



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)

Financial Statements, Required Supplementary Information, and
Supplementary Information

June 30, 2020

(With Independent Auditors' Report Thereon)

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)

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Independent Auditors' Report

Fiscal and Management Control Board
Massachusetts Bay Transportation Authority:

Report on the Financial Statements

We have audited the accompanying financial statements of the Massachusetts Bay Transportation Authority, a component unit of the Massachusetts Department of Transportation, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements for the year then ended as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; 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 these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. 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 the auditors' 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, the auditor considers internal control relevant to the entity'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 entity'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 the Massachusetts Bay Transportation Authority as of June 30, 2020, and the changes in its financial position and its cash flows for the year then ended, in accordance with U.S. generally accepted accounting principles.



Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis and required supplementary information – Pension and OPEB Plans as listed in the accompanying table of contents (collectively, the required supplementary information) be presented 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 required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the required supplementary information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The Supplementary Information – Metropolitan Boston Transit Parking Corporation Schedule of Debt Service Coverage listed in the accompanying table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The Supplementary Information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such 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 as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated January 29, 2021 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

KPMG LLP

Boston, Massachusetts
January 29, 2021

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)
Management's Discussion and Analysis (Unaudited)
June 30, 2020

Introduction

The following discussion and analysis of the financial performance and activity of the Massachusetts Bay Transportation Authority (the Authority) is intended to provide an introduction to and an overview and analysis of the basic financial statements of the Authority for the fiscal year ended June 30, 2020 (FY20) with selected comparative information for the fiscal year ended June 30, 2019 (FY19). The management of the Authority prepared this discussion, and it should be read in conjunction with the financial statements and the notes thereto, which follow this section.

In Chapter 127 of the Acts of 1999 of the Commonwealth, as amended (Chapter 127) or the "Forward Funding Legislation," the Commonwealth repealed and restated the Prior Act effective July 1, 2000. The Prior Act as restated by Section 151 of Chapter 127, together with Section 35T of Chapter 10 of Massachusetts General Laws, also enacted as part of Chapter 127, as amended, are collectively referred to herein as the "Enabling Act."

The Authority receives a dedicated revenue stream consisting of the Assessments and the Dedicated Sales Tax (collectively, the Dedicated Revenues). The Dedicated Sales Tax is equal to the greater of the base revenue amount (as defined in the Enabling Act) and the amount raised by a 1% statewide sales tax, plus \$160,000 annually, all to be funded from existing sales tax receipts, subject to upward adjustment under certain circumstances set forth in the Enabling Act.

Aggregate Assessments are adjusted annually for inflation but will not be permitted to increase by more than 2.5% per year. Under the Enabling Act, the Authority is required to meet all of its operating and capital expenditures from Dedicated Revenues, federal assistance, and revenues generated from operation of the Authority's system, including without limitation fare revenues and nonfare revenues (e.g., parking and advertising). However, under the Enabling Act, the Authority's failure to provide transportation services at current levels would not affect the Commonwealth's or the assessed cities' and towns' obligation or ability to provide the Dedicated Revenues.

Financial Statements

The financial statements are prepared using proprietary fund (enterprise fund) accounting that uses the same basis of accounting as private-sector business enterprises. The Authority is operated under one enterprise fund. Under this method of accounting, an economic resources measurement focus and an accrual basis of accounting is used.

Revenue is recorded when earned and expenses are recorded when incurred. The financial statements include statements of net position, statement of revenues, expenses, and changes in net position, and statement of cash flows. These are followed by notes to the financial statements. In addition to the financial statements, this report also contains required supplementary information pertaining to the retirement and other postemployment benefit plans (OPEB) of the Authority.

The Statement of Net Position presents information on the Authority's assets and deferred outflows of resources and liabilities and deferred inflows of resources, with the difference between the two reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or weakening.

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The Statement of Revenue, Expenses, and Changes in Net Position reports the operating revenues and expenses and nonoperating revenues and expenses of the Authority for the fiscal year with the difference – the change in net position – being combined with any capital grants and contributions to determine the net change in position for the fiscal year. That change combined with the net position from the end of the previous year equals the net position at the end of the fiscal year.

The Statement of Cash Flows report cash and cash equivalent activities for the fiscal year resulting from operating activities, capital and related financing activities, noncapital and related financing activities, and investing activities. The net result of these activities added to the beginning of the year balance of cash and cash equivalents total to the cash and cash equivalent balance at the end of the fiscal year.

(a) Financial Highlights – 2020 to 2019

- The Authority's net position at June 30, 2020 was \$3,578,852, an increase from the prior year of \$1,105,706. The Authority's net position increased by \$459,658 for the fiscal year ended at June 30, 2019. The \$646,048 net position increase year over year is primarily the result of an increase in federal CARES Act assistance of \$348,900 a decrease in operating expenses of \$56,390, and an increase in capital grants and contributions of \$307,351 in fiscal year 2020.
 - Total bonds and notes payable outstanding at June 30, 2020 and 2019 were \$5,516,228 and \$5,493,515, respectively. During fiscal year 2020, the Authority issued Senior Subordinated Sales Tax Bond Subseries 2020 B-1 in the amount of \$339,080 and Subseries 2020 B-2 in the amount of \$45,685.
 - During the year, the Authority's operating revenues, principally transportation revenues, totaled \$632,578 as compared to operating revenues of \$777,191 in fiscal year 2019, a decrease of \$144,613.
 - Total nonoperating revenues and capital grants and contributions, which consists of sales tax receipts and federal and state operating grants, increased by \$734,271 from \$1,930,483 in FY19 to \$2,664,754 in FY20. The increase was due to an increase in federal CARES Act assistance of \$348,900, and an increase of \$307,351 in capital grants and contributions. Interest expense decreased, by \$11,044, to \$224,677 for FY20.
 - Total operating expenses of \$2,191,626 in FY20 decreased by \$56,390 as compared with FY19. The decrease in operating expenses from FY19 to FY20 is primarily attributable to an increase in depreciation and amortization of \$18,525, a decrease in material, supplies, and services of \$41,481.
 - As of June 30, 2020, the Authority's capital assets had a depreciated value of \$11,875,355 made up of \$19,990,954 in historical cost offset by \$8,115,599 in accumulated depreciation and amortization. During FY20, the Authority spent \$1,666,474 for additions to the system.

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Condensed Financial Information

Condensed financial information as of and for the years ended June 30, 2020 and 2019 is as follows:

Condensed Schedule of Net Position:

	June 30	
	<u>2020</u>	<u>2019</u>
Current and noncurrent assets and deferred outflows	\$ 2,431,564	2,349,998
Capital assets, net	<u>11,875,355</u>	<u>10,607,504</u>
Total assets and deferred outflows	<u>\$ 14,306,919</u>	<u>12,957,502</u>
Current liabilities	\$ 967,488	946,039
Long-term liabilities and deferred inflows	<u>9,760,579</u>	<u>9,538,317</u>
Total liabilities and deferred inflows	<u>\$ 10,728,067</u>	<u>10,484,356</u>
Net position:		
Net investment in capital assets	\$ 7,438,829	5,984,296
Restricted	20,869	20,524
Unrestricted	<u>(3,880,846)</u>	<u>(3,531,674)</u>
Total net position	<u>\$ 3,578,852</u>	<u>2,473,146</u>

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Condensed Schedule of Revenue, Expenses, and Changes in Net Position:

	June 30	
	2020	2019
Operating revenue:		
Revenue from transportation	\$ 545,650	671,701
Other	86,928	105,490
Total operating revenues	<u>632,578</u>	<u>777,191</u>
Operating expenses:		
Transportation services	966,475	1,001,762
Other operating expenses	842,397	882,025
Total operating expenses, excluding depreciation	1,808,872	1,883,787
Depreciation and amortization	382,754	364,229
Total operating expenses, including depreciation and amortization	<u>2,191,626</u>	<u>2,248,016</u>
Operating loss	(1,559,048)	(1,470,825)
Nonoperating revenue, net	<u>1,673,128</u>	<u>1,246,208</u>
Gain (loss) before capital grants and contributions	114,080	(224,617)
Capital grants and contributions	<u>991,626</u>	<u>684,275</u>
Increase in net position	1,105,706	459,658
Beginning of year, net position	<u>2,473,146</u>	<u>2,013,488</u>
End of year, net position	<u>\$ 3,578,852</u>	<u>2,473,146</u>

The information contained in the condensed financial information table is used as the basis for the following discussion regarding the Authority's financial activities for the fiscal years ended June 30, 2020 and 2019.

Financial Highlights for the fiscal years ended June 30, 2020 and 2019

- The Authority ended the years June 30, 2020 and 2019 with a net position of \$3,578,852 and \$2,473,146 of which \$7,438,829 and \$5,984,296 represented the Authority's net investment in capital assets, and \$(3,880,846) and \$(3,531,674) was unrestricted, respectively. The net position increased by \$1,105,706 and \$459,658 in FY20 and FY19, respectively. The increase in net position in FY20 is attributable to increased investment in capital assets, coupled with a drop transit revenue due to ridership drop caused by COVID-19 pandemic in Spring 2020, and an increase in capital grants.
- The Authority incurred an operating loss for the year ended June 30, 2020 of \$1,559,048. The operating loss was offset in accordance with the Enabling Act, which provides the Authority a dedicated revenue

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stream consisting of the assessments on the communities in the Authority's service area and a Dedicated Sales Tax. For the year ended June 30, 2020, the Authority recognized \$1,077,308 of dedicated sales tax revenues from the Commonwealth of Massachusetts. Dedicated local assessments on cities and towns within the Authority's service area accounted for \$174,398 in nonoperating revenue in FY20. The increase to net revenue before capital grants and contributions was \$114,080. This increase is attributed to \$348,900 in federal funds under the CARES act to mitigate the effects of COVID-19 pandemic.

- The Authority ended the years June 30, 2020 and 2019 with cash and investments of \$1,346,473 and \$1,253,586, respectively. Only \$314,421 and \$296,900 of this amount at June 30, 2020 and 2019, respectively, is available for operations as the bulk of these assets are restricted for specific purposes and unavailable for the Authority's general use.
- The statement of cash flows identifies the sources and uses of cash for each fiscal year. Cash and cash equivalents increased by \$56,130 in FY20.

Operating Revenue

The following charts show the major sources of operating revenue for the fiscal years ended June 30, 2020 and 2019:

	<u>2020</u>	<u>Percent of total</u>	<u>2019</u>	<u>Percent of total</u>
Bus	\$ 86,296	14 %	\$ 109,131	14 %
Subway	242,164	38	306,120	39
Commuter rail	203,165	32	238,755	31
Other passenger	14,025	2	17,695	2
Other operating	86,928	14	105,490	14
	<u>\$ 632,578</u>	<u>100 %</u>	<u>\$ 777,191</u>	<u>100 %</u>

Passenger revenues makes up 86% of the total operating revenues in FY20 and FY19. The Authority continues to work on increasing ridership through new equipment purchases, station upgrades, and system expansion and will continue to pursue its policy of maximizing nonfare revenue opportunities.

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Operating Expenses

The following chart shows the major sources of operating expenses for the fiscal years ended June 30, 2020, and 2019:

	<u>2020</u>	<u>Percent of total</u>	<u>2019</u>	<u>Percent of total</u>
Wages and benefits	\$ 966,475	44 %	\$ 1,001,762	45 %
Commuter rail	546,624	25	549,600	24
Depreciation and amortization	382,754	18	364,229	16
Material and supplies	266,515	12	307,996	14
Other operating	29,258	1	24,429	1
	<u>\$ 2,191,626</u>	<u>100 %</u>	<u>\$ 2,248,016</u>	<u>100 %</u>

Consistent with previous years, wages and benefits make up the largest portion of operating expenses. This is common in the public transportation industry as the provision of service is extremely labor intensive. Due to the significant investments, the Authority has in capital assets, depreciation, and amortization continues to be a significant operating expense. Unlike the other expenses listed, depreciation and amortization is not a cash expense. The Authority has and continues to pursue ways to reduce costs without impacting service.

Capital Assets

The Authority's capital assets as of June 30, 2020 and 2019 amounted to \$11,875,355 and \$10,607,504, (net of accumulated depreciation and amortization), respectively. This investment in capital assets includes land, construction work in progress, ways and structures, buildings and equipment, and leases.

Net capital assets consisted of the following for the fiscal years ended June 30, 2020 and 2019:

	<u>2020</u>	<u>2019</u>
Land	\$ 393,845	393,845
Construction work in progress	4,400,499	2,977,084
Ways and structures	5,741,642	5,878,209
Buildings and equipment	1,242,924	1,252,169
Other capital assets	96,445	106,197
	<u>\$ 11,875,355</u>	<u>10,607,504</u>

The Authority primarily acquires its assets with the proceeds from federal capital grants and revenue bonds. Station improvements, new equipment purchases, and system expansion are all part of the Authority's capital investment program. Commitments on approved capital asset construction projects were \$1,423,015 and \$1,319,789, for the years ended June 30, 2020 and 2019, respectively. Commitments to invest in new transportation equipment were \$1,014,335 and \$955,474, as of June 30, 2020 and 2019, respectively.

