NUVEEN SELECT MATURITIES MUNICIPAL FUND Form N-Q March 01, 2011

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM N-O

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

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, Illinois 60606 (Address of principal executive offices) (Zip code)

Kevin J. McCarthy
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: 3/31

Date of reporting period: 12/31/10

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) Nuveen Select Maturities Municipal Fund (NIM) December 31, 2010

D		,	Optional		
	rincipal		Call Provisions	Datings	
4	Amount	Description (1)		Ratings	Value
	(000)		(2)	(3)	v alue
		Alabama – 2.7% (2.8% of Total Investments)			
		Alabama 21st Century Authority, Tobacco Settlement Revenue Bonds, Series 2001:			
		Bolids, Selies 2001.	12/11 at		
\$	2 000	5.750%, 12/01/17	101.00	Λ \$	2,032,120
Ψ	2,000	5.75070, 12/01/17	101.00 12/11 at	Α-φ	2,032,120
	200	5.500%, 12/01/21	12/11 at 101.00	A-	192,528
	200	Birmingham Special Care Facilities Financing Authority, Alabama,	101.00 11/15 at	A-	192,320
	190	Revenue Bonds, Baptist Health	100.00	Baa2	156,802
	160	System Inc., Series 2005A, 5.000%, 11/15/30	100.00	Daaz	130,602
		Jefferson County, Alabama, Sewer Revenue Refunding Warrants,	2/11 at		
	500	Series 2003B, 5.250%, 2/01/12 –	100.00	AA+	490,020
	300	AGM Insured	100.00	AAT	490,020
		Marshall County Healthcare Authority, Alabama, Revenue Bonds,	1/12 at		
	500	Series 2002A, 6.250%, 1/01/22	101.00	A-	511,175
		Total Alabama	101.00	A-	3,382,645
	3,360	Arizona – 1.0% (1.1% of Total Investments)			3,362,043
		Salt Verde Financial Corporation, Arizona, Senior Gas Revenue			
		Bonds, Citigroup Energy Inc			
		Prepay Contract Obligations, Series 2007:			
		rrepay Contract Obligations, Series 2007.	No Opt.		
	100	5.000%, 12/01/17	Call	A	103,698
	100	5.000%, 12/01/17	No Opt.	A	103,098
	85	5.250%, 12/01/19	Call	A	87,292
	63	5.250%, 12/01/19	No Opt.	A	61,292
	35	5 000% 12/01/22	Call	A	30,492
	33	5.000%, 12/01/32		A	30,492
	290	5.000%, 12/01/37	No Opt. Call	٨	323,722
	360	·	4/11 at	A	323,122
	750	Surprise Municipal Property Corporation, Arizona, Wastewater System Revenue Bonds, Series	100.00	N/R	751,148
	730	•	100.00	11/11	731,140
	1,350	2007, 4.500%, 4/01/17 Total Arizona			1 206 252
	1,330	Arkansas – 3.2% (3.3% of Total Investments)			1,296,352
		Jefferson County, Arkansas, Pollution Control Revenue Bonds,	6/11 at		
	1 500	· · · · · · · · · · · · · · · · · · ·	100.00	٨	1,506,390
	1,500	Entergy Arkansas Inc. Project, Series 2006, 4.600%, 10/01/17	100.00	A–	1,500,550
		Jonesboro, Arkansas, Industrial Development Revenue Bonds,	No Opt		
	1.000		No Opt.	DDD 1	1 061 600
	1,000	Anheuser Busch Inc. Project, Series	Call	BBB+	1,061,600

	2002, 4.600%, 11/15/12			
1,380	North Little Rock, Arkansas, Electric Revenue Refunding Bonds, Series 1992A, 6.500%, 7/01/15 –	No Opt. Call	Baa1	1,507,084
2 000	NPFG Insured			4.075.074
3,880	Total Arkansas California – 2.5% (2.6% of Total Investments)			4,075,074
	California Health Facilities Financing Authority, Revenue Bonds,	7/15 at		
400	Catholic Healthcare West,	100.00	A	412,908
	Series 2008H, 5.125%, 7/01/22			•
	California State, General Obligation Bonds, Various Purpose Series	3/20 at		
500	2010, 5.500%, 3/01/40	100.00	A1	485,475
1 000	Ceres Unified School District, Stanislaus County, California,	8/12 at		225 000
1,000	General Obligation Bonds, Series	32.87	A+	225,890
	2002B, 0.000%, 8/01/31 – FGIC Insured Golden State Tobacco Securitization Corporation, California,	6/17 at		
255	Tobacco Settlement Asset-Backed	100.00	BBB-	196,041
233	Bonds, Series 2007A-1, 4.500%, 6/01/27	100.00	ВВВ	170,011
	Moulton Niguel Water District, California, Certificates of			
	Participation, Refunding			
	Series 2003:			
2.50	**************************************	No Opt.		262.612
250	5.000%, 9/01/21 – AMBAC Insured	Call	AA+	263,613
250	5.000%, 9/01/22 – AMBAC Insured	No Opt. Call	AA+	261,235
230	5.000%, 9/01/22 – AIVIDAC IIIsuleu	No Opt.	AAT	201,233
500	5.000%, 9/01/23 – AMBAC Insured	Call	AA+	517,865
	Palomar Pomerado Health, California, General Obligation Bonds,	No Opt.		,
2,000	Series 2009A, 0.000%, 8/01/25 –	Call	AA+	815,160
	AGC Insured			
5,155	Total California			3,178,187
	Colorado – 12.0% (12.3% of Total Investments)	10/14 -4		
2 805	Centennial Downs Metropolitan District, Colorado, General Obligation Bonds, Series 1999,	12/14 at 100.00	N/R	2,890,165
2,073	5.000%, 12/01/20 – AMBAC Insured	100.00	11/10	2,070,103
	Colorado Educational and Cultural Facilities Authority, Charter	7/12 at		
1,105	School Revenue Bonds, Douglas	100.00	BBB	1,091,409
	County School District RE-1 – DCS Montessori School, Series			
	2002A, 6.000%, 7/15/22			
1 155	Colorado Educational and Cultural Facilities Authority, Revenue	12/13 at		1 105 000
1,175	Bonds, Classical Academy Charter School Series 2002 4 5000/ 12/01/18 SYNCOR A CTV	100.00	A	1,185,892
	Charter School, Series 2003, 4.500%, 12/01/18 – SYNCORA GTY Insured			
	Colorado Housing Finance Authority, Single Family Program Senior	4/11 at		
185	Bonds, Series 2000D-2,	105.00	AA	196,803
	6.900%, 4/01/29 (Alternative Minimum Tax)			,
	Denver Health and Hospitals Authority, Colorado, Healthcare	12/11 at		
1,025	Revenue Bonds, Series 2001A,	100.00	N/R (4)	1,077,183
	6.000%, 12/01/23 (Pre-refunded 12/01/11)	10/10		
1 165	Denver West Metropolitan District, Colorado, General Obligation	12/13 at	NI/D	1 205 427
1,465	Refunding and Improvement Bonds, Series 2003, 4.500%, 12/01/18 – RAAI Insured	100.00	N/R	1,395,427
	Donas, Series 2003, 7.300 /0, 12/01/10 - KAAI IIISUICU			

