



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

Financial Statements and Required Supplementary Information

June 30, 2021

(With Independent Auditors' Report Thereon)

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

Table of Contents

	Page(s)
Independent Auditors' Report	1–2
Management's Discussion and Analysis (Unaudited)	3–9
Financial Statement:	
Statement of Net Position	10–11
Statement of Revenue, Expenses, and Changes in Net Position	12
Statement of Cash Flows	13
Notes to Financial Statements	14–51
Required Supplementary Information – Pension and OPEB Plans (Unaudited):	
Schedule of Changes in Net Pension Liability and Related Ratios	52–54
Schedule of Pension Contributions	55–56
Schedule of Changes in Total OPEB Liability and Related Ratios	57



KPMG LLP
Two Financial Center
60 South Street
Boston, MA 02111

Independent Auditors' Report

Board of Directors
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, 2021, and the related notes to the financial statements, which collectively comprise the Massachusetts Bay Transportation Authority's (the Authority) 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, 2021, 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.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated January 26, 2022 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts 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 26, 2022

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

Management's Discussion and Analysis (Unaudited)

June 30, 2021

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, 2021 (FY21) with selected comparative information for the fiscal year ended June 30, 2020 (FY20). 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.

Chapter 161A is referred to herein, together with Section 35T of Chapter 10 of Massachusetts General Laws, 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.

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

Management's Discussion and Analysis (Unaudited)

June 30, 2021

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 – 2021 to 2020

- The Authority's net position at June 30, 2021 was \$5,146,804 an increase from the prior year of \$1,567,952. The Authority's net position increased by \$1,105,706 for the fiscal year ended at June 30, 2020. The \$462,246 net position increase year over year is primarily the result of an increase in Federal COVID-19 Assistance of \$584,124, and increase of other dedicated sales tax revenue of \$183,231, a decrease in operating revenue of \$426,389, a decrease in Pension expense of \$58,971, and a decrease in other postemployment benefits of \$60,177
- Total bonds and notes payable outstanding at June 30, 2021 and 2020 were \$5,349,346 and \$5,108,784, respectively. During fiscal 2021, the Authority issued Senior Subordinated Sales Tax Bond Subseries 2021 A-1 in the amount of \$544,770; Subseries 2021 A-2 in the amount of \$56,265; and Subseries 2021 B in the amount of \$50,195.
- During the year, the Authority's operating revenues, principally transportation revenues, totaled \$206,189 as compared to operating revenues of \$632,578 in fiscal year 2020, a decrease of \$426,389.
- Total nonoperating revenues and capital grants and contributions, net which consists of sales tax receipts and federal and state operating grants, increased by \$829,089 from \$2,664,754 in FY20 to \$3,493,843 in FY21. The increase was due to an increase in federal COVID-19 assistance of \$584,124 and an increase of \$183,231 in dedicated sales tax revenue, an increase of \$162,082 in capital grants and contributions, and a decrease of \$39,062 in other nonoperating income. Interest income decreased by \$26,099 to \$12,582 for FY21.
- Total operating expenses of \$2,132,080 in FY21 decreased by \$59,546 as compared with FY20. The decrease in operating expenses from FY20 to FY21 is primarily attributable to an increase in Materials, supplies, and services of \$22,350 decrease of pension expense of \$58,971 and a decrease in other postemployment benefits of \$60,177.
- As of June 30, 2021, the Authority's capital assets had a depreciated value of \$13,371,289 made up of \$21,902,452 in historical cost offset by \$8,531,163 in accumulated depreciation and amortization. During FY21, the Authority spent \$1,961,488 for additions to the system.

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

Management's Discussion and Analysis (Unaudited)

June 30, 2021

Condensed Financial Information

Condensed financial information as of and for the years ended June 30, 2021 and 2020 is as follows:

Condensed Statements of Net Position:

	June 30	
	2021	2020
Current and other assets and deferred outflows	\$ 2,783,374	2,431,564
Capital assets, net	<u>13,371,289</u>	<u>11,875,355</u>
Total assets and deferred outflows	<u>\$ 16,154,663</u>	<u>14,306,919</u>
Current liabilities	\$ 1,477,255	967,488
Long-term liabilities and deferred inflows	<u>9,530,604</u>	<u>9,760,579</u>
Total liabilities and deferred inflows	<u>\$ 11,007,859</u>	<u>10,728,067</u>
Net position:		
Net investment in capital assets	\$ 8,669,906	7,438,829
Restricted	<u>20,902</u>	<u>20,869</u>
Unrestricted	<u>(3,544,004)</u>	<u>(3,880,846)</u>
Total net position	<u>\$ 5,146,804</u>	<u>3,578,852</u>

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

	June 30	
	2021	2020
Operating revenue:		
Revenue from transportation	\$ 167,114	545,650
Other	<u>39,075</u>	<u>86,928</u>
Total operating revenues	<u>\$ 206,189</u>	<u>632,578</u>
Operating expenses:		
Transportation services	838,897	966,475
Other operating expenses	<u>853,639</u>	<u>842,397</u>
Total operating expenses, excluding depreciation	<u>\$ 1,692,536</u>	<u>1,808,872</u>

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

Management's Discussion and Analysis (Unaudited)

June 30, 2021

	June 30	
	2021	2020
Depreciation and amortization	\$ 439,544	382,754
Total operating expenses, including depreciation and amortization	2,132,080	2,191,626
Operating loss	(1,925,891)	(1,559,048)
Nonoperating revenue, net	2,280,135	1,613,128 (*)
Income before capital grants and contributions	354,244	54,080
Capital grants and contributions	1,213,708	1,051,626 (*)
Increase in net position	1,567,952	1,105,706
Beginning of year, net position	3,578,852	2,473,146
End of year, net position	\$ 5,146,804	3,578,852

(*) reclassified to conform to the current year presentation

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, 2021 and 2020.

Financial Highlights for the fiscal years ended June 30, 2021 and 2020

- The Authority ended the years June 30, 2021 and 2020 with a net position of \$5,146,804 and 3,578,852 of which \$8,669,906 and \$7,438,829 represented the Authority's net investment in capital assets, and (\$3,544,004) and (\$3,880,846) was unrestricted, respectively. The net position increased by \$1,567,952 and \$1,105,706 in FY21 and FY20, respectively. The increase in net position in FY21 is attributable to increased other nonoperating income, coupled with a drop transit revenue due to ridership drop caused by covid pandemic, and an increase in capital grants.
- The Authority incurred an operating loss for the year ended June 30, 2021 of \$1,925,891. The operating loss was offset in accordance with the Enabling Act which provides the Authority a dedicated revenue stream consisting of the assessments on the communities in the Authority's service area and a Dedicated Sales Tax. For year ended June 30, 2021 the Authority recognized \$1,260,539 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 \$177,861 in nonoperating revenue in FY21. The increase to net revenue before capital grants and contributions was \$300,164. This increase is primarily attributed to a \$584,124 increase in federal pandemic funds to mitigate the effects of Covid 19 pandemic.
- The Authority ended the years June 30, 2021 and 2020 with cash and investments of \$1,730,780 and \$1,346,473, respectively. Only \$651,683 and \$316,278 of this amount at June 30, 2021 and 2020, respectively, is available for operations as the bulk of these assets are restricted for specific purposes and unavailable for the Authority's general use.

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

Management's Discussion and Analysis (Unaudited)

June 30, 2021

- The statement of cash flows identifies the sources and uses of cash for each fiscal year. Cash and cash equivalents increased by \$403,712 in FY21.

