

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
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000 I000000 6.1
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001 B000000 811-21409
001 C000000 6177427825
002 A000000 60 STATE STREET
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008 A000001 PIONEER INVESTMENT MANAGEMENT, INC.
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010 A000002 STATE STREET BANK & TRUST COMPANY
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011 A000001 PIONEER FUNDS DISTRIBUTOR, INC.
011 B000001 8-41256
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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
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011 A000004 MERRILL LYNCH & CO.
011 B000004 8-7221

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011 C010004 NEW YORK
011 C020004 NY
011 C030004 10281
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011 A000005 JANNEY MONTGOMERY SCOTT, LLC
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011 C010005 PHILADELPHIA
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011 C030005 19103
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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
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012 A000002 AMERICAN STOCK TRANSFER & TRUST CO. (COMMON)
012 B000002 85-00000
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012 A000003 DEUTSCHE BANK TRUST COMPANY AMERICAS (PREF.)
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013 A000001 ERNST & YOUNG, LLP
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022 C000001 3489
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022 A000002 JP MORGAN SECURITIES, INC.
022 B000002 13-3379014
022 C000002 6651
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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

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022 D000004 1553
022 A000005 PIPER JAFFRAY & CO.
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022 A000006 BANK OF AMERICA CORP
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022 A000009 FIRST TRYON SECURITIES LLC
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022 A000010 BARCLAYS CAPITAL, INC.
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087	A010000	COMMON STOCK
087	A020000	723762100
087	A030000	MAV
087	B010000	PREFERRED STOCK - SERIES A
087	B020000	723762209

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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