liability of \$35.3 million for its net pension liability. The net pension liability was measured as of December 31, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2017 and rolled forward to the measurement date. The Agency's net pension liability was based on a projection of the Agency's long-term share of contributions to the pension plan relative to the projected contributions of all participating employees, actuarially determined.

For the years ended June 30, 2019 and 2018, the Agency recognized pension expense of \$8.8 million and \$5.7 million, respectively, which is included in administrative expenses. At June 30, 2019 and June 30, 2018, the Agency reported deferred outflows and inflows of resources related to pensions from the following sources (in millions):

Fiscal 2019	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience		\$ 2.4
Change in assumptions	\$ 8.3	
Net difference between projected and actual earnings on pension plan investments	16.0	5.9
Total	\$ 24.3	\$ 8.3

Fiscal 2018	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience		\$ 3.1
Change in assumptions	\$ 11.1	
Net difference between projected and actual earnings on pension plan investments	5.8	8.0
Total	\$ 16.9	\$ 11.1

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (in thousands):

Year ended June 30:

2020	\$	5,763
2021		3,299
2022		3,056
2023		3,830
Thereafter		-

Pension plan fiduciary net position - Detailed information about the pension plan’s fiduciary net position is available in the separately issued Pension financial report.

The MHFAERS financial statements for both calendar years 2019 and 2018 were audited by a different firm than the auditor of the Agency.

Deferred Compensation and Defined Contribution Plans

Plan Description – MassHousing maintains a contributory deferred compensation plan for all employees, created in accordance with Internal Revenue Code (“IRC”) Section 457(b). All employees may contribute up to 50% of their gross compensation, subject to Internal Revenue Service limitations. All temporary employees must contribute a minimum of 7.5% of their gross compensation. Through April 30, 2009, MassHousing matched the contributions of certain classes of employees at a specified rate. This match was suspended effective May 1, 2009. MassHousing’s match is maintained in a separate defined contribution plan in accordance with IRC Section 401(a) and vests at the rate of 25% per year over four years.

Beginning on January 1, 2018, MassHousing reinstated a match program, with the following features:

- Employees vested in the MassHousing pension plan (10+ years), receive a 25% match of each dollar, up to 6% of salary, contributed to the deferred compensation plan. All matching dollars from MassHousing are vested automatically assuming employment with MassHousing for more than four years.

- Employees not vested in the MassHousing pension plan, (less than 10 years) receive a 50% match of each dollar, up to 6% of salary, contributed to the deferred compensation plan. For employees with 4 or more years of service, all matching dollars from MassHousing are vested automatically. For employees with less than four years of service, matching dollars from MassHousing vest over time at 25% increments based on length of service.

Participant contributions and investment income are held in a trust for the exclusive benefit of participants and their beneficiaries. Participants may choose from among a range of fixed income and equity investment funds. Contributions and earnings thereon are not taxable to participants until they are withdrawn. Total participant contributions for FY 2019 and FY 2018 were approximately \$2.2 million and \$2.0 million, respectively. Total matching contributions for FY 2019 and FY 2018 were approximately \$382,000 and \$189,000, respectively.

Postretirement Healthcare Benefit Plan

Plan Description – Continuation of health and life insurance after retirement is covered by the Commonwealth’s retirement law. MassHousing administers a single-employer contributory defined benefit healthcare plan for retirees, which is open to all regular full-time and certain regular part-time employees. The plan also provides \$5,000 of life insurance coverage to all eligible retirees and their beneficiaries. Benefit provisions and all other requirements are established by Massachusetts statutes. Benefits vest after 10 years of an employee’s service either at MassHousing alone or in combination with service at certain other Massachusetts public employers. A committee comprised of key Agency staff members, one member designated by the Agency’s Board and one member designated by the Agency’s Executive Director, administers the Massachusetts Housing Finance Agency OPEB Trust (the “Trust”), an irrevocable trust dedicated solely to administering the investments of, and providing the benefits under the terms of, the substantive plan (the plan understood by the Agency and the plan participants). The Trust is a component unit of MassHousing whose financial statements are not combined for financial reporting purposes but are reported as separate standalone financial statements in accordance with GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other than Pension Plans.

A copy of the Trust’s standalone financial statements can be obtained at www.masshousing.com.

Employees covered by benefit terms – At June 30, 2019, the following employees were covered by the benefit terms:

Retired, Disabled, Survivors and Beneficiaries receiving benefits	158
Inactive plan members entitled to but not yet receiving benefit payments	52
Active plan members	325
Total	<u>535</u>

Contributions – MassHousing is required to contribute approximately 80% of the basic cost of group health insurance for employees (and, in some cases, dependents) who retire after January 31, 2010, 85% for those who retired after July 1, 1994 and before February

1, 2010 and 90% for employees who retired prior to July 2, 1994. The remaining cost is withheld from the retiree's or beneficiary's monthly pension benefit, is remitted directly to the Commonwealth's Group Insurance Commission, and is not reflected on the Trust's financial statements.

The Employer Contribution includes an implicit subsidy resulting from a uniform healthcare insurance premium rate being applied to both active and retired participants.

Contributions to the Trust from the Agency were \$2.9 million for both FY 2019 and FY 2018. Employees are not required to contribute to the OPEB Plan.

Net OPEB Liability - MassHousing's net OPEB liability was measured as of June 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2019.

Actuarial Assumptions - The total OPEB liability in the January 1, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Salary Increases	3.5%, average including inflation
Investment rate of return	7.25%, including inflation, net of OPEB plan investment expense
Healthcare cost trend rate	7% - 9% initial, graded down to 5% in 2046

Mortality rates for the actuarial valuations as of January 1, 2019 and January 1, 2017 were based on the RP-2014 White Collar Mortality Table projected generationally from the year 2006 using MP-2016.

The actuarial assumptions used in the January 1, 2019 valuation were based on the results of an actuarial experience study for the period January 1, 2018 through December 31, 2018. The components of the net OPEB liability are detailed below (in thousands):

Changes in the Net OPEB Liability

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
Beginning Balance at 7/1/18	\$ 53,610	\$ 30,531	23,079
Changes for the year:			
Service Cost	1,294		1,294
Interest	3,925		3,925
Differences between expected and actual experience	(326)		(326)
Change in assumptions	929		929
Contributions - employer		3,459	(3,459)
Net Investment Income		1,965	(1,965)
Benefit payments, including refunds of employee contributions	(1,531)	(1,531)	-
Administrative expenses		(35)	35
Net Changes	4,291	3,858	433
Balance at 6/30/19	\$ 57,901	\$ 34,389	\$ 23,512

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

The following presents the Agency’s net OPEB liability calculated using the healthcare cost trend rates that are 1-percentage-point lower (8% initial graded down to 4% in 2046) or 1-percentage-point higher (10% initial graded down to 6% in 2046) than the current healthcare trend rates (in thousands):

	Healthcare Cost		
	1% decrease	Trend Rates	1% increase
	(8% initial graded down to 4% in 2046)	(9% initial graded down to 5% in 2046)	(10% initial graded down to 6% in 2046)
Net OPEB liability \$	14,447	\$ 23,512	\$ 32,445

Sensitivity of the Agency’s net OPEB liability to changes in the discount rate

The following presents the Agency’s net OPEB liability calculated using the discount rate of 7.25%, as well as what the Agency’s net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate (in thousands):

	1% Decrease	Discount	1% Increase
	to 6.25%	Rate (7.25%)	to 8.25%
Net OPEB liability \$	31,006	\$ 23,512	\$ 15,519

Discount rate - The discount rate used to measure the total OPEB liability was 7.25% for the January 1, 2019 and January 1, 2017 actuarial valuations. The projection of cash flows used to determine the discount rate assumed that MassHousing contributions will be made at rates equal to the actuarially determined contribution rate. Based on those assumptions, the Trust’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 the Trust’s investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

The long-term expected rate of return on the Trust's investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return (20-year real return estimate) by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return (Geometric Average)</u>
Domestic Equity Assets	24%	5.40%
International Developed Markets Equity (Large) Assets	16%	5.80%
International Emerging Markets Equity Assets	15%	7.60%
Investment Grade Bond Assets	20%	1.30%
High Yield Bond Assets	15%	3.80%
Treasury Inflation Protection Securities	10%	1.00%
Total	<u>100%</u>	

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

At June 30, 2019, the Agency reported a liability of \$23.5 million for its net OPEB liability. The net OPEB liability was measured as of June 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2019. The Agency's net OPEB liability was based on a projection of the Agency's long-term share of the cost of health insurance, actuarially determined.

At June 30, 2018, the Agency reported a liability of \$23.1 million for its net OPEB liability. The net OPEB liability was measured as of June 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2017. The Agency's net OPEB liability was based on a projection of the Agency's long-term share of the cost of health insurance, actuarially determined.

At July 1, 2017, the Agency reported an adjustment to opening net position of \$22.7 million for cumulative beginning net OPEB liability due to the implementation of GASB 75. The restatement of the prior year financial statements was not practical due to the cost to implement this standard.

For the years ended June 30, 2019 and 2018, the Agency recognized OPEB expense of \$3.2 million in both years, which is included in administrative expenses. At June 30, 2019 and 2018, the Agency reported deferred outflows and inflows of resources related to OPEB from the following sources (in thousands):

Fiscal 2019	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience		\$ 264
Change in assumptions	\$ 750	
Net difference between projected and actual earnings on OPEB plan investments	494	
Total	<u>\$ 1,244</u>	<u>\$ 264</u>
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net difference between projected and actual earnings on OPEB plan investments	\$ 321	
Total	<u>\$ 321</u>	<u>\$ -</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows (in thousands):

Year ended June 30:		
2020	\$	259
2021		259
2022		259
2023		179
2024		23
Thereafter		-

The next actuarial report is required as of January 1, 2021.

The Trust’s Financial Statements – The Trust’s financial statements are prepared using the accrual basis of accounting, in accordance with the GASB pronouncements. The Trust’s Statements of Net Position and Statements of Changes in Net Position for fiscal years 2019 and 2018 are presented in the separate OPEB financial statements.

Employer (Agency) Contributions to the Trust – The Agency’s contributions to the Trust are recognized on the Trust’s financial statements in the period in which the contributions are due.

Participant (Retiree) Contributions to the Health Insurance Cost – The retirees’ share of the cost of the health insurance is withheld from the retiree’s or beneficiary’s monthly pension benefit, is remitted directly to the Commonwealth’s Group Insurance Commission, and is not reflected on the Trust’s financial statements.

Method Used to Value the Trust's Investments – Investments are reported on the Trust's Statement of Net Position at fair value. Quoted market prices for long-term investments, where available, are used to determine the fair values at the close of each reporting period.

The Trust's financial statements for both fiscal years 2019 and 2018 were audited by a different firm than the auditor of the Agency.

Note N. Commitments and Contingencies

MassHousing Mortgage Insurance Fund ("MIF")

MassHousing established MIF within the WCF to provide an additional source of primary mortgage insurance for certain borrowers. In both fiscal years 2019 and 2018, MassHousing made no transfers to MIF. From the inception of MIF in fiscal year 1989 through fiscal year 2010, MassHousing transferred a total of \$30.6 million to MIF. The transfers and MIF's regular operations have resulted in total net position of approximately \$113.2 million and \$104.6 million at June 30, 2019 and 2018, respectively, which is included in a separate account within the WCF. At June 30, 2019 and 2018, approximately \$72.9 million and \$57.2 million, respectively, of these totals served as collateral for insurance coverage relating to insured loans. Reinsurance agreements with unrelated insurers (described below) provide additional resources for the settlement of claims. A reserve for claims totaling \$1.6 million and \$1.8 million at June 30, 2019 and 2018, respectively, is included in WCF's other liabilities.

In addition to providing traditional mortgage insurance coverage, MIF also provides, under its MI Plus™ program, additional mortgage payment protection on new loans insured on or after July 1, 2004. The MI Plus program pays the borrower's monthly mortgage principal and interest requirements for up to six months in the event that the borrower becomes an "enrolled unemployed," as defined by the Commonwealth's unemployment compensation program. MI Plus payments are made directly to the borrower's mortgage loan servicer and are designed to keep the mortgage loan current, avoiding foreclosure, loan loss and mortgage insurance claims.

The following table summarizes the MIF claims activity at June 30, 2019 and 2018 (in thousands):

	June 30, 2019		June 30, 2018	
	<u>Claims</u>	<u>MI Plus Claims</u>	<u>Claims</u>	<u>MI Plus Claims</u>
Claims Paid	\$ 529	\$ 126	\$ 1,019	\$ 138
Number of Claims	10	123	23	154

MassHousing, on behalf of MIF, has reinsurance agreements with the Mortgage Guaranty Insurance Corporation ("MGIC"), United Guaranty Residential Insurance Corporation ("UG"), Genworth Mortgage Insurance Corporation ("GMIC") and Willis Re, acting as a broker for Everest Reinsurance Company, Partner Reinsurance Europe ZE (Zurich Branch), and Partner Reinsurance Company of the U.S. These agreements provide reinsurance of MassHousing's HomeOwnership loans and, in certain cases, other conventional mortgage loans purchased by MassHousing, loans which were made to persons and families of low- and moderate-income and which were originated by other

mortgage lenders on Massachusetts one-to-four unit, owner-occupied residential dwellings, as well as other bank portfolio loans held by Massachusetts banks. Under each reinsurance agreement, the MIF retains a 10% share of the insurance coverage written on any reinsured loan; the reinsurer provides reinsurance for the remaining 90% of the coverage. In addition to MIF's 10% share, MIF receives a ceding commission ranging from 20% to 37% of the reinsurance premiums paid under the MGIC, UG, GMIC, and Willis Re agreements. The net benefits to MIF under the agreements range from 26.3% to 43.3% of the premiums for the assumption of 10% of the mortgage risk. The first contract with Genworth includes an excess of loss coverage which costs 1.7% of gross premiums written.

The following table summarizes the MIF reinsurance balances at June 30, 2019 and 2018 (in millions):

	<u>June 30, 2019</u>	<u>June 30, 2018</u>
Willis RE	\$ 1,993	\$ 1,732
GMIC	106	146
MGIC	29	53
UG	11	16
Total loans with reinsurance	<u>\$ 2,139</u>	<u>\$ 1,947</u>

Center for Community Recovery Innovations, Inc. ("CCRI")

CCRI has been funded with contributions from MassHousing since fiscal year 1995. In both fiscal years 2019 and 2018, MassHousing contributed \$700,000 and has committed to fund \$700,000 in fiscal year 2020.

Opportunity Fund

On March 8, 2016, MassHousing Members voted to create a segregated revolving fund to be known as the Opportunity Fund within the Agency's WCF for programs and initiatives that increase housing opportunities and otherwise support the Agency's mission, subject to all applicable requirements of the Agency's enabling act. MassHousing Members further voted to make a cash investment of \$156 million and to transfer \$4 million from previously committed and reserved cash assets in the WCF to such Opportunity Fund.

MassHousing Members also voted to transfer previously committed non-cash assets in the Working Capital Fund from the Priority Development Fund ("PDF") and Agency funds invested in the Affordable Housing Trust Fund ("AHTF"), with any payments received from such assets to remain in the Opportunity Fund.

In January 2004, MassHousing announced the creation of the PDF to help increase the production of rental housing in Massachusetts.

The AHTF was established by the General Court of Massachusetts (the state legislature) under Section 227 of Chapter 159 of the Acts of 2000, now codified as Chapter 121D of the Massachusetts General Laws ("Chapter 121D"). Chapter 121D provides that the AHTF shall be sited at the Department of Housing and Community Development ("DHCD") and administered by MassHousing, in accordance with guidelines promulgated by DHCD in consultation with the advisory committee established under the legislation ("AHTF

Guidelines”). MassHousing has been administering the AHTF since 2001. The AHTF Guidelines were last revised in March 2007.

