

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  
000 G000000 N  
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  
002 B000000 BOSTON  
002 C000000 MA  
002 D010000 02109  
003 000000 N  
004 000000 N  
005 000000 N  
006 000000 N  
007 A000000 N  
007 B000000 0  
007 C010100 1  
007 C010200 2  
007 C010300 3  
007 C010400 4  
007 C010500 5  
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  
008 D010001 BOSTON  
008 D020001 MA  
008 D030001 02109  
010 A000001 PIONEER INVESTMENT MANAGEMENT, INC.  
010 B000001 801-8255  
010 C010001 BOSTON  
010 C020001 MA  
010 C030001 02109  
010 A000002 BROWN BROTHERS HARRIMAN & CO.  
010 C010002 BOSTON  
010 C020002 MA  
010 C030002 02109  
011 A000001 PIONEER FUNDS DISTRIBUTOR, INC.  
011 B000001 8-41256  
011 C010001 BOSTON  
011 C020001 MA  
PAGE 2  
011 C030001 02109  
011 C040001 1820  
011 A000002 UBS INVESTMENT BANK  
011 B000002 8-022651  
011 C010002 STAMFORD  
011 C020002 CT

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

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  
013 B010001 BOSTON  
013 B020001 MA  
013 B030001 02116  
013 B040001 5072  
015 A000001 BROWN BROTHERS HARRIMAN & CO.  
PAGE 3  
015 B000001 C  
015 C010001 BOSTON  
015 C020001 MA  
015 C030001 02109  
015 E010001 X  
015 A000002 CITIBANK, N.A. BUENOS AIRES BRANCH  
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

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

015 B000004 S  
015 C010004 VIENNA  
015 D010004 AUSTRIA  
015 E040004 X  
015 A000005 STANDARD CHARTERED BANK, BANGLADESH BRANCH  
015 B000005 S  
015 C010005 DHAKA  
015 D010005 BANGLADESH  
015 E040005 X  
015 A000006 EUROCLEAR BANK SA NV  
015 B000006 S  
015 C010006 BRUSSELS  
015 D010006 BELGIUM  
015 E040006 X  
015 A000007 BNP PARIBAS SECURITIES SERVICES  
015 B000007 S  
015 C010007 PANTIN  
015 D010007 BELGIUM  
015 E040007 X  
015 A000008 CITIBANK, N.A., SAO PAULO  
015 B000008 S  
015 C010008 SAO PAULO  
015 D010008 BRAZIL  
015 E040008 X  
015 A000009 ING BANK, N.V., SOFIA BRANCH  
015 B000009 S  
015 C010009 SOFIA  
015 D010009 BULGARIA  
015 E040009 X  
015 A000010 RBC INVESTOR SERVICES TRUST  
015 B000010 S  
015 C010010 TORONTO  
015 D010010 CANADA  
015 E040010 X  
015 A000011 BANCO DE CHILE  
PAGE 4  
015 B000011 S  
015 C010011 SANTIAGO  
015 D010011 CHILE  
015 E040011 X  
015 A000012 STANDARD CHARTERED BANK (CHINA) LTD.  
015 B000012 S  
015 C010012 SHANGHAI  
015 D010012 CHINA  
015 E040012 X  
015 A000013 CITITRUST COLOMBIA S.A., SOCIEDAD FIDUCIARA  
015 B000013 S  
015 C010013 BOGATA  
015 D010013 COLOMBIA  
015 E040013 X  
015 A000014 CITIBANK EUROPE PLC, ORGANIZACNI SLOZKA  
015 B000014 S  
015 C010014 PRAGUE  
015 D010014 CZECH REPUBLIC  
015 E040014 X  
015 A000015 SKANDINAVISKA ENSKILDA BANKEN AB (PUBL)  
015 B000015 S  
015 C010015 COPENHAGEN  
015 D010015 DENMARK  
015 E040015 X  
015 A000016 CITIBANK, N.A., CAIRO BRANCH  
015 B000016 S