1,500	·	No Opt. Call	Baa1	1,582,110
1,000	9/01/39 (Mandatory put 9/01/13) – NPFG Insured E-470 Public Highway Authority, Colorado, Toll Revenue Bonds, Series 2004B, 0.000%, 3/01/36 –	No Opt. Call	Baa1	147,660
70	NPFG Insured Northwest Parkway Public Highway Authority, Colorado, Revenue Bonds, Senior Series 2001A,	6/11 at 102.00	AA+ (4)	72,755
5.875	5.250%, 6/15/41 (Pre-refunded 6/15/11) – AGM Insured Northwest Parkway Public Highway Authority, Colorado, Senior Lien Revenue Bonds, Series 2001B,	6/11 at 38.04	N/R (4)	2,221,925
	0.000%, 6/15/27 (Pre-refunded 6/15/11) – AMBAC Insured Regional Transportation District, Colorado, Denver Transit Partners	7/20 at	. ,	
200	Eagle P3 Project Private Activity Bonds, Series 2010, 6.000%, 1/15/41 University of Colorado Hospital Authority, Revenue Bonds, Series	100.00 11/11 at	Baa3	196,984
2,845	2001A, 5.600%, 11/15/21 (Pre-refunded 11/15/11)	100.00	A3 (4)	2,976,098
19,340	Total Colorado Connecticut – 1.5% (1.5% of Total Investments) Eastern Connecticut Resource Recovery Authority, Solid Waste			15,034,411
	Revenue Bonds, Wheelabrator Lisbon Project, Series 1993A:	1/11 at		
265	5.500%, 1/01/14 (Alternative Minimum Tax)	100.00 1/11 at	BBB	265,697
	5.500%, 1/01/15 (Alternative Minimum Tax) Total Connecticut Florida 6.3% (6.5% of Total Investments)	100.00	BBB	1,571,539 1,837,236
2,400	Florida – 6.3% (6.5% of Total Investments) Deltona, Florida, Utility Systems Water and Sewer Revenue Bonds, Series 2003, 5.250%, 10/01/17 – NPFG Insured	10/13 at 100.00	A1	2,493,528
	Florida Citizens Property Insurance Corporation, High Risk Account Revenue Bonds, Series 2007A:			
1,000	5.000%, 3/01/15 – NPFG Insured	No Opt. Call No Opt.	A+	1,044,970
	5.000%, 3/01/16 – NPFG Insured Florida Deparmtent of Environmental Protection, Florida Forever	Call 7/17 at	A+	130,154
600	Revenue Bonds, Series 2007B, 5.000%, 7/01/19 – NPFG Insured JEA, Florida, Electric Revenue Certificates, Series 1973-2, 6.800%,	101.00	AA–	652,182
30	7/01/12 (ETM) North Sumter County Utility Dependent District, Florida, Utility	No Opt. Call No Opt.	AAA	31,675
750	Revenue Bonds, Series 2010, 5.000%, 10/01/20	Call	BBB	739,710
2,000	Orange County, Florida, Tourist Development Tax Revenue Bonds, Series 2005, 5.000%, 10/01/22 – AMBAC Insured	10/15 at 100.00	A+	2,073,520
235	Port Everglades Authority, Florida, Port Facilities Revenue Bonds, Series 1986, 7.125%,	No Opt. Call	AAA	274,398

