



## THE COMMONWEALTH OF MASSACHUSETTS

### General Obligation Bonds

### ANNUAL FINANCIAL INFORMATION AND OPERATING DATA FOR FISCAL YEAR 2020

March 26, 2021

This statement of annual financial information is provided by The Commonwealth of Massachusetts (the “Commonwealth”) pursuant to certain continuing disclosure undertakings and agreements entered into by the Commonwealth in connection with the Commonwealth’s issuance of general obligation debt and the Commonwealth’s support of the debt of certain other issuers, including the Massachusetts Department of Transportation (“MassDOT”), as successor to the Massachusetts Turnpike Authority, Massachusetts Bay Transportation Authority (“MBTA”) (Assessment Bonds and bonds issued prior to July 1, 2000), Massachusetts Clean Water Trust (certain bonds receiving Commonwealth contract assistance), Massachusetts State College Building Authority (certain Commonwealth-guaranteed bonds), University of Massachusetts Building Authority (certain Commonwealth-guaranteed bonds), Massachusetts Development Finance Agency (“MassDevelopment”) (certain bonds issued to finance projects under the infrastructure investment incentive (I-Cubed) program, South Weymouth naval air base development, and nonprofit community hospitals and hospital centers), and Woods Hole, Martha’s Vineyard and Nantucket Steamship Authority.

The financial information and operating data herein or incorporated by reference herein relates to the Commonwealth for the fiscal year ended June 30, 2020 and updates the financial information and operating data presented in the Commonwealth’s statement of annual financial information for general obligation debt dated March 24, 2020 with respect to the fiscal year ended June 30, 2019.

This statement is of limited scope. It contains only an updating of certain financial information and operating data described below. The information set forth herein does not contain all material information concerning the Commonwealth or its general obligation bonds necessary to make an informed investment decision. This statement does not constitute an offer to sell or the solicitation of an offer to buy Commonwealth general obligation bonds. This statement is submitted pursuant to various continuing disclosure undertakings and agreements relating to bonds that are subject to Rule 15c2-12, as amended, promulgated by the Securities and Exchange Commission and is intended to provide only the information necessary to conform to the requirements of said Rule 15c2-12.

Specific reference is made to:

- (i) the Commonwealth’s Information Statement dated October 28, 2020, as supplemented through December 8, 2020 (the “Information Statement”), which was filed with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access system (“EMMA”) on December 8, 2020 and available at <https://emma.msrb.org/P21420327-P21094605-P21513058.pdf>;
- (ii) the Commonwealth’s Statutory Basis Financial Report for the year ended June 30, 2020 (“SBFR”), which was filed on EMMA on December 21, 2020 and available at <https://emma.msrb.org/P11451433-P11125176-P11536365.pdf>; and
- (iii) the Commonwealth’s Comprehensive Annual Financial Report (GAAP basis) for the year ended June 30, 2020 (the “Audited Financial Statements”), which was filed on EMMA on March 26, 2021 and available at <https://emma.msrb.org/P11561619.pdf>.

**Except as set forth herein, the Information Statement contains the financial information and operating data required by the Commonwealth's continuing disclosure undertakings and are hereby incorporated by reference into this statement of annual financial information.** Specifically, the following items of the Commonwealth's continuing disclosure undertaking are included in the Information Statement and incorporated by reference herein: Items 4 (tobacco settlements), 5 (statutory limitations on tax revenues), 7 (current statutorily-imposed pension funding schedule), 12 (state workforce), 14 (general and special obligation long-term debt issuance and repayment analysis), 15 (outstanding long-term Commonwealth debt), 16 (debt service requirements), 17 (contract assistance requirements), 19 (authorized but unissued debt), 20 (debt limit calculation), 21 (interest rate swap agreements) and 22 (liquidity facilities). With respect to Items 12, 14, 15, 19 and 20, the Information Statement noted that the figures for fiscal 2020 were preliminary and unaudited, such numbers have been audited and there are no changes.

All information relating to the fiscal year ending June 30, 2021 is projected, as of December 8, 2020, unless otherwise indicated, and subject to change.

### **SPECIAL DISCLOSURE REGARDING COVID-19 MATTERS**

As discussed in the Information Statement, the outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, has spread globally, including throughout the United States and in Massachusetts, and on March 11, 2020, was declared a pandemic by the World Health Organization. In response to the pandemic, international, federal, state and local governments, as well as private businesses and organizations, have implemented numerous measures intended to mitigate the spread and effects of COVID-19. Individuals, businesses and organizations have altered their behavior to adapt to such measures and to respond to the spread of COVID-19. The continued spread of COVID-19, the mitigation measures implemented, and these behavioral adaptations have caused and may continue to cause, severe disruptions in global, national, and local economies, as well as global financial markets, and significant volatility in the U.S. stock and bond markets.

In March 2020, Governor Baker declared a state of emergency in the Commonwealth, and over the following eight weeks Governor Baker's administration undertook a number of mitigation measures in response to COVID-19, including emergency orders closing certain education programs and non-essential businesses, a number of social distancing mandates, travel advisories, and eviction moratoriums, as well as tax relief measures postponing the collection of certain taxes due in fiscal 2020. All of these measures resulted in widespread economic disruption throughout the Commonwealth.

