

PIONEER MUNICIPAL HIGH INCOME TRUST  
Form N-CSR  
June 29, 2006

OMB APPROVAL  
OMB Number: 3235-0570  
Expires: September 30, 2007  
Estimated average burden  
hours per response.....19.4

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)

Dorothy E. Bourassa, 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, 2005 through April 30, 2006

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.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

ITEM 1. REPORTS TO SHAREOWNERS.

-----

-----

PIONEER

-----  
MUNICIPAL  
HIGH  
INCOME  
TRUST

Annual  
Report

4/30/06

[Logo] PIONEER  
Investments (R)

Table of Contents

-----

Letter to Shareowners	2
Portfolio Summary	4
Prices and Distributions	5
Performance Update	6
Portfolio Management Discussion	7
Schedule of Investments	11
Financial Statements	20
Notes to Financial Statements	24
Report of Independent Registered Public Accounting Firm	33
Factors Considered by the Independent Trustees in Approving the Management Contract	34
Trustees, Officers and Service Providers	39

# Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

President's

Dear Shareowner,

-----  
The six and 12 months ending April 30, 2006, have been characterized by strong global growth, rising commodity and stock prices, and rising interest rates. While markets reversed in May (U.S. Treasury bond yields, stock markets, and commodity prices all turned down), we believe the basic fundamental pattern of strong global economic growth remains intact.

According to the International Monetary Fund, global economic growth in 2004-5 was the fastest of any two-year period in more than 30 years, and 2006 growth is projected to match 2005 levels. Growth has been broad-based, with Europe, Japan, and emerging market economies all showing strength. The result has been rising prices across a broad range of commodities, rising corporate profits, and rising interest rates. These have been the basic ingredients of the equity bull market and relatively weak bond market over the six months ending April 30, 2006.

The bond markets' concern has been that strong economic growth would spark inflation - we have already seen commodity prices rise, and U.S. labor costs are threatening to rise as the economy reaches full employment. In this environment, strong economic growth may lead to inflation and higher interest rates, while slowing economic growth is welcomed by the markets.

While first quarter economic growth was strong, it looks as if the slowdown in the U.S. economy that we have been anticipating for the second half of the year may be starting to unfold. The U.S. unemployment rate reached a five-year low of 4.6 percent in May, but employment growth slowed to only 75,000 new jobs, the smallest increase since the Katrina-distorted result of October 2005. The housing market is cooling, as is non-essential consumer spending.

The U.S. Federal Reserve ("Fed") has not yet paused in its program of measured increases in short-term interest rates, and it appears likely that the Fed will raise rates again at the end of June. Global stock markets declined in May after the Fed warned that the central bank remains determined to keep inflation low. Fed vigilance against inflation and resolve to hike interest rates as necessary to keep inflation pressures well-contained puts short-term pressure on markets, but is investor-friendly over the intermediate-to-longer term. By restraining

2

Letter

inflation, the Fed may limit upward pressure on longer-maturity bond yields and downward pressure on stocks' price/earnings ratios.

In summary, we believe a desirable moderate slowing of U.S. economic growth appears likely, with beneficial impacts on inflation and interest rates, while global growth prospects remain strong. We think security market valuations remain reasonable. However, there are no guarantees in investing. We know from a long-view of history that sudden shifts in investor sentiment can occur with little warning. This unpredictability reinforces the importance of Pioneer's message that investors should remain diversified, take a long-term view, and base investment decisions on economic and market fundamentals, rather than on emotion. Our investment philosophy and approach continue to be based on the use of fundamental research to identify a range of opportunities that offer an attractive balance of risk and reward to help Trust shareowners work toward their long-term goals.

# Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Respectfully,

/s/ Osbert M. Hood

Osbert M. Hood, President  
Pioneer Investment Management, 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 the opinion of Trust management 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.

3

Pioneer Municipal High Income Trust

-----  
PORTFOLIO SUMMARY 4/30/06  
-----

Portfolio Diversification

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

Health Revenue	24.7%
Airport Revenue	16.7%
Insured	12.1%
Tobacco Revenue	10.6%
Education Revenue	6.9%
Power Revenue	6.0%
Pollution Control Revenue	4.6%
Development Revenue	4.0%
General Obligation	3.8%
Facilities Revenue	3.1%
Transportation Revenue	2.7%
Utilities Revenue	1.3%
Gaming Revenue	1.2%
Housing Revenue	1.1%
School District Revenue	0.6%
Other Revenue	0.6%

Portfolio Maturity

-----  
(Effective duration as a percentage of long-term holdings)

0-1 years	7.5%
1-3 years	8.5%
3-6 years	43.4%
6-8 years	6.8%
8-10 years	9.7%
10+ years	24.1%

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Effective duration with leverage: 9.49 years  
Effective duration without leverage: 7.47 years

### Quality Distribution

(As a dollar-weighted percentage of holdings; based on S&P ratings.)

AAA	16.1%
AA	2.7%
A	2.6%
BBB	22.7%
BB	5.1%
B	15.5%
CCC	4.4%
Not Rated	30.9%

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

4

### Pioneer Municipal High Income Trust

#### PRICES AND DISTRIBUTIONS

##### Share Prices and Distributions

Market Value per Common Share	4/30/06	4/30/05
	\$13.22	\$14.33

Net Asset Value per Common Share	4/30/06	4/30/05
	\$15.15	\$15.62

Distributions per Common Share (5/1/05 - 4/30/06)	Income Dividends	Short-Term Capital Gains	Long-Term Capital Gains
	\$0.8920	\$ -	\$ -

### 10 Largest Holdings

(As a percentage of long-term holdings)

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

1	Allegheny County Hospital Development Authority Revenue, 9.25%, 11/15/30	3.40%
2	New Jersey Economic Development Authority Revenue, 6.25%, 9/15/29	3.03
3	Tobacco Settlement Financing Corp., 6.75%, 6/1/39	2.58
4	Massachusetts State Development Finance Agency, RIB, 7.034%, 10/1/39 (144A)	2.46
5	Metropolitan Pier & Exposition Authority Dedicated State Tax Revenue, 0.0%, 6/15/22	2.40
6	Minneapolis/St. Paul Metropolitan Airports, 7.0%, 4/1/25	2.07
7	Oklahoma Development Finance Authority Revenue, 5.625%, 8/15/29	1.98
8	Golden State Tobacco Securitization Corp., 7.875%, 6/1/42	1.94
9	New York State Dormitory Authority Revenue, RIB, 7.328%, 7/1/24 (144A)	1.93
10	Johnson City Health & Educational Facilities Board Hospital Revenue, 7.5%, 7/1/33	1.88

This list excludes temporary cash and derivative instruments. The portfolio is actively managed, and current holdings may be different.

5

### Pioneer Municipal High Income Trust

-----  
PERFORMANCE UPDATE 4/30/06

#### Investment Returns

-----  
The mountain chart on the right shows the change in market value, including 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 Lehman Brothers Municipal Bond Index and Lehman Brothers Non-Investment Grade Municipal Bond Index.

[The following table was depicted as a mountain chart in the printed material.]

	Pioneer Municipal High Income Trust -----	Lehman Brothers Municipal Bond Index -----	Lehman Brothers Non-Investment Grade~Municipal Bond Index -----
7/03	10,000	10,000	10,000
4/04	11,023	10,441	11,014
4/05	12,598	11,153	12,399
4/06	10,666	11,394	13,324

Cumulative Annual Total Returns  
(As of April 30, 2006)

Period	Net Asset Value (NAV)	Market Price
--------	--------------------------	-----------------

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Life-of-Trust		
(7/21/03)	27.95%	6.66%
1 Year	3.19	-1.85

-----  
Call 1-800-225-6292 or visit [pioneerinvestments.com](http://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 net asset value ("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 assumed to be reinvested at market price.

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

Index comparison begins July 31, 2003. The Lehman Brothers Municipal Bond Index is a broad measure of the municipal bond market. Lehman Brothers Non-Investment Grade Municipal Bond Index 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, 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. You cannot invest directly in an Index.

6

Pioneer Municipal High Income Trust

-----  
PORTFOLIO MANAGEMENT DISCUSSION 4/30/06  
-----

During the fiscal period ended April 30, 2006, strong economic growth, improved business fundamentals of some distressed municipal credits and robust investor demand for tax-free income were instrumental in boosting the performance of municipal bonds over their taxable counterparts. Lower-quality bonds led the municipal market during the 12 months. Investors in Pioneer Municipal High Income Trust participated in this outperformance, as the Trust had a substantial position in lower-quality credits, some of which saw positive changes in their business prospects. In the following interview, David Eurkus, a member of the management team for Pioneer Municipal High Income Trust, discusses some of the

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

factors that had an impact on the municipal bond market and the Trust.

Q: What was the investment environment like during the period?

A: The main focus in the bond market during the 12-month period ended April 30, 2006 was the Federal Reserve's ("Fed") tighter monetary policy. The Fed boosted the Federal funds target rate, the rate banks charge for overnight loans, to 4.50% from 2.75%. The Fed's actions resulted in a flattening of the yield curve with short-term and long-term rates at roughly the same level for a few months. (The yield curve shows the relationship between bond yields and maturity lengths.) By period-end, the yield curve had a more positive slope, with longer-term yields above shorter-term yields. Despite rising interest rates, the economy grew at a steady pace, with both business and consumer spending at relatively high levels. The strong economy continued to fuel concerns about higher inflation, and the Fed raised interest rates to 5.00% on May 10, 2006, just after the close of the fiscal period.

Q: How did the Trust perform in this environment?

A: For the period, Pioneer Municipal High Income Trust earned a total return of 3.19% at net asset value and -1.85% at market price. As of April 30, 2006, the Trust was selling at a discount of market price to net asset value of 12.74%. The Lehman Brothers Municipal Bond Index, which tracks the performance of investment-grade bonds, returned 2.16%. The Lehman Brothers Non-Investment Grade Municipal Bond Index returned 7.46% for the same period. While the Trust invested in municipal securities with a broad range of maturities and credit ratings, it maintained a dollar-weighted average portfolio credit quality rating of BBB. The Trust held 107

7

Pioneer Municipal High Income Trust

-----  
PORTFOLIO MANAGEMENT DISCUSSION 4/30/06

(continued)  
-----

issues in various states and the District of Columbia. On April 30, 2006, the Trust's 30-day SEC yield based on market price was 7.67%.

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

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 net asset value ("NAV"). NAV is total assets less total liabilities, which includes Preferred shares, divided by the number of common shares outstanding.

The performance data quoted represent past performance, which is no guarantee of future results. Investment return and principal value will fluctuate, and shares, when redeemed, may be worth more or less than their original cost.

Q: What contributed to the Trust's performance?

A: We kept the Trust diversified among sectors that generally perform well during a period of economic expansion. These sectors included transportation, public power, housing, education and water and sewer. We



## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

invested most of the assets in revenue bonds, whose interest and principal depend on revenues that are derived from the particular asset that the bond is financing. For example, a bond issued by an electric utility would be backed by the revenues the utility collects from its customers.

We also had a mix of investment-grade and below investment-grade bonds. The below-investment grade bonds, which have higher yields, made the biggest contribution to return. Many of these securities are long-term holdings that were issued by entities that were in significant financial difficulty at the time of purchase. As a result, we bought many of the bonds at substantial discounts to par. This was particularly true of airline/airport bonds (13.8% of net assets). For example, Delta and Northwest Airlines voluntarily declared bankruptcy; and early in the period, these bonds detracted from results. We liquidated all Delta bonds, which effectively removed a non-income producing asset from the portfolio, which we could then replace with another income-producing asset. Northwest remains a position in the portfolio because we

8

Pioneer Municipal High Income Trust

---

---

believe back interest will be paid once they exit voluntary bankruptcy. The bond's value has appreciated substantially since the initial Chapter 11 filing.

The Trust's health/hospital bonds (32% of net assets) and special revenue bonds, called tobacco bonds (14% of net assets), were also factors in the Trust's outperformance. Tobacco bonds have been a core long-term holding in the Trust. They are backed by tobacco companies' payments to states as part of the Master Settlement Agreement, in which states agreed to drop their lawsuits against tobacco companies in return for a series of payments.

On April 30, 2006, 23% of the Trust was leveraged. We began leveraging the portfolio when interest rates were at historically low levels. Lower short-term rates provided an opportunity to borrow funds at attractive rates and invest those funds in higher-yielding bonds, which, in turn, boosted the Trust's returns. As short-term interest rates rose, the cost of leveraging also rose and reduced the overall effectiveness of leveraging the Trust, resulting in modest dividend cuts.

Q: What is your outlook?

A: We do not plan to make any significant changes to the Trust. We intend to keep the portfolio fully invested in a variety of sectors and maintain a mix of both investment-grade and below investment-grade bonds. While economic growth was robust in the first four months of 2006, we believe it could slow in the coming months, as higher oil prices and interest rates take their toll on business profits and consumer spending. Higher interest rates have also begun to affect the availability of new municipal bonds, as municipalities and other entities are reluctant to issue higher-yielding new debt. We view this supply/demand dynamic as positive for the Trust. As supply has tightened, demand for tax-free income has remained strong, potentially boosting the value of the bonds in the portfolio.