Operating Revenue

The following charts show the major sources of operating revenue for the fiscal years ended June 30, 2021 and 2020:

	2021	Percent of total	2020	Percent of total
Bus	\$ 36,713	18 %	\$ 86,296	14 %
Subway	93,635	45	242,164	38
Commuter rail	33,109	16	203,165	32
Other passenger	3,657	2	14,025	2
Other operating	39,075	19	86,928	14
	<hr/> <u>\$ 206,189</u>	<hr/> <u>100 %</u>	<hr/> <u>\$ 632,578</u>	<hr/> <u>100 %</u>

Passenger revenues make up 81% and 86% of the total operating revenues in FY21 and FY20, respectively. 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.

Operating Expenses

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

	2021	Percent of total	2020	Percent of total
Wages and benefits	\$ 838,897	39 %	\$ 966,475	44 %
Commuter rail	542,226	25	546,624	25
Depreciation and amortization	439,544	21	382,754	18
Material and supplies	288,865	14	266,515	12
Other operating	22,548	1	29,258	1
	<hr/> <u>\$ 2,132,080</u>	<hr/> <u>100 %</u>	<hr/> <u>\$ 2,191,626</u>	<hr/> <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.

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

Management's Discussion and Analysis (Unaudited)

June 30, 2021

Capital Assets

The Authority's capital assets as of June 30, 2021 and 2020 amounted to \$13,371,289 and \$11,875,355, (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, 2021 and 2020:

	2021	2020
Land	\$ 410,634	393,845
Construction work in progress	4,095,064	4,400,499
Ways and structures	7,162,261	5,741,642
Buildings and equipment	1,616,794	1,242,924
Capital leases	86,536	96,445
	<hr/> <u>\$ 13,371,289</u>	<hr/> <u>11,875,355</u>

The Authority primarily acquires its assets with the proceeds from governmental agencies capital grants and revenue bonds. Station improvements, new equipment purchases and system expansion are all part of the Authority's capital investment program. See footnotes 7 and 9 for more information on the Authority's capital assets.

Debt

Bonds and notes outstanding for the fiscal years ended June 30, 2021 and 2020:

	2021	2020
General Transportation System bonds	\$ 121,165	141,585
Revenue bonds	4,607,636	4,199,314
MBTPC bonds	—	304,585
Commercial paper	200,000	35,000
BAB's	420,545	428,300
	<hr/> <u>\$ 5,349,346</u>	<hr/> <u>5,108,784</u>

The total amount for these categories of debt increased by \$240,562 for the fiscal year ended June 30, 2021.

During fiscal 2021, the Authority issued Senior Subordinated Sales Tax Bonds, Subseries 2021 A-1 in the amount of \$544,770; Subseries 2021 A-2 in the amount of \$56,265; and Subseries 2021 B in the amount of \$50,195.

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

Management's Discussion and Analysis (Unaudited)

June 30, 2021

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
 (A Component Unit of the Massachusetts Department of Transportation)

Statement of Net Position

June 30, 2021

(Dollars in thousands)

Assets and Deferred Outflows of Resources

Current assets:

Unrestricted cash and temporary cash investments (note 3)	\$ 647,944
Other cash and temporary investments	3,739
Restricted cash and temporary cash investments (note 3):	
Bond construction accounts	255,245
Stabilization accounts	20,902
Accounts receivable:	
Commonwealth of Massachusetts	135,122
Federal grants	251,008
Other trade, net	62,136
Materials and supplies	53,399
Prepaid expenses	5,267
	<hr/>
Total current assets	1,434,762

Noncurrent assets:

Restricted investments (note 3):	
Forward Delivery Agreements (note 3(g))	54,598
Lease deposits (note 6)	72,796
Bond reserve accounts (note 8)	675,556
	<hr/>
Total restricted investments	802,950
Net investment in direct financing lease (note 5)	30,237
Capital assets, at cost (notes 7 and 9):	
Transportation property, being depreciated	17,396,754
Transportation property, not being depreciated	4,505,698
Less accumulated depreciation	(8,531,163)
	<hr/>
Capital assets, net	13,371,289
Total noncurrent assets	14,204,476
	<hr/>
Total assets	15,639,238

Deferred outflows of resources:

Debt refundings	122,946
Derivative related amounts	6,531
Pension related amounts (note 12)	166,774
Other postemployment related amounts (note 13)	219,174
	<hr/>
Total deferred outflows of resources	515,425
Total assets and deferred outflows of resources	\$ 16,154,663

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

Statement of Net Position

June 30, 2021

(Dollars in thousands)

Liabilities and Deferred inflows of Resources

Current liabilities:

Current maturities of bonds and notes payable (note 8)	\$ 749,615
Accounts payable	432,208
Accrued liabilities:	
Payroll and vacation	112,709
Interest	107,670
Injuries and damage claims, workers' compensation claims, and other (note 10)	75,053
Total current liabilities	1,477,255

Noncurrent liabilities, less current maturities:

Bonds payable, net (note 8)	5,085,252
Obligations under capital leases (note 6)	72,796
Accrued liabilities (note 10)	105,808
Pension liability (note 12)	1,414,429
Other postemployment benefits (note 13)	2,135,831
Liability for derivative instruments	6,780
Unearned revenue	32,242
Total noncurrent liabilities	8,853,138
Total liabilities	10,330,393

Deferred inflows of resources:

Debt refundings	149
Pension related amounts (note 12)	147,813
Other postemployment related amounts (note 13)	529,504
Total deferred inflows of resources	677,466
Total liabilities and deferred inflows of resources	11,007,859

Net Position

Invested in capital assets, net of related debt	8,669,906
Restricted	20,902
Unrestricted	(3,544,004)
Total net position	\$ 5,146,804

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, 2021

(Dollars in thousands)

Operating revenue:

Revenue from transportation	\$ 167,114
Other	39,075
Total operating revenue	206,189

Operating expenses:

Wages and related employee benefits:	
Wages	499,015
Medical and dental insurance	58,600
Other postemployment benefits	51,041
Health and welfare trust expenditures	14,023
Pensions	185,009
Social security taxes	48,640
Workers' compensation	11,772
Other	427
Capitalized costs	(29,630)
 Total wages and related employee benefits	 838,897
Other operating expenses:	
Depreciation and amortization	439,544
Materials, supplies, and services	288,865
Injuries and damages	17,077
Commuter railroad and local subsidy expenses (note 11)	542,226
Other	5,471
 Total other operating expenses	 1,293,183
 Total operating expenses	 2,132,080
 Operating loss	 (1,925,891)

Nonoperating revenue (expense):

Dedicated sales tax revenue (note 4)	1,260,539
Contract assistance – Commonwealth of Massachusetts	127,000
Dedicated local assessments (note 4)	177,861
Other nonoperating income	10,356
Fair Market Value Change in Forward Delivery Agreements	(18,868)
Federal Pandemic Assistance (note 14)	933,024
Interest income	12,582
Interest expense	(222,359)
 Nonoperating revenue, net	 2,280,135
 Income before capital grants	 354,244
 Capital grants and contributions	 1,213,708
 Increase net position	 1,567,952
 Beginning of year net position	 3,578,852
 End of year net assets	 \$ 5,146,804

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, 2021

(Dollars in thousands)

Cash flows from operating activities:

Receipts from transit customers	\$ 154,994
Receipts from other operations	57,355
Payments to suppliers and vendors	(967,011)
Payments to employees	<u>(598,769)</u>
Net cash used in operating activities	<u>(1,353,431)</u>

Cash flows from capital and related financing activities:

Additions to transportation property	(1,961,488)
Interest paid	(223,452)
Change in deferred credits/charges	(22,338)
Commercial paper, net	165,000
Payments on debt	(636,122)
Proceeds from bond and note issuances	651,221
Proceeds from bond premiums	124,324
Capital grants	1,183,687
Other	<u>(3,054)</u>
Net cash used in capital and related financing activities	<u>(722,222)</u>

Cash flows from noncapital and related financing activities:

Sales tax, contract assistance and local assessment	1,612,063
Federal pandemic funds	<u>842,286</u>
Net cash provided by noncapital and related financing activities	<u>2,454,349</u>

Cash flows from investing activity:

Interest and other income	<u>25,016</u>
Net cash provided by investing activity	<u>25,016</u>
Net change	<u>403,712</u>

Cash, temporary cash investments, beginning of year

524,118

Cash, temporary cash investments, end of year

\$ 927,830

Adjustments to reconcile operating loss to net cash used in operating activities:

Operating loss	\$ (1,925,891)
Changes not requiring current expenditure of cash:	
Depreciation and amortization	439,544
Increase in pension amounts and related deferred outflows/inflows, net	50,471
Decrease in other postemployment benefits and related deferred outflows/inflows, net	(1,014)
Changes in all other working capital accounts except cash, temporary cash investments and short-term debt	<u>83,459</u>
Net cash used in operating activities	<u>\$ (1,353,431)</u>

See accompanying notes to financial statements.

