

THE COMMONWEALTH OF MASSACHUSETTS

General Obligation Bonds

ANNUAL FINANCIAL INFORMATION AND OPERATING DATA FOR FISCAL YEAR 2021

March 25, 2022

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, 2021 and updates the financial information and operating data presented in the Commonwealth's statement of annual financial information for general obligation debt dated March 26, 2021 with respect to the fiscal year ended June 30, 2020.

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:

- the Commonwealth's Information Statement dated January 6, 2022, as supplemented on January 31, 2022 (the "Information Statement"), which was filed with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access system ("EMMA") on January 31, 2022 and available at https://emma.msrb.org/P21610648.pdf;
- (ii) the Commonwealth's Statutory Basis Financial Report for the year ended June 30, 2021 ("SBFR"), which was filed on EMMA on November 24, 2021 and available at https://emma.msrb.org/P21590570.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 <u>https://emma.msrb.org/P11561619.pdf</u>. The

Commonwealth's Annual Comprehensive Financial Report for the fiscal year ended June 30, 2021 is not yet available and will be posted on EMMA as soon as available.

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:

Item 1 (statutory basis distribution of budgetary revenues and expenditures) Item 3 (lottery revenues and profits) Item 4 (tobacco settlements) Item 5 (statutory limitations on tax revenues) Item 6 (retirement systems and employee contributions) Item 7 (current statutorily-imposed pension funding schedule) Item 8 (actuarial valuations) Item 9 (annual required contributions) Item 10 (PRIT fund investments) Item 12 (state workforce) Item 14 (general and special obligation long-term debt issuance and repayment analysis) Item 15 (outstanding long-term Commonwealth debt) Item 16 (debt service requirements) Item 17 (contract assistance requirements) Item 19 (authorized but unissued debt) Item 20 (debt limit calculation) Item 21 (interest rate swap agreements) Item 22 (liquidity facilities)

All information relating to the fiscal year ending June 30, 2021 is preliminary, unaudited and subject to change. All information relating to the fiscal year ending June 30, 2022 is projected as of January 31, 2022, and subject to change.

SPECIAL DISCLOSURE REGARDING COVID-19 MATTERS

As discussed in the Information Statement, in response to the outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, and the declaration by the World Health Organization on March 11, 2020 of a COVID-19 pandemic, in March 2020 Governor Baker declared a state of emergency in the Commonwealth due to COVID-19. 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 COVID-19 pandemic continued to evolve, Governor Baker's administration curtailed certain measures while retaining the 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 2020 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. In December 2020, the Commonwealth also began phased vaccination efforts across Massachusetts.

As public health measures continued to trend in a positive direction, and the Commonwealth experienced significant declines in average daily COVID-19 cases and hospitalizations, and increasing rates of vaccination within the Commonwealth, the Administration continued to implement the reopening plan, and by the end of May 2021, nearly all COVID-19 restrictions were lifted and all industries were permitted to open. On June 15, 2021, the state of emergency in the Commonwealth related to COVID-19 was terminated. Based on information submitted to the Massachusetts Immunization Information System as of March 17, 2022, and using the University of Massachusetts Donahue Institute 2019 Population Estimates, more than 5.3 million people within the Commonwealth, or approximately 78% of the Commonwealth's population, were fully vaccinated.

The Administration is continuing to monitor public health data relating to COVID-19 and expects to take additional measures to control the spread of COVID-19 within the Commonwealth, if needed, as new variants of the virus emerge. At this time, the Commonwealth cannot predict whether additional measures will be needed to control the spread of COVID-19 or the nature or duration of any such measures.

The ultimate impact of the COVID-19 pandemic on the Commonwealth's economy remains unknown. In response to the pandemic, international, federal, state and local governments, as well as private businesses and organizations, implemented numerous measures intended to mitigate the spread and effects of COVID-19. The continued spread of COVID-19, the mitigation measures implemented, and the responses of individuals, businesses, and organizations to the disease and the mitigation measures implemented have caused and may continue to cause, severe disruptions in global, national, and local economies, as well as to global financial markets and the U.S. stock and bond markets. Many businesses have experienced and may continue to experience decreases in operations and revenues. The impacts of COVID-19 resulted in unprecedented rates of unemployment in the Commonwealth. The extent to which businesses that have completely or partially closed will reopen, travel and tourism activity will return to pre-pandemic levels, and businesses and organizations will allow employees to work from home is still unknown. The extent of these and other impacts on the Commonwealth's economy will depend on future developments and numerous 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 Kaitlyn Connors, Assistant Secretary, Executive Office for Administration and Finance, State House, Room 373, Boston, Massachusetts 02133, telephone (617) 727-2040.

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 2017 through fiscal 2021.

