

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 C000000 6177427825  
002 A000000 60 STATE STREET  
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008 A000001 PIONEER INVESTMENT MANAGEMENT, INC.  
008 B000001 A  
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010 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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011 C020001 MA  
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011 A000002 UBS WARBURG  
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011 C010002 STAMFORD

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011 C020002 CT  
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011 A000004 MERRILL LYNCH, PIERCE, FENNER & SMITH INC.  
011 B000004 8-7221  
011 C010004 NEW YORK  
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011 A000005 JANNEY MONTGOMERY SCOTT LLC  
011 B000005 8-462  
011 C010005 PHILADELPHIA  
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011 A000006 WACHOVIA CAPITAL MARKETS, LLC  
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011 C010006 RICHMOND  
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012 A000001 PIONEER INV. MGMT. SHAREHOLDER SERVICES, INC.  
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012 A000002 AMERICAN STOCK TRANSFER & TRUST COMPANY  
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013 A000001 ERNST & YOUNG LLP  
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SIGNATURE	MARY KELLERMANN	
TITLE	ACCOUNTING MANAGER	