NUVEEN SELECT MATURITIES MUNICIPAL FUND
Form N-CSRS
December 08, 2011

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED
MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-7056

Nuveen Select Maturities Municipal Fund
(Exact name of registrant as specified in charter)

Nuveen Investments
333 West Wacker Drive
Chicago, IL 60606
(Address of principal executive offices) (Zip code)

Kevin J. McCarthy
Nuveen Investments
333 West Wacker Drive
Chicago, IL 60606
(Name and address of agent for service)

Registrant's telephone number, including area code: (312) 917-7700

Date of fiscal year end: March 31

Date of reporting period: September 30, 2011

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR 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 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. ss. 3507.

ITEM 1. REPORTS TO STOCKHOLDERS.

LIFE IS COMPLEX.

Nuveen makes things e-simple.

It only takes a minute to sign up for e-Reports. Once enrolled, you'll receive an e-mail as soon as your Nuveen Fund information is ready. No more waiting for delivery by regular mail. Just click on the link within the e-mail to see the report and save it on your computer if you wish.

Free e-Reports right to your e-mail!

www.investordelivery.com
If you receive your Nuveen Fund dividends and statements from your financial advisor or brokerage account.

OR

www.nuveen.com/accountaccess
If you receive your Nuveen Fund dividends and statements directly from Nuveen.

Table of Contents

Chairman's
Letter to Shareholders

Dear Shareholders,

The global economy continues to be weighed down by an unusual combination of pressures facing the larger developed economies. Japanese leaders continue to work through the economic aftereffects of the March 2011 earthquake and tsunami. Political leaders in Europe and the U.S. have resolved some of the near term fiscal problems, but the financial markets are not convinced that these leaders are able to address more complex longer term fiscal issues. Despite improved earnings and capital increases, the largest banks in these countries continue to be vulnerable to deteriorating mortgage portfolios and sovereign credit exposure, adding another source of uncertainty to the global financial system.

In the U.S., recent economic statistics indicate that the economic recovery may be losing momentum. Consumption, which represents about 70% of the gross domestic product, faces an array of challenges from seemingly intractable declines in housing values, increased energy costs and limited growth in the job market. The failure of Congress and the administration to agree on the debt ceiling increase on a timely basis and the deep divisions between the political parties over fashioning a balanced program to address growing fiscal imbalances that led to the recent S&P ratings downgrade add considerable uncertainty to the domestic economic picture.

On a more positive note, corporate earnings continue to hold up well and the municipal bond market is recovering from recent weakness as states and municipalities implement various programs to reduce their budgetary deficits. In addition, the Federal Reserve has made it clear that it stands ready to take additional steps should the economic recovery falter. However, there are concerns that the Fed is approaching the limits of its resources to intervene in the economy.

These perplexing times highlight the importance of professional investment management. Your Nuveen investment team is working hard to develop an appropriate response to increased risk, and they continue to seek out opportunities created by stressful markets using proven investment disciplines designed to help your Fund achieve its investment objectives. On your behalf, we monitor their activities to assure that they maintain their investment disciplines.

As always, I encourage you to contact your financial consultant if you have any questions about your investment in a Nuveen Fund. On behalf of the other members of your Fund Board, we look forward to continuing to earn your trust in the months and years ahead.

Sincerely,

Robert P. Bremner
Chairman of the Board
November 21, 2011

Portfolio Manager's Comments

Certain statements in this report are forward-looking statements. Discussions of specific investments are for illustration only and are not intended as recommendations of individual investments. The forward-looking statements and other views expressed herein are those of the portfolio manager as of the date of this report. Actual future results or occurrences may differ significantly from those anticipated in any forward-looking statements, and the views expressed herein are subject to change at any time, due to numerous market and other factors. The Fund disclaims any obligation to update publicly or revise any forward-looking statements or views expressed herein.

Ratings shown are the highest rating given by one of the following national rating agencies: Standard & Poor's Group, Moody's Investors Service, Inc. or Fitch, Inc. Credit ratings are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC, CC, C and D are below-investment grade ratings. Bonds backed by U.S. Government or agency securities are given an implied rating equal to the rating of such securities. Holdings designated N/R are not rated by a national rating agency.

Nuveen Select Maturities Municipal Fund (NIM)

Portfolio manager Paul Brennan discusses key investment strategies and the six-month performance of the Nuveen Select Maturities Municipal Fund. With 20 years of investment experience, including 14 years with Nuveen, Paul has managed NIM since 2006.

What key strategies were used to manage NIM during the six-month reporting period ended September 30, 2011?