As part of the Opportunity Fund, MassHousing Members voted to designate and reserve \$50 million of such Opportunity Fund for programs and investments related to the preservation of the Commonwealth’s Section 13A portfolio and \$100 million of such Opportunity Fund for programs and investments related to the creation of workforce housing. Since inception, MassHousing Members voted to contribute an additional \$32.1 million of WCF earnings into the Opportunity Fund. On May 14, 2019, MassHousing Members voted to designate and reserve an additional \$10 million of Opportunity Fund cash for the creation of workforce housing. The Opportunity Fund is a designated unrestricted net position of the WCF and is included in the financial statements of the WCF and Affiliates.

Legislative Developments

From time to time, bills may be introduced into the Commonwealth legislature that could affect government operations generally or seek to impose financial and other obligations on MassHousing, including requiring the transfer of funds or assets from MassHousing to the Commonwealth or other Commonwealth agencies. Furthermore, measures and legislation may be considered by the Federal government, or the Commonwealth legislature, which measures could affect MassHousing’s programs. While some of these measures may benefit the programs, no assurance can be given that the programs will not be adversely affected by such measures. In addition, the United States Congress or the Massachusetts Commonwealth legislature could enact legislation that would adversely affect the timing and amount of MassHousing’s recoveries from mortgage loans and thereby adversely affect the availability of amounts for the payment of debt service on obligations. MassHousing cannot predict whether any such legislation will be enacted or, if it were enacted, what effect it would have on the revenues received by MassHousing from mortgage loans. There can be no assurance that any such legislation will not be enacted or that such legislation, if enacted, will not have an adverse impact on the operations of MassHousing, its financial condition or any of its contractual obligations.

Lease Commitments

MassHousing is subject to an operating office lease with One Beacon Street Limited Partnership. This lease consists of building space of approximately 106,382 rentable square feet, and is effective through March 31, 2030.

MassHousing also leases office equipment, automobiles and other items under several non-cancelable operating leases with terms in excess of one year.

The following is a summary of the future minimum lease payments under these leases (in thousands):

Fiscal Year	Total Future Minimum Lease Payments
2020	\$ 5,004
2021	4,999
2022	4,912
2023	4,803
2024	4,883
2025-2030	29,054
Total future minimum lease payments	<u>\$ 53,655</u>

Rent expense under all non-cancelable leases with terms in excess of one year totaled \$5.4 million and \$5.3 million in fiscal years 2019 and 2018, respectively.

Other

MassHousing's WCF has pledged to indemnify its municipal bond insurers in the event an insurer incurs losses under certain policies the insurer has issued. Those policies guarantee that bondholders of certain bond series and maturities will receive scheduled principal and interest payments. The indemnified amounts at June 30, 2019, by bond program are noted below (in thousands):

RHMRB Program	\$ 38,465
GRDB Program	645
SFHRB Program	13,885
	<u>\$ 52,995</u>

At June 30, 2019, MassHousing had commitments to provide approximately \$140.3 million for undisbursed portions of existing and new permanent and construction mortgage loans.

Risk-Sharing Program

MassHousing serves as an approved lender under the Housing Finance Agency Risk-Sharing Program for Insured Affordable Multi Family Project Loans ("Risk-Sharing Program"), authorized by Section 542(c) of the Housing and Community Development Act of 1992, which is administered by HUD. Under the Risk-Sharing Program, MassHousing acts as the servicer for these loans, and bears a percentage of risk loss ranging from 10-50% of each loan with the balance of risk loss borne by HUD in the event of a claim. As of June 30, 2019, MassHousing has 266 loans with an unpaid principal balance of \$2.6 billion, which is subject to a maximum loss exposure up to \$1.2 billion. MassHousing utilizes strict underwriting standards to minimize exposure to risk loss. Following default on a risk-share loan, MassHousing may obtain an initial claim payment from HUD of 100% of the loan's unpaid principal balance and accrued interest (subject to certain adjustments). After a period during which MassHousing works toward curing the default, foreclosure or resale of the related project, losses (if any) are calculated and apportioned between MassHousing and HUD according to the applicable risk-sharing percentage for the loan, and MassHousing reimburses HUD (with interest on the initial claim payment) for its share of the loss, with such reimbursement to be made by debentures maturing over a period of

five years (unless extended by HUD). In addition to using this program to insure mortgage loans pledged to secure bonds, MassHousing from time to time has sold 100% participation interests in mortgage loans secured under this program. In these cases, MassHousing is the original mortgagee and holds legal title to certain mortgage loans insured under this program for which 100% beneficial ownership has been transferred to participant owners. Since the inception of the Risk-Sharing Program, the Agency has suffered two partial claims, totaling approximately \$5 million.

Additionally, MassHousing has risk sharing agreements with four independent insurers whereby MassHousing co-insures single-family primary mortgage loans. The following table provides the risk sharing exposure balances at June 30, 2019 and 2018 (in thousands):

	<u>June 30, 2019</u>	<u>June 30, 2018</u>
Balance of loans with co-insurance	\$ 5,040	\$ 5,320
Risk exposure of loans with co-insurance coverage	1,686	1,804
MassHousing claim liability	3,796	3,796
Co-insurers claim liability	1,316	1,316
MassHousing collateral on deposit	1,295	1,270

Note O. Events Subsequent to June 30, 2019

Loan Commitments

Through the September 10, 2019 meeting of the Members of MassHousing, the Agency issued new mortgage and bridge loan commitments totaling \$121.6 million for multifamily developments.

Unscheduled Debt Redemptions

The following table summarizes the unscheduled debt redemption activity subsequent to June 30, 2019 (in thousands):

<u>Bond Program</u>	<u>Series</u>	<u>Redemption Date</u>	<u>Amount</u>
HB Program	various	7/1/2019	4,535
GRDB Program	2014A	7/15/2019	31
GRDB Program	2014B	7/15/2019	31
CLN	2017A	8/15/2019	16,090
GRDB Program	2014A	8/15/2019	20
GRDB Program	2014B	8/15/2019	37
HB Program	various	8/15/2019	10,075
RHMRB Program	2002D	9/3/2019	7,935
HB Program	2012C	9/3/2019	17,450
GRDB Program	2014A	9/15/2019	20
GRDB Program	2014B	9/15/2019	36
Total unscheduled debt redemptions subsequent to June 30, 2019			<u>\$ 56,260</u>

Debt

The following table summarizes the new debt issues subsequent to June 30, 2019 (in thousands):

<u>Issue Name</u>	<u>Issue Date</u>	<u>Final Maturity Date</u>	<u>Original Principal Amount</u>	<u>New Debt</u> ⁶	<u>Refunded Debt</u> ⁷	<u>Conduit</u> ⁸
Direct Purchase CLN, Issue 6 Blk 2019A	8/1/2019	10/3/2022	\$ 13,570	\$ 13,570		
Direct Purchase CLN, Issue 6 Blk 2019B (Taxable)	8/1/2019	9/30/2021	29,840	29,840		
Total Direct Purchase CLN Issues			\$ 43,410	\$ 43,410	\$ -	\$ -
SFHRB Series 209 (Taxable)	9/12/2019	6/1/2034	\$ 14,000	\$ 14,000		
SFHRB Series 210	9/12/2019	12/1/2036	9,150		\$ 9,150	
SFHRB Series 211	9/12/2019	12/1/2049	20,290	9,282	11,008	
SFHRB Series 212	9/12/2019	12/1/2049	15,000	15,000		
Total SFHRB Issues			\$ 58,440	\$ 38,282	\$ 20,158	\$ -
Multifamily Conduit Revenue Bonds (Arthur O'Shea House Issue), Series 2019A	7/31/2019	7/31/2021	\$ 18,030			\$ 18,030
Multifamily Conduit Revenue Bonds (Arthur O'Shea House Issue), Series 2019B	7/31/2019	7/31/2036	5,276			5,276
Multifamily Conduit Revenue Bonds (Arthur O'Shea House Issue), Series 2019C	7/31/2019	7/31/2036	1,694			1,694
Total Conduit Issues			\$ 25,000	\$ -	\$ -	\$ 25,000
Total			\$ 126,850	\$ 81,692	\$ 20,158	\$ 25,000

6 Funds used to finance new mortgage loans

7 Funds used to refund and/or replace outstanding bonds.

8 Funds used to finance mortgage loans for which neither the bonds nor the mortgage loans securing those bonds are in the Agency's financial statements. Each of such bond issues are separately secured from any other obligations issued by the Agency.

Interest Rate Swaps

On September 3, 2019, MassHousing partially terminated \$7.9 million of the notional amount of the interest rate swap agreement for its variable rate RHMRB, 2002 Series D bonds at par, as a result of the bonds being called. This interest rate swap agreement had an original notional value of \$32.2 million.

Agreements

On September 19, 2019, MassHousing executed an eighth amendment to the Annual Contributions Contract ("ACC") as PBCA Administrator for HUD. The amendment extends the term of the ACC from September 30, 2019 to January 31, 2021. This amendment makes certain changes to the scope of work to be performed and compensation to be received, which in MassHousing's assessment will not significantly affect its operations or financial position.

Note P. Litigation

MassHousing is involved in certain litigation and disputes incidental to its operations. Because it is generally difficult to predict the outcome of lawsuits, MassHousing cannot give any assurance as to the outcome of such litigation. Based upon the information it presently possesses, however, it is management's judgment that such litigation will not have a material adverse impact upon the financial condition of MassHousing.

**Required Supplemental Schedule 1
Unaudited**

**Massachusetts Housing Finance Agency Employees' Retirement System Plan
Schedules of Required Supplementary Information
Schedule of changes in the Agency's Net Pension Liability and related ratios
(Dollar amounts in thousands)**

	<u>FY 2019</u>	<u>FY 2018</u>	<u>FY 2017</u>	<u>FY 2016</u>	<u>FY 2015</u>
Total Pension Liability					
Service Cost	\$ 3,566	\$ 3,437	\$ 3,247	\$ 3,129	\$ 2,695
Interest	12,908	11,895	11,623	10,443	9,984
Changes in Benefit Terms	-	-	-	-	-
Differences between expected and actual experience	-	(3,670)	-	(265)	-
Changes of assumptions *	-	8,772	-	7,362	-
Benefit payments, including refunds of employee contributions	(7,182)	(6,920)	(5,958)	(5,161)	(5,134)
Net change in total pension liability	<u>9,292</u>	<u>13,514</u>	<u>8,912</u>	<u>15,508</u>	<u>7,545</u>
Total pension liability - beginning	<u>172,134</u>	<u>158,620</u>	<u>149,708</u>	<u>134,200</u>	<u>126,655</u>
Total pension liability - ending (a)	<u>\$ 181,426</u>	<u>\$ 172,134</u>	<u>\$ 158,620</u>	<u>\$ 149,708</u>	<u>\$ 134,200</u>
Plan fiduciary net position					
Contributions - employer	\$ 6,527	\$ 6,491	\$ 6,093	\$ 6,065	\$ 3,946
Contributions - employee	3,483	3,552	3,274	3,219	3,497
Net Investment Income	(5,544)	18,139	11,087	(3,352)	4,114
Benefit payments, including refunds of employee contributions	(7,182)	(6,920)	(5,958)	(5,161)	(5,134)
Administrative expenses	(446)	(378)	(380)	(366)	(419)
Net change in plan fiduciary net position	<u>(3,162)</u>	<u>20,884</u>	<u>14,116</u>	<u>405</u>	<u>6,004</u>
Plan fiduciary net position - beginning	<u>149,280</u>	<u>128,396</u>	<u>114,280</u>	<u>113,875</u>	<u>107,871</u>
Plan fiduciary net position - ending (b)	<u>\$ 146,118</u>	<u>\$ 149,280</u>	<u>\$ 128,396</u>	<u>\$ 114,280</u>	<u>\$ 113,875</u>
Net Pension Liability - ending (a)-(b)	<u>\$ 35,308</u>	<u>\$ 22,854</u>	<u>\$ 30,224</u>	<u>\$ 35,428</u>	<u>\$ 20,325</u>
Plan fiduciary net position as a percentage of total pension liability	80.5%	86.7%	80.9%	76.3%	84.9%
Covered Employee Payroll	\$ 34,506	\$ 33,250	\$ 33,641	\$ 32,430	\$ 28,044
Net Pension Liability as a percentage of covered employee payroll	102.3%	68.7%	89.8%	109.2%	72.5%

* Changes in assumptions - Mortality rates for FY 2018 were changed from RP-2000 projected with Scale BB and Generational Mortality to RP-2014 White Collar Mortality projected generationally from the year 2006 using MP-2016. In FY 2018 the discount rate used to measure the total pension liability was reduced to 7.5 percent from 7.75 percent. These changes in assumptions resulted in a \$8.7 million increase to Net Pension Liability in FY 2018.

**Required Supplemental Schedule 2
Unaudited**

**Massachusetts Housing Finance Agency Employees' Retirement System Plan
Schedule of Agency Contributions
(Dollar amounts in thousands)**

	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015
Actuarial Determined Contribution	\$ 6,527	\$ 6,491	\$ 6,093	\$ 6,065	\$ 3,946
Contributions made	6,527	6,491	6,093	6,065	3,946
Contribution deficiency (excess)	<u>\$ -</u>				
 Covered Payroll	 \$ 34,506	 \$ 33,250	 \$ 33,641	 \$ 32,430	 \$ 28,044
 Contribution as a percentage of covered employee payroll	 18.9%	 19.5%	 18.1%	 18.7%	 14.1%

Notes to Schedule

Methods and assumption used to determine contribution rates:

Actuarial cost method	Entry age, normal
Amortization method	Level payment, closed
Remaining amortization period	8 years
Asset valuation method	Market value adjusted by accounts receivable and accounts payable
Inflation	3 percent
Salary Increases	5 percent grading down to 3.75%
Investment rate of return	7.5 percent, including inflation, net of pension plan investment expense
Mortality	In the 2017 actuarial valuation, the Agency adopted the RP-2014 White Collar Mortality Table projected generationally from the year 2006 using MP-2016.
Measurement Date	December 31, 2018
Valuation Date	January 1, 2017
Changes in assumptions	Mortality rates for FY 2017 were changed from RP-2000 projected with Scale BB and Generational Mortality. In FY 2018, the discount rate used to measure the total pension liability was reduced to 7.50% from 7.75%.

