

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST
Form NSAR-B
May 30, 2012

PAGE 1
000 B000000 03/31/2012
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-B

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 56
019 C000000 PIONEERFDS
PAGE 3
021 000000 0
022 A000001 JP MORGAN SECURITIES, INC.
022 B000001 13-3379014
022 C000001 25734
022 D000001 2535
022 A000002 BLACKROCK INVESTMENTS, INC.
022 C000002 15000
022 D000002 9000
022 A000003 FIRST MIAMI SECURITIES
022 B000003 59-1842344
022 C000003 3489
022 D000003 10377
022 A000004 FIRST TRYON SECURITIES LLC
022 B000004 56-1986792
022 C000004 8409
022 D000004 1076

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

022 A000005 RAYMOND JAMES & ASSOCIATES, INC.
022 B000005 59-1237041
022 C000005 1500
022 D000005 5040
022 A000006 B.C. ZIEGLER AND COMPANY
022 B000006 39-0727640
022 C000006 5920
022 D000006 0
022 A000007 PIPER JAFFRAY & CO.
022 B000007 41-0953246
022 C000007 2430
022 D000007 868
022 A000008 BB&T INVESTMENT SERVICES, INC.
022 B000008 80-0078024
022 C000008 2415
022 D000008 0
022 A000009 JEFFERIES & COMPANY, INC.
022 B000009 95-2622900
022 C000009 1501
022 D000009 860
022 A000010 STIFEL, NICOLAUS & COMPANY, INC.
022 B000010 43-0538770
022 C000010 280
022 D000010 1733
023 C000000 76416
023 D000000 36207
024 000000 N
026 A000000 N
026 B000000 Y
026 C000000 N
026 D000000 Y
026 E000000 N
026 F000000 N
026 G010000 N
026 G020000 N
PAGE 4
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
028 F040000 0

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

| | | |
|-----|---------|-------|
| 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 |
| 044 | 000000 | 0 |
| | PAGE 5 | |
| 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 |
| 054 | E000000 | N |

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

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
058 A000000 N

PAGE 6

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 147.2
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 0.0
062 P000000 0.0
062 Q000000 0.0
062 R000000 2.4
063 A000000 0
063 B000000 23.0
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
070 G020000 N

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

| | | | |
|-------|---------|----|--------|
| 070 | H010000 | N | |
| 070 | H020000 | N | |
| 070 | I010000 | N | |
| 070 | I020000 | N | |
| 070 | J010000 | Y | |
| | PAGE | 7 | |
| 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 | | 63492 |
| 071 | B000000 | | 64988 |
| 071 | C000000 | | 426751 |
| 071 | D000000 | | 15 |
| 072 | A000000 | 12 | |
| 072 | B000000 | | 29045 |
| 072 | C000000 | | 0 |
| 072 | D000000 | | 0 |
| 072 | E000000 | | 0 |
| 072 | F000000 | | 2626 |
| 072 | G000000 | | 411 |
| 072 | H000000 | | 0 |
| 072 | I000000 | | 13 |
| 072 | J000000 | | 15 |
| 072 | K000000 | | 0 |
| 072 | L000000 | | 3 |
| 072 | M000000 | | 15 |
| 072 | N000000 | | 25 |
| 072 | O000000 | | 0 |
| 072 | P000000 | | 0 |
| 072 | Q000000 | | 0 |
| 072 | R000000 | | 60 |
| 072 | S000000 | | 276 |
| 072 | T000000 | | 0 |
| 072 | U000000 | | 0 |
| 072 | V000000 | | 0 |
| 072 | W000000 | | 473 |
| 072 | X000000 | | 3917 |
| 072 | Y000000 | | 0 |
| 072 | Z000000 | | 25128 |
| 072AA | 000000 | | 0 |
| 072BB | 000000 | | 5391 |
| 072CC | 010000 | | 41795 |
| 072CC | 020000 | | 0 |
| | PAGE | 8 | |
| 072DD | 010000 | | 30308 |
| 072DD | 020000 | | 0 |
| 072EE | 000000 | | 0 |
| 073 | A010000 | | 1.3100 |

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

| | | |
|-----|---------|--------------------------|
| 073 | A020000 | 0.0000 |
| 073 | B000000 | 0.0000 |
| 073 | C000000 | 0.0000 |
| 074 | A000000 | 0 |
| 074 | B000000 | 0 |
| 074 | C000000 | 0 |
| 074 | D000000 | 441031 |
| 074 | E000000 | 0 |
| 074 | F000000 | 1097 |
| 074 | G000000 | 0 |
| 074 | H000000 | 0 |
| 074 | I000000 | 6000 |
| 074 | J000000 | 1130 |
| 074 | K000000 | 0 |
| 074 | L000000 | 8638 |
| 074 | M000000 | 210 |
| 074 | N000000 | 458106 |
| 074 | O000000 | 0 |
| 074 | P000000 | 237 |
| 074 | Q000000 | 0 |
| 074 | R010000 | 0 |
| 074 | R020000 | 0 |
| 074 | R030000 | 0 |
| 074 | R040000 | 8224 |
| 074 | S000000 | 150008 |
| 074 | T000000 | 299637 |
| 074 | U010000 | 23282 |
| 074 | U020000 | 0 |
| 074 | V010000 | 12.87 |
| 074 | V020000 | 0.00 |
| 074 | W000000 | 0.0000 |
| 074 | X000000 | 9899 |
| 074 | Y000000 | 0 |
| 075 | A000000 | 0 |
| 075 | B000000 | 287325 |
| 076 | 000000 | 14.72 |
| 077 | A000000 | Y |
| 077 | B000000 | Y |
| 077 | C000000 | N |
| 077 | D000000 | N |
| 077 | E000000 | N |
| 077 | F000000 | N |
| 077 | G000000 | N |
| 077 | H000000 | N |
| 077 | I000000 | N |
| 077 | J000000 | N |
| 077 | K000000 | N |
| | PAGE | 9 |
| 077 | L000000 | N |
| 077 | M000000 | N |
| 077 | N000000 | N |
| 077 | O000000 | N |
| 077 | P000000 | N |
| 078 | 000000 | N |
| 080 | A000000 | ICI MUTUAL INSURANCE CO. |
| 080 | C000000 | 45000 |
| 081 | A000000 | Y |
| 081 | B000000 | 56 |
| 082 | A000000 | N |
| 082 | B000000 | 0 |
| 083 | A000000 | N |
| 083 | B000000 | 0 |

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

084 A000000 N
084 B000000 0
085 A000000 Y
085 B000000 N
086 A010000 149
086 A020000 1961
086 B010000 0
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
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