

## 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 2018.

In response to the Commonwealth's affordable housing challenges, we provided more than \$1.2 billion in new financing for home mortgages and for rental housing. Our portfolio of existing loans reached \$8.7 billion while our cumulative financing across the Commonwealth since making our first loan in 1970 reached nearly \$23 billion.

Our balance sheet is strong. Our Issuer Credit Ratings are Aa3 from Moody's Investors Service and AA- from S&P Global Ratings. Our financial strength is allowing us to generate additional resources to confront housing challenges including the need for workforce housing, expiring affordability restrictions, and down payment and closing cost assistance, to name just a few.

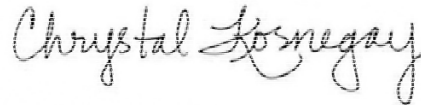
We know that lending is not enough to meet our mission. This is why we continued to offer thought-leadership and innovative programs to foster stronger communities, serve vulnerable populations and encourage economic opportunity.

It is because of our unwavering commitment to mission coupled with our financial strength that we were able to achieve these things while undergoing a leadership transition. We are honored and humbled to serve as the Commonwealth's affordable housing bank.

MassHousing's drive for excellence fuels our ability to create housing opportunities that help build a solid future for the Commonwealth.



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, 2018 and 2017, 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, 2018 and 2017, 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, 2018, 2017 and 2016 on pages 1 through 16 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 71 through 74 (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 21, 2018

# **Massachusetts Housing Finance Agency**

Annual Financial Report

June 30, 2018

Prepared by the

Office of the Financial Director

Charles C. Karimbakas, Financial Director

Stephen E. Vickery, Comptroller

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## **MANAGEMENT'S DISCUSSION AND ANALYSIS**

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### **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, 2018 (“FY 2018”) and June 30, 2017 (“FY 2017”), with selected comparative information for the fiscal year ended June 30, 2016 (“FY 2016”). 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 Supplementary 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 which 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 2018 and FY 2017, 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 Supplementary 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 2017			Change from FY 2016			
Jun. 30, 2018	\$	%	Jun. 30, 2017	\$	%	Jun. 30, 2016	
<b>Assets - Working Capital Fund and Affiliates (WCF)</b>							
Cash, cash equivalents, investments	\$ 682	\$ 57	9.1%	\$ 625	\$ 150	31.6%	\$ 475
Loans receivable (net)	364	9	2.5%	355	(10)	-2.7%	365
Other assets	606	35	6.1%	571	(44)	-7.2%	615
<b>Total Assets – WCF and Affiliates</b>	<b>\$ 1,652</b>	<b>\$ 101</b>	<b>6.5%</b>	<b>\$ 1,551</b>	<b>\$ 96</b>	<b>6.6%</b>	<b>\$ 1,455</b>
<b>Total Deferred Outflow of Resources - WCF and Affiliates</b>	<b>18</b>	<b>4</b>	<b>28.6%</b>	<b>14</b>	<b>\$ (7)</b>	<b>-33.3%</b>	<b>21</b>
<b>Total Assets and Deferred Outflow of Resources – WCF and Affiliates</b>	<b>\$ 1,670</b>	<b>\$ 105</b>	<b>6.7%</b>	<b>\$ 1,565</b>	<b>\$ 89</b>	<b>6.0%</b>	<b>\$ 1,476</b>
<b>Assets - Bond Programs</b>							
Cash, cash equivalents, investments	\$ 1,317	\$ 132	11.1%	\$ 1,185	\$ (92)	-7.2%	\$ 1,277
Loans receivable (net)	2,446	(118)	-4.6%	2,564	(67)	-2.5%	2,631
Derivative instruments	1	1		-	-		-
Other assets	18	(6)	-25.0%	24	(2)	-7.7%	26
<b>Total Assets – Bond Programs</b>	<b>\$ 3,782</b>	<b>\$ 9</b>	<b>0.2%</b>	<b>\$ 3,773</b>	<b>\$ (161)</b>	<b>-4.1%</b>	<b>\$ 3,934</b>
<b>Total Deferred Outflow of Resources - Bond Programs</b>	<b>9</b>	<b>(5)</b>	<b>-35.7%</b>	<b>14</b>	<b>\$ (8)</b>	<b>-36.4%</b>	<b>22</b>
<b>Total Assets and Deferred Outflow of Resources – Bond Programs</b>	<b>\$ 3,791</b>	<b>\$ 4</b>	<b>0.1%</b>	<b>\$ 3,787</b>	<b>\$ (169)</b>	<b>-4.3%</b>	<b>\$ 3,956</b>
<b>Total Assets and Deferred Outflow of Resources</b>	<b>\$ 5,461</b>	<b>\$ 110</b>	<b>2.1%</b>	<b>\$ 5,352</b>	<b>\$ (80)</b>	<b>-1.5%</b>	<b>\$ 5,432</b>
<b>Liabilities - WCF and Affiliates</b>							
Long term debt (net)	\$ 302	\$ 39	14.8%	\$ 263	\$ 78	42.2%	\$ 185
Derivative instruments	-	-		-	(2)	-100.0%	2
Other liabilities	634	52	8.9%	582	(42)	-6.7%	624
<b>Total Liabilities – WCF and Affiliates</b>	<b>\$ 936</b>	<b>\$ 91</b>	<b>10.8%</b>	<b>\$ 845</b>	<b>\$ 34</b>	<b>4.2%</b>	<b>\$ 811</b>
<b>Total Deferred Inflow of Resources - WCF and Affiliates</b>	<b>11</b>	<b>9</b>	<b>450.0%</b>	<b>2</b>	<b>\$ 2</b>		<b>-</b>
<b>Total Liabilities and Deferred Inflow of Resources – WCF and Affiliates</b>	<b>\$ 947</b>	<b>\$ 100</b>	<b>11.8%</b>	<b>\$ 847</b>	<b>\$ 36</b>	<b>4.4%</b>	<b>\$ 811</b>
<b>Liabilities – Bond Programs</b>							
Long term debt (net)	\$ 3,266	\$ 31	1.0%	\$ 3,235	\$ (134)	-4.0%	\$ 3,369
Derivative instruments	9	(5)	-35.7%	14	(8)	-36.4%	22
Other liabilities	12	(1)	-7.7%	13	(7)	-35.0%	20
<b>Total Liabilities – Bond Programs</b>	<b>\$ 3,287</b>	<b>\$ 25</b>	<b>0.8%</b>	<b>\$ 3,262</b>	<b>\$ (149)</b>	<b>-4.4%</b>	<b>\$ 3,411</b>
<b>Total Deferred Inflow of Resources - Bond Programs</b>	<b>-</b>	<b>-</b>		<b>-</b>	<b>\$ -</b>		<b>-</b>
<b>Total Liabilities and Deferred Inflow of Resources – Bond Programs</b>	<b>\$ 3,287</b>	<b>\$ 25</b>	<b>0.8%</b>	<b>\$ 3,262</b>	<b>\$ (149)</b>	<b>-4.4%</b>	<b>\$ 3,411</b>
<b>Total Liabilities and Deferred Inflow of Resources</b>	<b>\$ 4,234</b>	<b>\$ 125</b>	<b>3.0%</b>	<b>\$ 4,109</b>	<b>\$ (113)</b>	<b>-2.7%</b>	<b>\$ 4,222</b>
<b>Net Position – WCF and Affiliates</b>							
Restricted by contractual or statutory agreements	\$ 221	\$ 3	1.4%	\$ 218	\$ 12	5.8%	\$ 206
Unrestricted	501	-	0.0%	501	43	9.4%	458
<b>Total Net Position – WCF and Affiliates</b>	<b>\$ 722</b>	<b>\$ 3</b>	<b>0.4%</b>	<b>\$ 719</b>	<b>\$ 55</b>	<b>8.3%</b>	<b>\$ 664</b>
<b>Net Position – Bond Programs</b>							
Restricted by bond resolutions	\$ 504	\$ (20)	-3.8%	\$ 524	\$ (21)	-3.9%	\$ 545
<b>Total Net Position – Bond Programs</b>	<b>\$ 504</b>	<b>\$ (20)</b>	<b>-3.8%</b>	<b>\$ 524</b>	<b>\$ (21)</b>	<b>-3.9%</b>	<b>\$ 545</b>
<b>Total Net Position</b>							
Restricted by bond resolutions	\$ 505	\$ (19)	-3.6%	\$ 524	\$ (21)	-3.9%	\$ 545
Restricted by contractual or statutory agreements	221	3	1.4%	218	12	5.8%	206
Unrestricted	501	-	0.0%	501	43	9.4%	458
<b>Total Net Position</b>	<b>\$ 1,227</b>	<b>\$ (16)</b>	<b>-1.3%</b>	<b>\$ 1,243</b>	<b>\$ 34</b>	<b>2.8%</b>	<b>\$ 1,209</b>

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, 2018, 2017 and 2016 and the year-to-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 \$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. This can be compared with a decrease to \$974 million at June 30, 2017 from \$990 million at June 30, 2016, a decrease of approximately \$16 million or 2% for the year. There were no significant changes to Cash and Cash Equivalents in FY 2018 and FY 2017. Disclosure for Cash and Cash Equivalents is contained in Note C to the FY 2018 audited Annual Financial Report.

#### **Investments**

MassHousing's investments increased by approximately \$190 million, or 23%, to \$1.03 billion at June 30, 2018 from \$836 million at June 30, 2017. This can be compared with an increase of approximately \$74 million, or 10%, to \$836 million at June 30, 2017 from \$762 million at June 30, 2016. The increase in both years was largely the result of the purchase of U.S Treasury Notes and MBS, which are recorded as investments, as described below. Disclosure for Investments is contained in Note C to the financial statements.

At June 30, 2018, 2017 and 2016, MBS totaling approximately \$715 million, \$675 million and \$656 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, 2018, the fair value of these investments was less than its cost basis by approximately \$3 million. At June 30, 2017 and June 30, 2016, the fair value of these investments exceeded the cost basis by approximately \$18 million and \$38 million, respectively. 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 any gain or loss 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 \$2.81 billion at June 30, 2018 from \$2.92 billion at June 30, 2017, a decrease of approximately \$108 million or 4% for the year. This can be compared with a decrease to \$2.92 billion at June 30, 2017 from \$3 billion at June 30, 2016, a decrease of approximately \$77 million or 3%. 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, 2018, 2017 and 2016:



### ***Multifamily Loans***

MassHousing originated approximately \$675 million, \$729 million and \$783 million of multifamily loans in FY 2018, FY 2017 and FY 2016, respectively, as detailed in the table below:

#### **Multifamily Loan Originations**

(in millions)

<b>Year ended June 30</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Loans retained in Bond Resolutions or WCF	\$ 171.4	\$ 375.6	\$ 372.3
Loans sold to Federal Financing Bank	222.0	173.3	227.8
Loans securitized with GNMA and sold to Investors	257.0	144.3	183.2
Conduit Loans	24.8	35.8	-
	<b>\$ 675.2</b>	<b>\$ 729.0</b>	<b>\$ 783.3</b>

The total multifamily portfolio, net of allowances for uncollectible loans, decreased 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. This can be compared with an increase to \$2.51 billion at June 30, 2017 from \$2.47 billion at June 30, 2016, an increase of approximately \$32 million or 1%. 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. The increase in the mortgage loan portfolio in FY 2017 was primarily the result of a combination of a decrease in the allowance for uncollectible accounts and new lending activity, partially offset by the prepayment of multifamily loans.

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, 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 Net Operating Income of a few of the projects. At June 30, 2017, the total multifamily allowance for uncollectible amounts decreased to approximately \$225 million from approximately \$245 million at June 30, 2016. The decrease in the allowance for FY 2017 was mainly the result of improved financial and/or operating performance, specifically Net Operating Income of many of the projects subject to subordinated B Notes.

### ***Single-Family Loans***

The total single-family loan portfolio, net of adjustments for the allowances for uncollectible amounts, decreased 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. This can be compared with a decrease to \$412 million at June 30, 2017 from \$521 million at June 30, 2016, a decrease of approximately \$109 million, or 21% for the year after adjustments for the allowances for uncollectible amounts. Both the FY 2018 and FY 2017 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 fiscal years ended June 30, 2018, 2017 and 2016, including the purchases of loans and the sales of the loans, or loans wrapped by MBS, to Fannie Mae; J.P. Morgan Chase & Co ("JP Morgan"), the SFHRB Program, the WCF, Freddie Mac, and other loan sales. There have been no sales of loans wrapped by MBS to the RMRB Program during the last three years. MassHousing has retained the servicing rights for all loans sold or loans wrapped by MBS to Fannie Mae, JP Morgan, the SFHRB Program, the RMRB Program, and Freddie Mac.

**WCF Warehouse Loan Activity**

(in millions)

<b>Year ended June 30</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Loan beginning balance	\$ 44.9	\$ 89.3	\$ 71.1
Loan purchases	533.3	662.1	646.3
Loans sold to JPMorgan/Fannie Mae (including MBS)	(352.6)	(549.5)	(489.4)
Loans sold to SFHRB Program (including MBS)	(127.2)	(141.2)	(137.7)
Loans sold to Freddie Mac	(55.6)	(13.2)	-
Loans transferred to WCF	-	(1.8)	-
Other loan sales and principal receipts	(0.5)	(0.8)	(1.0)
<b>Ending balance</b>	<b>\$ 42.3</b>	<b>\$ 44.9</b>	<b>\$ 89.3</b>

MassHousing's Mortgage Service Center ("MSC"), which was established in 1996 within Home Ownership, services the Home Ownership loan portfolio. As of June 30, 2018, 2017 and 2016, the MSC serviced a portfolio with a principal balance of approximately \$3.8 billion for each of the three years, as detailed more fully for FY 2018 and FY 2017 in the table below:

**Home Ownership Servicing Portfolio**

(in millions)

<b>Year ended June 30</b>	<b>2018</b>	<b>2017</b>
Beginning Balance	\$ 3,792.1	\$ 3,803.8
New loans	536.5	665.0
Loans Paid in Full	(390.4)	(578.6)
Amortization and Curtailments	(89.7)	(87.0)
Foreclosures, Writeoffs and Adjustments	(6.1)	(11.1)
<b>Ending Balance</b>	<b>\$ 3,842.4</b>	<b>\$ 3,792.1</b>

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 \$5.2 million, \$4.9 million and \$7 million at June 30, 2018, 2017 and 2016,

respectively. The delinquency rates at June 30, 2018, 2017 and 2016 were 6.82%, 6.05% and 7.82%, respectively.

Certain single-family mortgage loans are reported net of allowances for uncollectible amounts. At June 30, 2018, the total single-family allowance for uncollectible amounts decreased to approximately \$3.4 million from \$3.5 million at June 30, 2017, a decrease of approximately \$84 thousand, or 2% for the year. This can be compared with a decrease to \$3.5 million at June 30, 2017 from \$4.1 million at June 30, 2016, a decrease of approximately \$628 thousand, or 15% for the year. Lower unemployment rates and improvement 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 2018 and FY 2017.

### **Total Assets**

MassHousing's combined Total Assets, consisting primarily of mortgage loans, increased 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. This can be compared with a decrease to \$5.32 billion at June 30, 2017 from \$5.39 billion at June 30, 2016, a decrease of approximately \$65 million or 1% for the year. There were no significant changes to Total Assets in FY 2018 or FY 2017.

### **Liabilities**

#### **Debt Payable**

MassHousing's total debt payable, which includes bonds, notes and other debt obligations, comprised approximately 85%, 85% and 84% of total liabilities at June 30, 2018, 2017 and 2016, 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 increased 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. This can be compared with a decrease to approximately \$3.5 billion at June 30, 2017 from \$3.55 billion at June 30, 2016, a decrease of approximately \$56 million or 2% for the year. 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. The reduction of total debt payable in FY 2017 was from the early redemption of debt, as a result of the prepayment of mortgages.

### Bond and Note Activity

MassHousing received approximately \$524 million, \$668 million and \$495 million of new bond and note debt in FY 2018, FY 2017 and FY 2016, 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>	<u>2018</u>		<u>2017</u>		<u>2016</u>	
	<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	15.8	4	66.3	5	72.7	7
General Rental Development Bonds ("GRDB")	-	-	-	-	33.3	1
Housing Bonds ("HB") and Notes	158.9	3	383.2	10	209.6	9
SFHRB	263.9	10	155.1	4	178.9	5
<b>Total New Debt Fundings</b>	<b>\$ 524.0</b>	<b>20</b>	<b>\$ 667.7</b>	<b>22</b>	<b>\$ 494.5</b>	<b>22</b>

MassHousing had unscheduled bond redemptions or defeasance of approximately \$336 million, \$590 million and \$414 million in FY 2018, FY 2017 and FY 2016, 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>	<u>2018</u>	<u>2017</u>	<u>2016</u>
WCF CLN	\$ 1.2	\$ 41.6	\$ 49.6
WCF Direct Purchase CLN	13.8	9.3	21.1
Rental Housing Mortgage Revenue Bonds ("RHMRB")	8.7	-	4.3
Multi-Family Development Bonds ("MFDB")	-	20.3	-
GRDB	2.0	11.7	29.2
HB	130.8	326.7	110.0
SFHRB	179.2	180.1	200.0
<b>Total Unscheduled Debt Redemptions/Defeasance</b>	<b>\$ 335.7</b>	<b>\$ 589.7</b>	<b>\$ 414.2</b>

### Total Liabilities

MassHousing's combined Total Liabilities, consisting primarily of bonds and notes, increased 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. This can be compared with a decrease to \$4.11 billion at June 30, 2017 from \$4.22 billion at June 30, 2016, a decrease of approximately \$115 million or 3% for the year. 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. The decrease in Total Liabilities in FY 2017 was primarily the result of a decrease in debt payable.

## Total Net Position

### Changes in Net Position

Total net position decreased to approximately \$1.23 billion at June 30, 2018 from \$1.24 billion at June 30, 2017, a decrease of approximately \$17 million, or 1%. This can be compared with an increase to \$1.24 billion at June 30, 2017 from \$1.21 billion at June 30, 2016, an increase of approximately \$33 million, or 3%. 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 \$4 million or 1%, to approximately \$722 million at June 30, 2018 from approximately \$719 million at June 30, 2017. This can be compared with an increase to \$719 million at June 30, 2017 from \$665 million at June 30, 2016, an increase of approximately \$54 million, or 8%.

The restricted portion of net position increased to \$221 million at June 30, 2018 from \$218 million at June 30, 2017, an increase of approximately \$2 million, or 1%. This can be compared with an increase in the restricted portion to \$218 million at June 30, 2017 from \$206 million at June 30, 2016, an increase of approximately \$12 million, or 6%. The increase in the restricted net position in FY 2018 was primarily the result of an increase in Mortgage Insurance Fund Net Position. The increase in the restricted net position in FY 2017 was primarily the result of the \$11.9 million Federal Home Loan Bank of Boston collateral requirement for "Helping to House New England" program loans. 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, 2018, 2017 and 2016, respectively, and the amount of those restrictions (in thousands):

<b>WCF and Affiliates Restricted Net Position</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Federal Home Loan Bank of Boston Collateral (Helping to House New England)	\$ 11,017	\$ 11,854	\$ -
MassHousing Mortgage Insurance Funds (MIF)	104,558	101,498	98,214
Minimum net position covenants	100,000	100,000	100,000
Restricted by Note Resolutions	1,361	1,112	4,215
Single family co-insurance	3,796	3,796	3,796
<b>Total WCF and Affiliates Restricted Net Position</b>	<b>\$ 220,732</b>	<b>\$ 218,260</b>	<b>\$ 206,225</b>

The unrestricted portion of net position that may be used to finance day-to-day operations increased by approximately \$1 million or less than 1%, to approximately \$502 million at June 30, 2018 from approximately \$501 million at June 30, 2017. This can be compared with an increase in the unrestricted portion to \$501 million at June 30, 2017 from \$458 million at June 30, 2016, an increase of approximately \$42 million, or 9%. The following table presents the WCF's unrestricted net position at June 30, 2018, 2017 and 2016, 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):

<b><u>WCF and Affiliates Unrestricted Designations Net Position</u></b>	<b><u>2018</u></b>	<b><u>2017</u></b>	<b><u>2016</u></b>
Designation of Equity of Affiliates (Center for Community Recovery Initiatives and Property Acquisition and Disposition Corporation)	\$ 1,536	\$ 1,753	\$ 1,875
Funding for loan purchases and loan advances and unrestricted net position requirements	202,073	213,785	177,720
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	58,363	62,058	57,616
Opportunity Fund	224,312	207,516	205,811
<b>Total WCF and Affiliates Unrestricted Designations of Net Position</b>	<b>501,694</b>	<b>500,522</b>	<b>458,432</b>
<b>Total WCF and Affiliates Restricted and Unrestricted Designations Net Position</b>	<b>\$ 722,426</b>	<b>\$ 718,782</b>	<b>\$ 664,657</b>

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 and other items, 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 Note B, K, and M of the financial statements, and a \$2 million increase to the provision for loan losses and other items. The increase in total net position of the WCF and Affiliates for the year ended June 30, 2017 was primarily the result of three factors: operating income of \$5 million before provision for loan losses and other items, a reduction to the provision for loan losses and other items of \$17 million, and a net transfer of net position from bond programs of \$32 million.

### **Bond-Funded Programs**

The net position of all bond-funded programs (all of which is restricted) decreased by approximately \$20 million on a combined basis, or 4%, to \$504 million at June 30, 2018 from \$524 million at June 30, 2017. This can be compared with a decrease to \$524 million at June 30, 2017 from \$545 million at June 30, 2016, a decrease of approximately \$21 million on a combined basis, or 4%. 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 and other items of \$12 million. The decrease in net position of the bond-funded programs for the year ended June 30, 2017 was primarily the result of three factors: net transfers to the WCF of \$32 million, partially offset by net operating income of \$7 million before provision for loan losses, and a \$4 million reduction to the provision for loan losses.

