

PIONEER MUNICIPAL HIGH INCOME TRUST  
Form N-CSR  
June 28, 2013

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED  
MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-21321

Pioneer Municipal High Income Trust  
(Exact name of registrant as specified in charter)

60 State Street, Boston, MA 02109  
(Address of principal executive offices) (ZIP code)

Terrence J. Cullen, Pioneer Investment Management, Inc.,  
60 State Street, Boston, MA 02109  
(Name and address of agent for service)

Registrant's telephone number, including area code: (617) 742-7825

Date of fiscal year end: April 30

Date of reporting period: May 1, 2012 through April 30, 2013

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss. 3507.

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## ITEM 1. REPORTS TO SHAREOWNERS.

Pioneer Municipal High  
Income Trust

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Annual Report | April 30, 2013  
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Ticker Symbol: MHI

[LOGO] PIONEER  
Investments (R)

visit us: [us.pioneerinvestments.com](http://us.pioneerinvestments.com)

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### President's Letter

Dear Shareowner,

Pioneer continues to see only modest economic growth in the U.S. Employment continues to rise, albeit slowly, and we believe it will continue to do so in 2013, barring a negative shock to the system. The housing and auto sectors continue to recover, benefiting from record-low interest rates. Banks' willingness to lend to consumers and businesses also continues to rise, broad

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measures of inflation remain subdued, and, if the weather cooperates in 2013, food prices should come back down. And, while corporate profit growth has slowed, profits remain high and many U.S. companies continue to both pay and increase dividends\*. Offsetting some of these positives are the continued contraction of fiscal policy in Washington and a recessionary Europe.

The Federal Reserve's aggressive monetary policy has driven Treasury yields to generational lows and supported investments in all financial assets, including equities and high-yield corporate bonds. For example, the Standard & Poor's 500 Index (the S&P 500), a broad measure of the U.S. stock market, returned 15.99% for the full calendar year ended December 31, 2012, and the Bank of America Merrill Lynch High Yield Master II Index (the High Yield Index), which measures the performance of high-yield corporate bonds, returned 15.59% for the same 12-month period. On the other hand, the Barclays Aggregate Bond Index (the Aggregate Index), which tracks the performance of a higher-quality bond universe, gained 4.22% for the 12 months ended December 31, 2012; the safer-still Barclays Government Credit Index (the Government/Credit Index) returned 4.82%; and 3-month Treasury bills, generally regarded as essentially "risk free" by the markets, returned just 0.09% in 2012. "Risky" assets outperformed again in the first quarter of 2013, as the S&P 500 returned 10.60% and the High Yield Index returned 2.89%. In contrast, the Aggregate Index returned -0.12% in the first quarter, the Government Credit Index returned -0.16%, and Treasury bills returned 0.02%.

Despite generally improving economic conditions and a rising stock market, global economies and investors still face daunting challenges as 2013 moves forward, although we remain cautiously optimistic. U.S. fiscal policy remains unsettled, and we feel the U.S. government could be at risk of credit rating downgrades from one or more of the major ratings agencies if the uncertainties persist. The Federal Reserve continues to provide extraordinary support to the U.S. economy and the bond market, but will not do so indefinitely. Europe has made progress, but has not yet resolved its sovereign-debt/banking problem, nor has the region been able to exit recession. Japan recently has unveiled aggressive and unconventional monetary and fiscal policies, but the country

\* Dividends are not guaranteed.

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continues to face issues such as high levels of debt as well as an aging population. China and other emerging economies, while generally in better shape than most "developed" markets, also face a range of challenges.

While most of the risks outlined here are widely recognized and may already be "priced in" to the market, we believe investors should continue to expect market volatility.

At Pioneer, we have long advocated the benefits of staying diversified and investing for the long term. And while diversification does not assure a profit or protect against loss in a declining market, we believe there are still opportunities for prudent investors to earn attractive returns. Our advice, as always, is to work closely with a trusted financial advisor to discuss your goals and work together to develop an investment strategy that meets your individual needs, keeping in mind that there is no single best strategy that works for every investor.

Pioneer's investment teams have, since 1928, sought out attractive opportunities in global equity and bond markets, using in-depth research to identify undervalued individual securities, and using thoughtful risk management to construct portfolios which balance potential risks and reward in an ever-changing world.

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We encourage you to learn more about Pioneer and our time-tested approach to investing by consulting with your financial advisor or visiting us online at [us.pioneerinvestments.com](http://us.pioneerinvestments.com). We greatly appreciate your trust in us, and we thank you for investing with Pioneer.

Sincerely,

/s/ Daniel K. Kingsbury

Daniel K. Kingsbury  
President and CEO  
Pioneer Investment Management USA, Inc.

Any information in this shareowner report regarding market or economic trends or the factors influencing the Trust's historical or future performance are statements of opinion as of the date of this report. These statements should not be relied upon for any other purposes. Past performance is no guarantee of future results, and there is no guarantee that market forecasts discussed will be realized.

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Portfolio Management Discussion | 4/30/13

Municipal bonds, whether high-rated or high-yielding, generated solid performance during the 12-month period ended April 30, 2013. In the following interview, David Eurkus discusses the factors that influenced the performance of Pioneer Municipal High Income Trust during the 12-month period. A senior vice president and portfolio manager at Pioneer, Mr. Eurkus is responsible for the daily management of the Trust.

Q How did Pioneer Municipal High Income Trust perform during the 12-month period ended April 30, 2013?

A Pioneer Municipal High Income Trust returned 12.45% at net asset value and 11.48% at market price during the 12-month period ended April 30, 2013. During the same period, the Trust's benchmarks, the Barclays High Yield Municipal Bond Index and the Barclays Municipal Bond Index, returned 12.82% and 5.19%, respectively. The Barclays High Yield Municipal Bond Index is designed to track the performance of lower-rated municipal bonds. The Barclays Municipal Bond Index is designed to track the performance of investment-grade municipal bonds. Unlike the Trust, the two Barclays municipal indices do not use leverage. While the use of leverage increases investment opportunity, it also increases investment risk. During the same 12-month period, the average return (at market price) of the 12 closed end funds in Lipper's High Yield Municipal Debt Closed End Funds category (which may or may not be leveraged), was 10.40%.

Shares of the Trust were selling at a 8.8% premium to net asset value at the end of the period on April 30, 2013.

On April 30, 2013, the standardized 30-day SEC yield of the Trust's shares was 2.00%.

Q How would you describe the investment environment for municipal securities during the 12-month period ended April 30, 2013?

A During the 12-month period, investment-grade municipal securities attracted investors because of their good values, better quality and very competitive yields. Many municipal securities offered superior after-tax yields compared

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with taxable bonds of similar quality and maturity. As a consequence, prices rose as yields declined. At the same time, high-yield investors saw additional opportunities to gain tax-advantaged income from below-investment-grade, higher-yielding municipals. As a result of those factors, prices tended to rise for both investment-grade municipal securities, especially those with longer maturities, and higher-yielding, lower-rated municipal debt.

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Q How did the market environment and your investment strategies affect the Trust's performance during the 12-month period ended April 30, 2013?

A The Trust was positioned to benefit from the gains in the municipal market during the period, given that both investment-grade and lower-rated, high-yield municipal bonds rallied. Market conditions were favorable over virtually the entire period, as demand for tax-advantaged municipal securities remained robust, while supply continued to be limited. At the same time, the Trust's use of leverage, or borrowed funds, helped magnify the benefits derived from a rising market, while the low-interest-rate environment meant that the Trust was able to borrow money at low rates.

We maintained a well-diversified portfolio of investment-grade and high-yielding municipal bonds that had been selected after being scrutinized by our research team at Pioneer. The Trust had investments in 141 different bonds issued in 34 different states as of the end of the period on April 30, 2013. Consistent with our longer-term strategy, we invested the Trust's assets almost exclusively in project-revenue securities backed by the cash-flow streams of specific projects. We believe those investments should be more reliable over the longer-term than general obligation bonds, which are not backed by dedicated revenue sources and can be more sensitive to changes in the financial health or credit ratings of the issuing municipalities or public agencies.

At the end of the period, on April 30, 2013, more than half of the Trust's total investment portfolio was allocated to investment-grade securities. The remainder of the Trust's total investment portfolio was invested in below-investment-grade securities.

Q Which types of investments had the biggest effect on the Trust's performance during the 12-month period ended April 30, 2013?

A In general, the Trust's investments in project-revenue bonds issued by hospitals, transportation projects and educational institutions performed well during the period. One particular area of strength came from the Trust's holdings in tobacco settlement bonds. One area of the Trust's portfolio where there was some underperformance, however, came from investments in continuing care retirement community (CCRC) projects. The CCRC industry felt the secondary effects of weakness in the single-family home market, as many prospective residents found it difficult to sell their existing homes at prices high enough to enable them to afford living in the CCRC. As a consequence, CCRC occupancy levels were below expectations in some communities.

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Q How did the level of leverage employed by the Trust change over the 12-month period ended April 30, 2013?