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Debt

Bonds and notes outstanding for the fiscal years ended June 30, 2020 and 2019:

	<u>2020</u>	<u>2019</u>
General Transportation System bonds	\$ 141,585	160,680
Revenue bonds	4,199,314	4,203,101
MBTPC bonds	304,585	304,585
Commercial paper	35,000	50,000
BAB's	<u>428,300</u>	<u>428,300</u>
	<u>\$ 5,108,784</u>	<u>5,146,666</u>

The total amount for these categories of debt decreased by \$37,882 for the fiscal year ended June 30, 2020.

During fiscal year 2020, the Authority issued Subordinated Sales Tax Bond Subseries 2020 B-1 in the amount of \$339,080 and Subseries 2020 B-2 in the amount of \$45,685.

Requests for Information

This financial report is intended to provide an overview of the finances of the Authority for those with an interest in this organization. Questions concerning any information within this report may be directed to the General Manager, the Chief Administrator, or the Chief Financial Officer of the Authority.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
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Statement of Net Position

June 30, 2020

(Dollars in thousands)

Assets and Deferred Outflows of Resources

Current assets:	
Unrestricted cash and temporary cash investments (note 3)	\$ 314,421
Other cash and temporary investments	1,857
Restricted cash and temporary cash investments (note 3):	
Bond construction accounts	186,971
Stabilization accounts	20,869
Accounts receivable:	
Commonwealth of Massachusetts	111,203
Federal grants	190,250
Other trade, net	32,057
Materials and supplies	52,208
Prepaid expenses	2,036
Total current assets	<u>911,872</u>
Noncurrent assets:	
Restricted investments (note 3):	
Forward Delivery Agreements (note 3(h))	73,466
Lease deposits (note 6)	78,332
Bond reserve accounts (note 8)	670,557
Total restricted investments	<u>822,355</u>
Net investment in direct financing lease (note 5)	29,100
Capital assets, at cost (notes 7 and 9):	
Transportation property, being depreciated	15,196,610
Transportation property, not being depreciated	4,794,344
Less accumulated depreciation	<u>(8,115,599)</u>
Capital assets, net	<u>11,875,355</u>
Total noncurrent assets	<u>12,726,810</u>
Total assets	<u>13,638,682</u>
Deferred outflows of resources:	
Debt refundings	143,184
Derivative related amounts	9,837
Pension related amounts (note 12)	237,630
Other postemployment related amounts (note 13)	277,586
Total deferred outflows of resources	<u>668,237</u>
Total assets and deferred outflows of resources	<u>\$ 14,306,919</u>

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
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Statement of Net Position

June 30, 2020

(Dollars in thousands)

Liabilities and Deferred inflows of Resources

Current liabilities:	
Current maturities of bonds and notes payable (note 8)	\$ 311,735
Accounts payable	386,612
Accrued liabilities:	
Payroll and vacation	86,153
Interest	108,218
Injuries and damage claims, workers' compensation claims, and other (note 10)	74,770
Total current liabilities	<u>967,488</u>
Noncurrent liabilities, less current maturities:	
Bonds payable, net (note 8)	5,204,493
Obligations under capital leases (note 6)	78,332
Accrued liabilities (note 10)	106,142
Pension liability (note 12)	1,520,913
Other postemployment benefits (note 13)	2,329,201
Liability for derivative instruments	10,631
Unearned revenue	53,444
Total noncurrent liabilities	<u>9,303,156</u>
Total liabilities	<u>10,270,644</u>
Deferred inflows of resources:	
Debt refundings	149
Pension related amounts (note 12)	61,714
Other postemployment related amounts (note 13)	395,560
Total deferred inflows of resources	<u>457,423</u>
Total liabilities and deferred inflows of resources	<u>10,728,067</u>
Net Position	
Invested in capital assets, net of related debt	7,438,829
Restricted	20,869
Unrestricted	<u>(3,880,846)</u>
Total net position	<u>\$ 3,578,852</u>

See accompanying notes to financial statements.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)

Statement of Revenue, Expenses, and Changes in Net Position

Year ended June 30, 2020

(Dollars in thousands)

Operating revenue:	
Revenue from transportation	\$ 545,650
Other	86,928
Total operating revenue	<u>632,578</u>
Operating expenses:	
Wages and related employee benefits:	
Wages	500,351
Medical and dental insurance	56,081
Other postemployment benefits	111,218
Health and welfare trust expenditures	18,488
Pensions	243,980
Social security taxes	44,941
Workers' compensation	13,635
Other	449
Capitalized costs	(22,668)
Total wages and related employee benefits	<u>966,475</u>
Other operating expenses:	
Depreciation and amortization	382,754
Materials, supplies, and services	266,515
Injuries and damages	21,714
Commuter railroad and local subsidy expenses (note 11)	546,624
Other	7,544
Total other operating expenses	<u>1,225,151</u>
Total operating expenses	<u>2,191,626</u>
Operating loss	<u>(1,559,048)</u>
Nonoperating revenue (expense):	
Dedicated sales tax revenue (note 4)	1,077,308
Contract assistance – Commonwealth of Massachusetts	187,000
Dedicated local assessments (note 4)	174,398
Other nonoperating income (note 14)	49,418
Fair Market Value Change in Forward Delivery Agreements	22,100
Federal Cares Act Assistance (note 14)	348,900
Interest income	38,681
Interest expense	(224,677)
Nonoperating revenue, net	<u>1,673,128</u>
Gain before capital grants	114,080
Capital grants and contributions	<u>991,626</u>
Increase net position	1,105,706
Beginning of year net position	<u>2,473,146</u>
End of year net assets	<u>\$ 3,578,852</u>

See accompanying notes to financial statements.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)

Statement of Cash Flows

Year ended June 30, 2020

(Dollars in thousands)

Cash flows from operating activities:	
Receipts from transit customers	\$ 547,667
Receipts from other operations	95,060
Payments to suppliers and vendors	(937,760)
Payments to employees	(561,828)
	<u>(856,861)</u>
Net cash used in operating activities	<u>(856,861)</u>
Cash flows from capital and related financing activities:	
Additions to transportation property	(1,666,474)
Interest paid	(227,428)
Change in deferred credits/charges	29,925
Commercial paper retirements	(15,000)
Payments on debt	(413,445)
Proceeds from bond and note issuances	384,765
Proceeds from bond premiums	93,567
Capital grants	969,373
Other	735
	<u>(843,982)</u>
Net cash used in capital and related financing activities	<u>(843,982)</u>
Cash flows from noncapital and related financing activities:	
Sales tax, contract assistance and local assessment	1,447,102
Federal Cares Act Assistance	221,779
	<u>1,668,881</u>
Net cash provided by noncapital and related financing activities	<u>1,668,881</u>
Cash flows from investing activity:	
Interest and other income	88,092
	<u>88,092</u>
Net cash provided by investing activity	<u>88,092</u>
Net change	56,130
Cash, temporary cash investments, beginning of year	<u>467,988</u>
Cash, temporary cash investments, end of year	<u>\$ 524,118</u>
Adjustments to reconcile operating loss to net cash used in operating activities:	
Operating loss	\$ (1,559,048)
Changes not requiring current expenditure of cash:	
Depreciation and amortization	382,754
Increase in pension amounts and related deferred outflows/inflows, net	120,171
Increase in other postemployment benefits and related deferred outflows/inflows, net	60,205
Changes in all other working capital accounts except cash, temporary cash investments and short-term debt	139,057
	<u>139,057</u>
Net cash used in operating activities	<u>\$ (856,861)</u>

See accompanying notes to financial statements.

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Notes to Financial Statements

June 30, 2020

(Dollars in thousands)

(1) The Reporting Entity

The Massachusetts Bay Transportation Authority (the Authority or MBTA) was originally created in 1964 as a body politic and corporate and a political subdivision of the Commonwealth of Massachusetts (the Commonwealth) to finance and operate mass transportation facilities within, and, to a limited extent, outside of its territorial area of 176 cities and towns and is authorized to enter into agreements for providing mass transportation service by private companies, including railroads. The 176 cities and towns are grouped into three categories, based upon the weighting of each member's allocable percentage of population and assessments: (i) the inner 14 cities and towns; (ii) the outer 51 cities and towns; and (iii) the other 111 served communities.

Chapter 161A is referred to herein, together with Section 35T of Chapter 10 of Massachusetts General Laws, as the "Enabling Act."

The Authority is governed and its corporate powers exercised by the board of directors (the Board of Directors or Board) of the Massachusetts Department of Transportation (MassDOT). However, during its existence, the Fiscal and Management Control Board (the Control Board or the FMCB) is afforded all the powers, responsibilities, and obligations relative to the Authority that are vested in the Board with the exception of authorizing the issuance of debt, which remains the responsibility of the Board. Furthermore, the General Manager is hired and retained by the Secretary of Transportation (the Secretary). The FMCB reports to the Secretary.

The Control Board may (i) establish separate operating and capital budgets each with clearly designated revenue sources and uses and establish policies and procedures to ensure that no funds are commingled between operating and capital budgets; (ii) establish one-year and five-year operating budgets, which are balanced primarily through a combination of internal cost controls and increased own-source revenues and which facilitate the transfer of MBTA employees from the capital budget to the operating budget; (iii) establish five-year and twenty-year capital plans that include a phased program for the complete restoration of the physical assets of the Authority including its vehicle fleet, a plan to address failings within the existing capital program and funding recommendations to meet the region's transit needs; (iv) establish a rigorous performance management system and performance metrics and targets that address, among other things, maximizing of own-source revenues, increasing ridership, reducing absenteeism, addressing vacancies and attrition, improving employee morale, achieving procurement and contracting improvements, and improving customer focus and orientation; (v) review any contract for the provision of services entered into by the Authority, including contracts entered into before the establishment of the Control Board, including, but not limited to, commuter rail and paratransit service contracts, and amend those contracts, as necessary, in accordance with their terms; and (vi) establish, increase, or decrease any fare, fee, rate, or charge for any service, license, or activity within the scope of the MBTA. The Control Board may: (i) reorganize or consolidate MBTA departments, divisions, or entities, in whole or in part, except the Metropolitan Boston Transit Parking Corporation; (ii) establish any new departments, divisions, or entities as it considers necessary; and (iii) transfer the duties, powers, functions, and appropriations of a department, division, or entity, except the duties, powers, functions, and appropriations of the Metropolitan Boston Transit Parking Corporation, to another. Any reorganization or consolidation that affects MassDOT shall be approved by the Board.

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The Control Board consists of five members appointed by the Governor. Three members shall be members of the MassDOT Board, one shall have experience in transportation finance and one shall have experience in mass transit operation. On May 25, 2017, the Governor accepted the FMCB's recommendation to extend its governance by two years, and will continue until June 30, 2020, as allowed under the authorizing statute. On July 2, 2020, Chapter 114 of the Acts of 2020 extended the Control Board term to June 30, 2021.

The Control Board shall appear before and provide updates to the Board not less than once per month.

Following the dissolution of the Control Board, the MassDOT Board will resume sole governance of the Authority. The Board consists of 11 members. The Secretary of Transportation shall serve ex officio as Chair and ten other members appointed by the Governor, one of whom shall be a rider, as defined in the Enabling Act; one of whom shall have experience in the field of public or private finance; one of whom shall have experience in transportation planning and policy; one of whom shall have experience in civil engineering; one of whom shall have experience in the field of public or private finance or transportation planning and policy; one of whom shall have municipal government experience in one of the fourteen cities and towns, as defined in the Enabling Act; one of whom shall have municipal government experience in one of the fifty-one cities and towns, as defined in the Enabling Act; one of whom shall have municipal government experience in one of the other served communities, as defined in the Enabling Act; one of whom shall have municipal government experience in a city or town not part of the area constituting the authority, as defined in the Enabling Act; and one of whom shall be a representative of a labor organization selected from a list of three nominees provided by the Massachusetts State Labor Council, AFL-CIO. Four of the members, other than the Chair, shall serve for terms that are coterminous with the Governor; provided, however, that at least three of the coterminous members shall have experience in transportation policy, public finance, or civil engineering and at least one of the coterminous members shall be a rider. The six remaining members appointed by the Governor shall serve for terms of four years. No more than six of the eleven directors, except the ex officio director, shall be members of the same political party.

Under the Enabling Act, the Advisory Board, consisting of a representative of each of the cities and towns paying assessments, shall have certain specified powers, including the power to review the Authority's long-term capital program and annual operating budget. The Enabling Act does not provide for the Authority to be a debtor under the federal bankruptcy code.