As the ongoing COVID-19 pandemic continues to evolve, Governor Baker's administration has curtailed certain measures while retaining flexibility to address future waves of the pandemic. In May 2020, the Governor announced a four-phase approach to reopening the Commonwealth, indicating that decisions and timing on all phases would be influenced by public health metrics. Between May and October 2020, as public health metrics improved, the phased reopening plan was implemented in steps, and certain mitigation measures were curtailed. By October 2020, the Commonwealth had proceeded to step 2 of Phase III of the plan.

In December 2020, the Commonwealth rolled back its reopening requirements and standards to step 1 of Phase III in response to an increase in new COVID-19 infections and hospitalizations following the Thanksgiving holiday. As a result, indoor capacity across a broad range of sectors was reduced, several workplace restrictions were tightened, and certain businesses were required to close, including indoor performance venues and certain high-contact indoor recreational businesses.

Following the rollback in the reopening plan in December 2020, public health measures have continued to trend in a positive direction, and the Commonwealth continues to report declines in average daily COVID-19 cases and hospitalizations, and increasing rates of vaccination within the Commonwealth. Accordingly, the Administration has taken steps to continue to implement the reopening plan, and on March 18, 2021 the Administration announced the transition to step 1 of the final phase of

the plan, effective March 22, 2021. The Administration is continuing to monitor public health data relating to COVID-19 and expects that it will continue to adjust the reopening plan, as needed, to control the spread of COVID-19 within the Commonwealth.

The COVID-19 pandemic has adversely impacted the Commonwealth's economy in a number of ways. Many businesses have experienced and may continue to experience decreases in operations and revenues. Due to the temporary closure of non-essential business and the stay-at-home advisory, there was a significant reduction in traffic volume and other commercial activity. These impacts to date have adversely impacted certain revenues of the Commonwealth. The extent of these and other impacts will depend on future developments, including the extent to which businesses that have completely or partially closed will reopen, and the extent to which modifications in operations implemented by businesses and organizations during the pandemic, including allowing employees to work from home, will continue after the state of emergency in the Commonwealth is lifted. At this time, the Commonwealth cannot predict whether additional measures will be needed to control the spread of COVID-19 or the duration of any such measures. The continued and ultimate impact of the COVID-19 pandemic on the economy and the financial condition of the Commonwealth remains unknown and is dependent on numerous and highly uncertain factors, many of which are beyond the Commonwealth's control.

For additional information, see "Special Disclosures Regarding COVID-19 Matters" in the Information Statement.

Questions regarding information contained in this statement may be directed to Sue Perez, Deputy Treasurer, Office of the Treasurer and Receiver-General, One Center Plaza, Suite 430, Boston, Massachusetts 02108, telephone (617) 367-9333, or to Mark Attia, Assistant Secretary, Executive Office for Administration and Finance, State House, Room 373, Boston, Massachusetts 02133, telephone (617) 727-2040.

**1. Summary presentation on statutory accounting and five-year comparative basis of selected budgeted operating funds operations, revenues and expenditures, concluding with prior fiscal year, plus estimates for current fiscal year.**

**Statutory Basis Distribution of Budgetary Revenues and Expenditures**

The table on the following two pages sets forth the Commonwealth's budgeted operating funds revenues and expenditures for fiscal 2016 through fiscal 2020 and projections for fiscal 2021. Projected revenue and expense items for fiscal 2021 are based on the fiscal 2021 budget, as enacted. See "SPECIAL DISCLOSURE REGARDING COVID-19 MATTERS," "COMMONWEALTH REVENUES – Tax Revenue Forecasting," and "FISCAL 2020 AND FISCAL 2021 – Fiscal 2021" in the Information Statement.

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**Budgeted Operating Funds – Statutory Basis (in millions) (1)**