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

Notes to Financial Statements

June 30, 2021

(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." Under the Enabling Act, an 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.

Since July 2015, The Authority has been governed by the Fiscal and Management Control Board (the Control Board or the FMCB) which was afforded all the powers, responsibilities, and obligations relative to the Authority with the exception of authorizing the issuance of debt, which remained the responsibility of the Massachusetts Department of Transportation (MassDOT). 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

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

Boston Transit Parking Corporation, to another. Any reorganization or consolidation that affects MassDOT shall be approved by the MassDOT's board.

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. Chapter 114 of the Acts of 2020 extended the Control Board term to June 30, 2021.

Subsequent to year end, legislation (Chapter 29 of the Acts of 2021) was passed providing for a new governance structure whereby the MBTA Board of Directors (the Board) replaced the FMCB. The Board shall consist of the following seven members: the Secretary of Transportation, who shall serve ex officio; one person to be appointed by the Advisory Board and five persons to be appointed by the governor, one of whom shall have experience in safety, one of whom shall have experience in transportation operations, one of whom shall have experience in public or private finance, one of whom shall be a rider and a resident of an environmental justice population and one of whom shall be selected from a list of three persons recommended by the President of the AFL-CIO.

During the transition period between the dissolution of the FMCB effective July 1, 2021 and the first official meeting of the Board, MassDOT exercised governance duties for the Authority.

In May 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 in June 2011 and refunded during fiscal 2021.

The Authority is the sole member of MBTPC and its 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 revenues 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 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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(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

Cash and cash equivalents include cash on deposit and money market funds.

(d) Investments

Investments are generally presented at fair value, other than certain investments that are recorded at amortized cost. The MBTA uses an independent pricing source to determine the fair value of investments at quoted market prices. Changes in fair value are included in nonoperating interest income in the Statement of Revenues, Expenses and Changes in Net Position. The investments recorded at amortized cost are those outlined by GASB standards and include: Investments held by the Authority in nonparticipating interest-earning investment contracts and money market investments and participating interest-earning contracts that have a remaining maturity at the time of purchase of one year or less. The Authority also records its investments in state & local government series obligations at cost due to prohibition of transferability of the obligations. The Authority invests in the Massachusetts Municipal Depository Trust (MMDT), which is an external investment pool and is not SEC-registered. MMDT is state-regulated and is valued at amortized cost.

(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.

(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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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

Lease Deposits – represent investments in 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 investment derivatives associated with bond reserve accounts as more fully described in note 3(g).

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, 2021:

	<u>Estimated useful life</u>
Ways and structures	10–60 years
Building and equipment	3–25 years

(h) Construction in Progress

For the year ended June 30, 2021, approximately \$2.0 billion was expended towards the completion of major construction projects and improvements in progress. The projects and improvements completed 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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(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 fiscal 2021. The Authority recognizes the state appropriated funds from the CTF on an accrual basis as nonoperating revenue.

As more fully described in note 14, the Authority received significant federal pandemic assistance. For the year ended June 30, 2021, the Authority recognized \$933,024 of nonoperating federal pandemic assistance revenue. The Authority records such assistance on the accrual basis of accounting.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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 governmental agencies to be used for various purposes connected with the planning, modernization, and expansion of transportation facilities and equipment. State contract assistance that is used for capital purposes is also included in capital grants and contributions in the accompanying financial statements.

(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, 2021 was \$23,120.

(n) Postemployment Benefits

(i) The Authority has the following defined benefit postemployment plans:

Pension. The Authority sponsors six defined benefit pension plans, three of which have significant net/total pension liabilities that are recorded on the accompanying financial statements (the MBTA Retirement Fund, the MBTA Police Association Retirement Plan and the MBTA Deferred Compensation Plan). The remaining three plans (the MBTA Executive Deferred Compensation Plan, the MBTA Executive Deferred Compensation Annuity Plan and the MBTA Excess Benefit Annuity Plan) have less than ten active and retired participants and are considered immaterial and are not reflected in the accompanying financial statements.

Other Postemployment Benefits (OPEB). The Authority sponsors one defined benefit OPEB plan.

For purposes of measuring the net/total pension and OPEB liabilities, deferred outflows of resources and deferred inflows of resources related to these liabilities and related expenses, information about the fiduciary net position and additions to/deductions from the fiduciary net position have been determined on the same basis as they are reported by the applicable defined benefit 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, where applicable, are measured at fair value.

(ii) The Authority has the following defined contribution postemployment plans:

Pension. The Authority sponsors one defined contribution plan, the MBTA Deferred Compensation Saving plan.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

OPEB. The Authority sponsors one defined contribution Transit Employees Health and Welfare Trust.

See footnotes 12 and 13 for more information on the Authorities postemployment benefit plans.

During fiscal 2021, the Authority implemented GASB Statement No. 84, *Fiduciary Activities*, and determined that none of its postemployment plans met the criteria for being reported as a fiduciary activity because none of the plans were determined to be component units of the Authority and the Authority was not deemed to have control of the plans' assets.

(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, 2021 the Authority recorded a long-term liability of \$8,772 related to simple ownership of historical rights of way and property located within industrial areas, and the operation and maintenance of our transportation facilities.

(p) Derivatives

The Authorities derivative activities included various forward delivery agreements (FDA) and various interest rate swaps which are recorded at fair value. At June 30, 2021, the fair value of the FDA which are considered investment derivatives totaled \$54,598. At June 30, 2021, the fair value of the interest rate swaps which are considered as hedge instruments totaled (\$6,780).

Derivative instruments are reported as assets or liabilities at fair value on the statement of net position. Fair value is determined using a market approach that considers benchmark interest rates.

Changes in fair value may be reported in the statement of revenue, expenses, and changes in net position, or as deferred inflows or deferred outflows of resources in the statement of net position depending upon whether the derivative instrument qualifies for hedge accounting.

(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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(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 result 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 which 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' 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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

Additionally, the Authority is authorized to invest in the Massachusetts Municipal Depository Trust (MMDT), a pooled money market like investment fund, established under General Laws, Chapter 29, Section 38A. MMDT is an external investment pool that meets the criteria established by GASB 79 to report its investments at amortized cost. As such, the Authority reports its investment in MMDT at amortized cost which approximates the net asset value of \$1.00 (one dollar) per share. MMDT has a maturity of less than one year and is not rated.

Marketable securities, which consist primarily of U.S. government instruments, are carried at fair value based upon quoted market prices. Nonparticipating interest earning contracts, including certificates of deposit, guaranteed investment contracts, and state and local government series obligations, are carried at cost.