Investments in high yield or lower-rated securities are subject to greater-than-average risk. The Trust may invest in securities of issuers that are in default or that are in bankruptcy.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

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 fixed-income securities in the Trust will generally fall. Conversely, when interest rates fall the prices of fixed-income securities in the Trust

9

Pioneer Municipal High Income Trust

-----  
 PORTFOLIO MANAGEMENT DISCUSSION 4/30/06

(continued)  
 -----

will generally rise. By concentrating in municipal securities, the portfolio is more susceptible to adverse economic, political or regulatory developments than is a portfolio that invests more broadly.

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

The Trust may use leverage through the issuance of preferred shares with an aggregate liquidation preference of up to 25% of the Trust's total assets after such issuance. Leverage creates significant risks, including the risk that the Trust's 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.

Risks of investing in the Trust are discussed in greater detail in the Trust's registration statement on Form N-2 relating to its common shares.

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 the opinion of Trust management 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.

10

Pioneer Municipal High Income Trust

-----  
 SCHEDULE OF INVESTMENTS 4/30/06  
 -----

Principal Amount	S&P/Moody's Ratings (unaudited)		Va
		TAX EXEMPT OBLIGATIONS - 128.2% of Net Assets	
		Alabama - 0.5%	
\$ 1,500,000	BBB/NR	Camden Alabama Industrial Development Board, 6.125%, 12/1/24	\$ 1,649, -----
5,000,000	B+/Ba1	Arizona - 6.6% Apache County Industrial Development Authority, 5.85%, 3/1/28	\$ 5,001,

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

5,000,000	B+/Ba1	Apache County Industrial Development Authority, 5.875%, 3/1/33	5,002,
7,000,000 (a)	NR/Aaa	Downtown Phoenix Hotel Corp., RIB, 6.917%, 7/1/40 (144A)	7,331,
3,000,000+	NR/NR	Maricopa County Industrial Development Authority, 7.875%, 4/1/27	3,159,
1,000,000	NR/Baa3	Pima County Industrial Development Authority, 7.25%, 7/1/31	1,074,
500,000	NR/Baa2	Yavapai County Industrial Development Authority, 6.0%, 8/1/33	528,
			-----
			\$ 22,098,
			-----
7,270,000	A/A2	California - 9.8% California State General Obligation, 5.25%, 2/1/28	\$ 7,581,
5,150,000	BBB/Baa3	Golden State Tobacco Securitization Corp., 7.8%, 6/1/42	6,106,
7,000,000	BBB/Baa3	Golden State Tobacco Securitization Corp., 7.875%, 6/1/42	8,331,
3,000,000	AAA/Aaa	San Diego Unified School District, 5.0%, 7/1/25	3,138,
2,500,000	AAA/Aaa	University of California Revenue, 5.0%, 5/15/25	2,577,
5,000,000	B+/NR	Valley Health System Hospital Revenue, 6.5%, 5/15/25	5,004,
			-----
			\$ 32,740,
			-----
2,000,000	NR/NR	Connecticut - 4.2% Bridgeport Senior Living Facility Revenue, 7.25%, 4/1/35	\$ 1,684,
2,205,000	BB+/Ba1	Connecticut State Health & Educational Facilities Authority Revenue, 5.375%, 7/1/17	2,212,
4,800,000	BB+/Ba1	Connecticut State Health & Educational Facilities Authority Revenue, 5.5%, 7/1/27	4,728,
5,000,000	BB+/NR	Mohegan Tribe Indians Gaming Authority, 6.25%, 1/1/31 (144A)	5,329,
			-----
			\$ 13,954,
			-----

The accompanying notes are an integral part of these financial statements. 11

Pioneer Municipal High Income Trust

-----  
SCHEDULE OF INVESTMENTS 4/30/06

(continued)  
-----

Principal Amount	S&P/Moody's Ratings (unaudited)		V
\$ 5,000,000	BBB/Baa3	District of Columbia - 3.6% District of Columbia Tobacco Settlement Financing Corp., 6.5%, 5/15/33	\$ 5,668
6,000,000	BBB/Baa3	District of Columbia Tobacco Settlement Financing Corp., 6.75%, 5/15/40	6,470
			-----
			\$ 12,139

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

			Delaware - 0.3%	
500,000	NR/NR		Sussex County Delaware Revenue, 5.9%, 1/1/26	\$ 508,611
600,000	NR/NR		Sussex County Delaware Revenue, 6.0%, 1/1/35	611,000
				\$ 1,120,000
			Florida - 2.7%	
2,000,000	NR/NR		Beacon Lakes Community Development, 6.9%, 5/1/35	\$ 2,171,000
1,650,000	BBB-/Baa2		Polk County Industrial Development Revenue, 5.85%, 12/1/30	1,682,000
5,000,000	NR/Baa2		Tallahassee Health Facilities Revenue, 6.375%, 12/1/30	5,303,000
				\$ 9,157,000
			Georgia - 2.0%	
4,240,000 (a)	NR/Aaa		Atlanta Georgia Water & Waste Revenue, RIB, 7.072%, 11/1/43 (144A)	\$ 4,481,000
2,325,000	NR/NR		Brunswick & Glynn County Development Authority Revenue, 7.25%, 1/1/35	2,349,000
				\$ 6,830,000
			Idaho - 1.6%	
5,000,000	BBB-/Baa3		Power County Industrial Development Corp., 6.45%, 8/1/32	\$ 5,337,000
			Illinois - 3.9%	
1,000,000	NR/NR		Centerpoint Intermodal Center, 8.0%, 6/15/23 (144A)	\$ 1,007,000
1,500,000	NR/NR		Illinois Health Facilities Authority Revenue, 6.9%, 11/15/33	1,620,000
16,880,000 (b)	AAA/Aaa		Metropolitan Pier & Exposition Authority Dedicated State Tax Revenue, 0.0%, 6/15/22	10,315,000
				\$ 12,944,000

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

Pioneer Municipal High Income Trust

Principal Amount	S&P/Moody's Ratings (unaudited)		Val
\$ 1,000,000	BBB+/Baa1	Indiana - 1.6%	
		Indiana State Development Finance Authority Revenue, 5.6%, 12/1/32	\$ 1,030,300
4,300,000	BBB-/Ba1	Indiana State Development Finance Authority Revenue, 5.75%, 10/1/11	4,442,100
			\$ 5,472,400

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

		Massachusetts - 11.3%	
5,000,000	AAA/Aa2	Massachusetts Bay Transportation Authority, 5.0%, 7/1/31	\$ 5,334,8
2,335,000	AAA/Aaa	Massachusetts Health & Educational Facilities Authority Revenue, 5.0%, 7/15/35	2,394,0
7,050,000	AAA/Aaa	Massachusetts Health & Educational Facilities Authority Revenue, 5.125%, 7/15/37	7,299,4
3,500,000	BBB/Baa3	Massachusetts Health & Educational Facilities Authority Revenue, 6.25%, 7/1/22	3,734,3
5,000,000	BBB-/NR	Massachusetts Health & Educational Facilities Authority Revenue, 6.75%, 10/1/33	5,392,3
75,000	BB/NR	Massachusetts State Development Finance Agency, 5.25%, 10/1/18	69,1
9,810,000 (a)	NR/Aaa	Massachusetts State Development Finance Agency, RIB, 7.034%, 10/1/39 (144A)	10,554,7
3,055,000	AA-/Aa3	Massachusetts State Housing Finance Agency, 5.25%, 12/1/33	3,098,1
			\$ 37,877,1
		Michigan - 3.5%	
1,500,000	BBB-/NR	John Tolfree Health System Corp., 6.0%, 9/15/23	\$ 1,520,0
2,000,000	BB-/Ba3	Michigan State Hospital Finance Authority Revenue, 5.5%, 8/15/23	1,920,0
4,010,000	BBB-/Ba1	Michigan State Hospital Finance Authority Revenue, 6.0%, 2/1/24	4,010,6
7,720,000 (c)	NR/NR	Wayne Charter County Michigan Special Airport Facilities Revenue, 6.75%, 12/1/15	4,246,4
			\$ 11,697,2
		Minnesota - 3.2%	
1,675,000	BB/NR	Duluth Economic Development Authority Health Care Facilities Revenue, 7.25%, 6/15/32	\$ 1,789,7
13,260,000 (c)	NR/NR	Minneapolis/St. Paul Metropolitan Airports, 7.0%, 4/1/25	8,884,0
			\$ 10,673,8

The accompanying notes are an integral part of these financial statements. 13

Pioneer Municipal High Income Trust

SCHEDULE OF INVESTMENTS 4/30/06

(continued)

Principal Amount	S&P/Moody's Ratings (unaudited)		Value
\$ 3,000,000	BBB-/Ba1	Mississippi - 0.9% Mississippi Business Finance Corp. Pollution Control Revenue, 5.9%, 5/1/22	\$ 3,025,620
5,500,000	NR/Caa2	Missouri - 1.3% St. Louis Industrial Development Authority	

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

		Revenue, 7.25%, 12/15/35	\$ 4,399,780
		-----	
1,600,000	NR/NR	Montana - 0.5% Two Rivers Authority, Inc. Correctional Facility Improvement Revenue, 7.375%, 11/1/27 (144A)	\$ 1,556,864
		-----	
1,000,000	BBB-/Baa2	Nevada - 1.5% Clark County Industrial Development Revenue, 5.45%, 3/1/38	\$ 1,043,380
1,850,000	B-/NR	Clark County Industrial Development Revenue, 5.5%, 10/1/30	1,807,635
2,000,000	NR/NR	Nevada State Department of Business & Industry, 7.25%, 1/1/23	2,079,400
		-----	
			\$ 4,930,415
		-----	
3,000,000	AAA/Aaa	New Hampshire - 0.9% Manchester School Facilities Revenue, 5.125%, 6/1/28	\$ 3,118,920
		-----	
2,000,000	B/Caa2	New Jersey - 9.9% New Jersey Economic Development Authority Revenue, 6.25%, 9/15/19	\$ 1,967,840
13,350,000	B/Caa2	New Jersey Economic Development Authority Revenue, 6.25%, 9/15/29	13,012,913
1,000,000	B/Caa2	New Jersey Economic Development Authority Revenue, 6.4%, 9/15/23	991,430
6,150,000	B/Caa2	New Jersey Economic Development Authority Revenue, 7.0%, 11/15/30	6,231,180
10,000,000	BBB/Baa3	Tobacco Settlement Financing Corp., 6.75%, 6/1/39	11,096,500
		-----	
			\$ 33,299,863
		-----	
3,700,000++	NR/NR	New Mexico - 1.6% New Mexico Hospital Equipment Loan Council, 6.4%, 6/1/16	\$ 3,781,178
1,350,000	BBB-/NR	Santa Fe Educational Facilities Revenue, 5.75%, 10/1/28	1,406,619
		-----	
			\$ 5,187,797
		-----	

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

Pioneer Municipal High Income Trust

Principal Amount	S&P/Moody's Ratings (unaudited)		Val
\$ 2,000,000	A/NR	New York - 8.8% New York City Industrial Development Agency, 5.375%, 6/1/23	\$ 2,058,5

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

6,225,000	CCC/Caa2	New York City Industrial Development Agency, 6.9%, 8/1/24	5,785,9
5,000,000	AAA/Aaa	New York City Trust Cultural Resources Revenue, 5.125%, 7/1/31	5,161,10
7,040,000 (a)	NR/Aaa	New York State Dormitory Authority Revenue, RIB, 7.328%, 7/1/24 (144A)	8,272,2
2,000,000	NR/NR	Suffolk County Industrial Development Agency, 7.25%, 1/1/30	2,045,2
6,000,000	AAA/Aaa	Triborough Bridge & Tunnel Authority Revenue, 5.25%, 11/15/30	6,316,5
			-----
			\$ 29,639,5
			-----
North Carolina - 2.3%			
3,375,000	NR/NR	Charlotte North Carolina Special Facilities Revenue, 5.6%, 7/1/27	\$ 3,050,8
4,600,000	NR/NR	Charlotte North Carolina Special Facilities Revenue, 7.75%, 2/1/28	4,810,9
			-----
			\$ 7,861,8
			-----
Oklahoma - 6.4%			
3,000,000+	AAA/Aaa	Oklahoma Development Finance Authority Revenue, 5.625%, 8/15/19	\$ 3,190,6
8,000,000+	AAA/Aaa	Oklahoma Development Finance Authority Revenue, 5.625%, 8/15/29	8,508,4
4,100,000	B-/Caa2	Tulsa Municipal Airport Revenue, 5.65%, 12/1/35	4,031,1
1,225,000	B-/Caa2	Tulsa Municipal Airport Revenue, 6.25%, 6/1/20	1,197,0
4,350,000	B-/Caa2	Tulsa Municipal Airport Revenue, 7.35%, 12/1/11	4,352,1
			-----
			\$ 21,279,3
			-----
Oregon - 4.2%			
1,000,000	NR/NR	Klamath Falls Electric Revenue, 5.75%, 1/1/13 (144A)	\$ 891,1
7,000,000	NR/NR	Klamath Falls Electric Revenue, 6.0%, 1/1/25 (144A)	5,678,4
7,500,000	NR/NR	Western Generation Agency Cogeneration Project Revenue, 7.125%, 1/1/21	7,553,8
			-----
			\$ 14,123,4
			-----