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

015 C010016 CAIRO  
015 D010016 EGYPT  
015 E040016 X  
015 A000017 NORDEA BANK FINLAND PLC  
015 B000017 S  
015 C010017 HELSINKI  
015 D010017 FINLAND  
015 E040017 X  
015 A000018 BNP PARIBAS SECURITIES SERVICES  
015 B000018 S  
015 C010018 PARIS  
015 D010018 FRANCE  
015 E040018 X  
015 A000019 BNP PARIBAS SECURITIES SERVICES  
015 B000019 S  
015 C010019 FRANKFURT  
015 D010019 GERMANY  
015 E040019 X  
015 A000020 STANDARD CHARTERED BANK GHANA LTD.  
015 B000020 S  
015 C010020 ACCRA  
015 D010020 GHANA  
015 E040020 X  
015 A000021 HSBC BANK PLC, ATHENS BRANCH  
015 B000021 S  
PAGE 5  
015 C010021 ATHENS  
015 D010021 GREECE  
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  
015 B000023 S  
015 C010023 BUDAPEST  
015 D010023 HUNGARY  
015 E040023 X  
015 A000024 CITIBANK, N.A., MUMBAI BRANCH  
015 B000024 S  
015 C010024 MUMBAI  
015 D010024 INDIA  
015 E040024 X  
015 A000025 CITIBANK, N.A., JAKARTA BRANCH  
015 B000025 S  
015 C010025 JAKARTA  
015 D010025 INDONESIA  
015 E040025 X  
015 A000026 CITIBANK, NA., LONDON BRANCH  
015 B000026 S  
015 C010026 LONDON  
015 D010026 IRELAND  
015 E040026 X  
015 A000027 BANK HAPOLIM BM  
015 B000027 S  
015 C010027 TEL AVIV  
015 D010027 ISRAEL  
015 E040027 X  
015 A000028 BNP PARIBAS SECURITIES SERVICES, MILAN BRANCH  
015 B000028 S  
015 C010028 MILAN

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

015 D010028 ITALY  
015 E040028 X  
015 A000029 SUMITOMO MITSU BANKING CORPORATION  
015 B000029 S  
015 C010029 TOKYO  
015 D010029 JAPAN  
015 E040029 X  
015 A000030 HSBC BANK MIDDLE EAST LIMITED, JORDAN BRANCH  
015 B000030 S  
015 C010030 AMMAN  
015 D010030 JORDAN  
015 E040030 X  
015 A000031 CFC STANBIC BANK LIMITED  
015 B000031 S  
015 C010031 NAIROBI  
PAGE 6  
015 D010031 KENYA  
015 E040031 X  
015 A000032 HSBC BANK MIDDLE EAST LIMITED, KUWAIT BRANCH  
015 B000032 S  
015 C010032 SAFAT  
015 D010032 KUWAIT  
015 E040032 X  
015 A000033 KBL EUROPEAN PRIVATE BANKERS SA  
015 B000033 S  
015 C010033 LUXEMBOURG  
015 D010033 LUXEMBOURG  
015 E040033 X  
015 A000034 HSBC BANK MALAYSIA BERHAD  
015 B000034 S  
015 C010034 KUALA LUMPUR  
015 D010034 MALAYSIA  
015 E040034 X  
015 A000035 BANCO NACIONAL DE MEXICO, S.A. (BANAMEX)  
015 B000035 S  
015 C010035 MEXICO CITY  
015 D010035 MEXICO  
015 E040035 X  
015 A000036 CITIBANK MAGHREB  
015 B000036 S  
015 C010036 CASABLANCA  
015 D010036 MOROCCO  
015 E040036 X  
015 A000037 BNP PARIBAS SECURITIES SERVICES  
015 B000037 S  
015 C010037 PANTIN  
015 D010037 NETHERLANDS  
015 E040037 X  
015 A000038 HSBC LIMITED, NEW ZEALAND BRANCH  
015 B000038 S  
015 C010038 AUCKLAND  
015 D010038 NEW ZEALAND  
015 E040038 X  
015 A000039 STANBIC IBTC BANK PLC  
015 B000039 S  
015 C010039 LAGOS  
015 D010039 NIGERIA  
015 E040039 X  
015 A000040 NORDEA BANK NORGE ASA  
015 B000040 S  
015 C010040 OSLO  
015 D010040 NORWAY