**Required Supplemental Schedule 3
Unaudited**

**Massachusetts Housing Finance Agency OPEB Trust
Schedules of Required Supplementary Information
Schedule of changes in the Agency's Net OPEB Liability and related ratios
(Dollar amounts in thousands)**

	<u>FY 2019</u>	<u>FY 2018</u>
Total OPEB Liability		
Service Cost	\$ 1,294	\$ 1,430
Interest	3,925	3,670
Differences between expected and actual experience	(326)	-
Changes of assumptions *	929	-
Benefit payments	(1,531)	(1,175)
Net change in total OPEB liability	<u>4,291</u>	<u>3,925</u>
Total OPEB liability - beginning	<u>53,610</u>	<u>49,685</u>
Total OPEB liability - ending (a)	<u><u>\$ 57,901</u></u>	<u><u>\$ 53,610</u></u>
Plan fiduciary net position		
Contributions - employer (including implicit subsidy)	\$ 3,459	\$ 3,115
Net Investment Income	1,970	1,614
Benefit payments	(1,531)	(1,175)
Administrative expenses	(40)	(31)
Net change in plan fiduciary net position	<u>3,858</u>	<u>3,523</u>
Plan fiduciary net position - beginning	<u>30,531</u>	<u>27,008</u>
Plan fiduciary net position - ending (b)	<u><u>\$ 34,389</u></u>	<u><u>\$ 30,531</u></u>
Net OPEB Liability - ending (a)-(b)	<u><u>\$ 23,512</u></u>	<u><u>\$ 23,079</u></u>
Plan fiduciary net position as a percentage of total OPEB liability	59.4%	57.0%
Covered Employee Payroll	\$ 32,614	\$ 34,715
Net OPEB Liability as a percentage of covered employee payroll	72.1%	66.5%

**Required Supplemental Schedule 4
Unaudited**

**Massachusetts Housing Finance Agency OPEB Trust
Schedule of Agency Contributions
(Dollar amounts in thousands)**

	FY 2019	FY 2018
Actuarial Determined Contribution	\$ 3,459	\$ 3,115
Contributions in relation to the Actuarially Determined Contribution	3,459	3,115
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>
Covered Employee Payroll	\$ 32,614	\$ 34,715
Contribution as a percentage of covered employee payroll	10.6%	9.0%

Notes to Schedule

Actuarially Determined Contributions consist of:

	FY 2019	FY 2018
Cash Contribution	\$ 2,897	\$ 2,901
Implicit Subsidy	562	214
Actuarial Determined Contribution	<u>\$ 3,459</u>	<u>\$ 3,115</u>

Methods and assumption used to determine contribution rates:

Actuarial cost method	Projected Unit Credit Level Dollar cost method
Amortization method	Level percentage of pay, closed basis
Remaining amortization period	18 years
Asset valuation method	Market value
Salary Increases	3.5 percent
Healthcare cost trend rates	7 to 9% initial graded down to 5% in 2046
Investment rate of return	7.25 percent, net of OPEB plan investment expense
Retirement Age	Based on Tier classification, gender and hire dates
Mortality	RP-2014 White Collar Mortality Table projected generational from the year 2006 using MP-2016
Changes in assumptions	(a) valuation of the Cadillac Tax (b) a change in the morbidity assumption to calculate age-graded claim rates based on Health Care Costs-from Birth to Death (c) a change in the withdrawal and disability assumptions to correspond with those in the pension valuation

SCHEDULE 1: INVESTMENTS AND CASH EQUIVALENTS**Investment Maturities (In Years)**

In thousands of dollars

	Total Cost, Amortized Cost, or Fair Value	Investment Maturities (In Years)			
		Less Than 1	1-5	6-10	More Than 10
Working Capital Fund and Affiliates					
U.S. Treasuries	\$ 99,760	\$ 57,698	\$ 42,062		
Government Sponsored Enterprises (GSEs)	60,896	3,486	20,831	\$ 7,022	\$ 29,557
Commercial Paper	8,477	8,477			
Certificates of Deposit	14,182	7,513	6,669		
Cash Equivalents	452,382	452,382			
Total Investments and Cash Equivalents	<u>\$ 635,697</u>	<u>\$ 529,556</u>	<u>\$ 69,562</u>	<u>\$ 7,022</u>	<u>\$ 29,557</u>
Rental Housing Mortgage Revenue Bond Program					
Guaranteed Investment Contracts (GICs)	\$ 2,327				\$ 2,327
Cash Equivalents	8,104	\$ 8,104			
Total Investments and Cash Equivalents	<u>\$ 10,431</u>	<u>\$ 8,104</u>			<u>\$ 2,327</u>
General Rental Development Bond Program					
GICs	\$ 119			\$ 119	
Cash Equivalents	5,430	\$ 5,430			
Total Investments and Cash Equivalents	<u>\$ 5,549</u>	<u>\$ 5,430</u>		<u>\$ 119</u>	
Multi-Family Housing Bond Program					
Cash Equivalents	\$ 27,566	\$ 27,566			
Total Investments and Cash Equivalents	<u>\$ 27,566</u>	<u>\$ 27,566</u>			

SCHEDULE 1: INVESTMENTS AND CASH EQUIVALENTS**Investment Maturities (In Years)**

In thousands of dollars

	Total Cost, Amortized Cost, or Fair Value	Investment Maturities (In Years)			
		Less Than 1	1-5	6-10	More Than 10
Housing Bond Program					
U.S. Treasuries	\$ 171,638	\$ 162,609	\$ 9,029		
GSEs	27,361	27,361			
GICs	12,534		12,534		
Cash Equivalents	212,339	212,339			
Total Investments and Cash Equivalents	<u>\$ 423,872</u>	<u>\$ 402,309</u>	<u>\$ 21,563</u>		
Single Family Housing Revenue Bond Program					
U.S. Treasuries	\$ 27,723	\$ 16,517	\$ 11,206		
GSEs	794,883	17,908	5,165	\$ 1,204	\$ 770,606
Commercial Paper	24,085	24,085			
Cash Equivalents	68,582	68,582			
Total Investments and Cash Equivalents	<u>\$ 915,273</u>	<u>\$ 127,092</u>	<u>\$ 16,371</u>	<u>\$ 1,204</u>	<u>\$ 770,606</u>
Residential Mortgage Revenue Bond Program					
GSEs	\$ 53,347	\$ 1,399			\$ 51,948
Cash Equivalents	56	56			
Total Investments and Cash Equivalents	<u>\$ 53,403</u>	<u>\$ 1,455</u>			<u>\$ 51,948</u>
Combined Totals Memorandum Only					
U.S. Treasuries	\$ 299,121	\$ 236,824	\$ 62,297		
GSEs	936,487	50,154	25,996	\$ 8,226	\$ 852,111
GICs	14,980		12,534	119	2,327
Commercial Paper	32,562	32,562			
Certificates of Deposit	14,182	7,513	6,669		
Cash Equivalents	774,459	774,459			
Total Investments and Cash Equivalents	<u>\$ 2,071,791</u>	<u>\$ 1,101,512</u>	<u>\$ 107,496</u>	<u>\$ 8,345</u>	<u>\$ 854,438</u>