A At the end of the period on April 30, 2013, 23.3% of the Trust's total

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managed assets were financed by leverage, compared with 24.1% of the Trust's total managed assets financed by leverage at the start of the fiscal year on May 1, 2012. The decrease was due to an increase in the value of securities in which the Trust had invested.

Q What is your investment outlook?

A We continue to be positive about the prospects for the municipal market, including both investment-grade and high-yielding debt.

We think the overall economy should continue to improve, although growth is likely to remain gradual. Interest rates are likely to remain low. At the same time, we anticipate that investors' appetite for tax-advantaged municipal securities should continue to be strong. The recent increases in marginal tax rates for higher-income households, and in payroll taxes for virtually all taxpayers, and the new taxes associated with the government's Affordable Care Act should help sustain this demand. Even after the price gains and declines in yields of the past year, the yields of municipal securities remain high enough to continue to attract new investors who are looking for alternatives to taxable income products.

We continue to position the Trust's portfolio with a focus on longer-maturity, investment-grade bonds as well as high-yielding municipal debt. We have emphasized those sectors in which we have seen superior relative value, including the health care industry and tobacco settlement bonds. We have kept the Trust's portfolio well diversified, and we continue to emphasize project revenue bonds. In managing the Trust's portfolio of investments, we intend to maintain our focus on intensive, independent research and to carefully monitor the credit-worthiness of every prospective project and issuing agency and municipality.

Note to Shareowners of Pioneer Municipal High Income Trust

Effect May 17, 2013, after the end of the 12-month period covered by this report, Jonathan Chirunga joined David Eurkus as a portfolio manager on the Trust, replacing Timothy Pynchon, who also was a portfolio manager on the Trust. Mr. Chirunga joined Pioneer in 2011 as an associate portfolio manager and credit analyst. As an associate portfolio manager, Mr. Chirunga covered all municipal high-yield bond sectors and provided investment recommendations to all of Pioneer's fixed-income funds.

Please refer to the Schedule of Investments on pages 11-20 for a full listing of Trust securities.

Investments in high-yield or lower-rated securities are subject to greater-than-average risk.

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The Trust may invest in securities of issuers that are in default or that are in bankruptcy.

A portion of income may be subject to state, federal, and/or alternative minimum tax. Capital gains, if any, are subject to a capital gains tax.

When interest rates rise, the prices of debt securities held by the Trust will generally fall. Conversely, when interest rates fall the prices of debt securities held by the Trust generally will rise.

By concentrating in municipal securities, the Trust is more susceptible to adverse economic, political or regulatory developments than is a portfolio that

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invests more broadly.

Investments in the Trust are subject to possible loss due to the financial failure of the issuers of the underlying securities and the issuers' inability to meet their debt obligations.

The Trust may invest up to 20% of its total assets in illiquid securities. Illiquid securities may be difficult to dispose of at a fair price at the times when the Trust believes it is desirable to do so, and their market price is generally more volatile than that of more liquid securities. Illiquid securities are also more difficult to value and investment of the Trust's assets in illiquid securities may restrict the Trust's ability to take advantage of market opportunities.

The Trust uses leverage through the issuance of preferred shares. Leverage creates significant risks, including the risk that the Trust's incremental income or capital appreciation will not be sufficient to cover the cost of leverage, which may adversely affect the return for the holders of common shares. Since February of 2008, regularly scheduled auctions for the Trust's preferred shares have failed and preferred shareowners have not been able to sell their shares at auction. The Board of Trustees of the Trust has considered, and continues to consider, this issue.

The Trust is required to maintain certain regulatory and rating agency asset coverage requirements in connection with its outstanding preferred shares. In order to maintain required asset coverage levels, the Trust may be required to alter the composition of its investment portfolio or take other actions, such as redeeming preferred shares with the proceeds from portfolio transactions, at what might be inopportune times in the market. Such actions could reduce the net earnings or returns to holders of the Trust's common shares over time.

Risks of investing in the Trust are discussed in greater detail in the Trust's original offering prospectus and in shareowner reports issued from time to time.

These risks may increase share price volatility.

Past performance is no guarantee of future results, and there is no guarantee that market forecasts discussed will be realized.

Any information in this shareowner report regarding market or economic trends or the factors influencing the Trust's historical or future performance are statements of opinion as of the date of this report. These statements should not be relied upon for any other purposes.

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Portfolio Summary | 4/30/13

Portfolio Diversification

-----  
(As a percentage of total investment portfolio)

[THE FOLLOWING DATA WAS REPRESENTED AS A PIE CHART IN THE PRINTED MATERIAL]

Health Revenue Bonds	17.3%
Facilities Revenue Bonds	14.8%
Insured	14.4%
Other Revenue Bonds	14.1%

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Tobacco Revenue Bonds	12.7%
Development Revenue Bonds	9.5%
Education Revenue Bonds	6.5%
Airport Revenue Bonds	5.1%
Transportation Revenue Bonds	2.6%
Pollution Control Revenue Bonds	1.8%
Water Revenue Bonds	1.2%

### Portfolio Quality

-----  
 (As a percentage of total investment portfolio; based on Standard & Poor's ratings)

[THE FOLLOWING DATA WAS REPRESENTED AS A PIE CHART IN THE PRINTED MATERIAL]

AAA	10.2%
AA	14.0%
A	6.6%
BBB	13.3%
BB	5.3%
B	9.4%
NR	41.2%

Bond ratings are ordered highest to lowest in portfolio. Based on Standard & Poor's measures, AAA (highest possible rating) through BBB are considered investment grade; BB or lower ratings are considered non-investment grade. Cash equivalents and some bonds may not be rated.

The portfolio is actively managed and current holdings may be different.

### 10 Largest Holdings

-----  
 (As a percentage of long-term holdings)\*

1. Metropolitan Pier & Exposition Authority Dedicated State Tax Revenue, 0.0%, 6/15/22	3.8
-----	
2. Lehman Municipal Trust Receipts Revenue, 13.661%, 8/21/35	3.2
-----	
3. State of Washington, General Obligation, 0.0%, 6/1/22	2.7
-----	
4. North Texas Tollway Authority Transportation Revenue, 5.75%, 1/1/33	2.6
-----	
5. Lehman Municipal Trust Receipts Revenue, RIB, 12.845%, 9/20/28 (144A)	2.4
-----	
6. New York State Dormitory Authority Revenue, 15.488%, 5/29/14 (144A)	2.4
-----	
7. Massachusetts Development Finance Agency Revenue, 5.75%, 1/1/42	2.2
-----	
8. State of Texas, General Obligation, 14.59%, 4/1/30	2.0
-----	
9. Tobacco Settlement Financing Corp., Revenue, 6.75%, 6/1/39	1.8
-----	
10. Tobacco Settlement Authority Revenue, 6.625%, 6/1/32	1.6
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\* This list excludes temporary cash investments and derivative instruments. The portfolio is actively managed, and current holdings may be different. The holdings listed should not be considered recommendations to buy or sell any security listed.

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Prices and Distributions | 4/30/13

Market Value per Common Share

	4/30/13	4/30/12
	\$16.02	\$15.49
Premium	8.8%	9.7%

Net Asset Value per Common Share

	4/30/13	4/30/12
	\$ 14.72	\$ 14.12

Distributions per Common Share

	Dividends	Short-Term Capital Gains	Long-Term Capital Gains
5/1/12 - 4/30/13	\$ 1.1400	\$ --	\$ --

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Performance Update | 4/30/13

Investment Returns

The mountain chart on the right shows the change in market value, including

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reinvestment of dividends and distributions, of a \$10,000 investment made in common shares of Pioneer Municipal High Income Trust, compared to that of the Barclays Municipal Bond Index and Barclays High Yield Municipal Bond Index.

Average Annual Total Returns  
(As of April 30, 2013)

Period	Net Asset Value (NAV)	Market Price
Life-of-Trust (7/17/2003)	7.67%	8.10%
5 Years	9.18	11.34
1 Year	12.45	11.48

[THE FOLLOWING DATA WAS REPRESENTED AS A MOUNTAIN CHART IN THE PRINTED MATERIAL]

Market Value of \$10,000 Investment

	Pioneer Municipal High Income Trust	Barclays Municipal Bond Index	Barclays High Yield Municipal Bond Index
7/31/2003	\$ 10,000	\$ 10,000	\$ 10,000
4/30/2004	\$ 9,589	\$ 10,441	\$ 10,891
4/30/2005	\$ 10,868	\$ 11,153	\$ 12,262
4/30/2006	\$ 10,666	\$ 11,394	\$ 13,177
4/30/2007	\$ 12,804	\$ 12,052	\$ 14,487
4/30/2008	\$ 12,511	\$ 12,388	\$ 13,523
4/30/2009	\$ 10,153	\$ 12,773	\$ 11,127
4/30/2010	\$ 15,097	\$ 13,904	\$ 14,194
4/30/2011	\$ 15,254	\$ 14,211	\$ 14,668
4/30/2012	\$ 19,213	\$ 15,826	\$ 17,038
4/30/2013	\$ 21,417	\$ 16,646	\$ 19,222

Call 1-800-225-6292 or visit [us.pioneerinvestments.com](http://us.pioneerinvestments.com) for the most recent month-end performance results. Current performance may be lower or higher than the performance data quoted.