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

015 E040040 X  
015 A000041 CITIBANK DEL PERU S.A.  
015 B000041 S  
015 C010041 LIMA  
015 D010041 PERU  
PAGE 7  
015 E040041 X  
015 A000042 HSBC LIMITED, PHILIPPINE BRANCH  
015 B000042 S  
015 C010042 TAGUIG CITY  
015 D010042 PHILIPPINES  
015 E040042 X  
015 A000043 BANK HANDLOWY W WARSZAWIE SA  
015 B000043 S  
015 C010043 WARSAW  
015 D010043 POLAND  
015 E040043 X  
015 A000044 BNP PARIBAS SECURITIES SERVICES  
015 B000044 S  
015 C010044 PARIS  
015 D010044 PORTUGAL  
015 E040044 X  
015 A000045 HSBC BANK MIDDLE EAST LIMITED, QATAR BRANCH  
015 B000045 S  
015 C010045 ST. HELIER  
015 D010045 QATAR  
015 E040045 X  
015 A000046 ING BANK N.V., BUCHAREST BRANCH  
015 B000046 S  
015 C010046 BUCHAREST  
015 D010046 ROMANIA  
015 E040046 X  
015 A000047 ZAO CITIBANK  
015 B000047 S  
015 C010047 MOSCOW  
015 D010047 RUSSIA  
015 E040047 X  
015 A000048 HSBC SAUDI ARABIA LIMITED  
015 B000048 S  
015 C010048 RIYADH  
015 D010048 SAUDI ARABIA  
015 E040048 X  
015 A000049 STANDARD CHARTERED BANK SINGAPORE BRANCH  
015 B000049 S  
015 C010049 SINGAPORE  
015 D010049 SINGAPORE  
015 E040049 X  
015 A000050 ING BANK NV, BRATISLAVA BRANCH  
015 B000050 S  
015 C010050 BRATISLAVA  
015 D010050 SLOVAKIA  
015 E040050 X  
015 A000051 STANDARD BANK OF SOUTH AFRICA LIMITED  
015 B000051 S  
015 C010051 JOHANNESBURG  
015 D010051 SOUTH AFRICA  
015 E040051 X  
PAGE 8  
015 A000052 CITIBANK KOREA INC  
015 B000052 S  
015 C010052 SEOUL  
015 D010052 SOUTH KOREA

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

015 E040052 X  
015 A000053 BANCO BILBAO VIZCAYA AREGENTARIA SA  
015 B000053 S  
015 C010053 MADRID  
015 D010053 SPAIN  
015 E040053 X  
015 A000054 HSBC, SRI LANKA BRANCH  
015 B000054 S  
015 C010054 COLOMBO  
015 D010054 SRI LANKA  
015 E040054 X  
015 A000055 SKANDINAVISKA ENSKILDA BANKEN AB (PUBL)  
015 B000055 S  
015 C010055 STOCKHOLM  
015 D010055 SWEDEN  
015 E040055 X  
015 A000056 CREDIT SUISSE AG  
015 B000056 S  
015 C010056 ZURICH  
015 D010056 SWITZERLAND  
015 E040056 X  
015 A000057 BANK OF TAIWAN  
015 B000057 S  
015 C010057 TAIPEI  
015 D010057 TAIWAN  
015 E040057 X  
015 A000058 HSBC LIMITED, THAILAND BRANCH  
015 B000058 S  
015 C010058 BANGKOK  
015 D010058 THAILAND  
015 E040058 X  
015 A000059 CITIBANK ANONIM SIRKETI  
015 B000059 S  
015 C010059 ISTANBUL  
015 D010059 TURKEY  
015 E040059 X  
015 A000060 HSBC BANK MIDDLE EAST LIMITED  
015 B000060 S  
015 C010060 DUBAI  
015 D010060 UNITED ARAB EMIRATES  
015 E040060 X  
015 A000061 HSBC BANK PLC  
015 B000061 S  
015 C010061 LONDON  
015 D010061 UNITED KINGDOM  
015 E040061 X  
015 A000062 CITIBANK, N.A., CARACAS BRANCH  
PAGE 9  
015 B000062 S  
015 C010062 CARACAS  
015 D010062 VENEZUELA  
015 E040062 X  
015 A000063 HSBC BANK (VIETNAM) LTD  
015 B000063 S  
015 C010063 HO CHI MINH CITY  
015 D010063 VIETNAM  
015 E040063 X  
015 A000064 UNICREDIT BANK AUSTRIA AG  
015 B000064 S  
015 C010064 VIENNA  
015 D010064 CROATIA  
015 E040064 X