On May 4, 2011, the Authority approved the establishment of Metropolitan Boston Transit Parking Corporation (MBTPC) a private Massachusetts nonprofit corporation organized under the provisions of Chapter 180 of Massachusetts General Laws, for the limited purpose of taking action necessary to provide for issuance of bonds on behalf of the Authority secured by the revenues from the parking system of the Authority. The MBTPC Systemwide Senior Lien Parking Revenue Bonds, Series 2011 were issued on June 22, 2011. The Authority is the sole member of MBTPC and the Board of Directors consists of three ex officio management employees of the Authority. MBTPC has no employees. MBTPC is authorized under the Systemwide Parking Revenue Bonds Resolution (the General Resolution) to issue debt payable and has assumed certain rights to receive gross revenue from the parking system of the Authority under a Transfer and Disposition Agreement. The obligations of the corporation, the bonds, and Transfer and Disposition Agreement are limited obligations, payable solely from the assets of MBTPC, which are

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pledged under the General Resolution and recourse shall be limited to such assets. Due to its relationship with the Authority, the MBTPC is considered a blended component of the Authority.

In accordance with the requirements of Governmental Accounting Standards Board (GASB), the financial statements must present the Authority (the primary government) and its component units. Pursuant to this criterion, no component units, other than the MBTPC, were identified for inclusion in the accompanying financial statements. Additionally, the accompanying financial statements are incorporated into the financial statements of MassDOT, as the Authority is a component unit of MassDOT.

(2) Summary of Significant Accounting Policies

(a) Basis of Financial Reporting

The Authority applies U.S. generally accepted accounting principles (GAAP) as prescribed by GASB. The accompanying financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting and reflect transactions on behalf of the Authority, the reporting entity. The Authority accounts for its operations as an enterprise fund. Operating revenues and expenses result from providing transportation services to member communities. All other revenues and expenses are reported as nonoperating revenues and expenses.

(b) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

(c) Cash and Temporary Cash Investments

Cash and temporary cash investments include cash on deposit and the Massachusetts Municipal Depository Trust (MMDT). MMDT is a state-regulated external investment pool that is not registered with the SEC.

(d) Investments

Investments are generally presented at fair value, other than certain investments that are recorded at amortized cost as prescribed by GASB (MMDT and guaranteed investment contracts). The MBTA uses an independent pricing source to determine the fair value of investments at quoted market prices. The Authority also records its investments in state & local government series obligations at cost due to prohibition of transferability of the obligations.

(e) Statement of Cash Flows

For purposes of the statement of cash flows, the Authority considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents, which are reported as temporary cash investments.

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(f) Cash and Investment Accounts

Certain cash and investments are segregated from operating cash and investments and labeled restricted due to certain external restrictions as follows:

Bond Construction Accounts – Represent unexpended bond proceeds

Stabilization Accounts – Represent funds held in accordance with statutory requirements to be used when annual revenues is projected to be less than annual expenses, or if the Authority has insufficient funds on hand to pay current expenses

Lease Deposits – Represent investments (Treasury STRIPS) held by trustees that will be used to make scheduled equity payments on the Authority's capital leases

Bond Reserve Accounts – Represent funds required to be maintained by trust agreements and bond resolutions.

Forward Delivery Agreements – Represent derivative instruments related to the bond reserve accounts as more fully described in note 3(h).

Unrestricted cash and temporary investments are free of any internal or external restrictions. Other cash and temporary investments represent internally restricted funds held for capital maintenance, debt service, and other expenses.

(g) Capital Assets

All capital assets exceeding \$5, with a useful life of greater than one year, are stated at historical cost. These costs include the Authority's labor costs for employees working on capital projects, related fringe benefits, and an allocated share of general and administrative costs. Ordinary maintenance and repairs are charged to expense as incurred.

Depreciation of capital assets is computed using the straight-line method over the estimated useful life of the asset. The major categories of transportation property in service and their estimated useful lives are as follows at June 30, 2020:

	Estimated useful life
Ways and structures	10–60 years
Building and equipment	3–25 years
Other capital assets	5–98 years

(h) Construction in Progress

For the year ended June 30, 2020, approximately \$1.7 billion was expended towards the completion of major construction projects and improvements in progress. The projects and improvements completed

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were transferred to the appropriate transportation property accounts. Major projects included transit service extensions, right-of-way improvements, and purchases of new rolling stock and other equipment.

The Authority does not capitalize interest.

(i) Materials and Supplies

Materials and supplies are stated at average cost and include items to support the Authority's operations.

(j) Self-Insurance

The Authority is fully self-insured for various risks including workers' compensation, and injuries and damages claims. The Authority also self-insures a portion of casualty, liability claims, and property losses.

(k) Revenue Recognition

The Authority realizes revenue from a variety of different sources including but not limited to dedicated sales tax revenue and dedicated assessment revenue (collectively referred to as Dedicated Revenues), state contract assistance appropriated funds, fare revenue, and nonfare revenue such as real estate, parking, and advertising revenues.

Under the Enabling Act, the Dedicated Revenues are impressed with a trust for the benefit of Authority bondholders. Furthermore, the Commonwealth covenants that while any Authority bonds or notes secured by the Dedicated Revenues are outstanding and remain unpaid, the Dedicated Revenues shall not be diverted, and, so long as the Dedicated Revenues are necessary for the purpose for which they have been pledged. The Authority recognizes the Dedicated Revenues as nonoperating revenue.

The Dedicated Sales Tax is equal to the greater of the base revenue amount (as defined in the Enabling Act) and the amount raised by a 1% statewide sales tax to be funded from existing sales tax receipts, subject to adjustment under certain circumstances set forth in the Enabling Act, plus \$160,000 annually. The dedicated assessment revenue consists of the obligation of 176 cities and towns in the Authority's expanded district to pay assessments for transportation services and benefits rendered. The Commonwealth deducts the assessments from each municipality's local aid payments; as such, these payments are received from the Commonwealth.

The dedicated assessments shall be adjusted each July 1 by the growth rate of the inflation index over the preceding 12 months not to exceed 102.5% of the previous year's assessment.

The Transportation Reform Act established the Commonwealth Transportation Fund (CTF), a budgetary fund of the Commonwealth for transportation related purposes, to receive essentially the same revenue previously deposited into the Highway Fund, including gasoline tax receipts and registry fee revenue. The Transportation Finance Act also provided funding for various transportation services and infrastructure needs within the various units of MassDOT. The Commonwealth appropriated the amount of \$127,000 from the CTF to the Authority for FY20. In addition, the Commonwealth made

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\$60,000 available to the Authority in the FY20 capital budget for pay-go capital purposes. These amounts are subject to appropriation by the Commonwealth in future years. The Authority recognizes the state appropriated funds from the CTF on an accrual basis as nonoperating revenue.

The Authority generates significant revenue from the operation of its transportation system, including both fare revenue and nonfare revenue such as those derived from real estate, parking, and advertising. Fare revenue is recorded on an accrual basis as operating revenue when fare media is purchased by riding customers through fare vending equipment and pass programs administered by the Authority. Real estate, parking, and advertising revenue is recorded on an accrual basis as operating revenue upon reporting of independent contractors managing these revenue streams on behalf of the Authority. Such activity is reflected as operating revenue in the accompanying financial statements

(l) Capital Grants and Contributions

The Authority receives capital grants from certain government agencies to be used for various purposes connected with the planning, modernization, and expansion of transportation facilities and equipment.

(m) Compensated Absences

The Authority accrues for vacation pay when it is earned by employees. The amount of vacation pay accrued as of June 30, 2020 was \$20,952.

(n) Postemployment Benefits

The Authority sponsors three defined-benefit pension plans, including the MBTA Retirement Fund, the MBTA Police Association Retirement Plan, and the MBTA Deferred Compensation Plan. The Authority measures and records a net pension liability on its statement of net position, which represents its unfunded pension plans' obligation. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the MBTA Retirement Fund, the MBTA Police Association Retirement Plan, and the MBTA Deferred Compensation Plan, and additions to/deductions from the Plans' fiduciary net position have been determined on the same basis as they are reported by the Plans. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments held by the plans are measured at fair value.

The Authority also sponsors an unfunded other post-employment benefit (OPEB) plan, which is more fully described in note 13.

(o) Environmental and other Remediation Obligations

The Authority recognizes pollution remediation liabilities in accordance with GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations* and GASB Statement No. 83, *Certain Asset Retirement Obligations*. At June 30, 2020, the Authority recorded a long-term

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liability of \$8,141 related to certain underground storage tanks and for the removal of Polychlorinated Biophenyls (PCB) at one of its facilities.

(p) Derivatives

The Authority's derivative activities included various forward delivery agreements (FDA) and various interest rate swaps, which are recorded at fair value determined using a market approach that considers benchmark interest rates. At June 30, 2020, the fair value of the FDA, which are considered investment derivatives totaled \$73,466. At June 30, 2020, the fair value of the interest rate swaps, which are considered as hedge instruments totaled \$(10,631).

Changes in fair value of the FDA for the year ended June 30, 2020 totaled approximately \$22.1 million and is reported in the statement of revenue, expenses, and changes in net position.

(q) Available Unrestricted Resources

The Authority's policy is to utilize available unrestricted resources prior to restricted resources.

(r) Deferred Inflows and Outflows

The Authority accounts for certain transactions that result in the consumption or acquisition of one period that are applicable to future periods as deferred outflows and deferred inflows, respectively, to distinguish them from assets and liabilities. Deferred outflows of resources increase net position, similar to assets and deferred inflows of resources decrease net position similar to liabilities.

(s) Statement of Net Position

The statement of net position presents all of the Authority's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference reported as net position. Net position is reported in three categories:

Net investment in capital assets consists of capital assets, net of accumulated depreciation and amortization and reduced by outstanding balances for bonds, notes, and other debt that are attributed to the acquisition, construction or improvement of those assets.

Restricted net position results when constraints placed on net position use are either externally imposed by creditors, grantors, contributors, and the like, or imposed by law through enabling legislation.

Unrestricted net position consists of net position that does not meet the definition of the two preceding categories.

(3) Deposits and Investments

The Authority's investment policy is to only invest in securities named in the respective trust agreements.

The Authority is authorized by its board of directors to make deposits into checking and savings accounts and to invest in direct obligations of the U.S. Treasury, its agencies and instrumentalities, bankers'

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acceptances, investment agreements, municipal bonds, repurchase agreements secured by U.S. government and agency obligations, and certain other investments permitted under the trust indentures.

Obligations of any agency or instrumentality of the United States of America including, but not limited to, the following may be acceptable as collateral to secure certificates of deposit or other instruments:

- (A) Federal Home Loan Banks
- (B) Federal Land Banks
- (C) Federal Intermediate Credit Banks
- (D) Bank for Cooperatives
- (E) Federal National Mortgage Association
- (F) Federal Farm Credit Banks

The Authority may invest in prime commercial paper of corporate issuers with a minimum quality rating of P 1 by Moody's Investors Service (Moody's) or A 1 by Standard and Poor's (S&P). These instruments can vary in maturity; however, no more than 10% of the investment funds shall be invested in the commercial paper of a single corporation.

Deposits and investments consisted of the following amounts presented in the accompanying statement of net position at June 30, 2020:

	2020
Restricted:	
Bond construction accounts	\$ 186,971
Bond reserve accounts	670,557
Stabilization accounts	20,869
Forward delivery agreements	73,466
Lease deposits	78,332
Subtotal	1,030,195
Unrestricted cash and temporary cash investments	316,278
Total	\$ 1,346,473

The Board approved the establishment of a Lockbox Capital Maintenance Fund (the Fund) that is to be funded by the increase in fare revenue generated by the fare changes. Resources deposited in the Fund will be used for pay-as-you-go capital improvements. Spending from the Fund for any purpose other than

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capital improvements requires at least a two-thirds vote of the FMCB. The Fund had a balance of \$57,766 as part of the unrestricted cash balance as of June 30, 2020.

(a) Custodial Credit Risk – Deposits

The custodial credit risk for deposits is the risk that, in the event of a bank failure, the Authority's deposits may not be recovered. The deposits in the bank in excess of the insured amount and collateralized amount are uninsured and uncollateralized. The carrying amount of the Authority's deposits at June 30, 2020 was \$92,179. The bank balances at June 30, 2020 were \$96,389. Of this amount, \$0 was exposed to custodial credit risk as uninsured and uncollateralized. These amounts reflect the Federal Deposit Insurance Corporation limit of \$250 per institution at June 30, 2020.

(b) Interest Rate Risk – Investments

Interest rate risk is the risk that changes in interest rates of debt investments will adversely affect the fair value of an investment. The Authority follows the guidelines in the Authority's trust agreements, and does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

The Authority's fixed-income investments at June 30, 2020 are presented below. All investments are presented by investment type and maturity.

Investment type	Amount	2020			
		Investment maturities (in years)			
		Less than 1 year	1–3	4–8	More than 8
Money market funds	\$ 397,689	397,689	—	—	—
MMDT	431,938	431,938	—	—	—
Guaranteed investment contracts	1,321	—	—	—	1,321
U.S. Treasury STRIPS	78,332	—	—	—	78,332
U.S. Treasury securities	20,701	20,701	—	—	—
U.S. government-sponsored enterprises	140,176	113,087	—	—	27,089
Municipal bonds	47,360	—	8,223	8,362	30,775
State and Local Government	63,310	—	12,180	—	51,130
Investments	\$ 1,180,827	963,415	20,403	8,362	188,647

(c) Credit Ratings

The Authority has \$397,689 invested in money market funds as of June 30, 2020. These investments are not rated.