Performance data shown represents past performance. Past performance is no guarantee of future results. Investment return and market price will fluctuate, and your shares may trade below NAV due to such factors as interest rate changes and the perceived credit quality of borrowers.

Total investment return does not reflect broker sales charges or commissions. All performance is for common shares of the Trust.

Closed-end funds, unlike open-end funds, are not continuously offered. There is a one-time public offering and once issued, shares of closed-end funds are sold in the open market through a stock exchange and frequently trade at prices lower than their NAV. NAV is total assets less total liabilities which includes preferred shares, divided by the number of common shares outstanding.

When NAV is lower than market price, dividends are assumed to be reinvested at the greater of NAV or 95% of the market price. When NAV is higher, dividends are

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assumed to be reinvested at prices obtained under the Trust's dividend reinvestment plan.

The performance table and graph do not reflect the deduction of fees and taxes that a shareowner would pay on Trust distributions or the sale of Trust shares.

The Barclays Municipal Bond Index is an unmanaged, broad measure of the municipal bond market. The Barclays High Yield Municipal Bond Index is unmanaged, totals over \$26 billion in market value and maintains over 1300 securities. Municipal bonds in this index have the following requirements: maturities of one year or greater, sub investment grade (below Baa or non-rated), fixed coupon rate, issued after 12/31/90, deal size over \$20 million, and maturity size of at least \$3 million. Index returns are calculated monthly, assume reinvestment of dividends and, unlike Trust returns, do not reflect any fees, expenses or sales charges. The indices do not employ leverage. It is not possible to invest directly in the indices.

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Schedule of Investments | 4/30/13

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
-----			
		TAX EXEMPT OBLIGATIONS --	
		126.2% of Net Assets	
		Alabama -- 2.1%	
2,500,000	NR/B2	Alabama Industrial Development Authority Solid Waste Disposal Revenue, 6.45%, 12/1/23	\$ 2,512,
4,500,000	NR/NR	Huntsville-Redstone Village Special Care Facilities Financing Authority Nursing Home Revenue, 5.5%, 1/1/43	4,460,
			----- \$ 6,973,
-----			
		Arizona -- 0.7%	
974,000	NR/Baa3	Pima County Industrial Development Authority Education Revenue, 6.75%, 7/1/31	\$ 975,
950,000	NR/Baa3	Pima County Industrial Development Authority Education Revenue, 7.25%, 7/1/31	952,
500,000	NR/Baa2	Yavapai County Industrial Development Authority Medical Revenue, 6.0%, 8/1/33	506,
			----- \$ 2,433,
-----			
		California -- 14.4%	
3,000,000 (a)	NR/A1	Abag Finance Authority for Nonprofit Corp., Revenue, 5.75%, 7/1/37	\$ 3,402,
5,100,000	B-/NR	California County Tobacco Securitization Agency Revenue, 5.125%, 6/1/38	4,564,
1,450,000	NR/NR	California Enterprise Development Authority Recovery Zone Facility Revenue, 8.5%, 4/1/31	1,673,
5,000,000	NR/Baa3	California Pollution Control Financing Authority, 5.0%, 7/1/37	5,211,
1,400,000	NR/NR	California Statewide Communities Development	

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568,006 (b)	NR/NR	Authority, 5.625%, 11/1/33 California Statewide Communities Development Authority Environmental Facilities Revenue, 9.0%, 12/1/38	1,402, 5,
4,000,000	BB/NR	California Statewide Communities Development Authority Revenue Higher Education Revenue, 7.25%, 10/1/38 (144A)	4,060,
5,150,000 (a)	AA+/Aaa	Golden State Tobacco Securitization Corp., Revenue Bonds, 7.8%, 6/1/42	5,183,
7,000,000 (a)	AA+/Aaa	Golden State Tobacco Securitization Corp., Revenue Bonds, 7.875%, 6/1/42	7,045,
7,885,000	AA-/WR	Lehman Municipal Trust Receipts Revenue, RIB, 12.845%, 9/20/28 (144A)	10,605,
2,000,000	B-/Caa1	Tobacco Securitization Authority of Northern California Revenue, 5.375%, 6/1/38	1,806,
3,000,000	BB+/B3	Tobacco Securitization Authority of Southern California Revenue, 5.0%, 6/1/37	2,763,
			\$ 47,724,

The accompanying notes are an integral part of these financial statements.

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Schedule of Investments | 4/30/13 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
2,000,000	BBB+/NR	Colorado -- 0.9% Colorado Health Facilities Authority Revenue, 5.25%, 5/15/42	\$ 2,063,
1,000,000	NR/NR	Kremmling Memorial Hospital District Certificate of Participation, 7.125%, 12/1/45	1,119,
			\$ 3,182,
1,000,000	NR/NR	Connecticut -- 6.0% Hamden Connecticut Facility Revenue, 7.75%, 1/1/43	\$ 1,089,
10,335,000 (c)	AAA/WR	Lehman Municipal Trust Receipts Revenue, 13.661%, 8/21/35	13,726,
5,000,000	B/NR	Mohegan Tribe of Indians Gaming Authority, 6.25%, 1/1/31	5,004,
			\$ 19,820,
5,000,000	BBB/Baa1	District of Columbia -- 3.6% District of Columbia Tobacco Settlement Financing Corp., 6.5%, 5/15/33	\$ 5,957,
6,000,000	BBB/Baa1	District of Columbia Tobacco Settlement Financing Corp., 6.75%, 5/15/40	6,164,
			\$ 12,122,

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		Florida -- 7.2%	
1,500,000	NR/NR	Alachua County Health Facilities Authority Revenue, 8.125%, 11/15/41	\$ 1,767,
1,500,000	NR/NR	Alachua County Health Facilities Authority Revenue, 8.125%, 11/15/46	1,767,
1,400,000	NR/NR	Beacon Lakes Community Development District Special Assessment, 6.9%, 5/1/35	1,416,
500,000	NR/B1	Capital Trust Agency Revenue Bonds, 7.75%, 1/1/41	562,
1,000,000	NR/NR	Florida Development Finance Corp., Educational Facilities Revenue, 6.0%, 9/15/40	1,067,
2,000,000	NR/NR	Florida Development Finance Corp., Educational Facilities Revenue, 7.625%, 6/15/41	2,389,
1,000,000	NR/NR	Florida Development Finance Corp., Educational Facilities Revenue, 7.75%, 6/15/42	1,142,
1,000,000 (a)	NR/WR	Hillsborough County Industrial Development Authority Revenue, 8.0%, 8/15/32	1,408,
2,260,000	NR/NR	Liberty County Subordinate Revenue, 8.25%, 7/1/28	2,285,
2,500,000	A/A2	Miami-Dade County Florida Aviation Revenue, 5.5%, 10/1/41	2,884,
1,000,000	NR/NR	St. Johns County Industrial Development Authority Revenue, 5.25%, 1/1/26	778,

The accompanying notes are an integral part of these financial statements.

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
		Florida -- (continued)	
2,000,000	NR/NR	St. Johns County Industrial Development Authority Revenue, 5.375%, 1/1/40	\$ 1,419,
5,000,000	NR/Baa1	Tallahassee Health Facilities Revenue, 6.375%, 12/1/30	5,078,
			\$ 23,968,
		Georgia -- 2.7%	
4,240,000	AA-/WR	Atlanta Georgia Water and Wastewater Revenue, RIB, 12.567%, 11/1/43 (144A)	\$ 4,866,
500,000	B-/NR	Clayton County Development Authority Revenue, 9.0%, 6/1/35	553,
2,400,000	NR/NR	Fulton County Residential Care Facilities Revenue, 5.0%, 7/1/27	2,434,
1,100,000	NR/NR	Fulton County Residential Care Facilities Revenue, 5.125%, 7/1/42	1,105,
			\$ 8,959,

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5,000,000	A-/Baa1	Idaho -- 1.5% Power County Industrial Development Corp., Revenue, 6.45%, 8/1/32	\$ 5,008,
-----			
1,827,000 (d)	NR/NR	Illinois -- 14.7% Illinois Finance Authority Revenue, 0.0%, 11/15/52	\$ 217,
2,087,000 (c)	NR/NR	Illinois Finance Authority Revenue, 4.0%, 11/15/52	1,521,
3,865,000	BBB+/NR	Illinois Finance Authority Revenue, 6.0%, 8/15/38	4,384,
2,000,000	AA+/Aa2	Illinois Finance Authority Revenue, 6.0%, 8/15/39	2,371,
2,450,000	NR/NR	Illinois Finance Authority Revenue, 6.375%, 5/15/17	2,454,
2,500,000	NR/Baa3	Illinois Finance Authority Revenue, 6.5%, 4/1/39	2,857,
240,000	NR/NR	Illinois Finance Authority Revenue, 7.0%, 11/15/17	239,
500,000	NR/NR	Illinois Finance Authority Revenue, 7.0%, 5/15/18	501,
855,000	NR/NR	Illinois Finance Authority Revenue, 7.0%, 11/15/27	854,
1,700,000	NR/NR	Illinois Finance Authority Revenue, 7.625%, 5/15/25	2,050,
600,000	NR/NR	Illinois Finance Authority Revenue, 7.75%, 5/15/30	721,
2,000,000	NR/NR	Illinois Finance Authority Revenue, 8.0%, 5/15/40	2,409,
3,200,000	NR/NR	Illinois Finance Authority Revenue, 8.0%, 5/15/46	3,854,

The accompanying notes are an integral part of these financial statements.