	<u>Fiscal 2016</u>	<u>Fiscal 2017</u>	<u>Fiscal 2018</u>	<u>Fiscal 2019</u>	<u>Fiscal 2020</u>	<u>Projected Fiscal 2021</u>
<u>Beginning Fund Balances</u>						
Reserved or Designated	\$226.0	\$126.0	\$117.4	\$371.5	\$521.3	\$776.6
Stabilization Fund	1,252.4	1,291.5	1,300.7	2,001.3	3,424.4	3,501.2
Undesignated	92.3	64.5	29.7	13.9	13.5	17.4
<b>Total</b>	<b><u>\$1,570.7</u></b>	<b><u>1,482.0</u></b>	<b><u>\$1,447.8</u></b>	<b><u>\$2,386.7</u></b>	<b><u>\$3,959.2</u></b>	<b><u>\$4,295.2</u></b>
<u>Revenues and Other Sources</u>						
Alcoholic Beverages	83.4	85.4	85.8	87.1	88.4	89.7
Banks	23.5	(0.1)	17.4	19.5	9.3	29.1
Cigarettes	505.6	490.3	471.2	439.8	416.3	299.7
Corporations	2,312.0	2,196.7	2,392.2	2,927.2	2,523.4	2,747.0
Deeds	281.9	297.2	284.5	318.3	314.2	263.2
Income	14,393.7	14,683.7	16,239.6	17,109.3	17,360.8	16,679.7
Inheritance and Estate	399.4	336.6	473.0	601.3	699.6	497.2
Insurance	429.6	421.9	430.9	470.6	495.9	528.1
Marijuana Excise	-	-	-	13.9	51.7	83.3
Motor Fuel	766.6	769.4	769.1	775.5	707.9	577.2
Public Utilities	(1.6)	(0.1)	(0.7)	-	(0.3)	-
Room Occupancy	162.2	156.7	158.7	168.8	146.6	114.8
Sales:						
Regular	4,156.9	4,226.1	4,433.2	4,688.3	4,905.1	5,490.3
Meals	1,063.8	1,132.5	1,154.4	1,216.0	1,077.3	827.2
Motor Vehicles	<u>833.9</u>	<u>852.5</u>	<u>866.3</u>	<u>894.0</u>	<u>828.0</u>	<u>856.1</u>
Sub-Total-Sales	6,054.6	6,211.1	6,453.9	6,798.3	6,810.4	7,173.6
Miscellaneous	13.6	12.9	11.5	10.5	9.1	7.8
Settlements and Judgments (2)	-	-	-	-	-	50
<b>Total Tax Revenues</b>	<b><u>\$25,424.5</u></b>	<b><u>\$25,661.7</u></b>	<b><u>\$27,787.2</u></b>	<b><u>\$29,740.1</u></b>	<b><u>\$29,633.3</u></b>	<b><u>\$29,140.3</u></b>
MBTA Transfer	(986.2)	(992.2)	(1,007.9)	(1,053.2)	(1,077.3)	(1,175.4)
MSBA Transfer	(798.5)	(816.8)	(847.9)	(893.2)	(917.3)	(1,015.4)
Workforce Training Fund Transfer (3)	(22.8)	(24.4)	(24.7)	(25.1)	(25.7)	(25.0)
<b>Total Budgeted Operating Tax Revenues</b>	<b><u>\$23,616.9</u></b>	<b><u>\$23,828.3</u></b>	<b><u>\$25,906.7</u></b>	<b><u>\$27,768.6</u></b>	<b><u>\$27,613.0</u></b>	<b><u>\$26,924.5</u></b>
Federal Reimbursements Departmental and Other Revenues	10,642.7	10,857.8	11,376.9	11,771.9	12,794.7	13,776.5
Inter-fund Transfers from Non-budgeted Funds and other sources (4)	<u>1,848.7</u>	<u>2,099.1</u>	<u>1,793.4</u>	<u>2,010.3</u>	<u>1,988.4</u>	<u>2,000.2</u>
<b>Budgeted Revenues and Other Sources</b>	<b><u>\$40,365.5</u></b>	<b><u>\$41,167.3</u></b>	<b><u>\$43,819.2</u></b>	<b><u>\$46,382.5</u></b>	<b><u>\$47,316.1</u></b>	<b><u>47,816.1</u></b>
Inter-fund Transfers	472.9	617.4	1,217.0	1,993.3	1,013.3	864.4
<b>Total Budgeted Revenues and Other Sources</b>	<b><u>\$40,838.4</u></b>	<b><u>\$41,784.7</u></b>	<b><u>\$45,036.2</u></b>	<b><u>\$48,375.8</u></b>	<b><u>\$48,329.4</u></b>	<b><u>\$48,680.5</u></b>
<u>Expenditures and Uses</u>						
Direct Local Aid	5,567.7	5,703.0	5,885.5	6,074.7	6,376.3	6,487.7
Medicaid	14,851.0	15,251.7	15,744.5	16,520.5	17,022.6	17,804.4
Other Health and Human Services	5,433.0	5,601.4	5,930.0	6,210.3	6,624.9	6,995.4
Group Insurance	1,629.7	1,662.5	1,634.0	1,644.2	1,662.0	1,733.0
Department of Elementary and Secondary Education	539.3	523.2	552.3	604.9	664.5	745.4
Higher Education	1,194.3	1,168.3	1,173.4	1,283.7	1,317.4	1,343.7
Department of Early Education and Care	547.6	540.0	564.3	607.5	712.2	1,017.9
Public Safety	1,065.6	1,059.6	1,102.0	1,168.1	1,478.6	1,336.9
Energy and Environmental Affairs	221.4	222.1	229.6	255.1	282.9	310.1
Debt Service (5)	2,174.3	2,284.7	2,323.4	2,327.1	2,410.2	2,372.2
Post -Employment Benefits (6)	2,503.4	2,659.7	2,891.5	3,110.2	3,305.0	3,641.3
Other Program Expenditures	<u>3,240.7</u>	<u>3,235.0</u>	<u>3,316.0</u>	<u>3,562.5</u>	<u>3,724.8</u>	<u>4,362.2</u>
<b>Total - Programs and Services before transfers to Non-budgeted funds</b>	<b><u>\$38,968.0</u></b>	<b><u>\$39,911.2</u></b>	<b><u>\$41,346.5</u></b>	<b><u>\$43,368.9</u></b>	<b><u>\$45,581.4</u></b>	<b><u>\$48,150.3</u></b>