The Authority has \$431,938 invested in MMDT as of June 30, 2020. MMDT is not rated.

The Authority holds guaranteed investment contracts with a fair value of \$1,321 at June 30, 2020. These investments are not rated.

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The Authority had \$209,703 in U.S. Treasury STRIPS, U.S. Treasury securities, state and local government series, and municipal bonds as of June 30, 2020. The investments in Treasury STRIPS, U.S. Treasury Securities, and state and local government series obligations are backed by the full faith and credit of the U.S. government. The municipal bonds represent debt obligations issued by the Commonwealth of Massachusetts and have an implied credit rating of Aaa/AA+.

The Authority has \$140,176 invested in U.S. government-sponsored enterprises as of June 30, 2020. These investments have an implied credit rating of AAaa/AA+ or they have been collateralized to AAA.

(d) Concentration of Credit Risk – Investments

Concentration of credit risk is the risk of loss attributable to the magnitude of the Authority's investment in a single issuer. The issuers where securities at year-end exceeded 5% of the total investments, other than U.S. government obligations and mutual funds, are as follows:

	Credit rating by Moody's/S&P	2020	Percentage of portfolio
Federal National Mortgage Association	Aaa/AA+	\$ 69,165	5.87 %

(e) Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Authority was not exposed to foreign currency risk as of June 30, 2020.

(f) Fair Value Hierarchy

Investments are measured at fair value on a recurring basis. Recurring fair value measurements are those that are required to be made at the end of each reporting period. Fair value measurements are categorized based on the valuation inputs used to measure the fair value.

- Level 1 inputs are quoted market prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.
- Level 2 inputs are other than quoted prices in Level 1 that are observable for the asset or liability or similar assets or liabilities either directly or indirectly through corroboration with the observable market data.
- Level 3 inputs are significant unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

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The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at June 30, 2020.

Institutional Money Market Funds – Valued at fair value, which is represented by the quoted price for the fund generally \$1.00 (one dollar). Institutional Money market funds are generally classified as Level 1.

U.S. Treasury Strips – Treasury strips are typically valued based on pricing sources with reasonable level of price transparency or derived from a treasury curve. Treasury strips are generally categorized as Level 2 of the fair value hierarchy.

U.S. Treasury Securities – Securities issued by the U.S. Government, its agencies, authorities, and instrumentalities are valued using quoted prices, documented trade history in the security, and a pricing model maximizing the use of observable inputs determined by investment managers.

- U.S. Treasury Securities consist principally of U.S. Treasury bills, notes, and bonds are generally classified as Level 2 of the fair value hierarchy.
- U.S. Government-sponsored enterprises securities consist principally of U.S. Government agency obligations including agency-issued debt, agency mortgage pass-through securities, and agency collateralized mortgage obligation are generally categorized in Level 2 of the fair value hierarchy.

Municipal Bonds – State and municipal bonds are generally valued based on the independent prices obtained from third-party valuation services. Where prices of recently executed market transactions of similar securities and of comparable size are easily observed, those are taken into consideration for arriving at the fair value. When independent prices are available for state and municipal bonds, these are categorized as Level 2 of the fair value hierarchy.

Derivative Instruments – The Authority's interest rate swaps and forward delivery agreements are classified as Level 2 as valued using a market approach that considers benchmark interest rates.

The Authority has no securities classified as Level 3.

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(g) Fair Value and Amortized Cost Measurements

The Authority categorizes its investments within the fair value hierarchy as of June 30, 2020 as follows:

	2020		
	Total	Fair value Level 1	Fair value Level 2
Investments by fair value level:			
Money market funds	\$ 397,689	397,689	—
U.S. Treasury STRIPS	78,332	—	78,332
U.S. Treasury securities	20,701	—	20,701
U.S. government-sponsored enterprises	140,176	—	140,176
Municipal bonds	47,360	—	47,360
Investments by fair value level	<u>684,258</u>	<u>397,689</u>	<u>286,569</u>
Investments measured at amortized cost:			
MMDT	431,938	—	—
State and Local Government Series	63,310	—	—
Guaranteed investment contracts	1,321	—	—
Investments measured at amortized cost	<u>496,569</u>	<u>—</u>	<u>—</u>
Total investments	<u>\$ 1,180,827</u>	<u>397,689</u>	<u>286,569</u>
Interest rate swaps	\$ (10,631)	—	(10,631)
Forward delivery agreements	\$ 73,466	—	73,466

(h) Forward Delivery Agreements

The Authority has entered into several forward delivery agreements (FDAs) with various counterparties related to its debt service and debt service reserve funds (collectively, the Funds). These FDAs provide for the counterparties to pay the Authority a fixed rate of return on the amounts on deposit in the Funds in exchange for the Authority's obligation to purchase securities at specified dates in the future. Under the FDAs, the Authority receives fixed return rates ranging from 4.000% to 6.765% and commits to purchase the securities at their market value on the specified future dates through June 30, 2037. The credit ratings of the counterparties to the FDAs as of June 30, 2020, as determined by Standard and Poor's, were from "A" to "AA."

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(4) Pledged Revenues

The Authority has pledged, as security for Sales Tax Series Bonds issued and Assessment Bonds issued, a portion of the Commonwealth sales tax (excluding meals tax) that is restricted for purposes of providing a dedicated revenue source to the Authority and a portion of the assessments obligated to be paid by cities and towns for which the Authority provides specified transportation services. Such bonds, issued by the Authority, provide financing for a portion of the capital improvement projects included in the Authority's approved Capital Investment Program (CIP), and are payable through fiscal year ended June 30, 2050. The pledge of dedicated sales tax receipts and assessments from local communities remains in place until all bonds outstanding are retired and paid. The Authority generally issues bonds annually to fund its CIP, and these funds will continue to be pledged as security for the bonds until such time as the Authority no longer finances its CIP through the issuance of bonds secured by such pledged revenues and all such Authority bonds issued and outstanding have been retired. The total amount of dedicated sales tax revenues and local assessment revenues received in fiscal year 2020 was \$1,075,631 and \$173,887, respectively, a total of \$1,249,518. Total annual debt service (principal and interest) paid during fiscal year 2020 on outstanding Sales Tax Bond Series and, Assessment Bonds was \$469,428, representing 37.6% of pledged revenues.

The MBTPC pledge of dedicated parking receipts of the parking system of the Authority remains in place until all bonds outstanding are retired and paid. The debt service requirement in fiscal year 2020 was \$15,373, which represents 47.3% of \$32,498 revenue in the fiscal year 2020.

Total principal and interest remaining on Sales Tax Series Bonds, Assessment Bonds, and MBTPC Bonds outstanding as of June 30, 2020 are \$5,093,424.

(5) Net Investment in Direct Financing Lease

The Authority entered into a direct financing lease related to the underground parking garage structure located at Nashua Street and Legends Way in the city of Boston effective on June 6, 2012. The lease is for a subsurface building area with five levels of parking with a capacity for 1,275 automobiles (unaudited). The lease agreement is for a 75-year term with an initial rent payment of \$50,000 paid on the commencement date of the lease. Future annual base rent payments will commence on the tenth anniversary of the lease, June 6, 2022, and continue for a 30-year period.

The following lists the components of the net investment in direct financing lease as of June 30, 2020:

		<u>2020</u>
Total minimum lease payments receivable	\$	68,981
Less unearned income		<u>(39,881)</u>
Net investment in direct financing lease	\$	<u>29,100</u>

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(6) Lease Obligations

(a) Capital Lease Arrangements

In fiscal year 2006, the Authority entered in a Sale-in/Lease-out (SILO) transaction involving 80 commuter rail cars. The agreement provides for the lease of rolling stock for a period of 11 years for 48 cars and 17 years for the remaining 32 cars. Because the transaction did not meet the "in-substance defeasance" criteria, the lease liability and the related refunding trust established to pay off the lease payments as they come due are included in the accompanying financial statements. As of June 30, 2020, the outstanding lease liabilities were \$78,332.

(b) Operating Leases

As of June 30, 2020, the Authority leased approximately 37,000 square feet of office space and equipment within a property in Somerville, Massachusetts. This lease requires a minimum lease payment of \$687 in fiscal year 2020. The lease terminates as of June 30, 2021.

In 2017, the Authority entered into a 99-year lease for space at South Station and will receive \$1,000 per year plus contractual increases over the life of the lease.

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(7) Capital Assets

A summary rollforward of capital assets at June 30, 2020 is as follows:

	Beginning balance June 30, 2019	Increases	Decreases	Ending balance June 30, 2020
Capital assets not being depreciated				
Land	\$ 393,845	—	—	393,845
Construction work in progress	<u>2,977,084</u>	<u>1,668,179</u>	<u>(244,764)</u>	<u>4,400,499</u>
Total capital assets not being depreciated	<u>3,370,929</u>	<u>1,668,179</u>	<u>(244,764)</u>	<u>4,794,344</u>
Capital assets being depreciated:				
Ways and structures	11,003,674	97,081	—	11,100,755
Buildings and equipment	3,632,002	145,758	(21,101)	3,756,659
Capital assets – other	<u>338,976</u>	<u>220</u>	<u>—</u>	<u>339,196</u>
Total capital assets being depreciated	<u>14,974,652</u>	<u>243,059</u>	<u>(21,101)</u>	<u>15,196,610</u>
Less accumulated depreciation for:				
Ways and structures	5,125,465	233,648	—	5,359,113
Buildings and equipment	2,379,833	155,003	(21,101)	2,513,735
Capital assets – other	<u>232,779</u>	<u>9,972</u>	<u>—</u>	<u>242,751</u>
Total	<u>7,738,077</u>	<u>398,623</u>	<u>(21,101)</u>	<u>8,115,599</u>
Other capital assets, net	<u>7,236,575</u>	<u>(155,564)</u>	<u>—</u>	<u>7,081,011</u>
Capital assets, net	<u>\$ 10,607,504</u>	<u>1,512,615</u>	<u>(244,764)</u>	<u>11,875,355</u>

(8) Long-Term Debt

(a) Bonds Payable

Debt issued by the Authority prior to and outstanding as of July 1, 2000 (the Prior Obligations) is backed by the full faith and credit of the Commonwealth to the extent revenues collected by the Authority are insufficient to pay the debt, until the debt is paid off. Principal and interest payments on that debt were subsidized by the Commonwealth prior to June 30, 2000. As of June 30, 2020, Prior Obligations in the amount of \$141,585 is outstanding.

Principal on GTS bonds, all issued prior to July 1, 2000, is payable in annual installments on March 1st and interest is payable semiannually on March 1st and September 1st. The GTS bonds were issued to provide funds for the financing of the Authority's transportation properties.

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Debt issued by the Authority after June 30, 2000 (new debt) is not supported by the Commonwealth's guarantee. Additionally, the Authority is not expected to receive any principal or interest subsidies from the Commonwealth, for the repayment of the prior obligations and new debt of the Authority, unless authorized by special legislation.

On June 11, 2020, the Authority issued Subordinated Sales Tax Fixed Rate Demand Obligation Bonds, Subseries 2020 B-1 in the amount of \$339,080 and Subseries 2020 B-2 in the amount of \$45,685. Both issues have an interest rate of 5.00%. Principal payments are made annually on July 1 through the maturity date of July 1, 2050 for Subseries B-1 and July 1, 2022 for Subseries B-2. The 2020 B-1 sales tax bonds were issued to refund \$80,255 of 2010 Series A Senior Sales Tax Bonds and \$66,460 of 2010 Series B Senior Sales Tax Bonds.

On December 8, 2017, the Authority entered into a TIFIA loan and a RRIF loan with the United States Department Transportation in the amount of \$162,000 and \$220,000, respectively. The Authority can draw on either loan no later than December 31, 2021. During fiscal 2020, there was no activity on either the TIFIA or RRIF loans. At June 30, 2020, there was no outstanding loan balance on either loan.

On July 1, 2020, the Authority finalized a refinancing of the TIFIA and RIFF loans. The two loans were consolidated under the RRIF program and the total loan amount increased to \$851,150. The new RIFF loan program consists of three tranches: (a) a PTC Tranche for \$382,000; (b) an ATC Tranche for \$369,065; and (c) a Resiliency Tranche for \$100,085. The PTC Tranche has an annual interest rate of 1.15%; the ATC Tranche has an annual interest rate of 1.29%; and the Resiliency Tranche has an annual interest rate of 1.45%. The Authority can draw on this new consolidated loan no later than December 1, 2021 and amortization commences on July 1 after the draw date. The final maturity on the Tranches is as follows: (a) PTC Tranche final maturity occurs on January 1, 2039; (b) ATC Tranche final maturity occurs on July 1, 2042; and (c) Resiliency Tranche final maturity occurs on July 1, 2054. Interest payments will be made on January 1 and July 1.

The Authority issued Commercial Paper Sales Tax Series B notes (CP) in the amount of \$144,000 during fiscal year 2020. As of June 30, 2020, \$35,000 in commercial paper was outstanding.