The accompanying notes are an integral part of these financial statements. 15

Pioneer Municipal High Income Trust

SCHEDULE OF INVESTMENTS 4/30/06

(continued)

Principal Amount	S&P/Moody's Ratings (unaudited)		Va
\$1,550,000	NR/Baa1	Pennsylvania - 5.9% Allegheny County Hospital Development Authority Revenue, 5.125%, 5/1/25	\$ 1,450,
12,300,000	B+/Ba3	Allegheny County Hospital Development Authority	

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

		Revenue, 9.25%, 11/15/30	14,626,
1,000,000	BB-/NR	Columbia County Hospital Authority Health Care Revenue, 5.9%, 6/1/29	879,
1,000,000	BBB/Ba2	Hazleton Health Services Authority Hospital Revenue, 5.625%, 7/1/17	945,
1,280,000	NR/B2	Langhorne Manor Borough Higher Education & Health Authority Revenue, 7.35%, 7/1/22	1,280,
500,000	BBB+/NR	Pennsylvania Higher Educational Facilities Authority Revenue, 5.4%, 7/15/36	516,
			-----
			\$ 19,699,
			-----
		Rhode Island - 1.3%	
4,000,000	NR/NR	Central Falls Detention Facilities Revenue, 7.25%, 7/15/35	\$ 4,368,
			-----
		South Carolina - 4.6%	
3,000,000	AA-/Aa3	Greenville County School District, 5.0%, 12/1/23	\$ 3,102,
5,000,000+	AA-/Aa3	Greenville County School District, 5.5%, 12/1/28	5,482,
5,185,000+	BBB+/Baa1	South Carolina Jobs Economic Development Authority Revenue, 6.375%, 8/1/34	5,924,
665,000	BBB+/Baa1	South Carolina Jobs Economic Development Authority Revenue, 6.375%, 8/1/34	737,
			-----
			\$ 15,246,
			-----
		Tennessee - 3.8%	
7,000,000	BBB+/Baa2	Johnson City Health & Educational Facilities Board Hospital Revenue, 7.5%, 7/1/33	\$ 8,086,
4,480,000	NR/Baa3	Knox County Health Educational & Housing Facilities Board Hospital Revenue, 6.375%, 4/15/22	4,719,
			-----
			\$ 12,806,
			-----

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

Pioneer Municipal High Income Trust

Principal Amount	S&P/Moody's Ratings (unaudited)		
		Texas - 11.7%	
\$ 7,500,000	CCC/Caa2	Alliance Airport Authority Special Facilities Revenue, 7.5%, 12/1/29	\$ 7,250
1,345,000	NR/Ba1	Bexar County Housing Finance Corp., 8.0%, 12/1/36	1,370
1,000,000	CCC/Caa2	Dallas-Fort Worth International Airport Revenue, 6.0%, 11/1/14	889
5,000,000	CCC/Caa2	Dallas-Fort Worth International Airport Revenue, 6.15%, 5/1/29	4,918
4,000,000	NR/NR	Decatur Hospital Authority Revenue, 7.0%, 9/1/25	4,318
1,000,000+	BB/NR	Georgetown Health Facilities Development Corp.,	



Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

		6.25%, 8/15/29	1,090
3,750,000	B-/Caa2	Houston Airport System Special Facilities Revenue, 5.7%, 7/15/29	3,236
5,340,000	NR/NR	Lubbock Health Facilities Development Corp., 6.625%, 7/1/36	5,249
2,450,000 (a)	NR/NR	Northside Independent School District, RIB, 7.484%, 6/15/33 (144A)	2,702
500,000	BBB-/Baa2	Sabine River Authority Pollution Control Revenue, 6.15%, 8/1/22	543
7,040,000 (a)	NR/Aa1	Texas State, RIB, 7.002%, 4/1/30 (144A)	7,692
			-----
			\$ 39,262
			-----
1,500,000	A-/A3	Vermont - 0.5% Vermont Educational & Health Buildings Financing Agency Revenue, 6.0%, 10/1/28	\$ 1,656
			-----
1,000,000	BBB/Baa2	Virginia - 1.5% Peninsula Ports Authority, 6.0%, 4/1/33	\$ 1,066
4,000,000	BB-/Ba3	Pocahontas Parkway Association of Virginia Toll Road Revenue, 5.5%, 8/15/28	4,074
			-----
			\$ 5,140
			-----
4,710,000	AAA/Aaa	Washington - 5.8% Spokane Public Facilities District Hotel/Motel Tax & Sales, 5.75%, 12/1/27	\$ 5,177
7,025,000	BBB/Baa3	Tobacco Settlement Authority Revenue, 6.625%, 6/1/32	7,674
14,315,000	AAA/Aaa	Washington State General Obligation, 0.0%, 6/1/22	6,558
			-----
			\$ 19,410
			-----
		TOTAL TAX-EXEMPT OBLIGATIONS	
		(Cost \$396,235,158)	\$429,707
			-----

The accompanying notes are an integral part of these financial statements. 17

Pioneer Municipal High Income Trust

SCHEDULE OF INVESTMENTS 4/30/06

(continued)

Shares		Value
	TAX-EXEMPT MONEY MARKET MUTUAL FUND - 0.0% of Net Assets	
6,536	BlackRock Provident Institutional Municipal Fund	\$ 6,536
		-----
	TOTAL TAX-EXEMPT MONEY MARKET MUTUAL FUND	
	(Cost \$6,536)	\$ 6,536
		-----
	TOTAL INVESTMENTS IN SECURITIES - 128.2%	
	(Cost \$396,241,694) (d) (e)	\$ 429,714,372
		-----

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

OTHER ASSETS AND LIABILITIES - 1.9%	\$	6,452,852
		-----
PREFERRED SHARES AT REDEMPTION VALUE, INCLUDING DIVIDENDS PAYABLE - (30.1)%	\$	(101,046,023)
		-----
NET ASSETS APPLICABLE TO COMMON SHAREOWNERS - 100.0%	\$	335,121,201
		=====

NR Security not rated by 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, 2006 the value of these securities amounted to \$55,498,331 or 16.6% of net assets applicable to common shareowners.

+ Prerefunded bonds have been collateralized by U.S. Treasury 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.

++ Prerefunded bonds have been collateralized by cash sufficient to pay interest and principal on the tax exempt issue and to retire the bonds in full at the earliest refunding date.

(a) The interest rate is subject to change periodically and inversely based upon prevailing market rates. The interest rate shown was the rate at April 30, 2006.

(b) Debt obligation initially issued at one coupon which converts to a higher coupon at a specific date. The rate shown was the rate at period end.

(c) Security is in default and is non-income producing.

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

Pioneer Municipal High Income Trust

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

Insured		12.1%
General Obligation		3.8
Revenue Bonds:		
Health Revenue		24.7
Airport Revenue		16.7
Tobacco Revenue		10.6
Education Revenue		6.9
Power Revenue		6.0
Pollution Control Revenue		4.6
Development Revenue		4.0
Facilities Revenue		3.1
Transportation Revenue		2.7
Utilities Revenue		1.3
Gaming Revenue		1.2

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Housing Revenue	1.1
School District Revenue	0.6
Other Revenue	0.6
	-----
	100.0%
	=====

(e) At April 30, 2006, the net unrealized gain on investments based on cost for federal income tax purposes of \$394,854,987 was as follows:

Aggregate gross unrealized gain for all investments in which there is an excess of value over tax cost	\$44,99
Aggregate gross unrealized loss for all investments in which there is an excess of tax cost over value	(10,13
	-----
Net unrealized gain	\$34,85
	=====
For financial reporting purposes net unrealized gain on investments was \$33,472,678 and cost of investments aggregated \$396,241,694	

RIB Residual Interest Bonds

Purchases and sales of securities (excluding temporary cash investments) for the period ended April 30, 2006, aggregated \$89,913,667 and \$84,620,516, respectively.

The accompanying notes are an integral part of these financial statements. 19

Pioneer Municipal High Income Trust

-----  
STATEMENT OF ASSETS AND LIABILITIES 4/30/06  
-----

ASSETS:

Investments in securities, at value (cost \$396,241,694)	\$429,714,372
Receivables -	
Interest	7,853,561
Unrealized appreciation on interest rate swaps	1,361,145
Prepaid expenses	30,402
	-----
Total assets	\$438,959,480
	-----

LIABILITIES:

Dividends payable to common shareowners	\$ 1,415,737
Due to custodian	1,053,250
Due to affiliate	215,230
Administration fee payable	25,104
Accrued expenses	82,935
	-----
Total liabilities	\$ 2,792,256
	-----

PREFERRED SHARES AT REDEMPTION VALUE:

\$25,000 liquidation value per share applicable to 4,040 shares, including dividends payable of \$46,023	\$101,046,023
	-----

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

NET ASSETS APPLICABLE TO COMMON SHAREOWNERS:		
Paid-in capital		\$315,162,552
Distributions in excess of net investment income		(37,943)
Accumulated net realized loss on investments and interest rate swaps		(14,837,231)
Net unrealized gain on investments		33,472,678
Net unrealized gain on interest rate swaps		1,361,145
		-----
Net assets applicable to common shareowners		\$335,121,201
		=====
NET ASSET VALUE PER SHARE:		
No par value, (unlimited number of shares authorized)		
Based on \$335,121,201/22,120,893 common shares		\$ 15.15
		=====

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

Pioneer Municipal High Income Trust

-----  
STATEMENT OF OPERATIONS  
-----

For the Year Ended 4/30/06

INVESTMENT INCOME:		
Interest		\$ 25,998,110
		-----
EXPENSES:		
Management fees	\$ 2,638,673	
Administration fees and reimbursement	342,187	
Transfer agent fees and expenses	52,316	
Auction agent fees	267,788	
Custodian fees	30,089	
Registration fees	23,750	
Professional fees	56,882	
Printing expense	23,336	
Trustees' fees	13,155	
Pricing fees	16,971	
Insurance fees	14,792	
Miscellaneous	14,242	
	-----	
Total expenses		\$ 3,494,181
Less fees paid indirectly		(38)
		-----
Net expenses		\$ 3,494,143
		-----
Net investment income		\$ 22,503,967
		-----
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS AND INTEREST RATE SWAPS:		
Net realized gain (loss) from:		
Investments	\$ (13,037,515)	
Interest rate swaps	47,240	\$ (12,990,275)
	-----	-----
Change in net unrealized gain from:		
Investments	\$ 1,945,843	
Interest rate swaps	543,838	\$ 2,489,681
	-----	-----

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Net loss on investments and interest rate swaps	(10,500,594)
-----	
DISTRIBUTIONS TO PREFERRED SHAREOWNERS FROM NET INVESTMENT INCOME:	\$ (2,704,921)
-----	
Net increase in net assets applicable to common shareowners resulting from operations	\$ 9,298,452
=====	

The accompanying notes are an integral part of these financial statements. 21

### Pioneer Municipal High Income Trust

#### STATEMENTS OF CHANGES IN NET ASSETS

For the Years Ended 4/30/06 and 4/30/05

	Year Ended 4/30/06	Year Ended 4/30/05
FROM OPERATIONS:		
Net investment income	\$ 22,503,967	\$ 25,177,837
Net realized gain (loss) on investments and interest rate swaps	(12,990,275)	258,653
Change in net unrealized gain on investments and interest rate swaps	2,489,681	20,621,102
Dividends and distributions to preferred shareowners from:		
Net investment income	(2,704,921)	(1,444,764)
Net realized gains	-	(90,681)
-----		
Net increase in net assets applicable to common shareowners	\$ 9,298,452	\$ 44,522,147
-----		
DIVIDENDS AND DISTRIBUTIONS TO COMMON SHAREOWNERS FROM:		
Net investment income (\$0.89 and \$1.07 per share, respectively)	\$ (19,731,837)	\$ (23,669,356)
Net realized gains (\$0.00 and \$0.09 per share, respectively)	-	(2,011,719)
-----		
Total distributions to common shareowners	\$ (19,731,837)	\$ (25,681,075)
-----		
FROM TRUST SHARE TRANSACTIONS:		
Changes in estimated common share offering costs previously charged to paid-in capital	\$ -	\$ 123,849
-----		
Net increase in net assets applicable to common shareowners resulting from Trust share transactions	\$ -	\$ 123,849
-----		
Net increase (decrease) in net assets applicable to common shareowners	\$ (10,433,385)	\$ 18,964,921
NET ASSETS APPLICABLE TO COMMON SHAREOWNERS:		
Beginning of year	345,554,586	326,589,665

