NUVEEN MASSACHUSETTS PREMIUM INCOME MUNICIPAL FUND Form N-Q April 28, 2006

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY
Investment Company Act file number 811-7484
Nuveen Massachusetts Premium Income Municipal Fund (Exact name of registrant as specified in charter)
333 West Wacker Drive, Chicago, Illinois 60606 (Address of principal executive offices) (Zip code)
Jessica R. Droeger Vice President and Secretary 333 West Wacker Drive, Chicago, Illinois 60606 (Name and address of agent for service)
Registrant's telephone number, including area code: 312-917-7700
Date of fiscal year end:5/31
Date of reporting period: 2/28/06
Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (§§ 239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after the close of the first and third fiscal quarters, pursuant to rule 30b1-5 under the Investment Company Act of 1940 (17 CFR 270.30b1-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.
A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q unless the Form displays a currently valid Office of Management and Budget (OMB) control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. § 3507.
Item 1. Schedule of Investments
Portfolio of Investments (Unaudited)

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMP

February 28, 2006

Principal

Nuveen Massachusetts Premium Income Municipal Fund (NMT)

Opti

Amount (000)	Description (1)	Provision
\$ 1,500	Consumer Discretionary [] 2.2% (1.5% of Total Investments) Boston Industrial Development Financing Authority, Massachusetts, Senior Revenue Bonds, Crosstown Center Project, Series 2002, 6.500%, 9/01/35 (Alternative Minimum Tax)	9/12 at 10
550	Consumer Staples [] 0.8% (0.5% of Total Investments) Guam Economic Development Authority, Tobacco Settlement Asset-Backed Bonds, Series 2001B, 5.500%, 5/15/41	5/11 at 10
750	Education and Civic Organizations [] 36.9% (25.1% of Total Investments) Massachusetts Development Finance Agency, Revenue Bonds, Western New England College, Series 2005A, 5.000%, 9/01/33 [] AGC Insured	9/15 at 10
500	Massachusetts Development Finance Authority, Revenue Bonds, Belmont Hills School, Series 2001,	9/11 at 10
890	5.375%, 9/01/23 Massachusetts Development Finance Authority, Revenue Bonds, Curry College, Series 2000A, 6.000%, 3/01/20 ACA Insured	3/09 at 10
1,000	Massachusetts Development Finance Authority, Revenue Bonds, Massachusetts College of Pharmacy and Allied Health Sciences, Series 2003C, 5.750%, 7/01/33	7/13 at 10
1,745	Massachusetts Development Finance Authority, Revenue Bonds, Massachusetts College of Pharmacy and Allied Health Sciences, Series 2005D, 5.000%, 7/01/27 AGC Insured	7/15 at 10
750	Massachusetts Development Finance Authority, Revenue Bonds, Milton Academy, Series 2003A, 5.000%, 9/01/19	9/13 at 10
1,090	Massachusetts Development Finance Authority, Revenue Refunding Bonds, Boston University, Series 1999P, 6.000%, 5/15/29	No Opt
170	Massachusetts Education Loan Authority, Student Loan Revenue Bonds, Issue E, Series 1995, 6.150%, 7/01/10 [] AMBAC Insured (Alternative Minimum Tax)	7/06 at 10
1,550	Massachusetts Educational Finance Authority, Educational Loan Revenue Bonds, Series 2002E,	1/12 at 10
2,000	5.000%, 1/01/13 AMBAC Insured (Alternative Minimum Tax) Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Boston College,	6/13 at 10
1,000	Series 2003N, 5.250%, 6/01/18 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Massachusetts Lastitute of Tack and Law Corine 2004M. F. 2500/, 7/01/15	No Opt
1,500	Institute of Technology, Series 2004M, 5.250%, 7/01/15 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, University of	10/11 at 10
500	Massachusetts Worcester Campus, Series 2001B, 5.250%, 10/01/31 FGIC Insured Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Wellesley College,	7/13 at 10
555	Series 2003H, 5.000%, 7/01/26 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Williams College,	7/13 at 10
500	Series 2003H, 5.000%, 7/01/21 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Worcester State	11/12 at 10
2,300	College, Series 2002, 5.000%, 11/01/32 AMBAC Insured Massachusetts Industrial Finance Agency, Revenue Bonds, Belmont Hill School, Series 1998,	9/08 at 10
1,645	5.250%, 9/01/28 Massachusetts Industrial Finance Agency, Revenue Bonds, Whitehead Institute for Biomedical	7/06 at 10
4,000	Research, Series 1993, 5.125%, 7/01/26 New England Education Loan Marketing Corporation, Massachusetts, Student Loan Revenue Bonds,	No Opt
375	Subordinate Series 1992H, 6.900%, 11/01/09 (Alternative Minimum Tax) Puerto Rico Industrial, Tourist, Educational, Medical and Environmental Control Facilities Financing Authority, Higher Education Revenue Bonds, Ana G. Mendez University System, Series	2/09 at 10
1,000	1999, 5.375%, 2/01/19 University of Massachusetts Building Authority, Senior Lien Project Revenue Bonds, Series	11/14 at 10

