

NUVEEN MASSACHUSETTS PREMIUM INCOME MUNICIPAL FUND  
Form N-23C-2  
June 10, 2014

**Securities and Exchange Commission**

**Washington, DC 20549**

**Rule 23c-2 Notice of Intention to**

**Redeem Securities**

of

Nuveen Massachusetts Premium Income Municipal Fund

333 West Wacker Drive

Chicago, Illinois 60606

under the

Investment Company Act of 1940

Investment Company Act File No. 811-07484

The undersigned registered closed-end investment company hereby notifies the Securities and Exchange Commission that it intends to redeem securities of which it is the issuer, as set forth below in accordance with the requirements of Rule 23c-2 under the Investment Company Act of 1940 (the "Act").

- (1) Title of the class of securities of Nuveen Massachusetts Premium Income Municipal Fund (the "Fund") to be redeemed:

MuniFund Term Preferred Shares, 2.65% Series 2015, Liquidation Preference \$10.00 per share, (CUSIP #67061E 302); 2.75% Series 2016, Liquidation Preference \$10.00 per share, (CUSIP #67061E 401); 2.60% Series 2015, Liquidation Preference \$10.00 per share, (CUSIP #67061E 609); and 2.65% Series 2015 #1 Liquidation Preference \$10.00 per share, (CUSIP #67061E 708) (collectively, the "MTP Shares").

- (2) Date on which the securities are expected to be called or redeemed:

MTP Shares

| Series               | Date          |
|----------------------|---------------|
| 2.65% Series 2015    | July 11, 2014 |
| 2.75% Series 2016    | July 11, 2014 |
| 2.60% Series 2015    | July 11, 2014 |
| 2.65% Series 2015 #1 | July 11, 2014 |

The redemption of these securities is subject to the Fund's Board of Trustees' approval of the final terms of the re-financing of the Fund's outstanding MTP Shares and the consummation of

the sale of certain newly issued series of preferred securities of the Fund, which may not occur. These redemptions may be effected on a subsequent date, due to market conditions or otherwise as determined by the Board of Trustees of the Fund.

(3) Applicable provisions of the governing instrument pursuant to which the securities are to be redeemed: The MTP Shares are to be redeemed pursuant to Section 2.5(c)(i) of the Statement Establishing and Fixing the Rights and Preferences of MuniFund Term Preferred Shares of the Fund.

(4) The number of shares to be redeemed and the basis upon which the shares to be redeemed are to be selected: The Fund intends to redeem all of the outstanding MTP Shares, as set forth below:

| Series               | Number of Shares |
|----------------------|------------------|
| 2.65% Series 2015    | 2,021,000        |
| 2.75% Series 2016    | 1,643,500        |
| 2.60% Series 2015    | 1,472,500        |
| 2.65% Series 2015 #1 | 2,207,500        |

*[Remainder of Page Left Blank]*

SIGNATURE

Pursuant to the requirement of Rule 23c-2 under the Investment Company Act of 1940, the Fund has duly caused this Notice of Intention to Redeem Securities to be signed on its behalf by the undersigned on this 10<sup>th</sup> day of June, 2014.

NUVEEN MASSACHUSETTS  
PREMIUM INCOME MUNICIPAL  
FUND

By: /s/ Mark L. Winget  
Name: Mark L. Winget  
Title: Assistant Vice President and  
Assistant Secretary

- 3 -