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

End of year (including undistributed (distributions in excess of) net investment income of (\$37,943) and \$203,603, respectively)	----- \$ 335,121,201 =====	----- \$ 345,554,586 =====
--	----------------------------------	----------------------------------

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

Pioneer Municipal High Income Trust

-----  
**FINANCIAL HIGHLIGHTS**  
 -----

	Year Ended 4/30/06	Year Ended 4/30/05
Per Common Share Operating Performance		
Net asset value, beginning of period	\$ 15.62	\$ 14.76
Increase (decrease) from investment operations (a)		
Net investment income	\$ 1.02	\$ 1.14
Net realized and unrealized gain (loss) on investments and interest rate swaps	(0.48)	0.95
Dividends and distributions to preferred shareowners from:		
Net investment income	(0.12)	(0.07)
Net realized gains	-	- (d)
Net increase (decrease) from investment operations	\$ 0.42	\$ 2.02
Dividends and distributions to common shareowners from:		
Net investment income	(0.89)	(1.07)
Net realized gains	-	(0.09)
Capital change with respect to issuance of:		
Common shares	-	- (d)
Preferred shares	-	-
Net increase (decrease) in net asset value	\$ (0.47)	\$ 0.86
Net asset value, end of period(e)	\$ 15.15	\$ 15.62
Market value, end of period(e)	\$ 13.22	\$ 14.33
Total return(f)	(1.85)%	13.34%
Ratios to average net assets of common shareowners		
Net expenses(g)	1.03%	1.04%
Net investment income before preferred share dividends	6.64%	7.60%
Preferred share dividends	0.80%	0.43%
Net investment income available to common shareowners	5.84%	7.17%
Portfolio turnover	20%	25%
Net assets of common shareowners, end of period (in thousands)	\$335,121	\$345,555
Preferred shares outstanding (in thousands)	\$101,000	\$101,000
Asset coverage per preferred share, end of period	\$107,962	\$110,533
Average market value per preferred share	\$ 25,000	\$ 25,000
Liquidation value, including dividends payable, per preferred share	\$ 25,011	\$ 25,000
Ratios to average net assets of common shareowners before reimbursement of organization expenses and expense reductions		
Net expenses(g)		1.04%
Net investment income before preferred share dividends		7.60%

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Preferred share dividends

0.43%

Net investment income available to common shareowners

7.17%

- (a) The per common share data presented above is based upon the average common shares outstanding for the periods presented.
- (b) Trust shares were first publicly offered on July 18, 2003.
- (c) Net asset value immediately after the closing of the first public offering was \$14.30.
- (d) Amount is less than \$0.01 per share.
  
- (e) 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.
- (f) 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 shareowner brokerage commissions. Total investment return less than a full period is not annualized. Past performance is not a guarantee of future results.
- (g) Expense ratios do not reflect the effect of dividend payments to preferred shareowners.
- (h) Annualized.

The information above represents the audited operating performance data for a share of common stock outstanding, total investment return, ratios to average net assets of common shareowners 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. 23

Pioneer Municipal High Income Trust

-----  
NOTES TO FINANCIAL STATEMENTS 4/30/06  
-----

### 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 Trust may invest in municipal securities with a broad range of maturities and credit ratings, including both investment grade and below investment grade municipal securities.

The Trust invests in below investment grade (high-yield) municipal securities. 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.

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, and the reported amounts of income,

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

expenses and gains and losses on investments during the reporting period. 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. Securities are valued at prices supplied by independent pricing services, which consider such factors as 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. Securities for which market quotations are not readily available are valued at their fair values as determined by, or under the direction of, the Board of Trustees.

24

### Pioneer Municipal High Income Trust

---

---

At April 30, 2006, there were no securities fair valued. Temporary cash investments are valued at amortized cost.

Discount and premium on debt securities are accreted or amortized, respectively, daily on an effective yield to maturity basis and are included in interest income. Interest income, including interest bearing cash accounts, is recorded on an accrual basis.

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

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

### 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.

The amounts and characterizations of distributions to shareowners for financial reporting purposes are determined in accordance with federal income tax rules. Therefore, the source of the Trust's distributions may be shown in the accompanying financial statements as either from or in excess of net investment income or net realized gain on investment transactions, or from paid in-capital, depending on the type of book/tax differences that may exist.

At April 30, 2006 the Trust reclassified \$308,755 to decrease undistributed net investment income and to decrease accumulated net realized loss on



## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

investments. The reclassification has no impact on the net asset value of the Trust and presents the Trust's capital accounts on a tax basis.

25

Pioneer Municipal High Income Trust

NOTES TO FINANCIAL STATEMENTS 4/30/06

(continued)

At April 30, 2006, the Trust had a capital loss carryforward of \$9,706,870 which will expire in 2014 if not utilized.

The tax character of distributions paid to common and preferred shareowners during the year ended April 30, 2006 and April 30, 2005 was as follows:

	2006	2005
Distributions paid from:		
Tax exempt income	\$22,436,758	\$25,094,466
Ordinary income	-	1,196,946
Net long-term capital gains	-	925,108
<b>Total</b>	<b>\$22,436,758</b>	<b>\$27,216,520</b>

The following shows the components of distributable earnings on a federal income tax basis at April 30, 2006.

	2006
Undistributed tax-exempt income	\$ 491,874
Undistributed ordinary income	149,127
Capital loss carryforward	(9,706,870)
Dividend payable	(1,461,760)
Unrealized appreciation	35,616,623
Post-October loss deferred	(5,130,345)
<b>Total</b>	<b>\$19,958,649</b>

The difference between book-basis and tax-basis unrealized appreciation is primarily attributable to the difference between book and tax amortization methods for premiums and discounts on fixed income securities, tax deferral of losses on wash sales and accrual of income on defaulted bond interest.

### C. Automatic Dividend Reinvestment Plan

All common shareowners automatically participate in the Automatic Dividend

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

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

26

Pioneer Municipal High Income Trust

---

---

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 Mellon Investor Services LLC, 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.

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 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 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.

27

Pioneer Municipal High Income Trust

---

---

NOTES TO FINANCIAL STATEMENTS 4/30/06

(continued)

---

---

### 2. Management Agreement

Pioneer Investment Management, Inc. ("PIM"), a wholly owned indirect subsidiary of Unicredito Italiano S.p.A. ("Unicredito Italiano"), manages the Trust's portfolio. Management fees are calculated daily at the annual rate of 0.60% of the Trust's average daily managed assets. "Managed assets" is the average daily value of the Trust's total assets minus the sum of the Trust's liabilities, which liabilities exclude debt related to leverage, short-term debt and the

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

aggregate liquidation preference of any outstanding preferred shares. At April 30, 2006, \$215,230 was payable to PIM related to management fees.

In addition, under PIM's management and administration agreements, certain other services and costs are paid by PIM and reimbursed by the Trust. For the year ended April 30, 2006, the Trust recorded \$34,331 in reimbursements, which is included in "Administration fees and reimbursement" on the Statement of Operations.

The Trust has retained Princeton Administrators, L.P., ("Princeton") to provide certain administrative services to the Trust on its behalf. The Trust pays Princeton a monthly fee at an annual rate of 0.07% of the average weekly value of the Trust's managed assets, subject to a minimum monthly fee of \$10,000.

Also, PIM has agreed for the first three years of the Trust's investment operations to limit the Trust's total annual expenses [excluding organizational and offering costs for common and preferred shares, interest expense, the cost of defending or prosecuting any claim or litigation to which the Trust is a party, (together with any amount in judgment or settlement), indemnification expenses or taxes incurred due to the failure of the Trust to qualify as a regulated investment company under the Code or any other non-recurring or non-operating expenses] to 0.80% of the Trust's average daily managed assets. The dividend on any preferred shares is not an expense for this purpose. As of April 30, 2006, the Trust's expenses were not reduced under such arrangements.

### 3. Transfer Agents

Pioneer Investment Management Shareholder Services, Inc. ("PIMSS"), a wholly owned indirect subsidiary of UniCredito Italiano, through a sub-transfer agency agreement with Mellon Investor Services LLC, provides substantially all transfer agent and shareowner

28

Pioneer Municipal High Income Trust

-----

-----

services related to the Trust's common shares at negotiated rates. Deutsche Bank Trust Company Americas is the transfer agent, registrar, dividend paying agent and redemption agent with respect to the Trust's Auction Preferred Shares ("APS"). The Trust pays Deutsche Bank Trust Company Americas an annual fee, as is agreed to from time to time by the Trust and Deutsche Bank Trust Company Americas, for providing such services.

### 4. Expense Offset Arrangements

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, 2006 the Trust expenses were reduced by \$38 under such arrangement.

### 5. Interest Rate Swaps

The Trust may enter into interest rate swap transactions to attempt to protect itself from increasing dividend or interest expense on its leverage resulting from increasing short-term interest rates. The cost of leverage may rise with an increase in interest rates, generally having the effect of lower yields and potentially lower dividends to common shareowners. Interest rate swaps can be used to "lock in" the cost of leverage and reduce the negative impact that

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

rising short-term interest rates would have on the Trust's leveraging costs.

An interest rate swap is an agreement between two parties, which involves exchanging a floating rate and fixed rate interest payments for a specified period of time. Interest rate swaps involve the accrual of the net interest payments between the parties on a daily basis, with the net amount recorded within the unrealized appreciation/ depreciation of interest rate swaps on the Statement of Assets and Liabilities. Once the interim payments are settled in cash, at the pre-determined dates specified in the agreement, the net amount is recorded as realized gain or loss from interest rate swaps on the Statement of Operations. During the term of the swap, changes in the value of the swap are recognized as unrealized gains and losses by "marking-to-market" the value of the swap based on values obtained from dealer quotations. When the swap is terminated, the Trust will record a realized gain or loss equal to the difference, if any, between

29

Pioneer Municipal High Income Trust

-----  
NOTES TO FINANCIAL STATEMENTS 4/30/06

(continued)  
-----

the proceeds from (or cost of) closing the contract and the cost basis of the contract. The Trust is exposed to credit risk in the event of non-performance by the other party to the interest rate swap. However, at April 30, 2006 the Trust does not anticipate non-performance by any counterparty. Risk may also arise with regard to market movements in the value of the swap arrangement that do not exactly offset the changes in the related dividend requirement or interest expense on the Trust's leverage.

Under the terms of the agreement entered into by the Trust, the Trust receives a floating rate of interest and pays a fixed rate of interest for the term. Details of the swap agreement outstanding as of April 30, 2006 were as follows:

Counterparty	Termination Date	Notional Amount (000)	Fixed Rate	Floating Rate	Unrealized Appreciation
UBS AG	April 5, 2009	\$50,000	2.665%	1 month BMA	\$1,361,145

### 6. Trust Shares

There are an unlimited number of common shares of beneficial interest authorized. Of the 22,120,893 common shares of beneficial interest outstanding at April 30, 2006, PIM owned 6,981 shares.

During the years ended April 30, 2006 and April 30, 2005, there were no share transactions by the Trust. All reinvested distributions were satisfied with previously issued shares purchased in the open market by the Plan Agent and credited to shareowner accounts.

The Trust may classify or reclassify any unissued common shares of beneficial interest into one or more series of preferred shares of beneficial interest. As of April 30, 2006, there were 4,040 APS as follows: Series A-2,000 and Series

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

B-2,040.

Dividends on Series A and Series B are cumulative at a rate which is reset every seven days based on the results of an auction. Dividend rates ranged from 1.78% to 3.70% during the year ended April 30, 2006.

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, asset coverage with respect to the outstanding preferred shares would be less than 200%.

30

Pioneer Municipal High Income Trust

---

---

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 Agreement and Declaration of Trust 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. However, 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 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.

### 7. Subsequent Events

Subsequent to April 30, 2006, the Board of Trustees of the Trust declared a dividend from undistributed net investment income of \$0.064 per common share payable May 31, 2006, to shareowners of record on May 16, 2006.

For the period May 1, 2006 to May 31, 2006, dividends declared on preferred stock totaled \$340,686 in aggregate for the two outstanding preferred share series.

31

Pioneer Municipal High Income Trust

---

---

NOTES TO FINANCIAL STATEMENTS 4/30/06

(continued)

---

---

### ADDITIONAL INFORMATION (unaudited)

During the period, there were no material changes in the Trust's investment objective or fundamental policies that were not approved by the shareowners.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

There were no changes in the Trust's charter or By-Laws that would delay or prevent a change in control of the Trust which have not been approved by the shareowners. There were 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.

### CEO CERTIFICATION DISCLOSURE (unaudited)

The Trust's Chief Executive Officer has submitted to the New York Stock Exchange the annual CEO certification as required by Section 303A.12(a) of the NYSE Listed Company Manual. In addition, the Trust has filed with the Securities and Exchange Commission the certification of its Chief Executive Officer and Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act.