Deposits and investments consisted of the following amounts presented in the accompanying statement of net position at June 30, 2021:

	2021
Restricted:	
Bond construction accounts	\$ 255,245
Bond reserve accounts	675,556
Stabilization accounts	20,902
Forward delivery agreements	54,598
Lease deposits	<u>72,796</u>
Subtotal	1,079,097
Unrestricted cash and temporary cash investments	<u>651,683</u>
Total	<u>\$ 1,730,780</u>

Included in bond reserve, stabilization, and unrestricted cash and temporary investments at June 30, 2021 are investments in Commonwealth debt instruments with a fair value of \$40,928.

(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, 2021 was \$104,475. The bank balances at June 30, 2021 were \$106,378. 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, 2021.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(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, 2021 are presented below. All investments are presented by investment type and maturity.

Investment type	Amount	Investment maturities (in years)			
		Less than 1 year	1–3	4–8	More than 8
Money market funds	\$ 363,251	363,251	—	—	—
MMDT	823,356	823,356	—	—	—
Guaranteed investment contracts	2,506	—	—	—	2,506
U.S. Treasury STRIPS	72,796	—	—	—	72,796
U.S. Treasury securities	134,521	134,521	—	—	—
U.S. government-sponsored enterprises	57,079	40,657	—	—	16,422
International Bank Notes	13,113	13,113	—	—	—
Municipal bonds	40,928	—	15,028	—	25,900
State and Local Government	64,157	—	12,180	—	51,977
 Investments	 \$ 1,571,707	 1,374,898	 27,208	 —	 169,601

(c) Credit Ratings

The Authority has \$823,356 invested in MMDT as of June 30, 2021, a state investment pool managed by Fidelity Investments as agent for the Commonwealth and shareholders of the MMDT. MMDT is unrated.

The Authority has \$363,251 invested in money market funds as of June 30, 2021. These investments are not rated.

The Authority holds guaranteed investment contracts with a fair value of \$2,506 at June 30, 2021. These investments are not rated.

The Authority had \$312,402 in U.S. Treasury STRIPS, U.S. Treasury securities, State and local government series and municipal bonds as of June 30, 2021. 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 have an implied credit rating of Aaa/AA+.

The Authority has \$57,079 invested in U.S. government-sponsored enterprises as of June 30, 2021. These investments have an implied credit rating of AAaa/AA+ or they have been collateralized to AAA.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

The Authority has \$13,113 in International Bank Notes. These investments are not rated.

(d) 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, 2021.

(e) 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.

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, 2021.

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

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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.

International Bank Notes – are generally valued based on independent prices obtained from third party valuation services and 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.

(f) Fair Value and Amortized Cost Measurements

The Authority categorizes its investments within the fair value hierarchy as of June 30, 2021 as follows:

	2021		
	Total	Fair value Level 1	Fair value Level 2
Investments by fair value level:			
Money market funds	\$ 363,251	363,251	—
U.S. Treasury STRIPS	72,796	—	72,796
U.S. Treasury securities	134,521	—	134,521
U.S. government sponsored enterprises	57,079	—	57,079
International bank notes	13,113	—	13,113
Municipal bonds	40,928	—	40,928
Total Investments by fair value level	681,688	363,251	318,437
Investments measured at amortized cost:			
MMDT	823,356	—	—
State & Local Government Series	64,157	—	—
Guaranteed investment contracts	2,506	—	—
Total Investments measured at amortized cost	890,019	—	—
Total investments	\$ 1,571,707	363,251	318,437
Interest rate swaps	\$ (6,870)	—	(6,870)
Forward delivery agreements	\$ 54,598	—	54,598

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(g) 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, 2021, as determined by Standard and Poor's, were from "A–" to "AA".

(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 2021 was \$1,260,539 and \$177,861, respectively, a total of \$1,438,400. Total annual debt service (principal and interest) paid during fiscal year 2021 on outstanding Sales Tax Bond Series and Assessment Bonds was \$431,153, representing 30.0% of pledged revenues.

The MBTPC pledge of dedicated parking receipts of the parking system remain in place until all of its bonds outstanding are retired and paid. The MBTPC bonds were fully retired during fiscal 2021.

Total principal and interest remaining on Sales Tax Series Bonds and Assessment Bonds outstanding as of June 30, 2021 are approximately \$7.4 billion.

(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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

The following lists the components of the net investment in direct financing lease as of March 31, 2021:

	2021
Total minimum lease payments receivable	\$ 68,981
Less unearned income	<u>(38,744)</u>
Net investment in direct financing lease	\$ <u>30,237</u>

(6) Lease Obligations

(a) Capital Lease Arrangements

In fiscal 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. The refunded trust’s investments in U.S. Treasury strips and corresponding lease liability were valued at \$72,796 at June 30, 2021.

(b) Operating Leases

As of June 30, 2021, the Authority leased approximately 37,000 square feet of office space and equipment within a property in Somerville, Massachusetts. This lease requires minimum lease payments of \$687 in fiscal years 2021, respectively. The lease terminated 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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(7) Capital Assets

A summary rollforward of capital assets at June 30, 2021 is as follows:

	Beginning balance				Ending balance
	June 30, 2020	Increases	Decreases	Transfers	June 30, 2021
Capital assets not being depreciated					
Land	\$ 393,845	16,789	—	—	410,634
Construction work in progress	<u>4,400,499</u>	<u>1,961,489</u>	<u>(2,266,924)</u>	<u>—</u>	<u>4,095,064</u>
Total capital assets not being depreciated	<u>4,794,344</u>	<u>1,978,278</u>	<u>(2,266,924)</u>	<u>—</u>	<u>4,505,698</u>
Capital assets being depreciated:					
Ways and structures	11,100,755	1,718,774	—	(35,036)	12,784,493
Buildings and equipment	3,756,659	531,361	(48,867)	35,036	4,274,189
Capital assets – other	339,196	—	(1,124)	—	338,072
Total capital assets being depreciated	<u>15,196,610</u>	<u>2,250,135</u>	<u>(49,991)</u>	<u>—</u>	<u>17,396,754</u>
Less accumulated depreciation for:					
Ways and structures	5,359,113	263,119	—	—	5,622,232
Buildings and equipment	2,513,735	192,527	(48,867)	—	2,657,395
Capital assets – other	242,751	9,909	(1,124)	—	251,536
Total	<u>8,115,599</u>	<u>465,555</u>	<u>(49,991)</u>	<u>—</u>	<u>8,531,163</u>
Other capital assets, net	<u>7,081,011</u>	<u>1,784,580</u>	<u>—</u>	<u>—</u>	<u>8,865,591</u>
Capital assets, net	<u>\$ 11,875,355</u>	<u>3,762,858</u>	<u>(2,266,924)</u>	<u>—</u>	<u>13,371,289</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, 2021, Prior Obligations in the amount of \$121,165, are 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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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 April 15, 2021, the Authority issued Subordinated Senior Sales Tax Bonds, Subseries 2021 A-1 in the amount of \$544,770; Subseries 2021 A-2 in the amount of \$56,265; and Subseries 2021 B in the amount of \$50,195. Over the life of each of the bonds, the 2021 A-1 subseries has an interest rate of 2.50%-5.00%; the 2021 A-2 has an interest rate of 5.00%; and the 2021 B subseries has an interest rate of .990%-2.535%. For the 2021 A-1 subseries', principal payments are made annually as follows: July 1, 2021, followed by July 1, 2024 through July 1, 2026, then on July 1, 2028, and finally July 1, 2031 through the maturity date of July 1, 2051. The 2021 A-2 subseries has two (2) principal payments, the first one on July 1, 2041 and the last one on the maturity date of July 1, 2042. Finally, the 2021 B subseries principal payments occur annually on July 1, 2025 through July 1, 2027 and then again from July 1, 2031 through the maturity date of July 1, 2034. The 2021 A 1 sales tax bonds were issued to refund \$304,585 of 2011 MBTPC Parking Bonds.