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The Authority's bonds payable outstanding at June 30, 2020 are as follows:

	<u>Final fiscal year of maturity</u>	<u>Interest rates</u>	<u>Outstanding principal as of June 30, 2020</u>	<u>Due in fiscal year 2021</u>
General transportation system bonds:				
1991 Series A dated November 1, 1991	2021	7.07-7.15%	\$ 9,980	9,980
1998 Series C dated November 1, 1998	2022	5.50 %	1,970	1,055
2000 Series Variable Rate Demand Obligation dated March 10, 2000 ^(a)	2030	Variable	<u>129,635</u>	<u>9,385</u>
			<u>141,585</u>	<u>20,420</u>
Revenue bonds:				
2003 Series A Senior Sales Tax dated January 29, 2003	2022	5.25 %	44,580	18,645
2003 Series C Senior Sales Tax dated February 3, 2004	2024	5.25 %	68,715	25,005
2004 Series B Senior Sales Tax dated March 9, 2004	2031	4.00%-5.25%	173,495	56,225
2004 Series C Senior Sales Tax dated December 22, 2004	2025	5.50 %	59,255	12,480
2005 Series A Senior Sales Tax dated March 24, 2005	2032	5.00 %	723,435	13,665
2005 Series B Senior Sales Tax dated December 21, 2005	2030	4.25%-5.50%	91,695	70
2006 Series A Senior Sales Tax dated March 2, 2006	2035	5.25 %	238,850	—
2006 Series B Senior Sales Tax dated December 5, 2006	2024	5.25 %	99,300	25,375
2006 Series A Assessment dated September 13, 2006 ^(b)	2036	Variable and fixed	161,340	—
2007 Series A-1 Senior Sales Tax dated May 24, 2007	2035	5.25 %	205,675	—
2008 Series B Senior Sales Tax dated April 30, 2008	2034	5.00%-5.25%	30,885	1,565

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	Final fiscal year of maturity	Interest rates	Outstanding principal as of June 30, 2020	Due in fiscal year 2021
2010 Series C Senior Sales Tax dated December 8, 2010	2021	5.00%	\$ 23,270	23,270
2012 Series A Assessment dated June 21, 2012	2042	4.00%–5.00%	338,595	44,790
2014 Series A Senior Sales Tax dated April 23, 2014	2045	3.00%–5.00%	179,030	5,740
2015 Series A Senior Sales Tax dated October 14, 2015	2046	2.00%–5.00%	177,855	—
2015 Series B Senior Sales Tax dated October 14, 2015	2036	4.00%–5.00%	169,095	—
2016 Series A Senior Sales Tax dated July 19, 2016	2034	Zero coupon	288,195	—
2016 Series A Assessment dated July 19, 2016	2029	2.00%–5.00%	119,260	—
2017 Series A-1 Subordinated Sales Tax dated October 12, 2017	2047	5.00 %	99,170	—
2017 Series A-2 Subordinated Sales Tax dated October 12, 2017	2047	5.00 %	130,930	—
2017 Bond Anticipation Notes Subordinated Sales Tax dated October 12, 2017	2022	4.00 %	271,095	—
2018 Senior Series A, Subordinated Sales Series A-1 dated October 12, 2018(c)	2027	Variable	84,325	10,865
2018 Senior Series A, Subordinated Sales Series A-2 dated October 12, 2018(c)	2027	Variable	84,325	10,865
2020 Series B-1 Subordinated Sales Tax dated June 11, 2020	2051	5.00 %	339,080	—
2020 Series B-2 Subordinated Sales Tax dated June 11, 2020	2023	5.00 %	45,685	—
			<u>4,247,135</u>	<u>248,560</u>

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	<u>Final fiscal year of maturity</u>	<u>Interest rates</u>	<u>Outstanding principal as of June 30, 2020</u>	<u>Due in fiscal year 2021</u>
Metropolitan Boston Transit Parking (MBTPC) Bonds:				
2011 Series A MBTPC dated June 22, 2011	2042	4.00%–5.25%	\$ <u>304,585</u>	<u>—</u>
			<u>304,585</u>	<u>—</u>
Revenue Build America (BABs) Bonds				
2009 Series C Senior Sales Tax dated October 29, 2009	2040	4.75%–5.569%	218,300	7,755
2010 Series D Senior Sales Tax dated December 8, 2010	2041	4.546%–5.869%	<u>210,000</u>	<u>—</u>
			428,300	7,755
Commercial Paper	2021		<u>35,000</u>	<u>35,000</u>
Total outstanding principal			5,156,605	\$ <u>311,735</u>
Unamortized capital appreciation			<u>(47,821)</u>	
Total bonds and note payable			5,108,784	
Less current maturities			(311,735)	
Plus unamortized bond premiums/discounts, net			<u>407,444</u>	
Total long-term bonds and note payable			\$ <u>5,204,493</u>	

- (a) The bonds were issued as variable rate demand obligations (VRDO) and their variable interest is based on a weekly reset tied to SIFMA. As of September 28, 2011, the 2000 Series VRDO was split into 2000 Series A-1 VRDO and 2000 Series A-2 VRDO. The Authority classifies these bonds as long term and has a standby purchase agreement providing liquidity support from Barclays Bank PLC.
- (b) The 2024 maturity in the amount of \$19,260 and the 2025 maturity in the amount of \$5,000 is variable debt based on the MUNI CPI rate, plus 123 basis points.

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(c) These bonds were issued as VRDOs and their variable interest is based on a weekly reset tied to SIFMA. The Authority classifies these bonds as long term and has a standby purchase agreement providing liquidity support from State Street Bank and Trust Company.

The contractual principal and interest maturities of the bonds and notes payable as of June 30, 2020 are as follows:

Fiscal year(s):	<u>Principal</u>	<u>Interest</u>
2021	\$ 311,735	220,027
2022	303,618	214,624
2023	533,092	196,402
2024	287,869	182,330
2025	265,919	170,270
2026–2030	1,346,334	663,511
2031–2035	939,467	379,774
2036–2040	617,530	202,164
2041–2045	366,940	69,892
2046–2050	121,210	14,963
2051	15,070	377
Total	<u>\$ 5,108,784</u>	<u>2,314,334</u>

A summary rollforward of bonds payable for the year ended June 30, 2020 is as follows:

<u>2020</u>						
	<u>Balance 2019</u>	<u>Bonds issued</u>	<u>Principal payments</u>	<u>Refunded/ redeemed principal</u>	<u>Capital appreciation bond accretion</u>	<u>Balance 2020</u>
GTS	\$ 160,680	—	(19,095)	—	—	141,585
Revenue	4,203,101	384,765	(247,635)	(146,715)	5,798	4,199,314
BABs	428,300	—	—	—	—	428,300
Commercial Paper	50,000	144,000	(159,000)	—	—	35,000
MBTPC	304,585	—	—	—	—	304,585
	<u>\$ 5,146,666</u>	<u>528,765</u>	<u>(425,730)</u>	<u>(146,715)</u>	<u>5,798</u>	<u>5,108,784</u>

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A rollforward of the 2016A capital appreciation bonds for the year ended June 30, 2020 is as follows:

	<u>Due at maturity</u>	<u>Unamortized appreciation</u>	<u>Outstanding balance</u>
June 30, 2019	\$ 288,195	(53,619)	234,576
Accretion	—	5,798	5,798
June 30, 2020	<u>\$ 288,195</u>	<u>(47,821)</u>	<u>240,374</u>

The following funds are included in restricted assets at June 30, 2020 in connection with the Authority's revenue bond trust agreements and bond resolutions:

	<u>Assessment bonds</u>	<u>Sales tax bonds</u>	<u>MBTPC bonds</u>	<u>Total balance</u>
Debt service	\$ 89,027	328,242	7,687	424,956
Debt service reserve	29,490	202,163	13,948	245,601
	<u>\$ 118,517</u>	<u>530,405</u>	<u>21,635</u>	<u>670,557</u>

The minimum required balances in the debt service reserve funds at June 30, 2020 were \$26,677 for the Assessment Bonds and \$146,950 for the Sales Tax Series Bonds. The minimum required balances in the debt service reserve funds at June 30, 2020 for MBTPC Bonds were \$12,294. The Authority has complied with its financial bond covenants by maintaining sufficient cash and investments in the debt service reserve funds.

In order to take advantage of low interest rates and easily accessible short-term capital markets, the Authority has the ability to issue commercial paper to raise funds in order to meet its capital needs. The Authority has a \$250,000 commercial paper program in total of which \$150,000 is administered by JP Morgan and \$100,000 by Barclays Capital Inc. The Authority's commercial paper program has been assigned short-term ratings of P-1 and A-1+ by Moody's and S&P, respectively. The Authority had \$35,000 outstanding commercial paper as of June 30, 2020.

(b) Debt Refundings

In prior years, the Authority defeased debt by placing the proceeds of new bonds or available cash in an irrevocable trust fund to provide for future debt service payments on the old debt. As of June 30, 2020, 100% of all previously defeased in-substance debt has been retired.

(c) Standby Purchase Agreements

The GTS 2000 Series Bonds issued March 10, 2000 were issued as a Variable Rate Demand Obligation. The Authority's obligation to purchase these Bonds in the event of a failed remarketing is secured by a Standby Bond Purchase Agreement (SBPA) with Barclays Bank PLC, a nationally

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recognized financial institution. The SBPA was renewed on September 14, 2018 and will expire on September 21, 2022.

The 2018 Subseries A-1 and 2018 Subseries A-2 Series Bonds were issued on July 2, 2018 as Variable Rate Demand Obligations. The Authority's obligation to purchase these Bonds in the event of a failed remarketing is secured by a Standby Bond Purchase Agreement (SBPA) with State Street Bank and Trust Company, a nationally recognized financial institution. The SBPA will expire on July 2, 2023.

(9) Commitments and Contingencies

(a) Capital Investment Program (CIP)

The Authority's continuing CIP for mass transportation has projects in service and in various stages of approval, planning, and implementation. The following tables show, as of June 30, 2020, capital project costs approved, expenditures against these projects, and estimated costs to complete these projects, as well as the major funding sources:

<u>Funding source</u>	<u>Approved project costs</u>	<u>Expenditures through June 30, 2020</u>	<u>Unexpended costs</u>
Federal grants	\$ 10,076,968	9,225,253	851,715
State and local sources	5,743,389	4,253,688	1,489,701
Authority bonds	9,341,525	7,153,476	2,188,049
Total	<u>\$ 25,161,882</u>	<u>20,632,417</u>	<u>4,529,465</u>

The terms of the federal grant contracts require the Authority to, in part, utilize the equipment and facilities for the purposes specified in the grant agreement, maintain these items in operation for a specified time period, which normally approximates the useful life of the equipment, and comply with the Equal Employment Opportunity and Affirmative Action programs required by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. Failure to comply with these terms may jeopardize future funding and require the Authority to refund a portion of these grants to the Federal Transit Administration. In management's opinion, no events have occurred that would result in the termination of these grants or require the refund of a significant amount of funds received under these grants.

Other cases and claims include disputes with contractors and others arising out of the Authority's CIP. In the opinion of the general counsel to the Authority, amounts reasonably expected to be paid by the Authority would be within the scope of grant funds and other funds available to the Authority for the respective projects.

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The Authority has entered into several long-term contracts to purchase coaches, locomotives, buses, rapid transit cars, and other transportation equipment. Unexpended amounts under these contracts total approximately \$1.0 billion at June 30, 2020.

(b) Automated Fare Collection Commitment

In March 2018, the Authority entered into an agreement with a third-party System Implementor (SI) to design, implement, integrate, test, finance, operate, maintain, and manage a new automated fare collection (AFC 2.0) system (the Project). The agreement hereafter referred to as the Project Agreement was amended and restated in June 2020. The Project Agreement's initial term is approximately 13.5 years and can be extended at the Authority's discretion for up to two additional five-year periods.

Upon satisfaction of the Project Agreements terms and conditions, the Authority is obligated to make milestone payments to the SI totaling approximately \$217.3 million through the Full Service Commencement Date, beginning on May 31, 2021 as defined. Thereafter, for the remainder of the initial term, the Authority is obligated to make availability payments to the SI for capital (APC) and availability payments for operations (APO) totaling approximately \$368.7 million and \$275.7 million, respectively. In addition to the APC and APO, the Authority is also required to make availability payments to the SI for transactions (APT) as defined in the Project Agreement.

The Project is expected to operational in fiscal 2024 with the initial term expiring in fiscal 2034. The Authority will capitalize all milestone and APC payments and will expense all APO and APT payments when made. As of June 30, 2020, the Authority has made no payments, milestone or otherwise. The first milestone payment of \$8.0 million was made in September 2020.

(c) Legal and Other

The Authority is involved in numerous lawsuits, claims, and grievances arising in the normal course of business, including claims for personal injury and personnel practices, property damage, and disputes over eminent domain proceedings. In the opinion of the general counsel to the Authority, payments of claims by the Authority, for amounts not covered by insurance, in the aggregate, are not expected to have a material adverse effect on the Authority's financial position.