## 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 2017			Change from 2016			
Fiscal 2018	\$	%	Fiscal 2017	\$	%	Fiscal 2016	
<b>Operating Revenues – WCF and Affiliates</b>							
Interest on loans	\$ 14	\$ 1 7.7%	\$ 13	\$ (2) -13.3%		\$ 15	
Investment earnings	8	4 100.0%	4	(1) -20.0%		5	
Fee income	73	1 1.4%	72	- 0.0%		72	
Miscellaneous income	4	1 33.3%	3	(5) -62.5%		8	
<b>Total Revenues - WCF and Affiliates</b>	<b>\$ 99</b>	<b>\$ 7 7.6%</b>	<b>\$ 92</b>	<b>\$ (8) -8.0%</b>		<b>\$ 100</b>	
<b>Operating Revenues – Bond Programs</b>							
Interest on loans	\$ 126	\$ (9) -6.7%	\$ 135	\$ (14) -9.4%		\$ 149	
Investment earnings	10	5 100.0%	5	(35) -87.5%		40	
Fee income	4	1 33.3%	3	(1) -25.0%		4	
Miscellaneous income	-	(1) -100.0%	1	4 -133.3%		(3)	
<b>Total Revenues - Bond Programs</b>	<b>\$ 140</b>	<b>\$ (4) -2.8%</b>	<b>\$ 144</b>	<b>\$ (46) -24.2%</b>		<b>\$ 190</b>	
<b>Total Revenues</b>	<b>\$ 239</b>	<b>\$ 3 1.3%</b>	<b>\$ 236</b>	<b>\$ (54) -18.6%</b>		<b>\$ 290</b>	
<b>Operating Expenses – WCF and Affiliates</b>							
Interest on bonds and notes, net of discount/premium	\$ 6	\$ 1 20.0%	\$ 5	\$ - 0.0%		\$ 5	
Administrative expenses	80	- 0.0%	80	4 5.3%		76	
Miscellaneous expenses	5	3 150.0%	2	(1) -33.3%		3	
<b>Total Expenses - WCF and Affiliates</b>	<b>\$ 91</b>	<b>\$ 4 4.6%</b>	<b>\$ 87</b>	<b>\$ 3 3.6%</b>		<b>\$ 84</b>	
<b>Operating Expenses – Bond Programs</b>							
Interest on bonds and notes, net of discount/premium	\$ 116	\$ (8) -6.5%	\$ 124	\$ (4) -3.1%		\$ 128	
Administrative expenses	4	- 0.0%	4	(2) -33.3%		6	
Miscellaneous expenses	7	(3) -30.0%	10	(2) -16.7%		12	
<b>Total Expenses - Bond Programs</b>	<b>\$ 127</b>	<b>\$ (11) -8.0%</b>	<b>\$ 138</b>	<b>\$ (8) -5.5%</b>		<b>\$ 146</b>	
<b>Total Expenses</b>	<b>\$ 218</b>	<b>\$ (7) -3.1%</b>	<b>\$ 225</b>	<b>\$ (5) -2.2%</b>		<b>\$ 230</b>	
Operating income before provision for loan losses and other items - WCF and Affiliates	\$ 8	\$ 3 60.0%	\$ 5	\$ (11) -68.8%		\$ 16	
Operating income before provision for loan losses and other items - Bond Programs	\$ 13	\$ 7 116.7%	\$ 6	\$ (38) -86.4%		\$ 44	
Total operating income before provision for loan losses and other items	\$ 21	\$ 10 90.9%	\$ 11	\$ (49) -81.7%		\$ 60	
Provision for (reduction to) loan losses	\$ 8	\$ 29 -138.1%	\$ (21)	\$ (15) 250.0%		\$ (6)	
Other items	-	1 -100.0%	(1)	(1)		-	
Total provision for (reduction to) loan losses and other items	\$ 8	\$ 30 -136.4%	\$ (22)	\$ (16) 266.7%		\$ (6)	
<b>Total operating income (loss)</b>	<b>\$ 13</b>	<b>\$ (20) -60.6%</b>	<b>\$ 33</b>	<b>\$ (34) -50.7%</b>		<b>\$ 67</b>	
Special Items	\$ (6)	\$ (6)	\$ -	\$ -		\$ -	
Changes in net position	\$ 7	\$ (26) -78.8%	\$ 33	\$ (34) -50.7%		\$ 67	
Cumulative effect of GASB 75 adjustment of beginning Net OPEB Liability	\$ (23)	\$ (23)	\$ -	\$ -		\$ -	
Net position at beginning of the fiscal year	\$ 1,243	\$ 33 2.7%	\$ 1,210	\$ 68 6.0%		\$ 1,142	
<b>Total net position at end of the fiscal year</b>	<b>\$ 1,227</b>	<b>\$ (16) -1.3%</b>	<b>\$ 1,243</b>	<b>\$ 34 2.8%</b>		<b>\$ 1,209</b>	

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, 2018, 2017 and 2016, and the year-to-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 represents the primary source of funding for interest payments due on MassHousing's bond and note obligations. Interest on loans for the years ended June 30, 2018 and June 30, 2017 decreased as compared to the previous years. The decrease for the year ended June 30, 2018 was 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. The decrease for the year ended June 30, 2017 was due to the prepayment of several multifamily loans, fewer single-family loans due to the conversion of MassHousing's Home Ownership Program to an MBS program, and a lower interest rate environment on newer loans.

#### **Investment Earnings**

Investment Earnings consist of interest income and increases or decreases in fair value of investments. 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. Investment Earnings for the year ended June 30, 2017 decreased as compared with FY 2016 due to a decrease in the total fair value of securities in the prior year.

#### **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, 2018 as compared with FY 2017 increased due to higher multifamily premiums on loans sold and higher servicing fees, partially offset by lower Section 8 recap fees. Fee Income for the year ended June 30, 2017 as compared with FY 2016 was flat.

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. MassHousing is currently acting as PBCA administrator under a contract extended through December 31, 2018, but which may be terminated by HUD upon 120 days' written notice. HUD cancelled its latest solicitation for PBCA services earlier in FY 2018, and stated that future requirements will be initiated through a new solicitation. It is anticipated that a new solicitation may be issued within the next several months.



**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 year ended June 30, 2018 as compared with FY 2017 was flat. Miscellaneous income for the year ended June 30, 2017 as compared with FY 2016 decreased due to fees recognized in FY 2016 from multifamily refinancings.

**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, 2018 and June 30, 2017, as compared with their corresponding prior years, decreased primarily due to savings from bond refundings.

**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 year ended June 30, 2018 as compared FY 2017 decreased due to lower bond issuances. Financing Costs for the year ended June 30, 2017 as compared with FY 2016 was flat.

**Administrative Expenses**

Administrative Expenses for the year ended June 30, 2018 as compared with FY 2017 were flat. Administrative Expenses for the year ended June 30, 2017 as compared with FY 2016 increased due to higher personnel costs.

**Miscellaneous Expenses**

Miscellaneous Expenses primarily include grant expenditures, MIF insurance claims paid, losses on property dispositions, and various other items. Miscellaneous Expenses for the year ended June 30, 2018 as compared with FY 2017 increased due to increased grant expenditures. Miscellaneous Expenses for the year ended June 30, 2017 as compared with FY 2016 decreased due to a reduction in MIF insurance claims paid.

**Adjusted Operating Income**

Adjusted Operating Income is a non-authoritative measure, defined as Change in Net Position before adjusting for the provision for loan losses and other items, Special Items, and net changes in the fair value of investments. Adjusted Operating Income increased by approximately \$11 million, or 33%, to \$44 million for the year ended June 30, 2018 from \$33 million in FY 2017. This can be compared with a decrease to \$33 million for the year ended June 30, 2017 from \$47 million in FY 2016, a decrease of \$14 million or 30%. 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 lower Interest on Loans. Adjusted Operating Income for the year ended June 30, 2017 decreased as a result of lower Interest on Loans and higher Administrative Expenses, partially offset by lower Interest Expense on Bonds and Notes and higher Investment Earnings.

## Provision for Loan Losses

The Provision for Loan Losses for year ended June 30, 2018 as compared with FY 2017 increased, mainly due to the result of reduced operating performance, specifically Net Operating Income of a few projects. The Provision for Loan Losses for year ended June 30, 2017 as compared with FY 2016 decreased, mainly due to the result of improved financial and/or operating performance, specifically Net Operating Income of many of the projects subject to subordinated B Notes.

## Special Items

The Agency recorded a \$6.2 million Special Item to the financial statements related to the termination of an existing interest rate swap agreement, 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)	2018	2017	2016
Net insurance premium revenue	\$ 5,119	\$ 5,266	\$ 5,309
Investment Earnings	1,705	1,329	1,189
Net increase (decrease) in fair value of investments	(1,529)	(1,348)	395
Underwriting and Administrative expenses	(1,785)	(1,631)	(1,473)
Claims expense	(266)	(560)	(791)
Reduction to (provision for) allowance for potential claims	(184)	228	145
<b>Operating Income</b>	<b>\$ 3,060</b>	<b>\$ 3,284</b>	<b>\$ 4,774</b>

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 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.

On May 31, 2018, Massachusetts Governor Charlie Baker signed into law *An Act Financing the Production and Preservation of Housing for Low and Moderate Income Residents*. This bill ensures long-term support for comprehensive efforts to increase the production of affordable housing, diversify the state's housing portfolio, modernize public housing, preserve the affordability of existing housing and invest in new, innovative solutions to address Massachusetts' rising demand for housing. Within the bill, MassHousing has been authorized to provide the following services in or for any state (or the District of Columbia): (1) contract administration in connection with any HUD multifamily rental subsidy program; (2) loan servicing for one-to four- family residential mortgage loans, provided the majority of loans serviced are secured by mortgages on property located in Massachusetts; and (3) loan products and services related to residential mortgage loans in partnership with governmental or quasi-governmental agencies in any state (or the District of Columbia).

**COMBINED STATEMENTS OF NET POSITION**

June 30, 2018 and 2017

**In thousands**

	June 30, 2018	June 30, 2017
<b>Assets</b>		
<b>Current assets</b>		
Cash and cash equivalents (Notes C & N)	\$ 973,372	\$ 974,251
Investments (Notes C & N)	172,431	46,161
Interest and fees receivable on construction and mortgage loans, net (Note D)	10,839	11,481
Current portion of loans receivable, net (Note D)	174,935	183,551
Other assets (Note F)	16,292	11,356
Total current assets	<b>1,347,869</b>	<b>1,226,800</b>
<b>Non-current assets</b>		
Investments (Notes C & N)	852,931	789,618
Non-current portion of loans receivable, net (Notes D & E)	2,635,423	2,735,107
Escrowed funds (Note G)	539,537	506,859
Investment derivative instruments (Note I)	1,225	135
Other assets (Note F)	56,696	65,447
Total non-current assets	<b>4,085,812</b>	<b>4,097,166</b>
Total assets	<b>5,433,681</b>	<b>5,323,966</b>
<b>Deferred outflow of resources</b>		
Pension and OPEB (Note M)	17,233	14,237
Hedging derivative instruments (Note I)	9,766	13,925
Total deferred outflow of resources	<b>26,999</b>	<b>28,162</b>
Total assets and deferred outflow of resources	<b>\$ 5,460,680</b>	<b>\$ 5,352,128</b>
<b>Liabilities</b>		
<b>Current liabilities</b>		
Current portion of long term debt, net (Note H)	\$ 229,579	\$ 155,122
Obligation line of credit (Note H)	75,000	75,000
Accrued interest payable	11,018	12,595
Other liabilities (Note N)	18,009	13,376
Hedging derivative instruments (Note I)	405	6
Total current liabilities	<b>334,011</b>	<b>256,099</b>
<b>Non-current liabilities</b>		
Non-current portion of long term debt, net (Note H)	3,253,935	3,258,201
Long term- loan (Note H)	9,180	9,180
Net pension and OPEB liability (Note M)	45,933	30,224
Other liabilities (Note N)	30,884	32,599
Escrowed funds payable (Note G)	539,537	506,859
Hedging derivative instruments (Note I)	9,361	13,919
Investment derivative instruments (Note I)	138	-
Total non-current liabilities	<b>3,888,968</b>	<b>3,850,982</b>
Total liabilities	<b>4,222,979</b>	<b>4,107,081</b>
<b>Deferred inflow of resources</b>		
Pension and OPEB (Note M)	11,136	1,872
Total deferred inflow of resources	<b>11,136</b>	<b>1,872</b>
Total liabilities and deferred inflow of resources	<b>4,234,115</b>	<b>4,108,953</b>
<b>Commitments and contingencies (Note N)</b>		
<b>Net position (Notes A &amp; K)</b>		
Restricted by bond resolutions	504,139	524,393
Restricted by contractual or statutory agreements	220,732	218,260
Unrestricted	501,694	500,522
Total net position	<b>\$ 1,226,565</b>	<b>\$ 1,243,175</b>

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

For the fiscal years ended: June 30, 2018 and 2017

In thousands	Fiscal Year Ended	
	June 30, 2018	June 30, 2017
<b>Operating revenues</b>		
Interest on loans (Notes B & D)	\$ 139,515	\$ 148,250
Investment earnings: (Notes B & C)		
Interest income	41,175	30,607
Net (decrease) in fair value of investments	(23,507)	(21,550)
Fee income (Note B)	76,961	75,465
Miscellaneous income (Note B)	5,049	4,152
<b>Total operating revenues</b>	<b>239,193</b>	<b>236,924</b>
<b>Operating expenses</b>		
Interest on bonds and notes, net of discount/premium (Notes B & H)	122,356	128,742
Financing costs	8,353	9,859
Administrative expenses	84,073	84,390
Miscellaneous expenses (Note B)	3,912	2,270
<b>Total operating expenses</b>	<b>218,694</b>	<b>225,261</b>
<b>Operating income before provision for (reduction to) loan losses and other items</b>	<b>20,499</b>	<b>11,663</b>
Provision for (reduction to) loan losses (Notes B & D)	8,247	(20,570)
Other items, net (Note F)	-	(1,087)
<b>Total provision for (reduction to) loan losses and other items</b>	<b>8,247</b>	<b>(21,657)</b>
<b>Operating income after provision for (reduction to) loan losses and other items</b>	<b>12,252</b>	<b>33,320</b>
<b>Special Items (Note I)</b>	(6,186)	-
<b>Change in net position</b>	<b>6,066</b>	<b>33,320</b>
Net position at the beginning of the fiscal year	1,243,175	1,209,855
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	1,220,499	1,209,855
<b>Net position at the end of the fiscal year</b>	<b>\$ 1,226,565</b>	<b>\$ 1,243,175</b>

**COMBINED STATEMENTS OF CASH FLOWS**

For the fiscal years ended: June 30, 2018 and 2017

In thousands	Fiscal Year Ended	
	June 30, 2018	June 30, 2017
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>		
<b>Cash flows from operating activities:</b>		
Collections on mortgage loans, construction loan repayments and loan sales	\$ 1,306,332	\$ 1,402,389
Loan advances to borrowers	(1,060,915)	(1,157,555)
Interest collections on construction loans	3,210	2,758
Fees collected	75,989	78,131
Cash payments to employees for services	(34,851)	(33,377)
Cash payments to other suppliers of goods and services	(42,801)	(41,877)
Miscellaneous disbursements	(9,163)	(6,787)
Transfer from (to) escrows	(32,704)	40,851
Federal and state subsidy receipts	80,256	104,700
Federal and state subsidy disbursements	(81,781)	(116,590)
Escrow receipts (disbursements), net	34,228	(28,961)
Net cash provided by operating activities	<b>237,800</b>	<b>243,682</b>
<b>Cash flows from non-capital financing activities:</b>		
Sale of bonds and notes and draw down on line of credit	529,535	680,883
Bond issuance / redemption costs	(8,382)	(8,507)
Retirement of bonds and notes and pay down on line of credit	(456,388)	(734,631)
Interest on bonds and notes	(127,080)	(131,558)
Net cash (used for) non-capital financing activities	<b>(62,315)</b>	<b>(193,813)</b>
<b>Cash flows from capital financing activities:</b>		
Acquisition of capital assets	(2,014)	(50)
Net cash (used for) capital financing activities	<b>(2,014)</b>	<b>(50)</b>
<b>Cash flows from investing activities:</b>		
Purchase of investments	(462,490)	(225,993)
Proceeds from sales of investments	250,314	130,429
Investment earnings, net of rebate	37,826	30,177
Net cash (used for) investing activities	<b>(174,350)</b>	<b>(65,387)</b>
Net (decrease) in cash and cash equivalents	(879)	(15,568)
Cash and cash equivalents at the beginning of the fiscal year	974,251	989,819
Cash and cash equivalents at end of the fiscal year	<b>\$ 973,372</b>	<b>\$ 974,251</b>

**COMBINED STATEMENTS OF CASH FLOWS (continued)**

For the fiscal years ended: June 30, 2018 and 2017

In thousands	Fiscal Year Ended	
	June 30, 2018	June 30, 2017
<b>RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES</b>		
<b>Operating income</b>	<b>\$ 12,252</b>	<b>\$ 33,320</b>
Adjustments to reconcile operating income to net cash provided by operating activities:		
Amortization of bond original discount (premium) and deferred issue costs, net	(2,956)	(2,490)
Depreciation and amortization	17,026	7,907
Provision for (reduction to) losses on loans and other items, net	8,247	(21,657)
Loss on property dispositions	129	126
Recognition of fee income	(3,659)	(3,237)
Investment earnings	(41,175)	(30,607)
Change in fair value of investments	23,507	21,550
Interest expense on bonds and notes	125,312	131,231
Financing expenses	8,353	9,860
Changes in assets and liabilities		
Decrease in loans and other receivables and mortgage-backed securities	100,028	97,623
Decrease in interest and fees receivable on loans	643	1,028
Decrease (increase) in other assets and other receivables	(51,057)	26,345
Increase (decrease) in accounts payable and other liabilities	41,150	(27,317)
<b>Total adjustments</b>	<b>225,548</b>	<b>210,362</b>
<b>Net cash provided by operating activities</b>	<b>\$ 237,800</b>	<b>\$ 243,682</b>

**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 initially funds its loan programs through the sale of bonds and notes to private investors.

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 2018 and 2017.

**(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) Multi-Family Development Revenue Bond Program**

The Multi-Family Development Revenue Bond Program was established to finance a mortgage loan for the multifamily residential development known as Princeton Crossing. The bonds were secured by a loan and benefitted from a Fannie Mae credit and liquidity facility.

On September 15, 2016, MassHousing used proceeds from mortgage loan prepayments and other available funds to defease and redeem all bonds outstanding under the Multi-Family Development Revenue Bond Program, totaling \$20.3 million. All remaining assets and liabilities of the Multi-Family Development Revenue Bond Program were transferred to the WCF.

(c) **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.

(d) **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.

(e) **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 2018 and 2017.

(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 program and affiliate 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 the WCF's. 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 2018 and 2017.

### **Mortgage Loans**

Multifamily and single-family mortgage loans are primarily recorded at cost, or in certain instances in the case of 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 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. Most interest rate swaps are effective hedges and are presented as hedging derivative instruments on the Statements of Net Position. Some recent agreements, however, are ineffective hedges because the terms of the agreement are not consistent with the hedged item. 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 2018 and 2017, 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 to Note K and Note M for further details of GASB 75.

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 periods

beginning after December 15, 2018, but earlier application is encouraged. The Agency is currently assessing the impact of GASB 84 and the implementation issues.

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 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 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 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”). The objective of this Statement is to improve the information that is disclosed in notes to financial statements related to debt, including direct borrowings and direct placements. This Statement also clarifies which liabilities should be included when disclosing information related to debt. The effective date of this standard is for periods beginning after June 15, 2018, but earlier application is encouraged. The Agency is currently assessing the impact of GASB 88 and the implementation issues.

In June 2018, GASB approved Statement No. 89, “Accounting for Interest Cost Incurred before the End of a Construction Period” (“GASB 89”). The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period. The effective date of this standard is for periods beginning after December 15, 2019, but earlier application is encouraged. The Agency is currently assessing the impact of GASB 89 and the implementation issues.



In August 2018, GASB approved Statement No. 90, "Majority Equity Interests" ("GASB 90"). The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. Earlier application is encouraged. The Agency is currently assessing the impact of GASB 90 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, 2018 and 2017, MassHousing had the following investments and cash equivalents by type and by maturities with credit ratings when available (in thousands):

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
Government Sponsored Enterprises (GSEs)	747,152	13,785	\$ 36,926	\$ 8,082	\$ 688,359	Aaa
U.S. Treasury Notes	240,872	146,448	94,424			AA+
Guaranteed Investment Contracts (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+
<b>Total Investments and Cash Equivalents</b>	<b>\$ 1,969,755</b>	<b>\$ 1,116,824</b>	<b>\$ 152,323</b>	<b>\$ 8,513</b>	<b>\$ 692,095</b>	

June 30, 2017	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	\$ 969,405	\$ 969,405				N/A to AAA
GSEs	674,989	12,899			\$ 662,090	Aaa
U.S. Treasury Notes	145,198	33,262	\$ 111,936			AA+
GICs	15,592			\$ 12,965	2,627	N/A
<b>Total Investments and Cash Equivalents</b>	<b>\$ 1,805,184</b>	<b>\$ 1,015,566</b>	<b>\$ 111,936</b>	<b>\$ 12,965</b>	<b>\$ 664,717</b>	

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, 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. For the fiscal year ended June 30, 2017, the total cash equivalents and investments from the bond programs included in the table were \$473.7 million and \$709.6 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, Government Sponsored Enterprises ("GSEs"), 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, 2018 and 2017 (in thousands):

	June 30, 2018		June 30, 2017	
	% of Total		% of Total	
	<u>Investments</u>	<u>Investments</u>	<u>Investments</u>	<u>Investments</u>
<b><u>Rental Housing Mortgage Revenue Bond Program</u></b>				
NATIXIS Funding Corp. (guaranteed by Caisse de Depots et Consignations)	\$ 3,736	100%	\$ 2,627	100%
<b><u>General Rental Development Bond Program</u></b>				
AIG Matched Funding Corp. (agreement is collateralized)	431	100%	431	100%
<b><u>Housing Bond Program</u></b>				
Berkshire Hathaway Inc.	12,534	10%	12,534	29%

## Cash Deposits

MassHousing's cash deposits per the bank were approximately \$34.7 million and \$12.1 million at June 30, 2018 and 2017, respectively. Of those amounts, \$1.8 million and \$2.2 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 \$32.9 million and \$9.9 million, respectively, were not insured or collateralized.