	<u>Fiscal 2017</u>	<u>Fiscal 2018</u>	<u>Fiscal 2019</u>	Fiscal 2020 ⁽¹⁾	Fiscal 2021 (2) (3)
Beginning fund balances	\$5,273.3	\$5,596.9	\$6,838.4	\$9,165.9	\$9,912.8
Revenues and Financing Sources	68,437.1	68,990.3	69,775.9	72,507.0	85,296.5
Expenditures and Financing Uses	68,113.5	67,749.0	67,503.0	72,615.4	80,946.6
Excess/(deficit)	<u>323.6</u>	<u>1,241.3</u>	<u>2,272.9</u>	<u>(108.4)</u>	<u>4,349.9</u>
Ending fund balances—GAAP fund perspective	<u>\$5,596.9</u>	<u>\$6,838.2</u>	<u>\$9,111.3</u>	<u>\$9,057.5</u>	<u>\$14,262.7</u>

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

SOURCE: Office of the Comptroller.

(1) Beginning fund balance was restated due to the early implementation of GASB Statement No. 84, Fiduciary Activities during fiscal 2020.

(2) Beginning fund balance was restated in fiscal 2021 due to GASB 84 reclassification of custodial fund activity presented in error in prior

year.(3) Fiscal 2021 numbers are preliminary, unaudited, and subject to change.

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.)

The Group Insurance Commission (GIC) manages the Commonwealth's other post-employment benefits for all state and certain agency employees and retirees. The GIC has representation on the Board of Trustees of the State Retiree Benefits Trust (SRBT). The SRBT is set up to pay for former state employees' OPEB benefits and to invest state and certain municipalities funds that have been set aside to pay for OPEB benefits and the cost to administer those funds and can only be dissolved when all such health care and other non-pension benefits, current and future, have been paid or defeased.

The GASB 74 actuarial valuation for fiscal year ended June 30, 2021, which was issued on January 28, 2022, 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 2.77%, was approximately \$15.999 billion as of June 30, 2021.

State Retiree Benefits Trust

(in thousands, except for percentages)

Actuarial Valuation <u>as of June 30</u> (1):	Plan Net <u>Position</u>	Total OPEB Liability	Net (Unfunded) <u>OPEB Liability</u>	Funded <u>Ratio</u>	Covered <u>Payroll</u> (4)	Net OPEB liability as % of Covered <u>Payroll</u>
2021 (5)	\$1,910,940	\$17,910,405	\$15,999,465	10.7%	\$5,585,443	286.4%
2020	1,414,312	22,105,511	20,691,199	6.4	5,624,148	367.9
2019 (3)	1,368,548	19,662,106	18,293,558	7.0	5,489,613	333.2
2018 (3)	1,187,569	19,761,333	18,573,764	6.0	5,295,068	350.8
2017	996,407	18,480,936	17,484,529	5.4	5,257,594	332.6

Actuarial Valuation <u>as of January 1</u> (2):	Actuarial Value of <u>Plan Assets</u>	Actuarial <u>Liability</u>	Accrued Unfunded Liability <u>(UAAL)</u>	Actuarial Ratio <u>Covered</u>	Funded <u>Payroll</u> (4)	Annual Covered Payroll as <u>% of</u> <u>UAAL</u>
2017	\$817,400	\$20,263,500	\$19,446,100	4.0%	\$5,257,594	369.9%
2016	760,400	17,082,900	16,322,500	4.5	5,792,288	281.8
2015	610,000	16,502,800	15,892,800	3.7	5,591,911	284.2
2014	511,200	15,670,200	15,159,000	3.3	5,344,500	283.6
2013	406,700	15,784,100	15,377,400	2.6	5,183,195	296.7
2012	360,500	16,559,400	16,298,900	2.2	4,922,388	331.1
2011	350,500	16,568,600	16,218,100	2.1	4,808,250	337.3
2010	309,800	15,166,300	14,856,500	2.0	4,711,563	315.3
2009	273,500	15,305,100	15,031,600	1.8	4,712,655	319.0
2008	-	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.

(4) Fiscal 2017 through fiscal 2021 covered payroll and fiscal 2017 funded payroll amounts have been restated to exclude certain employees for whose benefit the Commonwealth is not liable. Fiscal years prior to fiscal 2017 have not been restated and include such employees under funded payroll.

(5) Fiscal 2021 numbers are preliminary, unaudited, and subject to change.

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 2021.