The Authority participates in a number of federally assisted grant programs. These programs are subject to financial and compliance audits by the grantors or their representatives. In the opinion of the Authority's management, liabilities resulting from such disallowed expenditures, if any, will not be material to the accompanying financial statements.

(10) Risk Management

The Authority is exposed to various risks of loss related to general liability, property and casualty, workers' compensation, and unemployment.

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Buildings are fully insured to the extent that losses exceed the self-insured retention of \$2,500 for buildings valued over \$25,000 and the self-insured retention of \$1,000 for buildings valued under \$25,000 effective March 1, 2014. The Authority is self-insured for workers' compensation, unemployment claims and vehicle damage and loss. Beginning July 1, 2015, the Authority provided all its employees with health insurance through the health insurance plans administered by the Group Insurance Commission of the Commonwealth (GIC) and was no longer self-insured. Under GIC, the Authority pays 75% to 80% of all healthcare premiums for active employees within the health insurance plans administered by GIC; and pays 80% to 90% of all health premiums for retired employees within the health insurance plans administered by the GIC. Supplemental postemployment benefits for certain retirees are provided by the Authority as well.

The Authority self-funds a \$7,500 per occurrence deductible for general liability. The Authority has a program of excess public liability insurance to provide for \$67,500 of layered coverage on a per occurrence and annual aggregate basis. In the opinion of the general counsel to the Authority, payments of claims by the Authority for amounts not covered by insurance, in the aggregate, are not expected to have a material adverse effect on the Authority's financial position.

Expenditures for claims and judgments and workers' compensation were \$8,951 and \$13,635, respectively, for the year ended June 30, 2020.

The requirements of GASB, Statements require that liabilities for self-insured claims be reported if it is probable that a loss has been incurred and the amount can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. The Authority reserves such liabilities, which consist of workers' compensation, and injuries and damages (legal claims) as accrued expenses as of June 30, 2020 and 2019. Changes in the self-insurance liabilities in FY20 were as follows:

	2020	2019
Liability, beginning of year	\$ 141,357	162,288
Provisions for claims	17,517	2,845
Payments	(22,586)	(23,776)
Liability, end of year	\$ 136,288	141,357

(11) Commuter Railroad

Under the Enabling Act, the Authority may enter into agreements with private transportation companies, railroads, and other concerns providing for joint or cooperative operation of any mass transportation facility and for operation and use of any mass transportation facility and equipment for the account of the Authority.

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On February 5, 2014, the Authority and Keolis Commuter Services (Keolis) entered into an operating agreement effective July 1, 2014 to provide commuter railroad service over the Authority's rail lines. The original contract was for a period of eight (8) years, through June 30, 2022. The Authority had a fixed-base contract amount of \$2,686,342 over the eight-year term of the agreement. The contract also had a provision for an extension period comprising the option to extend for no less than two, but no greater than four, years. This extension was approved by the MBTA FMCB on June 15, 2020, and began on July 1, 2020. The fixed-base contract over the term of the contract and the extension through June 30, 2026 is \$4,073,776. The payments for all commuter rail costs incurred by Keolis totaled \$482,953 in FY20.

(12) Retirement Plans

The Authority provides retirement benefits to employees through six defined-benefit retirement plans and one defined-contribution plan: The MBTA Retirement Fund, the MBTA Police Association Retirement Plan, the MBTA Deferred Compensation Plan, the MBTA Executive Deferred Compensation Plan, the MBTA Executive Deferred Compensation Annuity Plan, the MBTA Excess Benefit Annuity Plan, and the MBTA Deferred Compensation Savings Plan.

The MBTA Retirement Fund, a single employer plan, covers all employees except the MBTA police, who are covered separately, and certain executives who elect coverage under an alternate plan. The MBTA Retirement Fund and the MBTA Police Association Retirement Plan, a single employer plan, both provide retirement, disability, and death benefits to their members. The MBTA Retirement Fund issues separately audited financial statements that may be obtained by writing to One Washington Mall, Boston, Massachusetts 02108, or by calling (617) 316-3800. The MBTA Police Association Retirement Plan also issues separately audited financial statements that may be obtained by writing to the Board of Directors, MBTA Police Association Retirement Plan, P.O. Box 35, Grafton, Massachusetts 01519.

The MBTA Deferred Compensation Plan, a single employer plan, provides supplemental pension benefits for certain Local 453, Steelworkers, Transit Employee Administrators (collective bargaining units) and executive employees after retirement. Employees may participate in both the MBTA Retirement Fund and the MBTA Deferred Compensation Plan. The MBTA Deferred Compensation Plan is unfunded and does not issue separately audited financial statements.

The remaining defined-benefit plans are single employer plans that are unfunded and do not issue separately audited financial statements. These plans collectively have less than ten active and retired participants. A copy of the actuarial report for any of these retirement plans can be obtained by writing to the Office of the Chief Financial Officer, MBTA, Ten Park Plaza, Boston, Massachusetts 02116.

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Employees Covered by Benefit Terms

At December 31, 2019, the following employees were covered by the benefit terms:

	MBTA Retirement Fund	MBTA Police Association Retirement Fund	MBTA Deferred Compensation Plan
Retired employees or beneficiaries receiving benefits	6,813	122	940
Active employees	5,507	221	680
Inactive employees entitled to, but not yet receiving benefits	390	45	—
Total	<u>12,710</u>	<u>388</u>	<u>1,620</u>

(a) Funding Policy and Annual Pension Cost

The pension agreements between the Authority and Local 589, dated July 1, 2014 for the MBTA Retirement Fund and the MBTA Police Association dated June 30, 2003, designates that the board of trustees of each retirement plan establish the contribution requirements; however, the Authority may amend these requirements.

The historical MBTA Retirement Fund contribution rates are as follows:

Valuation date	Effective date	Contribution percentage		
		Employer	Employee	Total
12/31/2017	7/1/2018	22.6811 %	8.0089 %	30.6900 %
12/31/2018	7/31/2019	25.1261	8.8239	33.9500
12/31/2019	7/31/2020	26.6561	9.3339	35.9900

Actual contributions made were in accordance with these contribution requirements.

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The historical MBTA Police Association Retirement Plan contribution rates are as follows:

Valuation date	Effective date	Contribution percentage		
		Employer	Employee	Total
12/31/2017	7/1/2018	14.18 %	8.79 %	22.97 %
12/31/2018	7/31/2019	14.46	8.79	23.25
12/31/2019	7/31/2020	13.76	8.38	22.14

Contributions are not required to be made for the MBTA Deferred Compensation Plan. Rather, benefit payments are made on a “pay-as-you-go” basis.

(i) *Net Pension Liability*

The Authority’s June 30, 2020 net pension liability for each retirement plan was measured as of December 31, 2019, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2019.

Actuarial assumptions. The total pension liability in the December 31, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Pension	MBTA Retirement Fund	MBTA Police Association Plan	MBTA Deferred Compensation Plan
Actuarial assumptions			
Inflation rate	2.75 %	3.03 %	2.75 %
Salary increase	2.75–8.0	3.25	2.75–8.0
Investment rate of return *	7.25	7.00	3.26

* Net of pension plan investment expense, including inflation

For the December 31, 2019 MBTA Retirement Fund and MBTA Deferred Compensation Plan actuarial valuations, mortality rates are used for all active employees and were based on the RP-2014 Blue Collar Mortality Tables with generational projection using the Scale MP-2018. 94.5% of the RP-2014 Blue Collar Mortality Tables projected by Scale MP-2018 generationally are the basis for all retirees. 107.5% of the RP-2014 Blue Collar Mortality Tables projected by Scale MP-2018 generationally are the basis for all beneficiary participants. The RP-2014 Disabled Mortality Tables projected by Scale MP-2018 generationally are used for the period after disability retirement. Among pre-retirement deaths, 7.5% are assumed to qualify for accidental death benefits.

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For the December 31, 2019 MBTA Police Association Plan actuarial valuation, the PubS-2010 (Below Median) Amount Weighted Safety Mortality Tables generational projection using Scale MP-2019 are used for all active participants. 97.2% of the PubS-2010 (Below Median) Amount Weighted Safety Mortality Tables generational projection using Scale MP-2019 are used for all retirees and deferred vested participants. 116.5% of the PubS-2010 (Below Median) Amount Weighted Contingent Survivor Mortality Tables generational projection using Scale MP-2019 are used for all current and future beneficiaries. The PubS-2010 Amount Weighted Safety Mortality Disability Tables generational projection using Scale MP-2019 are used for the periods after disability retirement. Among pre-retirement deaths, 25% are assumed to qualify for accidental death benefits.

The actuarial assumptions used in the December 31, 2019 valuation for the MBTA Retirement Fund were based on the results of an actuarial experience study for the five-year period ending December 31, 2017. There was no separate experience study performed for the MBTA Deferred Compensation Plan.

The actuarial assumptions used in the December 31, 2019 valuation for the MBTA Police Association were based on the results of an actuarial experience study for the five-year period ending December 31, 2019.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target allocation as of December 31, 2019 are summarized in the following tables:

	MBTA Retirement Fund	
	Target allocation	Long-term expected real rate of return
Equity	43 %	8.39 %
Fixed income	25	1.99
Alternatives	30	7.16
Cash	2	0.53
Total	100 %	

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	MBTA Police Association Plan	
	Target allocation	Long-term expected real rate of return
Equity	46.38 %	8.11 %
Fixed income	36.60	1.10
Alternatives	17.02	4.95
Total	100 %	

Discount rate: The discount rate used to measure the total pension liability was 7.25% for the MBTA Retirement Fund while the discount rate for the MBTA Police Association Retirement Plan was 7.00%. The projection of cash flows used to determine the discount rate assumed that employee contributions will continue to be made in accordance with the current funding policy. 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 MBTA Retirement Fund and MBTA Police Association Retirement Plan members. The discount rate used to measure the total pension liability for the MBTA Deferred Compensation Plan was 3.26%. Since this plan is unfunded, the assumed discount rate has been determined in accordance with the method prescribed by GASB No. 67 and is based on the S&P Municipal Bond 20 Year Grade Rate Index, whose yield to maturity was 3.26% as of December 31, 2019.

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(ii) *Change in the Net Pension Liability – MBTA Retirement Fund*

	Increase (decrease)		
	Total pension liability (a)	Plan fiduciary net position (b)	Net pension liability (a)-(b)
Balances at December 31, 2018	\$ 2,916,801	1,449,695	1,467,106
Changes for the year:			
Service cost	47,943	—	47,943
Interest	214,112	—	214,112
Difference between expected and actual experience	(3,179)	—	(3,179)
Changes in assumptions	69,299	—	69,299
Contributions – employer	—	103,264	(103,264)
Contributions – employee	—	36,366	(36,366)
Net investment Income	—	253,731	(253,731)
Benefit payments, including refund of employee contributions	(223,865)	(223,865)	—
Administrative expense	—	(5,046)	5,046
Net changes	104,310	164,450	(60,140)
Balances at December 31, 2019	\$ 3,021,111	1,614,145	1,406,966

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(iii) *Change in the Net Pension Liability – MBTA Police Association Retirement Plan*

	Increase (decrease)		
	Total pension liability (a)	Plan fiduciary net position (b)	Net pension liability (a)-(b)
Balances at December 31, 2018	\$ 108,057	83,012	25,045
Changes for the year:			
Service cost	2,074	—	2,074
Interest	7,525	—	7,525
Contributions – employer	—	3,309	(3,309)
Contributions – employee	—	2,013	(2,013)
Net investment Income	—	11,815	(11,815)
Difference between expected and actual experience	4,118	—	4,118
Changes of assumptions	(4,616)	—	(4,616)
Benefit payments, including refund of employee contributions	(5,343)	(5,343)	—
Administrative expense	—	(262)	262
Net changes	<u>3,758</u>	<u>11,532</u>	<u>(7,774)</u>
Balances at December 31, 2019	<u>\$ 111,815</u>	<u>94,544</u>	<u>17,271</u>

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(iv) *Change in the Total Pension Liability – MBTA Deferred Compensation Plan*

		<u>Increase (decrease) Total pension liability</u>
Balances at December 31, 2018	\$	92,816
Changes for the year:		
Service cost		2,417
Interest		3,352
Differences between expected and actual experience		672
Changes in assumptions		3,777
Benefit payments, including refund of employee contributions		<u>(6,358)</u>
Net changes		<u>3,860</u>
Balances at December 31, 2019	\$	<u>96,676</u>

Sensitivity of Net Pension Liability to Changes in the Rate

The following presents the net pension liability of the Authority, calculated using the discount rates disclosed as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate as of December 31, 2019.

	<u>Current rate</u>		<u>1% Decrease of current rate</u>	<u>Current discount rate</u>	<u>1% Increase of current rate</u>
MBTA Retirement Fund	7.25 %	\$	1,714,806	1,406,966	1,145,684
MBTA Police Assoc. Retirement Plan	7.00 %		31,500	17,271	5,403
MBTA Deferred Compensation	3.26 %		107,965	96,676	87,253

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

For the year ended June 30, 2020, the Authority recognized pension expense of \$226,775; \$2,342; and \$9,795; for the MBTA Retirement Fund, the MBTA Police Association Retirement Plan, and the MBTA Deferred Compensation Plan, respectively.