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Schedule of Investments | 4/30/13 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
-----			
4,000,000	NR/NR	Illinois -- (continued) Illinois Finance Authority Revenue, 8.25%, 5/15/45	\$ 4,254,
2,500,000	NR/NR	Illinois Finance Authority Revenue, 8.25%, 2/15/46	2,672,
16,880,000	AAA/A3	Metropolitan Pier & Exposition Authority Dedicated State Tax Revenue, 5.65%, 6/15/22	16,191,
1,450,000	NR/NR	Southwestern Illinois Development Authority Revenue, 5.625%, 11/1/26	1,236,
			-----
			\$ 48,793,
-----			
250,000	NR/NR	Indiana -- 1.6% City of Carmel Indiana Nursing Home	

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750,000	NR/NR	Revenue, 7.0%, 11/15/32 City of Carmel Indiana Nursing Home	\$ 279,
500,000	NR/NR	Revenue, 7.125%, 11/15/42 City of Carmel Indiana Nursing Home	835,
3,570,000	NR/NR	Revenue, 7.125%, 11/15/47 Vigo County Hospital Authority Revenue, 5.8%, 9/1/47 (144A)	553, 3,733,
			----- \$ 5,402,
2,260,000	BBB-/Baa3	Louisiana -- 2.9% Jefferson Parish Hospital Service District No. 2, 6.375%, 7/1/41	\$ 2,647,
1,500,000	BBB-/Baa3	Louisiana Local Government Environmental Facilities & Community Development Authority Revenue, 6.75%, 11/1/32	1,714,
5,000,000	NR/Baa1	Louisiana Public Facilities Authority Revenue, 5.5%, 5/15/47	5,310,
			----- \$ 9,672,
1,500,000	NR/Baa3	Maine -- 0.6% Maine Health & Higher Educational Facilities Authority Revenue, 7.5%, 7/1/32	\$ 1,921,
7,100,000	A/WR	Massachusetts -- 5.4% Massachusetts Development Finance Agency Revenue, 5.75%, 1/1/42	\$ 9,581,
2,250,000	NR/NR	Massachusetts Development Finance Agency Revenue, 7.1%, 7/1/32	2,251,
790,000	AA/NR	Massachusetts Educational Financing Authority Revenue, 6.0%, 1/1/28	916,
4,500,000 (b)	NR/NR	Massachusetts Health & Educational Facilities Authority Revenue, 6.5%, 1/15/38	23,
5,000,000	BB-/NR	Massachusetts Health & Educational Facilities Authority Revenue, 6.75%, 10/1/33	5,050,
			----- \$ 17,822,

The accompanying notes are an integral part of these financial statements.

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
935,000	NR/NR	Michigan -- 2.9% Doctor Charles Drew Academy Certificate of Participation, 5.7%, 11/1/36	\$ 683,
1,500,000	BB-/NR	John Tolfree Health System Corp., Revenue, 6.0%, 9/15/23	1,499,
2,000,000	BB+/NR	Kent Hospital Finance Authority Revenue, 6.25%, 7/1/40	2,127,
5,830,000	B-/NR	Michigan Tobacco Settlement Finance	

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		Authority Revenue, 6.0%, 6/1/48	5,413,
			\$ 9,724,
1,000,000	NR/NR	Minnesota -- 0.3% Port Authority of the City of Bloomington, Minnesota Recovery Zone Facility Revenue, 9.0%, 12/1/35	\$ 1,188,
1,600,000 (b) (e)	NR/NR	Montana -- 0.1% Two Rivers Authority Inc., Project Revenue, 7.375%, 11/1/27	\$ 239,
1,500,000	NR/NR	New Jersey -- 7.1% New Jersey Economic Development Authority Revenue, 10.5%, 6/1/32 (144A)	\$ 1,579,
5,000,000	B/B2	New Jersey Economic Development Authority Revenue, 5.25%, 9/15/29	5,252,
2,500,000	B/B2	New Jersey Economic Development Authority Revenue, 5.75%, 9/15/27	2,578,
6,150,000	B/B2	New Jersey Economic Development Authority Revenue, 7.0%, 11/15/30	6,173,
8,000,000 (a)	AA+/Aaa	Tobacco Settlement Financing Corp., Revenue, 6.75%, 6/1/39	8,044,
			\$ 23,628,
1,500,000	NR/NR	New Mexico -- 1.2% Otero County New Mexico Project Revenue, 6.0%, 4/1/23	\$ 1,355,
2,960,000	NR/NR	Otero County New Mexico Project Revenue, 6.0%, 4/1/28	2,533,
			\$ 3,888,
2,000,000	NR/NR	New York -- 7.8% Chautauqua County Capital Resource Corp., Revenue, 8.0%, 11/15/30	\$ 2,155,
3,000,000	NR/NR	Dutchess County Industrial Development Agency Revenue, 7.5%, 3/1/29	3,069,
2,000,000	BBB+/NR	Hempstead Local Development Corp., Revenue, 5.75%, 7/1/39	2,273,
2,000,000	BB/B2	New York City Industrial Development Agency Revenue, 5.25%, 12/1/32	1,999,

The accompanying notes are an integral part of these financial statements.

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Schedule of Investments | 4/30/13 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	Value
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New York -- (continued)



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2,000,000	BB/B2	New York City Industrial Development Agency Revenue, 7.625%, 12/1/32	\$ 2,039,
7,040,000 (c)	AAA/WR	New York State Dormitory Authority Revenue, 15.488%, 5/29/14 (144A)	10,210,
1,000,000	NR/Baa1	New York State Dormitory Authority Revenue, 6.125%, 12/1/29	1,119,
3,000,000	NR/NR	Suffolk County Industrial Development Agency Revenue, 7.25%, 1/1/30	3,003,
			<hr/> \$ 25,871,
		North Carolina -- 3.5%	
4,795,000	NR/NR	Charlotte North Carolina Special Facilities Revenue, 7.75%, 2/1/28	\$ 4,809,
6,685,000	NR/NR	Charlotte Special Facilities Revenue, 5.6%, 7/1/27	6,693,
			<hr/> \$ 11,502,
		North Dakota -- 0.8%	
2,525,000	BBB+/NR	County of Burleigh ND, 5.0%, 7/1/38	\$ 2,743,
		Oklahoma -- 0.4%	
1,225,000	NR/WR	Tulsa Airports Improvement Trust Revenue, 6.25%, 6/1/20	\$ 1,227,
		Pennsylvania -- 2.2%	
1,550,000	NR/Baa2	Allegheny County Hospital Development Authority Revenue, 5.125%, 5/1/25	\$ 1,551,
1,280,000 (b)	NR/WR	Langhorne Manor Borough Higher Education Authority Revenue, 7.35%, 7/1/22	371,
5,000,000	B-/Caa2	Pennsylvania Economic Development Financing Authority Solid Waste Disposal Revenue, 6.0%, 6/1/31	5,020,
500,000	BBB+/NR	Pennsylvania Higher Educational Facilities Authority Development Revenue, 5.4%, 7/15/36	504,
			<hr/> \$ 7,447,
		Rhode Island -- 2.1%	
6,000,000 (e)	NR/NR	Central Falls Rhode Island Detention Facility Corp., Revenue, 7.25%, 7/15/35	\$ 5,199,
1,500,000	NR/NR	Rhode Island Health & Educational Building Corp., Revenue, 8.375%, 1/1/46	1,781,
			<hr/> \$ 6,980,
		South Carolina -- 1.2%	
3,850,000 (a)	BBB+/Baa1	South Carolina Jobs Economic Development Authority Revenue, 6.375%, 8/1/34	\$ 3,909,