	<u>Fiscal 2016</u>	<u>Fiscal 2017</u>	<u>Fiscal 2018</u>	<u>Fiscal 2019</u>	<u>Fiscal 2020</u>	<u>Projected Fiscal 2021</u>
<u>Inter-Fund Transfers to</u>						
<u>Non-Budgeted Funds</u>						
Commonwealth Care Trust Fund	-	-	-	45.8	-	-
Medical Assistance Trust Fund	665.6	403.4	579.9	363.1	505.8	537.2
Massachusetts Transportation Trust Fund	566.8	484.7	634.7	643.2	588.2	605.0
Other	<u>253.8</u>	<u>402.3</u>	<u>319.2</u>	<u>389.0</u>	<u>304.7</u>	<u>128.1</u>
<b>Total Inter-Fund Transfers to Non-Budgeted Funds</b>	<b><u>\$1,486.2</u></b>	<b><u>\$1,290.4</u></b>	<b><u>\$1,533.8</u></b>	<b><u>\$1,441.1</u></b>	<b><u>\$1,398.7</u></b>	<b><u>\$1,270.3</u></b>
<b>Budgeted Expenditures and Other Uses</b>						
	<b><u>\$40,454.2</u></b>	<b><u>\$41,201.6</u></b>	<b><u>\$42,880.3</u></b>	<b><u>\$44,810.0</u></b>	<b><u>\$46,980.1</u></b>	<b><u>\$49,420.7</u></b>
Inter-fund Transfers	472.9	617.4	1,217.0	1,993.3	1,013.3	864.4
<b>Total Budgeted Expenditures and Other Uses</b>	<b><u>\$40,927.1</u></b>	<b><u>\$41,819.0</u></b>	<b><u>\$44,097.3</u></b>	<b><u>\$46,803.3</u></b>	<b><u>\$47,993.4</u></b>	<b><u>\$50,285.1</u></b>
<b>Excess (Deficiency) of Revenues and Other Sources Over Expenditures and Other Uses</b>						
	<b><u>(\$88.7)</u></b>	<b><u>(\$34.3)</u></b>	<b><u>\$938.9</u></b>	<b><u>\$1,572.5</u></b>	<b><u>\$336.0</u></b>	<b><u>(\$1,604.6)</u></b>
<u>Ending Fund Balances</u>						
Reserved or Designated (7)	126.0	117.4	371.5	521.3	776.6 (8)	266.5
Stabilization Fund	1,291.5	1,300.7	2,001.3	3,424.4	3,501.2	2,521.7
Undesignated	<u>64.5</u>	<u>29.7</u>	<u>13.9</u>	<u>13.5</u>	<u>17.4</u>	<u>(97.5)</u>
<b>Total</b>	<b><u>\$1,482.0</u></b>	<b><u>\$1,447.8</u></b>	<b><u>\$2,386.7</u></b>	<b><u>\$3,959.2</u></b>	<b><u>\$4,295.2</u></b>	<b><u>\$2,690.8</u></b>

SOURCES: Fiscal 2016-2020, Office of the Comptroller; fiscal 2021, Executive Office for Administration and Finance.

- (1) Totals may not add due to rounding.
- (2) For fiscal 2016 through 2020, tax and non-tax revenue from judgments and settlements in excess of \$10 million is included in specific tax and non-tax revenue categories. See "COMMONWEALTH REVENUES – Federal and Other Non-Tax Revenues; *Settlements and Judgments*" in the Information Statement.
- (3) The Workforce Training Fund is not subject to annual appropriation, and employer contributions are deposited directly in the Workforce Training Fund after their collection.
- (4) Inter-fund Transfers from Non-budgeted Funds and Other Sources include profits from the State Lottery, abandoned property proceeds and other inter-fund transfers.
- (5) Fiscal 2016 budgeted debt service excluded \$113 million in payments made from a non-budgeted fund that was made from budgeted funds in other years.
- (6) Post-Employment Benefits include all budgeted pension transfers and transfers to the State Retiree Benefits Trust Fund (SRBTF). See "PENSION AND OPEB FUNDING – Other Post-Employment Benefit Obligations (OPEB)" in the Information Statement.
- (7) Consists largely of appropriations authorized to be expended in the following year.
- (8) Includes appropriations authorized in fiscal 2020 that are expected to be funded by federal funds in fiscal 2021.

**2. Summary presentation on GAAP and five-year comparative basis of governmental funds operations, concluding with prior fiscal year.**

The following table provides financial results on a GAAP basis for all governmental operating funds of the Commonwealth for fiscal 2016 through fiscal 2020.