	11/01/16 (ETM)			
	South Miami Health Facilities Authority, Florida, Hospital Revenue,	8/17 at		
500	Baptist Health System	100.00	AA	501,090
7.640	Obligation Group, Series 2007, 5.000%, 8/15/27			7.041.227
7,640				7,941,227
	Georgia – 0.3% (0.4% of Total Investments) Cherokee County Water and Sewerage Authority, Georgia, Revenue	8/22 at		
380	Bonds, Series 1995, 5.200%,	100.00	BBB (4)	428,895
360	8/01/25 (Pre-refunded 8/01/22) – NPFG Insured	100.00	DDD (4)	420,093
	Idaho -0.1% (0.1% of Total Investments)			
	Madison County, Idaho, Hospital Revenue Certificates of	9/16 at		
100	Participation, Madison Memorial	100.00	BBB-	81,447
	Hospital, Series 2006, 5.250%, 9/01/37			, ,
	Illinois – 13.6% (13.9% of Total Investments)			
	Chicago, Illinois, Tax Increment Allocation Bonds, Irving/Cicero	1/11 at		
440	Redevelopment Project, Series	100.00	N/R	440,453
	1998, 7.000%, 1/01/14			
	Cook County Township High School District 208, Illinois, General	12/15 at		
1,500	•	100.00	Aa3	1,580,130
	2006, 5.000%, 12/01/21 – NPFG Insured			
2 000	Huntley, Illinois, Special Service Area 9, Special Tax Bonds, Series	3/17 at		2 00 5 220
2,000	2007, 5.100%, 3/01/28 –	100.00	AA+	2,005,320
	AGC Insured Illinois Dayslamment Finance Authority CNMA Colleteralized	4/11 of		
4,760	Illinois Development Finance Authority, GNMA Collateralized Mortgage Revenue Bonds, Greek	4/11 at 105.00	Aaa	5,083,344
4,700	American Nursing Home Committee, Series 2000A, 7.600%,	103.00	Aaa	3,003,344
	4/20/40			
	Illinois Educational Facilities Authority, Revenue Bonds, Art	3/14 at		
2,000	•	102.00	A+	2,103,500
_,	2000, 4.450%, 3/01/34 (Mandatory put 3/01/15)			_,,_
	Illinois Educational Facilities Authority, Student Housing Revenue	5/12 at		
1,000	Bonds, Educational	101.00	Aaa	1,089,410
	Advancement Foundation Fund, University Center Project, Series			
	2002, 6.625%, 5/01/17			
	(Pre-refunded 5/01/12)			
	Illinois Finance Authority, Revenue Bonds, Roosevelt University,	4/17 at		
250	Series 2007, 5.250%, 4/01/22	100.00	Baa2	234,795
20	Illinois Health Facilities Authority, Revenue Bonds, Condell	No Opt.	A	01 010
20	Medical Center, Series 2002,	Call	Aaa	21,218
	5.250%, 5/15/12 (ETM) Illinois Health Facilities Authority, Revenue Bonds, Lutheran	No Opt.		
50	General Health System, Series	Call	AA+ (4)	51,818
30	1993A, 6.125%, 4/01/12 – AGM Insured (ETM)	Can	<i>III</i> (¬)	31,010
	Illinois Health Facilities Authority, Revenue Bonds, Silver Cross	2/11 at		
695	Hospital and Medical	100.50	BBB	696,133
	Centers, Series 1999, 5.500%, 8/15/19			,
	Illinois State, General Obligation Bonds, Refunding Series 2006,	No Opt.		
50	5.000%, 1/01/15	Call	A+	52,567
	Illinois State, General Obligation Bonds, Refunding Series 2007B,	No Opt.		
130	5.000%, 1/01/16	Call	A+	136,439
195			A+	197,767

	Illinois State, General Obligation Bonds, Refunding Series 2008, 4.250%, 4/01/16	No Opt. Call		
	Illinois State, General Obligation Bonds, Refunding Series 2010,	No Opt.		
1,165	5.000%, 1/01/19	Call	A+	1,154,410
	Illinois State, General Obligation Bonds, Series 2007A, 5.500%,	No Opt.		
25	6/01/15	Call	A+	26,829
275	Illinois, General Obligation Bonds, Illinois FIRST Program, Series	12/12 at	A A .	275 497
275	2002, 5.250%, 12/01/19 – AGM Insured	100.00	AA+	275,487
	Kane & DeKalb Counties, Illinois, Community United School	No Opt.		
1 355	District 301, General Obligation	Call	A1	952,362
1,555	Bonds, Series 2006, 0.000%, 12/01/18 – NPFG Insured	Cuii	111	<i>752</i> ,562
	Metropolitan Pier and Exposition Authority, Illinois, Dedicated State	6/13 at		
55	Tax Revenue Bonds,	100.00	AAA	58,925
	Series 2002, 5.375%, 6/01/15 – FGIC Insured			
	Regional Transportation Authority, Cook, DuPage, Kane, Lake,	No Opt.		
700	McHenry and Will Counties,	Call	AA	857,892
	Illinois, General Obligation Bonds, Series 1994D, 7.750%, 6/01/19 –			
16.665	FGIC Insured			17.010.700
16,665	Total Illinois Indiana – 0.4% (0.4% of Total Investments)			17,018,799
	Indiana Finance Authority, Educational Facilities Revenue Bonds,	10/19 at		
250	Drexel Foundation For	100.00	BBB-	246,860
250	Educational Excellence, Inc., Series 2009A, 6.000%, 10/01/21	100.00	DDD	2.0,000
	Jasper County, Indiana, Pollution Control Revenue Refunding	No Opt.		
250	Bonds, Northern Indiana Public	Call	Baa1	272,648
	Service Company Project, Series 1994A Remarketed, 5.850%,			
	4/01/19 – NPFG Insured			
500	Total Indiana			519,508
	Iowa – 1.2% (1.3% of Total Investments)	614.4		
1.500	Iowa Tobacco Settlement Authority, Tobacco Settlement	6/11 at		1.562.701
1,520	Asset-Backed Revenue Bonds, Series 2001B, 5.300%, 6/01/25 (Pre-refunded 6/01/11)	101.00	AAA	1,563,791
	Kansas – 3.2% (3.3% of Total Investments)			
	Wichita, Kansas, Hospital Facilities Revenue Refunding and	11/11 at		
3,500	Improvement Bonds, Via Christi	101.00	A+	3,561,354
-,	Health System Inc., Series 2001-III, 5.500%, 11/15/21			-,,
	Wyandotte County-Kansas City Unified Government, Kansas, Sales	12/15 at		
245	Tax Special Obligation Bonds,	100.00	N/R	246,580
	Redevelopment Project Area B, Series 2005, 5.000%, 12/01/20			
	Wyandotte County-Kansas City Unified Government, Kansas, Sales	No Opt.		
370	Tax Special Obligation Capital	Call	BBB	197,447
	Appreciation Revenue Bonds Redevelopment Project Area B – Major			
	Multi-Sport Athletic Complex Project, Subordinate Lien Series 2010B, 0.000%, 6/01/21			
4,115	Total Kansas			4,005,381
7,113	Kentucky – 0.9% (0.9% of Total Investments)			4,005,501
	Kentucky Economic Development Finance Authority, Louisville	6/18 at		
325	Arena Project Revenue Bonds,	100.00	AA+	337,591
	Louisville Arena Authority, Inc., Series 2008-A1, 5.750%, 12/01/28 –			
	AGC Insured			