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/ Mortgage Loans	Balance of Commitment	
Working Capital Fund and Affiliates						
11 Long Point Road	5.550%	01/01/2029	\$ 91			
1199 Hixville Road	5.350%	08/01/2026	68			
120 Centre Court	0.000%	11/01/2042	713			
120 Centre Court	0.000%	11/01/2038	485			
2 Pierce Lane	5.350%	07/01/2026	68			
2101 Washington Street	3.750%	06/01/2059	4,043			
225 Centre Street	0.000%	08/01/2054	5,600			
246-248 Norwell Street	5.500%	07/09/2059	787			
246-248 Norwell Street	0.000%	06/01/2059	600			
3 Flintlock Lane	5.550%	12/01/2026	74			
38 Winfield Street	5.350%	08/01/2026	70			
706 Huntington Ave.	0.000%	11/01/2049	363			
808 Memorial Drive	7.750%	03/01/2021	253			
808 Memorial Drive	8.150%	03/01/2021	401			
A.O. Flats At Forest Hills	1.680%	06/01/2020		\$ 6,190		
A.O. Flats At Forest Hills	5.000%	06/01/2060	3,283		\$ 517	
A.O. Flats At Forest Hills	5.000%	06/01/2057			4,300	
Academy Hill School	3.750%	04/30/2058	1,510			
Academy Hill School	3.020%	04/30/2058	221			
AEI Group Homes-Braintree	5.350%	08/01/2026	103			
AEI Group Homes-Centerville	5.350%	07/01/2026	93			
AEI Group Homes-Kingston	5.550%	02/01/2027	104			
AEI Group Homes-Marshfield	5.550%	05/01/2028	114			
Ames Privilege Unit 2	2.600%	10/01/2054	118			
Appleton Mills Redevelopment Phase 1B	6.350%	04/01/2052	166			
Arlington Park	4.000%	02/01/2037	920			
Aurora Hotel	2.600%	03/01/2056	478			
Barstow Village	0.010%	07/01/2053	877			
Bedford Towers	3.550%	04/01/2050	261			
Bedford Village	2.000%	07/01/2060	4,500			
Bedford Village	3.240%	06/15/2020		7,100		
Bridle Path Apartments	5.430%	01/01/2049	325			
Brooks School	8.000%	01/01/2028	5,230			
Brooks School	0.000%	01/01/2028	122			
Brown Kaplan Townhomes	0.000%	08/25/2049	475			
Burbank Gardens	2.890%	07/01/2019		5,529		
Burbank Gardens	2.590%	07/01/2059	4,617			
Burbank Gardens Acquisition	0.000%	07/01/2059	452			
Cable Gardens	4.500%	01/01/2036	7,537			
Camden Apartments	4.920%	01/01/2061			5,900	
Camden Apartments	4.038%	01/01/2021		2,181	5,979	
Canton Village	6.490%	06/01/2046	443			
Central Grammar	0.000%	04/01/2053	695			
Chapman House	3.290%	04/10/2064	2,056			
Chatham West I	0.000%	06/01/2058	4,500			
Chatham West II	0.000%	06/01/2027	10,000			
Cheriton Heights Senior Housing	0.000%	11/22/2053	1,000			
Chestnut Park	0.000%	12/01/2058	5,000			
Cobbet Hill	2.340%	07/01/2019		5,985		
Cobbet Hill	2.260%	12/23/2066	1,000			
Codman Square Apartments	2.640%	01/01/2054	840			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/ Mortgage Loans	Balance of Commitment	
Cohen Residences	3.754%	01/01/2020		\$ 7,281	\$ 2,509	
Conant Village	6.000%	07/01/2045	\$ 680			
Covenant House I & II	0.570%	07/01/2045	1,049			
Curtain Lofts	0.000%	11/01/2052	783			
Florence Apartments	0.000%	12/11/2049	1,000			
Forest Park Apartments	7.500%	03/01/2041	899			
Forestvale	0.000%	12/11/2049	1,000			
Franklin Highlands	4.500%	08/01/2059		23,688		
Franklin Highlands	4.550%	08/01/2026		6,834		
Franklin Hill Revitalization Phase 2A	6.000%	05/01/2059	1,350			
Franklin Hill Revitalization Phase 2B	0.100%	12/31/2059	1,000			
Franklin School	5.250%	12/31/2049	3,433			
Gateway Residences On Washington	0.000%	10/01/2058	1,600			
Glen Meadow Apartments	0.000%	05/01/2057	1,750			
Greenway Apartments	3.850%	06/01/2053	1,000			
Habitat for Humanity - Boston, Inc.	2.500%	05/01/2023	196			
Hampton Court	3.120%	06/20/2064	17,891			
Hanover Woods	1.890%	08/01/2066	7,029			
Haynes House	0.000%	06/01/2053			9,000	
Haynes House	3.330%	07/01/2021		3,282		
Hayward Landing	2.570%	11/04/2065	19,238			
Hebronville Mill	8.000%	12/01/2016	191			
Hebronville Mill	9.616%	02/01/2020	4,714			
Hebronville Mill	8.500%	06/01/2018	1,166			
Heritage Common	0.700%	06/01/2050	10,409			
Heritage Common	0.000%	06/16/2051	1,500			
Heywood Wakefield Village	4.790%	12/31/2041	15,540			
Highland Apartments	3.040%	07/01/2054	5,896			
Hillside Village	0.000%	07/01/2059	600			
Holmes Beverly	0.000%	11/01/2058	1,600			
Holmes Beverly	0.000%	05/11/2024	600			
Houghton Village	2.700%	06/01/2058	7,370			
Houghton Village	0.000%	06/01/2058	1,545			
Kennedy Building Apartments	0.000%	01/01/2064	1,250			
King James Court	0.000%	04/01/2043	517			
King Pine	4.038%	01/01/2021			1,100	
Latin Academy	0.000%	06/01/2050	666			
Leyden Woods Apartments	3.850%	10/01/2037	2,059			
Lincoln Village	3.600%	09/01/2019		5,341		
Lincoln Woods	2.740%	07/01/2057	1,200			
Lincoln Woods	0.000%	08/01/2057	291			
Linwood Mill	0.010%	07/01/2053	1,000			
Littlebrook	2.450%	06/19/2063	1,792			
Loring Towers	1.000%	12/20/2049	406			
Lpi Portfolio	3.240%	12/31/2020		18,000		
Madison Melnea Cass Apts	2.890%	03/01/2020		9,850		
Madison Melnea Cass Apts	2.880%	03/01/2060	1,796		104	
Majestic Apartments	0.000%	01/01/2044	95			
Mansfield Meadows	3.250%	09/19/2063	10,384			
Maple Ridge Phase I	0.000%	06/01/2052	2,000			
Mariner's Hill	3.240%	05/15/2064	2,066			
Mashpee Village	7.000%	06/01/2056	1,500			
Mass Mills I	3.120%	07/01/2049	789			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/Mortgage Loans	Balance of Commitment	
Mass Mills II	3.120%	07/01/2049	\$ 818			
Middlebury Arms	3.320%	09/30/2055	3,986			
Mill House	2.870%	10/16/2064	851			
Mill Valley Estates	2.550%	11/18/2060	10,840			
Mt Pleasant Apts	7.700%	12/01/2048	522			
Museum Square	2.720%	07/24/2065	15,164			
Oak Woods	0.000%	12/01/2053	678			
Olmsted Green Homeownership	0.000%	10/01/2022	227			
Oxford House at Queeney Square	2.720%	01/01/2050	4,410			
Parmelee Court	3.070%	08/31/2064	1,136			
Pelham I Apartments	5.086%	12/01/2064	5,628			
Peter Sanborn Place	0.000%	08/01/2043	393			
Pilot Grove Hill	0.000%	12/01/2049	327			
Pine Crest	0.000%	01/01/2044	261			
Pine Gardens	7.350%	09/01/2044	731			
Pleasant Plaza	3.025%	01/01/2065	11,162			
Pondside at Littleton	3.141%	09/01/2064	12,332			
Powdermill Village	4.500%	03/01/2020	2,778			
Residences at Canal Bluffs	5.250%	06/01/2051	1,850			
Rindge Apts (402)	2.610%	07/01/2058	1,506			
Riverboat Village	5.010%	12/01/2033	6,508			
Riverview Meadows	2.180%	03/16/2065	4,968			
Rock Harbor Vlge	5.000%	07/01/2052	81			
Rogers Hall	0.063%	05/01/2044	351			
Roxbury Corners	4.000%	01/01/2050	886			
Roxbury Corners	0.000%	01/01/2050	1,196			
S.S.C.R.II-Bridgewater	5.550%	03/01/2027	89			
S.S.C.R.II-Mattapoissett	5.550%	10/01/2026	76			
S.S.C.R.II-Stoughton	5.550%	03/01/2027	78			
School House Brookledge	0.010%	12/04/2048	1,000			
School House Kenilworth	0.010%	06/01/2049	1,000			
Shillman House	0.000%	11/01/2051	2,604			
Shillman House	0.000%	12/17/2051	972			
Ships Watch	2.780%	07/24/2063	6,787			
Single Family Home Improvement Loans	4.250% to 6.750%		838			
Single Family Long Term Assets	0.000% to 7.500%		7,793			
Single Family Mass Advantage Loans	0.000%		1,951			
Single Family Modification Loans	0.000%		142			
Single Family Mortgage (Warehouse) Loans	1.000% to 5.500%		33,347			
Single Family Short Term Assets	5.250%		192			
Single Family Tax Credit Loans	5.000% to 6.250%		48			
Single Family Veterans Assistance Loans	0.000% to 1.000%		806			
Sitkowski School Apartments	2.000%	07/01/2056	1,645			
Solemar Apts	2.750%	06/01/2052	1,251			
South Canal Apartments	0.000%	03/01/2017	196			
Stratton Hill	0.000%	08/01/2059	2,500			
Susan Bailis Assisted Living	5.730%	07/01/2043	1,464			
Sycamore Village	0.000%	12/11/2049	1,000			
Temple Landing	0.000%	02/01/2043	1,260			
The Close Building	3.240%	07/01/2020		\$ 6,500		
The Close Building	4.520%	07/01/2020		1,745	\$ 55	
The Commons at Boston Road	0.000%	11/30/2038	29			
The Coolidge	4.460%	06/30/2051	750			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/ Mortgage Loans	Balance of Commitment	
The Fairways at Lebaron Hills	7.000%	02/01/2051	\$ 379			
The Millery	2.970%	09/01/2049	659			
The Preserve	6.450%	01/01/2046	2,799			
The Settlement	7.160%	05/01/2013	2,200			
The Tannery	3.680%	12/17/2021		\$ 8,500		
The Tannery	4.430%	12/17/2021		8,500		
The Tannery	0.000%	01/01/2062	4,000			
Van Ness Terrace	3.120%	06/24/2064	8,123			
Village at Mansfield Depot I	3.570%	09/01/2064	8,111			
Village at Mansfield Depot II	3.212%	09/01/2064	9,834			
Voke Lofts	3.400%	01/01/2055	203			
Voke Lofts	0.000%	01/01/2055	694			
Wakefield Place	8.250%	12/31/2034	21,081			
Warren House	3.500%	01/01/2020		2,992		
Weeks School Apts	5.470%	06/01/2047	3,370			
West Newton Rutland Apartments	0.000%	12/01/2053			\$ 7,760	
West Newton Rutland Apartments	3.390%	11/01/2021		3,073	27,917	
Whitney Carriage Park	3.470%	07/01/2030	15,585			
Woods at Wareham	5.500%	07/01/2054	8,790			
Sub-total			\$ 452,732	\$ 132,571	\$ 65,141	(a)
Rental Housing Mortgage Revenue Bond Program						
Adopted December 31, 1994						
Broadway Tower	5.850%	12/01/2022	\$ 912			
Kimball Court II	7.270%	09/18/2023	17,767			
Neptune Towers	6.250%	03/01/2022	208			
Plantation Tower	6.000%	04/01/2047	4,462			
Seabury Heights	5.548%	04/01/2022	1,529			
SEMASS Housing I-Raynham	6.650%	10/01/2025	78			
SEMASS Housing I-Somerset	6.650%	09/01/2025	76			
SEMASS Housing I-Taunton	6.650%	10/01/2025	83			
South End Tenants Houses II	6.190%	12/01/2045	4,179			
South Shore-Easton	6.650%	06/01/2025	82			
South Shore-Pembroke	6.650%	03/01/2025	86			
Trinity Terrace	7.700%	01/31/2035	1,182			
Sub-total			\$ 30,644			
General Rental Development Bond Program						
Adopted April 13, 2004						
113 Spencer	7.150%	05/01/2050	\$ 1,888			
Barstow Village	5.500%	06/01/2053	1,165			
Blackstone	4.500%	07/01/2053	30,010			
Clinton Housing Authority	5.200%	01/01/2026	302			
Curtain Lofts	7.250%	11/01/2052	1,061			
Franklin Square House	4.500%	09/01/2053	32,777			
Greenway Apartments	6.720%	06/01/2053	1,156			
Joseph's House	6.300%	09/01/2050	5,941			
Linwood Mill	6.180%	07/01/2053	959			
Machado House @ Peter's Grove	5.300%	07/01/2053	6,204			
Maple Ridge Phase II	6.500%	02/01/2053	1,151			
Mill Road Apartments (variable rate)	1.900%	11/01/2033	23,518			
Nazing Court	6.720%	07/01/2044	7,211			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/ Mortgage Loans	Balance of Commitment	
Ocean Shores at Marshfield	7.250%	07/01/2052	\$ 1,934			
Oliver Lofts	7.250%	03/01/2052	1,343			
Princeton at Westford (variable rate)	1.930%	01/01/2034	31,850			
Providence House	6.350%	01/01/2045	8,184			
Regency Towers I	1.000%	04/01/2040	430			
Rita Hall	5.250%	11/01/2053	6,224			
Rock Harbor Village	5.300%	05/01/2053	6,247			
School House Kenilworth	8.000%	06/01/2049	1,208			
Tecumseh Mill	5.250%	02/01/2054	6,779			
Temple Landing	6.500%	02/01/2043	1,928			
Tri-Town Landing Apartments	6.700%	12/01/2051	1,375			
Victory Gardens Plaza	5.070%	04/01/2054	7,930			
Village at Hospital Hill II	6.830%	03/01/2050	1,342			
Winchendon Housing Authority	5.190%	01/01/2026	343			
Sub-total			\$ 190,460			
Multi-Family Housing Bond Program						
Adopted November 10, 2009						
225 Centre Street	3.600%	01/01/2055	\$ 15,090			
225 Centre Street	5.500%	01/01/2055	725			
Castle Square	5.100%	01/01/2053	41,448			
Cedar Glen	4.850%	01/01/2051	13,838			
Central Grammar	5.250%	04/01/2053	2,737			
Charlesview Redevelopment	4.800%	10/01/2054	44,011			
Charlesview Redevelopment	0.000%	06/30/2055	400			
Cheriton Grove	5.070%	05/01/2053	4,778			
Chestnut Glen	4.850%	01/01/2051	13,014			
Glen Grove	4.850%	01/01/2051	18,639			
Gosnold Grove	4.850%	01/01/2053	1,985			
Heritage Apartments	4.610%	02/01/2053	18,676			
Heritage Green	4.850%	01/01/2051	10,379			
Inman/Cast 2 Apartments	4.500%	07/01/2052	12,986			
Kensington Court at Lakeville	0.000%	08/01/2050	2,243			
Longfellow Glen	4.850%	01/01/2051	11,845			
Lower Mills Apartments	4.750%	08/01/2052	8,392			
Nehoiden Glen	4.850%	01/01/2051	9,349			
Noonan Glen	4.850%	01/01/2051	2,021			
Norton Glen	4.660%	01/01/2051	14,879			
Old Mill Glen	4.850%	01/01/2051	5,848			
Regency Towers I	0.000%	04/01/2040	950			
Tri-Town Landing Apartments	0.000%	12/01/2051	1,317			
Westminster Village	4.500%	10/01/2051	41,322			
Sub-total			\$ 296,872			
Housing Bond Program						
Adopted February 19, 2003						
113 Spencer	0.000%	05/01/2050	\$ 1,000			
27 Jackson Street	0.000%	07/01/2048	3,220			
808 Memorial Drive	7.694%	03/01/2021	1,516			
808 Memorial Drive	13.500%	03/01/2021	189			
A.O Flats at Forest Hills	4.120%	06/01/2060		\$ 9,578	\$ 3,512	
Academy Hill School	3.020%	04/30/2058	966			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/ Mortgage Loans	Balance of Commitment	
Academy Homes I	5.850%	07/01/2040	\$ 5,956			
Adams Templeton	3.870%	12/01/2057	12,404			
Allen Park Apartments I	7.750%	01/01/2035	2,975			
Allen Park Apartments II	7.750%	01/01/2026	911			
Ames Privilege	8.250%	06/01/2024	1,134			
Ames Privilege - Unit 2	4.800%	10/01/2054	1,348			
Amory Street Residences	3.000%	07/01/2045	844			
Amy Lowell House	5.900%	07/28/2039	7,924			
Anderson Park	3.870%	08/01/2058	21,805			
Appleton Mills Redevelopment Phase IA	6.300%	04/01/2052	1,392			
Appleton Mills Redevelopment Phase IA	0.010%	07/01/2051	1,640			
Asher's Path	6.910%	11/01/2048	698			
Asher's Path	0.000%	11/01/2048	495			
Auburn Court	3.530%	06/01/2048	14,125			
Avalon at Chestnut Hill	5.320%	10/01/2047	37,282			
Back of the Hill	5.400%	10/01/2048	6,727			
Beachmont Apartments	6.500%	05/01/2049	2,005			
Beacon House	5.500%	07/01/2054	13,457			
Beacon House	3.500%	07/01/2024	1,435			
Beacon Park	6.875%	07/01/2044	373			
Bedford Village	4.740%	07/01/2060		\$ 6,002	\$ 593	
Berkshire Peak	3.470%	04/01/2058	4,112			
Binnall House	0.438%	04/01/2043	487			
Bixby Brockton Apartments	6.150%	01/01/2046	652			
Blackstone	5.000%	07/01/2052	738			
Blue Elm	6.335%	08/01/2024	179			
Blue Elm	6.050%	08/01/2044	1,102			
Blue Elm	5.689%	03/01/2025	206			
Blue Elm	6.000%	03/01/2045	979			
Boott Mills Apartments	3.000%	10/01/2058	2,325			
Boott Mills Apartments	5.900%	01/01/2046	1,323			
Bowdoin Apartments	6.250%	08/01/2042	1,414			
Brandy Hill	3.900%	10/01/2058	10,923			
Bridle Path Apartments	5.430%	01/01/2049	8,767			
Briston Arms	4.640%	03/01/2057	35,058			
Brown School Residences	6.950%	08/01/2048	2,082			
Burbank Gardens	4.420%	07/01/2059		3,800		
Capitol Square	7.500%	11/01/2045	1,073			
Casa Maria	5.500%	12/01/2048	4,060			
Cedar Meadows	7.300%	03/17/2020	155			
Central Annex	5.250%	07/01/2055	5,259			
Chauncy House	5.050%	07/01/2057	9,057			
Chelsea Village	7.000%	04/01/2048	1,349			
Cheriton Heights Senior Housing	6.000%	08/01/2053	1,417			
Chestnut Gardens	5.400%	01/01/2049	5,323			
Clarendon Hill	6.030%	03/01/2052	20,241			
Cleaves Dimock-Bragdon Apts	4.000%	03/01/2057	9,879			
Cobbet Hill	4.290%	12/01/2058	7,564			
Codman Square Apartments	5.500%	01/01/2054	1,053			
Cohen Residences	4.420%	02/01/2060		28,390		
Columbia West Apartments	5.340%	12/31/2052	300			
Columbia West Apartments	5.900%	03/01/2045	391			
Conant Village	0.000%	05/01/2057	1,109			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/ Mortgage Loans	Balance of Commitment	
Conway Court	4.150%	11/01/2053	\$ 2,079			
Cordovan at Haverhill Station	6.760%	09/01/2048	6,957			
Counting House Lofts	6.000%	12/01/2045	2,179			
Cromwell Court	5.360%	01/01/2052	5,610			
Davenport Commons	4.920%	08/01/2031	22,973			
Dom Polski	5.400%	12/01/2048	2,285			
Eastgate Apartments	5.400%	01/01/2049	7,668			
Fairweather Apartments	5.450%	12/01/2048	16,043			
Fitchburg Green	6.870%	01/01/2048	10,988			
Florence Apartments	7.310%	08/01/2050	14,568			
Forestvale	7.380%	08/01/2050	15,043			
Founders Court Apts.	3.600%	10/01/2057	1,857			
Founders Court Apts.	6.650%	01/01/2026	27			
Franklin Hill Revitalization Phase 2A	7.000%	10/01/2050	1,873			
Franklin Hill Revitalization Phase 2B	6.000%	10/01/2050	1,118			
Gateway Residences On Washington	4.100%	10/01/2058	10,013			
Genesis Brighton	3.900%	01/01/2049	56,371			
Georgetown Homes I	4.520%	05/01/2056	70,344			
Georgetown Homes II	4.520%	05/01/2056	43,217			
Golda Meir House II	3.900%	04/01/2059	37,734			
Goldman Residences	0.374%	11/01/2042	736			
Hadley Building Apartments	0.000%	01/31/2048	2,199			
Haley House	6.250%	05/01/2029	439			
Hamilton Wade Douglas	4.100%	01/01/2057	12,674			
Hamilton Wade Douglas	3.500%	01/01/2057	5,535			
Harborview Towers	4.200%	07/01/2052	6,228			
Hemenway Apts	6.930%	08/01/2047	1,316			
Heritage at Bedford Springs	4.725%	08/01/2048	25,104			
Heritage House	6.750%	08/01/2047	615			
High Rock Homes	5.650%	05/01/2050	2,491			
High Rock Homes	0.000%	05/01/2050	1,500			
Hillside Village	7.050%	05/01/2045	247			
Historic South End Apartments	5.250%	06/01/2055	22,171			
Hope Gardens	6.850%	07/01/2047	835			
Hotel Raymond	5.950%	01/01/2044	1,690			
Island Creek East - I	6.850%	12/01/2048	434			
Island Creek Village North- Age Restricted	4.500%	05/01/2058	3,663			
Jaclen Tower	4.150%	11/01/2053	8,841			
Kennedy Building Apartments	4.760%	01/01/2059	1,719			
Kensington Court at Lakeville	7.310%	08/01/2050	4,006			
King Pine	4.920%	07/01/2060		\$ 9,631	\$ 169	
King's Beach Towers	7.300%	06/30/2020	570			
Kings Landing	5.000%	06/01/2054	4,123			
King's Lynne	7.694%	03/01/2020	1,008			
Landmark at Fall River	5.850%	08/01/2039	3,682			
LBB Housing	3.400%	01/01/2054	3,720			
Lebanese Community Housing	5.750%	10/01/2049	2,556			
Leisure Towers	5.250%	07/01/2054	17,388			
Leyden Woods Apartments	3.850%	10/01/2057	25,725			
Lincoln Woods	3.750%	08/01/2057	12,342			
Lionhead Apartments	4.540%	12/27/2055	6,892			
Loring Towers	5.400%	01/01/2050	8,995			
Louis Barrett Residences	4.600%	03/01/2057	15,372			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/ Mortgage Loans	Balance of Commitment	
LPI Portfolio	4.540%	10/01/2060		\$ 287	\$ 25,713	
Lucerne Gardens	9.000%	07/01/2024	\$ 412			
Madison Melnea Cass Apts	4.420%	03/01/2060		11,125	25	
Madison Park III	4.090%	01/01/2058	20,696			
Majestic Apartments	5.950%	01/01/2044	1,423			
Maple Commons	9.740%	10/01/2022	1,940			
Maple Commons	9.740%	06/01/2023	212			
Maple Commons	8.150%	06/01/2023	371			
Maple Ridge Phase I	7.000%	06/01/2052	3,821			
Marcus Garvey Gardens	8.000%	01/01/2021	819			
Mary Colbert Apartments	5.500%	07/01/2055	3,152			
Mashpee Village	4.900%	05/01/2056	3,990			
Mason Place	6.050%	04/01/2044	4,767			
Mason Place	5.680%	04/01/2024	3,100			
Mass Mills III	4.500%	04/01/2048	3,434			
Mattapan Heights II	5.850%	02/01/2046	1,040			
Mattapan Heights Ii	2.000%	02/01/2046	2,000			
Mattapan Heights III	5.330%	03/01/2048	2,777			
Maverick Landing Phase I	6.300%	11/01/2035	2,124			
Maverick Landing Phase II	7.000%	11/01/2035	1,186			
Maverick Landing Phase III	7.100%	01/01/2037	1,631			
Maverick Landing Phase IV	5.940%	06/01/2037	1,476			
Meadowbrook Apartments	6.000%	01/01/2046	872			
Melville Towers	5.750%	01/01/2048	1,217			
Metropolitan (Rental)	7.900%	06/01/2045	11,300			
Middlebury Arms	5.250%	09/01/2055	1,262			
Mission Park	7.050%	02/01/2040	39,612			
Mohawk Forest Apartments	4.780%	08/01/2039	1,658			
Mohawk Forest Apartments	5.225%	08/01/2039	1,244			
Moorings at Squantum I	5.650%	05/01/2048	10,624			
Moorings at Squantum I	4.730%	01/01/2046	2,941			
Moorings at Squantum II	7.050%	05/01/2048	5,041			
Morgan Woods	5.550%	01/01/2048	4,370			
Mtn View Terrace	5.500%	07/31/2050	13,649			
Mystic Place	5.000%	05/01/2051	28,065			
New Girls Latin Academy	6.960%	07/01/2038	1,052			
New Port Antonio Apartments	4.000%	12/01/2027	25,000			
Nor-Al	5.250%	01/01/2055	5,738			
Nor-Al	5.250%	01/01/2034	2,105			
North Village at Webster	4.650%	01/01/2056	5,370			
Norton Glen	5.400%	11/01/2025	1,663			
Oak Terrace	4.290%	06/01/2058	12,429			
Ocean Shores	6.850%	06/01/2048	17,980			
Orchard Hill	6.680%	07/01/2027	688			
Palmer Green Est	3.320%	05/01/2058	11,357			
Palmer Green Est	3.250%	07/01/2036	3,637			
Pequot Highlands	4.140%	05/01/2059	41,261			
Pine Commons	7.800%	12/01/2037	849			
Pine Commons	6.900%	12/01/2043	1,517			
Pine Gardens	7.800%	12/01/2037	593			
Powdermill Village	7.750%	01/01/2042	1,038			
Power Town	3.750%	11/01/2056	6,727			
Quincy Heights	2.290%	06/01/2041	15,358			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	Mortgage Obligation	In thousands		Notes
				Advances Construction/ Mortgage Loans	Balance of Commitment	
Quincy Tower	4.290%	01/01/2059	\$ 20,878			
Regency Towers I	0.000%	04/01/2040	5,151			
Residence at Cedar Dell	6.050%	04/01/2045	926			
Residences At Canal Bluffs	7.640%	06/01/2051	772			
Rindge Apts	4.250%	07/01/2058	20,912			
River Place Towers	4.125%	04/01/2055	15,405			
Rolfé House	6.500%	01/01/2047	321			
School House Brookledge	7.200%	01/01/2049	1,517			
Seabury Heights	5.340%	02/01/2043	11,925			
Seabury Heights	5.548%	04/01/2022	555			
Seton Manor	6.200%	01/01/2020	44			
Shillman House	6.500%	11/01/2051	12,105			
Silver Leaf Terrace	5.730%	12/01/2040	11,695			
Sitkowski School Apartments	5.000%	07/01/2056	1,707			
Smith House	3.750%	12/01/2058	13,336			
South End Apartments	6.760%	06/01/2043	3,816			
South End Tenants Houses II	6.190%	12/01/2045	11,298			
South End Tenants Houses II	5.250%	12/01/2023	1,789			
Spring Gate	7.250%	07/01/2056	5,313			
St Mathieus School	4.000%	06/01/2053	1,819			
St Stephen'S Tower	3.600%	01/01/2034	15,888			
Stratton Hill	4.560%	06/01/2059	9,890			
Summer Hill Glen	4.150%	11/01/2053	11,442			
Susan S Bailis Assisted Living	6.500%	07/01/2043	1,948			
Sycamore Village	6.810%	08/01/2050	9,566			
Taurus At Ftn Hill	8.000%	07/01/2021	488			
Taurus At Ftn Hill	9.625%	07/01/2021	37			
The Carruth	5.850%	10/01/2048	5,172			
The Close Building	4.690%	03/01/2060		\$ 3,413	\$ 5,887	
The Commons at Boston Road (variable rate)	1.880%	11/30/2038	14,716			
The Commons at Chelmsford (variable rate)	1.880%	08/31/2038	9,551			
The Coolidge	5.300%	07/01/2050	3,669			
The Coolidge	4.460%	08/01/2049	2,319			
The Stearns Apartment	6.400%	02/01/2042	6,208			
The Stearns Apartment	6.575%	02/01/2021	2,064			
The Tannery	4.100%	01/01/2062		7,985	20,315	
Traditions of Dedham	6.650%	03/01/2044	9,359			
Treehouse at Easthampton Meadow	7.100%	09/01/2037	607			
Tribune Apartments	4.290%	05/01/2058	4,304			
Trinity Terrace	7.700%	01/31/2035	422			
UE Apartments	5.500%	01/01/2053	4,171			
Uphams Corner Market	6.470%	12/01/2042	1,351			
Valebrook	5.000%	04/01/2051	8,104			
Van Der Hayden	8.000%	09/01/2021	286			
Victory Gardens Plaza	7.800%	07/01/2019	19			
Village at Hospital Hill II	4.000%	01/20/2050	1,300			
Voke Lofts	3.400%	01/01/2055	2,030			
Wait Street	8.800%	11/01/2021	731			
Warren House	6.947%	12/01/2023	1,855			
Washington Park Apartments	3.400%	01/01/2055	3,115			
Waterway Apartments	5.000%	02/01/2052	5,276			
Waverley Woods	6.980%	07/01/2049	1,635			
Waverley Woods	0.000%	07/01/2049	1,750			