2004-1, 5.250%, 11/01/24 [] AMBAC Insured 725 University of Massachusetts Building Authority, Senior Lien Project Revenue Bonds, Series No Opt 2005-1, 5.000%, 5/01/15

☐ AMBAC Insured 24,545 Total Education and Civic Organizations Health Care
☐ 18.2% (12.3% of Total Investments) 1,250 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Berkshire Health 10/11 at 10 System, Series 2001E, 6.250%, 10/01/31 1,000 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Cape Cod Health Care 11/11 at 10 Inc., Series 2001C, 5.250%, 11/15/31
☐ RAAI Insured 1,000 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Caritas Christi 7/12 at 10 Obligated Group, Series 2002B, 6.250%, 7/01/22 935 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Emerson Hospital, 8/15 at 10 Series 2005E, 5.000%, 8/15/35 ☐ RAAI Insured 1,400 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Lahey Clinic Medical 8/15 at 10 Center, Series 2005C, 5.000%, 8/15/21 [] FGIC Insured 1,000 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Milton Hospital 7/15 at 10 Project, Series 2005D, 5.250%, 7/01/30 1,500 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, New England Medical 7/06 at 10 600 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, New England Medical 5/12 at 10 Center Hospitals, Series 2002H, 5.375%, 5/15/19 [] FGIC Insured 7/11 at 10 2,000 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Partners HealthCare System Inc., Series 2001C, 5.750%, 7/01/32 7/11 at 10 375 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, UMass Memorial Health Care, Series 2001C, 6.625%, 7/01/32 1,115 Massachusetts Health and Educational Facilities Authority, Revenue Bonds, UMass Memorial 7/15 at 10 Health Care, Series 2005D, 5.000%, 7/01/33 12,175 Total Health Care Housing/Multifamily [] 11.9% (8.0% of Total Investments) 1,500 Massachusetts Development Finance Authority, GNMA Collateralized Assisted Living Facility 3/12 at 10 Revenue Bonds, Arbors at Chicopee, Series 2001A, 6.250%, 9/20/42 (Alternative Minimum Tax) 2,500 Massachusetts Development Finance Authority, GNMA Collateralized Revenue Bonds, VOA Concord 10/11 at 10 Assisted Living Inc., Series 2000A, 6.900%, 10/20/41 1,920 Massachusetts Development Financing Authority, Assisted Living Revenue Bonds, Prospect House 12/09 at 10 Apartments, Series 1999, 7.000%, 12/01/31 500 Massachusetts Housing Finance Agency, Housing Revenue Bonds, Series 2003S, 5.050%, 12/01/23 6/13 at 10 (Alternative Minimum Tax) 395 Massachusetts Housing Finance Agency, Rental Housing Mortgage Revenue Bonds, Series 1999D, 7/10 at 10 5.500%, 7/01/13 AMBAC Insured (Alternative Minimum Tax) 1,000 Somerville Housing Authority, Massachusetts, GNMA Collateralized Mortgage Revenue Bonds, 5/12 at 10 Clarendon Hill Towers, Series 2002, 5.200%, 11/20/22 7,815 Total Housing/Multifamily Industrials [] 0.6% (0.4% of Total Investments) 400 Massachusetts Development Finance Agency, Solid Waste Disposal Revenue Bonds, Waste Management No Opt