790	Kentucky Housing Corporation, Housing Revenue Bonds, Series 2005G, 5.000%, 7/01/30 (Alternative Minimum Tax)	1/15 at 100.60	AAA	805,136
1,115	Total Kentucky			1,142,727
1,010	Louisiana – 1.4% (1.4% of Total Investments) Louisiana Public Facilities Authority, Revenue Bonds, Baton Rouge General Hospital, Series 2004, 5.250%, 7/01/24 – NPFG Insured Tobacco Settlement Financing Corporation, Louisiana, Tobacco Settlement Asset-Backed Bonds, Series 2001B:	7/14 at 100.00	Baa1	1,016,403
510	5.500%, 5/15/30	5/11 at 101.00 5/11 at	A	504,574
	5.875%, 5/15/39 Total Louisiana Maryland – 0.9% (0.9% of Total Investments)	101.00	A–	235,038 1,756,015
1,100	Maryland Energy Financing Administration, Revenue Bonds, AES Warrior Run Project, Series 1995, 7.400%, 9/01/19 (Alternative Minimum Tax) Massachusetts – 0.7% (0.7% of Total Investments)	3/11 at 100.00	N/R	1,099,989
500	Massachusetts Development Finance Agency, Revenue Bonds, Orchard Cove, Series 2007, 5.000%, 10/01/19 Massachusetts Port Authority, Special Facilities Revenue Bonds, Delta Air Lines Inc.,	10/17 at 100.00	N/R	445,270
	Series 2001A:	1/11		
100	5.200%, 1/01/20 – AMBAC Insured (Alternative Minimum Tax)	1/11 at 101.00 1/11 at	N/R	86,859
470 1,070	5.000%, 1/01/27 – AMBAC Insured (Alternative Minimum Tax) Total Massachusetts Michigan – 1.6% (1.6% of Total Investments)	101.00	N/R	368,489 900,618
1,000	Cornell Township Economic Development Corporation, Michigan, Environmental Improvement Revenue Refunding Bonds, MeadWestvaco Corporation-Escanaba Project, Series 2002, 5.875%, 5/01/18 (Pre-refunded 5/01/12)	5/12 at 100.00	AAA	1,065,940
360	Michigan State Hospital Finance Authority, Hospital Revenue Refunding Bonds, Sinai Hospital, Series 1995, 6.625%, 1/01/16 (Pre-refunded 1/31/11)	1/11 at 100.00	ВВ	356,767
500	Wayne County Airport Authority, Michigan, Revenue Bonds, Detroit Metropolitan Airport, Refunding Series 2010C, 5.000%, 12/01/16 (WI/DD, Settling	No Opt. Call	A	537,295
1,860	1/03/11) Total Michigan Minnesota – 1.4% (1.4% of Total Investments)			1,960,002
1,100	Becker, Minnesota, Pollution Control Revenue Bonds, Northern States Power Company, Series	8/12 at 101.00	A1	1,229,316
250	1993A, 8.500%, 9/01/19		AA+	275,053