During this reporting period, municipal bond prices generally rallied as yields declined across the municipal curve. U.S. Treasury rates dropped substantially and this forced down municipal interest rates. The relative decline in yields was attributable in part to the continued depressed levels of municipal bond issuance. Tax-exempt volume, which had been limited in 2010 by issuers' extensive use of taxable Build America Bonds (BABs), continued to drift lower in 2011. Even though BABs were no longer an option for issuers (the BAB program expired at the end of 2010), some borrowers had accelerated issuance into 2010 in order to take advantage of the program's favorable terms before its termination, fulfilling their capital program borrowing needs well into 2012. This reduced the need for many borrowers to come to market with new issues during this period. For the six months ended September 30, 2011, national municipal issuance was down 25% compared with the same period in 2010.

Despite the constrained issuance of tax-exempt municipal bonds and relatively lower yields, we continued to take a bottom-up approach to discovering undervalued sectors and individual credits with the potential to perform well over the long term. Overall, we believed that NIM was relatively well positioned in terms of interest rate sensitivity and credit and, given the sharp decline in yields on the maturities in which NIM typically invests, we did not make many changes in its allocations. During this period, NIM found value in health care and general obligation and other tax-backed bonds. In general, we continued to emphasize bonds rated A and BBB, although we also purchased some AA rated bonds during this period. For the most part, NIM focused on purchasing longer bonds (with maturities of 10 to 20 years) in order to take advantage of more attractive yields at the longer end of the municipal yield curve. The purchase of longer bonds also improved NIM's duration and yield curve positioning.

1 In keeping with its investment parameters, NIM maintains an average effective maturity of 12 years or less for portfolio holdings.

Past performance is not predictive of future results. Current performance may be higher or lower than the data shown. Returns do not reflect the deduction of taxes that shareholders may have to pay on Fund distributions or upon the sale of Fund shares.

For additional information, see the Performance Overview page in this report.

* 6-month returns are cumulative; all other returns are annualized.

**Refer to Glossary of Terms Used in this Report for definitions.

Cash for new purchases during this period was generated by the proceeds from bond calls and maturing bonds, which we worked to redeploy to keep the Fund as fully invested as possible. NIM typically has more maturing bonds than other funds because many of the bonds it purchases have intermediate-term maturities.1 Due to this and the fact that the bonds in the Fund's portfolio generally offered higher yields than those available in the current marketplace, NIM did not engage in active selling during this period.

How did the Fund perform?

Results for NIM, as well as relevant index information, are presented in the accompanying table.

Average Annual Total Returns on Net Asset Value*
For periods ended 9/30/11

Fund	6-Month	1-Year	5-Year	10-Year
NIM	5.09%	3.37%	4.56%	3.85%
Standard & Poor's (S&P) Intermediate Municipal Bond Index**	6.82%	4.40%	5.65%	5.26%
Standard & Poor's (S&P) National Municipal Bond Index**	8.08%	3.87%	4.69%	5.10%

For the six months ended September 30, 2011, NIM's cumulative return on net asset value (NAV) underperformed the returns for the Standard & Poor's (S&P) Intermediate Municipal Bond Index and the S&P National Municipal Bond Index.

Key management factors that influenced the Fund's return for this period included duration and yield curve positioning, credit exposure, sector allocation and individual security selection.

During this period, as yields across the municipal yield curve declined, municipal bonds with longer maturities generally outperformed the shorter maturity categories, with credits at the longest end of the yield curve posting the strongest returns. The intermediate part of the curve also performed relatively well. Overall, NIM was a little short of its duration target, which hampered the Fund's performance somewhat during the period's strong market rally. The Fund's yield curve positioning was more helpful for performance, with good exposure to the longer bonds that performed well.

Credit exposure also played an important role in performance during these six months, as bonds rated BBB and A generally outperformed those rated AAA. This outperformance was due in part to the longer durations typically associated with the lower-rated categories. In this environment, NIM's allocations of bonds rated A and below, which comprised approximately 55% of its portfolio, benefited the Fund's performance.

Holdings that generally made positive contributions to NIM's return during this period included hospitals, transportation and education credits. While general obligation (GO) and other tax-supported bonds generally tended to trail the market during this period, NIM's holdings of bonds issued by the states of California and Illinois performed well for the Fund.

In contrast, pre-refunded bonds, which are often backed by U.S. Treasury securities, were among the poorest performing market segments during this period. The under-performance of these bonds can be attributed primarily to their shorter effective maturities and higher credit quality. During this period, NIM was slightly overweighted in pre-refunded bonds relative to the market average, which detracted somewhat from its investment performance. In addition, individual security selection—in particular, an underperforming holding in the nursing home sector—detracted from NIM's performance for the period.