Cash balances reflected on the combining Statements of Net Position were approximately \$28.9 million and \$4.8 million at June 30, 2018 and 2017, respectively. The difference between the bank balances and the carrying amounts represents deposits in transit net of, outstanding checks and other transaction 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, 2018 and June 30, 2017:

- U.S. Treasury Notes purchased with an initial maturity of more than one year are valued using quoted market prices (Level 1 inputs)
- U.S. Treasury Notes 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, 2018 and 2017:

**Investment and Derivative Instruments Measured at Fair Value**

(in thousands)

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

**Investments and Derivative Instruments Measured at Fair Value**

(in thousands)

	June 30, 2017	Quoted Prices in Active Markets <u>06/30/17</u> <u>(Level 1)</u>	Significant Other Observable Inputs <u>(Level 2)</u>	Significant Unobservable Inputs <u>(Level 3)</u>
<b>Investments by fair value level</b>				
<b>Debt securities</b>				
GSEs	\$ 674,989	\$ 674,989		
U.S. Treasury Notes	145,198	145,198		
<b>Total Debt Securities</b>	<b>\$ 145,198</b>	<b>\$ 145,198</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Investment derivative instruments</b>				
Interest Rate Cap Agreement	\$ 135		\$ 135	
Interest Rate Swaps	(13,919)		(13,919)	
MBS Forward Contracts	(6)	\$ (6)		
<b>Total Derivative Instruments</b>	<b>\$ (13,790)</b>	<b>\$ (6)</b>	<b>\$ (13,784)</b>	<b>\$ -</b>

**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.

<b>6/30/2018 (in thousands)</b>	<b>Mortgage Obligation</b>	<b>Unamortized Prem./Disc. Loans</b>	<b>Loan Loss Reserve</b>	<b>Total</b>
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>
<b>Totals</b>	<b><u>\$ 3,041,631</u></b>	<b><u>\$ 771</u></b>	<b><u>\$ (232,045)</u></b>	<b><u>\$ 2,810,358</u></b>

<b>6/30/2017 (in thousands)</b>	<b>Mortgage Obligation</b>	<b>Unamortized Prem./Disc. Loans</b>	<b>Loan Loss Reserve</b>	<b>Total</b>
WCF - Multifamily	\$ 502,993	\$ -	\$ (203,814)	\$ 299,179
RHMRB Program	77,067	-	-	77,067
GRDB Program	186,932	2	(430)	186,504
MFHB Program	304,060	-	(950)	303,110
HB Program	1,660,572	-	(20,014)	1,640,558
Subtotal Multifamily	<u>\$ 2,731,624</u>	<u>\$ 2</u>	<u>\$ (225,208)</u>	<u>\$ 2,506,418</u>
WCF - Single-family	\$ 54,699	\$ 1,170	\$ (235)	\$ 55,634
SFHRB Program	359,821	-	(3,215)	356,606
Subtotal Single-family	<u>\$ 414,520</u>	<u>\$ 1,170</u>	<u>\$ (3,450)</u>	<u>\$ 412,240</u>
<b>Totals</b>	<b><u>\$ 3,146,144</u></b>	<b><u>\$ 1,172</u></b>	<b><u>\$ (228,658)</u></b>	<b><u>\$ 2,918,658</u></b>

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

Included in the SFHRB Program portfolio, at June 30, 2018 and June 30, 2017, were 85 and 70, respectively, non-performing and in foreclosure single-family loans. The outstanding mortgage loan balances for these properties at June 30, 2018 and June 30, 2017 totaled \$9.5 million and \$8.1 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 eight loans in fiscal year 2018 and 14 loans in 2017, which were held in the SFHRB Program or the WCF. At June 30, 2018 and June 30, 2017, the total fair value of foreclosed loans was \$1.4 million and \$1.7 million, respectively.

There was one non-performing development included in the multifamily loan portfolio at June 30, 2018 and there were two non-performing developments included in the multifamily loan portfolio at June 30, 2017. The total principal balance for these non-performing loans at June 30, 2018 and 2017 was \$6.1 million and \$7.4 million, respectively. No multifamily loans were foreclosed in either fiscal year 2018 or 2017.

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, 2018 and June 30, 2017, respectively, the Agency paid \$4 million and \$5 million for servicing rights. The amortization for the fiscal years ending June 30, 2018 and June 30, 2017, respectively, was \$3.8 million and \$4.3 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, 2018 and June 30, 2017, \$1.3 million and \$1.9 million, respectively, were capitalized, and \$802 thousand and \$821 thousand, respectively, were amortized.

#### Note F. Other Assets

At June 30, 2018 and 2017, MassHousing had the following current and non-current other assets (in thousands):

	<b>FY 2018</b>	<b>FY 2017</b>
SF Service Rights and Excess Servicing Rights Premiums	\$ 30,945	\$ 30,258
Unamortized Reinsurance Premium - Mortgage Insurance Fund	13,334	12,943
Accounts receivable - various	8,831	8,662
Deferred Expense Lehman Swap	1,780	8,342
Investments in AHTF participation rights	6,904	5,511
Fixed assets, net of accumulated depreciation	3,384	3,723
Interest receivable on investments	4,129	2,642
Other R/E Owned, net of allowance	1,546	1,926
Prepaid items	1,546	1,546
MCRFO and MMRFO, net of allowance	589	1,250
<b>Total Other Assets</b>	<b>\$ 72,988</b>	<b>\$ 76,803</b>

#### 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 2018 and 2017 are as follows (in thousands):

2018	Beginning			Ending	
	Balance	New Issues	Retirements	Balance	Current Maturities <sup>1</sup>
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
<b>Totals</b>	<b>\$ 3,392,685</b>	<b>\$ 524,024</b>	<b>\$ 456,388</b>	<b>\$ 3,460,321</b>	<b>\$ 229,579</b>
Unamortized Bond/Note Discount/Premium				23,193	
<b>Bonds and Notes Payable, Net</b>				<b>\$ 3,483,514</b>	

2017	Beginning			Ending	
	Balance	New Issues	Retirements	Balance	Current Maturities <sup>1</sup>
Bonds (all programs)	\$ 3,328,363	\$ 508,615	\$ 623,364	\$ 3,213,614	\$ 107,022
Notes: HB Program	21,536	29,740	51,026	250	250
Notes: WCF	109,707	129,356	60,242	178,821	47,850
<b>Totals</b>	<b>\$ 3,459,606</b>	<b>\$ 667,711</b>	<b>\$ 734,632</b>	<b>\$ 3,392,685</b>	<b>\$ 155,122</b>
Unamortized Bond/Note Discount/Premium				20,638	
<b>Bonds and Notes Payable, Net</b>				<b>\$ 3,413,323</b>	

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, 2018 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, 2018 are as follows (in thousands):

<b>Fiscal Year</b> <b><u>Ending June 30</u></b>	<b>Fixed Rate Bonds and Notes</b>			<b><u>Total</u></b>
	<b><u>Principal</u></b>	<b><u>Interest</u></b>		
FY19	\$ 184,470	\$ 114,200	\$	298,670
FY20	111,470	110,840		222,310
FY21	78,371	108,053		186,424
FY22	133,372	105,141		238,513
FY23	88,291	102,425		190,716
FY24 - FY28	351,957	475,346		827,303
FY29 - FY33	429,764	404,058		833,822
FY34 - FY38	481,293	310,347		791,640
FY39 - FY43	536,447	210,931		747,378
FY44 - FY48	415,326	112,487		527,813
FY49 - FY53	223,150	48,255		271,405
FY54 - FY58	115,662	8,854		124,516
FY59 - FY63	5,244	152		5,396
<b>Totals</b>	<b>\$ 3,154,817</b>	<b>\$ 2,111,089</b>	<b>\$</b>	<b>5,265,906</b>

**Variable Rate Bonds**

Listed in the table below are the outstanding Variable Rate Bonds as of June 30, 2018, including Remarketing Agent and Liquidity Providers, if applicable (in thousands):

<b>Variable Rate Bonds Outstanding</b>						
<b>Issue Name</b>	<b>Maturity Date</b>	<b>Bonds Outstanding June 30, 2018</b>	<b>Remarketing Agent</b>	<b>Remarketing Expiration Date</b>	<b>Liquidity Provider</b>	<b>Liquidity Expiration Date</b>
RHMRB Series 2002B	01/01/2044	\$ 11,120	n/a	n/a	n/a	n/a
RHMRB Series 2002D	01/01/2045	31,840	n/a	n/a	n/a	n/a
RHMRB Series 2002G	01/01/2046	11,635	n/a	n/a	n/a	n/a
RHMRB Series 2003A	07/01/2043	18,270	n/a	n/a	n/a	n/a
GRDB VRHB 2015A	01/01/2034	32,316	Raymond James	01/31/2034	Bank of America	01/31/2034
HB Series 2003F	12/01/2037	365	Merrill Lynch	12/01/2037	n/a	n/a
HB Series 2008A	05/01/2048	83,795	n/a	n/a	n/a	n/a
HB Series 2009B	01/01/2044	11,608	Merrill Lynch	01/01/2044	T.D. Bank	02/01/2021
HB Series 2013F	12/01/2038	25,000	Raymond James	12/01/2038	T.D. Bank	12/04/2018
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
SFHRB Series 76	12/01/2030	14,555	n/a	n/a	n/a	n/a
SFHRB Series 196	12/01/2048	15,000	n/a	n/a	n/a	n/a
<b>Total</b>		<b>\$ 305,504</b>				

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, 2018 and 2017 were as follows (in thousands):

	<b>June 30, 2018</b>	<b>June 30, 2017</b>
HB Program	\$ 120,159	\$ 112,045
RHMRB Program	72,865	84,150
SFHRB Program	11,250	-
<b>Total</b>	<b>\$ 204,274</b>	<b>\$ 196,195</b>

The total amounts of such unhedged, or partially unhedged, variable rate bonds outstanding at June 30, 2018 and 2017 were as follows (in thousands):

<b>Basis</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
London Interbank Offered Rate (LIBOR) plus 60 basis points	\$ 14,555	\$ 15,165
LIBOR plus 65 basis points	25,244	23,428
70% of one-month LIBOR	3,750	-
Weekly rate set by the underwriter/remarketing agent, determined by current market conditions	57,681	58,725
<b>Total</b>	<b>\$ 101,230</b>	<b>\$ 97,318</b>

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, 2018 and June 30, 2017:

#### FY 2018

<u>Issue Name</u>	<u>Issue Date</u>	<u>Final Maturity Date</u>	<u>Original Principal</u>		
			<u>Amount</u>	<u>New Debt</u> <sup>2</sup>	<u>Refunded Debt</u> <sup>3</sup>
Direct Purchase CLN, Issue 3	8/10/2017	3/15/2018	\$ 7,500	\$ -	\$ 7,500
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
CLN Series 2017 B	12/7/2017	12/1/2021	66,125	66,125	-
CLN Series 2017 C	12/7/2017	6/1/2020	9,790	9,790	-
HB Series 2017 D	12/7/2017	6/1/2059	106,445	106,445	-
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
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	-
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	-
Direct Purchase CLN, Issue 4 Blk 2018A	6/19/2018	6/18/2021	38,643	38,643	-
			<b>\$ 544,898</b>	<b>\$ 327,880</b>	<b>\$ 217,018</b>

#### FY 2017

<u>Issue Name</u>	<u>Issue Date</u>	<u>Final Maturity Date</u>	<u>Original Principal</u>		
			<u>Amount</u>	<u>New Debt</u> <sup>2</sup>	<u>Refunded Debt</u> <sup>3</sup>
HB Series 2016 D	7/28/2016	12/1/2048	\$ 48,530	\$ 40,430	\$ 8,100
HB Series 2016 E	7/28/2016	12/1/2027	12,790	-	12,790
Direct Purchase CLN, Issue 1, Blk 8	8/17/2016	8/17/2018	5,375	5,375	-
SFHRB Series 183	8/31/2016	12/1/2046	40,590	19,998	20,592
SFHRB Series 184	8/31/2016	6/1/2027	11,210	-	11,210
CLN Series 2016 A	9/22/2016	10/31/2018	9,464	9,464	-
HB Series 2016 F	9/22/2016	6/1/2057	73,510	73,510	-
HB Series 2016 G	9/22/2016	12/1/2058	9,980	-	9,980
HB CLN, Issue 1, Blk 3	9/22/2016	12/30/2016	29,740	-	29,740
Direct Purchase CLN, Issue 1, Blk 9	10/27/2016	10/27/2018	24,480	24,480	-
SFHRB Series 185	12/8/2016	12/1/2041	46,995	4,070	42,925
SFHRB Series 186	12/8/2016	12/1/2020	56,325	2,729	53,596
HB Series 2016 H	12/15/2016	12/1/2046	52,240	52,240	-
HB Series 2016 I	12/15/2016	12/1/2056	25,000	25,000	-
CLN Series 2016 B	12/15/2016	6/1/2019	34,755	34,755	-
CLN Series 2016 C	12/15/2016	6/1/2019	5,760	-	5,760
HB Series 2017 A	3/21/2017	12/1/2049	72,405	-	72,405
HB Series 2017 B	3/21/2017	12/1/2039	15,760	-	15,760
Direct Purchase CLN, Issue 2	3/21/2017	3/1/2019	18,256	18,256	-
HB Series 2017 C	5/25/2017	12/1/2052	43,280	43,280	-
CLN Series 2017 A	5/25/2017	12/1/2020	22,550	22,550	-
			<b>\$ 658,995</b>	<b>\$ 376,137</b>	<b>\$ 282,858</b>

2 Funds used to finance new mortgage loans

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

**Working Capital Fund -Line of Credit**

At June 30, 2018 and 2017, \$75 million of the line of credit with Bank of America, N.A. was drawn and outstanding to provide funding for the Agency's warehouse of single-family loans in the WCF.

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. In December 2016, MassHousing entered into an agreement with the Federal Home Loan Bank of Boston's Helping to House New England Program for \$9.18 million, of which the Agency has posted certain investments as collateral as required under the program. The Agency intends to utilize the program to provide funding for some of the Agency's multi-family loans. The agreement has a term of 10 years and a 0% interest rate. An MBS held in the WCF is pledged as security for the Federal Home Loan Bank of Boston's Helping to House New England program loan.

**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, 2018, are listed in the table below (in thousands):

<u>Issue Name</u>	<u>Issue Date</u>	<u>Maturity Date</u>	<u>Original</u>	
			<u>Principal</u>	<u>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

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, 2018 and 2017, \$17.8 million and \$20 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, 2018 and 2017 MassHousing had three types of derivative instruments outstanding: interest rate swaps, an interest rate cap agreement, and MBS Forward Contracts.

**Interest Rate Swaps**

On October 3, 2017, MassHousing exercised an early termination option without a termination fee with respect to an interest rate swap agreement in the HB Program with a notional value of \$14.0 million previously used as an interest rate hedge for its variable rate HB, 2009 Series A. These bonds are now unhedged.

On October 3, 2017, 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 \$5.8 million previously used as an interest rate hedge for its variable rate RHMRB, 2002 Series B. Also on October 3, 2017, MassHousing entered into a replacement interest rate swap agreement with a notional amount of \$5.8 million. The purpose of the replacement swap agreement is to hedge an interest rate for the variable rate bonds described above at a lower synthetic fixed rate (from 6.8% to 3.52%). The swap counterparty is obligated to pay MassHousing monthly based on an annualized amount equal to the one-month LIBOR (2.10% at June 30, 2018) on the amortized notional amount of the contract and MassHousing is obligated to pay the counterparty monthly a stipulated annualized fixed rate of 3.52% 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.

On October 3, 2017, 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 \$9.5 million previously used as an interest rate hedge for its variable rate RHMRB Bonds, 2002 Series B. Also on October 3, 2017, MassHousing entered into a replacement interest rate swap agreement with a notional amount of \$9.5 million. The purpose of the replacement swap agreement is to hedge an interest rate for the variable rate bonds described above at a lower synthetic fixed rate (from 6.7% to 3.02%). The swap counterparty is obligated to pay MassHousing monthly based on an annualized amount equal to the 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 3.02% 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.

On October 12, 2017, MassHousing exercised an early termination option without a termination fee with respect to an interest rate swap agreement in the HB Program with a

notional value of \$2.0 million previously used as an interest rate hedge for its variable rate HB, 2008 Series A. This portion of the bonds is now unhedged.

On November 8, 2017, MassHousing exercised an early termination option without a termination fee with respect to an interest rate swap agreement with Deutsche Bank in the RHMRB Program with a notional value of \$32.2 million previously used as an interest rate hedge for its variable rate RHMRB Bonds, 2002 Series D. Also on November 8, 2017, MassHousing entered into a replacement interest rate swap agreement with a notional amount of \$32.2 million. The purpose of the replacement swap agreement is to hedge an interest rate for the variable rate bonds described above at a lower synthetic fixed rate (from 6.84% to 3.65%). The swap counterparty is obligated to pay MassHousing monthly based on an annualized amount equal to the one-month LIBOR plus 0.25% on the amortized notional amount of the contract and MassHousing is obligated to pay the counterparty monthly a stipulated annualized fixed rate of 3.645% 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 relate. As a result of the termination of the original replacement swap with Deutsche Bank, the write-off of the remaining unamortized balance of \$6.2 million was recorded as a Special Item due to the infrequent nature of this type of transaction.

On April 1, 2018, MassHousing exercised a partial early termination option of \$1.4 million at par without a termination fee with respect to the interest rate swap agreement for its variable rate RHMRB, 2002 Series B, which was put in place on October 3, 2017.

On June 5, 2018, MassHousing entered into a swap agreement with a notional amount of \$25 million, effective June 19, 2018, as part of the financing for \$25 million of its HB, 2018 Series B. The purpose of the swap agreement is to hedge an interest rate for the variable rate bonds described above. The swap counterparty is obligated to pay MassHousing monthly based on an annualized amount equal to 70% of one-month LIBOR plus 1.05% on the amortized notional amount of the contract. MassHousing is obligated to pay the counterparty monthly a stipulated annualized fixed rate of 3.844% on the amortized notional amount of the contract. The Agency determined this swap to be an effective hedge, and it was recorded as a hedging derivative instrument.

On June 19, 2018, MassHousing entered into a swap agreement with a notional amount of \$11.3 million as part of the financing for \$15 million of its SFHRB, Series 196. The purpose of the swap agreement is to hedge an interest rate for the variable rate bonds described above. 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 2.573% on the amortized notional amount of the contract. This interest rate swap agreement was determined to be an ineffective hedge because the notional amount of the agreement is not consistent with the hedgeable item (the Series 196 Bonds) and therefore is 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, 2018 and 2017 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 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 each fiscal year. In all but one case, each interest rate swap's outstanding notional amount is equal to the principal amount of the associated debt.

June 30, 2018

Swap - Derivative Instruments (in thousands)

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

(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
1 Deutsche Bank AG	BBB+/Baa2
2 JP Morgan Chase & Co	A-/A3
3 Bank of America Corp	A-/A3
4 Barclays Bank PLC	BBB/Baa3
5 Citibank N.A.	A+/A1



June 30, 2017

Swap - Derivative Instruments (in thousands)

Associated Bond Series	Derivative Type	Notional Amount	Effective Date	Swap Termination Date	Fixed Rate Paid	Variable Rate Received	Change in Fair Values from 06/30/16		Name of Counterparty
							Fair Values 06/30/17	[increase/ (decrease)]	
RHMRB Series 2002B (Neptune)	Hedge	\$ 9,725	3/27/2002	7/1/2032	6.700%	LIBOR (a)	\$ (10)	\$ 303	2
RHMRB Series 2002B (Mt. Pleasant)	Hedge	5,835	3/27/2002	1/1/2044	6.800%	LIBOR (a)	(14)	175	2
RHMRB Series 2002D	Hedge	35,485	6/25/2009	1/1/2045	6.840%	LIBOR + .25% (b)	(397)	1,743	1
RHMRB Series 2002G	Hedge	14,570	6/25/2009	1/1/2046	5.360%	LIBOR + .25% (b)	(551)	726	1
RHMRB Series 2003A	Hedge	18,535	9/3/2003	7/1/2043	6.729%	LIBOR (b)	(10,860)	3,737	2
HB Series 2008A - Block III (Beachmont)	Hedge	2,046	9/1/2009	5/1/2048	5.963%	LIBOR + .65% (b)	-	-	3
HB Series 2008A - Block III (Briston Arms)	Hedge	3,565	9/1/2009	5/1/2048	5.563%	LIBOR + .65% (b)	(205)	230	3
HB Series 2008A - Block III (Lebanese)	Hedge	2,616	11/1/2009	5/1/2048	5.178%	LIBOR + .65% (b)	(330)	339	3
HB Series 2009B	Hedge	11,808	1/1/2004	1/1/2044	7.080%	LIBOR (b)	(963)	911	2
HB Series 2009A	Hedge	14,030	6/29/2006	1/1/2043	5.950%	SIFMA (c)	(5)	387	2
HB Series 2016I	Hedge	25,000	12/15/2016	12/1/2041	3.655% (70% * 3 mo. LIBOR) + 1.20% (d)		(584)	(584)	4
		<b>\$ 143,215</b>					<b>\$(13,919)</b>	<b>\$ 7,967</b>	

(a) LIBOR 1 month however LIBOR rate cannot exceed 20%

(b) LIBOR 1 month USD (1.22% at June 30, 2017)

(c) The Securities Industry and Financial Markets Association Municipal Swap Index ("SIFMA") (0.91% at June 30, 2017)

(d) LIBOR 3 month USD (1.30% at June 30, 2017)

Counterparty	Counterparty Credit Rating
1 Deutsche Bank AG	A-/Baa2
2 JP Morgan Chase & Co	A-/A3
3 Bank of America Corp	BBB+/Baa1
4 Barclays Bank PLC	BBB/Baa2

**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, 2018, debt service requirements of the Agency's outstanding variable rate debt and net interest rate swap payments at June 30, 2018 are as follows (in thousands):

Fiscal Year Ending June	Variable Rate Bonds Principal	Bonds Interest	Interest Rate Swaps Net	Total
FY19	\$ 3,665	\$ 5,602	\$ 3,113	\$ 12,380
FY20	3,945	5,571	3,021	12,537
FY21	4,165	5,460	2,945	12,570
FY22	4,460	5,358	2,854	12,672
FY23	4,250	5,256	2,768	12,274
FY24 - FY28	20,210	24,915	12,908	58,033
FY29 - FY33	30,065	21,962	11,015	63,042
FY34 - FY38	33,005	18,171	8,447	59,623
FY39 - FY43	41,180	13,931	5,201	60,312
FY43 - FY47	44,658	9,008	1,971	55,637
FY49 - FY53	22,315	4,506	1,107	27,928
FY54 - FY58	21,350	1,386	-	22,736
<b>Totals</b>	<b>\$ 233,268</b>	<b>\$ 121,126</b>	<b>\$ 55,350</b>	<b>\$ 409,744</b>

**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, 2018 and 2017, 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.