### IMPORTANT TAX INFORMATION (unaudited)

All of the net investment income distributions paid by Pioneer Municipal High Income Trust during the taxable year ended April 30, 2006 qualify as tax-exempt interest dividends for federal income tax purposes.

32

Pioneer Municipal High Income Trust

-----  
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM  
-----

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

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, 2006, 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 periods indicated therein. 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, 2006, by correspondence with the custodian and brokers. We believe that our audits provide a reasonable

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

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, 2006, 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 periods indicated therein, in conformity with U.S. generally accepted accounting principles.

Ernst & Young LLP

Boston, Massachusetts  
June 2, 2006

33

Pioneer Municipal High Income Trust

-----  
FACTORS CONSIDERED BY THE INDEPENDENT TRUSTEES IN  
APPROVING THE MANAGEMENT CONTRACT  
-----

The Investment Company Act of 1940 requires that both the Board of Trustees and a majority of the Independent Trustees (collectively "the Trustees") voting separately annually approve the Trust's management contract (the "Management Contract"). The Trustees have determined that the terms of the Management Contract are fair and reasonable and that renewal of the contract will enable the Trust to receive quality investment advisory services at a cost deemed reasonable and in the best interests of the Trust and its shareowners. In making such determinations, the Independent Trustees relied upon the assistance of counsel to the Independent Trustees and counsel to the Trust.

Throughout the year, the Independent Trustees regularly met in executive sessions separately from the Interested Trustees of the Trust and any officers of Pioneer Investment Management, Inc., the Trust's adviser (the "Investment Adviser"), or its affiliates. While the Trustees, including the Independent Trustees, act on all major matters relating to the Trust, a significant portion of the activities of the Board of Trustees (including certain of those described herein) is conducted through committees, the members of which are comprised exclusively of Independent Trustees. Such committee meetings are attended by officers of the Trust or the Investment Adviser to the extent requested by the members of the committee.

In evaluating the Management Contract, the Trustees conducted a review that was specifically focused upon the renewal of the Management Contract and also relied upon their knowledge, resulting from their meetings throughout the year, of the Investment Adviser, its services and the Trust. Both in meetings specifically dedicated to renewal of the Management Contract and at other meetings during the course of the year, the Trustees, including the Independent Trustees, received materials relating to the Investment Adviser's investment and management services under the Management Contract. These materials included (i) information on the investment performance of the Trust, a peer group of funds and an index, in each case selected by the Independent Trustees for this purpose, (ii) the general investment outlook in the markets in which the Trust invests, (iii) the procedures employed to determine the value of each of the Trust's assets, (iv) the Investment Adviser's management of the relationships with the Trust's unaffiliated service providers, (v) the record of compliance with the Trust's investment policies and restrictions and with the Trust's Code of Ethics and the structure and responsibilities of the Investment Adviser's compliance department, (vi) the nature, cost and

Pioneer Municipal High Income Trust

character of non-investment management services provided by the Investment Adviser and its affiliates, (vii) the disclosures included in the Trust's reports to shareowners, (viii) analyses of the benefits and costs of the use of leverage through the issuance of the Trust's preferred shares and sensitivity analyses based on changes in interest rates and (ix) the discount or premium of the market price of the Trust's common stock relative to its net asset value and measures that are or could be taken to address any discount.

Specifically in connection with the Independent Trustees' review of the Management Contract, the Independent Trustees requested and the Investment Adviser provided additional information in order to evaluate the quality of the Investment Adviser's services and the reasonableness of the fees under the Management Contract. Among other items, this information included data or analyses of (1) investment performance for one year period for the Trust and a peer group selected by the Independent Trustees for this purpose, (2) management and other fees incurred by a peer group of funds selected by the Independent Trustees for this purpose, (3) the advisory fees of other comparable portfolios managed by the Investment Adviser, (4) expense ratios for the Trust and a peer group of funds selected by the Independent Trustees for this purpose, (5) the overall organization of the Investment Adviser, (6) the Investment Adviser's financial results and condition, including its and certain of its affiliates' profitability from services performed for the Trust, (7) administrative reimbursements paid to the Investment Adviser or affiliates, (8) investment management staffing, and (9) operating expenses paid to third parties.

The following summarizes factors considered by the Trustees in connection with reviewing the information described above and their renewal of the Trust's Management Contract. The Trustees did not identify any single factor as all-important or controlling, and the summary does not detail all the matters that were considered.

- A. Ancillary Benefits to Shareowners. The Trustees considered the benefits to shareowners of investing in a closed-end fund that is part of an established group of open and closed-end funds. The Trustees also noted that the relationship of the market price relative to the Trust's net assets attributed to its common shares was at least comparable to other closed-end funds with similar investment approaches.

Pioneer Municipal High Income Trust

FACTORS CONSIDERED BY THE INDEPENDENT TRUSTEES IN APPROVING THE MANAGEMENT CONTRACT

(continued)

- B. Compliance and Investment Performance. The Trustees determined that the Investment Adviser had policies and systems reasonably designed to achieve compliance with the Trust's investment objectives and regulatory requirements. The Trustees also reviewed the Trust's investment



## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

performance, based on total return, as well as the Trust's performance compared to both the performance of a peer group and the results of an index, in each case selected by the Independent Trustees for this purpose. The Trust's performance, on the basis of total return, was in the fifth quintile for the 12 months ended June 30, 2005. (In all quintile rankings referred to throughout this discussion first quintile is most favorable to the Trust's shareowners. Thus, highest relative performance would be first quintile and lowest relative expenses also would be first quintile.) The Trustees also considered the yield (gross of expense) to the Trust's common shareowners relative to the yield (at June 30, 2005) of the Lehman Municipal Bond Index. The Trustees concluded that the performance of the Trust supported the continuation of the Management Contract.

- C. The Investment Adviser's Personnel and Methods. The Trustees reviewed the background of members of the team responsible for the daily management of the Trust and the Trust's investment objective and discipline. The Independent Trustees also have had discussions with senior management of the Investment Adviser responsible for investment operations and the senior management of the Investment Adviser's fixed income group. Among other things, the Trustees considered the number, education and experience of the Investment Adviser's investment staff and their use of technology and emphasis on analytics in view of the risk profile of securities in which the Trust invests. The Trustees concluded that the Investment Adviser had the quality and depth of personnel and the well-developed methods essential to performing its duties under the Management Contract.
- D. Nature and Quality of Other Services. The Trustees considered the nature, quality, cost and extent of other services provided to shareowners of the Trust, including administrative and shareowner services performed by the Investment Adviser under the Management Contract. The Trustees also considered the reasonableness of the arrangements for reimbursement of the Investment Adviser's out-of-pocket costs and expenses, including overhead, for certain administrative services that the Investment

36

Pioneer Municipal High Income Trust

---

---

Adviser is not required to provide under the Management Contract. The Trustees also considered the nature and extent of the other services provided by the Investment Adviser's affiliates under other contracts and its supervision of third party service providers. Based on these considerations, the Trustees concluded that the nature, quality, cost and extent of such services are satisfactory and reliable and serve the shareowners of the Trust well.

- E. Management Fee and Expenses. The Trustees considered the Investment Adviser's fee under the Management Contract relative to the management fees charged by a peer group of funds selected by the Independent Trustees for this purpose using data provided by an independent third party. The Trust's management fee for the 12 months ended June 30, 2005 was in the third quintile relative to the management fees paid by the other funds in that peer group for the comparable period. The Trustees determined that the fee under the Management Contract was reasonable and fair in light of both the overall nature and quality of services provided by the Investment Adviser and the fees charged by the funds in the peer group. The Trustees also considered the Trust's expense ratio for the 12 months ended June 30, 2005

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

and expense ratios for the comparable period of a peer group of funds selected by the Independent Trustees for this purpose. The Trust's expense ratio (after giving effect to expense limitations) was in the first quintile of the applicable peer group for the most recent fiscal year of the peer group. The Trustees concluded that the Trust's expense ratio was capped at a level that was reasonable relative to comparable funds.

- F. Profitability. The Trustees considered the level of the Investment Adviser's profits with respect to the management of the Pioneer funds, including details with respect to the Trust. This consideration included a review of the Investment Adviser's methodology in allocating certain of its costs to the management of each fund. The Trustees also considered the financial results realized by the Investment Adviser in connection with the operation of the Trust. They further considered the profits realized by the Investment Adviser and its affiliates from non-fund businesses that may benefit from or be related to the Trust's business. The Trustees considered the Investment Adviser's profit margins in comparison with the limited available industry data. The Trustees concluded that the Investment Adviser's profits from management

37

Pioneer Municipal High Income Trust

-----  
FACTORS CONSIDERED BY THE INDEPENDENT TRUSTEES IN  
APPROVING THE MANAGEMENT CONTRACT

(continued)

-----  
of the Pioneer funds, including the financial results derived from the Trust, bear a reasonable relationship to the services rendered and are fair for the management of the Trust.

- G. Economies of Scale. The Trustees considered whether the Trust had appropriately benefited from any economies of scale, and whether there was potential for realization of any further economies of scale. Since the Trust is a closed-end fund and its size is relatively stable at an asset level that was anticipated when the management fee was initially set, the Trustees concluded that economies of scale were not a relevant consideration.
- H. Other Benefits to the Investment Adviser. The Trustees also considered the character and amount of fees paid by the Trust, other than under the Management Contract, for services provided by the Investment Adviser and affiliates. The Trustees further considered the revenues and profitability of the Investment Adviser's businesses other than the fund business, including the Investment Adviser's institutional investment advisory business. The Trustees considered the intangible benefits that accrue to the Investment Adviser and its affiliates by virtue of its relationship with the Trust and the Pioneer funds as a group. The Trustees concluded that all these types of benefits accruing to the Investment Adviser were reasonable in the context of the overall relationship between the Investment Adviser and the Trust.

Conclusion. The Trustees, in light of the Investment Adviser's overall performance, considered it appropriate to continue to retain the management services of the Investment Adviser. Based on their evaluation of all material factors deemed relevant and the advice of independent counsel, the Trustees concluded that the Management Contract with the Trust is fair and reasonable and voted to approve the continuation of the Management Contract for another year.

Pioneer Municipal High Income Trust

-----  
TRUSTEES, OFFICERS AND SERVICE PROVIDERS  
-----

Investment Adviser  
Pioneer Investment Management, Inc.

Custodian  
Brown Brothers Harriman & Co.

Independent Registered Public Accounting Firm  
Ernst & Young LLP

Legal Counsel  
Wilmer Cutler Pickering Hale and Dorr LLP

Transfer Agent  
Pioneer Investment Management Shareholder Services, Inc.

Shareowner Services and Sub-Transfer Agent  
Mellon Investor Services LLC

Preferred Share Auction/Transfer Agent and Registrar  
Deutsche Bank Trust Company Americas

Sub-Administrator  
Princeton Administrators, L.P.

Trustees and Officers  
The Trust's Board of Trustees provides broad supervision over the Trust's affairs. The officers of the Trust are responsible for the Trust's operations. The Trust's Trustees and officers are listed below, together with their principal occupations during the past five years. Trustees who are interested persons of the Trust within the meaning of the Investment Company Act of 1940 are referred to as Interested Trustees. Trustees who are not interested persons of the Trust are referred to as Independent Trustees. Each of the Trustees (except Mr. Hood and Mr. West) serve as a Trustee of the 91 U.S. registered investment portfolios for which Pioneer Investment Management, Inc. ("Pioneer") serves as investment adviser (the "Pioneer Funds"). Mr. Hood and Mr. West serve as Trustees for 35 of the 91 Pioneer Funds. The address for all Interested Trustees and all officers of the Trust is 60 State Street, Boston, Massachusetts 02109.

The Trust's statement of additional information provides more detailed information regarding the Trust's Trustees and is available upon request, without charge, by calling 1-800-225-6292.

39

-----  
TRUSTEES, OFFICERS AND SERVICE PROVIDERS  
-----

Proxy Voting Policies and Procedures of the Trust are available without charge, upon request, by calling our toll free number (1-800-225-6292). Information regarding how the Trust voted proxies relating to portfolio securities during the most recent 12-month period ended June 30 is publicly available to

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

shareowners at pioneerinvestments.com and on the SEC's web site at  
<http://www.sec.gov>.