In December 2017, the Authority entered into a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan and a Railroad Rehabilitation and Improvement Financing (RRIF) loan with the United States Department of Transportation. In July 2020, the Authority finalized a refinancing of the TIFIA and RRIF loans. The two loans were consolidated under the RRIF program and the total loan amount increased to \$851,150. The new RRIF 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%. So long as the Authority's initial draw occurs on or before December 1, 2021, the Authority can continue to access this source of financing. 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.

During fiscal 2021, there was no activity on the RRIF loans; as a result, each tranche has an outstanding balance of zero as of June 30, 2021.

Subsequent to year end and prior to December 1, 2021, the MBTA made its first draw of \$336,854. A portion of the proceeds were used to retire the 2017 Bond Anticipation Note in the amount of \$271,095. The MBTA then made its second drawdown on the PTC loan of \$45,146 on December 23, 2021.

The Authority issued Commercial Paper Sales Tax notes (CP) in the amount of \$250,000 during fiscal year 2021. As of June 30, 2021, \$200,000 in commercial paper was outstanding. In June 2021, the MBTA expanded its commercial paper program to \$400,000 from \$250,000, establishing four series: Series A (\$125,000), Series B (\$125,000), Series C (\$75,000) and Series D (\$75,000). Both JP Morgan and Barclays administer \$200,000 each, and Barclays Bank PLC provides liquidity support.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

The Authority's bonds payable outstanding at June 30, 2021 are as follows:

	Final fiscal year of maturity	Interest rates	Outstanding principal as of June 30, 2021	Due in fiscal year 2022
General transportation system bonds:				
1998 Series C dated November 1, 1998	2022	5.50 %	\$ 915	915
2000 Series Variable Rate Demand Obligation dated March 10, 2000 ^(a)	2032	Variable	120,250	10,040
			<u>121,165</u>	<u>10,955</u>
Revenue bonds:				
2003 Series A Senior Sales Tax dated January 29, 2003	2022	5.25 %	25,935	25,935
2003 Series C Senior Sales Tax dated February 3, 2004	2024	5.25 %	43,710	26,040
2004 Series B Senior Sales Tax dated March 9, 2004	2031	4.00%–5.25%	117,270	59,230
2004 Series C Senior Sales Tax dated December 22, 2004	2025	4.35%–5.50%	46,775	10,840
2005 Series A Senior Sales Tax dated March 24, 2005	2036	5.00 %	709,770	13,985
2005 Series B Senior Sales Tax dated December 21, 2005	2030	4.35%–5.50%	91,625	75
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 %	73,925	26,740
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%	29,320	1,645
2012 Series A Assessment dated June 21, 2012	2042	4.00%–5.00%	293,805	41,390

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

	Final fiscal year of maturity	Interest rates	Outstanding principal as of June 30, 2021	Due in fiscal year 2022
2014 Series A Senior Sales Tax dated April 23, 2014	2045	3.00%–5.00%	\$ 173,290	6,025
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	271,095
2018 Senior Series A, Subordinated Sales Series A-1 dated October 12, 2018(c)	2027	Variable	73,460	14,605
2018 Senior Series A, Subordinated Sales Series A-2 dated October 12, 2018(c)	2027	Variable	73,460	14,600
2020 Series B-1 Subordinated Sales Tax dated June 11, 2020	2051	5.00 %	339,080	3,130
2020 Series B-2 Subordinated Sales Tax dated June 11, 2020	2023	5.00 %	45,685	—
2021 Series A-1 Subordinated Sales Tax dated April 15, 2021	2052	2.50%–5.00%	544,770	5,330
2021 Series A-2 Subordinated Sales Tax dated April 15, 2021	2043	5.00 %	56,265	—
2021 Series B Subordinated Sales Tax dated April 15, 2021	2035	0.990%–2.535%	50,195	—
			<u>4,649,805</u>	<u>520,665</u>

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

	Final fiscal year of maturity	Interest rates	Outstanding principal as of June 30, 2021	Due in fiscal year 2022
Revenue Build America (BABs)				
Bonds				
2009 Series C Senior Sales Tax dated October 29, 2009	2040	4.75%–5.569%	\$ 210,545	7,995
2010 Series D Senior Sales Tax dated December 8, 2010	2041	4.546%–5.869%	<u>210,000</u>	10,000
			420,545	17,995
Commercial Paper	2022		<u>200,000</u>	200,000
Total outstanding principal			5,391,515	\$ <u>749,615</u>
Unamortized capital appreciation			<u>(42,169)</u>	
Total bonds and note payable			5,349,346	
Less current maturities			(749,615)	
Plus unamortized bond premiums/discounts, net			<u>485,521</u>	
Total long-term bonds and note payable			\$ <u>5,085,252</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.
- (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.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

The contractual principal and interest maturities of the bonds and notes payable as of June 30, 2021 are as follows:

	Principal	Interest
Fiscal year(s):		
2022	\$ 749,615	212,641
2023	235,645	205,010
2024	257,090	190,943
2025	266,495	178,607
2026	278,400	166,043
2027–2031	1,222,190	640,347
2032–2036	1,040,786	392,411
2037–2041	695,095	218,150
2042–2046	394,220	82,093
2047–2051	186,995	24,214
2052	22,815	456
Total	\$ 5,349,346	2,310,915

A summary rollforward of bonds payable for the year ended June 30, 2021 is as follows:

	2021					
	Balance 2020	Bonds issued	Principal payments	Refunded/ redeemed principal	Capital appreciation bond accretion	Balance 2021
GTS	\$ 141,585	—	(20,420)	—	—	121,165
Revenue	4,199,314	651,230	(248,560)	—	5,652	4,607,636
BABs	428,300	—	(7,755)	—	—	420,545
Commercial Paper	35,000	250,000	(85,000)	—	—	200,000
MBTPC	304,585	—	—	(304,585)	—	—
	<u>\$ 5,108,784</u>	<u>901,230</u>	<u>(361,735)</u>	<u>(304,585)</u>	<u>5,652</u>	<u>5,349,346</u>

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

A rollforward of the 2016A capital appreciation bonds for the year ended June 30, 2021 is as follows:

	<u>Due at maturity</u>	<u>Unamortized appreciation</u>	<u>Outstanding balance</u>
June 30, 2020	\$ 288,195	(47,821)	240,374
Accretion	—	5,652	5,652
June 30, 2021	<u>\$ 288,195</u>	<u>(42,169)</u>	<u>246,026</u>

The following funds, excluding the fair value of any forward delivery agreements, are included in restricted assets at June 30, 2021 in connection with the Authority's revenue bond trust agreements and bond resolutions:

	<u>Assessment bonds</u>	<u>Sales tax bonds</u>	<u>Outstanding balance</u>
Debt service	\$ 84,669	356,718	441,387
Debt service reserve	<u>30,327</u>	<u>203,842</u>	<u>234,169</u>
	<u>\$ 114,996</u>	<u>560,560</u>	<u>675,556</u>

The minimum required balances in the debt service reserve funds at June 30, 2021 were \$26,187 for the Assessment Bonds and \$136,917 for the Sales Tax Series Bonds. The Authority has complied with its financial bond covenants by maintaining sufficient cash and investments in the debt service reserve funds.

(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.

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

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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, 2021, capital project costs approved, expenditures against these projects, and estimated costs to complete these projects, as well as the major funding sources:

Funding source	Approved project costs	Expenditures through June 30, 2021	Unexpended costs
Federal grants	\$ 10,556,928	9,793,785	763,143
State and local sources	6,576,789	4,873,957	1,702,832
Authority bonds	9,802,656	7,890,145	1,912,511
Total	<u>\$ 26,936,373</u>	<u>22,557,887</u>	<u>4,378,486</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.

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 \$905,316 at June 30, 2021.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(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, 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, 2021, the Authority has made two (2) milestone payments with an aggregate value of \$12 million. These payments are reflected in the "Transportation property, not being depreciated" line on the Statement of Net Position.