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

018 000000 Y  
 019 A000000 Y  
 019 B000000 52  
 019 C000000 PIONEERFDS  
 020 C000001 0  
 020 C000002 0  
 020 C000003 0  
 020 C000004 0  
 020 C000005 0  
 020 C000006 0  
 020 C000007 0  
 020 C000008 0  
 020 C000009 0  
 020 C000010 0  
 021 000000 0  
 022 A000001 J.P. MORGAN SECURITIES INC.  
 022 B000001 13-3379014  
 022 C000001 9181  
 022 D000001 17834  
 022 A000002 BNY CAPITAL MARKETS, LLC.  
 022 B000002 23-2384977  
 022 C000002 14350  
 022 D000002 4533  
 022 A000003 ROYAL BANK OF CANADA  
 022 B000003 00-0000000  
 022 C000003 5281  
 022 D000003 3235  
 022 A000004 GEORGE K. BAUM & COMPANY  
 022 B000004 43-1661917  
 022 C000004 3890  
 022 D000004 0  
 022 A000005 CLEARVIEW TRADING ADVISORS, INC.  
 022 B000005 14-1981175  
 022 C000005 0  
 022 D000005 874  
 022 C000006 0  
 022 D000006 0  
 PAGE 10  
 022 C000007 0  
 022 D000007 0  
 022 C000008 0  
 022 D000008 0  
 022 C000009 0  
 022 D000009 0  
 022 C000010 0  
 022 D000010 0  
 023 C000000 61508  
 023 D000000 33476  
 024 000000 N  
 025 A000001 DELETE  
 025 D000001 0  
 025 D000002 0  
 025 D000003 0  
 025 D000004 0  
 025 D000005 0  
 025 D000006 0  
 025 D000007 0  
 025 D000008 0  
 026 A000000 N  
 026 B000000 Y  
 026 C000000 N  
 026 D000000 Y



Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

026	E000000	N	
026	F000000	N	
026	G010000	N	
026	G020000	N	
026	H000000	N	
027	000000	N	
028	A010000		0
028	A020000		0
028	A030000		0
028	A040000		0
028	B010000		0
028	B020000		0
028	B030000		0
028	B040000		0
028	C010000		0
028	C020000		0
028	C030000		0
028	C040000		0
028	D010000		0
028	D020000		0
028	D030000		0
028	D040000		0
028	E010000		0
028	E020000		0
028	E030000		0
028	E040000		0
028	F010000		0
	PAGE	11	
028	F020000		0
028	F030000		0
028	F040000		0
028	G010000		0
028	G020000		0
028	G030000		0
028	G040000		0
028	H000000		0
030	A000000		0
030	B000000	0.00	
030	C000000	0.00	
031	A000000		0
031	B000000		0
032	000000		0
033	000000		0
035	000000		0
036	B000000		0
038	000000		0
042	A000000	0	
042	B000000	0	
042	C000000	0	
042	D000000	0	
042	E000000	0	
042	F000000	0	
042	G000000	0	
042	H000000	0	
043	000000	0	
044	000000	0	
045	000000	Y	
046	000000	N	
047	000000	Y	
048	000000	0.600	
048	A010000		0
048	A020000	0.000	