RISK CONSIDERATIONS

Fund shares are not guaranteed or endorsed by any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation. Past performance is no guarantee of future results. Fund common shares are subject to a variety of risks, including:

Investment Risk. The possible loss of the entire principal amount that you invest.

Price Risk. Shares of closed-end investment companies like these Funds frequently trade at a discount to their NAV. Your common shares at any point in time may be worth less than your original investment, even after taking into account the reinvestment of Fund dividends and distributions.

Tax Risk. The tax treatment of Fund distributions may be affected by new IRS interpretations of the Internal Revenue Code and future changes in tax laws and regulations.

Issuer Credit Risk. This is the risk that a security in a Fund's portfolio will fail to make dividend or interest payments when due.

Interest Rate Risk. Fixed-income securities such as bonds, preferred, convertible and other debt securities will decline in value if market interest rates rise.

Reinvestment Risk. If market interest rates decline, income earned from a Fund's portfolio may be reinvested at rates below that of the original bond that generated the income.

Call Risk or Prepayment Risk. Issuers may exercise their option to prepay principal earlier than scheduled, forcing a Fund to reinvest in lower-yielding securities.

Dividend and Share Price Information

During the six-month reporting period ended September 30, 2011, the monthly dividend of NIM was cut effective June 2011.

NIM seeks to pay stable dividends at rates that reflect the Fund's past results and projected future performance. During certain periods, NIM may pay dividends at a rate that may be more or less than the amount of net investment income actually earned by the Fund during the period. If a Fund has cumulatively earned more than it has paid in dividends, it holds the excess in reserve as undistributed net investment income (UNII) as part of the Fund's NAV. Conversely, if a Fund has cumulatively paid dividends in excess of its earnings, the excess constitutes negative UNII that is likewise reflected in the Fund's NAV. NIM will, over time, pay all of its net investment income as dividends to shareholders. As of September 30, 2011, NIM had a positive UNII balance, based upon our best estimate, for tax purposes and a positive UNII balance for financial reporting purposes.

SHARE REPURCHASES AND SHARE PRICE INFORMATION

Since the inception of the Fund's repurchase program, the Fund has not repurchased any of its outstanding shares.

As of September 30, 2011, the share price of NIM was trading at a (+) premium of (+)1.65% to its NAV. The Fund's average (-) discount over the entire six-month reporting period was (-)1.43%.

NIM Performance OVERVIEW

Nuveen Select Maturities Municipal Fund

as of September 30, 2011

Fund Snapshot		
Share Price		$ 10.49
Net Asset Value (NAV)		$ 10.32
Premium/(Discount) to NAV		1.65%
Market Yield		3.89%
Taxable-Equivalent Yield1		5.40%
Net Assets ($000)		$ 128,269
Average Annual Total Return		
(Inception 9/18/92)		
	On Share Price	On NAV
6-Month (Cumulative)	9.11 %	5.09%
1-Year	-0.90 %	3.37%
5-Year	5.93 %	4.56%
10-Year	4.30 %	3.85%
States3		
(as a % of total investments)		
Illinois		15.0%
Colorado		10.1%
Texas		8.7%
Pennsylvania		7.5%
New York		7.1%
Florida		6.7%
South Carolina		5.1%
Kansas		3.1%
Wisconsin		3.1%
Arkansas		3.0%
California		3.0%
Alabama		2.7%
New Jersey		2.4%
Tennessee		2.0%
North Carolina		1.6%
Washington		1.6%
Connecticut		1.5%
Louisiana		1.4%

Other	14.4%
Portfolio Composition3	
(as a % of total investments)	
Tax Obligation/Limited	20.5%
Utilities	16.3%
U.S. Guaranteed	13.6%
Health Care	10.0%
Tax Obligation/General	9.3%
Transportation	8.1%
Education and Civic Organizations	5.1%
Water and Sewer	4.5%
Consumer Staples	4.4%
Long-Term Care	4.4%
Other	3.8%

Refer to the Glossary of Terms Used in this Report for further definition of the terms used within this Fund's Performance Overview page.

1 Taxable-Equivalent Yield represents the yield that must be earned on a fully taxable investment in order to equal the yield of the Fund on an after-tax basis. It is based on a income tax rate of 28%. When comparing this Fund to investments that generate qualified dividend income, the Taxable-Equivalent Yield is lower.

2 Ratings shown are the highest rating given by one of the following national rating agencies: Standard & Poor's Group, Moody's Investors Service, Inc. or Fitch, Inc. Credit ratings are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC, CC, C and D are below-investment grade ratings. Bonds backed by U.S. Government or agency securities are given an implied rating equal to the rating of such securities. Holdings designated N/R are not rated by a national rating agency.