(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.

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

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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. See note 13.

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 \$6,034 and \$11,772 respectively for the year ended June 30, 2021.

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, 2021 and 2020. Changes in the self-insurance liabilities in FY21 were as follows:

	2021	2020
Liability, beginning of year	\$ 136,288	141,357
Provisions for claims	18,211	17,517
Payments	<u>(17,806)</u>	<u>(22,586)</u>
Liability, end of year	<u>\$ 136,693</u>	<u>136,288</u>

(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.

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 contract is for a period of eight (8) years, through June 30, 2022. The Authority has a fixed base contract amount of approximately \$2.7 billion over the eight-year term of the agreement. The contract also has a provision for an extension period, comprised of the option to extend for no less than two, but no greater than four, one year extension. The payments for all commuter rail costs incurred by Keolis totaled \$519,852 in FY21. The fixed base contract over the term of the contract and four-year extension period termination date of June 30, 2026 is approximately \$4.1 billion.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(12) Pension Plans

The MBTA Retirement Fund, a single employer defined benefit 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 defined benefit 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 defined benefit 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.

Employees Covered by Benefit Terms

At December 31, 2020, 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	\$ 6,710	128	916
Active employees	5,674	223	703
Inactive employees entitled to, but not yet receiving benefits	342	43	—
Total	<u><u>\$ 12,726</u></u>	<u><u>394</u></u>	<u><u>1,619</u></u>

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(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.

The historical MBTA Retirement Fund contribution rates are as follows:

Valuation date	Effective date	Contribution percentage		
		Employer	Employee	Total
12/31/2018	7/1/2019	25.13 %	8.82 %	33.95 %
12/31/2019	7/1/2020	26.66	9.33	35.99
12/31/2020	7/1/2021	26.66	9.33	35.99

Actual contributions made were in accordance with these contribution requirements.

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

Valuation date	Effective date	Contribution percentage		
		Employer	Employee	Total
12/31/2018	7/1/2019	14.46 %	8.79 %	23.25 %
12/31/2019	7/1/2020	13.76	8.38	22.14
12/31/2020	7/1/2021	14.32	8.93	23.25

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, 2021 net pension liability for each retirement plan was measured as of December 31, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2020.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

Actuarial assumptions. The total pension liability for the MBTA Retirement Fund and the MBTA Police Association Plan as of December 31, 2020 was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Pension	MBTA Retirement Fund	MBTA Police Association Plan
Actuarial assumptions		
Inflation rate	2.75 %	3.03 %
Salary increase	2.75-8.0	3.25
Investment rate of return *	7.25	7.00
* Net of pension plan investment expense, including inflation		

For the December 31, 2020 MBTA Retirement Fund actuarial valuation, mortality rates were as follows:

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

Among pre-retirement deaths, 7.5% are assumed to qualify for accidental death benefits

An experience study of the MBTA Retirement Fund was conducted based on the period from January 1, 2014 to December 31, 2017

For the December 31, 2020 MBTA Police Association Plan actuarial valuation, mortality rates were as follows:

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

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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

Among pre-retirement deaths, 25% are assumed to qualify for accidental death benefits

An experience study of the MBTA Police Association Retirement Plan was conducted based on the period from January 1, 2014 to 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, 2020 are summarized in the following tables:

	MBTA Retirement Fund	
	Target allocation	Long term expected real rate of return
Equity	43 %	6.46 %
Fixed income	23	1.25
Alternatives	32	6.32
Cash	2	(0.08)
Total	<u>100 %</u>	

	MBTA Police Association Plan	
	Target allocation	Long term expected real rate of return
Equity	46 %	8.11 %
Fixed income	37	1.10
Alternatives	17	4.95
Total	<u>100 %</u>	

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

Actuarial assumptions. The total pension liability for the MBTA Deferred Compensation Plan as of December 31, 2020 was determined using same actuarial assumptions for inflation, salary increases and mortality as described above for members covered by the MBTA Retirement Fund and the MBTA Police Association Retirement Plan.

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 1.93%. 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 1.93% as of December 31, 2020.

(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, 2019	\$ 3,021,111	1,614,145	1,406,966
Changes for the year:			
Service cost	52,010	—	52,010
Interest	214,773	—	214,773
Difference between expected and actual experience	(7,346)	—	(7,346)
Contributions – employer	—	116,286	(116,286)
Contributions – employee	—	40,774	(40,774)
Net investment Income	—	228,671	(228,671)
Benefit payments, including refund of employee contributions	(225,423)	(225,423)	—
Administrative expense	—	(4,510)	4,510
Net changes	34,014	155,798	(121,784)
Balances at December 31, 2020	<u>\$ 3,055,125</u>	<u>1,769,943</u>	<u>1,285,182</u>

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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

	Total pension liability (a)	Plan fiduciary net position (b)	Increase (decrease) Net pension liability (a)-(b)
Balances at December 31, 2019	\$ 111,815	94,544	17,271
Changes for the year:			
Service cost	2,147	—	2,147
Interest	7,774	—	7,774
Contributions – employer	—	2,554	(2,554)
Contributions – employee	—	1,594	(1,594)
Net investment Income	—	7,208	(7,208)
Difference between expected and actual experience	(1,595)	—	(1,595)
Benefit payments, including refund of employee contributions	(5,908)	(5,908)	—
Administrative expense	—	(284)	284
Net changes	2,418	5,164	(2,746)
Balances at December 31, 2020	\$ 114,233	99,708	14,525

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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

	<u>Increase (decrease)</u>	<u>Total pension liability</u>
Balances at December 31, 2019	\$ 96,676	
Changes for the year:		
Service cost	2,767	
Interest	3,140	
Differences between expected and actual experience	2,604	
Changes in assumptions	15,784	
Benefit payments, including refund of employee contributions	<u>(6,249)</u>	
Net changes	<u>18,046</u>	
Balances at December 31, 2020	\$ <u>114,722</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, 2020.

	<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 %	\$ 1,596,155	1,285,182	1,021,143
MBTA Police Assoc.				
Retirement Plan	7.00 %	28,905	14,525	2,520
MBTA Deferred				
Compensation	1.93 %	129,527	114,722	102,516

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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

For the year ended June 30, 2021 the Authority recognized pension expense of \$164,616; \$1,028; and \$15,877; for the MBTA Retirement Fund, the MBTA Police Association Retirement Plan and the MBTA Deferred Compensation Plan, respectively.

At June 30, 2021, 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	\$ 71,369	112	11,782	83,263
Contributions subsequent to the measurement date	61,243	1,279	3,119	65,641
Differences between expected and actual experience	<u>11,825</u>	<u>4,085</u>	<u>1,960</u>	<u>17,870</u>
Total deferred outflows of resources	<u>144,437</u>	<u>5,476</u>	<u>16,861</u>	<u>166,774</u>
Deferred inflows of resources:				
Differences between expected and actual experience	(7,467)	(2,809)	—	(10,276)
Changes in assumptions	—	(3,297)	—	(3,297)
Net difference between projected and actual earnings	<u>(133,069)</u>	<u>(1,171)</u>	<u>—</u>	<u>(134,240)</u>
Total deferred inflows of resources	<u>(140,536)</u>	<u>(7,277)</u>	<u>—</u>	<u>(147,813)</u>
Less contributions subsequent to the measurement date	<u>(61,243)</u>	<u>(1,279)</u>	<u>(3,119)</u>	<u>(65,641)</u>
Net deferred outflows and inflows of resources exclusive of employer specific deferrals	<u>\$ (57,342)</u>	<u>(3,080)</u>	<u>13,742</u>	<u>(46,680)</u>

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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.