**Terms, fair values and credit rating** – The terms, including fair value and counterparty credit rating, of the outstanding cap at June 30, 2018 and 2017 is provided below. The credit rating was issued by S&P and Moody’s, respectively. The notional value of the cap and the principal amount of the associated debt declines each fiscal year.

June 30, 2018

Interest Rate Cap - Investment Derivative Instrument (dollars in thousands)

Associated Bond Series	Notional Amount	Effective Date	Cap Termination Date	Strike Rate	Rate Index	Fair Value	Change in Fair Values from		Name of Counterparty
							06/30/17	[increase/(decrease)]	
HB Series 2008A	\$ 52,440	4/2/2014	4/1/2024	6.000%	1 Month LIBOR	\$ 96	\$	(39)	1
<b>Counterparty</b>									
<b>Credit Rating</b>									
1 SMBC Capital Markets, Inc	A1								

June 30, 2017

Interest Rate Cap - Investment Derivative Instrument (dollars in thousands)

Associated Bond Series	Notional Amount	Effective Date	Cap Termination Date	Strike Rate	Rate Index	Fair Value	Change in Fair Values from		Name of Counterparty
							06/30/16	[increase/(decrease)]	
HB Series 2008A	\$ 52,980	4/2/2014	4/1/2024	6.000%	1 Month LIBOR	\$ 135	\$	33	1
<b>Counterparty</b>									
<b>Credit Rating</b>									
1 SMBC Capital Markets, Inc	A1								

### MBS Forward Contracts

In October 2009, MassHousing converted its HomeOwnership Program from a whole loan purchase program to a program primarily financed through the sale of MBS guaranteed by GSEs as to timely payment of principal and interest. These securities represent pools of qualified first mortgage loans originated by MassHousing-approved lenders. Under this

program, MassHousing periodically enters into forward contracts to sell MBS to investors before the securities are ready for delivery (referred to as “MBS Forward Contracts”). MassHousing enters into MBS Forward Contracts to hedge the interest rate risk for loan commitments made to originating mortgage lenders. MBS Forward Contracts are derivative instruments due to one or more of the following factors that are not determined at the time MassHousing and the investor enter into the transaction: settlement factors; the reference rates or interest rates the MBS will bear; and notional amounts in the form of the principal amount of the future MBS. In addition, payment to MassHousing by the investor is not required until the investor receives the MBS, enabling the investor to take a position on interest rates without making a payment. Finally, the MBS Forward Contracts may be “net settled” because MassHousing is not obligated to deliver or purchase an asset (the MBS) to settle the MBS Forward Contract.

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, 2018 and 2017, 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, 2018 and 2017, are provided below. The terms, including fair values and counterparty credit ratings, of the MBS Forward Contracts at June 30, 2018 and 2017, are provided in Schedule 6. The credit rating was issued by Moodys. The fair values presented below and in Schedule 6 at June 30, 2018 and 2017 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, 2018 (in thousands)**

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

**MBS Forward Contracts at June 30, 2017 (in thousands)**

	Notional Amount	Coupon Rate	Fair Value	Counterparty
MBS Forward Contracts	Jun. 30, 2017	Range	Jun. 30, 2017	Credit Rating
Fannie Mae	\$ 112,000	3.5-4.0%	\$ (6)	Aaa
Total	<u>\$ 112,000</u>		<u>\$ (6)</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, 2018 and 2017 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, 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+/A1 by S&P and Moody’s, respectively. The other provider is rated BBB/Baa3 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. At June 30, 2017, the Agency had no exposure to credit risk on its outstanding interest rate swaps, as no interest rate swaps had a positive value.

MassHousing executes interest rate swap agreements with various counterparties. Listed below are the counterparties and their ratings, the notional amounts and fair value of the interest rate swaps outstanding and the percentages of the total interest rate swaps outstanding at June 30, 2018 and 2017 (in thousands):

### June 30, 2018 Swap Counterparties

Counterparty	Notional Amount	Fair Value	Credit Rating
Bank of America Corp	\$ 6,111	\$ (258)	A-/A3
JP Morgan Chase & Co	29,878	(8,954)	A-/A3
Deutsche Bank AG	13,270	(32)	BBB+/Baa2
Barclays Bank PLC	50,000	(117)	BBB/Baa3
Citibank N.A.	54,210	991	A+/A1

### June 30, 2017 Swap Counterparties

Counterparty	Notional Amount	Fair Value	Credit Rating
Bank of America Corp	\$ 8,227	\$ (535)	BBB+/Baa1
JP Morgan Chase & Co	59,933	(11,852)	A-/A3
Deutsche Bank AG	50,055	(948)	A-/Baa2
Barclays Bank PLC	25,000	(584)	BBB/Baa2

MBS Forward Contract terms often expose MassHousing to credit risk. At June 30, 2018 and 2017, the Agency was exposed to credit risk on its outstanding MBS Forward Contracts that had a positive fair value. However, the net fair value to the counterparty at June 30, 2018 and 2017 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, 2018 and 2017.

**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, 2018, the Agency was not exposed to basis risk on its interest rate swaps, its interest rate cap, or its MBS Forward Contracts.

At June 30, 2017, on one interest rate swap, MassHousing received a variable rate payment equivalent to the SIFMA rate and was exposed to basis risk as the relationship between the weekly bond rate and the SIFMA rate diverged. At June 30, 2017, the weekly variable bond rate being paid by MassHousing was 0.81%, and the SIFMA rate being received by MassHousing under the interest rate swap was 0.91%. The Agency did not believe this risk to be significant. There was no exposure to basis risk on the remaining outstanding interest rate swaps, its interest rate cap, or its MBS Forward Contracts at June 30, 2017.

**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, 2018 and 2017 is as follows:

**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 Series 196	12/01/48	06/01/27

**Debt exposed to Rollover risk - June 30, 2017**

<u>Associated Debt Issuance</u>	<u>Debt Maturity Dates</u>	<u>Swap Early Termination Date</u>
RHMRB 2002B (Neptune)	01/01/44	01/01/17
RHMRB 2002B (Mt. Pleasant)	01/01/44	01/01/17
RHMRB 2002D	01/01/45	07/01/17
RHMRB 2002G	01/01/46	07/01/18
HB 2008A Block III (Beachmont)	05/01/48	06/17/14
HB 2008A Block III (Briston Arms)	05/01/48	06/17/19
HB 2008A Block III (Lebanese)	05/01/48	10/18/24
HB 2009A	01/01/43	01/01/17
HB 2009B	01/01/44	01/01/19
HB 2016I	12/01/56	12/01/25

**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, 2018 and 2017 and the interfund transfers for fiscal years 2018 and 2017 (in thousands):

**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
<b>Totals</b>	<b>\$ 310</b>	<b>\$ (16)</b>	<b>\$ (10)</b>	<b>\$ (284)</b>	<b>\$ -</b>

**Interfund Receivable (Payable) Balances at June 30, 2017**

	WCF & Affiliates	RHMRB Program	GRDB Program	SFHRB Program	Totals
WCF & Affiliates	\$ -	\$ (16)	\$ (10)	\$ (187)	\$ (213)
RHMRB Program	16	-	-	-	16
GRDB Program	10	-	-	-	10
SFHRB Program	187	-	-	-	187
<b>Totals</b>	<b>\$ 213</b>	<b>\$ (16)</b>	<b>\$ (10)</b>	<b>\$ (187)</b>	<b>\$ -</b>

**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
<b>Totals</b>	<b>\$ 19,967</b>	<b>\$ (1,667)</b>	<b>\$ (3,048)</b>	<b>\$ (15,002)</b>	<b>\$ (250)</b>	<b>\$ -</b>

**Interfund Transfers for Fiscal Year 2017**

	WCF & Affiliates	GRDB Program	MFHRB Program	HB Program	SFHRB Program	RMRB Program	Totals
WCF & Affiliates	\$ -	\$ (1,700)	\$ (3,082)	\$ (29,572)	\$ 2,866	\$ (305)	\$ (31,793)
GRDB Program	1,700	-	-	-	-	-	1,700
MFHRB Program	3,082	-	-	-	-	-	3,082
HB Program	29,572	-	-	-	-	-	29,572
SFHRB Program	(2,866)	-	-	-	-	-	(2,866)
RMRB Program	305	-	-	-	-	-	305
<b>Totals</b>	<b>\$ 31,793</b>	<b>\$ (1,700)</b>	<b>\$ (3,082)</b>	<b>\$ (29,572)</b>	<b>\$ 2,866</b>	<b>\$ (305)</b>	<b>\$ -</b>

**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, 2018 and 2017 consist of the following (in thousands):

	June 30, 2018	June 30, 2017
Equity of Affiliates (Center for Community Recovery Initiatives, Property Acquisition and Disposition Corporation)	\$ 1,536	\$ 1,753
Funding for loan purchases and advances and unrestricted net position requirements	202,073	213,785
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	58,363	62,058
Opportunity Fund	224,312	207,516
<b>Total Designations</b>	<b>\$ 501,694</b>	<b>\$ 500,522</b>

**(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 2018 and 2017 (in thousands):

<b>Fiscal 2018</b>	<b>WCF</b>	<b>MIF</b>	<b>PADCO</b>	<b>CCRI</b>	<b>Combined Totals</b>
<b><u>STATEMENTS OF NET POSITION at June 30, 2018</u></b>					
Total assets	\$ 1,520,896	\$ 129,264	\$ -	\$ 1,536	\$ 1,651,696
Deferred outflow of resources	17,638	-	-	-	17,638
<b>Total assets and deferred outflow of resources</b>	<b>\$ 1,538,534</b>	<b>\$ 129,264</b>	<b>\$ -</b>	<b>\$ 1,536</b>	<b>\$1,669,334</b>
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
<b>Total liabilities, deferred inflow of resources, and net position</b>	<b>\$ 1,538,534</b>	<b>\$ 129,264</b>	<b>\$ -</b>	<b>\$ 1,536</b>	<b>\$1,669,334</b>

**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
<b>Changes in net position</b>	<b>\$ 3,510</b>	<b>\$ 3,060</b>	<b>\$ -</b>	<b>\$ (217)</b>	<b>\$ 6,353</b>

<b>Fiscal 2017</b>	<b>WCF</b>	<b>MIF</b>	<b>PADCO</b>	<b>CCRI</b>	<b>Combined Totals</b>
<b><u>STATEMENTS OF NET POSITION at June 30, 2017</u></b>					
Total assets	\$ 1,423,109	\$ 125,818	\$ -	\$ 1,753	\$ 1,550,680
Deferred outflow of resources	14,243	-	-	-	14,243
<b>Total assets and deferred outflow of resources</b>	<b>\$ 1,437,352</b>	<b>\$ 125,818</b>	<b>\$ -</b>	<b>\$ 1,753</b>	<b>\$1,564,923</b>
Total liabilities	\$ 819,949	\$ 24,320	\$ -	\$ -	\$ 844,269
Deferred inflow of resources	1,872	-	-	-	1,872
Total net position	615,531	101,498	-	1,753	718,782
<b>Total liabilities, deferred inflow of resources, and net position</b>	<b>\$ 1,437,352</b>	<b>\$ 125,818</b>	<b>\$ -</b>	<b>\$ 1,753</b>	<b>\$1,564,923</b>

**STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION****For the fiscal year ended June 30, 2017**

Total revenues	\$ 86,183	\$ 6,766	\$ -	\$ 719	\$ 93,668
Total expenses	67,013	3,482	-	841	71,336
<b>Changes in net position</b>	<b>\$ 19,170</b>	<b>\$ 3,284</b>	<b>\$ -</b>	<b>\$ (122)</b>	<b>\$ 22,332</b>

**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](http://www.masshousingretirement.com).

**Benefits Provided** – 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 \$176,000 for members hired after January 1, 2011

Cost-of-Living Adjustments (COLA) are handled by the Legislature, which includes Senators and Representatives, and by the Governor. Each year, they may or may not recommend a COLA amount to include in the state's annual budget. For FY 2018, the recommendation by the Governor, the House and the Senate was a 3% increase on the first

\$13,000 of annual benefits. MHFAERS voted and granted a 3% cost of living increase (COLA) to qualifying retirees and beneficiaries on the base maximum of \$13 thousand of benefits.

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	340
	<u>548</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 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 and \$6.1 million for FY 2018 and 2017, respectively.

### Net Pension Liability

The Agency's net pension liability was measured as of December 31, 2017, 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. Mortality rates for the actuarial valuation as of January 1, 2015 were based on the mortality rates of the RP-2000 Mortality Table projected with Scale BB and Generational Mortality.

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:

<b>Asset Class</b>	<b><u>Target Allocation</u></b>	<b><u>Long-Term Expected Real Rate of Return (Geometric Average)</u></b>
Public Domestic Equity	25%	4.5%
Public Foreign Equity (Large Dev.)	7%	4.3%
Public Foreign Equity (Small Dev.)	3%	3.5%
Public Emerging Markets Equity	10%	6.5%
Investment Grade Bonds	10%	0.9%
High Yield Bonds	6%	2.6%
Treasury Inflation Protection Securities	6%	0.6%
Emerging Markets Debt	5%	2.4%
Real Estate	10%	3.9%
Private Equity	10%	6.4%
Natural Resources & Commodities	3%	4.4%
Core Infrastructure	5%	3.8%
Total	<u>100%</u>	

**Discount rate** - The discount rate used to measure the total pension liability was reduced to 7.50% for the January 1, 2017 actuarial valuation for FY 2018 financial statements from 7.75% for the January 1, 2015 actuarial valuation for FY 2017 financial statements. 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.

**Changes in the Net Pension Liability**

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
<b>Beginning Balance at 12/31/16</b>	\$ 158,620,314	\$ 128,396,579	\$ 30,223,735
<b>Changes for the year:</b>			
Service Cost	3,437,119		3,437,119
Interest	11,894,789		11,894,789
Differences between expected and actual experience	(3,669,508)		(3,669,508)
Change in assumptions	8,772,196		8,772,196
Contributions - employer		6,490,693	(6,490,693)
Contributions - employee		3,551,791	(3,551,791)
Net Investment Income		18,139,418	(18,139,418)
Benefit payments, including refunds of employee contributions	(6,920,493)	(6,920,493)	-
Administrative expenses		(377,587)	377,587
Net Changes	13,514,103	20,883,822	(7,369,719)
<b>Balance at 12/31/17</b>	<b>\$ 172,134,417</b>	<b>\$ 149,280,401</b>	<b>\$ 22,854,016</b>

**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:

	1% Decrease to 6.50%	Current Discount Rate (7.50%)	1% Increase to 8.50%
Net pension liability	\$ 38,619,522	\$ 22,854,016	\$ 11,077,420

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

At June 30, 2018, the Agency reported a liability of \$22.9 million for its net pension liability. The net pension liability was measured as of December 31, 2017, 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, 2018 and 2017, the Agency recognized pension expense of \$5.7 million and \$7 million, respectively, which is included in administrative expenses. At June 30, 2018 and June 30, 2017, the Agency reported deferred outflows and inflows of resources related to pensions from the following sources (in thousands):

<b>Fiscal 2018</b>	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
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
<b>Total</b>	<b>\$ 16.9</b>	<b>\$ 11.1</b>
<b>Fiscal 2017</b>	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience		\$ 0.2
Change in assumptions	\$ 5.0	
Net difference between projected and actual earnings on pension plan investments	9.2	1.7
<b>Total</b>	<b>\$ 14.2</b>	<b>\$ 1.9</b>

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

Year ended June 30:

2019	\$ 3,288,364
2020	2,397,371
2021	(67,154)
2022	(310,011)
2023	463,882
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 Massachusetts Housing Finance Agency Employees' Retirement System's financial statements for both calendar years 2018 and 2017 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 reinstituted 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 2018 and FY 2017 were approximately \$2.2 million and \$1.8 million, respectively. Total matching contributions for FY 2018 were approximately \$189,000.

### 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 OPEB Plan's standalone financial statements can be obtained at [www.masshousing.com](http://www.masshousing.com).

**Employees covered by benefit terms** – At June 30, 2018, the following employees were covered by the benefit terms:

Retired, Disabled, Survivors and Beneficiaries receiving benefits	128
Inactive plan members entitled to but not yet receiving benefit payments	32
Active plan members	<u>341</u>
Total	<u><u>501</u></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 and \$2.6 million for FY 2018 and 2017, respectively. Employees are not required to contribute to the OPEB Plan.

**Net OPEB Liability** - MassHousing's 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.

**Actuarial Assumptions** - The total OPEB liability in the January 1, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3%
Salary Increases	3%, 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 2044

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. Mortality rates for the actuarial valuation as of January 1, 2015 were based on the mortality rates of the RP-2000 Mortality Table projected with Scale BB and Generational Mortality.



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.

**Changes in the Net OPEB Liability**

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
<b>Beginning Balance at 7/1/2017</b>	\$ 49,684,483	\$ 27,008,000	\$ 22,676,483
<b>Changes for the year:</b>			
Service Cost	1,430,612		1,430,612
Interest	3,663,486		3,663,486
Contributions - employer		3,114,886	(3,114,886)
Net Investment Income		1,626,080	(1,626,080)
Benefit payments, including refunds of employee contributions	(1,168,498)	(1,168,498)	-
Administrative expenses		(48,975)	48,975
Net Changes	3,925,600	3,523,493	402,107
<b>Balance at 6/30/18</b>	<b>\$ 53,610,083</b>	<b>\$ 30,531,493</b>	<b>\$ 23,078,590</b>

**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 2044) or 1-percentage-point higher (10% initial graded down to 6% in 2044) than the current healthcare trend rates:

	1% decrease (8% initial graded down to 4% in 2044)	Healthcare Cost Trend Rates (9% initial graded down to 5% in 2044)	1% increase (10% initial graded down to 6% in 2044)
Net OPEB liability \$	15,190,951	\$ 23,078,590	\$ 33,081,743

**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:

	1% Decrease to 6.25%	Discount Rate (7.25%)	1% Increase to 8.25%
Net OPEB liability \$	31,394,435	\$ 23,078,590	\$ 16,395,480

**Discount rate** - The discount rate used to measure the total OPEB liability was reduced to 7.25% for the January 1, 2017 actuarial valuation from 7.40% for the January 1, 2015 actuarial valuation. The projection of cash flows used to determine the discount rate assumed that MassHousing contributions will be made at rates equal to the actuarially determined contribution rate. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of

current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

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

<u>Asset Class</u>	<u>Target Allocation</u>	<u>20 Year Expected Real Rate of Return (Geometric Average)</u>
Domestic Equity Assets	24%	4.40%
International Developed Markets Equity (Large) Assets	16%	4.20%
International Emerging Markets Equity Assets	15%	6.50%
Investment Grade Bond Assets	20%	0.80%
High Yield Bond Assets	15%	2.60%
TIPS Assets	10%	0.50%
	<u>100%</u>	

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

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

<b>Fiscal 2018</b>	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience		
Change in assumptions		
Net difference between projected and actual earnings on OPEB plan investments	\$ 320,625	
<b>Total</b>	<b>\$ 320,625</b>	<b>\$ -</b>

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

Year ended June 30:

2019	\$ 80,156
2020	80,156
2021	80,156
2022	80,157
2023	-
Thereafter	-

The next actuarial report is required as of January 1, 2019.

**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 2018 and 2017 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 2018 and 2017 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 2018 and 2017, 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 \$104.6 million and \$101.5 million at June 30, 2018 and 2017, respectively, which is included in a separate account within the WCF. At June 30, 2018 and 2017, approximately \$57.2 million and \$41.5 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 \$1.8 million and \$1.7 million at June 30, 2018 and 2017, 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, 2018 and 2017 (in thousands):

	<b>June 30, 2018</b>		<b>June 30, 2017</b>	
	<b><u>Claims</u></b>	<b><u>MI Plus Claims</u></b>	<b><u>Claims</u></b>	<b><u>MI Plus Claims</u></b>
Claims Paid	\$ 1,019	\$ 138	\$ 1,931	\$ 145
Number of Claims	23	154	39	148

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 and Partner Reinsurance Europe ZE (Zurich Branch). 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, 2018 and 2017 (in millions):

	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Willis RE	\$ 1,732	\$ 1,470
GMIC	146	186
MGIC	53	82
UG	16	22
<b>Total loans with reinsurance</b>	<b><u>\$ 1,947</u></b>	<b><u>\$ 1,760</u></b>

#### **Center for Community Recovery Innovations, Inc. (“CCRI”)**

CCRI has been funded with contributions from MassHousing since fiscal year 1995. In both fiscal years 2018 and 2017, MassHousing contributed \$700,000 and has committed to fund \$700,000 in fiscal year 2019.

#### **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.

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 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 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. On May 8, 2018, MassHousing Members voted to contribute an additional

\$16.3M of WCF earnings into the Opportunity Fund. 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.

On May 31, 2018, Massachusetts Governor Charlie Baker signed into law *An Act Financing the Production and Preservation of Housing for Low and Moderate Income Residents*. This bill ensures long-term support for comprehensive efforts to increase the production of affordable housing, diversify the state's housing portfolio, modernize public housing, preserve the affordability of existing housing and invest in new, innovative solutions to address Massachusetts' rising demand for housing. Within the bill, MassHousing has been authorized to provide the following services in or for any state (or the District of Columbia): (1) contract administration in connection with any HUD multifamily rental subsidy program; (2) loan servicing for one-to four- family residential mortgage loans, provided the majority of loans serviced are secured by mortgages on property located in Massachusetts; and (3) loan products and services related to residential mortgage loans in partnership with governmental or quasi-governmental agencies in any state (or the District of Columbia).

**Lease Commitments**

On January 23, 2017, MassHousing entered into the fifth amendment to its operating office lease with One Beacon Street Limited Partnership with an amended termination date of March 31, 2030. This lease amendment is for expansion space located on the fourth floor of the building consisting of approximately 9,938 rentable square feet and is effective for the amended period August 1, 2017 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):

<b>Fiscal Year</b>	<b>Total Future Minimum Lease Payments</b>
2019	\$ 4,927
2020	4,932
2021	4,924
2022	4,841
2023	4,803
2024-2030	33,936
<b>Total future minimum lease payments</b>	<b>\$ 58,363</b>

Rent expense under all non-cancelable leases with terms in excess of one year totaled \$5.3 million and \$4.74 million in fiscal years 2018 and 2017, 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, 2018, by bond program are noted below (in thousands):

RHMRB Program	\$ 72,865
GRDB Program	2,615
SFHRB Program	14,555
	<b>\$ 90,035</b>

At June 30, 2018, MassHousing had commitments to provide approximately \$90.8 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, 2018, MassHousing has 284 loans with an unpaid principal balance of \$2.8 billion, which is subject to a maximum loss exposure up to \$1.3 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 liability balances at June 30, 2018 and 2017 (in thousands):

	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Balance of loans with co-insurance	\$ 5,320	\$ 6,398
Risk exposure of loans with co-insurance coverage	1,804	2,165
MassHousing claim liability	3,796	3,796
Co-insurers claim liability	1,316	1,400
MassHousing collateral on deposit	1,270	1,258

#### **Note O. Events Subsequent to June 30, 2018**

Through the September 11, 2018 meeting of the Members of MassHousing, the Agency issued new mortgage and bridge loan commitments totaling \$117.1 million for multifamily developments.