During the audit of the GASB 75 report as of the June 30, 2019 measurement date, 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 reflects 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 2021 through 2017 (in thousands, except for percentages)

	<u>Fiscal 2021</u> (6)	<u>Fiscal 2020</u>	<u>Fiscal 2019</u> (7)	<u>Fiscal 2018</u> (7)	<u>Fiscal 2017</u>
Total OPEB liability (as of July 1)	\$22,105,511	\$19,662,106	\$19,761,333	\$18,480,936	\$19,821,600
Service cost	992,669	785,689	806,023	792,135	950,800
Interest	521,143	732,808	796,880	691,630	591,900
Differences between expected and actual experience	(2,926,517)	(600,057)	715,192	218,891	(48,600)
Changes of assumptions (1), (2), (3), (4) Benefit payments, including refunds of member	(2,297,649)	2,050,139	(1,935,139)	21,504	(2,393,700)
contributions	(484,752)	(525,174)	(482,183)	(443,763)	<u>(441,064</u>)
Net change in total OPEB liability	(4,195,106)	2,443,405	(99,227)	1,280,397	<u>(1,340,664)</u>
Total OPEB liability, June 30	<u>\$17,910,405</u>	<u>\$22,105,511</u>	<u>\$19,662,106</u>	<u>\$19,761,333</u>	<u>\$18,480,936</u>
Plan fiduciary net position, July 1 Contributions:	\$1,414,312	\$1,368,548	\$1,187,569	\$996,407	\$866,043
Employer	569,989	547,611	594,916	542,896	465,449
Other additions	200	122	188	<u>133</u>	784
Total contributions	<u>570,189</u>	<u>547,733</u>	<u>595,104</u>	<u>543,029</u>	466,233
Net investment income	<u>411,438</u>	23,380	<u>68,229</u>	<u>93,308</u>	105,822
Benefit payments, including refunds of plan member contributions	(484,752)	(525,174)	(482,183)	(443,763)	(441,064)
Administrative expense	(464,752)	(175)	(482,183)	(443,703)	(441,004)
Other changes	(247)	(175) <u>-</u>	(171) <u>-</u>	<u>(1,262)</u>	(127) (500)
Net change in plan fiduciary net position	496,628	<u>45,764</u>	<u>180,979</u>	<u>191,162</u>	<u>130,364</u>
Plan fiduciary net position, June 30	<u>\$1,910,940</u>	<u>\$1,414,312</u>	<u>\$1,368,548</u>	<u>\$1,187,569</u>	<u>\$996,407</u>
Plan net OPEB liability - June 30	<u>\$15,999,465</u>	<u>\$20,691,199</u>	<u>\$18,293,558</u>	<u>\$18,573,764</u>	<u>\$17,484,529</u>
Plan fiduciary net position as a percentage of the total OPEB liability	10.7%	6.4%	7.0%	6.0%	5.4%
Covered payroll (6)	<u>\$5,585,443</u>	\$5,624,148	<u>\$5,489,613</u>	<u>\$5,295,068</u>	<u>\$5,257,594</u>
Net OPEB liability as a percentage of covered employee payroll	286.4%	367.9%	333.2%	350.8%	332.6%

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 (i) 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) Fiscal 2017 through fiscal 2021 covered payroll and fiscal 2017 funded payroll amounts have been restated to exclude certain employees for whose benefit the Commonwealth is not liable.

(6) Fiscal 2021 numbers are preliminary, unaudited, and subject to change.

(7) Certain amounts were restated due to errors in calculations during subsequent audit procedures as more fully described in the paragraph preceding the table.

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

The following table sets forth actual capital expenditures for fiscal 2017 through 2021.

Investment Category:	<u>Fiscal 2017</u>	<u>Fiscal 2018</u>	<u>Fiscal 2019</u>	<u>Fiscal 2020</u>	<u>Fiscal 2021 (2)</u>
Information technology	\$154	\$185	\$174	\$94	\$122
Infrastructure/facilities	510	417	441	399	414
Environment	202	217	210	222	284
Housing	213	242	253	197	269
Public safety	17	18	19	17	22
Transportation	1,895	1,889	1,869	2,030	1,684
Other	<u>269</u>	<u>280</u>	<u>294</u>	<u>211</u>	<u>268</u>
Total	<u>\$3,260</u>	<u>\$3,248</u>	<u>\$3,260</u>	<u>\$3,170</u>	<u>\$3,063</u>

Commonwealth Historical Capital Spending (in millions)⁽¹⁾

SOURCE: Office of the Comptroller.

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

(2) Fiscal 2021 numbers are preliminary, unaudited, and subject to change.

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, 2021 are set forth in the table below.

Long-Term Leases (in thousands)

Fiscal Year	Leases (1)
2022	\$231,718
2023	189,131
2024	162,737
2025	133,350
2026	98,699
2027	85,857
2028	76,967
2029	65,426
2030	44,410
2031 through 2050	185,305
Total	<u>\$1,273,600</u>

SOURCE: 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.

(2) Fiscal 2021 numbers are preliminary, unaudited, and subject to change.