

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST

Form NSAR-A

November 29, 2011

PAGE 1
000 A000000 09/30/2011
000 C000000 1258943
000 D000000 N
000 E000000 NF
000 F000000 Y
000 G000000 N
000 H000000 N
000 I000000 6.1
000 J000000 A
001 A000000 PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST
001 B000000 811-21409
001 C000000 6177427825
002 A000000 60 STATE STREET
002 B000000 BOSTON
002 C000000 MA
002 D010000 02109
003 000000 N
004 000000 N
005 000000 N
006 000000 N
007 A000000 N
007 B000000 0
007 C010100 1
008 A000001 PIONEER INVESTMENT MANAGEMENT, INC.
008 B000001 A
008 C000001 801-8255
008 D010001 BOSTON
008 D020001 MA
008 D030001 02109
010 A000001 PIONEER INVESTMENT MANAGEMENT, INC.
010 B000001 801-8255
010 C010001 BOSTON
010 C020001 MA
010 C030001 02109
010 A000002 STATE STREET BANK & TRUST COMPANY
010 C010002 BOSTON
010 C020002 MA
010 C030002 02101
011 A000001 PIONEER FUNDS DISTRIBUTOR, INC.
011 B000001 8-41256
011 C010001 BOSTON
011 C020001 MA
011 C030001 02109
011 C040001 1820
011 A000002 UBS INVESTMENT BANK
011 B000002 8-022651
011 C010002 STAMFORD
011 C020002 CT
011 C030002 06901
011 A000003 RBC CAPITAL MARKETS CORP.
011 B000003 8-045411
PAGE 2
011 C010003 MINNEAPOLIS
011 C020003 MN
011 C030003 55402
011 C040003 4422
011 A000004 MERRILL LYNCH & CO.
011 B000004 8-7221

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

011 C010004 NEW YORK
011 C020004 NY
011 C030004 10281
011 C040004 1201
011 A000005 JANNEY MONTGOMERY SCOTT, LLC
011 B000005 8-462
011 C010005 PHILADELPHIA
011 C020005 PA
011 C030005 19103
011 C040005 1675
011 A000006 WACHOVIA CAPITAL MARKETS, LLC
011 B000006 8-99999
011 C010006 RICHMOND
011 C020006 VA
011 C030006 23219
012 A000001 PIONEER INVEST. MGMT. SHAREHOLDER SER. INC.
012 B000001 85-01359
012 C010001 BOSTON
012 C020001 MA
012 C030001 02109
012 A000002 AMERICAN STOCK TRANSFER & TRUST CO. (COMMON)
012 B000002 85-00000
012 C010002 BROOKLYN
012 C020002 NY
012 C030002 11219
012 A000003 DEUTSCHE BANK TRUST COMPANY AMERICAS (PREF.)
012 B000003 85-00000
012 C010003 NEW YORK CITY
012 C020003 NY
012 C030003 10005
013 A000001 ERNST & YOUNG, LLP
013 B010001 BOSTON
013 B020001 MA
013 B030001 02116
013 B040001 5072
015 A000001 BROWN BROTHERS HARRIMAN & CO.
015 B000001 C
015 C010001 BOSTON
015 C020001 MA
015 C030001 02109
015 E010001 X
018 000000 Y
019 A000000 Y
019 B000000 55
019 C000000 PIONEERFDS
PAGE 3
021 000000 0
022 A000001 FMSBONDS, INC.
022 B000001 59-1842344
022 C000001 3489
022 D000001 7377
022 A000002 JP MORGAN SECURITIES, INC.
022 B000002 13-3379014
022 C000002 6651
022 D000002 2535
022 A000003 RAYMOND JAMES & ASSOCIATES, INC.
022 B000003 59-1237041
022 C000003 1500
022 D000003 4566
022 A000004 B.C. ZIEGLER AND COMPANY
022 B000004 39-0727640
022 C000004 1971

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

022 D000004 1553
022 A000005 PIPER JAFFRAY & CO.
022 B000005 41-0953246
022 C000005 2430
022 D000005 868
022 A000006 BANK OF AMERICA CORP
022 B000006 56-0906609
022 C000006 1589
022 D000006 0
022 A000007 JEFFERIES & COMPANY, INC.
022 B000007 95-2622900
022 C000007 1501
022 D000007 0
022 A000008 CAIN BROTHERS & COMPANY, LLC
022 B000008 13-3960078
022 C000008 1500
022 D000008 0
022 A000009 FIRST TRYON SECURITIES LLC
022 B000009 56-1986792
022 C000009 0
022 D000009 1076
022 A000010 BARCLAYS CAPITAL, INC.
022 B000010 61-0316560
022 C000010 1000
022 D000010 0
023 C000000 23900
023 D000000 18511
024 000000 N
026 A000000 N
026 B000000 Y
026 C000000 N
026 D000000 Y
026 E000000 N
026 F000000 N
026 G010000 N
PAGE 4
026 G020000 N
026 H000000 N
027 000000 N
028 A010000 0
028 A020000 0
028 A030000 0
028 A040000 0
028 B010000 0
028 B020000 0
028 B030000 0
028 B040000 0
028 C010000 0
028 C020000 0
028 C030000 0
028 C040000 0
028 D010000 0
028 D020000 0
028 D030000 0
028 D040000 0
028 E010000 0
028 E020000 0
028 E030000 0
028 E040000 0
028 F010000 0
028 F020000 0
028 F030000 0