On August 20, 2018, MassHousing partially terminated \$15.5 million with respect to an interest rate swap agreement for its variable rate RHMRB, 2002 Series D. This interest rate swap agreement had an original notional value of \$32.2 million and 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 \$203,000.

On September 19, 2018, MassHousing exercised an early termination option of \$3.5 million at market without a termination fee with respect to an interest rate swap agreement for its variable rate RHMRB, 2002 Series B (Mt. Pleasant). This interest rate swap agreement had an original notional value of \$5.8 million and was previously determined to be an ineffective hedge and was recorded as an investment derivative instrument.

On September 19, 2018, MassHousing exercised an early termination option of \$7.4 million at market without a termination fee with respect to an interest rate swap agreement for its variable rate RHMRB, 2002 Series B (Neptune). This interest rate swap agreement had an original notional value of \$9.5 million and was previously determined to be an ineffective hedge and was recorded as an investment derivative instrument.

On September 19, 2018, MassHousing partially terminated \$2.3 million with respect to an interest rate swap agreement for its variable rate RHMRB, 2002 Series D. This interest rate swap agreement had an original notional value of \$32.2 million and 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.

The following table summarizes the unscheduled debt redemption activity subsequent to June 30, 2018 (in thousands):

<u>Bond Program</u>	<u>Series</u>	<u>Redemption Date</u>	<u>Amount</u>
WCF CLN	2016B	7/1/2018	\$ 3,980
GRDB Program	2015A	7/1/2018	115
HB Program	various	7/9/2018	8,590
GRDB Program	2014A	7/15/2018	27
GRDB Program	2014B	7/15/2018	40
SFHRB Program	various	7/18/2018	28,880
HB Program	2008A	8/1/2018	1,595
GRDB Program	2014A	8/15/2018	47
GRDB Program	2014B	8/15/2018	28
RHMRB Program	2002D	9/1/2018	15,500
GRDB Program	2014A	9/15/2018	37
GRDB Program	2014B	9/15/2018	40
HB Program	various	9/17/2018	53,225
Direct Purchase CLN	Issue 1, Blk 5	9/19/2018	21,010
Direct Purchase CLN	Issue 2	9/19/2018	18,256
<b>Total unscheduled debt redemptions subsequent to June 30, 2018</b>			<b>\$ 151,370</b>

The following table summarizes the new debt issues subsequent to June 30, 2018 (in thousands):

<u>Issue Name</u>	<u>Issue Date</u>	<u>Final Maturity Date</u>	<u>Original</u>	<u>New Debt</u> <sup>2</sup>	<u>Refunded Debt</u> <sup>3</sup>
			<u>Principal Amount</u>		
Direct Purchase CLN, Issue 4 Blk 2018B	7/26/2018	6/18/2021	4,175	4,175	-
HB 2018 Issue 2 Blk 2018A Notes	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
SFHRB Series 197	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	-
			<b>\$ 78,143</b>	<b>\$ 32,725</b>	<b>\$ 45,418</b>

<sup>2</sup> Funds used to finance new mortgage loans

<sup>3</sup> Funds used to refund and/or replace outstanding bonds.

## 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)

	FY 2018	FY 2017	FY 2016	FY 2015
<b>Total Pension Liability</b>				
Service Cost	\$ 3,437	\$ 3,247	\$ 3,129	\$ 2,695
Interest	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	(6,920)	(5,958)	(5,161)	(5,134)
<b>Net change in total pension liability</b>	<b>13,514</b>	<b>8,912</b>	<b>15,508</b>	<b>7,545</b>
<b>Total pension liability - beginning</b>	<b>158,620</b>	<b>149,708</b>	<b>134,200</b>	<b>126,655</b>
<b>Total pension liability - ending (a)</b>	<b>\$ 172,134</b>	<b>\$ 158,620</b>	<b>\$ 149,708</b>	<b>\$ 134,200</b>
<b>Plan fiduciary net position</b>				
Contributions - employer	\$ 6,491	\$ 6,093	\$ 6,065	\$ 3,946
Contributions - employee	3,552	3,274	3,219	3,497
Net Investment Income	18,139	11,087	(3,352)	4,114
Benefit payments, including refunds of employee contributions	(6,920)	(5,958)	(5,161)	(5,134)
Administrative expenses	(378)	(380)	(366)	(419)
<b>Net change in plan fiduciary net position</b>	<b>20,884</b>	<b>14,116</b>	<b>405</b>	<b>6,004</b>
<b>Plan fiduciary net position - beginning</b>	<b>128,396</b>	<b>114,280</b>	<b>113,875</b>	<b>107,871</b>
<b>Plan fiduciary net position - ending (b)</b>	<b>\$ 149,280</b>	<b>\$ 128,396</b>	<b>\$ 114,280</b>	<b>\$ 113,875</b>
<b>Net Pension Liability - ending (a)-(b)</b>	<b>\$ 22,854</b>	<b>\$ 30,224</b>	<b>\$ 35,428</b>	<b>\$ 20,325</b>
<b>Plan fiduciary net position as a percentage of total pension liability</b>	<b>86.7%</b>	<b>80.9%</b>	<b>76.3%</b>	<b>84.9%</b>
<b>Covered Employee Payroll</b>	<b>\$ 33,250</b>	<b>\$ 33,641</b>	<b>\$ 32,430</b>	<b>\$ 28,044</b>
<b>Net Pension Liability as a percentage of covered employee payroll</b>	<b>68.7%</b>	<b>89.8%</b>	<b>109.2%</b>	<b>72.5%</b>

\* 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. 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 2018	FY 2017	FY 2016	FY 2015
<b>Actuarial Determined Contribution</b>	\$ 6,491	\$ 6,093	\$ 6,065	\$ 3,946
<b>Contributions made</b>	6,491	6,093	6,065	3,946
<b>Contribution deficiency (excess)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Covered Payroll</b>	\$ 33,250	\$ 33,641	\$ 32,430	\$ 28,044
<b>Contribution as a percentage of covered employee payroll</b>	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	9 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	January 1, 2017
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. 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 2018</u>
<b>Total OPEB Liability</b>	
Service Cost	\$ 1,430
Interest	3,663
Changes in Benefit Terms	-
Differences between expected and actual experience	-
Changes of assumptions	-
Benefit payments	(1,168)
<b>Net change in total OPEB liability</b>	<u>3,925</u>
<b>Total OPEB liability - beginning</b>	<u>49,685</u>
<b>Total OPEB liability - ending (a)</b>	<u><u>\$ 53,610</u></u>
 <b>Plan fiduciary net position</b>	
Contributions - employer (including implicit subsidy)	\$ 3,115
Net Investment Income	1,626
Benefit payments	(1,169)
Administrative expenses	(49)
<b>Net change in plan fiduciary net position</b>	<u>3,523</u>
<b>Plan fiduciary net position - beginning</b>	<u>27,008</u>
<b>Plan fiduciary net position - ending (b)</b>	<u><u>\$ 30,531</u></u>
 <b>Net OPEB Liability - ending (a)-(b)</b>	<u><u>\$ 23,079</u></u>
 <b>Plan fiduciary net position as a percentage of total OPEB liability</b>	57.0%
 <b>Covered Employee Payroll</b>	\$ 34,715
 <b>Net OPEB Liability as a percentage of covered employee payroll</b>	66.5%

**Required Supplemental Schedule 4**  
**Unaudited**

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

	FY 2018
<b>Actuarial Determined Contribution</b>	\$ 2,901
<b>Contributions made</b>	2,901
<b>Contribution deficiency (excess)</b>	<u>\$ -</u>
<b>Covered Employee Payroll</b>	\$ 34,715
<b>Contribution as a percentage of covered employee payroll</b>	8.4%

**Notes to Schedule**

**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	19 years
Asset valuation method	Market value
Inflation	3 percent
Salary Increases	3 percent average including inflation
Healthcare cost trend rates	7 to 9% initial graded down to 5% in 2042
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	Mortality rates for the current year were changed from RP-2000 projected with Scale BB and Generational Mortality. The discount rate used to measure the total OPEB liability was reduced to 7.40% from 7.25%.

**SCHEDULE 1: INVESTMENTS AND CASH EQUIVALENTS**

		<b>Investment Maturities (In Years)</b>			
		<b>In thousands of dollars</b>			
	<b>Total Cost, Amortized Cost, or Fair Value</b>	<b>Less Than 1</b>	<b>1-5</b>	<b>6-10</b>	<b>More Than 10</b>
<b>Working Capital Fund and Affiliates</b>					
U.S. Treasury Notes	\$ 124,267	\$ 43,926	\$ 80,341		
Government Sponsored Enterprises (GSEs)	31,816		10,522	\$ 6,891	\$ 14,403
Commercial Paper	8,410	8,410			
Certificates of Deposit	10,439	2,000	8,439		
Cash Equivalents	503,452	503,452			
Total Investments and Cash Equivalents	<u>\$ 678,384</u>	<u>\$ 557,788</u>	<u>\$ 99,302</u>	<u>\$ 6,891</u>	<u>\$ 14,403</u>
<b>Rental Housing Mortgage Revenue Bond Program</b>					
Guaranteed Investment Contracts	\$ 3,736				\$ 3,736
Cash Equivalents	7,763	\$ 7,763			
Total Investments and Cash Equivalents	<u>\$ 11,499</u>	<u>\$ 7,763</u>	<u></u>	<u></u>	<u>\$ 3,736</u>
<b>General Rental Development Bond Program</b>					
Guaranteed Investment Contracts	\$ 431			\$ 431	
Cash Equivalents	7,018	\$ 7,018			
Total Investments and Cash Equivalents	<u>\$ 7,449</u>	<u>\$ 7,018</u>	<u></u>	<u>\$ 431</u>	<u></u>
<b>Multi-Family Housing Bond Program</b>					
Cash Equivalents	\$ 26,152	\$ 26,152			
Total Investments and Cash Equivalents	<u>\$ 26,152</u>	<u>\$ 26,152</u>	<u></u>	<u></u>	<u></u>

**SCHEDULE 1: INVESTMENTS AND CASH EQUIVALENTS**

		<b>Investment Maturities (In Years)</b>			
		<b>In thousands of dollars</b>			
	<b>Total Cost, Amortized Cost, or Fair Value</b>	<b>Less Than 1</b>	<b>1-5</b>	<b>6-10</b>	<b>More Than 10</b>
<b>Housing Bond Program</b>					
U.S. Treasury Notes	\$ 87,759	\$ 87,759			
Government Sponsored Enterprises (GSEs)	20,603		\$ 20,603		
Guaranteed Investment Contracts	12,534		12,534		
Cash Equivalents	239,140	239,140			
Total Investments and Cash Equivalents	<u>\$ 360,036</u>	<u>\$ 326,899</u>	<u>\$ 33,137</u>		
<b>Single Family Housing Revenue Bond Program</b>					
U.S. Treasury Notes	\$ 28,846	\$ 14,763	\$ 14,083		
Government Sponsored Enterprises (GSEs)	635,143	12,591	5,801	\$ 1,191	\$ 615,560
Commercial Paper	1,788	1,788			
Cash Equivalents	160,805	160,805			
Total Investments and Cash Equivalents	<u>\$ 826,582</u>	<u>\$ 189,947</u>	<u>\$ 19,884</u>	<u>\$ 1,191</u>	<u>\$ 615,560</u>
<b>Residential Mortgage Revenue Bond Program</b>					
Government Sponsored Enterprises (GSEs)	\$ 59,590	\$ 1,194			\$ 58,396
Cash Equivalents	63	63			
Total Investments and Cash Equivalents	<u>\$ 59,653</u>	<u>\$ 1,257</u>			<u>\$ 58,396</u>
<b>Combined Totals Memorandum Only</b>					
U.S. Treasury Notes	\$ 240,872	\$ 146,448	\$ 94,424		
Government Sponsored Enterprises (GSEs)	747,152	13,785	36,926	\$ 8,082	\$ 688,359
Guaranteed Investment Contracts	16,701		12,534	431	3,736
Commercial Paper	10,198	10,198			
Certificates of Deposit	10,439	2,000	8,439		
Cash Equivalents	944,393	944,393			
Total Investments and Cash Equivalents	<u>\$ 1,969,755</u>	<u>\$ 1,116,824</u>	<u>\$ 152,323</u>	<u>\$ 8,513</u>	<u>\$ 692,095</u>

**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	
Working Capital Fund and Affiliates						
11 Long Point Road	5.550%	01/01/2029	\$ 98			
1199 Hixville Road	5.350%	08/01/2026	76			
120 Centre Court	0.000%	11/01/2042	744			
120 Centre Court	0.000%	11/01/2038	510			
2 Pierce Lane	5.350%	07/01/2026	76			
225 Centre Street	0.000%	08/01/2054	5,600			
3 Flintlock Lane	5.550%	12/01/2026	82			
38 Winfield Street	5.350%	08/01/2026	78			
706 Huntington Ave.	0.000%	11/01/2049	376			
808 Memorial Drive	7.750%	03/01/2021	389			
808 Memorial Drive	8.150%	03/01/2021	618			
A.O. Flats At Forest Hills	1.680%	06/01/2020		\$ 50	\$ 6,140	
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	1,527			
Academy Hill School	3.020%	04/30/2058	224			
AEI Group Homes-Braintree	5.350%	08/01/2026	115			
AEI Group Homes-Centerville	5.350%	07/01/2026	104			
AEI Group Homes-Kingston	5.550%	02/01/2027	116			
AEI Group Homes-Marshfield	5.550%	05/01/2028	125			
Ames Privilege Unit 2	2.600%	10/01/2054	118			
Anderson Park	2.750%	08/01/2018		2,213	277	
Appleton Mills Redevelopment Phase 1B	6.350%	04/01/2052	168			
Arlington Park	4.000%	02/01/2037	955			
Aurora Hotel	2.600%	03/01/2056	556			
Barstow Village	0.010%	07/01/2053	877			
Bedford Towers	3.550%	04/01/2050	334			
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	329			
Brooks School	8.000%	01/01/2028	5,234			
Brooks School	0.000%	01/01/2028	122			
Brookside Terrace	3.000%	03/01/2019	157			
Brown Kaplan Townhomes	0.000%	08/25/2049	517			
Burbank Gardens	2.890%	07/01/2019		5,529		
Burbank Gardens	2.590%	07/01/2059	4,618			
Burbank Gardens Acquisition	0.000%	07/01/2059	452			
Cable Gardens	4.500%	01/01/2036	7,542			
Canton Village	6.490%	06/01/2046	448			
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%	07/01/2020	200			
Chestnut Park	3.000%	07/01/2020	2,137			
Cobbet Hill	2.340%	12/01/2018		7,114		
Cobbet Hill	3.000%	12/01/2018		786		
Cobbet Hill	2.260%	12/23/2066	1,000			
Codman Square Apartments	2.640%	01/01/2054	840			
Cohen Residences	3.754%	01/01/2020			9,790	



**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	
Conant Village	6.000%	07/01/2045	\$ 690			
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	915			
Forestvale	0.000%	12/11/2049	1,000			
Franklin Highlands	4.500%	08/01/2059		\$ 12,036		
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	3.250%	10/01/2018		6,939	\$ 2,525	
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	244			
Hampton Court	3.120%	06/20/2064	17,891			
Hanover Woods	1.890%	08/01/2066	7,029			
Haynes House	0.000%	03/01/2019	122			
Hayward Landing	2.570%	11/04/2065	19,308			
Hebronville Mill	8.000%	12/01/2016	265			
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	10,788			
Heritage Common	0.000%	06/16/2051	1,500			
Heywood Wakefield Village	4.790%	12/31/2041	15,918			
Highland Apartments	3.040%	07/01/2054	5,896			
Hillside Village	5.230%	12/01/2043	600			
Houghton Village	2.700%	06/01/2058	7,475			
Houghton Village	0.000%	06/01/2058	1,545			
Island Creek Vlge North- Age Restricted	4.500%	05/01/2058	3,697			
Latin Academy	0.000%	06/01/2050	680			
Leyden Woods Apartments	3.850%	10/01/2037	2,132			
Lincoln Village	3.600%	03/01/2019		5,341	1,781	
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			
Madison Melnea Cass Apts	2.890%	03/01/2020		2,883	6,967	
Madison Melnea Cass Apts	2.880%	03/01/2060	487		1,413	
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			
Mason Place	5.680%	04/01/2024	747			
Mass Mills I	3.120%	07/01/2049	789			
Mass Mills II	3.120%	07/01/2049	818			
Mass Mills III	4.500%	04/01/2048	3,491			
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			
Museum Square	2.720%	07/24/2065	15,164			

**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	
Neptune Towers	0.000%	04/01/2032	\$ 100			
Oak Terrace	4.290%	06/01/2058	1,000			
Oak Terrace	2.340%	01/01/2019		\$ 2,371		
Olmsted Green Homeownership	0.000%	10/01/2022	382			
Oxford House at Queeney Square	2.720%	01/01/2050	4,411			
Parmalee Court	3.070%	08/31/2064	1,136			
Pelham I Apartments	5.086%	12/01/2064	5,711			
Pilot Grove Hill	3.750%	12/01/2049	10			
Pilot Grove Hill	0.000%	12/01/2049	344			
Pine Gardens	7.350%	09/01/2044	741			
Pleasant Plaza	3.025%	01/01/2065	11,162			
Pondside at Littleton	3.141%	09/01/2064	12,332			
Powdermill Village	4.500%	03/01/2019	2,834			
Princeton at Boston Road	0.000%	11/30/2038	30			
Quincy Heights	2.290%	06/01/2041	939			
Quincy Tower	2.340%	01/12/2019		15,999	\$ 795	
Quincy Tower	3.000%	01/12/2019		4,307	479	
Residence At Cedar Dell	4.750%	07/01/2053	10,342			
Residences at Canal Bluffs	5.250%	06/01/2051	1,850			
Rindge Apts (402)	2.610%	07/01/2058	13		1,493	
Riverboat Village	5.010%	12/01/2033	6,537			
Riverview Meadows	2.180%	03/16/2065	4,996			
Rock Harbor Vlge	5.000%	07/01/2052	106			
Roxbury Corners	4.000%	01/01/2050	997			
Roxbury Corners	0.000%	01/01/2050	1,196			
S.S.C.R.II-Bridgewater	5.550%	03/01/2027	98			
S.S.C.R.II-Mattapoisett	5.550%	10/01/2026	84			
S.S.C.R.II-Stoughton	5.550%	03/01/2027	86			
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	4.000% to 6.750%		935			
Single Family Long Term Assets	0.000% to 7.500%		4,265			
Single Family Mass Advantage Loans	0.000%		2,233			
Single Family Modification Loans	0.000%		160			
Single Family Mortgage (Warehouse) Loans	1.000% to 5.500%		42,748			
Single Family Tax Credit Loans	5.000% to 6.250%		120			
Single Family Veterans Assistance Loans	0.000% to 1.000%		617			
Sitkowski School Apartments	2.000%	07/01/2056	1,645			
Smith House	2.450%	11/01/2018		16,000		
Solemar Apts	2.750%	06/01/2052	1,496			
South Canal Apartments	0.000%	03/01/2017	197			
Stratton Hill	1.680%	07/26/2019		7,473	2,822	
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 Coolidge	4.460%	06/30/2051	750			
The Fairways at Lebaron Hills	7.000%	02/01/2051	383			
The Millery	2.970%	09/01/2049	671			
The Preserve	6.450%	01/01/2046	2,837			

**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	
The Settlement	7.160%	05/01/2013	\$ 2,200			
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 I	3.212%	09/01/2064	9,834			
Voke Lofts	3.400%	01/01/2055	206			
Voke Lofts	0.000%	01/01/2055	695			
Wakefield Place	8.250%	12/31/2034	21,087			
Warren House	3.500%	01/01/2019		\$ 2,992		
Weeks School Apts	5.470%	06/01/2047	3,420			
Wellington Community	0.000%	08/01/2052				
Whitney Carriage Park	3.470%	07/01/2030	15,584			
Whittier Terrace	7.500%	05/27/2019	128			
Woods at Wareham	5.500%	07/01/2054	8,869			
<b>Sub-total</b>			<b>\$ 460,232</b>	<b>\$ 105,967</b>	<b>\$ 39,299</b>	<b>(a)</b>
<b>Rental Housing Mortgage Revenue Bond Program</b>						
<b>Adopted December 31, 1994</b>						
Broadway Tower	5.850%	12/01/2022	\$ 1,140			
Kimball Court II	7.270%	09/18/2023	18,026			
Mt. Pleasant Apartments- Boston	6.750%	12/01/2043	1,566			
Neptune Towers	7.550%	03/01/2032	9,504			
Neptune Towers	6.250%	03/01/2022	2,700			
Plantation Tower	6.000%	04/01/2047	4,522			
Seabury Heights	5.548%	04/01/2022	2,014			
SEMASS Housing I-Raynham	6.650%	10/01/2025	88			
SEMASS Housing I-Somerset	6.650%	09/01/2025	85			
SEMASS Housing I-Taunton	6.650%	10/01/2025	93			
South Cove Apartments	6.360%	09/01/2023	2,884			
South End Tenants Houses II	6.190%	12/01/2045	4,239			
South Shore-Easton	6.650%	06/01/2025	93			
South Shore-Pembroke	6.650%	03/01/2025	96			
Trinity Terrace	7.700%	01/31/2035	1,220			
Victoria Apartments	6.833%	09/01/2043	7,995			
Woodlands at Abington Station	6.150%	01/01/2044	855			
<b>Sub-total</b>			<b>\$ 57,120</b>			
<b>General Rental Development Bond Program</b>						
<b>Adopted April 13, 2004</b>						
113 Spencer	7.150%	05/01/2050	\$ 1,904			
Barstow Village	5.500%	06/01/2053	1,177			
Blackstone	4.500%	07/01/2053	30,373			
Clinton Housing Authority	5.200%	01/01/2026	337			
Curtain Lofts	7.250%	11/01/2052	1,068			
Franklin Square House	4.500%	09/01/2053	33,171			
Greenway Apartments	6.720%	06/01/2053	1,165			
Joseph's House	6.300%	09/01/2050	5,999			
Linwood Mill	6.180%	07/01/2053	967			
Machado House @ Peter's Grove	5.300%	07/01/2053	6,267			
Maple Ridge Phase II	6.500%	02/01/2053	1,160			
Nazing Court	6.720%	07/01/2044	7,318			
Ocean Shores at Mansfield	7.250%	07/01/2052	1,948			
Oliver Lofts	7.250%	03/01/2052	1,353			