3 Holdings are subject to change.

NIM

Shareholder Meeting Report

The annual meeting of shareholders was held on July 25, 2011, in the Lobby Conference Room, 333 West Wacker Drive, Chicago, IL 60606; at this meeting the shareholders were asked to vote on the election of Board Members, the elimination of Fundamental Investment Policies and the approval of new Fundamental Investment Policies. The meeting was subsequently adjourned to August 31, 2011.

Approval of the Board Members was reached as follows:

John P. Amboian	
For	7,523,191
Withhold	275,806
Total	7,798,997
David J. Kundert	
For	7,511,032
Withhold	287,965
Total	7,798,997
Terence J. Toth	
For	7,514,900
Withhold	284,097
Total	7,798,997
To approve the elimination of the Fund's fundamental investment policy relating to the Fund's ability to make loans	
For	5,498,663
Against	502,764
Abstain	172,209
Broker Non-Votes	1,625,361
Total	7,798,997
To approve the new fundamental investment policy relating to the Fund's ability to make loans	
For	5,503,442
Against	490,236
Abstain	179,958
Broker Non-Votes	1,625,361
Total	7,798,997

NIM Nuveen Select Maturities Municipal Fund
Portfolio of Investments

September 30, 2011 (Unaudited)

Principal Amount (000)	Description (1)	Optional Call Provisions (2)	Ratings (3)	Value
	Alabama – 2.6%			
	Alabama 21st Century Authority, Tobacco Settlement Revenue Bonds, Series 2001:			
$ 2,000	5.750%, 12/01/17	12/11 at 101.00	A1	$ 2,028,000
200	5.500%, 12/01/21	12/11 at 101.00	A1	200,874
180	Birmingham Special Care Facilities Financing Authority, Alabama, Revenue Bonds, Baptist Health System Inc., Series 2005A, 5.000%, 11/15/30	11/15 at 100.00	Baa2	158,926
500	Jefferson County, Alabama, Sewer Revenue Refunding Warrants, Series 2003B, 5.250%, 2/01/12 – AGM Insured	No Opt. Call	AA+	496,110
500	Marshall County Healthcare Authority, Alabama, Revenue Bonds, Series 2002A, 6.250%, 1/01/22	1/12 at 101.00	A–	507,745
3,380	Total Alabama			3,391,655
	Alaska – 0.3%			
305	Valdez, Alaska, Marine Terminal Revenue Refunding Bonds, BP Pipelines Inc. Project, Refunding Series 2003B, 5.000%, 1/01/21	No Opt. Call	A	345,779
	Arizona – 1.0%			
	Salt Verde Financial Corporation, Arizona, Senior Gas Revenue Bonds, Citigroup Energy Inc Prepay Contract Obligations, Series 2007:			
100	5.000%, 12/01/17	No Opt. Call	A	101,978
85	5.250%, 12/01/19	No Opt. Call	A	87,084
35	5.000%, 12/01/32	No Opt. Call	A	32,261
380	5.000%, 12/01/37	No Opt. Call	A	342,217
750	Surprise Municipal Property Corporation, Arizona, Wastewater System Revenue Bonds, Series 2007, 4.500%, 4/01/17	4/12 at 100.00	A–	754,958
1,350	Total Arizona			1,318,498
	Arkansas – 3.0%			
1,500	Jefferson County, Arkansas, Pollution Control Revenue Bonds, Entergy Arkansas Inc. Project, Series 2006, 4.600%, 10/01/17	12/11 at 100.00	A–	1,502,535
1,000	Jonesboro, Arkansas, Industrial Development Revenue Bonds, Anheuser Busch Inc. Project, Series 2002, 4.600%, 11/15/12	No Opt. Call	A–	1,043,770
1,140		No Opt. Call	Baa1	1,246,579

	North Little Rock, Arkansas, Electric Revenue Refunding Bonds, Series 1992A, 6.500%, 7/01/15 – NPFG Insured			
3,640	Total Arkansas			3,792,884
	California – 3.0%			
355	California Health Facilities Financing Authority, Revenue Bonds, Catholic Healthcare West, Series 2008H, 5.125%, 7/01/22	7/15 at 100.00	A	376,115
500	California State, General Obligation Bonds, Various Purpose Series 2010, 5.500%, 3/01/40	3/20 at 100.00	A1	534,520
1,000	Ceres Unified School District, Stanislaus County, California, General Obligation Bonds, Series 2002B, 0.000%, 8/01/31 – FGIC Insured	8/12 at 32.87	A+	266,190
260	Golden State Tobacco Securitization Corporation, California, Tobacco Settlement Asset-Backed Bonds, Series 2007A-1, 4.500%, 6/01/27	6/17 at 100.00	BBB–	203,726
	Moulton Niguel Water District, California, Certificates of Participation, Refunding Series 2003:			