SUPPLEMENTAL SCHEDULE 2: MORTGAGE / CONSTRUCTION LOAN OBLIGATIONS AND COMMITMENTS

Project Name	Interest Rate	Maturity Date	In thousands			Notes
			Mortgage Obligation	Advances Construction/ Mortgage Loans	Balance of Commitment	
Weeks School Apartments	6.720%	06/01/2047	\$ 1,046			
Westland Avenue Apartments	6.050%	02/01/2046	9,225			
Wilbraham Commons	7.000%	03/19/2048	969			
Wilkins Glen	4.150%	11/01/2053	10,630			
Willow Apartments	5.300%	05/01/2047	3,116			
Wood Ridge Homes	7.800%	11/01/2019	30			
Woodbourne Apartments	5.600%	07/01/2049	2,869			
Woodland Station Apartments	5.650%	01/01/2048	3,658			
Woodland Station Apartments	0.000%	01/01/2048	270			
Worcester Loomworks Phase I	4.900%	01/01/2056	1,324			
Worcester Loomworks Phase II	6.000%	01/01/2056	1,051			
Zelma Lacey House Of Charlestown	5.900%	11/01/2044	5,627			
Sub-total			\$ 1,471,121	\$ 80,211	\$ 56,214	
Single Family Housing Revenue Bond Program						
Adopted September 12, 1985						
Home Improvement Loans	1.000% - 6.25%		\$ 5,437			
Single Family Mortgages Receivable	3.125% - 8.500%		269,278			
Sub-total			\$ 274,715			
Total			\$ 2,716,544	\$ 212,782	\$ 121,355	

(a) This balance includes Single Family mortgages funded by the Agency's Working Capital Fund and held for pending subsequent sale of loans, or loans wrapped by MBS, either to outside investors or to one or more of the Agency's bond programs.

							In thousands of dollars					
	Final Maturity Date	Next Scheduled Principal Payment Date	Interest %	Rate Range To	Debt Type	Outstanding June 30, 2018	Issued and Compounded	Retired or Exchanged	Outstanding June 30, 2019	Unamortized Bond/Note Discount/Premium	Adjusted Totals	
Rental Housing Mortgage Revenue Bond Program												
2002 Series B (var)	01/01/2044		2.3400	2.5100	Underwritten	\$ 11,120		\$ 11,120	\$ -	\$ -	\$ -	
2002 Series D (var)	01/01/2045	07/01/2019	2.3400	2.7700	Underwritten	31,840		19,190	12,650		12,650	
2002 Series G (var)	01/01/2046	07/01/2019	2.3400	2.7700	Private Placement	11,635		3,805	7,830		7,830	
2003 Series A (var)	07/01/2043	07/01/2019	2.3400	2.7700	Private Placement	18,270		285	17,985		17,985	
Sub-total						\$ 72,865	\$ -	\$ 34,400	\$ 38,465	\$ -	\$ 38,465	
General Rental Development Bond Program												
2005 Series AC	01/01/2026	01/01/2020	4.3750	4.5000	Underwritten	\$ 337		\$ 35	\$ 302	\$ -	\$ 302	
2005 Series AQ	01/01/2026		4.3750	4.5000	Underwritten	1,895		1,895	-		-	
2005 Series AW	01/01/2026	01/01/2020	4.3750	4.5000	Underwritten	383		40	343		343	
2012 Issue One	06/01/2053	12/01/2019	2.0000	4.6250	Underwritten	12,610		130	12,480		12,480	
2012 Series A	06/01/2053	12/01/2019	4.0000	4.0000	Private Placement	63,660		750	62,910		62,910	
2014 Series A	01/15/2046	07/15/2019	4.3750	4.3750	Underwritten	29,281		13,860	15,421		15,421	
2014 Series B	04/15/2054	07/15/2019	4.5000	4.5000	Underwritten	43,812		425	43,387		43,387	
VRHB 2015A (var)	01/01/2034	01/01/2034	.9500	2.3100	Underwritten	32,315		465	31,850		31,850	
2018 Mill Road (var)	11/01/2048	11/01/2019	1.8300	2.8500	Underwritten		23,675	115	23,560		23,560	
Sub-total						\$ 184,293	\$ 23,675	\$ 17,715	\$ 190,253	\$ -	\$ 190,253	
Multi-Family Housing Bond Program												
2009 Series A, Subseries 1	12/01/2051	12/01/2038	3.0100	3.0100	Private Placement	\$ 85,280			\$ 85,280	\$ -	\$ 85,280	
2009 Series A, Subseries 2	12/01/2051	06/01/2033	3.5500	3.5500	Private Placement	50,170			50,170		50,170	
2009 Series A, Subseries 3	12/01/2051	06/01/2035	2.5800	2.5800	Private Placement	42,830			42,830		42,830	
2009 Series A, Subseries 4	12/01/2051	12/01/2019	2.3200	2.3200	Private Placement	14,890		\$ 250	14,640		14,640	
2010 Series A	12/01/2038	12/01/2019	3.3000	5.3000	Underwritten	60,020		1,780	58,240		58,240	
2011 Series A	12/01/2032	12/01/2019	2.9000	4.8750	Underwritten	14,780		720	14,060		14,060	
2011 Series B	12/01/2053	12/01/2019	2.5000	5.1250	Underwritten	27,955		815	27,140		27,140	
Sub-total						\$ 295,925	\$ -	\$ 3,565	\$ 292,360	\$ -	\$ 292,360	
Housing Bond Program												
2003 Series F (var)	12/01/2037	12/01/2019	1.0700	2.5900	Underwritten	\$ 365		\$ 25	\$ 340	\$ -	\$ 340	
2003 Series H	06/01/2043	12/01/2019	4.8750	5.1250	Underwritten	8,710		7,305	1,405		1,405	
2007 Series F	06/01/2040		5.7000	5.7000	Underwritten	31,615		31,615	-		-	
2007 Series G	06/01/2040		6.7000	6.7000	Underwritten	9,200		9,200	-		-	
2008 Series A (var)	05/01/2048	07/01/2019	2.3200	3.1700	Private Placement	83,795		2,520	81,275		81,275	
2008 Series B	12/01/2038		5.4500	7.0000	Underwritten	39,385		39,385	-		-	
2009 Series B (var)	01/01/2044	07/01/2019	1.9400	2.4600	Underwritten	11,608		200	11,408		11,408	
2009 Series C	12/01/2049	12/01/2019	3.6000	5.3500	Underwritten	32,055		540	31,515		31,515	
2009 Series D	06/01/2040	12/01/2019	3.9500	5.0500	Underwritten	13,295		2,640	10,655		10,655	
2010 Series A	12/01/2022	12/01/2019	3.8750	4.2500	Underwritten	9,300		3,085	6,215		6,215	
2010 Series B	06/01/2041	12/01/2019	3.9500	5.5000	Underwritten	7,830		2,335	5,495		5,495	
2010 Series C	12/01/2042	12/01/2019	4.0500	5.3500	Underwritten	37,835		8,785	29,050		29,050	
2010 Series D	12/01/2042	12/01/2019	4.7820	7.0180	Underwritten	6,935		1,865	5,070		5,070	
2010 Series E	06/01/2053	12/01/2019	3.4500	5.1250	Underwritten	11,905		150	11,755		11,755	
2011 Series A	12/01/2041	12/01/2019	3.4000	5.3000	Underwritten	19,020		4,265	14,755	\$ (27)	14,728	
2012 Series A	12/01/2031	12/01/2019	1.7500	3.5000	Underwritten	25,830		1,610	24,220		24,220	
2012 Series B	06/01/2053	12/01/2019	1.7500	4.0200	Underwritten	37,865		585	37,280		37,280	
2012 Series C	06/01/2043	12/01/2019	2.5570	4.8360	Underwritten	61,250		29,380	31,870		31,870	
2012 Series E	12/01/2054	12/01/2019	1.4500	3.7500	Underwritten	23,540		500	23,040		23,040	
2012 Series F	06/01/2043	12/01/2019	1.4500	3.5000	Underwritten	580		10	570		570	
2013 Series A	12/01/2041	12/01/2019	1.7920	5.0860	Underwritten	21,730		3,730	18,000		18,000	
2013 Series B	06/01/2056	12/01/2019	1.8000	4.5000	Underwritten	114,105		1,355	112,750		112,750	
2013 Series C	12/01/2049	12/01/2019	2.0500	5.3500	Underwritten	22,670		255	22,415		22,415	
2013 Series E	12/01/2054	12/01/2019	1.7500	5.2500	Underwritten	28,785		260	28,525	(77)	28,448	
2013 Series F (var)	12/01/2038	12/01/2019	.9300	2.3800	Underwritten	25,000		620	24,380		24,380	
2014 Series A	12/01/2055	12/01/2019	1.3000	4.6000	Underwritten	22,575		1,115	21,460		21,460	
2014 Series B	12/01/2047	12/01/2019	1.7500	4.7000	Underwritten	71,955		8,815	63,140		63,140	
2014 Series C	12/01/2045	12/01/2019	2.2060	5.0000	Underwritten	1,790		100	1,690		1,690	
2014 Series D	12/01/2054	12/01/2019	1.2000	4.2500	Underwritten	29,015		405	28,610		28,610	
2014 Series E	12/01/2045	12/01/2019	1.5500	4.3500	Underwritten	37,455		33,665	3,790		3,790	
2015 Series A	12/01/2048	12/01/2019	1.7500	4.5000	Underwritten	46,240		1,130	45,110		45,110	
2015 Series B	12/01/2053	12/01/2019	2.0190	4.6140	Underwritten	30,405		770	29,635		29,635	
2015 Series C	06/01/2055	12/01/2019	1.4500	4.2500	Underwritten	20,700		280	20,420		20,420	
2015 Series D	12/01/2045	12/01/2019	1.3000	4.3000	Underwritten	35,310		340	34,970		34,970	
2015 Series E	12/01/2045	12/01/2019	1.2000	4.2000	Underwritten	27,785		640	27,145		27,145	
2015 Series G	12/01/2050	12/01/2019	1.2500	4.1000	Underwritten	50,410		910	49,500		49,500	
2015 Series H	12/01/2050	12/01/2019	1.2500	4.1000	Underwritten	20,375		370	20,005		20,005	
2015 Series I	12/01/2050	06/01/2022	3.4500	3.4500	Underwritten	25,000			25,000		25,000	
2016 Series A	12/01/2055	12/01/2019	.9000	4.1000	Underwritten	24,640		270	24,370		24,370	
2016 Series B	12/01/2048	12/01/2019	1.2500	4.2500	Underwritten	13,235		195	13,040		13,040	
2016 Series C	12/01/2055	12/01/2019	2.2000	5.0000	Underwritten	22,510		305	22,205		22,205	
2016 Series D	12/01/2048	12/01/2027	2.9000	3.4500	Underwritten	48,530			48,530		48,530	
2016 Series E	12/01/2027	12/01/2019	1.5000	3.2000	Underwritten	12,790		985	11,805		11,805	
2016 Series F	06/01/2057	12/01/2019	.9500	3.6250	Underwritten	73,510		550	72,960		72,960	
2016 Series G	12/01/2058	12/01/2019	3.8500	3.8500	Private Placement	9,980		85	9,895		9,895	
2016 Series H	12/01/2046	12/01/2019	1.3000	4.4000	Underwritten	52,240		955	51,285		51,285	
2016 Series I (var)	12/01/2056	06/01/2047	2.8339	3.1548	Private Placement	25,000			25,000		25,000	
2017 Series A	12/01/2049	12/01/2019	1.2500	4.5500	Underwritten	71,320		680	70,640		70,640	
2017 Series B	12/01/2039	12/01/2019	1.7500	3.8500	Underwritten	7,830		180	7,650		7,650	
2017 Series C	12/01/2052	12/01/2019	1.1500	4.0500	Underwritten	43,280			43,280		43,280	
2017 Series D	06/01/2059	12/01/2019	1.4000	4.0000	Underwritten	106,445			106,445		106,445	
2018 Series A	06/01/2046	06/01/2020	1.8000	3.8500	Underwritten	27,475			27,475		27,475	
2018 Series B (var)	06/01/2058	06/01/2046	2.5100	2.8200	Private Placement	25,000			25,000		25,000	
2018 Series C	06/01/2040	12/01/2019	2.8170	4.7210	Underwritten		79,285	940	78,345		78,345	
2018 Series D	12/01/2058	06/01/2021	1.9500	4.4500	Underwritten		51,235		51,235		51,235	
2019 Series A	06/01/2061	06/01/2021	1.4000	3.6250	Underwritten		70,855		70,855		70,855	
Sub-total						\$ 1,667,008	\$ 201,375	\$ 205,905	\$ 1,662,478	\$ (25)	\$ 1,662,453	