**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	
Princeton at Westford (variable rate)	1.520%	01/01/2034	\$ 32,315			
Providence House	6.350%	01/01/2045	8,308			
Quincy Housing Authority	5.090%	01/01/2026	1,895			
Regency Towers I	1.000%	04/01/2040	430			
Rita Hall	5.250%	11/01/2053	6,287			
Rock Harbor Village	5.300%	05/01/2053	6,311			
School House Kenilworth	8.000%	06/01/2049	1,218			
South Cove Apartments	6.320%	09/01/2043	13,639			
Tecumseh Mill	5.250%	02/01/2054	6,846			
Temple Landing	6.500%	02/01/2043	1,961			
Tri-Town Landing Apartments	6.700%	12/01/2051	1,386			
Victory Gardens Plaza	5.070%	04/01/2054	8,011			
Village at Hospital Hill II	6.830%	03/01/2050	1,354			
Winchendon Housing Authority	5.190%	01/01/2026	384			
<b>Sub-total</b>			<b>\$ 184,552</b>			
<b>Multi-Family Housing Bond Program</b>						
<b>Adopted November 10, 2009</b>						
225 Centre Street	3.600%	01/01/2055	\$ 15,296			
225 Centre Street	5.500%	01/01/2055	731			
Castle Square	5.100%	01/01/2053	41,902			
Cedar Glen	4.850%	01/01/2051	14,019			
Central Grammar	5.250%	04/01/2053	2,766			
Charlesview Redevelopment	4.800%	10/01/2054	44,476			
Charlesview Redevelopment	0.000%	06/30/2055	480			
Cheriton Grove	5.070%	05/01/2053	4,829			
Chestnut Glen	4.850%	01/01/2051	13,185			
Glen Grove	4.850%	01/01/2051	18,883			
Gosnold Grove	4.850%	01/01/2053	2,008			
Heritage Apartments	4.610%	02/01/2053	18,903			
Heritage Green	4.850%	01/01/2051	10,514			
Inman/Cast 2 Apartments	4.500%	07/01/2052	13,153			
Kensington Court at Lakeville	0.000%	08/01/2050	2,243			
Longfellow Glen	4.850%	01/01/2051	12,000			
Lower Mills Apartments	4.750%	08/01/2052	8,494			
Nehoiden Glen	4.850%	01/01/2051	9,471			
Noonan Glen	4.850%	01/01/2051	2,047			
Norton Glen	4.660%	01/01/2051	15,081			
Old Mill Glen	4.850%	01/01/2051	5,925			
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	41,876			
<b>Sub-total</b>			<b>\$ 300,549</b>			
<b>Housing Bond Program</b>						
<b>Adopted February 19, 2003</b>						
113 Spencer	0.000%	05/01/2050	\$ 1,000			
144 Worcester Street	7.048%	03/01/2019	13			
1550 Beacon Plaza	0.374%	11/01/2042	766			
27 Jackson Street	0.000%	07/01/2048	3,397			
808 Memorial Drive	7.694%	03/01/2021	2,301			
808 Memorial Drive	13.500%	03/01/2021	280			

**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	
929 House	6.901%	03/01/2019	\$ 353			
A.O Flats at Forest Hills	4.120%	06/01/2057			\$ 13,090	
Academy Hill School	3.020%	04/30/2058	979			
Academy Homes I	5.850%	07/01/2040	6,096			
Adams Templeton	3.870%	12/01/2057	12,541			
Allen Park Apartments I	7.750%	01/01/2035	3,070			
Allen Park Apartments II	7.750%	01/01/2026	1,013			
Ames Privilege	8.250%	06/01/2024	1,314			
Ames Privilege - Unit 2	4.800%	10/01/2054	1,362			
Amory Street Residences	3.000%	07/01/2045	845			
Amy Lowell House	5.900%	07/28/2039	8,123			
Anderson Park	3.870%	12/01/2058		\$ 22,000		
Appleton Mills Redevelopment Phase IA	6.300%	04/01/2052	1,404			
Appleton Mills Redevelopment Phase IA	0.010%	07/01/2051	1,640			
Arbor Point at Woodland Station	5.650%	01/01/2048	37,036			
Arbor Point at Woodland Station	0.000%	01/01/2048	2,700			
Asher's Path	6.910%	11/01/2048	705			
Asher's Path	0.000%	11/01/2048	521			
Auburn Court	3.530%	06/01/2048	14,400			
Avalon at Chestnut Hill	5.320%	10/01/2047	37,833			
Babcock Tower	7.048%	03/01/2019	327			
Babcock Tower	14.500%	03/01/2019	16			
Babcock Tower	12.625%	04/01/2019	8			
Back of the Hill	5.400%	10/01/2048	6,819			
Bay Meadows	5.400%	01/01/2049	7,770			
Beachmont Apartments	6.500%	05/01/2049	2,027			
Beacon House	5.500%	07/01/2054	13,579			
Beacon House	3.500%	07/01/2024	1,688			
Beacon Park	6.875%	07/01/2044	379			
Bedford Village	4.740%	07/01/2060		964	5,631	
Bergen Circle	6.922%	03/01/2019	349			
Berkshire Peak	3.470%	04/01/2058	4,161			
Binnall House	0.438%	04/01/2043	506			
Bixby Brockton Apartments	6.150%	01/01/2046	661			
Blackstone	5.000%	07/01/2052	963			
Blossom Court Apartments	7.133%	03/01/2019	20			
Blossom Court Apartments	10.570%	02/01/2019	31			
Blue Elm	6.335%	08/01/2024	208			
Blue Elm	6.050%	08/01/2044	1,120			
Blue Elm	5.689%	03/01/2025	235			
Blue Elm	6.000%	03/01/2045	994			
Boott Mills Apartments	5.900%	01/01/2046	13,412			
Boott Mills Apartments	3.000%	01/01/2046	2,325			
Bowdoin Apartments	6.250%	08/01/2042	1,441			
Brandy Hill	3.900%	10/01/2058		11,000		
Bridle Path Apartments	5.430%	01/01/2049	8,883			
Briston Arms	4.640%	03/01/2057	35,392			
Brown School Residences	6.950%	08/01/2048	2,103			
Burbank Gardens	4.420%	07/01/2059		1,765	\$ 2,035	
Capitol Square	7.500%	11/01/2045	1,086			
Carter Heights	7.200%	10/01/2043	246			
Casa Maria	5.500%	12/01/2048	4,114			
Cedar Meadows	7.300%	03/17/2020	160			

**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	
Central Annex	5.250%	07/01/2055	\$ 5,307			
Chauncy House	5.050%	07/01/2057	9,133			
Chelsea Village	7.000%	04/01/2048	1,363			
Cheriton Heights Senior Housing	6.000%	08/01/2053	1,429			
Chestnut Gardens	5.400%	01/01/2049	5,394			
Chestnut Park	6.901%	05/01/2019	1,049			
Chestnut Park	12.625%	05/01/2019	47			
Clarendon Hill	6.030%	03/01/2052	20,432			
Cleaves Dimock-Bragdon Apts	4.000%	03/01/2057	9,989			
Cobbet Hill	4.290%	12/01/2058		\$ 5,814	\$ 1,786	
Codman Square Apartments	5.500%	01/01/2054	1,063			
Cohen Residences	4.420%	02/01/2060		25,767	2,623	
Colonial Apts	7.048%	03/01/2019	42			
Columbia West Apartments	5.340%	12/31/2052	300			
Columbia West Apartments	5.900%	03/01/2045	397			
Conant Village	0.000%	05/01/2057	1,159			
Conway Court	4.150%	11/01/2053	2,105			
Cordovan at Haverhill Station	6.760%	09/01/2048	7,030			
Counting House Lofts	6.000%	12/01/2045	2,212			
Cromwell Court	5.360%	01/01/2052	5,672			
Davenport Commons	4.920%	08/01/2031	24,333			
Dom Polski	5.400%	12/01/2048	2,316			
Everett Sq Plaza	6.922%	03/01/2019	227			
Fairweather Apartments	5.450%	12/01/2048	16,257			
Fitchburg Green	6.870%	01/01/2048	11,107			
Florence Apartments	7.310%	08/01/2050	14,686			
Forbes Building	7.133%	03/01/2019	205			
Forestvale	7.380%	08/01/2050	15,163			
Founders Court Apts.	3.600%	10/01/2057	1,879			
Founders Court Apts.	6.650%	01/01/2026	30			
Franklin Hill Revitalization Phase 2A	7.000%	10/01/2050	1,888			
Franklin Hill Revitalization Phase 2B	6.000%	10/01/2050	1,130			
Gateway Residences On Washington	4.100%	10/01/2058		10,080		
Genesis Brighton	3.900%	01/01/2049		51,672	5,118	
Genesis Brighton	7.694%	03/01/2019	39			
Genesis Brighton	11.850%	02/01/2019	3			
Georgetown Homes I	4.520%	05/01/2056	71,067			
Georgetown Homes II	4.520%	05/01/2056	43,662			
Golda Meir House II	3.900%	04/01/2059		29,364	8,436	
Hadley Building Apartments	0.000%	01/31/2048	2,199			
Haley House	6.250%	05/01/2029	470			
Hamilton Wade Douglas	4.100%	01/01/2057	12,813			
Hamilton Wade Douglas	3.500%	01/01/2057	5,605			
Harborview Towers	4.200%	07/01/2052	6,313			
Hemenway Apts	6.930%	08/01/2047	1,330			
Heritage at Bedford Springs	4.725%	08/01/2048	25,495			
Heritage House	6.750%	08/01/2047	622			
High Rock Homes	5.650%	05/01/2050	2,520			
High Rock Homes	0.000%	05/01/2050	1,500			
Hillside Village	7.050%	05/01/2045	2,505			
Historic South End Apartments	5.250%	06/01/2055	22,373			
Holyoke Farms	6.350%	12/01/2039	6,010			
Hope Gardens	6.850%	07/01/2047	844			

**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	
Hotel Raymond	5.950%	01/01/2044	\$ 1,720			
Hunter Place	7.133%	03/01/2019	86			
Hunter Place	7.500%	02/01/2019	11			
Island Creek East - I	6.850%	12/01/2048	4,382			
Jaclen Tower	4.150%	11/01/2053	8,954			
Jarvis Heights	7.133%	03/01/2019	205			
Jarvis Heights	12.625%	04/01/2019	15			
Kensington Court at Lakeville	7.310%	08/01/2050	4,039			
King James Court	5.038%	04/01/2043	5,314			
King'S Beach Towers	7.300%	06/30/2020	577			
Kings Landing	5.000%	06/01/2054	4,164			
King's Lynne	7.694%	03/01/2020	2,378			
Landmark at Fall River	5.850%	08/01/2039	3,775			
Lawrenceville	9.211%	03/01/2019	32			
LBB Housing	3.400%	01/01/2054	3,776			
Lebanese Community Housing	5.750%	10/01/2049	2,586			
Leisure Towers	5.250%	07/01/2054	17,556			
Leyden Woods Apartments	3.850%	10/01/2057	26,014			
Lincoln Woods	3.750%	08/01/2057	12,485			
Lionhead Apartments	4.540%	12/27/2055	6,964			
Loring Towers	5.400%	01/01/2050	9,118			
Louis Barrett Residences	4.600%	03/01/2057	15,520			
Lucerne Gardens	9.000%	07/01/2024	474			
Madison Melnea Cass Apts	4.420%	03/01/2060			\$ 11,150	
Madison Park III	4.090%	01/01/2058	20,913			
Majestic Apartments	5.950%	01/01/2044	1,448			
Maple Commons	9.740%	10/01/2022	2,416			
Maple Commons	9.740%	06/01/2023	254			
Maple Commons	8.150%	06/01/2023	447			
Maple Ridge Phase I	7.000%	06/01/2052	3,850			
Marcus Garvey Gardens	8.000%	01/01/2021	1,290			
Martensen Village	7.133%	03/01/2019	30			
Martensen Village	14.500%	03/01/2019	1			
Mary Colbert Apartments	5.500%	07/01/2055	3,179			
Mashpee Village	4.900%	05/01/2056	4,028			
Mason Place	6.050%	04/01/2044	4,848			
Mason Place	5.680%	04/01/2024	2,895			
Mass Pike Towers	5.310%	03/01/2040	3,388			
Mass Pike Towers	4.380%	03/01/2040	2,711			
Mattapan Heights II	5.850%	02/01/2046	1,055			
Mattapan Heights Ii	2.000%	02/01/2046	2,000			
Mattapan Heights III	5.330%	03/01/2048	2,817			
Maverick Landing Phase I	6.300%	11/01/2035	2,196			
Maverick Landing Phase II	7.000%	11/01/2035	1,223			
Maverick Landing Phase III	7.100%	01/01/2037	1,676			
Maverick Landing Phase IV	5.940%	06/01/2037	1,520			
Meadowbrook Apartments	6.000%	01/01/2046	885			
Melville Towers	5.750%	01/01/2048	1,233			
Metropolitan (Rental)	7.900%	06/01/2045	11,427			
Middlebury Arms	5.250%	09/01/2055	1,273			
Mission Park	7.050%	02/01/2040	40,433			
Mohawk Forest Apartments	4.780%	08/01/2039	1,705			
Mohawk Forest Apartments	5.225%	08/01/2039	1,278			

**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	
Moorings at Squantum I	5.650%	05/01/2048	\$ 10,766			
Moorings at Squantum I	4.730%	01/01/2046	3,014			
Moorings at Squantum II	7.050%	05/01/2048	5,092			
Morgan Woods	5.550%	01/01/2048	4,431			
Mt. Pleasant Apartments - Boston	6.750%	12/01/2043	4,769			
Mtn View Terrace	5.500%	07/31/2050	13,810			
Mystic Place	5.000%	05/01/2051	28,065			
New Girls Latin Academy	6.960%	07/01/2038	1,078			
New Port Antonio Apartments	4.000%	12/01/2027	25,000			
Nor-Al	5.250%	01/01/2055	5,791			
Nor-Al	5.250%	01/01/2034	2,199			
North Village at Webster	4.650%	01/01/2056	5,424			
Norton Glen	5.400%	11/01/2025	1,874			
Oak Terrace	4.290%	06/01/2058	11,550			
Ocean Shores	6.850%	06/01/2048	18,170			
Orchard Hill	6.922%	03/01/2019	281			
Orchard Hill	13.500%	02/01/2019	24			
Orchard Hill	6.680%	07/01/2027	745			
Orchard Hill	6.320%	03/01/2019	26			
Orchard Hill	8.370%	03/01/2019	96			
Oxford Place	11.728%	11/01/2023	956			
Palmer Green Est	3.320%	05/01/2058	11,497			
Palmer Green Est	3.250%	07/01/2036	3,794			
Pequot Highlands	4.140%	07/01/2059		\$ 41,295		
Pine Commons	7.800%	12/01/2037	869			
Pine Commons	6.900%	12/01/2043	1,540			
Pine Crest	5.062%	02/01/2044	2,680			
Pine Gardens	7.800%	12/01/2037	606			
Powdermill Village	7.750%	01/01/2042	1,054			
Power Town	3.750%	11/01/2056	6,808			
Quincy Heights	2.290%	06/01/2041	14,949			
Quincy Tower	4.290%	02/01/2059		20,961		
Regency Towers I	0.000%	04/01/2040	5,151			
Residence at Cedar Dell	6.050%	04/01/2045	939			
Residences At Canal Bluffs	7.640%	06/01/2051	777			
Rindge Apts	4.250%	07/01/2058		21,100		
River Place Towers	4.125%	04/01/2055	15,589			
Rockledge Apartments	7.048%	03/01/2019	72			
Rockledge Apartments	13.500%	03/01/2019	11			
Rolfe House	6.500%	01/01/2047	325			
School House Brookledge	7.200%	01/01/2049	1,531			
Seabury Heights	5.340%	02/01/2043	12,169			
Seabury Heights	5.548%	04/01/2022	731			
Seton Manor	6.200%	01/01/2020	116			
Shillman House	6.500%	11/01/2051	12,211			
Silver Leaf Terrace	5.730%	12/01/2040	11,964			
Sitkowski School Apartments	5.000%	07/01/2056	1,722			
Smith House	3.750%	12/01/2058		11,729	\$ 1,681	
South Cove Apartments	6.360%	09/01/2023	4,630			
South End Apartments	6.760%	06/01/2043	3,878			
South End Tenants Houses II	6.190%	12/01/2045	11,462			
South End Tenants Houses II	5.250%	12/01/2023	2,132			
Spring Gate	7.250%	07/01/2056	5,340			



**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	
St Mathieus School	4.000%	06/01/2053	\$ 1,843			
St Stephen'S Tower	3.600%	01/01/2034	16,140			
Stratton Hill	4.560%	08/01/2059		\$ 9,890		
Summer Hill Glenn	4.150%	11/01/2053	11,588			
Susan S Bailis Assisted Living	6.500%	07/01/2043	1,980			
Sycamore Village	6.810%	08/01/2050	9,652			
Taurus At Ftn Hill	8.000%	07/01/2021	696			
Taurus At Ftn Hill	9.625%	07/01/2021	53			
The Carruth	5.850%	10/01/2048	5,237			
The Commons at Boston Road (variable rate)	1.540%	11/30/2038	15,093			
The Commons at Chelmsford (variable rate)	1.540%	08/31/2038	9,801			
The Coolidge	5.300%	07/01/2050	3,715			
The Coolidge	4.460%	08/01/2049	2,220			
The Stearns Apartment	6.400%	02/01/2042	6,326			
The Stearns Apartment	6.575%	02/01/2021	3,198			
Traditions of Dedham	6.650%	03/01/2044	9,504			
Treehouse at Easthampton Meadow	7.100%	09/01/2037	623			
Tribune Apartments	4.290%	05/01/2058	4,347			
Trinity Terrace	7.700%	01/31/2035	436			
Trinity Village	7.800%	03/01/2019	347			
UE Apartments	5.500%	01/01/2053	4,213			
Uphams Corner Market	6.470%	12/01/2042	1,375			
Valebrook	5.000%	04/01/2051	8,205			
Van Der Hayden	8.000%	09/01/2021	398			
Victoria Apartments	6.833%	09/01/2043	17,571			
Victory Gardens Plaza	7.800%	07/01/2019	248			
Village at Hospital Hill II	4.000%	01/20/2050	1,300			
Voke Lofts	3.400%	01/01/2055	2,058			
Wait Street	8.800%	11/01/2021	994			
Walden Square Apartments	7.130%	01/01/2043	8,593			
Wardman Apartments	7.482%	01/01/2042	4,621			
Warren House	6.947%	12/01/2023	2,194			
Washington Park Apartments	3.400%	01/01/2055	3,159			
Waterway Apartments	5.000%	02/01/2052	5,339			
Waverley Woods	6.980%	07/01/2049	1,651			
Waverley Woods	0.000%	07/01/2049	1,750			
Weeks School Apartments	6.720%	06/01/2047	1,058			
West Stoughton Village	6.900%	06/01/2024	661			
Westborough Village	7.133%	03/01/2019	113			
Westland Avenue Apartments	6.050%	02/01/2046	9,360			
Wilbraham Commons	7.000%	03/19/2048	9,785			
Wilkins Glenn	4.150%	11/01/2053	10,766			
Willow Apartments	5.300%	05/01/2047	3,164			
Wood Ridge Homes	7.800%	11/01/2019	99			
Woodbourne Apartments	5.600%	07/01/2049	2,904			
Woodbury Building	7.800%	03/01/2019	33			
Woodlands At Abington Station	6.150%	01/01/2044	1,153			
Worcester Loomworks Phase I	4.900%	01/01/2056	1,337			
Worcester Loomworks Phase II	6.000%	01/01/2056	1,059			
Zelma Lacey House Of Charlestown	5.900%	11/01/2044	5,720			
<b>Sub-total</b>			<b>\$ 1,363,381</b>	<b>\$ 263,401</b>	<b>\$ 51,550</b>	

**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	
Single Family Housing Revenue Bond Program						
Adopted September 12, 1985						
Home Improvement Loans	6.250%		\$ 3			
Single Family Mortgages Receivable	3.125% - 8.500%		306,426			
Sub-total			\$ 306,429			
Total			\$ 2,672,263	\$ 369,368	\$ 90,849	