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At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to pension amounts from the following sources:

	MBTA Retirement Fund	MBTA Police Assoc. Retirement Plan	MBTA Deferred Compensation Plan	Total
Deferred outflows of resources:				
Changes in assumptions	\$ 125,413	224	3,799	129,436
Contributions subsequent to the measurement date	55,251	1,271	3,158	59,680
Differences between expected and actual experience	41,664	5,132	1,718	48,514
Total deferred outflows of resources	<u>222,328</u>	<u>6,627</u>	<u>8,675</u>	<u>237,630</u>
Deferred inflows of resources:				
Differences between expected and actual experience	(2,385)	(2,463)	—	(4,848)
Changes in assumptions	—	(3,957)	(193)	(4,150)
Net difference between projected and actual earnings	(51,920)	(796)	—	(52,716)
Total deferred inflows of resources	<u>(54,305)</u>	<u>(7,216)</u>	<u>(193)</u>	<u>(61,714)</u>
Less contributions subsequent to the measurement date	<u>(55,251)</u>	<u>(1,271)</u>	<u>(3,158)</u>	<u>(59,680)</u>
Net deferred outflows and inflows of resources exclusive of employer specific deferrals	<u>\$ 112,772</u>	<u>(1,860)</u>	<u>5,324</u>	<u>116,236</u>

Amounts reported as deferred outflows of resources related to pensions resulting from the Authority contributions subsequent to the measurement date will be recognized as a reduction in the net pension liability in the subsequent year.

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Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized (amortized) into pension expense as follows:

	MBTA Retirement Fund	MBTA Police Assoc. Retirement Plan	MBTA Deferred Compensation Plan
Year ended June 30:			
2021	\$ 72,844	(637)	3,841
2022	48,999	(587)	1,483
2023	20,587	808	—
2024	(29,658)	(1,302)	—
2025	—	(71)	—
thereafter	—	(71)	—
Totals	\$ 112,772	(1,860)	5,324

Payable to the Pension Plans

At June 30, 2020 the Authority reported a payable for \$5,242 for the outstanding amount of contributions to pension plans required for the year ended June 30, 2020.

(b) The MBTA Deferred Compensation Savings Plan

The Authority provides a defined-contribution retirement plan for nonunion and certain grandfathered union management not participating in the MBTA Retirement Fund. Authority employee trustees administer the plan and recommend benefit amendments that require approval from the Authority's general manager. The plan requires members to contribute 8.8% of total covered payroll for the years ended June 30, 2020, with the Authority contributing 8.0%. The Plan had 493 members as of June 30, 2020. The cost of the Plan was \$2,107 for the years ended June 30, 2020. Member contributions vest to plan members immediately, while contributions made by the Authority vest to plan members as follows: 50% after three years, 75% after four years, and 100% after five years of credited service. The total asset balances of \$41,687 as of June 30, 2020, were held by a third-party administrator who allocates the assets of fully funded member account balance at the direction of individual member discretion.

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(13) Other Postemployment Benefits (OPEB)

In addition to providing the pension benefits described, the Authority provides OPEB for eligible retired employees under two arrangements. The Authority participates in the Commonwealth of Massachusetts' Group Insurance Commission (GIC) plan, which provides health and other benefits to both Medicare and Non-Medicare eligible retirees. The Authority also provides eligible retirees with additional nonduplicative supplemental life insurance and Medicare Part B premium benefits through the Transit Employees Health and Welfare Fund. The benefits, benefit levels, employee contributions, and employer contributions are governed by the Authority, collective bargaining agreements, and state statute. Plan membership as of July 1, 2018 is as follows:

Retirees or beneficiaries currently receiving		
benefits payments		6,225
Active employees		6,095
		12,320

Benefits Provided

Through the GIC, the Authority provides medical, prescription drug, mental health/substance abuse, and life insurance to retirees and their covered dependents. All active employees who retire from the Authority and meet the eligibility criteria can receive these benefits.

(a) Funding Policy

Retiree contributions to the GIC plan vary based on the date of retirement. Pre- and post-65 retirees with a retirement date on or before July 1, 1994 contribute 10% to the cost of the health plan. Retirees who retired after July 1, 1994 and filed for retirement prior to August 10, 2009 contribute 15% of the cost of the health plan. Retirees who retired after July 1, 1994 and filed for retirement on or after August 10, 2009 but on or before October 1, 2009 with a retirement date on or before January 31, 2010 contribute 15% of the cost of the health plan. Retirees who file for retirement after October 1, 2009 contribute 20% of the cost of the health plan. The Authority contributes the remainder of the health plan costs on a pay-as-you-go basis.

(b) Total OPEB Liability

The Authority's total OPEB liability of \$2,329,201 was measured as of June 30, 2019 and was determined by an actuarial valuation as of July 1, 2019.

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Actuarial assumptions and other inputs: The total OPEB liability as of June 30, 2019 was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.75% to 3.03%
Salary increase	2.75% to 8.00%
Discount Rate	2.79% based on the S&P Municipal Bond 20 Year High Grade Rate Index
Healthcare cost trend rate	Pre-Medicare and Medicare, 7.0% decreasing to an ultimate trend rate of 4.5% Medicare Part B, 5% decreasing to an ultimate trend rate of 5.0%
Actuarial Cost Method	Entry age normal based on level percentage of projected salary

Mortality rates for MBTA Retirement Fund eligible employees:

Active and Deferred Mortality: The RP-2014 Blue Collar Mortality Tables with fully generational projection using Scale MP-2018 Improvement

Retired Mortality: 94.5% of the RP-2014 Blue Collar Mortality Tables with fully generational projection using Scale MP-2018 Improvement

Surviving Spouse Mortality: 107.5% of the RP-2014 Blue Collar Mortality Tables with fully generational projection using Scale MP-2018 Improvement

Disabled Mortality: The RP-2014 Disability Mortality Tables with fully generational projection using Scale MP-2018 Improvement

Mortality rates for MBTA Police Association eligible employees:

Active Mortality: PubS-2010 (Below Median) Amount Weighted Safety Mortality Tables – Fully Generational Scale MP-2019

Retired and Deferred Mortality: 97.2% of PubS-2010 (Below Median) Amount Weighted Safety Mortality Tables – Fully Generational Scale MP-2019

Surviving Spouse Mortality: 116.5% of Pub-2010 (Below Median) Amount Weighted Contingent Survivor Mortality Tables – Fully Generational Scale MP-2019

Disabled Mortality: PubS-2010 Amount Weighted Safety Mortality Disability Tables – Fully Generational Scale MP-2019

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Experience study for MBTA Retirement Fund eligible employees: termination, retirement, mortality and disability rates reflect The MBTA Retirement Fund experience study dated April 12, 2019. The study evaluated five years of experience from January 1, 2013 to December 31, 2017.

Experience study for MBTA Police Association eligible employees: termination, retirement, mortality, and disability rates reflect the MBTA Police Association Retirement Plan experience study dated May 2020. The study evaluated six years of experience from January 1, 2014 to December 31, 2019

Significant Change of Assumptions:

The discount rate changed from 2.98% as of June 30, 2018 to 2.79% as of June 30, 2019.

Healthcare cost trend rates: the assumed health care cost trend rates have been updated. The July 1, 2018 valuation utilized pre-Medicare and Medicare trends that graded down gradually over time to a 5.0% ultimate trend rate reached by the fiscal year ending June 30, 2028. The updated July 1, 2019 valuation increased the initial trend rates, which then grade down to an ultimate trend rate of 4.5% fiscal year ending June 30, 2033.

The "Cadillac" tax was repealed and is no longer included in the plans cost projections.

(i) *Change in Total OPEB Liability*

	<u>Increase (decrease)</u>
Balances at June 30, 2019	\$ 2,458,432
Changes for the year:	
Service cost	87,346
Interest	74,941
Differences between expected and actual experience	(304,320)
Changes of assumptions	75,199
Benefit payments, including refund of employee contributions	<u>(62,397)</u>
Net changes	<u>(129,231)</u>
Balances at June 30, 2020	\$ <u><u>2,329,201</u></u>

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Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (1.79%) or 1-percentage-point higher (3.79%) than the current discount rate (in thousands):

	<u>1%</u> <u>Decrease</u>	<u>Discount</u> <u>rate</u>	<u>1%</u> <u>Increase</u>
Total OPEB liability	\$ 2,809,404	2,329,201	1,960,144

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates. The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or cost trend rates that are 1-percentage-point higher than the current healthcare cost trend rates (in thousands):

	<u>1%</u> <u>Decrease</u>	<u>Discount</u> <u>rate</u>	<u>1%</u> <u>Increase</u>
Total OPEB liability	\$ 1,947,986	2,329,201	2,829,129

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June 30, 2020

(Dollars in thousands)

(ii) *OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB*

For the year ended June 30, 2020, the Authority recognized OPEB expense of \$122,726. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB amounts from the following sources:

Deferred outflows of resources:

Change in assumptions	\$	227,961
Contributions subsequent to the measurement date		<u>49,625</u>
Total deferred outflows of resources		<u>277,586</u>

Deferred inflows of resources:

Difference between expected and actual results		(309,270)
Changes in assumptions		<u>(86,290)</u>
Total deferred inflows of resources		<u>(395,560)</u>

Net deferred outflows and inflows of resources		(117,974)
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Less contributions subsequent to the measurement date		<u>(49,625)</u>
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Net deferred outflows and inflows of resources exclusive of employer specific deferrals	\$	<u><u>(167,599)</u></u>
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Amounts reported as deferred outflows of resources related to OPEB resulting from the Authority contributions subsequent to the measurement date will be recognized as a reduction in the net OPEB liability in the year ended June 30, 2020.

Other amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized (amortized) into OPEB expense as follows

Year ended June 30:		
2021	\$	(39,561)
2022		(39,561)
2023		(39,561)
2024		(32,730)
2025		<u>(16,186)</u>
Totals	\$	<u><u>(167,599)</u></u>

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(c) Transit Employees Health and Welfare Trust

In fiscal year 2015 the Authority and Local 589 (Local Union 589, Amalgamated Transit union, AFL-CIO and CLC) as a result of an arbitration award established a separate trust fund, the Transit Employee Health and Welfare Trust Fund (the Trust Fund), to address legislative changes impacting healthcare and other coverage (medical, dental, vision, and life insurance) for Local 589 active and retired employees (collectively, the employees). The Authority and the employees are required to make contributions to the Trust Fund based on the rates agreed to in the Collective Bargaining Agreement. Contributions, once received by the Trust Fund, must be used exclusively “to provide benefits to eligible participants and/or appropriate administrative or operating expenditures.” The Trust allows participation of any Authority employee or retiree and provides pre and postretiree benefits to those individuals through the Trust Fund. As such the Trust Fund does not meet the definition of a qualifying trust under the requirements of GASB 75 and its assets cannot be used to reduce the Authority’s total OPEB liability.

In fiscal year 2020, the Authority made contributions to the Trust Fund of \$18,488. The liability for the Authority’s obligation for the benefits administered by this Trust Fund is recorded as part of the Authority’s total OPEB liability. All operating activities of the Trust Fund have been excluded from the accompanying financial statements.

(14) CORONAVIRUS (COVID-19)

On March 10, 2020, the Massachusetts Governor declared a State of Emergency as a result of impact of COVID-19 on the residents of the Commonwealth. The World Health Organization subsequently formally classified COVID-19 as Global Pandemic on March 11, 2020. Finally, on March 13, 2020 was declared a national state of emergency as a result of the COVID-19 pandemic.

The impact of COVID-19 State of Emergency declaration, including but not limited to social distancing and the classification of nonessential businesses and activities resulted in a corresponding decline in the use of the MBTA transit system as a whole.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act, is a \$2.2 trillion economic stimulus bill passed by Congress and signed into law resulting in the CARES Act as a means to protect the American people from the public health and economic impacts of COVID-19. The CARES Act, through the Federal Transit Administration’s (FTA), provided \$25 billion grant to transit agencies to help to prevent, prepare for and respond to the COVID-19 pandemic. The CARES Act is providing approximately \$875.85 million to the MBTA and is available to support the Authority’s revenue loss as well as all operating expenses generally eligible under the program. Transit entities nationwide could receive funding for approved costs incurred beginning on January 20, 2020. As of June 30, 2020, a total of \$221.8 million has been received by the MBTA for operating assistance that occurred from January 20, 2020 through June 30, 2020 and an additional \$127.1 million was to be received in FY21 for FY20 related expenses.

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On December 21, 2020 the Consolidated Appropriations Act, 2021, established a second round of economic stimulus assistance in the amount of \$2.2 trillion. A certain apportionment of the \$2.2 trillion is being allocated to affected Transportation agencies nationwide. As of the publication of these financial statements, the amount apportioned to the MBTA remains unknown.