							In thousands of dollars				
	Final Maturity Date	Next Scheduled Principal Payment Date	Interest % Rate Range		Debt Type	Outstanding June 30, 2018	Issued and Compounded	Retired or Exchanged	Outstanding June 30, 2019	Unamortized Bond/Note Discount/Premium	Adjusted Totals
			From	To							
Single Family Housing Revenue Bond Program											
Series 76 (var)	12/01/2030	12/01/2019	2.5900	3.1200	Underwritten	\$ 14,555		\$ 670	\$ 13,885	\$	13,885
Series 147	12/01/2025		4.6000	4.6000	Underwritten	1,325		1,325	-		-
Series 151	12/01/2027	12/01/2026	4.1000	4.1000	Underwritten	390		15	375		375
Series 152	12/01/2020	12/01/2019	2.8000	3.2500	Underwritten	4,095		1,575	2,520		2,520
Series 153	12/01/2020	12/01/2019	3.8000	4.4000	Underwritten	4,905		1,405	3,500		3,500
Series 154	12/01/2027		4.1000	4.1000	Underwritten	1,055		1,055	-		-
Series 155	12/01/2028	12/01/2019	3.2000	5.0000	Underwritten	4,240		1,770	2,470	\$ 160	2,630
Series 156	06/01/2029	12/01/2019	2.6250	4.5000	Underwritten	5,330		1,655	3,675	64	3,739
Series 157	12/01/2023	12/01/2019	2.6500	3.9000	Underwritten	11,585		4,725	6,860		6,860
Series 159	12/01/2032	12/01/2019	2.0000	4.0500	Underwritten	8,050		1,025	7,025		7,025
Series 160	06/01/2034	12/01/2019	2.3000	3.7500	Underwritten	11,175		2,225	8,950	135	9,085
Series 161	12/01/2042	12/01/2019	1.7500	3.8750	Underwritten	2,395		295	2,100		2,100
Series 162	12/01/2042	12/01/2019	1.4500	3.5000	Underwritten	85,035		3,755	81,280	309	81,589
Series 163	12/01/2033	12/01/2019	1.9000	4.0000	Underwritten	31,980		3,315	28,665	458	29,123
Series 165	12/01/2043	12/01/2019	1.4500	4.0000	Underwritten	27,105		5,370	21,735		21,735
Series 166	12/01/2026	12/01/2019	1.6630	3.7910	Underwritten	17,890		2,215	15,675		15,675
Series 167	12/01/2043	12/01/2019	1.8000	4.0000	Underwritten	16,190		5,340	10,850	822	11,672
Series 168	12/01/2026	12/01/2019	1.3500	3.7500	Underwritten	17,595		1,220	16,375		16,375
Series 169	12/01/2044	06/01/2021	2.5500	4.0000	Underwritten	12,745		3,955	8,790	820	9,610
Series 170	12/01/2020	12/01/2019	2.3080	3.1920	Underwritten	4,535		1,230	3,305		3,305
Series 171	12/01/2044	12/01/2019	1.1500	4.0000	Underwritten	30,090		5,375	24,715	870	25,585
Series 172	06/01/2045	06/01/2028	3.3000	4.0000	Underwritten	38,240		5,555	32,685	1,764	34,449
Series 173	12/01/2026	12/01/2025	3.0000	3.1000	Underwritten	3,080			3,080		3,080
Series 174	12/01/2025	12/01/2019	1.6000	3.4000	Underwritten	18,765		2,350	16,415		16,415
Series 175	12/01/2045	06/01/2039	4.0000	4.1000	Underwritten	12,695		2,845	9,850	1,446	11,296
Series 176	12/01/2025	12/01/2024	2.9500	3.0000	Underwritten	3,120			3,120		3,120
Series 177	06/01/2039	12/01/2019	1.7000	4.0000	Underwritten	39,120		8,155	30,965		30,965
Series 178	06/01/2042	06/01/2030	3.5000	3.7000	Underwritten	60,795		14,030	46,765	2,026	48,791
Series 179	12/01/2025	12/01/2022	2.3000	2.9000	Underwritten	12,800			12,800		12,800
Series 180	12/01/2028	12/01/2019	1.5000	3.5000	Underwritten	19,405		5,835	13,570		13,570
Series 181	12/01/2044	12/01/2028	3.2500	4.0000	Underwritten	37,755		4,360	33,395	1,225	34,620
Series 182	12/01/2028	12/01/2019	1.2500	3.3000	Underwritten	19,185		1,490	17,695		17,695
Series 183	12/01/2046	06/01/2027	2.8000	3.5000	Underwritten	37,320		5,330	31,990	1,461	33,451
Series 184	06/01/2027	12/01/2019	1.0000	2.6250	Underwritten	9,745		955	8,790		8,790
Series 185	06/01/2046	06/01/2021	2.1000	4.2000	Underwritten	36,800		275	36,525	1,596	38,121
Series 186	06/01/2039	12/01/2019	1.5000	4.0000	Underwritten	38,265		8,590	29,675		29,675
Series 187	12/01/2037	12/01/2026	2.4000	3.5500	Underwritten	51,920			51,920	2,296	54,216
Series 188	06/01/2043	12/01/2019	1.2000	4.0000	Underwritten	43,675		6,300	37,375		37,375
Series 189	12/01/2047	06/01/2038	1.5000	1.5000	Underwritten	25,000			25,000		25,000
Series 190	12/01/2048	12/01/2028	2.7000	4.0000	Underwritten	62,065		870	61,195	1,689	62,884
Series 191	12/01/2028	12/01/2019	1.5000	3.1500	Underwritten	16,525		1,300	15,225		15,225
Series 192	12/01/2022	12/01/2022	.0000	.0000	Private Placement	14,800			14,800		14,800
Series 193	12/01/2043	12/01/2019	2.7500	4.4000	Underwritten	17,500			17,500	744	18,244
Series 194	06/01/2019		1.7000	1.8500	Underwritten	560		560	-		-
Series 195	12/01/2048	12/01/2020	1.8500	4.0000	Underwritten	16,115		150	15,965		15,965
Series 196 (var)	12/01/2048	06/01/2030	1.8060	2.1130	Underwritten	15,000			15,000		15,000
Series 197	06/01/2030	06/01/2020	3.0500	4.0500	Underwritten		\$ 8,300		8,300	766	9,066
Series 198	12/01/2034	12/01/2019	1.9000	3.8500	Underwritten		8,970	160	8,810		8,810
Series 199	12/01/2048	12/01/2034	3.8000	4.0000	Underwritten		16,915		16,915		16,915
Series 200 (var)	12/01/2048	12/01/2034	1.8950	2.1430	Underwritten		15,000		15,000		15,000
Series 201	12/01/2037	12/01/2019	3.0000	4.7000	Underwritten		12,400	65	12,335	808	13,143
Series 202	06/01/2034	12/01/2019	2.1500	4.0500	Underwritten		3,610	80	3,530		3,530
Series 203	12/01/2048	12/01/2020	4.5000	4.5000	Underwritten		12,325		12,325		12,325
Series 204 (var)	12/01/2048	06/01/2038	1.6100	2.6300	Underwritten		10,000		10,000		10,000
Series 205	06/01/2035	06/01/2020	2.4500	3.8000	Underwritten		18,000		18,000	1,424	19,424
Series 206	12/01/2036	12/01/2019	1.7500	3.4500	Underwritten		6,610		6,610		6,610
Series 207	06/01/2049	12/01/2036	3.1500	4.0000	Underwritten		19,890		19,890		19,890
Series 208 (var)	06/01/2049	06/01/2037	1.3200	1.9000	Underwritten		15,000		15,000		15,000
Sub-total						\$ 962,515	\$ 147,020	\$ 118,770	\$ 990,765	\$ 20,883	\$ 1,011,648
Residential Mortgage Revenue Bond Program											
2012 Series A	10/01/2042		3.0270	3.0270	Underwritten	\$ 30,233		\$ 4,198	\$ 26,035	\$ 1,404	\$ 27,439
2012 Series B	12/01/2042		2.5270	2.5270	Underwritten	29,442		3,853	25,589	690	26,279
Sub-total						\$ 59,675	\$ -	\$ 8,051	\$ 51,624	\$ 2,094	\$ 53,718
						\$ 3,242,281	\$ 372,070	\$ 388,406	\$ 3,225,945	\$ 22,952	\$ 3,248,897

SCHEDULE 4: NOTES AND OTHER INDEBTEDNESS

In thousands of dollars									
Scheduled Redemption Date	Interest Rate Range		Debt Type	In thousands of dollars			Unamortized Bond/Note Discount/Premium		Adjusted Totals
	From	To		Outstanding June 30, 2018	Issued and Compounded	Retired	Outstanding June 30, 2019		
Working Capital Fund									
General Obligation Notes Payable									
Construction Loan Notes									
2016 Series A	10/31/2018	3.0000	3.0000	Private Placement	\$ 9,464		\$ 9,464	\$ -	\$ -
2016 Series B	06/01/2019	2.0000	2.0000	Underwritten	34,755		34,755	-	-
2016 Series C	06/01/2019	2.2500	2.2500	Underwritten	5,760		5,760	-	-
2017 Series A	06/01/2020	1.8500	1.8500	Underwritten	22,550			22,550	22,550
2017 Series B	12/01/2021	2.0500	2.0500	Underwritten	66,125			66,125	66,125
2017 Series C	06/01/2020	2.3500	2.3500	Underwritten	9,790			9,790	9,790
Total					\$ 148,444	\$ -	\$ 49,979	\$ 98,465	\$ -
Direct Purchase Construction Loan Notes									
DIRECT PURCHASE IS 1 BLK5	10/29/2018	2.4900	2.4900	Direct Purchase	\$ 21,010		\$ 21,010	\$ -	\$ -
DIRECT PURCHASE IS 1 BLK9	10/27/2018	2.1600	2.1600	Direct Purchase	24,480		24,480	-	-
DIRECT PURCHASE IS 2	03/01/2019	1.8000	1.8000	Direct Purchase	18,256		18,256	-	-
DIRECT PURCHASE IS 4 BLK 2018A	06/18/2021	4.2700	4.2700	Direct Purchase	5,850	\$ 20,826		26,676	26,676
DIRECT PURCHASE IS 4 BLK 2018B	06/18/2021	4.2700	4.2700	Direct Purchase		4,175		4,175	4,175
DIRECT PURCHASE IS 4 BLK 2018C	12/20/2021	4.1700	4.1700	Direct Purchase		8,345		8,345	8,345
DIRECT PURCHASE IS 5 BLK 2018A	12/20/2021	4.1900	4.1900	Direct Purchase		14,901		14,901	14,901
DIRECT PURCHASE IS 5 BLK 2019A	06/27/2022	3.2600	3.2600	Direct Purchase		9,073		9,073	9,073
DIRECT PURCHASE IS 5 BLK 2019B	06/27/2022	4.1000	4.1000	Direct Purchase		8,500		8,500	8,500
Total					\$ 69,596	\$ 65,820	\$ 63,746	\$ 71,670	\$ -
Housing Bond Program									
2018 IS 2 BLK 2018A NOTES (var)	07/24/2020	2.5080	2.9660	Underwritten		\$ 250		\$ 250	\$ 250
2018 IS 2 BLK 2018B NOTES (var)	12/18/2018	2.0610	2.1570	Underwritten		24,533	\$ 24,533	-	-
Total					\$ -	\$ 24,783	\$ 24,533	\$ 250	\$ -
Grand Total					\$ 218,040	\$ 90,603	\$ 138,258	\$ 170,385	\$ -

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SCHEDULE 5: DEBT SERVICE REQUIREMENTS

In thousands of dollars													
	2020		2021		2022		2023		2024		2025-2029		2030-
	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
Working Capital Fund *	\$ 5,600	\$ 32,340	\$ 6,947	\$ 42,818	\$ 4,482	\$ 193,075							
Rental Housing Mortgage Revenue Bond Program **	1,024	1,565	977	1,645	930	1,755	\$ 886	\$ 1,505	\$ 856	\$ 1,005	\$ 3,843	\$ 5,565	\$ 2,934
General Rental Development Bond Program **	6,885	1,350	6,848	1,310	6,803	1,363	6,753	1,431	6,702	1,495	32,619	8,331	30,693
Multi-Family Housing Bond Program	10,517	3,745	10,388	3,915	10,236	4,105	10,070	4,295	9,887	4,505	46,244	25,950	39,503
Housing Bond Program **	63,399	34,815	62,730	33,205	61,837	32,820	60,901	33,785	59,910	33,955	281,539	189,310	243,054
Single Family Housing Revenue Bond Program **	32,124	45,795	30,900	36,585	30,030	33,295	29,146	52,495	27,995	40,455	124,339	149,330	95,735
Residential Mortgage Revenue Bond Program	1,435	1,399	1,435		1,435		1,435		1,435		7,174		7,174
Totals ***	\$ 120,984	\$ 121,009	\$ 120,225	\$ 119,478	\$ 115,753	\$ 266,413	\$ 109,191	\$ 93,511	\$ 106,785	\$ 81,415	\$ 495,758	\$ 378,486	\$ 419,093

*The following Direct Purchase Construction Loan Notes (DP CLN) are being drawn down in increments based on the draw schedules in the Schedule of Advances in the Block Certificates: Issue Four Block 2018A, Issue Four Block 2018C, Issue Five Block 2018A, Issue Five Block 2019A, and Issue Five Block 2019B. As of June 30, 2019, the amount of DP CLN outstanding is \$71,670,000. However, the schedule above includes additional advances of \$98,098,000, which will be completed by April 1, 2021.

**The bond programs indicated above include weekly variable rate debt in some or all of the outstanding principal balance. For purposes of the table above, interest is calculated at the rate in effect on June 30, 2019. Most of the variable rate debt is subject to weekly redetermination by the remarketing agent, while some series are based on LIBOR (London Interbank Offer Rate) and SIFMA index rates.

***The total Principal amount shown excludes any amounts for unamortized bond / note discount / premium. In addition, the future principal and interest payments have been adjusted for contractual amounts or scheduled payments paid during the first quarter of FY 2020 for notices received by the Agency as of June 30, 2019.