(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 From	To	Outstanding June 30, 2017	Issued and Compounded	Retired or Exchanged	Outstanding June 30, 2018	Unamortized Bond/Note Discount/Premium	Adjusted Totals			
Rental Housing Mortgage Revenue Bond Program														
2002 Series B (var)	01/01/2044	07/01/2018	1.4800	2.2400	\$	15,560		\$	4,440	\$	11,120	\$	11,120	
2002 Series D (var)	01/01/2045	07/01/2018	1.4800	2.2400		35,485			3,645		31,840		31,840	
2002 Series G (var)	01/01/2046	07/01/2018	1.4800	2.2400		14,570			2,935		11,635		11,635	
2003 Series A (var)	07/01/2043	07/01/2018	1.4800	2.2400		18,535			265		18,270		18,270	
Sub-total						\$	84,150	\$	-	\$	11,285	\$	72,865	
General Rental Development Bond Program														
2005 Series AC	01/01/2026	01/01/2019	4.3750	4.5000	\$	372		\$	35	\$	337		\$	337
2005 Series AQ	01/01/2026	01/01/2019	4.3750	4.5000		2,090			195		1,895		1,895	
2005 Series AW	01/01/2026	01/01/2019	4.3750	4.5000		423			40		383		383	
2012 Issue One	06/01/2053	12/01/2018	1.7000	4.6250		12,730			120		12,610		12,610	
2012 Series A	06/01/2053	12/01/2018	4.0000	4.0000		64,380			720		63,660		63,660	
2014 Series A	01/15/2046	07/15/2018	4.3750	4.3750		30,427			1,146		29,281		29,281	
2014 Series B	04/15/2054	07/15/2018	4.5000	4.5000		44,202			390		43,812		43,812	
VRHB 2015A (var)	01/01/2034	01/01/2034	.7800	1.8700		32,755			440		32,315		32,315	
Sub-total						\$	187,379	\$	-	\$	3,086	\$	184,293	
Multi-Family Housing Bond Program														
2009 Series A, Subseries 1	12/01/2051	12/01/2038	3.0100	3.0100	\$	85,280			\$	85,280		\$	85,280	
2009 Series A, Subseries 2	12/01/2051	06/01/2033	3.5500	3.5500		50,170			50,170		50,170		50,170	
2009 Series A, Subseries 3	12/01/2051	06/01/2035	2.5800	2.5800		42,830			42,830		42,830		42,830	
2009 Series A, Subseries 4	12/01/2051	12/01/2018	2.3200	2.3200		15,130		\$	240		14,890		14,890	
2010 Series A	12/01/2038	12/01/2018	3.0500	5.3000		61,710			1,690		60,020		60,020	
2011 Series A	12/01/2032	12/01/2018	2.5500	4.8750		15,475			695		14,780		14,780	
2011 Series B	12/01/2053	12/01/2018	2.1250	5.1250		28,730			775		27,955		27,955	
Sub-total						\$	299,325	\$	-	\$	3,400	\$	295,925	
Housing Bond Program														
2003 Series F (var)	12/01/2037	12/01/2018	1.0000	1.9000	\$	390		\$	25	\$	365		\$	365
2003 Series H	06/01/2043	12/01/2018	4.8750	5.1250		8,875			165		8,710		8,710	
2007 Series F	06/01/2040	12/01/2018	5.7000	5.7000		36,430			4,815		31,615		31,615	
2007 Series G	06/01/2040	12/01/2018	6.7000	6.7000		10,800			1,600		9,200		9,200	
2008 Series A (var)	05/01/2048	07/01/2018	1.4600	2.6400		84,635			840		83,795		83,795	
2008 Series B	12/01/2038	12/01/2018	5.2500	7.0000		40,275			890		39,385		39,385	
2009 Series A (var)	01/01/2043		.7700	1.7000		14,030			14,030		-		-	
2009 Series B (var)	01/01/2044	07/01/2018	1.1800	2.0600		11,808			200		11,608		11,608	
2009 Series C	12/01/2049	12/01/2018	3.4000	5.3500		32,575			520		32,055		32,055	
2009 Series D	06/01/2040	12/01/2018	3.7500	5.0500		18,060			4,765		13,295		13,295	
2010 Series A	12/01/2022	12/01/2018	3.6250	4.2500		27,055			17,755		9,300		9,300	
2010 Series B	06/01/2041	12/01/2018	3.9500	5.5000		8,010			180		7,830		7,830	
2010 Series C	12/01/2042	12/01/2018	3.7500	5.3500		77,380			39,545		37,835		37,835	
2010 Series D	12/01/2042	12/01/2018	4.7820	7.0180		16,595			9,660		6,935		6,935	
2010 Series E	06/01/2053	12/01/2018	3.4500	5.1250		12,045			140		11,905		11,905	
2011 Series A	12/01/2041	12/01/2018	3.1000	5.3000		19,415			395		19,020	\$	(38)	18,982
2012 Series A	12/01/2031	12/01/2018	1.5000	3.5000		27,415			1,585		25,830		25,830	
2012 Series B	06/01/2053	12/01/2018	1.5000	4.0200		38,440			575		37,865		37,865	
2012 Series C	06/01/2043	12/01/2018	1.8760	4.8360		73,245			11,995		61,250		61,250	
2012 Series E	12/01/2054	12/01/2018	1.2500	3.7500		24,025			485		23,540		23,540	
2012 Series F	06/01/2043	12/01/2018	1.2500	3.5000		12,615			12,035		580		580	
2013 Series A	12/01/2041	12/01/2018	1.5920	5.0860		31,200			9,470		21,730		21,730	
2013 Series B	06/01/2056	12/01/2018	1.3000	4.5000		115,440			1,335		114,105	97	114,202	
2013 Series C	12/01/2049	12/01/2018	1.6500	5.3500		22,905			235		22,670		22,670	
2013 Series E	12/01/2054	12/01/2018	1.3000	5.2500		29,035			250		28,785	(92)	28,693	
2013 Series F (var)	12/01/2038	12/01/2018	.8200	1.8800		25,580			580		25,000		25,000	
2014 Series A	12/01/2055	12/01/2018	.9000	4.6000		23,350			775		22,575		22,575	
2014 Series B	12/01/2047	12/01/2018	1.2500	4.7000		84,145			12,190		71,955		71,955	
2014 Series C	12/01/2045	12/01/2018	1.6050	5.0000		1,895			105		1,790		1,790	
2014 Series D	12/01/2054	12/01/2018	.8750	4.2500		29,400			385		29,015		29,015	
2014 Series E	12/01/2045	12/01/2018	1.1500	4.3500		38,260			805		37,455		37,455	
2015 Series A	12/01/2048	12/01/2018	1.2500	4.5000		46,485			245		46,240		46,240	
2015 Series B	12/01/2053	12/01/2018	1.4700	4.6140		31,170			765		30,405		30,405	
2015 Series C	06/01/2055	12/01/2018	1.0000	4.2500		20,975			275		20,700		20,700	
2015 Series D	12/01/2045	12/01/2018	.9000	4.3000		35,630			320		35,310		35,310	
2015 Series E	12/01/2045	12/01/2018	.8500	4.2000		28,335			550		27,785		27,785	
2015 Series G	12/01/2050	12/01/2018	.9000	4.1000		51,190			780		50,410		50,410	
2015 Series H	12/01/2050	12/01/2018	.9000	4.1000		20,740			365		20,375		20,375	
2015 Series I	12/01/2050	06/01/2022	3.4500	3.4500		25,000					25,000		25,000	
2016 Series A	12/01/2055	12/01/2018	.8000	4.1000		24,835			195		24,640		24,640	
2016 Series B	12/01/2048	12/01/2018	1.0500	4.2500		13,420			185		13,235		13,235	
2016 Series C	12/01/2055	12/01/2018	1.8000	5.0000		22,890			380		22,510		22,510	
2016 Series D	12/01/2048	12/01/2027	2.9000	3.4500		48,530					48,530		48,530	
2016 Series E	12/01/2027	12/01/2018	1.5000	3.2000		12,790					12,790		12,790	
2016 Series F	06/01/2057	06/01/2019	.9500	3.6250		73,510					73,510		73,510	
2016 Series G	12/01/2058	12/01/2018	3.8500	3.8500		9,980					9,980		9,980	
2016 Series H	12/01/2046	12/01/2018	1.3000	4.4000		52,240					52,240		52,240	
2016 Series I (var)	12/01/2056	06/01/2047	2.1170	2.8434		25,000					25,000		25,000	
2017 Series A	12/01/2049	12/01/2018	.9000	4.5500		72,405		1,085			71,320		71,320	
2017 Series B	12/01/2039	12/01/2018	1.3000	3.8500		15,760		7,930			7,830		7,830	
2017 Series C	12/01/2052	12/01/2019	1.1500	4.0500		43,280					43,280		43,280	
2017 Series D	06/01/2059	12/01/2019	1.4000	4.0000			\$	106,445			106,445		106,445	

						In thousands of dollars				
	Final Maturity Date	Next Scheduled Principal Payment Date	Interest % Rate Range From To		Outstanding June 30, 2017	Issued and Compounded	Retired or Exchanged	Outstanding June 30, 2018	Unamortized Bond/Note Discount/Premium	Adjusted Totals
2018 Series A	06/01/2046	06/01/2020	1.8000	3.8500		\$ 27,475		\$ 27,475		\$ 27,475
2018 Series B (var)	06/01/2058	06/01/2046	2.4500	2.4500		25,000		25,000		25,000
<b>Sub-total</b>					<b>\$ 1,669,493</b>	<b>\$ 158,920</b>	<b>\$ 161,405</b>	<b>\$ 1,667,008</b>	<b>\$ (33)</b>	<b>\$ 1,666,975</b>
<b>Single Family Housing Revenue Bond Program</b>										
Series 76 (var)	12/01/2030	12/01/2018	1.6600	2.5900	\$ 15,165		\$ 610	\$ 14,555		\$ 14,555
Series 143	12/01/2017		3.9000	3.9000	410		410	-		-
Series 147	12/01/2025	06/01/2023	4.6000	4.6000	1,885		560	1,325		1,325
Series 149, Subseries A	12/01/2041		3.1600	3.1600	20,380		20,380	-		-
Series 149, Subseries C	12/01/2041		2.9200	2.9200	7,510		7,510	-		-
Series 149, Subseries D	12/01/2041		2.9200	2.9200	10,380		10,380	-		-
Series 151	12/01/2027	12/01/2026	4.1000	4.1000	390			390		390
Series 152	06/01/2020	12/01/2018	2.5000	4.1500	9,405		5,310	4,095		4,095
Series 153	12/01/2023	12/01/2019	3.8000	4.4000	5,135		230	4,905		4,905
Series 154	12/01/2027	12/01/2026	4.1000	4.1000	1,055			1,055		1,055
Series 155	12/01/2028	12/01/2018	2.9000	5.0000	6,010		1,770	4,240	\$ 236	4,476
Series 156	06/01/2029	12/01/2018	2.2500	4.5000	8,330		3,000	5,330	95	5,425
Series 157	12/01/2023	12/01/2018	2.2500	3.9000	28,960		17,375	11,585		11,585
Series 159	12/01/2032	12/01/2018	1.6000	4.0500	9,230		1,180	8,050		8,050
Series 160	06/01/2034	12/01/2018	2.0500	3.7500	15,115		3,940	11,175	175	11,350
Series 161	12/01/2042	12/01/2018	1.5000	3.8750	2,875		480	2,395		2,395
Series 162	12/01/2042	12/01/2018	1.2500	3.5000	87,245		2,210	85,035	392	85,427
Series 163	12/01/2033	12/01/2018	1.5500	4.0000	41,580		9,600	31,980	572	32,552
Single 165	12/01/2043	12/01/2018	1.1500	4.0000	37,625		10,520	27,105		27,105
Series 166	12/01/2026	12/01/2018	1.3900	3.7910	19,415		1,525	17,890		17,890
Series 167	12/01/2043	12/01/2018	1.8000	4.0000	21,805		5,615	16,190	996	17,186
Series 168	12/01/2026	12/01/2018	.9500	3.7500	19,080		1,485	17,595		17,595
Series 169	12/01/2044	06/01/2021	2.5500	4.0000	15,190		2,445	12,745	978	13,723
Series 170	12/01/2020	12/01/2018	1.5120	4.0500	14,340		9,805	4,535		4,535
Series 171	12/01/2044	12/01/2018	.8000	4.0000	38,135		8,045	30,090	1,023	31,113
Series 172	06/01/2045	06/01/2028	3.3000	4.0000	54,750		16,510	38,240	2,058	40,298
Series 173	12/01/2026	12/01/2025	3.0000	3.1000	3,080			3,080		3,080
Series 174	12/01/2025	12/01/2018	1.2000	3.4000	21,075		2,310	18,765		18,765
Series 175	12/01/2045	06/01/2029	3.6500	4.1000	20,485		7,790	12,695	1,672	14,367
Series 176	12/01/2025	12/01/2024	2.9500	3.0000	3,120			3,120		3,120
Series 177	06/01/2039	12/01/2018	1.1500	4.0000	48,140		9,020	39,120		39,120
Series 178	06/01/2042	06/01/2029	3.5000	3.7000	64,390		3,595	60,795	2,306	63,101
Series 179	12/01/2025	12/01/2022	1.0000	2.9000	14,135		1,335	12,800		12,800
Series 180	12/01/2028	12/01/2018	1.4000	3.5000	22,270		2,865	19,405		19,405
Series 181	12/01/2044	12/01/2028	3.2500	4.0000	42,250		4,495	37,755	1,386	39,141
Series 182	12/01/2028	12/01/2018	1.0000	3.3000	20,600		1,415	19,185		19,185
Series 183	12/01/2046	06/01/2027	2.8000	3.5000	39,410		2,090	37,320	1,643	38,963
Series 184	06/01/2027	12/01/2018	.9500	2.6250	10,660		915	9,745		9,745
Series 185	06/01/2046	06/01/2021	2.1000	4.2000	46,995		10,195	36,800	1,780	38,580
Series 186	06/01/2039	12/01/2018	1.2000	4.0000	54,660		16,395	38,265		38,265
Series 187	12/01/2037	12/01/2026	2.4000	3.5500		\$ 51,920		51,920	2,545	54,465
Series 188	06/01/2043	12/01/2018	1.0500	4.0000		44,355	680	43,675		43,675
Series 189	12/01/2047	06/01/2038	1.5000	1.5000		25,000		25,000		25,000
Series 190	12/01/2048	12/01/2028	2.7000	4.0000		62,065		62,065	1,863	63,928
Series 191	12/01/2028	12/01/2018	1.3000	3.1500		16,605	80	16,525		16,525
Series 192	12/01/2022	12/01/2022	.0000	.0000		14,800		14,800		14,800
Series 193	12/01/2043	06/01/2020	2.8000	4.4000		17,500		17,500		17,500
Series 194	06/01/2019	12/01/2018	1.7000	1.8500		560		560	814	1,374
Series 195	12/01/2048	12/01/2020	1.8500	4.0000		16,115		16,115		16,115
Series 196 (var)	12/01/2048	06/01/2030	1.8090	1.8090		15,000		15,000		15,000
<b>Sub-total</b>					<b>\$ 902,670</b>	<b>\$ 263,920</b>	<b>\$ 204,075</b>	<b>\$ 962,515</b>	<b>\$ 20,534</b>	<b>\$ 983,049</b>
<b>Residential Mortgage Revenue Bond Program</b>										
2012 Series A	10/01/2042		3.0270	3.0270	\$ 37,088		\$ 6,855	\$ 30,233	\$ 1,814	\$ 32,047
2012 Series B	12/01/2042		2.5270	2.5270	33,509		4,067	29,442	878	30,320
<b>Sub-total</b>					<b>\$ 70,597</b>	<b>\$ -</b>	<b>\$ 10,922</b>	<b>\$ 59,675</b>	<b>\$ 2,692</b>	<b>\$ 62,367</b>
					<b>\$ 3,213,614</b>	<b>\$ 422,840</b>	<b>\$ 394,173</b>	<b>\$ 3,242,281</b>	<b>\$ 23,193</b>	<b>\$ 3,265,474</b>

**SCHEDULE 4: NOTES AND OTHER INDEBTEDNESS**

	Scheduled Redemption Date	Interest Rate Range FromTo		In thousands of dollars					Unamortized Bond/Note Discount/Premium	Adjusted Totals	
				Outstanding June 30, 2017	Issued and Compounded	Retired	Outstanding June 30, 2018				
Working Capital Fund											
General Obligation Notes Payable											
Construction Loan Notes											
2015 Series A	06/01/2018	1.8500	1.8500	\$10,675		\$10,675	\$-		\$-		
2016 Series A	10/31/2018	3.0000	3.0000		\$9,464		9,464			9,464	
2016 Series B	06/01/2019	2.0000	2.0000	34,755			34,755			34,755	
2016 Series C	06/01/2019	2.2500	2.2500	5,760			5,760			5,760	
2017 Series A	06/01/2020	1.8500	1.8500	22,550			22,550			22,550	
2017 Series B	12/01/2021	2.0500	2.0500		66,125		66,125			66,125	
2017 Series C	06/01/2020	2.3500	2.3500		9,790		9,790			9,790	
Total				\$73,740	\$85,379	\$10,675	\$148,444	\$-		\$148,444	
Direct Purchase Construction Loan Notes											
DIRECT PURCHASE IS 1 BLK4	08/14/2017	2.1000	2.1000	\$8,000		\$8,000	\$-		\$-		
DIRECT PURCHASE IS 1 BLK5	10/29/2018	2.4900	2.4900	19,795	\$1,215		21,010			21,010	
DIRECT PURCHASE IS 1 BLK6	10/29/2017	1.9400	1.9400	7,200		7,200	-		-		
DIRECT PURCHASE IS 1 BLK7	12/17/2017	2.3100	2.3100	21,975		21,975	-		-		
DIRECT PURCHASE IS 1 BLK8	08/17/2018	2.1000	2.1000	5,375	1,240	6,615	-		-		
DIRECT PURCHASE IS 1 BLK9	10/27/2018	2.1600	2.1600	24,480			24,480			24,480	
DIRECT PURCHASE IS 2	03/01/2019	1.8000	1.8000	18,256			18,256			18,256	
DIRECT PURCHASE IS 3	03/15/2018	1.5000	1.5000		7,500	7,500	-		-		
DIRECT PURCHASE IS 4 BLK 2018A	06/18/2021	4.2700	4.2700		5,850		5,850			5,850	
Total				\$105,081	\$15,805	\$51,290	\$69,596	\$-		\$69,596	
Housing Bond Program											
2016 ISSUE ONE BLK 1 NOTES	06/29/2018	1.7070	2.4350	\$250		\$250	\$-		\$-		
Total				\$250	\$-	\$250	\$-	\$-		\$-	
Grand Total				\$179,071	\$101,184	\$62,215	\$218,040	\$-		\$218,040	

**SCHEDULE 5: DEBT SERVICE REQUIREMENTS**

In thousands of dollars													
	2019		2020		2021		2022		2023		2024-2028		2029-
	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
Working Capital Fund *	\$ 4,024	\$ 113,725	\$ 2,902	\$ 32,340	\$ 3,021	\$ 38,643	\$ 678	\$ 66,125					
Rental Housing Mortgage Revenue Bond Program **	1,617	2,525	1,557	2,680	1,493	2,825	1,424	3,035	\$ 1,360	\$ 2,745	\$ 6,041	\$ 11,715	\$ 4,454
General Rental Development Bond Program **	6,932	1,275	6,892	1,204	6,844	1,275	6,793	1,325	6,740	1,390	32,823	7,166	31,383
Multi-Family Housing Bond Program	10,631	3,565	10,517	3,745	10,388	3,915	10,236	4,105	10,070	4,295	47,362	24,765	41,004
Housing Bond Program **	65,411	40,290	64,652	33,090	63,685	35,365	62,665	34,180	61,586	35,075	289,275	187,350	249,206
Single Family Housing Revenue Bond Program **	29,819	67,005	28,691	43,935	27,755	34,265	26,957	30,670	26,156	49,760	115,729	147,965	90,378
Residential Mortgage Revenue Bond Program	1,656	1,194	1,656		1,656		1,656		1,656		8,280		8,280
Totals ***	\$ 120,090	\$ 229,579	\$ 116,867	\$ 116,994	\$ 114,842	\$ 116,288	\$ 110,409	\$ 139,440	\$ 107,568	\$ 93,265	\$ 499,510	\$ 378,961	\$ 424,705

\*The Direct Purchase Construction Loan Note Issue Four Block 2018A is being drawn down in increments based on the draw schedule in the Amended and restated Block Certificate. As of June 30, 2018, the amount outstanding is \$5,850,000. However, the schedule above includes total payments of \$32,793,000, which will be fully drawn by June 30, 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, 2018. 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) 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 2019 for notices received by the Agency as of June 30, 2018.