	Northern Municipal Power Agency, Minnesota, Electric System Revenue Bonds, Refunding Series 2009A, 5.000%, 1/01/15 – AGC Insured	No Opt. Call		
230	White Earth Band of Chippewa Indians, Minnesota, Revenue Bonds, Series 2000A, 7.000%,	No Opt. Call	N/R	235,674
1,580	12/01/11 – ACA Insured Total Minnesota Mississippi = 0.66% (0.66% of Total Investments)			1,740,043
	Mississippi – 0.6% (0.6% of Total Investments) Mississippi Hospital Equipment and Facilities Authority, Revenue Bonds, Baptist Memorial Healthcare, Series 2004B-1:			
	Treatmente, series 2004D-1.	No Opt.		
200	5.000%, 9/01/16	Call	AA	214,286
200	5.000%, 9/01/10	9/14 at	AA	214,200
200	5 0000/ 0/01/24	9/14 at 100.00	Λ Λ	202 190
300	5.000%, 9/01/24		AA	303,180
250	Warren County, Mississippi, Gulf Opportunity Zone Revenue	8/11 at	DDD	210.002
250	Bonds, International Paper Company,	100.00	BBB	218,883
	Series 2006A, 4.800%, 8/01/30			- 2 < 2 +0
750	Total Mississippi			736,349
	Missouri – 0.3% (0.3% of Total Investments)			
	St. Louis County, Missouri, GNMA Collateralized Mortgage	7/20 at		
250	Revenue Bonds, Series 1989A, 8.125%,	100.00	AAA	321,428
	8/01/20 (Pre-refunded 7/01/20) (Alternative Minimum Tax)			
	Montana – 0.1% (0.1% of Total Investments)			
	University of Montana, Revenue Bonds, Series 1996D, 5.375%,	5/11 at		
90	5/15/19 – NPFG Insured (ETM)	100.00	BBB (4)	103,988
	Nebraska – 0.9% (0.9% of Total Investments)			
	Dodge County School District 1, Nebraska, Fremont Public Schools,	12/14 at		
1,000	General Obligation Bonds,	100.00	Aa3	1,086,000
,	Series 2004, 5.000%, 12/15/19 – AGM Insured			, ,
	Nevada – 1.2% (1.2% of Total Investments)			
	Clark County, Nevada, Airport Revenue Bonds, Subordinte Lien	1/20 at		
1,000	Series 2010B, 5.750%, 7/01/42	100.00	Aa3	1,023,970
1,000	Director of Nevada State Department of Business and Industry,	100.00	Ads	1,023,770
	· · · · · · · · · · · · · · · · · · ·			
	Revenue Bonds, Las Vegas Managail Project First Tion Series 2000:			
	Monorail Project, First Tier, Series 2000:	No Ont		
900	0.0000/ 1/01/15 AMD AC Incomed	No Opt.	D	126 699
800	0.000%, 1/01/15 – AMBAC Insured	Call	D	126,688
2.5	0.0000 1/01/1/C AND AGE 1	No Opt.	ъ.	5.010
35	0.000%, 1/01/16 – AMBAC Insured	Call	D	5,213
400	0.0000 4/04/40 13/03/40	No Opt.	_	4.5.0.45
120	0.000%, 1/01/18 – AMBAC Insured	Call	D	15,847
		No Opt.		
50	0.000%, 1/01/20 – AMBAC Insured	Call	D	5,851
	Las Vegas Redevelopment Agency, Nevada, Tax Increment	6/19 at		
250	Revenue Bonds, Series 2009A,	100.00	A	277,868
	8.000%, 6/15/30			
2,255	Total Nevada			1,455,437
	New Jersey – 2.2% (2.3% of Total Investments)			
	Bayonne Redevelopment Agency, New Jersey, Revenue Bonds,	No Opt.		
360	Royal Caribbean Cruises Project,	Call	BB	325,721

Series 2006A, 4.750%, 11/01/16 (Alternative Minimum Tax) New Jersey Economic Development Authority, Cigarette Tax Revenue Bonds, Series 2004:

	Revenue Bonds, Series 2004:			
		No Opt.		
150	5.375%, 6/15/14	Call	BBB	155,807
		No Opt.		
15	5.375%, 6/15/15 – RAAI Insured	Call	Baa3	15,610
		No Opt.		
25	5.500%, 6/15/16 – RAAI Insured	Call	Baa3	26,001
23	New Jersey Transportation Trust Fund Authority, Transportation	No Opt.	Daas	20,001
1 720		_	A A	201.040
1,730		Call	AA-	381,949
	Appreciation Series 2010A, 0.000%, 12/15/33			
	New Jersey Transportation Trust Fund Authority, Transportation	No Opt.		
1,500	System Bonds, Series 2010D,	Call	AA-	1,546,650
	5.000%, 12/15/23			
	Tobacco Settlement Financing Corporation, New Jersey, Tobacco	6/17 at		
425	Settlement Asset-Backed Bonds,	100.00	BBB	364,701
120	Series 2007-1A, 4.500%, 6/01/23	100.00	DDD	301,701
4 205				2 916 420
4,205	Total New Jersey			2,816,439
	New York – 6.2% (6.3% of Total Investments)			
	Brooklyn Areba Local Development Corporation, New York,	1/20 at		
220	Payment in Lieu of Taxes Revenue	100.00	BBB-	219,993
	Bonds, Barclays Center Project, Series 2009, 6.000%, 7/15/30			
	Dormitory Authority of the State of New York, Revenue Bonds,	7/13 at		
1.000	Brooklyn Law School, Series	100.00	BBB+	1,074,910
1,000	2003A, 5.500%, 7/01/15 – RAAI Insured	100.00	222.	1,07.1,510
	New York City Industrial Development Agency, New York, Civic	No Opt		
170		No Opt.	N/D	166 600
170	Facility Revenue Bonds, Special	Call	N/R	166,622
	Needs Facilities Pooled Program, Series 2008A-1, 5.700%, 7/01/13			
	New York State Tobacco Settlement Financing Corporation,			
	Tobacco Settlement Asset-Backed and			
	State Contingency Contract-Backed Bonds, Series 2003A-1:			
		6/11 at		
20	5.500%, 6/01/14	100.00	AA-	20,071
		6/13 at		,,
250	5.250%, 6/01/20 – AMBAC Insured	100.00	AA-	266,153
230	5.230%, 0/01/20 – AMBAC IIIsuicu		AA-	200,133
500	5.050g (101/00 AMPAGI 1	6/13 at		607.752
590	5.250%, 6/01/22 – AMBAC Insured	100.00	AA-	607,753
	New York State Tobacco Settlement Financing Corporation,			
	Tobacco Settlement Asset-Backed and			
	State Contingency Contract-Backed Bonds, Series 2003B-1C:			
		6/13 at		
500	5.500%, 6/01/21	100.00	AA-	527,805
	,	6/13 at		,
300	5.500%, 6/01/22	100.00	AA-	315,795
300	Port Authority of New York and New Jersey, Special Project Bonds,	No Opt.	7171	313,773
4 200	•	•	Doo1	4 520 004
4,300	JFK International Air	Call	Baa1	4,538,004
	Terminal LLC, Sixth Series 1997, 7.000%, 12/01/12 – NPFG Insured			
	(Alternative Minimum Tax)			
7,350	Total New York			7,737,106
	North Carolina – 1.6% (1.7% of Total Investments)			

