

BLACKROCK MASSACHUSETTS TAX-EXEMPT TRUST
Form N-Q
January 22, 2015

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: 08/31/2015

Date of reporting period: 11/30/2014

Item 1 Schedule of Investments

Schedule of Investments November 30, 2014 (Unaudited)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

	(Percentages shown are based on Net Assets)	
	Par (000)	Value
Municipal Bonds		
Massachusetts 153.0%		
County/City/Special District/School District 3.5%		
Town of Holyoke Massachusetts, GO, Refunding, 5.00%, 9/01/26	\$ 1,000	\$ 1,169,890
Education 74.9%		
Massachusetts Development Finance Agency, RB:		
Boston University, Series T-1 (AMBAC), 5.00%, 10/01/39	1,000	1,031,350
Foxborough Regional Charter School, Series A, 7.00%, 7/01/42	250	283,485
Mount Holyoke College, Series B, 5.00%, 7/01/41	500	550,905
Smith College, 5.00%, 7/01/35	2,000	2,047,840
Wellesley College, Series J, 5.00%, 7/01/42	1,950	2,248,720
WGBH Educational Foundation, Series A (AMBAC), 5.75%, 1/01/42	650	824,792
Massachusetts Development Finance Agency, Refunding RB:		
Boston University, Series P, 5.45%, 5/15/59	1,500	1,769,310
Clark University (Syncora), 5.13%, 10/01/35	500	515,555
Emerson College, Series A, 5.00%, 1/01/40	200	212,244
Trustees of Deerfield Academy, 5.00%, 10/01/40	1,675	1,916,636
Wheelock College, Series C, 5.25%, 10/01/37	1,000	1,069,170
Williston Northampton School Project (Syncora), 5.00%, 10/01/25	500	507,280
Worcester Polytechnic Institute (NPFGC), 5.00%, 9/01/27	1,985	2,166,766
Massachusetts Educational Financing Authority, RB, Education Loan, Issue I, AMT, 5.00%, 1/01/27	1,000	1,108,620
Massachusetts Health & Educational Facilities Authority, RB:		
Northeastern University, Series R, 5.00%, 10/01/33	225	248,780
Tufts University, Series O, 5.38%, 8/15/38	1,000	1,136,550
	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	\$ 1,090,050
Harvard University, Series A, 5.50%, 11/15/36	100	116,239
Harvard University, Series B, 5.00%, 10/01/38	400	443,192
Northeastern University, Series T-1, 5.00%, 10/01/31	500	561,960
Northeastern University, Series T-2, 5.00%, 10/01/32	500	558,650
Springfield College, 5.63%, 10/15/40	500	540,280
Tufts University, Series M, 5.50%, 2/15/27	1,000	1,275,840
Massachusetts State College Building Authority, RB, Series A (AMBAC), 5.00%, 5/01/16 (a)	1,000	1,066,040
Massachusetts State College Building Authority, Refunding RB, Series B (Syncora), 5.50%, 5/01/39	825	1,080,940
University of Massachusetts Building Authority, RB, Senior-Series 2, 5.00%, 11/01/39	500	564,415
		24,935,609
Health 24.6%		
Massachusetts Development Finance Agency, RB, 1st Mortgage, Edgecombe Project, Series A, 6.75%, 7/01/21	660	662,950
Massachusetts Development Finance Agency, Refunding RB:		
Carleton-Willard Village, 5.63%, 12/01/30	500	557,165
Partners Healthcare System, Series L, 5.00%, 7/01/36	1,000	1,128,990
Seven Hills Foundation & Affiliates (Radian), 5.00%, 9/01/35	240	241,010
Massachusetts Health & Educational Facilities Authority, RB:		
Cape Cod Healthcare Obligated Group, Series D (AGC), 5.00%, 11/15/31	1,000	1,110,100
Caregroup, Series E-1, 5.00%, 7/01/28	500	530,815