Inc., Series 2003, 5.450%, 6/01/14

Long Town Care 2.29/ /2.29/ of Tatal Investments)	
	10/08 at 10
	10/00 at 10
	8/06 at 10
	5,00 dt 10
	1/11 at 10
Community, Series 1994B, 4.750%, 7/01/17	-,
Total Long-Term Care	
Tax Obligation/General ☐ 19.5% (13.1% of Total Investments)	
Ashland, Massachusetts, General Obligation Bonds, Series 2004, 5.250%, 5/15/23 🛘 AMBAC Insured	5/15 at 10
Boston, Massachusetts, General Obligation Bonds, Series 2005A, 5.000%, 1/01/17	1/15 at 10
Fall River, Massachusetts, General Obligation Bonds, Series 2003, 5.000%, 2/01/21 🛘 FSA Insured	2/13 at 10
Massachusetts Bay Transportation Authority, General Obligation Transportation System Bonds, Series 1991A, 7,000%, 3/01/21	No Opt.
Massachusetts, General Obligation Bonds, Consolidated Loan, Series 2001D, 6.000%, 11/01/13 $\ \square$	No Opt
	5/12 at 10
	No Opt
	No ope
	1/13 at 10
	1/13 at 10
Worcester, Massachusetts, General Obligation Bonds, Series 2005A, 5.000%, 7/01/19 🛘 FGIC	7/15 at 10
Total Tax Obligation/General	
Toy Obligation (Limited Ed. 15. 20/ (10. 20/ of Tatal Investments)	
	E/14 at 10
AMBAC Insured	5/14 at 10
Massachusetts Bay Transportation Authority, Assessment Bonds, Series 2005A, 5.000%, 7/01/18	7/15 at 10
Massachusetts Bay Transportation Authority, Senior Lien Sales Tax Revenue Bonds, Series 2004C, 5.250%, 7/01/21	No Opt
Massachusetts College Building Authority, Project Revenue Bonds, Series 2004A, 5.000%, 5/01/19 MBIA Insured	5/14 at 10
Massachusetts College Building Authority, Project Revenue Bonds, Series 2006A, 5.000%, 5/01/31 (WI/DD, Settling 3/08/06) ☐ AMBAC Insured	5/16 at 10
Massachusetts College Building Authority, Project Revenue Refunding Bonds, Series 2003B,	No Opt
Massachusetts School Building Authority, Dedicated Sales Tax Revenue Bonds, Series 2005A,	8/15 at 10
Massachusetts, Special Obligation Dedicated Tax Revenue Bonds, Series 2005, 5.000%, 1/01/20	No Opt
Massachusetts, Special Obligation Refunding Notes, Federal Highway Grant Anticipation Note	No Opt
Program, Series 2003A, 5.000%, 12/15/13 [] FSA Insured	но орг
	Total Long-Term Care Tax Obligation/General [] 19.5% (13.1% of Total Investments) Ashland, Massachusetts, General Obligation Bonds, Series 2004, 5.250%, 5/15/23 [] AMBAC Insured Boston, Massachusetts, General Obligation Bonds, Series 2005A, 5.000%, 1/01/17 Fall River, Massachusetts, General Obligation Bonds, Series 2003, 5.000%, 2/01/21 [] FSA Insured Massachusetts Bay Transportation Authority, General Obligation Transportation System Bonds, Series 1991A, 7.000%, 3/01/21 Massachusetts, General Obligation Bonds, Consolidated Loan, Series 2001D, 6.000%, 11/01/13 [] MBIA Insured Monson, Massachusetts, General Obligation Bonds, Series 2002, 5.250%, 5/15/22 [] AMBAC Insured Norwell, Massachusetts, General Obligation Bonds, Series 2003, 5.000%, 11/15/20 [] FGIC Insured Springfield, Massachusetts, General Obligation Bonds, Series 2003: 5.250%, 1/15/15 [] MBIA Insured Morson, 1/15/23 [] MBIA Insured Worcester, Massachusetts, General Obligation Bonds, Series 2005A, 5.000%, 7/01/19 [] FGIC Insured Total Tax Obligation/General Tax Obligation/Limited [] 15.3% (10.3% of Total Investments) Martha[s Vineyard Land Bank, Massachusetts, Revenue Bonds, Series 2004, 5.000%, 7/01/18 Massachusetts Bay Transportation Authority, Assessment Bonds, Series 2005A, 5.000%, 7/01/18 Massachusetts Bay Transportation Authority, Senior Lien Sales Tax Revenue Bonds, Series 2004C, 5.250%, 7/01/21 Massachusetts College Building Authority, Project Revenue Bonds, Series 2004A, 5.000%, 5/01/19 [] MBIA Insured Massachusetts College Building Authority, Project Revenue Bonds, Series 2006A, 5.000%, 5/01/19 [] MBIA Insured Massachusetts College Building Authority, Project Revenue Refunding Bonds, Series 2003B, 5.375%, 5/01/23 [] XLCA Insured Massachusetts College Building Authority, Project Revenue Refunding Bonds, Series 2005A, 5.000%, 8/15/20 [] FSA Insured