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
4,600,000	BBB+/NR	Tennessee -- 1.5% Sullivan County Health, Educational & Housing Facilities Board Revenue, 5.25%, 9/1/36	\$ 4,907,
1,345,000	NR/Caa2	Texas -- 17.0% Bexar County Housing Finance Corp., Multi Family Housing Revenue, 8.0%, 12/1/36	\$ 931,
2,500,000	BB+/Baa3	Central Texas Regional Mobility Authority Revenue, 6.75%, 1/1/41	2,933,
4,000,000	NR/NR	Decatur Hospital Authority Medical Revenue, 7.0%, 9/1/25	4,200,
725,078 (b) (e)	NR/NR	Gulf Coast Industrial Development Authority Revenue, 7.0%, 12/1/36	6,
3,750,000	B/B2	Houston Airport System Special Facilities Revenue, 5.7%, 7/15/29	3,759,
3,000,000	NR/NR	Jefferson County Industrial Development Corp., Revenue, 8.25%, 7/1/32	3,077,
5,340,000	NR/NR	Lubbock Health Facilities Development Corp., Nursing Home Revenue, 6.625%, 7/1/36	5,595,
10,000,000	BBB+/A3	North Texas Tollway Authority Transportation Revenue, 5.75%, 1/1/33	11,249,
2,810,000 (c)	AAA/Aaa	Northside Independent School District, General Obligation, 13.477%, 9/29/12 (144A)	3,174,
1,500,000	NR/NR	Red River Health Facilities Development Corp., Revenue, 8.0%, 11/15/41	1,742,
3,000,000	NR/NR	Sanger Industrial Development Corp., Revenue, 8.0%, 7/1/38	3,211,
7,040,000 (c)	AA+/Aaa	State of Texas, General Obligation, 14.59%, 4/1/30	8,731,
2,000,000	NR/NR	Tarrant County Cultural Education Facilities Finance Corp., Revenue, 8.0%, 11/15/34	2,298,
1,000,000	NR/NR	Tarrant County Cultural Education Facilities Finance Corp., Revenue, 8.125%, 11/15/39	1,129,
1,500,000	NR/NR	Tarrant County Cultural Education Facilities Finance Corp., Revenue, 8.25%, 11/15/44	1,700,
2,500,000	NR/NR	Travis County Health Facilities Development Corp., Revenue, 7.125%, 1/1/46	2,686,
			\$ 56,429,
1,500,000 (a)	A-/Baa1	Vermont -- 0.5% Vermont Educational & Health Buildings Financing Agency Higher Education Revenue, 6.0%, 10/1/28	\$ 1,535,
1,000,000	BBB/Baa1	Virginia -- 0.3% Peninsula Ports Authority Revenue, 6.0%, 4/1/33	\$ 1,011,

The accompanying notes are an integral part of these financial statements.

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Schedule of Investments | 4/30/13 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
4,710,000	A+/A2	Washington -- 10.3% Spokane Public Facilities District Hotel/Motel Tax & Sales, 5.75%, 12/1/27	\$ 4,831,
14,315,000 (d)	AA+/Aa1	State of Washington, General Obligation, 0.0%, 6/1/22	11,723,
7,025,000	BBB/Baa1	Tobacco Settlement Authority Revenue, 6.625%, 6/1/32	7,165,
3,795,000	A/A2	Washington State Health Care Facilities Authority Revenue, 6.0%, 1/1/33	4,267,
1,150,000	NR/NR	Washington State Housing Finance Commission Revenue, 6.75%, 10/1/47	1,171,
5,000,000	NR/NR	Washington State Housing Finance Committee Nonprofit Revenue, 5.625%, 1/1/27	5,060,
			\$ 34,220,
2,000,000	NR/NR	West Virginia -- 0.9% City of Philippi WV, 7.75%, 10/1/44	\$ 2,050,
745,000	NR/NR	West Virginia Hospital Finance Authority Hospital Revenue, 9.125%, 10/1/41	956,
			\$ 3,006,
2,320,000 (f) (g)	NR/NR	Wisconsin -- 1.8% Aztalan Township, 7.5%, 5/1/18	\$
2,500,000	NR/NR	Wisconsin Public Finance Authority Continuing Care Retirement Community Revenue, 8.25%, 6/1/46	3,018,
1,500,000	NR/NR	Wisconsin State Public Finance Authority Revenue, 8.375%, 6/1/20	1,513,
1,500,000	NR/NR	Wisconsin State Public Finance Authority Revenue, 8.625%, 6/1/47	1,627,
			\$ 6,158,
		TOTAL TAX EXEMPT OBLIGATIONS (Cost \$373,360,495)	\$ 419,431,
10,000,000 (c) (e)	NR/NR	MUNICIPAL COLLATERALIZED DEBT OBLIGATION -- 1.8% of Net Assets Non-Profit Preferred Funding Trust I, 6.75%, 9/15/37 (144A)	\$ 5,887,
		TOTAL MUNICIPAL COLLATERALIZED DEBT OBLIGATION (Cost \$10,000,000)	\$ 5,887,
		TOTAL INVESTMENTS IN SECURITIES -- 128.0% (Cost -- \$383,360,495) (h) (i)	\$ 425,319,

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OTHER ASSETS AND LIABILITIES -- 2.4%	\$ 7,872,
-----	
PREFERRED SHARES AT REDEMPTION VALUE, INCLUDING DIVIDENDS PAYABLE -- (30.4)%	\$ (100,999,
-----	
NET ASSETS APPLICABLE TO COMMON SHAREOWNERS -- 100.0%	\$ 332,192,
=====	

The accompanying notes are an integral part of these financial statements.

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NR Security not rated by S&P or Moody's.

WR Rating withdrawn by either S&P or Moody's.

(144A) Security is exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be resold normally to qualified institutional buyers in a transaction exempt from registration. At April 30, 2013, the value of these securities amounted to \$44,117,879, or 13.3% of total net assets applicable to common shareowners.

RIB Residual Interest Bond. The interest rate is subject to change periodically and inversely based upon prevailing market rates. The interest rate shown is the rate at April 30, 2013.

(a) Prerefunded bonds have been collateralized by U.S. Treasury or U.S. Government Agency securities which are held in escrow to pay interest and principal on the tax exempt issue and to retire the bonds in full at the earliest refunding date. (b) Security is in default and is non income producing.

(c) The interest rate is subject to change periodically. The interest is shown is the rate at April 30, 2013.

(d) Security issued with a zero coupon. Income is recognized through accretion of discount.

(e) Indicates a security that has been deemed as illiquid. As of April 30, 2013 the aggregate cost of illiquid securities in the Trust's portfolio was \$18,163,066. As of that date, the aggregate value of illiquid securities in the Trust's portfolio of \$11,332,998 represented 3.4% of total net assets applicable to common shareowners.

(f) Security is valued using fair value methods (other than prices supplied by independent pricing services). See Notes to Financial Statements -- 1A.

(g) The issuer is scheduled for approval of a reorganization plan.

(h) The concentration of investments by type of obligation/ market sector is as follows:

Insured	
NATL-RE	4.9%
FSA	3.6

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NATL-RE FGIC	2.8
AMBAC GO OF INSTN	2.3
PSF-GTD	0.8
Revenue Bonds:	
Health Revenue	17.3
Facilities Revenue	14.8
Other Revenue	14.1
Tobacco Revenue	12.7
Development Revenue	9.5
Education Revenue	6.5
Airport Revenue	5.1
Transportation Revenue	2.6
Pollution Control Revenue	1.8
Water Revenue	1.2
Utilities Revenue	0.0*
	-----
	100.0%
	=====

\* Amount is less than 0.1%.

The accompanying notes are an integral part of these financial statements.

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### Schedule of Investments | 4/30/13 (continued)

- (i) At April 30, 2013, the net unrealized gain on investments based on cost for federal tax purposes of \$383,215,567 was as follows:

Aggregate gross unrealized gain for all investments in which there is an excess of value over tax cost	\$ 53,818,913
Aggregate gross unrealized loss for all investments in which there is an excess of tax cost over value	(11,715,271)
	-----
Net unrealized gain	\$ 42,103,642
	=====

For financial reporting purposes net unrealized gain on investments was \$41,958,714 and cost of investments aggregated \$383,360,495.

Purchases and sales of securities (excluding temporary cash investments) for the year ended April 30, 2013 aggregated \$46,502,974 and \$40,491,580, respectively.

Various inputs are used in determining the value of the Trust's investments. These inputs are summarized in the three broad levels below.

Level 1 - quoted prices in active markets for identical securities.

Level 2 - other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds credit risks, etc.). See Notes to Financial Statements -- Note 1A.

Level 3 - significant unobservable inputs (including the Trust's own assumptions in determining fair value of investments. See Notes

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to Financial Statements -- Note 1A.

Generally, equity securities are categorized as Level 1, fixed income securities and senior loans are categorized as Level 2, and securities valued using fair value methods (other than prices supplied by independent pricing services) as level 3. See Notes to Financial Statements -- Note 1A.

The following is a summary of the inputs used as of April 30, 2013, in valuing the Trust's investments.

	Level 1	Level 2	Level 3	Total
Tax Exempt Obligations	\$ --	\$ 419,431,709	\$ --**	\$419,431,709
Municipal Collateralized Debt Obligation	--	5,887,500	--	5,887,500
<b>Total Investments in Securities</b>	<b>\$ --</b>	<b>\$ 425,319,209</b>	<b>\$ --</b>	<b>\$425,319,209</b>

The following is a reconciliation of assets valued using significant unobservable inputs (level 3):

	Balance as of 4/30/12	Realized gain (loss)	Change in Unrealized appreciation (depreciation)	Purchases	Sales	Accrued discounts/ premiums	Transfers in to Level 3*	Tr ou Le
Tax exempt obligations	\$ --**	\$ --	\$ --	\$ --	\$ --	\$ --	\$ --	\$
<b>Total</b>	<b>\$ --**</b>	<b>\$ --</b>	<b>\$ --</b>	<b>\$ --</b>	<b>\$ --</b>	<b>\$ --</b>	<b>\$ --</b>	<b>\$</b>

\* Transfers are calculated on the beginning of period values.