40

-----  
Pioneer Municipal High Income Trust  
-----

INTERESTED TRUSTEES  
-----

Name and Age	Positions Held With the Fund	Length of Service and Term of Office
John F. Cogan, Jr. (79)*	Chairman of the Board, Trustee and President	Class I Trustee since 2003. Term expires in 2007. Elected by Preferred Shares

\*Mr. Cogan is an Interested Trustee because he is an officer or director of Pioneer and certain o

Osbert M. Hood (53)**	Trustee and Executive Vice President	Class II Trustee since 2003. Term expires in 2008.
-----------------------	--	--

\*\*Mr. Hood is an Interested Trustee because he is an officer or director of Pioneer and certain o

-----  
Pioneer Municipal High Income Trust  
-----

INTERESTED TRUSTEES  
-----

Name and Age	Principal Occupation During Past Five Years	Other by
John F. Cogan, Jr. (79)*	Deputy Chairman and a Director of Pioneer Global Asset Management S.p.A. ("PGAM"); Non-Executive Chairman and a Director of Pioneer Investment Management USA Inc. ("PIM-USA"); Chairman and a Director of Pioneer; Director of Pioneer Alternative Investment Management Limited (Dublin); President and a Director of Pioneer Alternative Investment Management (Burmuda) Limited and affiliated funds; Director of PIOGLOBAL Real Estate Investment Fund (Russia); Director of Nano-C, Inc. (since 2003); Director of Cole Investment Corporation (since 2004); Director of Fiduciary Counseling Inc.; President and Director of Pioneer Funds Distributor, Inc. ("PFD"); President of all of the Pioneer Funds; and of Counsel, Wilmer Cutler Pickering Hale and Dorr LLP (counsel to PIM-USA and the Pioneer Funds).	Cha of Com of Com

Osbert M. Hood (53)**	President and Chief Executive Officer, PIM-USA since May 2003 (Director since January 2001); President and Director of Pioneer since May 2003; Chairman and Director of Pioneer Investment Management	Non
-----------------------	---	-----

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Shareholder Services, Inc. ("PIMSS") since May 2003; Executive Vice President of all of the Pioneer Funds since June 2003; Executive Vice President and Chief Operating Officer of PIM-USA, November 2000 to May 2003.

41

Pioneer Municipal High Income Trust

INDEPENDENT TRUSTEES

Name, Age and Address	Positions Held With the Fund	Length of Service and Term of Office
David R. Bock **(62) 3050 K. Street NW, Washington, DC 20007	Trustee	Class I Trustee since 2005. Term expires in 2007.

\*\*Mr. Bock became a Trustee of the Fund on January 1, 2005.

Mary K. Bush (58) 3509 Woodbine Street, Chevy Chase, MD 20815	Trustee	Class III Trustee since 2003. Term expires in 2006.
Margaret B.W. Graham (58) 1001 Sherbrooke Street West, Montreal, Quebec, Canada H3A 1G5	Trustee	Class II Trustee since 2003. Term expires in 2008.
Thomas J. Perna (55) 89 Robbins Avenue, Berkeley Heights, NJ 07922	Trustee	Class III Trustee since February 2006. Term expires in 2006.

Pioneer Municipal High Income Trust

INDEPENDENT TRUSTEES

Name, Age and Address	Principal Occupation During Past Five Years	Other Directorships Held by this Trustee
David R. Bock **(62) 3050 K. Street NW, Washington, DC 20007	Senior Vice President and Chief Financial Officer, I-trax, Inc. (publicly traded health care services company) (2001 - present); Managing Partner, Federal City Capital Advisors (boutique merchant bank) (2002 to 2004); Executive Vice President and Chief Financial Officer, Pedestal Inc. (internet-based mortgage trading company) (2000 - 2002).	Director of Social Company afforda finance Directo Mortgag traded

\*\*Mr. Bock became a Trustee of the Fund on January 1, 2005.

Mary K. Bush (58)	President, Bush International (international financial	Directo
-------------------	--	---------

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

3509 Woodbine Street, advisory firm).  
Chevy Chase, MD 20815

Corpora  
identif  
special  
product  
Mortgag  
Insuran  
and Bri  
Inc. (e

Margaret B.W. Graham (58) 1001 Sherbrooke Street West, Montreal, Quebec, Canada H3A 1G5	Founding Director, The Winthrop Group, Inc. (consulting firm); Desautels, Faculty of Management, McGill University.	None
Thomas J. Perna (55) 89 Robbins Avenue, Berkeley Heights, NJ 07922	Private investor (2004 - present); Senior Executive Vice President, The Bank of New York (financial and securities services) (1986 - 2004).	Directo (techno securit industr

42

Pioneer Municipal High Income Trust

Name, Age and Address	Positions Held With the Fund	Length of Service and Term of Office
Marguerite A. Piret (57) One Boston Place, 28th Floor, Boston, MA 02108	Trustee	Class III Trustee since 2003. Term expires in 2006. Elected by Preferred Shares only.
Stephen K. West (77) 125 Broad Street, New York, NY 10004	Trustee	Class I Trustee since 2003. Term expires in 2007.
John Winthrop (69) One North Adgers Wharf, Charleston, SC 29401	Trustee	Class II Trustee since 2003. Term expires in 2008.

Pioneer Municipal High Income Trust

Name, Age and Address	Principal Occupation During Past Five Years	Other D by this
Marguerite A. Piret (57) One Boston Place, 28th Floor, Boston, MA 02108	President and Chief Executive Officer, Newbury, Piret & Company, Inc. (investment banking firm).	Directo High In (closed

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

		company
Stephen K. West (77) 125 Broad Street, New York, NY 10004	Senior Counsel, Sullivan & Cromwell (law firm).	Director Helvetia (closed company)
John Winthrop (69) One North Adgers Wharf, Charleston, SC 29401	President, John Winthrop & Co., Inc. (private investment firm).	None

FUND OFFICERS

Dorothy E. Bourassa (58)	Secretary	Since 2003. Serves at the discretion of the Board.	Secretary of PIM-USA; Senior Vice President of Pioneer; and Secretary/Clerk of Pioneer subsidiaries; Secretary of all of Pioneer's subsidiaries since September 2003 (Assistant Secretary from September 2000 to September 2003).
--------------------------	-----------	--	---

43

Pioneer Municipal High Income Trust

FUND OFFICERS

Name and Age	Positions Held With the Fund	Length of Service and Term of Office
Christopher J. Kelley (41)	Assistant Secretary	Since 2003. Serves at the discretion of the Board.
David C. Phelan (48)	Assistant Secretary	Since 2003. Serves at the discretion of the Board.
Vincent Nave (60)	Treasurer	Since 2003. Serves at the discretion of the Board.
Mark E. Bradley (46)	Assistant Treasurer	Since 2003. Serves at the discretion of the Board.
Luis I. Presutti (41)	Assistant Treasurer	Since November, 2000. Serves at the discretion of the Board.
Gary Sullivan (48)	Assistant Treasurer	Since May, 2003.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Serves at the discretion of the Board.

Pioneer Municipal High Income Trust

FUND OFFICERS

Name and Age	Principal Occupation During Past Five Years	Other Director by this Office
Christopher J. Kelley (41)	Vice President and Senior Counsel of Pioneer since July 2002; Vice President and Senior Counsel of BISYS Fund Services, Inc. (April 2001 to June 2002); Assistant Secretary of all Pioneer Funds since September 2003.	None
David C. Phelan (48)	Partner, Wilmer Cutler Pickering Hale and Dorr LLP; Assistant Secretary of all Pioneer Funds since September 2003.	None
Vincent Nave (60)	Vice President - Fund Accounting, Administration and Custody Services of Pioneer; and Treasurer of all of the Pioneer Funds.	None
Mark E. Bradley (46)	Deputy Treasurer of Pioneer since 2004; Treasurer and Senior Vice President, CDC IXIS Asset Management Services from 2002 to 2003; Assistant Treasurer and Vice President, MFS Investment Management from 1997 to 2002; and Assistant Treasurer of all of the Pioneer Funds since November 2004.	None
Luis I. Presutti (41)	Assistant Vice President - Fund Accounting, Administration and Custody Services of Pioneer; and Assistant Treasurer of all of the Pioneer Funds.	None
Gary Sullivan (48)	Fund Accounting Manager - Fund Accounting, Administration and Custody Services of Pioneer; and Assistant Treasurer of all of the Pioneer Funds since May 2002.	None

44

Pioneer Municipal High Income Trust

Name and Age	Position	With the Trust
Katherine Kim Sullivan (32)	Assistant	



Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Terrence J. Cullen (45)

Chief  
Office

Pioneer Municipal High Income Trust

Name and Age

Length  
and Te

Katherine Kim Sullivan (32)

Since  
at the  
the Bo

Terrence J. Cullen (45)

Since  
Serves  
discre  
the Bo

The outstanding capital stock of PFD, PIM and PIMSS is indirectly wholly owned by UniCredito Italiano S.p.A. ("UniCredito Italiano"), one of the largest banking groups in Italy. PIM, the Trust's investment adviser, provides investment management and financial services to mutual funds, institutional and other clients.

45

This page for your notes.

46

This page for your notes.

47

This page for your notes.

48

-----  
-----  
This page for your notes.

49

-----  
-----  
This page for your notes.

50

-----  
-----  
This page for your notes.

51

-----  
-----  
This page for your notes.

52

-----  
HOW TO CONTACT PIONEER  
-----

We are pleased to offer a variety of convenient ways for you to contact Mellon for assistance or information.

You can call Mellon Investor Services LLC for:

Account Information 1-800-710-0935

Telecommunications Device for the Deaf (TDD) 1-800-231-5469

Or write to Mellon Investor Services LLC:

For

General inquiries, lost dividend checks

Write to

P.O. Box 3315  
South Hackensack, NJ

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Change of address, account consolidation	07606-1915 P.O. Box 3316 South Hackensack, NJ 07606-1916
Lost stock certificates	P.O. Box 3317 South Hackensack, NJ 07606-1917
Stock transfer	P.O. Box 3312 South Hackensack, NJ 07606-1912
Dividend reinvestment plan (DRIP)	P.O. Box 3338 South Hackensack, NJ 07606-1938

For additional information, please contact your investment advisor or visit our web site [pioneerinvestments.com](http://pioneerinvestments.com).

The Trust files a complete statement of investments with the Securities and Exchange Commission for the first and third quarters for each fiscal year on Form N-Q. Shareholders may view the filed Form N-Q by visiting the Commission's web site at <http://www.sec.gov>. The filed form may also be viewed and copied at the Commission's Public Reference Room in Washington, DC. Information regarding the operations of the Public Reference Room may be obtained by calling 1-800-SEC-0330.

The Trust's Chief Executive Officer is required by the New York Stock Exchange's Listing Standards to file annually with the Exchange a certification that he is not aware of any violation by the Trust of the Exchange's Corporate Governance Standards applicable to the Trust. The Trust has filed such certification.

### ITEM 2. CODE OF ETHICS.

(a) Disclose whether, as of the end of the period covered by the report, the registrant has adopted a code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, regardless of whether these individuals are employed by the registrant or a third party. If the registrant has not adopted such a code of ethics, explain why it has not done so.

The registrant has adopted, as of the end of the period covered by this report, a code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer and controller.

(b) For purposes of this Item, the term "code of ethics" means written standards that are reasonably designed to deter wrongdoing and to promote:

- (1) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- (2) Full, fair, accurate, timely, and understandable disclosure in reports and documents that a registrant files with, or submits to, the Commission and in other public communications made by the registrant;
- (3) Compliance with applicable governmental laws, rules, and regulations;
- (4) The prompt internal reporting of violations of the code to an appropriate person or persons identified in the code; and

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

(5) Accountability for adherence to the code.

(c) The registrant must briefly describe the nature of any amendment, during the period covered by the report, to a provision of its code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, regardless of whether these individuals are employed by the registrant or a third party, and that relates to any element of the code of ethics definition enumerated in paragraph (b) of this Item. The registrant must file a copy of any such amendment as an exhibit pursuant to Item 10(a), unless the registrant has elected to satisfy paragraph (f) of this Item by posting its code of ethics on its website pursuant to paragraph (f)(2) of this Item, or by undertaking to provide its code of ethics to any person without charge, upon request, pursuant to paragraph (f)(3) of this Item.

The registrant has made no amendments to the code of ethics during the period covered by this report.

(d) If the registrant has, during the period covered by the report, granted a waiver, including an implicit waiver, from a provision of the code of ethics to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, regardless of whether these individuals are employed by the registrant or a third party, that relates to one or more of the items set forth in paragraph (b) of this Item, the registrant must briefly describe the nature of the waiver, the name of the person to whom the waiver was granted, and the date of the waiver.

Not applicable.

(e) If the registrant intends to satisfy the disclosure requirement under paragraph (c) or (d) of this Item regarding an amendment to, or a waiver from, a provision of its code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and that relates to any element of the code of ethics definition enumerated in paragraph (b) of this Item by posting such information on its Internet website, disclose the registrant's Internet address and such intention.

Not applicable.

(f) The registrant must:

(1) File with the Commission, pursuant to Item 10(a), a copy of its code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, as an exhibit to its annual report on this Form N-CSR;

(2) Post the text of such code of ethics on its Internet website and disclose, in its most recent report on this Form N-CSR, its Internet address and the fact that it has posted such code of ethics on its Internet website; or

(3) Undertake in its most recent report on this Form N-CSR to provide to any person without charge, upon request, a copy of such code of ethics and explain the manner in which such request may be made.  
See Item 10(2)

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

- (a) (1) Disclose that the registrant's board of trustees has determined that the registrant either:
- (i) Has at least one audit committee financial expert serving on its audit committee; or
  - (ii) Does not have an audit committee financial expert serving on its audit committee.