1,880	Union County, North Carolina, Certificates of Participation, Series 2003, 5.000%, 6/01/18 –	6/13 at 101.00	Aa2	2,014,664
	AMBAC Insured Ohio – 1.3% (1.4% of Total Investments)			
	Buckeye Tobacco Settlement Financing Authority, Ohio, Tobacco	6/17 at		
770	Settlement Asset-Backed Revenue	100.00	Baa3	595,118
	Bonds, Senior Lien, Series 2007A-2, 5.125%, 6/01/24			ŕ
	Toledo-Lucas County Port Authority, Ohio, Port Revenue Bonds,	No Opt.		
1,000	Cargill Inc., Series 2004B,	Call	A	1,056,820
	4.500%, 12/01/15			
1,770	Total Ohio			1,651,938
	Pennsylvania – 7.4% (7.6% of Total Investments)	10/10		
200	Luzerne County Industrial Development Authority, Pennsylvania,	12/19 at	NI/D	102.016
200	Guaranteed Lease Revenue Bonds,	100.00	N/R	193,916
	Series 2009, 7.750%, 12/15/27 Pennsylvania Higher Educational Facilities Authority, College	No Opt.		
770	Revenue Bonds, Ninth Series	Call	Aaa	877,223
770	1976, 7.625%, 7/01/15 (ETM)	Can	1 taa	077,223
	Pennsylvania Higher Educational Facilities Authority, Revenue	3/11 at		
225	Bonds, University of the Arts,	100.00	A+ (4)	248,821
	Series 1999, 5.150%, 3/15/20 – RAAI Insured (ETM)		· /	,
	Pennsylvania Turnpike Commission, Motor License Fund-Enhanced	No Opt.		
580	Subordinate Special Revenue	Call	AA	413,905
	Bonds, Series 2010A-2, 0.000%, 12/01/34			
	Philadelphia Gas Works, Pennsylvania, Revenue Bonds, Eighteenth	8/14 at		
4,120	Series 2004, 5.000%, 8/01/15 –	100.00	BBB+	4,380,589
	AMBAC Insured	N. 0		
1 425	Philadelphia Gas Works, Pennsylvania, Revenue Bonds, Twelfth	No Opt.	A	1.762.000
1,435	Series 1990B, 7.000%, 5/15/20 –	Call	Aaa	1,762,080
	NPFG Insured (ETM) Philadelphia Hospitals and Higher Education Facilities Authority,	5/11 at		
250	Pennsylvania, Hospital	100.00	BBB	250,135
230	Revenue Bonds, Temple University Hospital, Series 1993A,	100.00	ррр	250,133
	6.625%, 11/15/23			
	Pittsburgh School District, Allegheny County, Pennsylvania,	No Opt.		
1,085	General Obligation Bonds, Series	Call	Aa3	1,154,603
	2006B, 5.000%, 9/01/12 – AMBAC Insured			
8,665	Total Pennsylvania			9,281,272
	Puerto Rico – 0.6% (0.6% of Total Investments)			
	Puerto Rico Sales Tax Financing Corporation, Sales Tax Revenue	8/26 at		
1,000	Bonds, First Subordinate Series	100.00	A+	789,540
	2009A, 0.000%, 8/01/32			
	Rhode Island – 0.7% (0.7% of Total Investments)			
	Rhode Island Tobacco Settlement Financing Corporation, Tobacco Settlement Asset-Backed Bonds,			
	Series 2002A:			
	DOILOS 200211.	6/12 at		
255	6.125%, 6/01/32	100.00	BBB	250,071
		6/12 at		,~ · -
725	6.250%, 6/01/42	100.00	BBB	653,682
980	Total Rhode Island			903,753