In thousands of dollars

2034		2035-2039		2040-2044		2045-2049		2050-2054		2055-2059		2060-2064		Scheduled Maturity	
Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	
														\$ 17,029	\$ 268,233
\$ 7,745	\$ 1,799	\$ 7,705	\$ 736	\$ 9,045	\$ 14	\$ 930								\$ 13,999	\$ 38,465
42,040	25,754	13,095	23,060	16,650	17,226	42,616	\$ 11,169	\$ 60,572						\$ 174,512	\$ 190,253
32,765	31,281	41,390	23,281	54,420	13,990	69,860	3,361	47,410						\$ 208,758	\$ 292,360
229,345	193,318	274,455	136,598	268,958	81,908	257,900	37,611	171,350	\$ 9,377	\$ 96,040	\$ 305	\$ 6,790	\$ 1,292,487	\$ 1,662,728	
203,010	59,944	176,360	31,200	155,615	7,178	97,825								\$ 468,591	\$ 990,765
	7,174		4,890	50,225										\$ 33,587	\$ 51,624
\$ 514,905	\$ 319,270	\$ 513,005	\$ 219,765	\$ 554,913	\$ 120,316	\$ 469,131	\$ 52,141	\$ 279,332	\$ 9,377	\$ 96,040	\$ 305	\$ 6,790	\$ 2,208,963	\$ 3,494,428	

SCHEDULE 6: MBS Forward Contracts - Hedging Derivative Instruments

Forward Contracts to sell TBA Mortgage Backed Securities	Notional Amount Jun. 30, 2019	Trade Date	Delivery Date	Coupon Rate	Fair Value Jun. 30, 2019	Counterparty Credit Rating
FHLMC TBA JUL 2019	\$ 4,000,000	4/11/2019	7/15/2019	3.50%	\$ (51,250)	Aaa
FHLMC TBA JUL 2019	5,000,000	4/22/2019	7/15/2019	3.50%	(86,328)	Aaa
FHLMC TBA JUL 2019	5,000,000	5/2/2019	7/15/2019	3.50%	(78,125)	Aaa
FHLMC TBA JUL 2019	5,000,000	6/10/2019	7/15/2019	3.50%	(7,813)	Aaa
FHLMC TBA JUL 2019	5,000,000	4/24/2019	7/15/2019	3.50%	(73,828)	Aaa
FNMA TBA JUL 2019	5,000,000	4/9/2019	7/15/2019	4.00%	(37,500)	Aaa
FNMA TBA JUL 2019	5,000,000	4/12/2019	7/15/2019	4.00%	(51,172)	Aaa
FNMA TBA JUL 2019 ¹	1,247,500	6/14/2019	7/22/2019	4.00%	(2,339)	Aaa
FHLMC TBA AUG 2019	5,000,000	6/7/2019	8/13/2019	3.50%	(3,125)	Aaa
FNMA TBA AUG 2019	5,000,000	5/17/2019	8/13/2019	3.50%	(47,656)	Aaa
FNMA TBA AUG 2019	5,000,000	5/13/2019	8/13/2019	3.50%	(52,344)	Aaa
FNMA TBA AUG 2019	2,000,000	5/22/2019	8/13/2019	3.50%	(21,563)	Aaa
FNMA TBA AUG 2019	4,000,000	5/22/2019	8/13/2019	4.00%	(25,625)	Aaa
FNMA TBA SEP 2019	5,000,000	6/27/2019	9/12/2019	3.00%	976	Aaa
FNMA TBA SEP 2019	5,000,000	6/13/2019	9/12/2019	3.50%	(9,375)	Aaa
Total	<u>\$ 66,247,500</u>				<u>\$ (547,067)</u>	

¹ These MBS forward contracts relate to Ginnie Mae MBS to be issued. The HUD loans that eventually back the Ginnie Mae MBS are on a forward contract between MassHousing and Fannie Mae.

SCHEDULE 6: MBS Forward Contracts - Hedging Derivative Instruments

Forward Contracts to sell TBA Mortgage Backed Securities	Notional Amount Jun. 30, 2018	Trade Date	Delivery Date	Coupon Rate	Fair Value Jun. 30, 2018	Counterparty Credit Rating
FNMA TBA JUL 2018	\$ 1,000,000	6/1/2018	7/12/2018	3.50%	\$ (2,344)	Aaa
FNMA TBA JUL 2018	5,000,000	5/8/2018	7/12/2018	4.00%	(25,781)	Aaa
FNMA TBA JUL 2018	5,000,000	4/23/2018	7/12/2018	4.00%	(30,469)	Aaa
FNMA TBA JUL 2018	5,000,000	4/18/2018	7/12/2018	4.00%	(6,250)	Aaa
FNMA TBA JUL 2018	5,000,000	5/2/2018	7/12/2018	4.00%	(26,563)	Aaa
FNMA TBA JUL 2018	5,000,000	4/13/2018	7/12/2018	4.00%	(1,563)	Aaa
FNMA TBA JUL 2018	5,000,000	4/27/2018	7/12/2018	4.00%	(27,344)	Aaa
FNMA TBA JUL 2018	7,110,014	6/11/2018	7/12/2018	4.00%	(34,439)	Aaa
FNMA TBA JUL 2018	4,000,000	6/1/2018	7/12/2018	4.50%	(3,750)	Aaa
FNMA TBA JUL 2018	5,000,000	5/1/2018	7/12/2018	4.50%	(20,313)	Aaa
FNMA TBA AUG 2018	2,000,000	6/19/2018	8/13/2018	3.50%	(4,063)	Aaa
FNMA TBA AUG 2018	8,000,000	6/1/2018	8/13/2018	4.00%	(13,750)	Aaa
FNMA TBA AUG 2018	5,000,000	5/11/2018	8/13/2018	4.00%	(22,656)	Aaa
FNMA TBA AUG 2018	5,000,000	5/30/2018	8/13/2018	4.00%	7,031	Aaa
FNMA TBA AUG 2018	3,000,000	5/17/2018	8/13/2018	4.00%	(35,156)	Aaa
FNMA TBA AUG 2018	5,000,000	5/25/2018	8/13/2018	4.00%	(11,719)	Aaa
FNMA TBA AUG 2018	2,000,000	5/22/2018	8/13/2018	4.00%	(17,500)	Aaa
FNMA TBA AUG 2018	5,000,000	6/5/2018	8/13/2018	4.00%	(13,281)	Aaa
FNMA TBA AUG 2018	4,000,000	5/17/2018	8/13/2018	4.50%	(37,500)	Aaa
FNMA TBA AUG 2018	4,000,000	5/11/2018	8/13/2018	4.50%	(11,719)	Aaa
FNMA TBA AUG 2018	5,000,000	6/11/2018	8/13/2018	4.50%	(17,578)	Aaa
FNMA TBA AUG 2018	4,000,000	5/22/2018	8/13/2018	4.50%	(26,094)	Aaa
FNMA TBA SEP 2018	5,000,000	6/15/2018	9/13/2018	4.00%	(13,086)	Aaa
FNMA TBA SEP 2018	5,000,000	6/28/2018	9/13/2018	4.00%	(781)	Aaa
FNMA TBA SEP 2018	10,000,000	6/27/2018	9/13/2018	4.00%	(1,563)	Aaa
FNMA TBA SEP 2018	5,000,000	6/19/2018	9/13/2018	4.00%	(6,641)	Aaa
Total	<u>\$ 124,110,014</u>				<u>\$ (404,872)</u>	

Supplemental Schedule 7
 Massachusetts Housing Finance Agency and Affiliates
 Unaudited

COMBINING STATEMENTS OF NET POSITION
 June 30, 2019

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	General Rental Development Bond Program	Multi-Family Housing Bond Program	Housing Bond Program	Single Family Housing Revenue Bond Program	Residential Mortgage Revenue Bond Program	Eliminations	June 30, 2019
Assets									
Current assets									
Cash and cash equivalents	\$ 455,951	\$ 16,056	\$ 5,430	\$ 27,566	\$ 233,466	\$ 83,333	\$ 56		\$ 821,858
Investments	77,174				189,970	58,510	1,399		327,053
Interest and fees receivable on construction and mortgage loans, net	837	176	590	1,192	6,250	1,020			10,065
Current portion of loans receivable, net	89,514	1,326	2,428	3,770	27,926	11,790			136,754
Interfund accounts receivable (payable)	225	(31)	(3)		15	(206)			
Other assets	10,871	153	10	46	1,219	2,643	147	\$ (56)	15,033
Total current assets	634,572	17,680	8,455	32,574	458,846	157,090	1,602	(56)	1,310,763
Non-current assets									
Investments	106,141	2,327	119		21,563	788,181	51,948		970,279
Non-current portion of loans receivable, net	315,157	29,318	187,602	292,152	1,505,349	259,886			2,589,464
Escrowed funds	553,107		14		55				553,176
Investment derivative instruments					40				40
Other assets	56,558				161	1,245			57,964
Total non-current assets	1,030,963	31,645	187,735	292,152	1,527,168	1,049,312	51,948		4,170,923
Total assets	1,665,535	49,325	196,190	324,726	1,986,014	1,206,402	53,550	(56)	5,481,686
Deferred outflow of resources									
Pension and OPEB	25,522								25,522
Hedging derivative instruments	547	10,791			3,588				14,926
Total deferred outflow of resources	26,069	10,791			3,588				40,448
Total assets and deferred outflow of resource	\$ 1,691,604	\$ 60,116	\$ 196,190	\$ 324,726	\$ 1,989,602	\$ 1,206,402	\$ 53,550	\$ (56)	\$ 5,522,134
Liabilities									
Current liabilities									
Current portion of long term debt, net	\$ 32,340	\$ 1,565	\$ 1,350	\$ 3,745	\$ 34,815	\$ 45,795	\$ 1,399		\$ 121,009
Obligation line of credit	50,000								50,000
Accrued interest payable	673	251	473	879	5,610	2,862	120		10,868
Other liabilities	15,766		357		29	102	56	\$ (56)	16,254
Hedging derivative instruments	547								547
Total current liabilities	99,326	1,816	2,180	4,624	40,454	48,759	1,575	(56)	198,678
Non-current liabilities									
Non-current portion of long term debt, net	137,795	36,900	188,903	288,615	1,627,888	965,853	52,319		3,298,273
Long term- loan	16,363								16,363
Net pension and OPEB liability	58,820								58,820
Other liabilities	28,949				788				29,737
Escrowed funds payable	553,107		14		55				553,176
Hedging derivative instruments		10,791			3,588				14,379
Investment derivative instruments		22			23	2,631			2,676
Total non-current liabilities	795,034	47,713	188,917	288,615	1,632,342	968,484	52,319		3,973,424
Total liabilities	894,360	49,529	191,097	293,239	1,672,796	1,017,243	53,894	(56)	4,172,102
Deferred inflow of resources									
Pension and OPEB	8,587								8,587
Total deferred inflow of resources	8,587								8,587
Total liabilities and deferred inflow of resources	902,947	49,529	191,097	293,239	1,672,796	1,017,243	53,894	(56)	4,180,689
Commitments and contingencies									
Net position									
Restricted by bond resolutions		10,587	5,093	31,487	316,806	189,159	(344)		552,788
Restricted by contractual or statutory agreements	238,906								238,906
Unrestricted	549,751								549,751
Total net position	\$ 788,657	\$ 10,587	\$ 5,093	\$ 31,487	\$ 316,806	\$ 189,159	\$ (344)		\$ 1,341,445

Supplemental Schedule 7
 Massachusetts Housing Finance Agency and Affiliates
 Unaudited

COMBINING STATEMENTS OF REVENUES,
 EXPENSES, AND CHANGES IN NET POSITION

For the fiscal year ended:
 June 30, 2019

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	General Rental Development Bond Program	Multi-Family Housing Bond Program	Housing Bond Program	Single Family Housing Revenue Bond Program	Residential Mortgage Revenue Bond Program	Eliminations	Fiscal 2019
Operating revenues									
Interest on loans	\$ 13,027	\$ 2,986	\$ 8,296	\$ 13,886	\$ 76,107	\$ 15,066			\$ 129,368
Investment earnings:									
Interest income	14,387	362	169	573	8,253	28,981	\$ 1,756		54,481
Net increase (decrease) in fair value of investments	3,949	(1,151)			764	27,031	1,808		32,401
Fee income	78,117		98	490	2,512				81,217
Miscellaneous income	5,238				256	467		\$ (1,052)	4,909
Total operating revenues	114,718	2,197	8,563	14,949	87,892	71,545	3,564	(1,052)	302,376
Operating expenses									
Interest on bonds and notes, net of discount/premium	6,611	1,898	6,821	10,622	63,529	28,632	928		119,041
Financing costs	373		238		4,130	1,592			6,333
Administrative expenses	82,254	29	14	1	606	4,095	16		87,015
Miscellaneous expenses	1,858					130		(1,052)	936
Total operating expenses	91,096	1,927	7,073	10,623	68,265	34,449	944	(1,052)	213,325
Operating income before provision for (reduction to) loan losses	23,622	270	1,490	4,326	19,627	37,096	2,620		89,051
Provision for (reduction to) loan losses	(21,352)			(276)	(6,021)	56			(27,593)
Total Provision for (reduction to) loan losses	(21,352)			(276)	(6,021)	56			(27,593)
Operating income after provision for (reduction to) loan losses	44,974	270	1,490	4,602	25,648	37,040	2,620		116,644
Special Items		(1,764)							(1,764)
Change in net position	44,974	(1,494)	1,490	4,602	25,648	37,040	2,620		114,880
Interfund transfers	21,257	(2,220)	(3,018)	(3,013)	(15,791)	3,003	(218)		
Net position at the beginning of the fiscal year	722,426	14,301	6,621	29,898	306,949	149,116	(2,746)		1,226,565
Net position at the end of the fiscal year	\$ 788,657	\$ 10,587	\$ 5,093	\$ 31,487	\$ 316,806	\$ 189,159	\$ (344)		\$ 1,341,445

COMBINING STATEMENTS OF CASH FLOWS

For the fiscal year ended:
 June 30, 2019

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	General Rental Development Bond Program	Multi-Family Housing Bond Program	Housing Bond Program	Single Family Housing Revenue Bond Program	Residential Mortgage Revenue Bond Program	Eliminations	Fiscal 2019
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS									
Cash flows from operating activities:									
Collections on mortgage loans, construction loan repayments and loan sales	\$ 1,077,441	\$ 29,626	\$ 25,618	\$ 17,577	\$ 231,850	\$ 57,148		\$ 7,100	\$ 1,446,360
Loan advances to borrowers	(1,133,587)				(62,476)	(9,932)			(1,205,995)
Interest collections on construction loans	2,284								2,284
Fees collected	74,528			490	2,968				77,986
Cash payments to employees for services	(34,714)		98						(34,616)
Cash payments to other suppliers of goods and services	(36,975)	(28)	(73)	(1)	(759)	(4,049)	\$ (16)		(41,901)
Miscellaneous receipts (disbursements)	5,026	12	59		7			(7,100)	(1,996)
Transfer to escrows	(13,624)								(13,624)
Federal and state subsidy receipts	81,588								81,588
Federal and state subsidy disbursements	(80,060)								(80,060)
Escrow receipts, net	12,096								12,096
Net cash provided by (used for) operating activities	(45,997)	29,610	25,702	18,066	171,590	43,167	(16)		242,122
Cash flows from non-capital financing activities:									
Sale of bonds and notes and draw down on line of credit	98,003		23,675		226,158	150,118			497,954
Bond issuance / redemption costs	(363)		(238)		(4,130)	(1,691)			(6,422)
Retirement of bonds and notes and pay down on line of credit	(163,725)	(34,400)	(17,715)	(3,565)	(230,438)	(118,770)	(8,051)		(576,664)
Interest on bonds and notes	(6,571)	(2,006)	(6,843)	(10,631)	(63,865)	(31,082)	(1,545)		(122,543)
Fund transfers	61,862	(2,220)	(26,690)	(3,013)	(32,717)	3,003	(225)		
Net cash provided by (used for) non-capital financing activities	(10,794)	(38,626)	(27,811)	(17,209)	(104,992)	1,578	(9,821)		(207,675)
Cash flows from capital financing activities:									
Acquisition of capital assets	(3,832)								(3,832)
Net cash (used for) capital financing activities	(3,832)								(3,832)
Cash flows from investing activities:									
Purchase of investments	(79,229)	(7,380)			(254,897)	(265,985)			(607,491)
Proceeds from sales of investments	75,433	8,788	312		166,695	115,152	8,051		374,431
Investment earnings, net of rebate	13,670	400	169	557	6,404	27,952	1,779		50,931
Net cash provided by (used for) investing activities	9,874	1,808	481	557	(81,798)	(122,881)	9,830		(182,129)
Net increase (decrease) in cash and cash equivalents	(50,749)	(7,208)	(1,628)	1,414	(15,200)	(78,136)	(7)		(151,514)
Cash and cash equivalents at the beginning of the fiscal year	506,700	23,264	7,058	26,152	248,666	161,469	63		973,372
Cash and cash equivalents at end of the fiscal year	\$ 455,951	\$ 16,056	\$ 5,430	\$ 27,566	\$ 233,466	\$ 83,333	\$ 56		\$ 821,858