**Governmental Fund Operations – GAAP Basis – Fund Perspective (in millions)**

	<u>Fiscal 2016</u>	<u>Fiscal 2017</u>	<u>Fiscal 2018</u>	<u>Fiscal 2019</u>	<u>Fiscal 2020 (1)</u>
Beginning fund balances	\$5,305.2	\$5,273.3	\$5,596.9	\$6,838.4	\$9,165.9
Revenues and Financing Sources	67,749.6	68,437.1	68,990.3	69,775.9	72,507.0
Expenditures and Financing Uses	67,781.5	68,113.5	67,749.0	67,503.0	72,615.4
Excess/(deficit)	<u>(31.9)</u>	<u>323.6</u>	<u>1,241.3</u>	<u>2,272.9</u>	<u>(108.4)</u>
<b>Ending fund balances— GAAP fund perspective</b>	<b><u>\$5,273.3</u></b>	<b><u>\$5,596.9</u></b>	<b><u>\$6,838.2</u></b>	<b><u>\$9,111.3</u></b>	<b><u>\$9,057.5</u></b>

SOURCE: Office of the Comptroller.

(1) – Beginning fund balance was restated due to the early implementation of GASB Statement No. 84, *Fiduciary Activities* during FY20.

### 3. Summary presentation on a five-year comparative basis of lottery revenues and profits.

The following table provides financial results on a GAAP basis for all governmental operating funds of the Commonwealth for fiscal 2016 through fiscal 2020.

#### Lottery Revenues and Profits (in thousands)

<u>Fiscal</u> <u>Year</u>	<u>Revenues</u>	<u>Net</u> <u>Operating</u> <u>Revenues</u>	<u>Net Profits</u>
2020(1)	\$5,257,627	\$1,090,894	\$986,851
2019	5,508,564	1,206,850	1,104,220
2018	5,291,951	1,097,398	997,057
2017	5,097,765	1,136,203	1,039,697
2016	5,233,931	1,092,130	989,411

**SOURCE: State Lottery Commission**

(1) The lottery net profits for fiscal 2020 represent a \$117.4 million decrease from fiscal 2019 in large part due to the impact of the COVID-19 pandemic. See "SPECIAL DISCLOSURE REGARDING COVID-19 MATTERS."

### 6. Summary description of the retirement systems for which the Commonwealth is responsible, including membership and contribution rates.

The Massachusetts State Employees' Retirement System (MSERS) and the Massachusetts Teachers' Retirement System (MTRS) are the two largest plans of the public contributory retirement systems operated in the Commonwealth. The most recent combined valuations were as of January 1, 2019. A summary of the retirement systems through the last valuation is contained in the Information Statement.

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**8. Summary presentation on a ten-year comparative basis of actuarial valuations of pension fund assets, liabilities, and funding progress.**

While the General Laws require a biennial actuarial valuation, the Public Employee Retirement Administration Commission (PERAC) has historically produced annual valuations. However, due to the COVID-19 pandemic, PERAC did not perform an actuarial valuation as of January 1, 2020. The next actuarial valuation will be performed as of January 1, 2021. A table containing a 10-year comparison of the actuarial value of assets to the market values, the ratio of the actuarial value to market value, and the funded ratio based on actuarial value compared to the funded ratio based on the market value of assets, through the last valuation (January 1, 2019) is contained in the Information Statement.

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**9. Summary presentation on a five-year comparative basis of pension contributions made and the cost impact of a minimal traditional schedule.**

The following table sets forth the annual required contribution (ARC) by the Commonwealth for each of the fiscal years indicated and the actual contributions made. The ARC was determined annually through fiscal 2014, based on the most recent Commonwealth valuation, under Governmental Accounting Standards Board (GASB) Statement No. 27. GASB 27 is no longer applicable with the implementation of GASB 67/68, as described below, but the Commonwealth expects to continue calculating the ARC under GASB 27 principles for comparison. Actuarial valuations have been performed annually since January 1, 2000. The Commonwealth also develops a revised funding schedule by statute at least every three years, and the Commonwealth made the full contribution required, under the then-current funding schedule, for each year displayed in the table. The decrease from fiscal 2016 to fiscal 2017 shown below in the percentage of the ARC funded reflects the assumptions and plan changes described in the January 1, 2016 valuation report that increased plan liabilities.

The calculation of the Commonwealth's ARC assumes amortization of the unfunded actuarial liability on a 4.0% annual increasing basis to fiscal 2040. (This is the minimum allowable funding schedule for local systems under state pension law.) The amount shown in the table below for contributions made in the current fiscal year is the amount required by the current funding schedule. The amounts shown for contributions made in fiscal 2016 and fiscal 2017 include the costs associated with an early retirement incentive program (ERIP).

**Annual Required Contributions and Other Pension Contributions**  
(in thousands)

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Annual required contribution (ARC) (1)	\$2,600,000	\$3,060,000	\$3,392,000	\$3,500,000	\$3,800,000
Contributions made	<u>\$2,001,093</u>	<u>\$2,198,093</u>	<u>\$2,394,000</u>	<u>\$2,608,000</u>	<u>\$2,841,525</u>
% of ARC funded for the fiscal year	77%	72%	73%	75%	75%
ARC as ratio of total government expenditures (2)	6.4%	7.2%	7.6%	7.6%	7.92%

SOURCE: Public Employee Retirement Administration Commission.