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

028	F040000	0
028	G010000	0
028	G020000	0
028	G030000	0
028	G040000	0
028	H000000	0
030	A000000	0
030	B000000	0.00
030	C000000	0.00
031	A000000	0
031	B000000	0
032	000000	0
033	000000	0
035	000000	0
036	B000000	0
038	000000	0
042	A000000	0
042	B000000	0
042	C000000	0
042	D000000	0
042	E000000	0
042	F000000	0
042	G000000	0
042	H000000	0
043	000000	0
	PAGE 5	
044	000000	0
045	000000	Y
046	000000	N
047	000000	Y
048	000000	0.600
048	A010000	0
048	A020000	0.000
048	B010000	0
048	B020000	0.000
048	C010000	0
048	C020000	0.000
048	D010000	0
048	D020000	0.000
048	E010000	0
048	E020000	0.000
048	F010000	0
048	F020000	0.000
048	G010000	0
048	G020000	0.000
048	H010000	0
048	H020000	0.000
048	I010000	0
048	I020000	0.000
048	J010000	0
048	J020000	0.000
048	K010000	0
048	K020000	0.000
049	000000	N
050	000000	N
051	000000	N
052	000000	N
053	A000000	N
054	A000000	Y
054	B000000	Y
054	C000000	Y
054	D000000	N

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

054 E000000 N
 054 F000000 N
 054 G000000 N
 054 H000000 Y
 054 I000000 N
 054 J000000 Y
 054 K000000 N
 054 L000000 N
 054 M000000 Y
 054 N000000 N
 054 O000000 N
 055 A000000 N
 055 B000000 N
 056 000000 Y
 057 000000 N
 PAGE 6
 058 A000000 N
 059 000000 Y
 060 A000000 Y
 060 B000000 Y
 061 000000 0
 062 A000000 Y
 062 B000000 0.0
 062 C000000 0.0
 062 D000000 0.0
 062 E000000 0.0
 062 F000000 0.0
 062 G000000 0.0
 062 H000000 0.0
 062 I000000 0.0
 062 J000000 0.0
 062 K000000 0.0
 062 L000000 0.0
 062 M000000 0.0
 062 N000000 0.0
 062 O000000 146.7
 062 P000000 0.0
 062 Q000000 0.0
 062 R000000 0.3
 063 A000000 0
 063 B000000 21.3
 064 A000000 Y
 064 B000000 Y
 065 000000 N
 066 A000000 N
 067 000000 N
 068 A000000 N
 068 B000000 N
 069 000000 N
 070 A010000 Y
 070 A020000 N
 070 B010000 N
 070 B020000 N
 070 C010000 Y
 070 C020000 N
 070 D010000 N
 070 D020000 N
 070 E010000 Y
 070 E020000 N
 070 F010000 N
 070 F020000 N
 070 G010000 Y

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

070	G020000	N	
070	H010000	N	
070	H020000	N	
070	I010000	N	
070	I020000	N	
	PAGE	7	
070	J010000	Y	
070	J020000	Y	
070	K010000	Y	
070	K020000	Y	
070	L010000	N	
070	L020000	N	
070	M010000	N	
070	M020000	N	
070	N010000	N	
070	N020000	N	
070	O010000	Y	
070	O020000	N	
070	P010000	Y	
070	P020000	N	
070	Q010000	N	
070	Q020000	N	
070	R010000	N	
070	R020000	N	
071	A000000		25386
071	B000000		26983
071	C000000		424016
071	D000000		6
072	A000000	6	
072	B000000		15857
072	C000000		0
072	D000000		0
072	E000000		0
072	F000000		1298
072	G000000		151
072	H000000		0
072	I000000		3
072	J000000		55
072	K000000		0
072	L000000		14
072	M000000		7
072	N000000		12
072	O000000		0
072	P000000		0
072	Q000000		0
072	R000000		31
072	S000000		70
072	T000000		0
072	U000000		0
072	V000000		0
072	W000000		242
072	X000000		1883
072	Y000000		0
072	Z000000		13974
072AA	000000		2102
072BB	000000		0
072CC	010000		25702
	PAGE	8	
072CC	020000		0
072DD	010000		13088
072DD	020000		0
072EE	000000		0

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

073	A010000	0.5700
073	A020000	0.0000
073	B000000	0.0000
073	C000000	0.0000
074	A000000	3678
074	B000000	0
074	C000000	0
074	D000000	434521
074	E000000	0
074	F000000	831
074	G000000	0
074	H000000	0
074	I000000	0
074	J000000	90
074	K000000	0
074	L000000	9488
074	M000000	49
074	N000000	448657
074	O000000	0
074	P000000	301
074	Q000000	0
074	R010000	0
074	R020000	0
074	R030000	0
074	R040000	2126
074	S000000	150005
074	T000000	296225
074	U010000	23204
074	U020000	0
074	V010000	12.77
074	V020000	0.00
074	W000000	0.0000
074	X000000	9231
074	Y000000	0
075	A000000	0
075	B000000	282000
076	000000	13.85
077	A000000	N
078	000000	N
080	C000000	0
081	B000000	0
082	B000000	0
083	B000000	0
084	B000000	0
086	A010000	70
086	A020000	895
086	B010000	0
	PAGE	9
086	B020000	0
086	C010000	0
086	C020000	0
086	D010000	0
086	D020000	0
086	E010000	0
086	E020000	0
086	F010000	0
086	F020000	0
087	A010000	COMMON STOCK
087	A020000	723762100
087	A030000	MAV
087	B010000	PREFERRED STOCK - SERIES A
087	B020000	723762209

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

087 C010000 PREFERRED STOCK - SERIES B
087 C020000 723762308
088 A000000 N
088 B000000 N
088 C000000 N
088 D000000 Y
SIGNATURE MARK E. BRADLEY
TITLE TREASURER