June 30, 2018

In thousands of dollars														
-2033	2034-2038		2039-2043		2044-2048		2049-2053		2054-2058		2059-2063		Scheduled Maturity	
Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal
													\$ 10,625	\$ 250,833
\$ 15,735	\$ 2,747	\$ 12,900	\$ 1,297	\$ 14,390	\$ 75	\$ 4,315							\$ 22,065	\$ 72,865
7,650	27,497	41,830	25,045	12,130	19,188	44,556	\$ 12,388	\$ 20,680	\$ 1,640	\$ 43,812			\$ 184,164	\$ 184,293
31,275	32,986	39,500	24,857	51,250	16,032	66,870	5,231	59,700	75	2,940			\$ 219,389	\$ 295,925
228,075	197,239	276,660	135,710	281,615	79,434	256,458	35,087	163,345	8,515	90,260	\$ 152	\$ 5,245	\$ 1,312,617	\$ 1,667,008
182,995	56,751	174,095	28,858	147,055	6,495	83,030	27	1,740					\$ 437,616	\$ 962,515
	8,280		7,300	58,481									\$ 40,420	\$ 59,675
\$ 465,730	\$ 325,500	\$ 544,985	\$ 223,067	\$ 564,921	\$ 121,224	\$ 455,229	\$ 52,733	\$ 245,465	\$ 10,230	\$ 137,012	\$ 152	\$ 5,245	\$ 2,226,897	\$ 3,493,114

**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>	



**SCHEDULE 6: MBS Forward Contracts - Hedging Derivative Instruments**

Forward Contracts to sell TBA Mortgage Backed Securities	Notional Amount Jun. 30, 2017	Trade Date	Delivery Date	Coupon Rate	Fair Value Jun. 30, 2017	Counterparty Credit Rating
FNMA TBA JUL 2017	\$ 3,000,000	4/19/2017	7/13/2017	3.50%	\$ (1,875)	Aaa
FNMA TBA JUL 2017	4,000,000	5/1/2017	7/13/2017	3.50%	(14,844)	Aaa
FNMA TBA JUL 2017	5,000,000	4/26/2017	7/13/2017	3.50%	(32,422)	Aaa
FNMA TBA JUL 2017	3,000,000	5/4/2017	7/13/2017	3.50%	(15,938)	Aaa
FNMA TBA JUL 2017	3,000,000	5/3/2017	7/13/2017	3.50%	(10,781)	Aaa
FNMA TBA JUL 2017	3,000,000	4/11/2017	7/13/2017	3.50%	(14,063)	Aaa
FNMA TBA JUL 2017	3,000,000	4/13/2017	7/13/2017	3.50%	(6,094)	Aaa
FNMA TBA JUL 2017	2,000,000	5/9/2017	7/13/2017	3.50%	(13,125)	Aaa
FNMA TBA JUL 2017	3,000,000	4/13/2017	7/13/2017	4.00%	(3,750)	Aaa
FNMA TBA JUL 2017	2,000,000	4/19/2017	7/13/2017	4.00%	(1,250)	Aaa
FNMA TBA JUL 2017	3,000,000	5/1/2017	7/13/2017	4.00%	(8,438)	Aaa
FNMA TBA JUL 2017	2,000,000	5/3/2017	7/13/2017	4.00%	(5,313)	Aaa
FNMA TBA JUL 2017	3,000,000	5/4/2017	7/13/2017	4.00%	(11,250)	Aaa
FNMA TBA JUL 2017	4,000,000	5/9/2017	7/13/2017	4.00%	(19,375)	Aaa
FNMA TBA JUL 2017	2,000,000	4/11/2017	7/13/2017	4.00%	(8,125)	Aaa
FNMA TBA AUG 2017	5,000,000	5/25/2017	8/14/2017	3.50%	8,203	Aaa
FNMA TBA AUG 2017	4,000,000	5/17/2017	8/14/2017	3.50%	10,000	Aaa
FNMA TBA AUG 2017	4,000,000	6/1/2017	8/14/2017	3.50%	8,750	Aaa
FNMA TBA AUG 2017	4,000,000	6/8/2017	8/14/2017	3.50%	17,500	Aaa
FNMA TBA AUG 2017	2,000,000	5/12/2017	8/14/2017	3.50%	(6,406)	Aaa
FNMA TBA AUG 2017	5,000,000	5/19/2017	8/14/2017	3.50%	2,344	Aaa
FNMA TBA AUG 2017	5,000,000	6/7/2017	8/14/2017	3.50%	26,563	Aaa
FNMA TBA AUG 2017	3,000,000	6/7/2017	8/14/2017	4.00%	13,594	Aaa
FNMA TBA AUG 2017	4,000,000	5/12/2017	8/14/2017	4.00%	(7,813)	Aaa
FNMA TBA AUG 2017	2,000,000	6/8/2017	8/14/2017	4.00%	7,813	Aaa
FNMA TBA AUG 2017	3,000,000	6/1/2017	8/14/2017	4.00%	6,094	Aaa
FNMA TBA AUG 2017	3,000,000	5/17/2017	8/14/2017	4.00%	7,500	Aaa
FNMA TBA AUG 2017	2,000,000	5/25/2017	8/14/2017	4.00%	3,516	Aaa
FNMA TBA SEP 2017	6,000,000	6/20/2017	9/13/2017	3.50%	23,438	Aaa
FNMA TBA SEP 2017	5,000,000	6/28/2017	9/13/2017	3.50%	16,797	Aaa
FNMA TBA SEP 2017	2,000,000	6/13/2017	9/13/2017	3.50%	4,688	Aaa
FNMA TBA SEP 2017	4,000,000	6/13/2017	9/13/2017	4.00%	8,125	Aaa
FNMA TBA SEP 2017	2,000,000	6/20/2017	9/13/2017	4.00%	4,688	Aaa
FNMA TBA SEP 2017	2,000,000	6/28/2017	9/13/2017	4.00%	4,843	Aaa
Total	<u>\$ 112,000,000</u>				<u>\$ (6,406)</u>	

**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
<b>Assets</b>									
<b>Current assets</b>									
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	<b>698,680</b>	<b>26,781</b>	<b>10,234</b>	<b>30,985</b>	<b>374,323</b>	<b>205,503</b>	<b>1,426</b>	<b>(63)</b>	<b>1,347,869</b>
<b>Non-current assets</b>									
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	<b>953,016</b>	<b>60,813</b>	<b>182,048</b>	<b>295,726</b>	<b>1,606,417</b>	<b>929,396</b>	<b>58,396</b>		<b>4,085,812</b>
Total assets	<b>1,651,696</b>	<b>87,594</b>	<b>192,282</b>	<b>326,711</b>	<b>1,980,740</b>	<b>1,134,899</b>	<b>59,822</b>	<b>(63)</b>	<b>5,433,681</b>
<b>Deferred outflow of resources</b>									
Pension and OPEB	17,233								17,233
Hedging derivative instruments	405	8,709			652				9,766
Total deferred outflow of resources	<b>17,638</b>	<b>8,709</b>			<b>652</b>				<b>26,999</b>
Total assets and deferred outflow of resource	<b>\$ 1,669,334</b>	<b>\$ 96,303</b>	<b>\$ 192,282</b>	<b>\$ 326,711</b>	<b>\$ 1,981,392</b>	<b>\$ 1,134,899</b>	<b>\$ 59,822</b>	<b>\$ (63)</b>	<b>\$ 5,460,680</b>
<b>Liabilities</b>									
<b>Current liabilities</b>									
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	<b>206,794</b>	<b>2,953</b>	<b>2,643</b>	<b>4,453</b>	<b>46,235</b>	<b>69,601</b>	<b>1,395</b>	<b>(63)</b>	<b>334,011</b>
<b>Non-current liabilities</b>									
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	<b>728,978</b>	<b>79,049</b>	<b>183,018</b>	<b>292,360</b>	<b>1,628,208</b>	<b>916,182</b>	<b>61,173</b>		<b>3,888,968</b>
Total liabilities	<b>935,772</b>	<b>82,002</b>	<b>185,661</b>	<b>296,813</b>	<b>1,674,443</b>	<b>985,783</b>	<b>62,568</b>	<b>(63)</b>	<b>4,222,979</b>
<b>Deferred inflow of resources</b>									
Pension and OPEB	11,136								11,136
Total deferred inflow of resources	<b>11,136</b>								<b>11,136</b>
Total liabilities and deferred inflow of resources	<b>946,908</b>	<b>82,002</b>	<b>185,661</b>	<b>296,813</b>	<b>1,674,443</b>	<b>985,783</b>	<b>62,568</b>	<b>(63)</b>	<b>4,234,115</b>
<b>Commitments and contingencies</b>									
<b>Net position</b>									
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	<b>\$ 722,426</b>	<b>\$ 14,301</b>	<b>\$ 6,621</b>	<b>\$ 29,898</b>	<b>\$ 306,949</b>	<b>\$ 149,116</b>	<b>\$ (2,746)</b>		<b>\$ 1,226,565</b>

**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
<b>Operating revenues</b>									
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
<b>Total operating revenues</b>	<b>100,749</b>	<b>6,640</b>	<b>8,655</b>	<b>14,817</b>	<b>87,386</b>	<b>22,168</b>	<b>39</b>	<b>(1,261)</b>	<b>239,193</b>
<b>Operating expenses</b>									
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
<b>Total operating expenses</b>	<b>91,864</b>	<b>4,017</b>	<b>6,895</b>	<b>10,724</b>	<b>71,218</b>	<b>34,028</b>	<b>1,209</b>	<b>(1,261)</b>	<b>218,694</b>
Operating income (loss) before provision for loan losses and other items	<b>8,885</b>	<b>2,623</b>	<b>1,760</b>	<b>4,093</b>	<b>16,168</b>	<b>(11,860)</b>	<b>(1,170)</b>		<b>20,499</b>
Provision for loan losses	2,532			276	5,268	171			8,247
Other items, net									
<b>Total Provision for loan losses</b>	<b>2,532</b>			<b>276</b>	<b>5,268</b>	<b>171</b>			<b>8,247</b>
Operating income (loss) after provision for loan losses	<b>6,353</b>	<b>2,623</b>	<b>1,760</b>	<b>3,817</b>	<b>10,900</b>	<b>(12,031)</b>	<b>(1,170)</b>		<b>12,252</b>
<b>Special Items</b>		(6,186)							(6,186)
<b>Change in net position</b>	<b>6,353</b>	<b>(3,563)</b>	<b>1,760</b>	<b>3,817</b>	<b>10,900</b>	<b>(12,031)</b>	<b>(1,170)</b>		<b>6,066</b>
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
<b>Net position at the end of the fiscal year</b>	<b>\$ 722,426</b>	<b>\$ 14,301</b>	<b>\$ 6,621</b>	<b>\$ 29,898</b>	<b>\$ 306,949</b>	<b>\$ 149,116</b>	<b>\$ (2,746)</b>		<b>\$ 1,226,565</b>

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
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>									
<b>Cash flows from operating activities:</b>									
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
<b>Cash flows from non-capital financing activities:</b>									
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)
<b>Cash flows from capital financing activities:</b>									
Acquisition of capital assets	(2,014)								(2,014)
Net cash (used for) capital financing activities	(2,014)								(2,014)
<b>Cash flows from investing activities:</b>									
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

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
<b>RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY (USED FOR) OPERATING ACTIVITIES</b>									
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, net	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

**Supplemental Schedule 7**

Massachusetts Housing Finance Agency and Affiliates

Unaudited

**COMBINING STATEMENTS OF NET**
**POSITION**

June 30, 2017

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	Multi-Family Development 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, 2017
<b>Assets</b>										
<b>Current assets</b>										
Cash and cash equivalents	\$ 498,840	\$ 14,896		\$ 7,645	\$ 25,010	\$ 295,944	\$ 131,843	\$ 73		\$ 974,251
Investments	33,262						11,487	1,412		46,161
Interest and fees receivable on construction and mortgage loans, net	785	451		678	1,219	7,036	1,312			11,481
Current portion of loans receivable, net	124,071	3,287		2,380	3,431	39,669	10,713			183,551
Interfund accounts receivable (payable)	213	(16)		(10)			(187)			
Other assets	8,597	394		5	11	427	1,794	201	\$ (73)	11,356
<b>Total current assets</b>	<b>665,768</b>	<b>19,012</b>		<b>10,698</b>	<b>29,671</b>	<b>343,076</b>	<b>156,962</b>	<b>1,686</b>	<b>(73)</b>	<b>1,226,800</b>
<b>Non-current assets</b>										
Investments	92,940	2,627		431		43,375	579,145	71,100		789,618
Non-current portion of loans receivable, net	230,742	73,780		184,124	299,679	1,600,888	345,894			2,735,107
Escrowed funds	506,779					80				506,859
Investment derivative instruments						135				135
Other assets	54,451	8,042				1,249	1,705			65,447
<b>Total non-current assets</b>	<b>884,912</b>	<b>84,449</b>		<b>184,555</b>	<b>299,679</b>	<b>1,645,727</b>	<b>926,744</b>	<b>71,100</b>		<b>4,097,166</b>
<b>Total assets</b>	<b>1,550,680</b>	<b>103,461</b>		<b>195,253</b>	<b>329,350</b>	<b>1,988,803</b>	<b>1,083,706</b>	<b>72,786</b>	<b>(73)</b>	<b>5,323,966</b>
<b>Deferred outflow of resources</b>										
Pension and OPEB	14,237									14,237
Hedging derivative instruments	6	11,831				2,088				13,925
<b>Total deferred outflow of resources</b>	<b>14,243</b>	<b>11,831</b>				<b>2,088</b>				<b>28,162</b>
<b>Total assets and deferred outflow of resources</b>	<b>\$ 1,564,923</b>	<b>\$ 115,292</b>		<b>\$ 195,253</b>	<b>\$ 329,350</b>	<b>\$ 1,990,891</b>	<b>\$ 1,083,706</b>	<b>\$ 72,786</b>	<b>\$ (73)</b>	<b>\$ 5,352,128</b>
<b>Liabilities</b>										
<b>Current liabilities</b>										
Current portion of long term debt, net	\$ 47,850	\$ 2,710		\$ 1,215	\$ 3,400	\$ 66,515	\$ 32,020	\$ 1,412		\$ 155,122
Obligation line of credit	75,000									75,000
Accrued interest payable	530	987		494	896	7,035	2,488	165		12,595
Other liabilities	12,492			852		32		73	\$ (73)	13,376
Hedging derivative instruments	6									6
<b>Total current liabilities</b>	<b>135,878</b>	<b>3,697</b>		<b>2,561</b>	<b>4,296</b>	<b>73,582</b>	<b>34,508</b>	<b>1,650</b>	<b>(73)</b>	<b>256,099</b>
<b>Non-current liabilities</b>										
Non-current portion of long term debt, net	130,971	81,440		186,164	295,925	1,603,188	888,051	72,462		3,258,201
Long term- loan	9,180									9,180
Net pension and OPEB liability	30,224									30,224
Other liabilities	31,237	460				902				32,599
Escrowed funds payable	506,779					80				506,859
Hedging derivative instruments		11,831				2,088				13,919
<b>Total non-current liabilities</b>	<b>708,391</b>	<b>93,731</b>		<b>186,164</b>	<b>295,925</b>	<b>1,606,258</b>	<b>888,051</b>	<b>72,462</b>		<b>3,850,982</b>
<b>Total liabilities</b>	<b>844,269</b>	<b>97,428</b>		<b>188,725</b>	<b>300,221</b>	<b>1,679,840</b>	<b>922,559</b>	<b>74,112</b>	<b>(73)</b>	<b>4,107,081</b>
<b>Deferred inflow of resources</b>										
Pension and OPEB	1,872									1,872
<b>Total deferred inflow of resources</b>	<b>1,872</b>									<b>1,872</b>
<b>Total liabilities and deferred inflow of resources</b>	<b>846,141</b>	<b>97,428</b>		<b>188,725</b>	<b>300,221</b>	<b>1,679,840</b>	<b>922,559</b>	<b>74,112</b>	<b>(73)</b>	<b>4,108,953</b>
<b>Commitments and contingencies</b>										
<b>Net position</b>										
Restricted by bond resolutions		17,864		6,528	29,129	311,051	161,147	(1,326)		524,393
Restricted by contractual or statutory agreements	218,260									218,260
Unrestricted	500,522									500,522
<b>Total net position</b>	<b>\$ 718,782</b>	<b>\$ 17,864</b>		<b>\$ 6,528</b>	<b>\$ 29,129</b>	<b>\$ 311,051</b>	<b>\$ 161,147</b>	<b>\$ (1,326)</b>		<b>\$ 1,243,175</b>

**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, 2017

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	Multi-Family Development 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 2017
<b>Operating revenues</b>										
Interest on loans	\$ 12,968	\$ 5,523	\$ 21	\$ 9,103	\$ 14,210	\$ 85,714	\$ 20,711			\$ 148,250
Investment earnings:										
Interest income	5,851	184		32	52	1,729	20,319	\$ 2,440		30,607
Net (decrease) in fair value of investments	(1,366)					(65)	(17,212)	(2,907)		(21,550)
Fee income	72,320				499	2,646				75,465
Miscellaneous income	3,895					348	1,599		\$ (1,690)	4,152
<b>Total operating revenues</b>	<b>93,668</b>	<b>5,707</b>	<b>21</b>	<b>9,135</b>	<b>14,761</b>	<b>90,372</b>	<b>25,417</b>	<b>(467)</b>	<b>(1,690)</b>	<b>236,924</b>
<b>Operating expenses</b>										
Interest on bonds and notes, net of discount/premium	4,679	5,242	21	7,282	10,807	69,361	29,794	1,556		128,742
Financing costs	788			4		7,513	1,554			9,859
Administrative expenses	79,995	40		14	2	741	3,582	16		84,390
Miscellaneous expenses	3,540						420		(1,690)	2,270
<b>Total operating expenses</b>	<b>89,002</b>	<b>5,282</b>	<b>21</b>	<b>7,300</b>	<b>10,809</b>	<b>77,615</b>	<b>35,350</b>	<b>1,572</b>	<b>(1,690)</b>	<b>225,261</b>
Operating income (loss) before reduction to loan losses and other items	<b>4,666</b>	<b>425</b>		<b>1,835</b>	<b>3,952</b>	<b>12,757</b>	<b>(9,933)</b>	<b>(2,039)</b>		<b>11,663</b>
Reduction to loan losses	(16,579)			(519)	(743)	(2,330)	(399)			(20,570)
Other items, net	(1,087)									(1,087)
<b>Total Reduction to loan losses and other items</b>	<b>(17,666)</b>			<b>(519)</b>	<b>(743)</b>	<b>(2,330)</b>	<b>(399)</b>			<b>(21,657)</b>
Operating income (loss) after reduction to loan losses and other items	<b>22,332</b>	<b>425</b>		<b>2,354</b>	<b>4,695</b>	<b>15,087</b>	<b>(9,534)</b>	<b>(2,039)</b>		<b>33,320</b>
<b>Special Items</b>										
Change in net position	<b>22,332</b>	<b>425</b>		<b>2,354</b>	<b>4,695</b>	<b>15,087</b>	<b>(9,534)</b>	<b>(2,039)</b>		<b>33,320</b>
Interfund transfers	31,793			(1,700)	(3,082)	(29,572)	2,866	(305)		
Net position at the beginning of the fiscal year	664,657	17,439		5,874	27,516	325,536	167,815	1,018		1,209,855
Cumulative effect of GASB 75 adjustment of beginning Net OPEB Liability										
<b>Net position at the end of the fiscal year</b>	<b>\$ 718,782</b>	<b>\$ 17,864</b>		<b>\$ 6,528</b>	<b>\$ 29,129</b>	<b>\$ 311,051</b>	<b>\$ 161,147</b>	<b>\$ (1,326)</b>		<b>\$ 1,243,175</b>

**Supplemental Schedule 7**

Massachusetts Housing Finance Agency and Affiliates

Unaudited

**COMBINING STATEMENTS OF CASH FLOWS**

For the fiscal year ended:

June 30, 2017

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	Multi-Family Development 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 2017
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>										
<b>Cash flows from operating activities:</b>										
Collections on mortgage loans, construction loan repayments and loan sales	\$ 978,540	\$ 8,889	\$ 20,427	\$ 22,352	\$ 17,581	\$ 253,087	\$ 101,513			\$ 1,402,389
Loan advances to borrowers	(941,148)					(202,678)	(13,729)			(1,157,555)
Interest collections on construction loans	2,758									2,758
Fees collected	73,174				499	4,458				78,131
Cash payments to employees for services	(33,337)	(40)								(33,377)
Cash payments to other suppliers of goods and services	(36,909)		(1)	(92)	(1)	(1,437)	(3,421)	\$ (16)		(41,877)
Miscellaneous receipts (disbursements)	(4,053)		(2,782)	48						(6,787)
Transfer from escrows	40,851									40,851
Federal and state subsidy receipts	104,700									104,700
Federal and state subsidy disbursements	(116,590)									(116,590)
Escrow disbursements, net	(28,961)									(28,961)
Net cash provided by (used for) operating activities	<b>39,025</b>	<b>8,849</b>	<b>17,644</b>	<b>22,308</b>	<b>18,079</b>	<b>53,430</b>	<b>84,363</b>	<b>(16)</b>		<b>243,682</b>
<b>Cash flows from non-capital financing activities:</b>										
Sale of bonds and notes and draw down on line of credit	138,536					383,235	159,112			680,883
Bond issuance / redemption costs	(710)					(6,192)	(1,605)			(8,507)
Retirement of bonds and notes and pay down on line of credit	(60,242)	(2,540)	(20,300)	(14,430)	(3,255)	(410,641)	(206,800)	(16,423)		(734,631)
Interest on bonds and notes	(4,540)	(5,697)	(25)	(7,423)	(10,814)	(68,997)	(31,895)	(2,167)		(131,558)
Fund transfers	33,982			(1,004)	(3,082)	(29,572)		(324)		
Net cash provided by (used for) non-capital financing activities	<b>107,026</b>	<b>(8,237)</b>	<b>(20,325)</b>	<b>(22,857)</b>	<b>(17,151)</b>	<b>(132,167)</b>	<b>(81,188)</b>	<b>(18,914)</b>		<b>(193,813)</b>
<b>Cash flows from capital financing activities:</b>										
Acquisition of capital assets	(50)									(50)
Net cash (used for) capital financing activities	<b>(50)</b>									<b>(50)</b>
<b>Cash flows from investing activities:</b>										
Purchase of investments	(61,907)	(5,700)		(5)		(30,911)	(127,470)			(225,993)
Proceeds from sales of investments	21,000	5,319		820		1,766	85,101	16,423		130,429
Investment earnings, net of rebate	5,821	178		30	41	1,430	20,189	2,488		30,177
Net cash provided by (used for) investing activities	<b>(35,086)</b>	<b>(203)</b>		<b>845</b>	<b>41</b>	<b>(27,715)</b>	<b>(22,180)</b>	<b>18,911</b>		<b>(65,387)</b>
Net increase (decrease) in cash and cash equivalents	110,915	409	(2,681)	296	969	(106,452)	(19,005)	(19)		(15,568)
Cash and cash equivalents at the beginning of the fiscal year	387,925	14,487	2,681	7,349	24,041	402,396	150,848	92		989,819
Cash and cash equivalents at end of the fiscal year	<b>\$ 498,840</b>	<b>\$ 14,896</b>		<b>\$ 7,645</b>	<b>\$ 25,010</b>	<b>\$ 295,944</b>	<b>\$ 131,843</b>	<b>\$ 73</b>		<b>\$ 974,251</b>



**Supplemental Schedule 7**

Massachusetts Housing Finance Agency and Affiliates

Unaudited

**COMBINING STATEMENTS OF CASH  
FLOWS (continued)**

For the fiscal year ended:

June 30, 2017

In thousands	Working Capital Fund and Affiliates	Rental Housing Mortgage Revenue Bond Program	Multi-Family Development 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 2017
<b>RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY (USED FOR) OPERATING ACTIVITIES</b>										
Operating income (loss)	\$ 22,332	\$ 425		\$ 2,354	\$ 4,695	\$ 15,087	\$ (9,534)	\$ (2,039)		\$ 33,320
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							(1,918)	(572)		(2,490)
Depreciation and amortization	7,907									7,907
Reduction to losses on loans and other items, net	(17,666)			(519)	(743)	(2,330)	(399)			(21,657)
Loss on property dispositions	126									126
Recognition of fee income	(3,149)	(2)				(86)				(3,237)
Investment earnings	(5,851)	(184)		(32)	(52)	(1,729)	(20,319)	(2,440)		(30,607)
Change in fair value of investments	1,366					65	17,212	2,907		21,550
Interest expense on bonds and notes	4,679	5,242	21	7,282	10,807	69,360	31,712	2,128		131,231
Financing expenses	788		\$ -	4		7,514	1,554			9,860
Changes in assets and liabilities:										
Decrease (increase) in loans and other receivables and mortgage-backed securities	28,695	3,380	20,300	14,443	3,359	(37,154)	64,600			97,623
Decrease (increase) in interest and fees receivable on loans	123	(12)	4	250	13	469	181			1,028
Decrease (increase) in interfund balances	(23)			(26)		(6)	55			
Decrease in other assets and other receivables	23,056					2,070	1,219			26,345
Increase (decrease) in accounts payable and other liabilities	(23,358)		(2,681)	(1,448)		170				(27,317)
Total adjustments	16,693	8,424	17,644	19,954	13,384	38,343	93,897	2,023		210,362
Net cash provided by (used for) operating activities	\$ 39,025	\$ 8,849	\$ 17,644	\$ 22,308	\$ 18,079	\$ 53,430	\$ 84,363	\$ (16)		\$ 243,682