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	\$ 24,682	(984)	7,613
2023	(3,731)	410	6,129
2024	(53,976)	(1,700)	—
2025	(24,317)	(469)	—
2026	—	(337)	—
Totals	\$ (57,342)	(3,080)	13,742

Payable to the Pension Plans

At June 30, 2021 the Authority reported a payable for \$5,242 for the outstanding amount of contributions to pension plans required for the year ended June 30, 2021.

(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, 2021, with the Authority contributing 8.0%. The Plan had 514 members as of June 30, 2021. The cost of the Plan was \$3,585 for the years ended June 30, 2021. 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 \$57,430 as of June 30, 2021, were held by a third party administrator who allocates the assets of fully funded member account balance at the direction of individual member discretion.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

(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, 2020 is as follows:

Retirees or beneficiaries currently receiving benefits payments	6,151
Active employees	<hr/> <hr/> 6,736
	<hr/> <hr/> 12,887

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 \$2,135,831 was measured as of June 30, 2020 and was determined by an actuarial valuation as of June 30, 2020.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

Actuarial assumptions and other inputs: The total OPEB liability as of June 30, 2020 was determined using the same actuarial assumptions for inflation, salary increases and mortality as described in note 12(a)(i) for members covered by the MBTA Retirement Fund and the MBTA Police Association Retirement Plan. Other Actuarial assumptions used to determine total OPEB liability as of June 30, 2020 are as follows:

Discount Rate	2.66% 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, 5.0% remaining constant

Discount rate: The discount rate used to measure the total OPEB liability was 2.66%. Since OPEB is unfunded, the assumed discount rate has been determined in accordance with the method prescribed by GASB No. 74 and is based on the S&P Municipal Bond 20 Year Grade Rate Index, whose yield to maturity was 2.66% as of June 30, 2020.

(i) *Change in Total OPEB Liability*

	<u>Increase (decrease)</u>
Balances at June 30, 2019	\$ 2,329,201
Changes for the year:	
Service cost	82,707
Interest	66,510
Differences between expected and actual experience	(216,297)
Changes of assumptions	(69,802)
Benefit payments, including refund of employee contributions	<u>(56,488)</u>
Net changes	<u>(193,370)</u>
Balances at June 30, 2020	<u>\$ 2,135,831</u>

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

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

calculated using a discount rate that is 1-percentage-point lower (1.66%) or 1-percentage-point higher 3.66% than the current discount rate (in thousands):

	1% Decrease	Discount rate	1% Increase
Total OPEB liability	\$ 2,556,821	2,135,831	1,801,201

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):

	1% Decrease	Discount rate	1% Increase
Total OPEB liability	\$ 1,796,981	2,135,831	2,578,346

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

For the year ended June 30, 2021 the Authority recognized OPEB expense of \$60,667. At June 30, 2021, 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	\$ 164,359
Contributions subsequent to the measurement date	<u>54,815</u>
	<u>219,174</u>

Deferred inflows of resources:

Difference between expected and actual results	(413,657)
Changes in assumptions	<u>(115,847)</u>

Total deferred inflows of resources	<u>(529,504)</u>
-------------------------------------	------------------

Net deferred outflows and inflows of resources	(310,330)
--	-----------

Less contributions subsequent to the measurement date

Net deferred outflows and inflows of resources exclusive of employer specific deferrals	<u>(54,815)</u>
	<u>\$ (365,145)</u>

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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 ending June 30, 2021.

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:	\$	
2022	\$ (88,550)	
2023	\$ (88,550)	
2024	\$ (81,719)	
2025	\$ (65,175)	
2026	\$ (41,151)	
 Totals	 <u>\$ (365,145)</u>	

(c) Transit Employees Health and Welfare Trust

In fiscal 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 post retiree 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 2021, the Authority made contributions to the Trust Fund of \$14,023. 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) Pandemic Assistance

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 non-essential businesses and activities resulted in a corresponding decline in the use of the MBTA transit system as a whole.

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

Notes to Financial Statements

June 30, 2021

(Dollars in thousands)

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 \$827.69 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, 2021, a total of \$827.69 million (100%) has been received by the MBTA for operating assistance that occurred from January 20, 2020 through June 30, 2021.

On December 27, 2020 the Coronavirus Response and Relief Supplemental Appropriation Act of 2021 ("CRRSAA") established a second round of economic stimulus assistance in the amount of \$2.3 trillion. The CRSAA is providing approximately \$291.3 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. As of June 30, 2021, a total of \$236.4 million has been received by the MBTA for operating assistance that occurred from October 1, 2020 through June 30, 2021.

On March 11, 2021, the American Rescue Plan Act of 2021 ("ARPA") was signed into law, establishing a third round of economic stimulus assistance in the amount of \$1.9 trillion package and is intended to combat the COVID-19 pandemic, including the public health and economic impacts. The package includes \$30 billion of direct federal aid to transportation agencies. The ARPA is providing approximately \$860.0 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. As of June 30, 2021, the MBTA has not received any ARPA funds for operating expenses that occurred through June 30, 2021.

(15) Subsequent Events

In August 2021, the Authority issued \$325 million of Subordinated Sales Tax Bond Anticipation Notes, Series 2021 (Sustainability Bonds) maturing May 1, 2025 to interim fund the Authority's automatic train control project. The bonds pay 4.00% coupons on January 1, 2022 and semiannually thereafter on each July 1 and January 1 and at maturity.

In addition, as more fully described in note 8, in December 2021, the Authority drew down \$382 million under the RRIF program.

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

Required Supplementary Information – MBTA Retirement Fund

Schedule of Changes in Net Pension Liability and Related Ratios

June 30, 2021

(Dollar amounts in thousands)

(Unaudited)

	December 31 (measurement date)						
	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability							
Service cost	\$ 52,010	47,943	46,101	31,850	31,897	37,305	34,501
Interest	214,773	214,112	207,498	204,780	195,768	191,392	184,667
Differences between expected and actual experience	(7,346)	(3,179)	11,599	44,627	90,068	31,325	48,560
Change in assumptions	—	69,299	43,927	128,688	—	(6,762)	—
Benefit payments, including refunds of employee contributions	(225,423)	(223,865)	(221,710)	(212,815)	(197,562)	(188,906)	(184,130)
Net change in total pension liability	34,014	104,310	87,415	197,130	120,171	64,354	83,598
Total pension liability – beginning	<u>3,021,111</u>	<u>2,916,801</u>	<u>2,829,386</u>	<u>2,632,256</u>	<u>2,512,085</u>	<u>2,447,731</u>	<u>2,364,133</u>
Total pension liability – ending	<u>3,055,125</u>	<u>3,021,111</u>	<u>2,916,801</u>	<u>2,829,386</u>	<u>2,632,256</u>	<u>2,512,085</u>	<u>2,447,731</u>
Plan Fiduciary Net Position							
Contributions – employers	116,286	103,264	92,013	83,383	77,239	73,374	70,603
Contributions – employees	40,774	36,366	32,606	29,775	27,792	26,511	25,318
Net investment income	228,671	253,731	(52,073)	221,691	86,782	4,712	73,543
Benefit payments, including refunds of employee contributions	(225,423)	(223,865)	(221,710)	(212,815)	(197,562)	(188,906)	(184,130)
Administrative expenses	(4,510)	(5,046)	(4,317)	(4,464)	(6,493)	(5,808)	(4,053)
Net change in plan fiduciary net position	155,798	164,450	(153,481)	117,570	(12,242)	(90,117)	(18,719)
Plan fiduciary net position – beginning	<u>1,614,145</u>	<u>1,449,695</u>	<u>1,603,176</u>	<u>1,485,606</u>	<u>1,497,848</u>	<u>1,587,965</u>	<u>1,606,684</u>
Plan fiduciary net position – ending	<u>1,769,943</u>	<u>1,614,145</u>	<u>1,449,695</u>	<u>1,603,176</u>	<u>1,485,606</u>	<u>1,497,848</u>	<u>1,587,965</u>
Authority's net pension liability	<u>\$ 1,285,182</u>	<u>1,406,966</u>	<u>1,467,106</u>	<u>1,226,210</u>	<u>1,146,650</u>	<u>1,014,237</u>	<u>859,766</u>
Plan fiduciary net position as a percentage of the total pension liability	57.9 %	53.4 %	49.7 %	56.7 %	56.4 %	59.6 %	64.9 %
Covered-employee payroll	\$ 460,922	436,828	425,862	428,830	446,741	443,238	417,957
Net pension liability as a percentage of covered employee payroll	278.8 %	322.1 %	344.5 %	285.9 %	256.7 %	228.8 %	205.7 %

