

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST

Form NSAR-A

November 27, 2013

PAGE 1  
000 A000000 09/30/2013  
000 C000000 0001258943  
000 D000000 N  
000 E000000 NF  
000 F000000 Y  
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000 H000000 N  
000 I000000 6.1  
000 J000000 A  
001 A000000 PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST  
001 B000000 811-21409  
001 C000000 6177427825  
002 A000000 60 STATE STREET  
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002 D010000 02109  
003 000000 N  
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007 C010600 6  
007 C010700 7  
007 C010800 8  
007 C010900 9  
007 C011000 10  
008 A000001 PIONEER INVESTMENT MANAGEMENT, INC.  
008 B000001 A  
008 C000001 801-8255  
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008 D030001 02109  
010 A000001 PIONEER INVESTMENT MANAGEMENT, INC.  
010 B000001 801-8255  
010 C010001 BOSTON  
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010 C030001 02109  
010 A000002 BROWN BROTHERS HARRIMAN & CO.  
010 C010002 BOSTON  
010 C020002 MA  
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011 A000001 PIONEER FUNDS DISTRIBUTOR, INC.  
011 B000001 8-41256  
011 C010001 BOSTON  
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011 C030001 02109  
011 C040001 1820  
011 A000002 UBS INVESTMENT BANK  
011 B000002 8-022651  
011 C010002 STAMFORD  
011 C020002 CT

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011 C030002 06901  
011 A000003 RBC CAPITAL MARKETS CORP.  
011 B000003 8-045411  
011 C010003 MINNEAPOLIS  
011 C020003 MN  
011 C030003 55402  
011 C040003 4422  
011 A000004 MERRILL LYNCH & CO.  
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  
011 C020005 PA  
011 C030005 19103  
011 C040005 1675  
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 SERV. INC.  
012 B000001 85-01359  
012 C010001 BOSTON  
012 C020001 MA  
012 C030001 02109  
012 A000002 AMERICAN STOCK TRANSFER & TRUST CO. (COMMON)  
012 B000002 85-00000  
012 C010002 BROOKLYN  
012 C020002 NY  
012 C030002 11219  
012 A000003 DEUTSCHE BANK TRUST COMPANY AMERICAS (PREF.)  
012 B000003 85-05212  
012 C010003 NEW YORK  
012 C020003 NY  
012 C030003 10005  
013 A000001 ERNST & YOUNG, LLP  
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015 A000001 BROWN BROTHERS HARRIMAN & CO.  
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015 B000002 S  
015 C010002 BUENOS AIRES  
015 D010002 ARGENTINA  
015 E040002 X  
015 A000003 HSBC BANK AUSTRALIA LIMITED  
015 B000003 S  
015 C010003 SYDNEY  
015 D010003 AUSTRALIA  
015 E040003 X  
015 A000004 UNICREDIT BANK AUSTRIA AG

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015 B000004 S  
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015 D010004 AUSTRIA  
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015 A000006 EUROCLEAR BANK SA NV  
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015 A000007 BNP PARIBAS SECURITIES SERVICES  
015 B000007 S  
015 C010007 PANTIN  
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015 E040007 X  
015 A000008 CITIBANK, N.A., SAO PAULO  
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015 A000010 RBC INVESTOR SERVICES TRUST  
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015 E040010 X  
015 A000011 BANCO DE CHILE  
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015 A000013 CITITRUST COLOMBIA S.A., SOCIEDAD FIDUCIARA  
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015 A000014 CITIBANK EUROPE PLC, ORGANIZACNI SLOZKA  
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015 E040014 X  
015 A000015 SKANDINAVISKA ENSKILDA BANKEN AB (PUBL)  
015 B000015 S  
015 C010015 COPENHAGEN  
015 D010015 DENMARK  
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015 A000016 CITIBANK, N.A., CAIRO BRANCH  
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015 C010016 CAIRO  
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015 E040017 X  
015 A000018 BNP PARIBAS SECURITIES SERVICES  
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015 E040018 X  
015 A000019 BNP PARIBAS SECURITIES SERVICES  
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015 A000020 STANDARD CHARTERED BANK GHANA LTD.  
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015 A000021 HSBC BANK PLC, ATHENS BRANCH  
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015 E040021 X  
015 A000022 STANDARD CHARTERED BANK (HONG KONG) LIMITED  
015 B000022 S  
015 C010022 KWUN TONG  
015 D010022 HONG KONG  
015 E040022 X  
015 A000023 CITIBANK EUROPE PLC, HUNGARIAN BRANCH OFFICE  
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015 D010023 HUNGARY  
015 E040023 X  
015 A000024 CITIBANK, N.A., MUMBAI BRANCH  
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015 A000026 CITIBANK, NA., LONDON BRANCH  
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015 D010026 IRELAND  
015 E040026 X  
015 A000027 BANK HAPOLIM BM  
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015 E040027 X  
015 A000028 BNP PARIBAS SECURITIES SERVICES, MILAN BRANCH  
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015 C010028 MILAN

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015 D010028 ITALY  
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015 A000030 HSBC BANK MIDDLE EAST LIMITED, JORDAN BRANCH  
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015 A000031 CFC STANBIC BANK LIMITED  
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015 D010031 KENYA  
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015 A000032 HSBC BANK MIDDLE EAST LIMITED, KUWAIT BRANCH  
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015 A000033 KBL EUROPEAN PRIVATE BANKERS SA  
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015 A000035 BANCO NACIONAL DE MEXICO, S.A. (BANAMEX)  
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015 A000036 CITIBANK MAGHREB  
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015 A000038 HSBC LIMITED, NEW ZEALAND BRANCH  
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015 E040038 X  
015 A000039 STANBIC IBTC BANK PLC  
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015 E040039 X  
015 A000040 NORDEA BANK NORGE ASA  
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015 B000041 S  
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015 D010047 RUSSIA  
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015 B000048 S  
015 C010048 RIYADH  
015 D010048 SAUDI ARABIA  
015 E040048 X  
015 A000049 STANDARD CHARTERED BANK SINGAPORE BRANCH  
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015 C010050 BRATISLAVA  
015 D010050 SLOVAKIA  
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015 A000051 STANDARD BANK OF SOUTH AFRICA LIMITED  
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PAGE 8  
015 A000052 CITIBANK KOREA INC  
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015 A000063 HSBC BANK (VIETNAM) LTD  
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015 A000064 UNICREDIT BANK AUSTRIA AG  
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087	A030000	MAV
087	B010000	PREFERRED STOCK - SERIES A
087	B020000	723762209
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	