The registrant's Board of Trustees has determined that the registrant has at least one audit committee financial expert.

(2) If the registrant provides the disclosure required by paragraph (a)(1)(i) of this Item, it must disclose the name of the audit committee financial expert and whether that person is "independent." In order to be considered "independent" for purposes of this Item, a member of an audit committee may not, other than in his or her capacity as a member of the audit committee, the board of trustees, or any other board committee:

- (i) Accept directly or indirectly any consulting, advisory, or other compensatory fee from the issuer; or
- (ii) Be an "interested person" of the investment company as defined in Section 2(a)(19) of the Act (15 U.S.C. 80a-2(a)(19)).

Ms. Marguerite A. Piret, an independent trustee, is such an audit committee financial expert.

(3) If the registrant provides the disclosure required by paragraph (a)(1)(ii) of this Item, it must explain why it does not have an audit committee financial expert.

Not applicable.

### ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

(a) Disclose, under the caption AUDIT FEES, the aggregate fees billed for each of the last two fiscal years for professional services rendered by the principal accountant for the audit of the registrant's annual financial statements or services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements for those fiscal years.

#### Audit Fees

Fees for audit services provided to the Trust totaled approximately \$26,335 in 2006 and \$22,900 in 2005.

(b) Disclose, under the caption AUDIT-RELATED FEES, the aggregate fees billed in each of the last two fiscal years for assurance and related services by the principal accountant that are reasonably related to the performance of the audit of the registrant's financial statements and are not reported under paragraph (a) of this Item. Registrants shall describe the nature of the services comprising the fees disclosed under this category.

#### Audit-Related Fees

Fees for the Trust's audit-related services totaled approximately \$8,500 in 2006 and \$8,000 in 2005, which were related to the issuance of agreed upon procedures report to the rating agencies.

(c) Disclose, under the caption TAX FEES, the aggregate fees billed in each of the last two fiscal years for professional services rendered by the principal

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

accountant for tax compliance, tax advice, and tax planning. Registrants shall describe the nature of the services comprising the fees disclosed under this category.

### Tax Fees

Fees for tax compliance services, primarily for tax returns, totaled approximately \$6,800 and \$6,000 for 2006 and 2005, respectively.

(d) Disclose, under the caption ALL OTHER FEES, the aggregate fees billed in each of the last two fiscal years for products and services provided by the principal accountant, other than the services reported in paragraphs (a) through (c) of this Item. Registrants shall describe the nature of the services comprising the fees disclosed under this category.

### Other Fees

There were no other services provided to the Trust during the fiscal years ended April 30, 2006 and 2005.

(e) (1) Disclose the audit committee's pre-approval policies and procedures described in paragraph (c) (7) of Rule 2-01 of Regulation S-X.

## PIONEER FUNDS

### APPROVAL OF AUDIT, AUDIT-RELATED, TAX AND OTHER SERVICES PROVIDED BY THE INDEPENDENT AUDITOR

#### SECTION I - POLICY PURPOSE AND APPLICABILITY

The Pioneer Funds recognize the importance of maintaining the independence of their outside auditors. Maintaining independence is a shared responsibility involving Pioneer Investment Management, Inc ("PIM"), the audit committee and the independent auditors.

The Funds recognize that a Fund's independent auditors: 1) possess knowledge of the Funds, 2) are able to incorporate certain services into the scope of the audit, thereby avoiding redundant work, cost and disruption of Fund personnel and processes, and 3) have expertise that has value to the Funds. As a result, there are situations where it is desirable to use the Fund's independent auditors for services in addition to the annual audit and where the potential for conflicts of interests are minimal. Consequently, this policy, which is intended to comply with Rule 210.2-01(C)(7), sets forth guidelines and procedures to be followed by the Funds when retaining the independent audit firm to perform audit, audit-related tax and other services under those circumstances, while also maintaining independence.

Approval of a service in accordance with this policy for a Fund shall also constitute approval for any other Fund whose pre-approval is required pursuant to Rule 210.2-01(c)(7)(ii).

In addition to the procedures set forth in this policy, any non-audit services that may be provided consistently with Rule 210.2-01 may be approved by the Audit Committee itself and any pre-approval that may be waived in accordance with Rule 210.2-01(c)(7)(i)(C) is hereby waived.

Selection of a Fund's independent auditors and their compensation shall be determined by the Audit Committee and shall not be subject to this policy.

#### SECTION II - POLICY

---

**Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR**

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
------------------	------------------------------	---

I. AUDIT SERVICES	Services that are directly related to performing the independent audit of the Funds	<ul style="list-style-type: none"> <li>o Accounting research assistance</li> <li>o SEC consultation, registration statements, and reporting</li> <li>o Tax accrual related matters</li> <li>o Implementation of new accounting standards</li> <li>o Compliance letters (e.g. rating agency letters)</li> <li>o Regulatory reviews and assistance regarding financial matters</li> <li>o Semi-annual reviews (if requested)</li> <li>o Comfort letters for closed end offerings</li> </ul>
-------------------	---	---

II. AUDIT-RELATED SERVICES	Services which are not prohibited under Rule 210.2-01(C)(4) (the "Rule") and are related extensions of the audit services support the audit, or use the knowledge/expertise gained from the audit procedures as a foundation to complete the project. In most cases, if the Audit-Related Services are not performed by the Audit firm, the scope of the Audit Services would likely increase. The Services are typically well-defined and governed by accounting professional standards (AICPA, SEC, etc.)	<ul style="list-style-type: none"> <li>o AICPA attest and agreed-upon procedures</li> <li>o Technology control assessments</li> <li>o Financial reporting control assessments</li> <li>o Enterprise security architecture assessment</li> </ul>
----------------------------	---	---

**AUDIT COMMITTEE APPROVAL POLICY**

**AUDIT COMMITTEE REPORTING POLICY**

o "One-time" pre-approval for the audit period for all pre-approved specific service subcategories. Approval of the independent auditors as auditors for a Fund shall constitute pre approval for these services.

o A summary of all such services and related fees reported at each regularly scheduled Audit Committee meeting.

o "One-time" pre-approval for the fund fiscal year within a specified dollar limit for all pre-approved specific service subcategories

o A summary of all such services and related fees (including comparison to specified dollar limits) reported quarterly.

o Specific approval is needed to exceed the

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

pre-approved dollar limit for these services (see general Audit Committee approval policy below for details on obtaining specific approvals)

- o Specific approval is needed to use the Fund's auditors for Audit-Related Services not denoted as "pre-approved", or to add a specific service subcategory as "pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
III. TAX SERVICES	Services which are not prohibited by the Rule, if an officer of the Fund determines that using the Fund's auditor to provide these services creates significant synergy in the form of efficiency, minimized disruption, or the ability to maintain a desired level of confidentiality.	<ul style="list-style-type: none"> <li>o Tax planning and support</li> <li>o Tax controversy assistance</li> <li>o Tax compliance, tax returns, excise tax returns and support</li> <li>o Tax opinions</li> </ul>

AUDIT COMMITTEE APPROVAL POLICY	AUDIT COMMITTEE REPORTING POLICY
<ul style="list-style-type: none"> <li>o "One-time" pre-approval for the fund fiscal year within a specified dollar limit</li> </ul>	<ul style="list-style-type: none"> <li>o A summary of all such services and related fees (including comparison to specified dollar limits) reported quarterly.</li> </ul>
<ul style="list-style-type: none"> <li>o Specific approval is needed to exceed the pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining specific approvals)</li> </ul>	
<ul style="list-style-type: none"> <li>o Specific approval is needed to use the Fund's</li> </ul>	



Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

auditors for tax services not denoted as pre-approved, or to add a specific service subcategory as "pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
IV. OTHER SERVICES A. SYNERGISTIC, UNIQUE QUALIFICATIONS	Services which are not prohibited by the Rule, if an officer of the Fund determines that using the Fund's auditor to provide these services creates significant synergy in the form of efficiency, minimized disruption, the ability to maintain a desired level of confidentiality, or where the Fund's auditors possess unique or superior qualifications to provide these services, resulting in superior value and results for the Fund.	<ul style="list-style-type: none"> <li>o Business Risk Management support</li> <li>o Other control and regulatory compliance projects</li> </ul>

AUDIT COMMITTEE APPROVAL POLICY	AUDIT COMMITTEE REPORTING POLICY
<ul style="list-style-type: none"> <li>o "One-time" pre-approval for the fund fiscal year within a specified dollar limit</li> <li>o Specific approval is needed to exceed the pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining specific approvals)</li> <li>o Specific approval is needed to use the Fund's auditors for "Synergistic" or "Unique Qualifications" Other Services not denoted as pre-approved to the left, or to</li> </ul>	<ul style="list-style-type: none"> <li>o A summary of all such services and related fees (including comparison to specified dollar limits) reported quarterly.</li> </ul>

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

add a specific service  
subcategory as "pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PROHIBITED SERVICE SUBCATEGORIES
PROHIBITED SERVICES	Services which result in the auditors losing independence status under the Rule.	<ol style="list-style-type: none"> <li>1. Bookkeeping or other services related to the accounting records or financial statements of the audit client*</li> <li>2. Financial information systems design and implementation*</li> <li>3. Appraisal or valuation services, fairness* opinions, or contribution-in-kind reports</li> <li>4. Actuarial services (i.e., setting actuarial reserves versus actuarial audit work)*</li> <li>5. Internal audit outsourcing services*</li> <li>6. Management functions or human resources</li> <li>7. Broker or dealer, investment advisor, or investment banking services</li> <li>8. Legal services and expert services unrelated to the audit</li> <li>9. Any other service that the Public Company Accounting Oversight Board determines, by regulation, is impermissible</li> </ol>

AUDIT COMMITTEE APPROVAL POLICY	AUDIT COMMITTEE REPORTING POLICY
<ul style="list-style-type: none"> <li>o These services are not to be performed with the exception of the(*) services that may be permitted if they would not be subject to audit procedures at the audit client (as defined in rule 2-01(f)(4)) level the firm providing the service.</li> </ul>	<ul style="list-style-type: none"> <li>o A summary of all services and related fees reported at each regularly scheduled Audit Committee meeting will serve as continual confirmation that has not provided any restricted services.</li> </ul>

GENERAL AUDIT COMMITTEE APPROVAL POLICY:

- o For all projects, the officers of the Funds and the Fund's auditors will each make an assessment to determine that any proposed projects will not impair independence.
- o Potential services will be classified into the four non-restricted service categories and the "Approval of Audit, Audit-Related, Tax and Other

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Services" Policy above will be applied. Any services outside the specific pre-approved service subcategories set forth above must be specifically approved by the Audit Committee.

- o At least quarterly, the Audit Committee shall review a report summarizing the services by service category, including fees, provided by the Audit firm as set forth in the above policy.

-----

(2) Disclose the percentage of services described in each of paragraphs (b) through (d) of this Item that were approved by the audit committee pursuant to paragraph (c) (7) (i) (C) of Rule 2-01 of Regulation S-X.

### Non-Audit Services

Beginning with non-audit service contracts entered into on or after May 6, 2003, the effective date of the new SEC pre-approval rules, the Trust's audit committee is required to pre-approve services to affiliates defined by SEC rules to the extent that the services are determined to have a direct impact on the operations or financial reporting of the Trust. For the years ended April 30, 2006 and 2005, there were no services provided to an affiliate that required the Trust's audit committee pre-approval.

(f) If greater than 50 percent, disclose the percentage of hours expended on the principal accountant's engagement to audit the registrant's financial statements for the most recent fiscal year that were attributed to work performed by persons other than the principal accountant's full-time, permanent employees.

N/A

(g) Disclose the aggregate non-audit fees billed by the registrant's accountant for services rendered to the registrant, and rendered to the registrant's investment adviser (not including any sub-adviser whose role is primarily portfolio management and is subcontracted with or overseen by another investment adviser), and any entity controlling, controlled by, or under common control with the adviser that provides ongoing services to the registrant for each of the last two fiscal years of the registrant.

The aggregate non-audit fees for the Trust and affiliates, as previously defined, totaled approximately \$15,300 in 2006 and \$15,100 in 2005. These fees include services provided prior to May 6, 2003, the effective date of the pre-approval process.

(h) Disclose whether the registrant's audit committee of the board of trustees has considered whether the provision of non-audit services that were rendered to the registrant's investment adviser (not including any subadviser whose role is primarily portfolio management and is subcontracted with or overseen by another investment adviser), and any entity controlling, controlled by, or under common control with the investment adviser that provides ongoing services to the registrant that were not pre-approved pursuant to paragraph (c) (7) (ii) of Rule 2-01 of Regulation S-X is compatible with maintaining the principal accountant's independence.