COMBINING STATEMENTS OF CASH FLOWS
 (continued)

For the fiscal year ended:
 June 30, 2019

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	General Rental Development Bond Program	Multi-Family Housing Bond Program	Housing Bond Program	Single Family Housing Revenue Bond Program	Residential Mortgage Revenue Bond Program	Eliminations	Fiscal 2019
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY (USED FOR) OPERATING ACTIVITIES									
Operating income	\$ 44,974	\$ 270	\$ 1,490	\$ 4,602	\$ 25,648	\$ 37,040	\$ 2,620		\$ 116,644
Adjustments to reconcile operating income to net cash provided by (used for) operating activities:									
Amortization of bond original discount (premium) and deferred issue costs, net					8	(2,748)	(599)		(3,339)
Depreciation and amortization	20,609								20,609
Provision for (reduction to) losses on loans, net	(21,352)			(276)	(6,021)	56			(27,593)
Loss on property dispositions	6								6
Recognition of fee income	(3,997)				(28)				(4,025)
Investment earnings	(14,387)	(362)	(169)	(573)	(8,253)	(28,981)	(1,756)		(54,481)
Change in fair value of investments	(3,949)	1,151			(764)	(27,031)	(1,808)		(32,401)
Interest expense on bonds and notes	6,611	1,898	6,821	10,622	63,521	31,380	1,527		122,380
Financing expenses	373		238		4,130	1,592			6,333
Changes in assets and liabilities:									
Decrease (increase) in loans and other receivables and mortgage-backed securities	(60,329)	26,477	17,766	3,677	92,377	31,550			111,518
Decrease (increase) in interest and fees receivable on loans	(148)	160	79	14	561	109			775
Decrease (increase) in interfund balances	(15)	16	(6)		(16)	21			
Decrease (increase) in other assets and other receivables	(28,330)				427	150			(27,753)
Increase (decrease) in accounts payable and other liabilities	13,937		(517)			29			13,449
Total adjustments	(90,971)	29,340	24,212	13,464	145,942	6,127	(2,636)		125,478
Net cash provided by (used for) operating activities	\$ (45,997)	\$ 29,610	\$ 25,702	\$ 18,066	\$ 171,590	\$ 43,167	\$ (16)		\$ 242,122

Supplemental Schedule 7
Massachusetts Housing Finance Agency and Affiliates
 Unaudited

COMBINING STATEMENTS OF NET POSITION
 June 30, 2018

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	General Rental Development Bond Program	Multi-Family Housing Bond Program	Housing Bond Program	Single Family Housing Revenue Bond Program	Residential Mortgage Revenue Bond Program	Eliminations	June 30, 2018
Assets									
Current assets									
Cash and cash equivalents	\$ 506,700	\$ 23,264	\$ 7,058	\$ 26,152	\$ 248,666	\$ 161,469	\$ 63		\$ 973,372
Investments	54,336				87,759	29,142	1,194		172,431
Interest and fees receivable on construction and mortgage loans, net	689	336	669	1,206	6,810	1,129			10,839
Current portion of loans receivable, net	123,868	2,887	2,507	3,597	30,162	11,914			174,935
Interfund accounts receivable (payable)	310	(16)	(10)			(284)			
Other assets	12,777	310	10	30	926	2,133	169	\$ (63)	16,292
Total current assets	698,680	26,781	10,234	30,985	374,323	205,503	1,426	(63)	1,347,869
Non-current assets									
Investments	120,596	3,736	431		33,137	636,635	58,396		852,931
Non-current portion of loans receivable, net	239,935	54,233	181,617	295,726	1,572,542	291,370			2,635,423
Escrowed funds	539,483				54				539,537
Investment derivative instruments		1,129			96				1,225
Other assets	53,002	1,715			588	1,391			56,696
Total non-current assets	953,016	60,813	182,048	295,726	1,606,417	929,396	58,396		4,085,812
Total assets	1,651,696	87,594	192,282	326,711	1,980,740	1,134,899	59,822	(63)	5,433,681
Deferred outflow of resources									
Pension and OPEB	17,233								17,233
Hedging derivative instruments	405	8,709			652				9,766
Total deferred outflow of resources	17,638	8,709			652				26,999
Total assets and deferred outflow of resources	\$ 1,669,334	\$ 96,303	\$ 192,282	\$ 326,711	\$ 1,981,392	\$ 1,134,899	\$ 59,822	\$ (63)	\$ 5,460,680
Liabilities									
Current liabilities									
Current portion of long term debt, net	\$ 113,725	\$ 2,525	\$ 1,275	\$ 3,565	\$ 40,290	\$ 67,005	\$ 1,194		\$ 229,579
Obligation line of credit	75,000								75,000
Accrued interest payable	631	428	494	888	5,917	2,522	138		11,018
Other liabilities	17,033		874		28	74	63	\$ (63)	18,009
Hedging derivative instruments	405								405
Total current liabilities	206,794	2,953	2,643	4,453	46,235	69,601	1,395	(63)	334,011
Non-current liabilities									
Non-current portion of long term debt, net	104,315	70,340	183,018	292,360	1,626,685	916,044	61,173		3,253,935
Long term- loan	9,180								9,180
Net pension and OPEB liability	45,933								45,933
Other liabilities	30,067				817				30,884
Escrowed funds payable	539,483				54				539,537
Hedging derivative instruments		8,709			652				9,361
Investment derivative instruments						138			138
Total non-current liabilities	728,978	79,049	183,018	292,360	1,628,208	916,182	61,173		3,888,968
Total liabilities	935,772	82,002	185,661	296,813	1,674,443	985,783	62,568	(63)	4,222,979
Deferred inflow of resources									
Pension and OPEB	11,136								11,136
Total deferred inflow of resources	11,136								11,136
Total liabilities and deferred inflow of resources	946,908	82,002	185,661	296,813	1,674,443	985,783	62,568	(63)	4,234,115
Commitments and contingencies									
Net position									
Restricted by bond resolutions		14,301	6,621	29,898	306,949	149,116	(2,746)		504,139
Restricted by contractual or statutory agreements	220,732								220,732
Unrestricted	501,694								501,694
Total net position	\$ 722,426	\$ 14,301	\$ 6,621	\$ 29,898	\$ 306,949	\$ 149,116	\$ (2,746)		\$ 1,226,565

Supplemental Schedule 7

Massachusetts Housing Finance Agency and Affiliates

Unaudited

COMBINING STATEMENTS OF REVENUES,
EXPENSES, AND

CHANGES IN NET POSITION

For the fiscal year ended:

June 30, 2018

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	General Rental Development Bond Program	Multi-Family Housing Bond Program	Housing Bond Program	Single Family Housing Revenue Bond Program	Residential Mortgage Revenue Bond Program	Eliminations	Fiscal 2018 (as restated)
Operating revenues									
Interest on loans	\$ 13,652	\$ 5,245	\$ 8,570	\$ 14,052	\$ 80,595	\$ 17,401			\$ 139,515
Investment earnings:									
Interest income	10,421	1,395	85	275	4,202	22,758	\$ 2,039		41,175
Net (decrease) in fair value of investments	(2,200)				(580)	(18,727)	(2,000)		(23,507)
Fee income	73,308			490	3,163				76,961
Miscellaneous income	5,568				6	736		\$ (1,261)	5,049
Total operating revenues	100,749	6,640	8,655	14,817	87,386	22,168	39	(1,261)	239,193
Operating expenses									
Interest on bonds and notes, net of discount/premium	6,477	3,987	6,880	10,722	65,234	27,862	1,194		122,356
Financing costs	761				5,324	2,268			8,353
Administrative expenses	79,971	30	15	2	660	3,380	15		84,073
Miscellaneous expenses	4,655					518		(1,261)	3,912
Total operating expenses	91,864	4,017	6,895	10,724	71,218	34,028	1,209	(1,261)	218,694
Operating income (loss) before provision for loan losses	8,885	2,623	1,760	4,093	16,168	(11,860)	(1,170)		20,499
Provision for loan losses	2,532			276	5,268	171			8,247
Total Provision for loan losses	2,532			276	5,268	171			8,247
Operating income (loss) after provision for loan losses	6,353	2,623	1,760	3,817	10,900	(12,031)	(1,170)		12,252
Special Items		(6,186)							(6,186)
Change in net position	6,353	(3,563)	1,760	3,817	10,900	(12,031)	(1,170)		6,066
Interfund transfers	19,967		(1,667)	(3,048)	(15,002)		(250)		
Net position at the beginning of the fiscal year	718,782	17,864	6,528	29,129	311,051	161,147	(1,326)		1,243,175
Cumulative effect of GASB 75 adjustment of beginning									
Net OPEB Liability	(22,676)								(22,676)
Net position at the beginning of the fiscal year, as restated	696,106	17,864	6,528	29,129	311,051	161,147	(1,326)		1,220,499
Net position at the end of the fiscal year	\$ 722,426	\$ 14,301	\$ 6,621	\$ 29,898	\$ 306,949	\$ 149,116	\$ (2,746)		\$ 1,226,565

Supplemental Schedule 7
 Massachusetts Housing Finance Agency and Affiliates
 Unaudited

COMBINING STATEMENTS OF CASH FLOWS

For the fiscal year ended:
 June 30, 2018

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	General Rental Development Bond Program	Multi-Family Housing Bond Program	Housing Bond Program	Single Family Housing Revenue Bond Program	Residential Mortgage Revenue Bond Program	Eliminations	Fiscal 2018
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS									
Cash flows from operating activities:									
Collections on mortgage loans, construction loan repayments and loan sales	\$ 915,780	\$ 25,308	\$ 10,967	\$ 17,576	\$ 261,735	\$ 74,966			\$ 1,306,332
Loan advances to borrowers	(919,120)				(138,231)	(3,564)			(1,060,915)
Interest collections on construction loans	3,210								3,210
Fees collected	71,739			490	3,760				75,989
Cash payments to employees for services	(34,851)								(34,851)
Cash payments to other suppliers of goods and services	(38,462)	(30)	(35)	(1)	(786)	(3,472)	\$ (15)		(42,801)
Miscellaneous receipts (disbursements)	(9,250)		33		54				(9,163)
Transfer to escrows	(32,704)								(32,704)
Federal and state subsidy receipts	80,256								80,256
Federal and state subsidy disbursements	(81,781)								(81,781)
Escrow receipts, net	34,228								34,228
Net cash provided by (used for) operating activities	(10,955)	25,278	10,965	18,065	126,532	67,930	(15)		237,800
Cash flows from non-capital financing activities:									
Sale of bonds and notes and draw down on line of credit	101,184				158,920	269,431			529,535
Bond issuance / redemption costs	(910)				(5,334)	(2,138)			(8,382)
Retirement of bonds and notes and pay down on line of credit	(61,965)	(11,285)	(3,086)	(3,400)	(161,655)	(204,075)	\$ (10,922)		(456,388)
Interest on bonds and notes	(6,375)	(4,680)	(6,880)	(10,730)	(66,397)	(30,213)	(1,805)		(127,080)
Fund transfers	29,998		(1,667)	(3,048)	(25,023)		(260)		
Net cash provided by (used for) non-capital financing activities	61,932	(15,965)	(11,633)	(17,178)	(99,489)	33,005	(12,987)		(62,315)
Cash flows from capital financing activities:									
Acquisition of capital assets	(2,014)								(2,014)
Net cash (used for) capital financing activities	(2,014)								(2,014)
Cash flows from investing activities:									
Purchase of investments	(123,099)	(5,446)	(1)		(80,342)	(253,602)			(462,490)
Proceeds from sales of investments	72,665	4,337	2		2,389	159,999	10,922		250,314
Investment earnings, net of rebate	9,331	164	80	255	3,632	22,294	2,070		37,826
Net cash provided by (used for) investing activities	(41,103)	(945)	81	255	(74,321)	(71,309)	12,992		(174,350)
Net increase (decrease) in cash and cash equivalents	7,860	8,368	(587)	1,142	(47,278)	29,626	(10)		(879)
Cash and cash equivalents at the beginning of the fiscal year	498,840	14,896	7,645	25,010	295,944	131,843	73		974,251
Cash and cash equivalents at end of the fiscal year	\$ 506,700	\$ 23,264	\$ 7,058	\$ 26,152	\$ 248,666	\$ 161,469	\$ 63		\$ 973,372

Supplemental Schedule 7

Massachusetts Housing Finance Agency and Affiliates

Unaudited

COMBINING STATEMENTS OF CASH FLOWS
(continued)

For the fiscal year ended:

June 30, 2018

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	General Rental Development Bond Program	Multi-Family Housing Bond Program	Housing Bond Program	Single Family Housing Revenue Bond Program	Residential Mortgage Revenue Bond Program	Eliminations	Fiscal 2018
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY (USED FOR) OPERATING ACTIVITIES									
Operating income (loss)	\$ 6,353	\$ 2,623	\$ 1,760	\$ 3,817	\$ 10,900	\$ (12,031)	\$ (1,170)		\$ 12,252
Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities:									
Amortization of bond original discount (premium) and deferred issue costs, net									
					7	(2,378)	(585)		(2,956)
Depreciation and amortization	17,026								17,026
Provision for losses on loans	2,532			276	5,268	171			8,247
Loss on property dispositions	129								129
Recognition of fee income	(3,573)				(86)				(3,659)
Investment earnings	(10,421)	(1,395)	(85)	(275)	(4,202)	(22,758)	(2,039)		(41,175)
Change in fair value of investments	2,200				580	18,727	2,000		23,507
Interest expense on bonds and notes	6,477	3,987	6,880	10,722	65,227	30,240	1,779		125,312
Financing expenses	761				5,324	2,268			8,353
Changes in assets and liabilities:									
Decrease (increase) in loans and other receivables and mortgage-backed securities									
	(21,567)	19,948	2,379	3,512	42,605	53,151			100,028
Decrease in interest and fees receivable on loans									
	96	115	10	13	226	183			643
Decrease (increase) in interfund balances									
	31					(31)			
Decrease (increase) in other assets and other receivables									
	(52,047)				676	314			(51,057)
Increase in accounts payable and other liabilities									
	41,048		21		7	74			41,150
Total adjustments	(17,308)	22,655	9,205	14,248	115,632	79,961	1,155		225,548
Net cash provided by (used for) operating activities	\$ (10,955)	\$ 25,278	\$ 10,965	\$ 18,065	\$ 126,532	\$ 67,930	\$ (15)		\$ 237,800