

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST

Form NSAR-A

November 28, 2008

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000 A000000 09/30/2008
000 C000000 1258943
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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 PRINCETON ADMINISTRATORS, LLC
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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 C040003 4422
011 A000004 MERRILL LYNCH & CO.
011 B000004 8-7221
011 C010004 NEW YORK
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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
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011 C020006 VA
011 C030006 23219
012 A000001 PIONEER INVEST. MGMT. SHAREHOLDER SERVICES
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012 A000002 AMERICAN STOCK TRANSFER & TRUST CO.
012 B000002 85-00000
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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 A000003 FIRST TRYON SECURITIES, LLC
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 022 A000004 B.C. ZIEGLER AND CO.
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 022 B000005 41-0953246
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 022 A000006 CITIGROUP GLOBAL MARKETS, INC.
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 022 A000007 BB&T INVESTMENTS SERVICES, INC.
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087	C010000	PREFERRED STOCK - SERIES B
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SIGNATURE	MARY KELLERMANN	
TITLE	ACCOUNTING MANAGER	