

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST

Form NSAR-A

November 28, 2008

PAGE 1
000 A000000 09/30/2008
000 C000000 1258943
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000 H000000 N
000 I000000 6.1
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001 B000000 811-21409
001 C000000 6177427825
002 A000000 60 STATE STREET
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010 A000002 PRINCETON ADMINISTRATORS, LLC
010 C010002 PRINCETON
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011 A000001 PIONEER FUNDS DISTRIBUTOR, INC.
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PAGE 2
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011 A000002 UBS INVESTMENT BANK
011 B000002 8-022651
011 C010002 STAMFORD

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011 C020002 CT
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011 A000003 RBC CAPITAL MARKETS CORP.
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011 C010003 MINNEAPOLIS
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011 C030003 55402
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011 A000004 MERRILL LYNCH & CO.
011 B000004 8-7221
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011 A000005 JANNEY MONTGOMERY SCOTT, LLC
011 B000005 8-462
011 C010005 PHILADELPHIA
011 C020005 PA
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011 A000006 WACHOVIA CAPITAL MARKETS, LLC
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011 C010006 RICHMOND
011 C020006 VA
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012 A000001 PIONEER INVEST. MGMT. SHAREHOLDER SERVICES
012 B000001 85-01359
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012 A000002 AMERICAN STOCK TRANSFER & TRUST CO.
012 B000002 85-00000
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012 C030002 11219
012 A000003 DEUTSCHE BANK TRUST COMPANY AMERICAS (PREF.)
012 B000003 85-00000
012 C010003 NEW YORK CITY
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012 C030003 10005
013 A000001 ERNST & YOUNG, LLP
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PAGE 3
015 A000001 BROWN BROTHERS HARRIMAN & CO.
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022 A000004 B.C. ZIEGLER AND CO.
022 B000004 39-0727640
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022 A000005 PIPER JAFFRAY & CO.
022 B000005 41-0953246
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022 A000006 CITIGROUP GLOBAL MARKETS, INC.
022 B000006 11-2418191
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022 A000007 BB&T INVESTMENTS SERVICES, INC.
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022 A000008 RAYMOND JAMES & ASSOCIATES, INC.
022 B000008 59-1237041
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022 A000009 RBC CAPITAL MARKETS CORP.
022 B000009 13-5033225
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022 A000010 FIFTH THIRD SECURITIES, INC.
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PAGE 7

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PAGE 8

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SIGNATURE	MARY KELLERMANN	
TITLE	ACCOUNTING MANAGER	