9,750	Total Tax Obligation/Limited	
	Transportation ☐ 11.7% (7.9% of Total Investments)	
,	Massachusetts Port Authority, Revenue Bonds, Series 2003A, 5.000%, 7/01/33 MBIA Insured	7/13 at 10
	Massachusetts Port Authority, Revenue Bonds, Series 2005A, 5.000%, 7/01/23 AMBAC Insured	7/15 at 10
4,000	Massachusetts Port Authority, Special Facilities Revenue Bonds, US Airways Group Inc., Series 1996A, 5.750%, 9/01/16 [] MBIA Insured (Alternative Minimum Tax)	9/06 at 10
7,900	Total Transportation	
	U.S. Guaranteed [] 11.3% (7.6% of Total Investments) (4)	
410	Massachusetts Health and Educational Facilities Authority, Revenue Bonds, CareGroup Inc., Series 1998A, 5.000%, 7/01/25 (Pre-refunded 7/01/21) ☐ MBIA Insured	7/21 at 10
2,000	Massachusetts Health and Educational Facilities Authority, Revenue Bonds, Daughters of Charity National Health System Carney Hospital, Series 1994D, 6.100%, 7/01/14 (Pre-refunded 7/01/06)	7/06 at 10
845	Massachusetts Port Authority, Revenue Bonds, Series 1982, 13.000%, 7/01/13 (ETM)	7/06 at 10
	Massachusetts, General Obligation Bonds, Consolidated Loan, Series 2004B, 5.000%, 8/01/24 (Pre-refunded 8/01/14)	8/14 at 10
1,500	Massachusetts, Special Obligation Dedicated Tax Revenue Bonds, Series 2004, 5.250%, 1/01/25 (Pre-refunded 1/01/14) FGIC Insured	1/14 at 10
1,200	University of Massachusetts Building Authority, Senior Lien Project Revenue Bonds, Series 2003-1, 5.250%, 11/01/18 (Pre-refunded 11/01/13) AMBAC Insured	11/13 at 10
7,205	Total U.S. Guaranteed	
	Utilities [] 3.6% (2.4% of Total Investments)	
1,000	Massachusetts Development Finance Agency, Resource Recovery Revenue Bonds, SEMass System, Series 2001A, 5.625%, 1/01/16 [] MBIA Insured	1/12 at 10
415	Massachusetts Development Finance Agency, Solid Waste Disposal Revenue Bonds, Dominion Energy Brayton Point Project, Series 2006, 5.000%, 2/01/36 (Alternative Minimum Tax)	8/16 at 10
1,000	Massachusetts Industrial Finance Agency, Resource Recovery Revenue Refunding Bonds, Ogden Haverhill Project, Series 1998A, 5.600%, 12/01/19 (Alternative Minimum Tax)	12/08 at 10
2,415	Total Utilities	
	Water and Sewer ☐ 12.8% (8.7% of Total Investments)	
2,000	Boston Water and Sewerage Commission, Massachusetts, General Revenue Bonds, Senior Series 2004A, 5.000%, 11/01/25	11/14 at 10
1,500	Massachusetts Water Pollution Abatement Trust, Pooled Loan Program Bonds, Series 10, 5.000%, 8/01/26	8/14 at 10
750	Massachusetts Water Pollution Abatement Trust, Pooled Loan Program Bonds, Series 11, 4.500%, 8/01/29	8/15 at 10
1,500	Massachusetts Water Pollution Abatement Trust, Pooled Loan Program Bonds, Series 9, 5.000%, 8/01/22	8/13 at 10
1,250	Massachusetts Water Pollution Abatement Trust, Revenue Bonds, MWRA Loan Program, Series 2002A, 5.250%, 8/01/20	8/12 at 10
1,500	Massachusetts Water Resources Authority, General Revenue Bonds, Series 2005A, 5.000%, 8/01/28	8/17 at 10