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	\$ 681,756
Children s Hospital, Series M, 5.50%, 12/01/39	500	574,005
Lahey Clinic Medical Center, Series D, 5.25%, 8/15/37	1,000	1,058,440
Southcoast Health Obligation Group, Series D, 5.00%, 7/01/39	500	539,020
Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, Series H, 5.25%, 7/01/38	1,000	1,089,200
		8,173,451
Housing 11.3%		
Massachusetts HFA, RB, M/F Housing, Series A (FHA), 5.25%, 12/01/35	185	201,769
Massachusetts HFA, Refunding RB, AMT:		
Series C, 5.00%, 12/01/30	490	510,810
Series C, 5.35%, 12/01/42	2,000	2,080,140
Series F, 5.70%, 6/01/40	900	955,116
		3,747,835
State 19.6%		
Massachusetts Bay Transportation Authority, Refunding RB, Senior Series A, 5.25%, 7/01/29	730	925,903
Massachusetts School Building Authority, RB:		
Dedicated Sales Tax, Senior, Series A, 5.00%, 5/15/43	500	563,500
Dedicated Sales Tax, Series A (AGM), 5.00%, 8/15/15 (a)	1,000	1,034,440
Senior Series B, 5.00%, 10/15/41	1,000	1,136,880
	Par	
Municipal Bonds	(000)	Value
Massachusetts (concluded)		
State (concluded)		
Massachusetts State College Building Authority, RB, Series A, 5.50%, 5/01/39	\$ 2,500	\$ 2,852,850
		6,513,573
Transportation 19.1%		
Commonwealth of Massachusetts, RB, Series A, 5.00%, 6/15/27	1,000	1,189,140
Commonwealth of Massachusetts, Refunding RB, Series A, 5.00%, 6/01/38	500	569,940
Massachusetts Department of Transportation, Refunding RB, Senior Series B:		
5.00%, 1/01/32	1,120	1,237,264
5.00%, 1/01/37	1,000	1,095,240
Massachusetts Port Authority, RB, Series A, AMT, 5.00%, 7/01/42	1,000	1,101,310
Metropolitan Boston Transit Parking Corp., Refunding RB, 5.25%, 7/01/36	1,000	1,157,390
		6,350,284
Total Municipal Bonds		
(Cost \$46,717,248) 153.0%		50,890,642
Short-Term Securities	Shares	
BIF Massachusetts Municipal Money Fund, 0.00% (b)(c)	234,324	234,324
Total Short-Term Securities		
(Cost \$234,324) 0.7%		234,324
Total Investments		
(Cost \$46,951,572 *) 153.7%		51,124,966
Other Assets Less Liabilities 1.9%		638,947

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VRDP Shares, at Liquidation Value (55.6%)	(18,500,000)
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Net Assets Applicable to Common Shares 100.0%	\$ 33,263,913
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* As of November 30, 2014, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

Tax cost	\$ 46,965,547
Gross unrealized appreciation	\$ 4,173,395
Gross unrealized depreciation	(13,976)
Net unrealized appreciation	\$ 4,159,419

Schedule of Investments (continued)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

Notes to Schedule of Investments

- (a) 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.
- (b) Investments in issuers considered to be an affiliate of the Trust during the period ended November 30, 2014, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held	Net	Shares Held	Income
	at August 31,		at November 30,	
	2014	Activity	2014	
BIF Massachusetts Municipal Money Fund	291,104	(56,780)	234,324	

- (c) 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
Syncora	Syncora Guarantee

Financial futures contracts outstanding as of November 30, 2014 were as follows:

Contracts Sold	Issue	Exchange	Expiration	Notional	Unrealized
				Value	Depreciation
(33)	10-Year U.S. Treasury Note	Chicago Board of Trade	March 2015	\$ 4,192,547	\$ (12,602)

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.

Schedule of Investments (continued)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

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. 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. 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. The three levels of the fair value hierarchy are as follows:

Level 1 unadjusted quoted prices 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)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund'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. For information about the Fund's policy regarding valuation of investments and derivative financial instruments, please refer to the Fund's most recent financial statements as contained in its annual report.

The following tables summarize the Trust's investments and derivative financial instruments categorized in the disclosure hierarchy as of November 30, 2014:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments ¹		\$ 50,890,642		\$ 50,890,642
Short-Term Securities	\$ 234,324			234,324
Total	\$ 234,324	\$ 50,890,642		\$ 51,124,966

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

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments ²				
Liabilities:				
Interest rate contracts	\$ (12,602)			\$ (12,602)

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

Schedule of Investments (concluded)

BlackRock Massachusetts Tax-Exempt Trust (MHE)

The Trust may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial reporting purposes. As of November 30, 2014, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash pledged for financial futures contracts	\$ 51,000			\$ 51,000
Liabilities:				
Bank overdraft		\$ (21,628)		(21,628)
VRDP Shares		(18,500,000)		(18,500,000)
Total	\$ 51,000	\$ (18,521,628)		\$ (18,470,628)

There were no transfers between levels during the period ended November 30, 2014.

BLACKROCK MASSACHUSETTS TAX-EXEMPT TRUST

NOVEMBER 30, 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

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: January 22, 2015

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: January 22, 2015

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock Massachusetts Tax-Exempt Trust

Date: January 22, 2015