

BLACKROCK MASSACHUSETTS TAX-EXEMPT TRUST
Form N-Q
July 23, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED

MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-07660

Name of Fund: BlackRock Massachusetts Tax-Exempt Trust (MHE)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock Massachusetts Tax-Exempt Trust, 55 East 52nd Street, New York, NY 10055

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 08/31/2014

Date of reporting period: 05/31/2014

Item 1 Schedule of Investments

Schedule of Investments May 31, 2014 (Unaudited)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Massachusetts 155.5%		
County/City/Special District/School District 3.6%		
Town of Holyoke Massachusetts, GO, Refunding, 5.00%, 9/01/26	\$ 1,000	\$ 1,164,000
Education 77.1%		
Massachusetts Development Finance Agency, RB:		
Boston University, Series T-1 (AMBAC), 5.00%, 10/01/39	1,000	1,046,520
Foxborough Regional Charter School, Series A, 7.00%, 7/01/42	250	280,398
Mount Holyoke College, Series B, 5.00%, 7/01/41	500	536,630
Smith College, 5.00%, 7/01/35	2,000	2,082,880
Wellesley College, Series J, 5.00%, 7/01/42	1,950	2,168,907
WGBH Educational Foundation, Series A (AMBAC), 5.75%, 1/01/42	650	794,814
Massachusetts Development Finance Agency, Refunding RB:		
Boston University, Series P, 5.45%, 5/15/59	1,500	1,726,710
Clark University (Syncora), 5.13%, 10/01/35	500	522,990
Emerson College, Series A, 5.00%, 1/01/40	200	207,584
Trustees of Deerfield Academy, 5.00%, 10/01/40	1,675	1,850,640
Wheelock College, Series C, 5.25%, 10/01/37	1,000	1,025,420
Williston Northampton School Project (Syncora), 5.00%, 10/01/25	500	508,455
Worcester Polytechnic Institute (NPFGC), 5.00%, 9/01/27	1,985	2,190,527
Massachusetts Educational Financing Authority, RB, Education Loan, Issue I, AMT, 5.00%, 1/01/27 (a)	1,000	1,093,720
Massachusetts Health & Educational Facilities Authority, RB:		
Northeastern University, Series R, 5.00%, 10/01/33	225	248,029
Tufts University, Series O, 5.38%, 8/15/38	1,000	1,137,780
	Par (000)	Value
Municipal Bonds		
Massachusetts (continued)		
Education (concluded)		
Massachusetts Health & Educational Facilities Authority, Refunding RB:		
Berklee College of Music, Series A, 5.00%, 10/01/37	\$ 1,000	\$ 1,097,730
Harvard University, Series A, 5.50%, 11/15/36	100	117,111
Harvard University, Series B, 5.00%, 10/01/38	400	449,764
Northeastern University, Series T-1, 5.00%, 10/01/31	950	1,057,302
Northeastern University, Series T-2, 5.00%, 10/01/32	500	554,180
Springfield College, 5.63%, 10/15/40	500	535,425
Tufts University, Series M, 5.50%, 2/15/27	1,000	1,265,690
Massachusetts State College Building Authority, RB, Series A (AMBAC), 5.00%, 5/01/16 (b)	1,000	1,090,560
Massachusetts State College Building Authority, Refunding RB, Series B (Syncora), 5.50%, 5/01/39	825	1,044,813
University of Massachusetts Building Authority, RB, Senior-Series 2, 5.00%, 11/01/39	500	556,585
		25,191,164
Health 24.5%		
Massachusetts Development Finance Agency, RB, 1st Mortgage, Edgcombe Project, Series A, 6.75%, 7/01/21	660	661,650
Massachusetts Development Finance Agency, Refunding RB:		
Carleton-Willard Village, 5.63%, 12/01/30	500	539,520
Partners Healthcare System, Series L, 5.00%, 7/01/36	1,000	1,099,310
Seven Hills Foundation & Affiliates (Radian), 5.00%, 9/01/35	240	240,473
Massachusetts Health & Educational Facilities Authority, RB:		
Cape Cod Healthcare Obligated Group, Series D (AGC), 5.00%, 11/15/31	1,000	1,072,390
Caregroup, Series E-1, 5.00%, 7/01/28	500	525,780

