

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST

Form NSAR-A

November 29, 2007

PAGE 1  
000 A000000 09/30/2007  
000 C000000 1258943  
000 D000000 N  
000 E000000 NF  
000 F000000 Y  
000 G000000 N  
000 H000000 N  
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001 B000000 811-21409  
001 C000000 6177427825  
002 A000000 60 STATE STREET  
002 B000000 BOSTON  
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008 B000001 A  
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008 D020001 MA  
008 D030001 02109  
010 A000001 PIONEER INVESTMENT MANAGEMENT, INC.  
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010 A000002 PRINCETON ADMINISTRATORS, LLC  
010 C010002 PRINCETON  
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010 C040002 9095  
011 A000001 PIONEER FUNDS DISTRIBUTOR, INC.  
011 B000001 8-12345678  
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PAGE 2  
011 C020001 MA  
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011 A000002 UBS WARBURG  
011 B000002 8-022651  
011 C010002 STAMFORD

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011 C020002 CT  
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011 A000003 RBC CAPITAL MARKETS  
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011 A000004 MERRILL LYNCH, PIERCE, FENNER & SMITH INC.  
011 B000004 8-7221  
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  
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011 C040005 1675  
011 A000006 WACHOVIA CAPITAL MARKETS, LLC  
011 B000006 8-99999  
011 C010006 RICHMOND  
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011 C030006 23219  
012 A000001 PIONEER INV. MGMT. SHAREHOLDER SERVICES, INC.  
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012 A000002 AMERICAN STOCK TRANSFER & TRUST COMPANY  
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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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015 A000001 BROWN BROTHERS HARRIMAN & CO.  
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 022 A000004 CITIGROUP GLOBAL MARKETS, INC.  
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 022 B000006 52-1037969  
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 022 A000007 STATE STREET GLOBAL MARKETS, LLC  
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 022 B000009 54-0796506  
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SIGNATURE	MARY KELLERMANN	
TITLE	ACCOUNTING MANAGER	