- (1) The ARC calculation for fiscal 2016 does not include costs associated with the ERIP because such costs had not yet been identified at the time the calculation was made.
- (2) Based on Total Budgeted Expenditures and Other Uses.

While the General Laws require a biennial actuarial valuation, the Public Employee Retirement Administration Commission (PERAC) has historically produced annual valuations. However, due to the COVID-19 pandemic, PERAC did not perform an actuarial valuation as of January 1, 2020. The next actuarial valuation will be performed as of January 1, 2021. A table containing a 10-year comparison of the actuarial value of assets to the market values, the ratio of the actuarial value to market value, and the funded ratio based on actuarial value compared to the funded ratio based on the market value of assets, through the last valuation (January 1, 2019) is contained in the Information Statement.

**10. Summary presentation on a five-year comparative basis of PRIT Fund asset allocation and investment returns.**

The actual asset allocation mix invariably deviates from the PRIT Fund’s allocation targets due to market movement, cash flows, and manager performance. Material deviations from the asset allocation targets can alter the expected return and risk of the PRIT Fund. The following table sets forth the actual PRIT Fund asset allocation for each of the most recent five fiscal years, as well as the current target ranges. The actual allocation figures are as of June 30 for each of the years indicated. The target ranges are those contained in the asset allocation plan, which was most recently approved on February 24, 2021.

**PRIT Fund Asset Allocation**

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>Target Ranges</u>
<b>Global Equity</b>	42.2%	45.7%	41.9%	43.2%	42.0%	34.0 – 44.0%
<b>Core Fixed Income</b>	13.9	12.0	12.8	13.6	15.7	12.0 – 18.0
<b>Value-Added Fixed Income</b>	8.4	8.1	8.0	7.9	7.5	5.0 – 11.0
<b>Private Equity</b>	11.1	10.6	10.8	11.3	11.4	11.0 – 17.0
<b>Real Estate</b>	10.4	9.1	9.0	9.4	9.2	7.0 – 13.0
<b>Timber/Natural Resources</b>	3.3	3.7	3.4	3.9	3.7	1.0 – 7.0
<b>Portfolio Completion Strategies</b>	9.8	9.5	13.4	10.0	9.7	7.0 – 13.0

SOURCE: Pension Reserves Investment Management Board.

The following table sets forth the actual investment rates of return for the assets in the PRIT Fund for the last 10 fiscal years:

**PRIT Fund Rates of Return (Gross of Fees)**

<u>Fiscal Year</u>	<u>Rate of Return</u>	<u>Fiscal Year</u>	<u>Rate of Return</u>
<b>2020</b>	2.38%	<b>2015</b>	3.86%
<b>2019</b>	6.12	<b>2014</b>	17.53
<b>2018</b>	9.97	<b>2013</b>	12.69
<b>2017</b>	13.20	<b>2012</b>	(0.08)
<b>2016</b>	2.29	<b>2011</b>	22.30

<b>3yr annualized</b>	6.11%
<b>5yr annualized</b>	6.71%
<b>10yr annualized</b>	8.81%

SOURCE: Pension Reserves Investment Management Board.

## 11. Summary presentation of actuarial valuations of OPEB assets, liabilities and funding progress.

In addition to providing pension benefits, the Commonwealth is statutorily required to provide certain health care and life insurance benefits (“other post-employment benefits” or “OPEB”) for retired employees of the Commonwealth, as well as retired employees of housing authorities, redevelopment authorities and certain other governmental agencies (offline agencies). Substantially all of the Commonwealth’s employees may become eligible for these benefits if they reach retirement age and eligibility while working for the Commonwealth. Eligible retirees are required to contribute a specified percentage of the health care/benefit costs. The Commonwealth is reimbursed for the cost of benefits to retirees of the eligible authorities and non-state agencies. (Although, as noted above, the Commonwealth is required to pay pensions to retired municipal teachers, the Commonwealth has no OPEB obligations with respect to retired municipal teachers.)

Employer and employee contribution rates are set by statute. The Commonwealth recognizes its share of the costs on an actuarial basis. As of June 30, 2020, Commonwealth participants contributed 10% to 20% of premium costs, depending on the date of hire and whether the participant is active, retiree or survivor status. According to the most recent actuarial valuation as of June 30, 2020, the Group Insurance Commission had 133,322 state enrollees as of January 1, 2020. As of that date, the Commonwealth was responsible for the OPEB liability of 129,046 of those enrollees.

The GASB 74 actuarial valuation for fiscal year ended June 30, 2020, which was issued on March 12, 2021, is available at: <https://www.macomptroller.org/commonwealth-actuarial-valuations>. According to the report, the Commonwealth’s unfunded OPEB liability, assuming no pre-funding and using a discount rate of 2.28%, was approximately \$20.691 billion as of June 30, 2020.

The plan net position as of June 30, 2020 was approximately \$1.414 billion.