Schedule of Investments (continued)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
Massachusetts (continued)		
Health (concluded)		
Massachusetts Health & Educational Facilities Authority, RB (concluded):		
Children s Hospital, Series M, 5.25%, 12/01/39	\$ 600	\$ 665,124
Children s Hospital, Series M, 5.50%, 12/01/39	500	570,840
Lahey Clinic Medical Center, Series D, 5.25%, 8/15/37	1,000	1,052,620
Southcoast Health Obligation Group, Series D, 5.00%, 7/01/39	500	527,735
Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, Series H, 5.25%, 7/01/38	1,000	1,056,940
		8,012,382
Housing 11.4%		
Massachusetts HFA, RB, M/F Housing, Series A (FHA), 5.25%, 12/01/35	185	198,866
Massachusetts HFA, Refunding RB, AMT: Series C, 5.00%, 12/01/30	490	506,929
Series C, 5.35%, 12/01/42	2,000	2,059,940
Series F, 5.70%, 6/01/40	910	948,038
		3,713,773
State 19.9%		
Massachusetts Bay Transportation Authority, Refunding RB, Senior Series A, 5.25%, 7/01/29	730	916,953
Massachusetts School Building Authority, RB: Dedicated Sales Tax, Senior, Series A, 5.00%, 5/15/43	500	559,690
Dedicated Sales Tax, Series A (AGM), 5.00%, 8/15/15 (b)	1,000	1,057,960
Senior Series B, 5.00%, 10/15/41	1,000	1,108,500
Massachusetts State College Building Authority, RB, Series A, 5.50%, 5/01/39	2,500	2,853,075
		6,496,178
Transportation 19.0%		
Commonwealth of Massachusetts, RB, Series A, 5.00%, 6/15/27	1,000	1,181,900
	Par	
Municipal Bonds		
	(000)	Value
Massachusetts (concluded)		
Transportation (concluded)		
Commonwealth of Massachusetts, Refunding RB, Series A, 5.00%, 6/01/38	\$ 500	\$ 560,390
Massachusetts Department of Transportation, Refunding RB, Senior Series B: 5.00%, 1/01/32	1,120	1,212,221
5.00%, 1/01/37	1,000	1,071,290
Massachusetts Port Authority, RB, Series A, AMT, 5.00%, 7/01/42	1,000	1,074,910
Metropolitan Boston Transit Parking Corp., Refunding RB, 5.25%, 7/01/36	1,000	1,118,270
		6,218,981
Total Municipal Bonds		
(Cost 47,333,943) 155.5%		50,796,478
Short-Term Securities		
Municipal Bonds 2.2%		
Commonwealth of Massachusetts, GO, Series A, VRDN (Wells Fargo NA SBPA), 0.07%, 6/10/14 (c)	200	200,000
Massachusetts Health & Educational Facilities Authority, RB, Partners Healthcare System, Series P2, VRDN (JPMorgan NA SBPA), 0.05%, 6/02/14 (c)	500	500,000

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Total Municipal Bonds 2.2%		700,000
Money Market Fund 0.0%	Shares	
BIF Massachusetts Municipal Money Fund, 0.00% (d)(e)	11,633	11,633
Total Short-Term Securities		
(Cost \$711,633) 2.2%		711,633

Schedule of Investments (continued)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

(Percentages shown are based on Net Assets)

	Value
Total Investments (Cost \$48,045,576) 157.7%	\$ 51,508,111
Liabilities in Excess of Other Assets (1.1%)	(346,808)
VRDP Shares, at Liquidation Value (56.6%)	(18,500,000)
Net Assets Applicable to Common Shares 100.0%	\$ 32,661,303

* As of May 31, 2014, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

Tax cost	\$ 48,030,516
Gross unrealized appreciation	3,482,643
Gross unrealized depreciation	(5,048)
Net unrealized appreciation	\$ 3,477,595

Notes to Schedule of Investments

(a) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
Morgan Stanley & Co. International PLC	\$ 1,093,720	\$ 14,680

(b) U.S. government securities, held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.