\*\* Includes security that is fair valued at \$0.

At April 30, 2013, there were no transfers between levels 1, 2 and 3.

The accompanying notes are an integral part of these financial statements.

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Statement of Assets and Liabilities | 4/30/13

**ASSETS:**

Investments in securities, at value (cost \$383,360,495)	\$425,319,209
Receivables --	
Investment securities sold	2,000,000

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Interest receivable	9,142,803
Reinvestment of distributions	85,383
Other assets	16,000
<hr/>	
Total assets	\$436,563,395
<hr/>	
LIABILITIES:	
Investment securities purchased	\$ 1,400,000
Due to custodian	1,556,201
Due to affiliates	234,290
Administration fee payable	74,978
Accrued expenses	105,884
Other liabilities	76
<hr/>	
Total liabilities	\$ 3,371,429
<hr/>	
PREFERRED SHARES AT REDEMPTION VALUE:	
\$25,000 liquidation value per share applicable to 4,040 shares, including dividends payable of \$600	\$100,999,400
<hr/>	
NET ASSETS APPLICABLE TO COMMON SHAREOWNERS:	
Paid-in capital	\$321,276,522
Undistributed net investment income	8,289,893
Accumulated net realized loss on investments	(39,332,563)
Net unrealized appreciation on investments	41,958,714
<hr/>	
Net assets applicable to common shareowners	\$332,192,566
<hr/>	
NET ASSET VALUE PER COMMON SHARE:	
No par value (unlimited number of shares authorized)	
Based on \$332,192,566/22,564,036 common shares	\$ 14.72
<hr/>	

The accompanying notes are an integral part of these financial statements.

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### Statement of Operations

For the Year Ended 4/30/13

INVESTMENT INCOME:	
Interest	\$ 29,197,084
<hr/>	
EXPENSES:	
Management fees	\$ 2,581,599
Administrative reimbursements	245,269
Transfer agent fees and expenses	18,379
Shareholder communications expense	12,549
Auction agent fees	250,389
Custodian fees	6,121
Registration fees	15,833
Professional fees	91,730
Printing expenses	23,213
Trustees' fees	15,255
Pricing fees	23,132
Miscellaneous	112,599

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Total expenses		\$ 3,396,068
Net investment income		\$ 25,801,016
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS:		
Net realized loss on investments	\$ (5,401,978)	
Change in net unrealized appreciation on investments	19,076,138	
Net gain on investments		\$ 13,674,160
DISTRIBUTIONS TO PREFERRED SHAREOWNERS FROM NET INVESTMENT INCOME:		
		\$ (275,062)
Net increase in net assets applicable to common shareowners resulting from operations		\$ 39,200,114

The accompanying notes are an integral part of these financial statements.

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Statements of Changes in Net Assets

	Year Ended 4/30/13	Year Ended 4/30/12
FROM OPERATIONS:		
Net investment income	\$ 25,801,016	\$ 23,022,348
Net realized loss on investments	(5,401,978)	(8,740,047)
Change in unrealized appreciation on investments	19,076,138	37,817,446
Distributions to preferred shareowners from net investment income	(275,062)	(234,733)
Net increase in net assets applicable to common shareowners resulting from operations	\$ 39,200,114	\$ 51,865,014
DISTRIBUTIONS TO COMMON SHAREOWNERS:		
Net investment income (\$1.14 and \$1.20 per share, respectively)	\$ (25,681,570)	\$ (26,857,057)
Total distributions to common shareowners	\$ (25,681,570)	\$ (26,857,057)
FROM TRUST SHARE TRANSACTIONS:		
Reinvestment of distributions	\$ 1,043,462	\$ 1,569,243
Net increase in net assets applicable to common shareowners from Trust share transactions	\$ 1,043,462	\$ 1,569,243
Net increase in net assets applicable to common shareowners	\$ 14,562,006	\$ 26,577,200
NET ASSETS APPLICABLE TO COMMON SHAREOWNERS:		
Beginning of year	317,630,560	291,053,360
End of year	\$ 332,192,566	\$ 317,630,560



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Undistributed net investment income \$ 8,289,893 \$ 7,905,832

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### Financial Highlights

	Year Ended 4/30/13	Year Ended 4/30/12	Year Ended 4/30/11
<hr/>			
Per Share Operating Performance			
Net asset value, beginning of period	\$ 14.12	\$ 13.00	\$ 13.00
<hr/>			
Increase (decrease) from investment operations: (a)			
Net investment income	\$ 1.14	\$ 1.03	\$ 1.03
Net realized and unrealized gain (loss) on investments	0.61	1.30	(0.01)
Distributions to preferred shareowners from:			
Net investment income	(0.01)	(0.01)	(0.01)
<hr/>			
Net increase (decrease) from investment operations	\$ 1.74	\$ 2.32	\$ 0.99
<hr/>			
Distributions to common shareowners from:			
Net investment income	(1.14)	(1.20)	(1.14)
<hr/>			
Net increase (decrease) in net asset value	\$ 0.60	\$ 1.12	\$ (0.15)
<hr/>			
Net asset value, end of period (b)	\$ 14.72	\$ 14.12	\$ 13.00
<hr/>			
Market value, end of period (b)	\$ 16.02	\$ 15.49	\$ 13.00
<hr/>			
Total return at market value (c)	11.48%	25.95%	1.54%
Ratios to average net assets of common shareowners:			
Net expenses (d)	1.03%	1.08%	1.08%
Net investment income before preferred share distributions	7.84%	7.50%	8.62%
Preferred share distributions	0.08%	0.08%	0.08%
Net investment income available to common shareowners	7.76%	7.42%	8.54%
Portfolio turnover	10%	11%	
Net assets of common shareowners, end of period (in thousands)	\$332,193	\$317,631	\$291,000

The accompanying notes are an integral part of these financial statements.

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	Year Ended 4/30/13	Year Ended 4/30/12	Year Ended 4/30/11
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Preferred shares outstanding (in thousands)	\$101,000	\$101,000	\$1
Asset coverage per preferred share, end of period	\$107,211	\$103,623	\$
Average market value per preferred share (e)	\$ 25,000	\$ 25,000	\$
Liquidation value, including dividends payable, per preferred share	\$ 25,001	\$ 25,001	\$
Ratios to average net assets of common shareowners before waivers and reimbursement of expenses			
Net expenses	1.03%	1.08%	
Net investment income before preferred share distributions	7.84%	7.50%	
Preferred share distributions	0.08%	0.08%	
Net investment income available to common shareowners	7.76%	7.42%	

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- (a) The per common share data presented above is based upon the average common shares outstanding for the periods presented.
- (b) Net asset value and market value are published in Barron's on Saturday, The Wall Street Journal on Monday and The New York Times on Monday and Saturday.
- (c) Total investment return is calculated assuming a purchase of common shares at the current market value on the first day and a sale at the current market value on the last day of the periods reported. Dividends and distributions, if any, are assumed for purposes of this calculation to be reinvested at prices obtained under the Trust's dividend reinvestment plan. Total investment return does not reflect brokerage commissions. Past performance is not a guarantee of future results.
- (d) Expense ratios do not reflect the effect of distribution payments to preferred shareowners.
- (e) Market value is redemption value without an active market.

The information above represents the audited operating performance data for a share of common stock outstanding, total investment return, ratios to average net assets and other supplemental data for the periods indicated. This information has been determined based upon financial information provided in the financial statements and market value data for the Trust's common shares.

The accompanying notes are an integral part of these financial statements.

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Notes to Financial Statements | 4/30/13

### 1. Organization and Significant Accounting Policies

Pioneer Municipal High Income Trust (the Trust) was organized as a Delaware statutory trust on March 13, 2003. Prior to commencing operations on July 21, 2003, the Trust had no operations other than matters relating to its organization and registration as a diversified, closed-end management investment company under the Investment Company Act of 1940, as amended. The investment objective of the Trust is to seek a high level of current income exempt from regular federal income tax, and the Trust may, as a secondary objective, also seek capital appreciation to the extent that it is consistent with its primary investment objective.

The Trust's financial statements have been prepared in conformity with U.S. generally accepted accounting principles that require the management of the Trust to, among other things, make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported

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amounts of income, expenses, and gain or loss on investments during the reporting year. Actual results could differ from those estimates.

The following is a summary of significant accounting policies followed by the Trust in the preparation of its financial statements, which are consistent with those policies generally accepted in the investment company industry:

### A. Security Valuation

Security transactions are recorded as of trade date. Fixed income securities with remaining maturity of more than sixty days are valued at prices supplied by independent pricing services, which consider such factors as market prices, market events, quotations from one or more brokers, Treasury spreads, yields, maturities and ratings. Valuations may be supplemented by dealers and other sources, as required. The values of interest rate swaps are determined by obtaining dealer quotations. Equity securities that have traded on an exchange are valued at the last sale price on the principal exchange where they are traded. Equity securities that have not traded on the date of valuation, or securities for which sale prices are not available, generally are valued using the mean between the last bid and asked prices. Short-term fixed income securities with remaining maturities of sixty days or less generally are valued at amortized cost. Shares of money market mutual funds are valued at such funds' net asset value.