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Required Supplementary Information – MBTA Retirement Fund

Schedule of Changes in Net Pension Liability and Related Ratios

June 30, 2020

(Dollar amounts in thousands)

(Unaudited)

Total Pension Liability	December 31 (measurement date)			
	2019	2018	2017	2016
Service cost	\$ 47,943	46,101	31,850	31,897
Interest	214,112	207,498	204,780	195,768
Differences between expected and actual experience	(3,179)	11,599	44,627	90,068
Change in assumptions	69,299	43,927	128,688	—
Benefit payments, including refunds of employee contributions	<u>(222,865)</u>	<u>(221,710)</u>	<u>(212,815)</u>	<u>(197,562)</u>
Net change in total pension liability	105,310	87,415	197,130	120,171
Total pension liability – beginning	<u>2,916,801</u>	<u>2,829,386</u>	<u>2,632,256</u>	<u>2,512,085</u>
Total pension liability – ending	<u>3,022,111</u>	<u>2,916,801</u>	<u>2,829,386</u>	<u>2,632,256</u>
Plan Fiduciary Net Position				
Contributions – employers	103,264	92,013	83,383	77,239
Contributions – employees	36,366	32,606	29,775	27,792
Net investment income	253,731	(52,073)	221,691	86,782
Benefit payments, including refunds of employee contributions	(223,865)	(221,710)	(212,815)	(197,562)
Administrative expenses	<u>(5,046)</u>	<u>(4,317)</u>	<u>(4,464)</u>	<u>(6,493)</u>
Net change in plan fiduciary net position	164,450	(153,481)	117,570	(12,242)
Plan fiduciary net position – beginning	<u>1,449,695</u>	<u>1,603,176</u>	<u>1,485,606</u>	<u>1,497,848</u>
Plan fiduciary net position – ending	<u>1,614,145</u>	<u>1,449,695</u>	<u>1,603,176</u>	<u>1,485,606</u>
Authority's net pension liability	<u>\$ 1,407,966</u>	<u>1,467,106</u>	<u>1,226,210</u>	<u>1,146,650</u>
Plan fiduciary net position as a percentage of the total pension liability	53.4 %	49.7 %	56.7 %	56.4 %
Covered-employee payroll	\$ 436,828	425,862	428,830	446,741
Net pension liability as a percentage of covered employee payroll	322 %	345 %	286 %	257 %

Notes: Information provided for Required Supplementary Information will be provided for 10 years as it becomes available.

See accompanying independent auditors' report.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
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Required Supplementary Information – MBTA Police Retirement Plan
Schedule of Changes in Net Pension Liability and Related Ratios

June 30, 2020

(Dollar amounts in thousands)

(Unaudited)

Total Pension Liability	December 31 (measurement date)			
	2019	2018	2017	2016
Service cost	\$ 2,074	2,019	2,042	2,177
Interest	7,525	7,137	6,958	6,538
Differences between expected and actual experience	4,118	—	(1,769)	1,646
Change in assumptions	(4,616)	1,346	—	—
Benefit payments, including refunds of employee contributions	(5,343)	(4,675)	(4,636)	(3,850)
Net change in total pension liability	3,758	5,827	2,595	6,511
Total pension liability – beginning	108,057	102,230	99,635	93,124
Total pension liability – ending	111,815	108,057	102,230	99,635
Plan Fiduciary Net Position				
Contributions – employers	3,309	2,727	2,492	2,550
Contributions – employees	2,013	1,702	1,504	1,570
Net investment income	11,815	(3,316)	9,371	5,313
Benefit payments, including refunds of employee contributions	(5,343)	(4,675)	(4,636)	(3,850)
Administrative expenses	(262)	(242)	(180)	(184)
Net change in plan fiduciary net position	11,532	(3,804)	8,551	5,399
Plan fiduciary net position – beginning	83,012	86,816	78,265	72,866
Plan fiduciary net position – ending	94,544	83,012	86,816	78,265
Authority's net pension liability	\$ 17,271	25,045	15,414	21,370
Plan fiduciary net position as a percentage of the total pension liability	84.6 %	76.8 %	84.9 %	78.6 %
Covered-employee payroll	\$ 18,207	16,736	16,123	16,289
Net pension liability as a percentage of covered employee payroll	95 %	150 %	96 %	131 %

Notes: Information provided for Required Supplementary Information will be provided for 10 years as it becomes available.

See accompanying independent auditors' report.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)
Required Supplementary Information – MBTA Deferred Compensation Plan
Schedule of Changes in Total Pension Liability and Related Ratios

June 30, 2020

(Dollar amounts in thousands)

(Unaudited)

Total Pension Liability	December 31 (measurement date)			
	2019	2018	2017	2016
Service cost	\$ 2,417	2,099	2,039	2,035
Interest	3,352	2,887	3,142	2,687
Differences between expected and actual experience	672	2,155	2,206	5,423
Change in assumptions	3,777	(578)	5,122	(4,681)
Benefit payments, including refunds of employee contributions	<u>(6,358)</u>	<u>(5,940)</u>	<u>(5,889)</u>	<u>(5,679)</u>
Net change in total pension liability	3,860	623	6,620	(215)
Authority's total pension liability – beginning	<u>92,816</u>	<u>92,193</u>	<u>85,573</u>	<u>85,788</u>
Authority's total pension liability – ending	<u>\$ 96,676</u>	<u>92,816</u>	<u>92,193</u>	<u>85,573</u>
Covered-employee payroll	\$ 65,207	61,986	56,848	60,454
Total pension liability as a percentage of covered employee payroll	148.3 %	149.7 %	162.2 %	141.6 %

Notes: Information provided for Required Supplementary Information will be provided for 10 years as it becomes available.
The Deferred Compensation Plan has no assets accumulated in a trust for purposes of making future pension payments.

See accompanying independent auditors' report.

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Required Supplementary Information – MBTA Retirement Fund

Schedule of Pension Contributions

June 30, 2020

(Dollar amounts in thousands)

(Unaudited)

	December 31			
	2019	2018	2017	2016
Actuarially determined contribution	\$ 103,264	92,013	83,383	77,239
Contributions in relation to the actuarially determined contribution	103,264	92,013	83,383	77,239
Contribution deficiency (excess)	\$ —	—	—	—
Covered employee payroll	\$ 436,828	425,862	428,830	446,741
Contributions as a percentage of covered employee payroll	23.6 %	21.6 %	19.4 %	17.3 %

Notes: Information provided for Required Supplementary Information will be provided for 10 years as it becomes available.

See accompanying independent auditors' report

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)

Required Supplementary Information – MBTA Police Retirement Plan

Schedule of Pension Contributions

June 30, 2020

(Dollar amounts in thousands)

(Unaudited)

	December 31			
	2019	2018	2017	2016
Actuarially determined contribution	\$ 3,309	2,727	2,492	2,550
Contributions in relation to the actuarially determined contribution	<u>3,309</u>	<u>2,727</u>	<u>2,492</u>	<u>2,550</u>
Contribution deficiency (excess)	<u>\$ —</u>	<u>—</u>	<u>—</u>	<u>—</u>
Covered employee payroll	\$ 18,207	16,736	16,123	16,289
Contributions as a percentage of covered employee payroll	18.2 %	16.3 %	15.5 %	15.7 %

Notes: Information provided for Required Supplementary Information will be provided for 10 years as it becomes available.

See accompanying independent auditors' report.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)

Required Supplementary Information – MBTA OPEB Plan

Schedule of Changes in Total OPEB Liability and Related Ratios

June 30, 2020

(Dollar amounts in thousands)

(Unaudited)

	2020	2019	2018
	(measurement	(measurement	(measurement
	date	date	date
	June 30,	June 30,	June 30,
	2019)	2018)	2017
Total OPEB Liability	_____	_____	_____
Service cost	\$ 87,346	71,286	82,866
Interest	74,941	70,435	63,600
Difference between expected and actual experience	(304,320)	(98,131)	—
Change in assumptions	75,199	265,990	(171,163)
Benefit payments, including refunds of employee contributions	<u>(62,397)</u>	<u>(59,917)</u>	<u>(60,630)</u>
Net change in total OPEB liability	(129,231)	249,663	(85,327)
Total OPEB liability – beginning	<u>2,458,432</u>	<u>2,208,769</u>	<u>2,294,076</u>
Total OPEB liability – ending	<u>\$ 2,329,201</u>	<u>2,458,432</u>	<u>2,208,749</u>
Covered-employee payroll	\$ 461,393	462,807	460,328
Total OPEB liability as a percentage of covered employee payroll	505 %	531 %	480 %

Notes: Information provided for Required Supplementary Information will be provided for 10 years as it becomes available.

See accompanying independent auditors' report.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)

Supplementary Information

Metropolitan Boston Transit Parking Corporation
Schedule of Debt Service Coverage

June 30, 2020

	Number of spaces at facility (Unaudited)	2020 Gross revenues by facility	Revenue amount from facility to debt service	2020 Net revenue of facility after debt service	2020 Debt service percentage of gross revenue
Route 128	2,578	\$ 3,524,304	1,249,536	2,274,768	35.45 %
Alewife	2,471	4,092,291	2,035,780	2,056,511	49.75
Quincy Adams	2,218	2,566,920	940,480	1,626,440	36.64
Wonderland & Lots	1,912	2,425,886	895,292	1,530,594	36.91
Hingham Boat	1,726	380,305	137,434	242,871	36.14
Braintree	1,510	2,662,039	968,660	1,693,379	36.39
Wellington	1,335	1,426,627	518,039	908,588	36.31
Kingston	1,030	261,666	95,315	166,351	36.43
Greenbush	1,000	83,294	30,102	53,192	36.14
Lynn	978	303,700	134,734	168,966	44.36
Riverside	935	840,295	312,914	527,381	37.24
Quincy Center (Garage)*	872	—	—	—	—
Norwood Center	781	388,321	141,332	246,989	36.40
Middleboro/Lakeville	769	324,314	119,119	205,195	36.73
Canton Junction	762	334,586	122,134	212,452	36.50
Oak Grove	729	1,027,442	375,930	651,512	36.59
Forge Park	718	323,054	117,027	206,027	36.23
Salem	712	602,484	226,480	376,004	37.59
Ashland	693	335,898	121,094	214,804	36.05
Newburyport	680	207,938	73,624	134,314	35.41
South Weymouth	636	158,678	57,504	101,174	36.24
Norfolk	630	275,418	100,018	175,400	36.31
Quincy Boat [^]	600	—	—	—	—
South Attleboro	579	488,096	180,355	307,741	36.95
Woodland	559	698,947	291,684	407,263	41.73
Campello	552	68,682	25,170	43,512	36.65
Bridgewater	499	175,896	63,730	112,166	36.23
Dedham	497	125,869	45,593	80,276	36.22
Beverly	494	354,364	141,212	213,152	39.85
Nantasket	490	42,728	15,570	27,158	36.44
Westborough	448	332,077	119,566	212,511	36.01
Hanson	428	151,964	55,264	96,700	36.37
Beachmont	416	293,326	109,115	184,211	37.20
Halifax	412	69,686	25,376	44,310	36.41
Orient Heights	411	307,791	114,411	193,380	37.17

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
(A Component Unit of the Massachusetts Department of Transportation)

Supplementary Information

Metropolitan Boston Transit Parking Corporation
Schedule of Debt Service Coverage

June 30, 2020

	<u>Number of spaces at facility (Unaudited)</u>	<u>2020 Gross revenues by facility</u>	<u>Revenue amount from facility to debt service</u>	<u>2020 Net revenue of facility after debt service</u>	<u>2020 Debt service percentage of gross revenue</u>
Abington	404	\$ 208,884	75,558	133,326	36.17 %
Wollaston	403	306,855	119,854	187,001	39.06
Cohasset	387	70,559	25,552	45,007	36.21
Grafton	386	196,158	71,189	124,969	36.29
Southborough	372	278,858	100,687	178,171	36.11
Holbrook	362	150,918	55,141	95,777	36.54
Stoughton	361	187,241	67,855	119,386	36.24
North Quincy Newport*	353	—	—	—	—
Readville	353	44,357	16,068	28,289	36.22
Montello	351	64,702	24,783	39,919	38.30
Lechmere#	347	—	—	—	—
Walpole	345	170,011	61,736	108,275	36.31
East Weymouth	335	209,564	75,141	134,423	35.86
Hersey	318	160,391	57,871	102,520	36.08
Lots with 150–300 spaces	4,639	3,625,709	1,649,929	1,975,780	45.51
Lots with less than 150 spaces	2,096	1,168,613	426,650	741,963	36.51
		<u>\$ 32,497,706</u>	<u>12,787,608</u>	<u>19,710,098</u>	<u>39.35 %</u>

* Garage was closed in FY20 for renovation.

The Lechmere garage was closed for both renovation and to allow for work on the Green Line Extension

^ Quincy Boat garage has been closed since 2017

Due to reductions in utilization of the parking at facilities of the Authority as a result of the COVID-19 pandemic, the Authority intends to provide to MBTPC the amount necessary to meet the debt service payments on the parking revenue bonds on July 1, 2020 and January 1, 2021, to the extent parking revenues and other available funds of MBTPC are insufficient to make such payments. The Authority provided \$2,615,708 in the last quarter of FY2020 to meet the debt service payment requirements in April through June 2020.