**State Retiree Benefits Trust**  
(in thousands, except for percentages)

<b>Actuarial Valuation as of June 30 (1):</b>	<b>Plan Net Position</b>	<b>Total OPEB Liability</b>	<b>Net (Unfunded) OPEB Liability</b>	<b>Funded Ratio</b>	<b>Covered Payroll</b>	<b>Net OPEB liability as % of Covered Payroll</b>
<b>2020</b>	\$1,414,312	\$22,105,511	\$20,691,199	6.4%	\$6,608,652	313.1%
<b>2019 (3)</b>	1,368,548	19,662,106	18,293,558	7.0	6,354,473	287.9
<b>2018 (3)</b>	1,187,569	19,761,333	18,573,764	6.0	6,155,914	301.7
<b>2017</b>	996,407	18,480,936	17,484,529	5.4	5,927,012	295.0

<b>Actuarial Valuation as of January 1 (2):</b>	<b>Actuarial Value of Plan Assets</b>	<b>Actuarial Liability</b>	<b>Accrued Unfunded Liability (UAAL)</b>	<b>Actuarial Ratio Covered</b>	<b>Funded Payroll</b>	<b>Annual Covered Payroll as % of UAAL</b>
<b>2017</b>	\$817,400	\$20,263,500	\$19,446,100	4.0%	\$5,927,012	328.1%
<b>2016</b>	760,400	17,082,900	16,322,500	4.5	5,792,288	281.8
<b>2015</b>	610,000	16,502,800	15,892,800	3.7	5,591,911	284.2
<b>2014</b>	511,200	15,670,200	15,159,000	3.3	5,344,500	283.6
<b>2013</b>	406,700	15,784,100	15,377,400	2.6	5,183,195	296.7
<b>2012</b>	360,500	16,559,400	16,298,900	2.2	4,922,388	331.1
<b>2011</b>	350,500	16,568,600	16,218,100	2.1	4,808,250	337.3
<b>2010</b>	309,800	15,166,300	14,856,500	2.0	4,711,563	315.3
<b>2009</b>	273,500	15,305,100	15,031,600	1.8	4,712,655	319.0
<b>2008</b>	-	9,812,000	9,812,000	0.0	4,574,233	214.5

SOURCE: Office of the Comptroller

- (1) Amounts are as of June 30 and prepared in accordance with GASB Statement No. 74, effective as of fiscal 2017.
- (2) Amounts are as of January 1 and prepared in accordance with GASB Statement No. 43, which was replaced by GASB Statement No. 74.
- (3) Certain amounts were restated due to errors in calculations during subsequent audit procedures as more fully described below.

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The following table shows the beginning and ending liabilities and assets for the State Retirees' Benefits Trust, as well as the unfunded OPEB liability, or net OPEB liability (NOL), with the NOL being the amount that the Commonwealth records on its Statement of Net Position as its unfunded OPEB liability, as required by GASB Statements No. 74 and No. 75, and as shown in the Audited Financial Statements for each fiscal year. The table also shows the components of the change in the NOL between the beginning (July 1) and end (June 30) for fiscal years 2017 to 2020.

During the audit of the GASB 75 report as of the June 30, 2019 measurement date (which will be reported in the Audited Financial Statements for fiscal 2020), the Commonwealth's independent auditors, currently KPMG, noted errors in the total OPEB liability and the net OPEB liability as calculated by a third party actuarial firm. These errors included incorrect total and net OPEB liabilities dating back to the June 30, 2018 measurement date. The information in the following GASB 74 and 75 tables have been changed to reflect the restated amounts. These restated amounts are reported in the Audited Financial Statements for fiscal 2020.

### **GASB 74 Information for the State Retirees' Benefit Trust Schedule of Changes in Net OPEB Liability and Related Ratios**

Fiscal Years 2020 through 2017  
(in thousands, except for percentages)

	<u>Fiscal 2020</u>	<u>Fiscal 2019 (5)</u>	<u>Fiscal 2018 (5)</u>	<u>Fiscal 2017</u>
Total OPEB liability (as of July 1)	<b>\$19,662,106</b>	<b>\$19,761,333</b>	<b>\$18,480,936</b>	<b>\$19,821,600</b>
Service cost	785,689	806,023	792,135	950,800
Interest	732,808	796,880	691,630	591,900
Differences between expected and actual experience	(600,057)	715,192	218,891	(48,600)
Changes of assumptions (1), (2), (3), (4)	2,050,139	(1,935,139)	21,504	(2,393,700)
Benefit payments, including refunds of member contributions	<u>(525,174)</u>	<u>(482,183)</u>	<u>(443,763)</u>	<u>(441,064)</u>
Net change in total OPEB liability	<u>2,443,405</u>	<u>(99,227)</u>	<u>1,280,397</u>	<u>(1,340,664)</u>
Total OPEB liability, June 30	<b><u>\$22,105,511</u></b>	<b><u>\$19,662,106</u></b>	<b><u>\$19,761,333</u></b>	<b><u>\$18,480,936</u></b>
Plan fiduciary net position, July 1	<b>\$1,368,548</b>	<b>\$1,187,569</b>	<b>\$996,407</b>	<b>\$866,043</b>
Contributions:				
Employer	547,611	594,916	542,896	465,449
Other additions	<u>122</u>	<u>188</u>	<u>133</u>	<u>784</u>
Total contributions	<u>547,733</u>	<u>595,104</u>	<u>543,029</u>	<u>466,233</u>
Net investment income	<u>23,380</u>	<u>68,229</u>	<u>93,308</u>	<u>105,822</u>
Benefit payments, including refunds of plan member contributions	(525,174)	(482,183)	(443,763)	(441,064)
Administrative expense	(175)	(171)	(150)	(127)
Other changes	-	-	<u>(1,262)</u>	<u>(500)</u>
Net change in plan fiduciary net position	<u>45,764</u>	<u>180,979</u>	<u>191,162</u>	<u>130,364</u>
Plan fiduciary net position, June 30	<b><u>\$1,414,312</u></b>	<b><u>\$1,368,648</u></b>	<b><u>\$1,187,569</u></b>	<b><u>\$996,407</u></b>
Plan net OPEB liability - June 30	<b><u>\$20,691,199</u></b>	<b><u>\$18,293,458</u></b>	<b><u>\$18,573,764</u></b>	<b><u>\$17,484,529</u></b>
Plan fiduciary net position as a percentage of the total OPEB liability	6.4%	7.0%	6.0%	5.4%
Covered payroll (as of actuarial valuation date)	<u>\$6,608,652</u>	<u>\$6,354,473</u>	<u>\$6,155,194</u>	<u>\$5,927,012</u>