Securities for which independent pricing services are unable to supply prices or for which market prices and/or quotations are not readily available or are considered to be unreliable are valued by or at the direction or with the

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approval of the Valuation Committee using fair value methods pursuant to procedures adopted by the Board of Trustees. The Valuation Committee is comprised of certain members of the Board of Trustees. The Valuation Committee may use fair value methods if it is determined that a significant event has occurred after the close of the exchange or market on which the security trades and prior to the determination of the Trust's net asset value. Examples of a significant event might include political or economic news, corporate restructurings, natural disasters, terrorist activity or trading halts. Thus, the valuation of the Trust's securities may differ from exchange prices and such differences could be material. Pioneer Investment Management, Inc. (PIM) is responsible for monitoring developments that may impact fair valued securities and for discussing and assessing fair values on an ongoing basis, and at least quarterly, with the Valuation Committee.

At April 30, 2013, one security was valued using fair value methods (in addition to securities valued using prices supplied by independent pricing services), representing 0.0% of net assets. Inputs used when applying fair value methods to value a security may include credit ratings, the financial condition of the company, current market conditions and comparable securities.

Discount and premium on debt securities are accreted or amortized, respectively, daily into interest income on a yield-to-maturity basis with a corresponding increase or decrease in the cost basis of the security. Interest income, including interest or income bearing cash accounts, is recorded on an accrual basis.

Dividend income is recorded on the ex-dividend date, except that certain dividends from foreign securities where the ex-dividend date may have passed are recorded as soon as the Trust becomes aware of the ex-dividend data in

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the exercise of reasonable diligence.

Gains and losses on sales of investments are calculated on the identified cost method for both financial reporting and federal income tax purposes.

### B. Federal Income Taxes

It is the Trust's policy to comply with the requirements of the Internal Revenue Code applicable to regulated investment companies and to distribute all of its taxable income and net realized capital gains, if any, to its shareowners. Therefore, no federal income tax provision is required. As of April 30, 2013, the Fund did not have any interest and penalties related to uncertain tax positions, which, if applicable, would be recorded as income tax expense on Statement of Operations. Tax years for the prior three fiscal years remain subject to examination by federal and state tax authorities.

The amount and character of income and capital gain distributions to shareowners are determined in accordance with federal income tax rules, which may differ from U.S. generally accepted accounting principles.

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Distributions in excess of net investment income or net realized gains are temporary overdistributions for financial statement purposes resulting from differences in the recognition or classification of income or distributions for financial statement and tax purposes. Capital accounts within the financial statements are adjusted for permanent book/tax differences to reflect tax character, but are not adjusted for temporary differences. At April 30, 2013, the Trust reclassified \$539,677 to increase undistributed net investment income and \$539,677 to increase accumulated net realized loss on investments to reflect permanent book/tax differences. The reclassification has no impact on the net assets of the Trust and presents the Trust's capital accounts on a tax basis.

At April 30, 2013, the Trust was permitted to carry forward \$13,857,492 of long term losses under the Regulated Investment Company Modernization Act of 2010 without limitation. Additionally, at April 30, 2013, the Trust had a net capital loss carry forward of \$23,146,406 of which the following amounts will expire between 2014 and 2018 if not utilized: \$5,441,357 in 2014, \$4,138,756 in 2015, \$4,586,154 in 2017 and \$8,980,139 in 2018. Since unlimited losses are required to be utilized prior to losses incurred in pre-enactment years, pre-enactment capital loss carryforwards may be more likely to expire unused.

The Trust has elected to defer \$5,113,443 of capital losses recognized between November 1, 2012 and April 30, 2013 to its fiscal year ending April 30, 2014.

The tax character of distributions paid to common and preferred shareowners during the years ended April 30, 2013 and April 30, 2012 was as follows:

	2013	2012
Distribution paid from:		
Tax-exempt income	\$25,766,728	\$25,801,273
Ordinary income	189,904	1,290,517

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Total taxable distribution	\$25,956,632	\$27,091,790
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The following shows the components of distributable earnings (losses) on a federal income tax basis at April 30, 2013:

	2013
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Distributable earnings:	
Dividends payable	(600)
Undistributed tax-exempt income	\$ 7,178,928
Undistributed ordinary income	431,881
Capital loss carryforward	(37,003,898)
Post-October loss deferred	(5,113,443)
Unrealized appreciation	45,423,176
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Total	\$ 10,916,044
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The difference between book-basis and tax-basis unrealized depreciation is primarily attributable to the difference between book and tax amortization methods for premiums and discounts on fixed income securities, book/tax difference in the accrual of income on securities in default, the deferral of post-October capital losses for tax purposes and other temporary differences.

### C. Automatic Dividend Reinvestment Plan

All common shareowners whose shares are registered in their own names automatically participate in the Automatic Dividend Reinvestment Plan (the Plan), under which participants receive all dividends and capital gain distributions (collectively, dividends) in full and fractional common shares of the Trust in lieu of cash. Shareowners may elect not to participate in the Plan. Shareowners not participating in the Plan receive all dividends and capital gain distributions in cash. Participation in the Plan is completely voluntary and may be terminated or resumed at any time without penalty by notifying American Stock Transfer & Trust Company, the agent for shareowners in administering the Plan (the Plan Agent), in writing prior to any dividend record date; otherwise such termination or resumption will be effective with respect to any subsequently declared dividend or other distribution.

If a shareowner's shares are held in the name of a brokerage firm, bank or other nominee, the shareowner can ask the firm or nominee to participate in the Plan on the shareowner's behalf. If the firm or nominee does not offer the Plan, dividends will be paid in cash to the shareowner of record. A firm or nominee may reinvest a shareowner's cash dividends in common shares of the Trust on terms that differ from the terms of the Plan.

Whenever the Trust declares a dividend on common shares payable in cash, participants in the Plan will receive the equivalent in common shares acquired by the Plan Agent either (i) through receipt of additional unissued but authorized common shares from the Trust or (ii) by purchase of

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outstanding common shares on the New York Stock Exchange or elsewhere. If, on the payment date for any dividend, the net asset value per common share is equal to or less than the market price per share plus estimated brokerage trading fees (market premium), the Plan Agent will invest the dividend amount in newly issued common shares. The number of newly issued common shares to be credited to each account will be determined by dividing the dollar amount of the dividend by the net asset value per common share on the date the shares are issued, provided that the maximum discount from the then current market price per share on the date of issuance does not exceed 5%. If, on the payment date for any dividend, the net asset value per common share is greater than the market value (market discount), the Plan Agent will invest the dividend amount in common shares acquired in open-market purchases. There are no brokerage charges with respect to newly issued common shares. However, each participant will pay a pro rata share of brokerage trading fees incurred

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with respect to the Plan Agent's open-market purchases. Participating in the Plan does not relieve shareowners from any federal, state or local taxes which may be due on dividends paid in any taxable year. Shareowners holding Plan shares in a brokerage account may not be able to transfer the shares to another broker and continue to participate in the Plan.

### D. Risks

At times, the Trust's investments may represent industries or industry sectors that are interrelated or have common risks, making the Trust more susceptible to any economic, political, or regulatory developments or other risks affecting those industries and sectors. Information regarding the Trust's principal risks is contained in the Trust's original offering prospectus, with additional information included in the Trust's shareowner reports issued from time to time. Please refer to those documents when considering the Trust's principal risks.

The Trust may invest in both investment grade and below investment grade (high-yield) municipal securities with a broad range of maturities and credit ratings. Debt securities rated below investment grade are commonly referred to as "junk bonds" and are considered speculative. These securities involve greater risk of loss, are subject to greater price volatility, and are less liquid, especially during periods of economic uncertainty or change, than higher rated debt securities.

### 2. Management Agreement

Pioneer Investment Management, Inc. (PIM), the Trust's investment adviser, a wholly owned indirect subsidiary of UniCredit S.p.A. (UniCredit), manages the Trust's portfolio. Management fees payable under the Trust's Advisory Agreement with PIM are calculated daily at the annual rate of 0.60% of the Trust's average daily managed assets. "Managed assets" means (a) the total assets of the Trust, including any form of investment leverage, minus (b) all accrued liabilities incurred in the normal course of operations, which shall not include any liabilities or obligations attributable to investment leverage obtained through (i) indebtedness of any type (including, without limitation, borrowing through a credit facility of the issuance of debt securities), (ii) the issuance of preferred stock or other similar preference securities, and/or (iii) any other means. For the year ended April 30, 2013, the net management fee was 0.60% of the Trust's average daily managed assets, which was equivalent to 0.79% of the Trust's average daily net assets attributable to the common shareowners.

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In addition, under PIM's management and administration agreements, certain other services and costs are paid by PIM and reimbursed by the Trust. At April 30, 2013, \$309,268 was payable to PIM related to management costs, administrative costs and certain other reimbursements and is included in "Due to affiliates" and "Administrative fee" on the Statement of Assets and Liabilities.