	South Carolina – 5.1% (5.2% of Total Investments)			
	Berkeley County School District, South Carolina, Installment	12/13 at		
750	Purchase Revenue Bonds, Securing	100.00	A1	785,940
	Assets for Education, Series 2003, 5.250%, 12/01/19			
	Piedmont Municipal Power Agency, South Carolina, Electric	No Opt.		
1,540	Revenue Bonds, Series 1991, 6.750%,	Call	AAA	1,936,180
	1/01/19 – FGIC Insured (ETM)			
	Piedmont Municipal Power Agency, South Carolina, Electric	No Opt.		
2,835	Revenue Bonds, Series 1991, 6.750%,	Call	Baa1	3,390,007
	1/01/19 – FGIC Insured			
	South Carolina JOBS Economic Development Authority, Economic	11/12 at		
5	Development Revenue Bonds, Bon	100.00	A3 (4)	5,444
	Secours Health System Inc., Series 2002A, 5.625%, 11/15/30			
	(Pre-refunded 11/15/12)			
•	South Carolina JOBS Economic Development Authority, Economic	11/12 at		1006
20	Development Revenue Bonds, Bon	100.00	A–	19,963
	Secours Health System Inc., Series 2002B, 5.625%, 11/15/30	5/11 ·		
105	Tobacco Settlement Revenue Management Authority, South	5/11 at	DDD (4)	100 506
195	Carolina, Tobacco Settlement	101.00	BBB (4)	199,506
	Asset-Backed Bonds, Series 2001B, 6.000%, 5/15/22 (Pre-refunded			
5,345	5/15/11) Total South Carolina			6,337,040
3,343	South Dakota – 0.8% (0.8% of Total Investments)			0,337,040
	South Dakota Health and Educational Facilities Authority, Revenue	5/17 at		
1,000	Bonds, Sanford Health,	100.00	AA-	967,870
1,000	Series 2007, 5.000%, 11/01/27	100.00	7171	707,070
	Tennessee – 2.1% (2.1% of Total Investments)			
	Shelby County Health, Educational and Housing Facilities Board,			
	Tennessee, Hospital Revenue			
	Bonds, Methodist Healthcare, Series 2002:			
	,	9/12 at		
750	6.000%, 9/01/17 (Pre-refunded 9/01/12)	100.00	AAA	815,490
		9/12 at		
1,250	6.000%, 9/01/17 (Pre-refunded 9/01/12)	100.00	AAA	1,359,150
	The Tennessee Energy Acquisition Corporation, Gas Revenue	No Opt.		
400	Bonds, Series 2006A, 5.000%, 9/01/13	Call	Ba3	423,780
2,400	Total Tennessee			2,598,420
	Texas – 6.7% (6.8% of Total Investments)			
	Austin, Texas, General Obligation Bonds, Series 2004, 5.000%,	9/14 at		
1,055	9/01/20 – NPFG Insured	100.00	AAA	1,134,737
	Bexar County Housing Finance Corporation, Texas, FNMA	No Opt.		2 06.6 2 0
565	Guaranteed Multifamily Housing Revenue	Call	N/R	586,628
	Bonds, Villas Sonterra Apartments Project, Series 2007A, 4.700%,			
	10/01/15 (Alternative			
	Minimum Tax) Progress Piver Authority Toyon Colletenslined Pollution Control	No Ont		
25	Brazos River Authority, Texas, Collateralized Pollution Control Revenue Bonds, Texas Utilities	No Opt. Call	CCC-	8,397
23	Electric Company, Series 2003D, 5.400%, 10/01/29 (Mandatory put	Call	CCC-	0,371
	10/01/14)			
	Brazos River Authority, Texas, Collateralized Revenue Refunding	6/14 at		
2,000	Bonds, CenterPoint Energy	100.00	A3	2,010,180
,	,			, ,

500	Inc., Series 2004B, 4.250%, 12/01/17 – FGIC Insured Brazos River Authority, Texas, Pollution Control Revenue Refunding Bonds, TXU Electric Company, Series 2001C, 5.750%, 5/01/36 (Mandatory put 11/01/11) (Alternative Minimum Tax)	No Opt. Call	CCC	466,120
15	Brazos River Authority, Texas, Pollution Control Revenue Refunding Bonds, TXU Energy Company LLC, Series 2003A, 6.750%, 4/01/38 (Mandatory put 4/01/13) (Alternative Minimum Tax)	No Opt. Call	CCC-	10,706
1,875	Denton Independent School District, Denton County, Texas, General Obligation Bonds, Series 2006, 5.000%, 8/15/20	8/16 at 100.00	AAA	2,024,888
300	Kerrville Health Facilities Development Corporation, Texas, Revenue Bonds, Sid Peterson Memorial Hospital Project, Series 2005, 5.125%, 8/15/26	No Opt. Call	BBB-	268,113
200	Love Field Airport Modernization Corporation, Texas, Special Facilities Revenue Bonds, Southwest Airlines Company, Series 2010, 5.250%, 11/01/40	11/20 at 100.00	BBB	179,778
325	North Texas Tollway Authority, Second Tier System Revenue Refunding Bonds, Series 2008F, 5.750%, 1/01/38	1/18 at 100.00	A3	307,574
25	Sabine River Authority, Texas, Pollution Control Revenue Bonds, TXU Energy Company LLC Project, Series 2001B, 5.750%, 5/01/30 (Mandatory put 11/01/11)	No Opt. Call	CCC	23,306
1,350	(Alternative Minimum Tax) Texas Municipal Gas Acquisition and Supply Corporation I, Gas Supply Revenue Bonds, Series 2006B, 0.752%, 12/15/17	1/11 at 100.00	A	1,201,311
145	Weslaco Health Facilities Development Corporation, Texas, Hospital Revenue Bonds, Knapp Medical Center, Series 2002, 6.000%, 6/01/17 (Pre-refunded 6/01/12)	6/12 at 100.00	N/R (4)	152,386
8,380	Total Texas			8,374,124
525	Virgin Islands – 0.4% (0.4% of Total Investments) Virgin Islands Public Finance Authority, Matching Fund Loan Notes Revenue Bonds, Senior Lien Series 2010A, 5.000%, 10/01/29	10/20 at 100.00	BBB	490,985
250	Virginia – 0.2% (0.2% of Total Investments) Virginia College Building Authority, Educational Facilities Revenue Refunding Bonds, Marymount University, Series 1998, 5.100%, 7/01/18 – RAAI Insured Washington – 0.7% (0.7% of Total Investments)	1/11 at 100.00	N/R	250,093
295	Washington Public Power Supply System, Revenue Refunding	No Opt. Call	Aaa	367,192
520	Washington State Tobacco Settlement Authority, Tobacco Settlement Asset-Backed Revenue Bonds, Series 2002, 6.500%, 6/01/26	6/13 at 100.00	BBB	526,396
815	Total Washington Wisconsin – 3.7% (3.7% of Total Investments)			893,588