Net OPEB liability as a percentage of covered employee payroll

313.1%

287.9%

301.7%

295.0%

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SOURCE: Office of the Comptroller

- (1) The change in assumptions in fiscal 2017 was due to an increase in the investment rate of return (discount rate) from 2.80% to 3.63%.
- (2) The change in assumptions in fiscal 2018 was due to (i) a change in base OPEB rates for medical services and prescriptions, (ii) a decrease in the healthcare trend rate from 8.5% to 8.0%, (iii) a change in mortality for disabled members and (iv) an increase of the discount rate from 3.63% to 3.95%.
- (3) The change in assumptions in fiscal 2019 was due to (1) a change in base OPEB rates for medical services and prescriptions, (ii) a decrease in the healthcare trend rate from 8.0% to 7.5%, (iii) a change in medical plan election rates, (iv) a change in future retirees' plan participation rates and (v) a decrease in the discount rate from 3.95% to 3.69%
- (4) The change in assumptions in fiscal 2020 was due to (1) removal of the excise tax, (ii) an update of the per capita claims costs, (iii) an update of the medical trend rate based on the SOA-Getzen trend rate model version 2020\_b, (iv) change in the salary scale to be consistent with that of SERS, (v) a change in future retirees' plan participation rates, (vi) a change in medical plan election rates and (vii) a decrease in the discount rate from 3.63% to 2.28%
- (5) Certain amounts were restated due to errors in calculations during subsequent audit procedures as more fully described in the preceding paragraph.

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**13. Five-year summary presentation of actual capital project expenditures.**

The following table sets forth actual capital expenditures for fiscal 2016 through 2020.

**Commonwealth Historical Capital Spending (in millions) (1)**

<b>Investment Category:</b>	<b><u>Fiscal 2016</u></b>	<b><u>Fiscal 2017</u></b>	<b><u>Fiscal 2018</u></b>	<b><u>Fiscal 2019</u></b>	<b><u>Fiscal 2020</u></b>
Information technology	\$169	\$154	\$185	\$174	\$94
Infrastructure/facilities	526	510	417	441	399
Environment	238	202	217	210	222
Housing	185	213	242	253	197
Public safety	18	17	18	19	17
Transportation	2,081	1,895	1,889	1,869	2,030
Other	<u>215</u>	<u>269</u>	<u>280</u>	<u>294</u>	<u>211</u>
Total	<u>\$3,432</u>	<u>\$3,260</u>	<u>\$3,248</u>	<u>\$3,260</u>	<u>\$3,170</u>

SOURCE: Office of the Comptroller.

(1) Includes all spending funded by capital appropriations, including General Obligation, Special Obligation, project financed, and federal reimbursement spending.

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**18. Annual fiscal year long-term leasing liabilities for Commonwealth, beginning with the current fiscal year.**

In addition to Commonwealth-owned buildings and facilities, the Commonwealth leases additional space from private parties. In certain circumstances, the Commonwealth has acquired certain types of capital assets under long-term capital leases; typically, these arrangements relate to computer and telecommunications equipment and to motor vehicles. Minimum future rental expenditure commitments of the Commonwealth under operating leases and long-term principal and interest obligations related to leases in effect as of June 30, 2020 are set forth in the table below.

**Long-Term Leases (in thousands)**

<u>Fiscal Year</u>	<u>Leases (1)</u>
2021	\$233,301
2022	170,404
2023	153,903
2024	135,385
2025	109,692
2026	78,894
2027	67,838
2028	60,978
2029	49,199
2030 through 2051	<u>201,786</u>
<b>Total</b>	<b><u>\$1,261,380</u></b>

SOURCES: Office of the Comptroller

(1) Includes operating and capital leases. Leases with the institutions of higher education that are supported by tuition and fees are not included.