Effective May 1, 2012, PIM has retained Brown Brothers Harriman & Co. (BBH) to provide certain administrative and accounting services to the Trust on its behalf. For such services, the Trust pays BBH a monthly fee at an annual rate of 0.025% of the Trust's average daily managed assets subject to a minimum monthly fee of \$6,250. Previously, PIM had retained State Street Bank & Trust Company (State Street) to provide such services. PIM paid State Street a monthly fee at an annual rate of 0.07% of the Trust's average daily managed assets in excess of \$500 million and 0.03% for average daily managed assets in excess of \$500 million, subject to a minimum monthly fee of \$10,000.

### 3. Transfer Agents

Pioneer Investment Management Shareholder Services, Inc. (PIMSS), a wholly owned indirect subsidiary of UniCredit, through a sub-transfer agency agreement with American Stock Transfer & Trust Company, provides substantially all transfer agent and shareowner services related to the Trust's common shares at negotiated rates. Deutsche Bank Trust Company Americas (Deutsche Bank) is the transfer agent, registrar, dividend paying agent and auction agent with respect to the Trust's Auction Preferred Shares (APS). The Trust pays Deutsche Bank an annual fee, as is agreed to from time to time by the Trust and Deutsche Bank, for providing such services.

In addition, the Trust reimburses PIMSS for out-of-pocket expenses incurred by PIMSS related to shareowner communications activities such as proxy and statement mailings and outgoing phone calls.

### 4. Expense Offset Agreements

The Trust has entered into an arrangement with its custodian whereby credits realized as a result of uninvested cash balances are used to reduce a portion of the Trust's custodian expenses. For the year ended April 30, 2013, the Trust expenses were not reduced under such an arrangement.

### 5. Trust Shares

There are an unlimited number of common shares of beneficial interest authorized.

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Transactions in common shares of beneficial interest for the years ended April 30, 2013 and April 30, 2012 were as follows:

	4/30/13	4/30/12
Shares outstanding at beginning of year	22,495,129	22,381,423
Reinvestment of distributions	68,907	113,706
Shares outstanding at end of year	22,564,036	22,495,129

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The Trust may classify or reclassify any unissued shares of beneficial interest into one or more series of preferred shares of beneficial interest. As of April 30, 2013, there were 4,040 APS as follows: Series A-2,000 and Series B-2,040.

Dividends on Series A and Series B are cumulative at a rate which is to be reset every seven days based on the results of an auction. An auction fails if there are more APS offered for sale than there are buyers. When an auction fails, the dividend rate for the period will be the maximum rate on the auction dates described in the prospectus for the APS. Preferred shareowners are not able to sell their APS at an auction if the auction fails. Since February 2008, the Trust's auctions related to the APS have failed. The maximum rate for each series is 110% of the 7 day commercial paper rate or adjusted Kenny rate. Dividend rates on APS ranged from 0.149% to 0.429% during the year ended April 30, 2013.

The Trust may not declare dividends or make other distributions on its common shares or purchase any such shares if, at the time of the declaration, distribution or purchase, the Trust does not comply with the asset coverage ratios described in the prospectus for the APS.

The APS are redeemable at the option of the Trust, in whole or in part, on any dividend payment date at \$25,000 per share plus any accumulated or unpaid dividends, whether or not declared. The APS are also subject to mandatory redemption at \$25,000 per share plus any accumulated or unpaid dividends, whether or not declared, if certain requirements relating to the composition of the assets and liabilities of the Trust as set forth in the Statement of Preferences are not satisfied.

The holders of APS have voting rights equal to the holders of the Trust's common shares (one vote per share) and will vote together with holders of the common shares as a single class. Holders of APS are also entitled to elect two of the Trust's Trustees. In addition, the Investment Company Act of 1940, as amended, requires that along with approval by shareowners that might otherwise be required, the approval of the holders of a majority of any outstanding

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preferred shares, voting separately as a class, would be required to (a) adopt any plan of reorganization that would adversely affect the preferred shares and (b) take any action requiring a vote of security holders, including, among other things, changes in the Trust's subclassification as a closed-end management investment company or changes in its fundamental investment restrictions.

### 6. Subsequent Events

The Board of Trustees of the Trust declared on May 2, 2013 a dividend from undistributed net investment income of \$0.095 per common share payable May 31, 2013, to common shareowners of record on May 16, 2013.

Subsequent to April 30, 2013, dividends declared and paid on preferred shares totaled \$38,404 in aggregate for the two outstanding preferred share series through June 20, 2013.

### ADDITIONAL INFORMATION

Effective May 17, 2013, Jonathan Chirunga of PIM became a portfolio manager of Pioneer Municipal High Income Advantage Trust. He joins David Eurkus, who has been a portfolio manager on the Fund since its inception.



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Report of Independent Registered Public Accounting Firm

To the Board of Trustees and the Shareowners of  
Pioneer Municipal High Income Trust:

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We have audited the accompanying statement of assets and liabilities of Pioneer Municipal High Income Trust (the "Trust"), including the schedule of investments, as of April 30, 2013, and the related statement of operations for the year then ended, the statements of changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended. These financial statements and financial highlights are the responsibility of the Trust's management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement. We were not engaged to perform an audit of the Trust's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Trust's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements and financial highlights, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our procedures included confirmation of securities owned as of April 30, 2013, by correspondence with the custodian and brokers or by other appropriate auditing procedures where replies from brokers were not received. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of Pioneer Municipal High Income Trust at April 30, 2013, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Boston, Massachusetts  
June 24, 2013

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Additional Information (unaudited)

ADDITIONAL INFORMATION (unaudited)

During the period, there have been no material changes in the Trust's investment objective or fundamental policies that have not been approved by the shareowners. There have been no changes in the Trust's charter or By-Laws that

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would delay or prevent a change in control of the Trust which has not been approved by the shareowners. There have been no changes in the principal risk factors associated with investment in the Trust. There were no changes in the persons who are primarily responsible for the day-to-day management of the Trust's portfolio.

Notice is hereby given in accordance with Section 23(c) of the Investment Company Act of 1940 that the Trust may purchase, from time to time, its common shares in the open market.

### IMPORTANT TAX INFORMATION (unaudited)

The following summarizes the taxable per share distributions paid by Pioneer Municipal High Income Trust during the taxable year ended April 30, 2013:

	Payable Date	Ordinary Income
Common Shareowners	12/20/12	0.008275
Preferred Shareowners		
Series A	2/5/13	0.890000
	2/12/13	0.810000
	2/19/13	0.980000
	2/26/13	0.980000
	3/5/13	0.980000
	3/12/13	0.890000
	3/19/13	1.070000
	3/26/13	1.070000
	4/2/13	1.070000
	4/9/13	0.980000
	4/16/13	1.520000
	4/23/13	2.060000
	4/30/13	1.970000
Series B	2/6/13	0.890000
	2/13/13	0.810000
	2/20/13	0.980000
	2/27/13	0.980000
	3/6/13	0.980000
	3/13/13	0.890000
	3/20/13	1.070000
	3/27/13	1.070000
	4/3/13	1.070000
	4/10/13	0.980000
	4/17/13	1.520000
	4/24/13	2.060000
	5/1/13	1.970000

All the other net investment income distributions paid by the Trust qualify as tax-exempt interest dividends for federal income tax purposes.

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### Approval of Investment Advisory Agreement

Pioneer Investment Management, Inc. (PIM) serves as the investment adviser to Pioneer Municipal High Income Trust (the Trust) pursuant to an investment

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advisory agreement between PIM and the Trust. In order for PIM to remain the investment adviser of the Trust, the Trustees of the Trust must determine annually whether to renew the investment advisory agreement for the Trust.

The contract review process began in March 2012 as the Trustees of the Trust agreed on, among other things, an overall approach and timeline for the process. In July 2012, the Trustees approved the format of the contract review materials and submitted their formal request to PIM to furnish information necessary to evaluate the terms of the investment advisory agreement. The contract review materials were provided to the Trustees in July 2012 and September 2012. After reviewing and discussing the materials, the Trustees submitted a request for additional information to PIM, and materials were provided in response to this request. Meetings of the Independent Trustees of the Trust were held in July, September, October, and November, 2012 to review and discuss the contract review materials. In addition, the Trustees took into account the information related to the Trust provided to the Trustees at each regularly scheduled meeting.

At a meeting held on November 13, 2012, based on their evaluation of the information provided by PIM and third parties, the Trustees of the Trust, including the Independent Trustees voting separately, unanimously approved the renewal of the investment advisory agreement for another year. In considering the renewal of the investment advisory agreement, the Trustees considered various factors that they determined were relevant, including the factors described below. The Trustees did not identify any single factor as the controlling factor in determining to approve the renewal of the agreement.

### Nature, Extent and Quality of Services

The Trustees considered the nature, extent and quality of the services that had been provided by PIM to the Trust, taking into account the investment objective and strategy of the Trust. The Trustees reviewed the terms of the investment advisory agreement. The T