Badger Tobacco Asset Securitization Corporation, Wisconsin, Tobacco Settlement Asset-Backed Bonds, Series 2002:

	20145, 20116 2002.			
		6/12 at		
465	6.125%, 6/01/27 (Pre-refunded 6/01/12)	100.00	AAA	490,733
		6/12 at		
1,480	6.375%, 6/01/32 (Pre-refunded 6/01/12)	100.00	AAA	1,593,531
	Wisconsin Health and Educational Facilities Authority, Revenue	7/11 at		
1,000	Bonds, Agnesian Healthcare	100.00	A-(4)	1,027,610
	Inc., Series 2001, 6.000%, 7/01/21 (Pre-refunded 7/01/11)			
	Wisconsin Health and Educational Facilities Authority, Revenue	2/11 at		
1,105	Bonds, Aurora Health Care Inc.,	100.00	A3	1,105,033
	Series 1999A, 5.500%, 2/15/20 – ACA Insured			
	Wisconsin Health and Educational Facilities Authority, Revenue			
	Bonds, Wheaton Franciscan			
	Healthcare System, Series 2006:			
	·	8/16 at		
200	5.250%, 8/15/18	100.00	BBB+	206,366
		8/16 at		
180	5.250%, 8/15/34	100.00	BBB+	158,319
4,430	Total Wisconsin			4,581,592
\$				
127,690	Total Investments (cost \$120,715,977) – 97.7%			122,353,973
•	Other Assets Less Liabilities – 2.3%			2,850,209
				\$
	Net Assets – 100%			125,204,182
				- , ,

Fair Value Measurements

In determining the fair value of the Fund's investments, various inputs are used. These inputs are summarized in the three broad levels listed below:

Level 1 – Quoted prices in active markets for identical securities.

Level 2 – Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3 – Significant unobservable inputs (including management's assumptions in determining the fair value of investments).

The inputs or methodologies used for valuing securities are not an indication of the risk associated with investing in those securities. The following is a summary of the Fund's fair value measurements as of December 31, 2010:

	Level 1	Level 2	Level 3	Total
Investments:				
Municipal Bonds	\$ —	- \$122,353,973	\$ —	- \$122,353,973

During the period ended December 31, 2010, the Fund recognized no significant transfers to/from Level 1, Level 2, or Level 3.

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 timing differences in recognizing taxable market discount and timing differences in recognizing certain gains and losses on investment transactions. To the extent that differences arise that are permanent in nature, such amounts are reclassified within the capital accounts on the Statement of Assets and Liabilities presented in the annual report, based on their federal tax basis treatment; temporary differences do not require reclassification. Temporary and permanent differences do not impact the net asset value of the Fund.

At December 31, 2010, the cost of investments was \$120,582,215.

Gross unrealized appreciation and gross unrealized depreciation of investments at December 31, 2010, were as follows:

Gross unrealized:

Appreciation \$3,835,854
Depreciation (2,064,096)
Net unrealized appreciation (depreciation) of investments \$1,771,758

- (1) All percentages shown in the Portfolio of Investments are based on net assets.
- (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.
 - Ratings: Using the highest of Standard & Poor's Group ("Standard & Poor's"), Moody's Investor Service,
- (3) Inc.
 - ("Moody's") or Fitch, Inc. ("Fitch") rating. Ratings below BBB by Standard & Poor's, Baa by Moody's or BBB
 - by Fitch are considered to be below investment grade. Holdings designated N/R are not rated by any of these national rating agencies.
 - Backed by an escrow or trust containing sufficient U.S. Government or U.S. Government agency
- (4) securities,
 - which ensure the timely payment of principal and interest. Such investments are normally considered to be equivalent to AAA rated securities.
- N/R Not rated.
- WI/DD Purchased on a when-issued or delayed delivery basis.
- (ETM) Escrowed to maturity.

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: See 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 Select Maturities Municipal Fund

By (Signature and Title) /s/ Kevin J. McCarthy Kevin J. McCarthy

Vice President and Secretary

Date March 1, 2011

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 (Signature and Title) /s/ Gifford R. Zimmerman

Gifford R. Zimmerman

Chief Administrative Officer (principal executive officer)

Date March 1, 2011

By (Signature and Title) /s/ Stephen D. Foy

Stephen D. Foy

Vice President and Controller (principal financial officer)

Date March 1, 2011