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

048	B010000		0
048	B020000	0.000	
048	C010000		0
048	C020000	0.000	
048	D010000		0
048	D020000	0.000	
048	E010000		0
048	E020000	0.000	
048	F010000		0
048	F020000	0.000	
048	G010000		0
048	G020000	0.000	
048	H010000		0
048	H020000	0.000	
048	I010000		0
048	I020000	0.000	
048	J010000		0
	PAGE	12	
048	J020000	0.000	
048	K010000		0
048	K020000	0.000	
049	000000	N	
050	000000	N	
051	000000	N	
052	000000	N	
053	A000000	N	
054	A000000	Y	
054	B000000	Y	
054	C000000	Y	
054	D000000	N	
054	E000000	N	
054	F000000	N	
054	G000000	N	
054	H000000	Y	
054	I000000	N	
054	J000000	Y	
054	K000000	N	
054	L000000	N	
054	M000000	Y	
054	N000000	N	
054	O000000	N	
055	A000000	N	
055	B000000	N	
056	000000	N	
057	000000	N	
058	A000000	N	
059	000000	Y	
060	A000000	Y	
060	B000000	Y	
061	000000		0
062	A000000	Y	
062	B000000	0.0	
062	C000000	0.0	
062	D000000	0.0	
062	E000000	0.0	
062	F000000	0.0	
062	G000000	0.0	
062	H000000	0.0	
062	I000000	0.0	
062	J000000	0.0	
062	K000000	0.0	
062	L000000	0.0	

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

062	M000000	0.0
062	N000000	0.0
062	O000000	149.4
062	P000000	0.0
062	Q000000	0.0
062	R000000	0.0
063	A000000	0
	PAGE	13
063	B000000	22.7
064	A000000	Y
064	B000000	Y
065	000000	N
066	A000000	N
067	000000	N
068	A000000	N
068	B000000	N
069	000000	N
070	A010000	Y
070	A020000	N
070	B010000	N
070	B020000	N
070	C010000	Y
070	C020000	N
070	D010000	N
070	D020000	N
070	E010000	Y
070	E020000	N
070	F010000	N
070	F020000	N
070	G010000	Y
070	G020000	N
070	H010000	N
070	H020000	N
070	I010000	N
070	I020000	N
070	J010000	Y
070	J020000	Y
070	K010000	Y
070	K020000	Y
070	L010000	N
070	L020000	N
070	M010000	N
070	M020000	N
070	N010000	N
070	N020000	N
070	O010000	Y
070	O020000	N
070	P010000	Y
070	P020000	N
070	Q010000	N
070	Q020000	N
070	R010000	N
070	R020000	N
071	A000000	60932
071	B000000	76489
071	C000000	439334
071	D000000	14
072	A000000	6
072	B000000	14585
	PAGE	14
072	C000000	0
072	D000000	0

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

072 E000000	0
072 F000000	1344
072 G000000	103
072 H000000	0
072 I000000	12
072 J000000	3
072 K000000	0
072 L000000	9
072 M000000	6
072 N000000	1
072 O000000	0
072 P000000	0
072 Q000000	0
072 R000000	27
072 S000000	17
072 T000000	0
072 U000000	0
072 V000000	0
072 W000000	230
072 X000000	1752
072 Y000000	0
072 Z000000	12833
072AA000000	2622
072BB000000	0
072CC010000	0
072CC020000	39186
072DD010000	13357
072DD020000	0
072EE000000	0
073 A010000	0.5700
073 A020000	0.0000
073 B000000	0.0000
073 C000000	0.0000
074 A000000	3568
074 B000000	0
074 C000000	0
074 D000000	419127
074 E000000	0
074 F000000	0
074 G000000	0
074 H000000	0
074 I000000	0
074 J000000	0
074 K000000	0
074 L000000	8118
074 M000000	150
074 N000000	430963
074 O000000	0
074 P000000	208
PAGE 15	
074 Q000000	0
074 R010000	0
074 R020000	0
074 R030000	0
074 R040000	211
074 S000000	150000
074 T000000	280544
074 U010000	23474
074 U020000	0
074 V010000	11.95
074 V020000	0.00
074 W000000	0.0000

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST - Form NSAR-A

074	X000000	6216
074	Y000000	0
075	A000000	0
075	B000000	296812
076	000000	13.43
077	A000000	N
078	000000	N
080	C000000	0
081	B000000	0
082	B000000	0
083	B000000	0
084	B000000	0
086	A010000	67
086	A020000	905
086	B010000	0
086	B020000	0
086	C010000	0
086	C020000	0
086	D010000	0
086	D020000	0
086	E010000	0
086	E020000	0
086	F010000	0
086	F020000	0
087	A010000	COMMON STOCK
087	A020000	723762100
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	