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 Police Retirement Plan

Schedule of Changes in Net Pension Liability and Related Ratios

June 30, 2021

(Dollar amounts in thousands)

(Unaudited)

	December 31 (measurement date)						
	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability							
Service cost	\$ 2,147	2,074	2,019	2,042	2,177	1,879	1,772
Interest	7,774	7,525	7,137	6,958	6,538	6,490	6,173
Differences between expected and actual experience	(1,595)	4,118	—	(1,769)	1,646	(5,058)	(60)
Change in assumptions	—	(4,616)	1,346	—	—	784	—
Benefit payments, including refunds of employee contributions	(5,908)	(5,343)	(4,675)	(4,636)	(3,850)	(3,542)	(3,417)
Net change in total pension liability	2,418	3,758	5,827	2,595	6,511	553	4,468
Total pension liability – beginning	<u>111,815</u>	<u>108,057</u>	<u>102,230</u>	<u>99,635</u>	<u>93,124</u>	<u>92,571</u>	<u>88,103</u>
Total pension liability – ending	<u>114,233</u>	<u>111,815</u>	<u>108,057</u>	<u>102,230</u>	<u>99,635</u>	<u>93,124</u>	<u>92,571</u>
Plan Fiduciary Net Position							
Contributions – employers	2,554	3,309	2,727	2,492	2,550	2,512	2,280
Contributions – employees	1,594	2,013	1,702	1,504	1,570	1,513	1,337
Net investment income	7,208	11,815	(3,316)	9,371	5,313	403	3,966
Benefit payments, including refunds of employee contributions	(5,908)	(5,343)	(4,675)	(4,636)	(3,850)	(3,542)	(3,417)
Administrative expenses	(284)	(262)	(242)	(180)	(184)	(138)	(122)
Net change in plan fiduciary net position	5,164	11,532	(3,804)	8,551	5,399	748	4,044
Plan fiduciary net position – beginning	<u>94,544</u>	<u>83,012</u>	<u>86,816</u>	<u>78,265</u>	<u>72,866</u>	<u>72,118</u>	<u>68,074</u>
Plan fiduciary net position – ending	<u>99,708</u>	<u>94,544</u>	<u>83,012</u>	<u>86,816</u>	<u>78,265</u>	<u>72,866</u>	<u>72,118</u>
Authority's net pension liability	<u>\$ 14,525</u>	<u>17,271</u>	<u>25,045</u>	<u>15,414</u>	<u>21,370</u>	<u>20,258</u>	<u>20,453</u>
Plan fiduciary net position as a percentage of the total pension liability	87.3 %	84.6 %	76.8 %	84.9 %	78.6 %	78.2 %	77.9 %
Covered-employee payroll	\$ 17,850	18,207	16,736	16,123	16,289	16,478	18,207
Net pension liability as a percentage of covered employee payroll	81.4 %	94.9 %	149.6 %	95.6 %	131.2 %	122.9 %	112.3 %

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 Deferred Compensation Plan

Schedule of Changes in Total Pension Liability and Related Ratios

June 30, 2021

(Dollar amounts in thousands)

(Unaudited)

Total Pension Liability	December 31 (measurement date)						
	2020	2019	2018	2017	2016	2015	2014
Service cost	\$ 2,767	2,417	2,099	2,039	2,035	1,382	1,715
Interest	3,140	3,352	2,887	3,142	2,687	2,615	2,592
Differences between expected and actual experience	2,604	672	2,155	2,206	5,423	4,482	2,767
Change in assumptions	15,784	3,777	(578)	5,122	(4,681)	1,260	—
Other changes	—	—	—	—	—	(195)	—
Benefit payments, including refunds of employee contributions	(6,249)	(6,358)	(5,940)	(5,889)	(5,679)	(5,648)	(5,517)
Net change in total pension liability	18,046	3,860	623	6,620	(215)	3,896	1,557
Authority's total pension liability – beginning	96,676	92,816	92,193	85,573	85,788	81,892	80,335
Authority's total pension liability – ending	\$ 114,722	96,676	92,816	92,193	85,573	85,788	81,892
Covered-employee payroll	\$ 70,206	65,207	61,986	56,848	60,454	56,540	56,042
Total pension liability as a percentage of covered employee payroll	163.4 %	148.3 %	149.7 %	162.2 %	141.6 %	151.7 %	146.1 %

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.

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

Required Supplementary Information – MBTA Retirement Fund

Schedule of Pension Contributions

June 30, 2021

(Dollar amounts in thousands)

(Unaudited)

	December 31						
	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 116,286	103,264	92,013	83,383	77,239	73,359	77,594
Contributions in relation to the actuarially determined contribution	<u>116,286</u>	<u>103,264</u>	<u>92,013</u>	<u>83,383</u>	<u>77,239</u>	<u>73,374</u>	<u>70,603</u>
Contribution deficiency (excess)	\$ —	—	—	—	—	(15)	6,991
Covered employee payroll	\$ 460,922	436,828	425,862	428,830	446,741	443,238	417,957
Contributions as a percentage of covered employee payroll	25.2 %	23.6 %	21.6 %	19.4 %	17.3 %	16.6 %	16.9 %

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, 2021

(Dollar amounts in thousands)

(Unaudited)

	December 31						
	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 2,554	3,309	2,727	2,492	2,550	2,512	2,279
Contributions in relation to the actuarially determined contribution	<u>2,554</u>	<u>3,309</u>	<u>2,727</u>	<u>2,492</u>	<u>2,550</u>	<u>2,512</u>	<u>2,279</u>
Contribution deficiency (excess)	<u>—</u>						
Covered employee payroll	\$ 17,850	18,207	16,736	16,123	16,289	16,478	18,207
Contributions as a percentage of covered employee payroll	14.3 %	18.2 %	16.3 %	15.5 %	15.7 %	15.2 %	12.5 %

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, 2021

(Dollar amounts in thousands)

(Unaudited)

Total OPEB Liability	2021 (measurement date June 30, 2020)	2020 (measurement date June 30, 2019)	2019 (measurement date June 30, 2018)	2018 (measurement date June 30, 2017)
Service cost	\$ 82,707	87,346	71,286	82,886
Interest	66,510	74,941	70,435	63,600
Difference between expected and actual experience	(216,297)	(304,320)	(98,131)	—
Change in assumptions	(69,802)	75,199	265,990	(171,163)
Benefit payments, including refunds of employee contributions	(56,488)	(62,397)	(59,917)	(60,630)
Net change in total OPEB liability	(193,370)	(129,231)	249,663	(85,307)
Total OPEB liability – beginning	<u>2,329,201</u>	<u>2,458,432</u>	<u>2,208,769</u>	<u>2,294,076</u>
Total OPEB liability – ending	<u>\$ 2,135,831</u>	<u>2,329,201</u>	<u>2,458,432</u>	<u>2,208,769</u>
Covered-employee payroll	\$ 473,597	461,393	462,807	460,328
Total OPEB liability as a percentage of covered employee payroll	451.0 %	504.8 %	531.2 %	479.8 %

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

See accompanying independent auditors' report.