MBIA Insured

8,500 Total Water and Sewer

\$ 97,040 Total Investments (cost \$100,028,051) [] 148.0%

Other Assets Less Liabilities [] 0.3%

Preferred Shares, at Liquidation Value ☐ (48.3)%

Net Assets Applicable to Common Shares ☐ 100%

- (1) All percentages shown in the Portfolio of Investments are based on net assets applicable to Common shares unless otherwise noted.
- (2) Optional Call Provisions: Dates (month and year) and prices of the earliest optional call or redemption. There may be other call provisions at varying prices at later dates. Certain mortgage-backed securities may be subject to periodic principal paydowns.
- (3) Ratings: Using the higher of Standard & Poor sor Moody srating. Ratings below BBB by Standard & Poor sor Group or Baa by Moody solvestor Service, Inc. are considered to be below investment grade.
- (4) Investment is backed by an escrow or trust containing sufficient U.S. Government or U.S. Government agency securities which ensure the timely payment of principal and interest. Such investments are normally considered to be equivalent to AAA rated securities.
- N/R Investment is not rated.
- WI/DD Investment purchased on a when-issued or delayed delivery basis.
- (ETM) Investment is escrowed to maturity.

Income Tax Information

The following information is presented on an income tax basis. Differences between amounts for financial statement and federal income tax purposes are primarily due to the treatment of paydown gains and losses, timing differences in recognizing taxable market discount and timing differences in recognizing certain gains and losses on investment transactions.

At February 28, 2006, the cost of investments was \$99,950,149.

Gross unrealized appreciation and gross unrealized depreciation of investments at February 28, 2006, were as follows:

Gross unrealized:	
Appreciation	\$4,227,159
Depreciation	(124,577)

Net unrealized appreciation (depreciation) of investments

\$4,102,582

Item 2. Controls and Procedures.

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") (17 CFR 270.30a-3(c))) are effective, as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the controls and procedures required by Rule 30a-3(b) under the 1940 Act (17 CFR 270.30a-3(b)) and Rule 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934 (17 CFR 240.13a-15(b) or 240.15d-15(b)).

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 (17 CFR 270.30a-3(d)) 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.

File as exhibits as part of this Form a separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the 1940 Act (17 CFR 270.30a-2(a)), exactly as set forth below: EX-99 CERT Attached hereto.

SIGNATURES

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.

(Registrant) Nuveen Mas	sachusetts Premium Income Municipal Fund
By (Signature and Title)*	/s/ Jessica R. Droeger Jessica R. Droeger Vice President and Secretary
DateApril 28, 2006	
•	f the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed s on behalf of the registrant and in the capacities and on the dates indicated.
By (Signature and Title)*	/s/ Gifford R. Zimmerman Gifford R. Zimmerman Chief Administrative Officer (principal executive officer)
DateApril 28, 2006	
By (Signature and Title)*	/s/ Stephen D. Foy Stephen D. Foy Vice President and Controller (principal financial officer)
Date <u>April 28, 2006</u>	

SIGNATURES 7

^{*} Print the name and title of each signing officer under his or her signature.