(c) Variable rate security. Rate shown is as of report date and maturity shown is the date the principal owed can be recovered through demand.

(d) Investments in issuers considered to be an affiliate of the Trust during the period ended May 31, 2014, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held		Net Activity	Shares Held		Income
	2013	at August 31,		2014	at May 31,	
BIF Massachusetts Municipal Money Fund	5		11,628	11,633		

(e) Represents the current yield as of report date.

Portfolio Abbreviations

AGC	Assured Guarantee Corp.
AGM	Assured Guaranty Municipal Corp.
AMBAC	American Municipal Bond Assurance Corp.
AMT	Alternative Minimum Tax (subject to)
FHA	Federal Housing Administration
GO	General Obligation Bonds
HFA	Housing Finance Agency
M/F	Multi-Family
NPFGC	National Public Finance Guarantee Corp.
Radian	Radian Guaranty, Inc.
RB	Revenue Bonds
SBPA	Stand-by Bond Purchase Agreements
Syncora	Syncora Guarantee
VRDN	Variable Rate Demand Notes

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Schedule of Investments (continued)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

Financial futures contracts outstanding as of May 31, 2014 were as follows:

Contracts Sold (39)	Issue	Exchange	Expiration	Notional Value	Unrealized Depreciation
	10-Year U.S. Treasury Note	Chicago Board of Trade	September 2014	\$ 4,895,109	\$ (18,641)

For Trust compliance purposes, the Trust's sector classifications refer to any one or more of the sector sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by the investment advisor. These definitions may not apply for purposes of this report, which may combine such sector sub-classifications for reporting ease.

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial reporting purposes as follows:

Level 1 unadjusted price quotations in active markets/exchanges for identical assets or liabilities that the Trust has the ability to access

Level 2 other observable inputs (including, but not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Trust's own assumptions used in determining the fair value of investments and derivative financial instruments)

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Trust's policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and is not necessarily an indication of the risks associated with investing in those securities. For information about the Trust's policy regarding valuation of investments and derivative financial instruments, please refer to the Trust's most recent financial statements as contained in its semi-annual report.

The following tables summarize the Trust's investments and derivative financial instruments categorized in the disclosure hierarchy as of May 31, 2014:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments ¹		\$ 50,796,478		\$ 50,796,478
Short-Term Securities	\$ 11,633	700,000		711,633
Total	\$ 11,633	\$ 51,496,478		\$ 51,508,111

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¹ See above Schedule of Investments for values in each sector.

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Schedule of Investments (concluded)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments ²				
Liabilities:				
Interest rate contracts	\$ (18,641)			\$ (18,641)

² Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation/depreciation on the instrument.

The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial reporting purposes. As of May 31, 2014, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash	\$ 16,737			\$ 16,737
Cash pledged for financial futures contracts	51,000			51,000
Liabilities:				
VRDP Shares		\$(18,500,000)		(18,500,000)
Total	\$ 67,737	\$(18,500,000)		\$ (18,432,263)

There were no transfers between levels during the period ended May 31, 2014.

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Item 2 Controls and Procedures

- 2(a) The registrant's principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the 1940 Act)) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended.
- 2(b) There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 3 Exhibits

Certifications Attached hereto

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Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock Massachusetts Tax-Exempt Trust

By: /s/ John M. Perlowski
John M. Perlowski

Chief Executive Officer (principal executive officer) of

BlackRock Massachusetts Tax-Exempt Trust

Date: July 23, 2014

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ John M. Perlowski
John M. Perlowski

Chief Executive Officer (principal executive officer) of

BlackRock Massachusetts Tax-Exempt Trust

Date: July 23, 2014

By: /s/ Neal J. Andrews
Neal J. Andrews

Chief Financial Officer (principal financial officer) of

BlackRock Massachusetts Tax-Exempt Trust

Date: July 23, 2014