The Fund's independent auditor, Ernst & Young LLP ("E&Y"), has advised the Audit Committee of the Fund's Board of Trustees that

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

E&Ys Spanish affiliate (E&Y Spain) performed certain non-audit work for Pioneer Global Investments Limited ("PGIL"), an affiliate of the Funds investment adviser. The services involved the receipt and disbursement of monies transferred to E&Y Spain by PGIL in payment of individual payroll and related income tax withholdings due on returns prepared by E&Y Spain for certain PGIL employees located in Spain from February 2001 to October 2005. E&Y became auditors of the Fund in May 2002. These payroll and tax services were discontinued in November 2005. The annual fee received by E&Y Spain for all such services totaled approximately 9,000 Euro per year. E&Y has informed the Audit Committee that based on its internal reviews and the de minimus nature of the services provided and fees received, E&Y does not believe its independence with respect to the Fund has been impaired or that it is disqualified from acting as independent auditors to the Fund.

The Trust's audit committee of the Board of Trustees has considered whether the provision of non-audit services that were rendered to the Affiliates (as defined) that were not pre-approved pursuant to paragraph (c)(7)(ii) of Rule 2-01 of Regulation S-X is compatible with maintaining the principal accountant's independence.

### Item 5. Audit Committee of Listed Registrants

(a) If the registrant is a listed issuer as defined in Rule 10A-3 under the Exchange Act (17 CFR 240.10A-3), state whether or not the registrant has a separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act (15 U.S.C. 78c(a)(58)(A)). If the registrant has such a committee, however designated, identify each committee member. If the entire board of directors is acting as the registrants audit committee as specified in Section 3(a)(58)(B) of the Exchange Act (15 U.S.C. 78c(a)(58)(B)), so state.

The registrant has a separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act (15 U.S.C. 78c(a)(58)(A)).

(b) If applicable, provide the disclosure required by Rule 10A-3(d) under the Exchange Act (17 CFR 240.10A-3(d)) regarding an exemption from the listing standards for audit committees.

N/A

### Item 6. Schedule of Investments.

File Schedule I Investments in securities of unaffiliated issuers as of the close of the reporting period as set forth in 210.12-12 of Regulation S-X [17 CFR 210.12-12], unless the schedule is included as part of the report to shareholders filed under Item 1 of this Form.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Included in Item 1

### ITEM 7. DISCLOSURE OF PROXY VOTING POLICIES AND PROCEDURES FOR CLOSED-END MANAGEMENT INVESTMENT COMPANIES.

A closed-end management investment company that is filing an annual report on this Form N-CSR must, unless it invests exclusively in non-voting securities, describe the policies and procedures that it uses to determine how to vote proxies relating to portfolio securities, including the procedures that the company uses when a vote presents a conflict between the interests of its shareholders, on the one hand, and those of the company's investment adviser; principal underwriter; or any affiliated person (as defined in Section 2(a)(3) of the Investment Company Act of 1940 (15 U.S.C. 80a-2(a)(3)) and the rules thereunder) of the company, its investment adviser, or its principal underwriter, on the other. Include any policies and procedures of the company's investment adviser, or any other third party, that the company uses, or that are used on the company's behalf, to determine how to vote proxies relating to portfolio securities.

#### Proxy Voting Policies and Procedures of Pioneer Investment Management, Inc.

VERSION DATED July, 2004

##### Overview

Pioneer Investment Management, Inc. ("Pioneer") is a fiduciary that owes each of its client's duties of care and loyalty with respect to all services undertaken on the client's behalf, including proxy voting. When Pioneer has been delegated proxy-voting authority for a client, the duty of care requires Pioneer to monitor corporate events and to vote the proxies. To satisfy its duty of loyalty, Pioneer must place its client's interests ahead of its own and must cast proxy votes in a manner consistent with the best interest of its clients. Pioneer will vote all proxies presented in a timely manner.

The Proxy Voting Policies and Procedures are designed to complement Pioneer's investment policies and procedures regarding its general responsibility to monitor the performance and/or corporate events of companies that are issuers of securities held in accounts managed by Pioneer. Pioneer's Proxy Voting Policies summarize Pioneer's position on a number of issues solicited by companies held by Pioneer's clients. The policies are guidelines that provide a general indication on how Pioneer would vote but do not include all potential voting scenarios.

Pioneer's Proxy Voting Procedures detail monitoring of voting, exception votes, and review of conflicts of interest and ensure that case-by-case votes are handled within the context of the overall guidelines (i.e. best interest of client). The overriding goal is that all proxies for US and non-US companies that are received promptly will be voted in accordance with Pioneer's policies or specific client instructions. All shares in a company held by Pioneer-managed accounts will be voted alike, unless a client has given us specific voting instructions on an issue or has not delegated authority to us or the Proxy Voting Oversight Group determines that the circumstances justify a different approach.

Pioneer does not delegate the authority to vote proxies relating to its clients to any of its affiliates, which include other subsidiaries of UniCredito.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Any questions about these policies and procedures should be directed to the Proxy Coordinator.

1

### Proxy Voting Procedures

#### Proxy Voting Service

Pioneer has engaged an independent proxy voting service to assist in the voting of proxies. The proxy voting service works with custodians to ensure that all proxy materials are received by the custodians and are processed in a timely fashion. To the extent applicable, the proxy voting service votes all proxies in accordance with the proxy voting policies established by Pioneer. The proxy voting service will refer proxy questions to the Proxy Coordinator (described below) for instructions under circumstances where: (1) the application of the proxy voting guidelines is unclear; (2) a particular proxy question is not covered by the guidelines; or (3) the guidelines call for specific instructions on a case-by-case basis. The proxy voting service is also requested to call to the Proxy Coordinator's attention specific proxy questions that, while governed by a guideline, appear to involve unusual or controversial issues. Pioneer reserves the right to attend a meeting in person and may do so when it determines that the company or the matters to be voted on at the meeting are strategically important to its clients.

#### Proxy Coordinator

Pioneer's Director of Investment Operations (the "Proxy Coordinator") coordinates the voting, procedures and reporting of proxies on behalf of Pioneer's clients. The Proxy Coordinator will deal directly with the proxy voting service and, in the case of proxy questions referred by the proxy voting service, will solicit voting recommendations and instructions from the Director of Portfolio Management US or, to the extent applicable, investment sub-advisers. The Proxy Coordinator is responsible for ensuring that these questions and referrals are responded to in a timely fashion and for transmitting appropriate voting instructions to the proxy voting service. The Proxy Coordinator is responsible for verifying with the Compliance Department whether Pioneer's voting power is subject to any limitations or guidelines issued by the client (or in the case of an employee benefit plan, the plan's trustee or other fiduciaries).

#### Referral Items

From time to time, the proxy voting service will refer proxy questions to the Proxy Coordinator that are described by Pioneer's policy as to be voted on a case-by-case basis, that are not covered by Pioneer's guidelines or where Pioneer's guidelines may be unclear with respect to the matter to be voted on. Under such certain circumstances, the Proxy Coordinator will seek a written voting recommendation from the Director of Portfolio Management US. Any such recommendation will include: (i) the manner in which the proxies should be voted; (ii) the rationale underlying any such decision; and (iii) the disclosure of any contacts or communications made between Pioneer and any outside parties concerning the proxy proposal prior to the time that the voting instructions are provided. In addition, the Proxy Coordinator will ask the Compliance Department to review the question for any actual or apparent conflicts of interest as described below under "Conflicts of

2

Interest." The Compliance Department will provide a "Conflicts of Interest Report," applying the criteria set forth below under "Conflicts of

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Interest," to the Proxy Coordinator summarizing the results of its review. In the absence of a conflict of interest, the Proxy Coordinator will vote in accordance with the recommendation of the Director of Portfolio Management US.

If the matter presents a conflict of interest for Pioneer, then the Proxy Coordinator will refer the matter to the Proxy Voting Oversight Group for a decision. In general, when a conflict of interest is present, Pioneer will vote according to the recommendation of the Director of Portfolio Management US where such recommendation would go against Pioneer's interest or where the conflict is deemed to be immaterial. Pioneer will vote according to the recommendation of its proxy voting service when the conflict is deemed to be material and the Pioneer's internal vote recommendation would favor Pioneer's interest, unless a client specifically requests Pioneer to do otherwise. When making the final determination as to how to vote a proxy, the Proxy Voting Oversight Group will review the report from the Director of Portfolio Management US and the Conflicts of Interest Report issued by the Compliance Department.

### Conflicts of Interest

A conflict of interest occurs when Pioneer's interests interfere, or appear to interfere with the interests of Pioneer's clients. Occasionally, Pioneer may have a conflict that can affect how its votes proxies. The conflict may be actual or perceived and may exist when the matter to be voted on concerns:

- o An affiliate of Pioneer, such as another company belonging to the UniCredito Italiano S.p.A. banking group (a "UniCredito Affiliate");
- o An issuer of a security for which Pioneer acts as a sponsor, advisor, manager, custodian, distributor, underwriter, broker, or other similar capacity (including those securities specifically declared by PGAM to present a conflict of interest for Pioneer);
- o An issuer of a security for which UniCredito has informed Pioneer that a UniCredito Affiliate acts as a sponsor, advisor, manager, custodian, distributor, underwriter, broker, or other similar capacity; or
- o A person with whom Pioneer (or any of its affiliates) has an existing, material contract or business relationship that was not entered into in the ordinary course of Pioneer's business.
- o Pioneer will abstain from voting with respect to companies directly or indirectly owned by UniCredito Italiano Group, unless otherwise directed by a client. In addition, Pioneer will inform PGAM Global Compliance and the PGAM Independent Directors before exercising such rights.

Any associate involved in the proxy voting process with knowledge of any apparent or actual conflict of interest must disclose such conflict to the Proxy Coordinator and the Compliance Department. The Compliance Department will review each item referred to Pioneer to determine whether an actual or potential conflict of interest with Pioneer exists in connection with the proposal(s) to be voted upon. The review will be conducted by comparing the apparent parties affected by the proxy proposal being

voted upon against the Compliance Department's internal list of interested

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

persons and, for any matches found, evaluating the anticipated magnitude and possible probability of any conflict of interest being present. For each referral item, the determination regarding the presence or absence of any actual or potential conflict of interest will be documented in a Conflicts of Interest Report to the Proxy Coordinator.

### Securities Lending

In conjunction with industry standards Proxies are not available to be voted when the shares are out on loan through either Pioneer's lending program or a client's managed security lending program. However, Pioneer will reserve the right to recall lent securities so that they may be voted according to the Pioneer's instructions. If a portfolio manager would like to vote a block of previously lent shares, the Proxy Coordinator will work with the portfolio manager and Investment Operations to recall the security, to the extent possible, to facilitate the vote on the entire block of shares.

### Share-Blocking

"Share-blocking" is a market practice whereby shares are sent to a custodian (which may be different than the account custodian) for record keeping and voting at the general meeting. The shares are unavailable for sale or delivery until the end of the blocking period (typically the day after general meeting date).

Pioneer will vote in those countries with "share-blocking." In the event a manager would like to sell a security with "share-blocking", the Proxy Coordinator will work with the Portfolio Manager and Investment Operations Department to recall the shares (as allowable within the market time-frame and practices) and/or communicate with executing brokerage firm. A list of countries with "share-blocking" is available from the Investment Operations Department upon request.

### Record Keeping

The Proxy Coordinator shall ensure that Pioneer's proxy voting service:

- o Retains a copy of the proxy statement received (unless the proxy statement is available from the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system);
- o Retains a record of the vote cast;
- o Prepares Form N-PX for filing on behalf of each client that is a registered investment company; and
- o Is able to promptly provide Pioneer with a copy of the voting record upon its request.

4

The Proxy Coordinator shall ensure that for those votes that may require additional documentation (i.e. conflicts of interest, exception votes and case-by-case votes) the following records are maintained:

- o A record memorializing the basis for each referral vote cast;
- o A copy of any document created by Pioneer that was material in making the decision on how to vote the subject proxy; and
- o A copy of any conflict notice, conflict consent or any other written communication (including emails or other electronic



## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

communications) to or from the client (or in the case of an employee benefit plan, the plan's trustee or other fiduciaries) regarding the subject proxy vote cast by, or the vote recommendation of, Pioneer.

- o Pioneer shall maintain the above records in the client's file for a period not less than ten (10) years.

### Disclosure

Pioneer shall take reasonable measures to inform its clients of the process or procedures clients must follow to obtain information regarding how Pioneer voted with respect to assets held in their accounts. In addition, Pioneer shall describe to clients its proxy voting policies and procedures and will furnish a copy of its proxy voting policies and procedures upon request. This information may be provided to clients through Pioneer's Form ADV (Part II) disclosure, by separate notice to the client, or through Pioneer's website.

### Proxy Voting Oversight Group

The members of the Proxy Voting Oversight Group are Pioneer's: Director of Portfolio Management US, Head of Investment Operations, and Director of Compliance. Other members of Pioneer will be invited to attend meetings and otherwise participate as necessary. The Head of Investment Operations will chair the Proxy Voting Oversight Group.

The Proxy Voting Oversight Group is responsible for developing, evaluating, and changing (when necessary) Pioneer's Proxy Voting Policies and Procedures. The group meets at least annually to evaluate and review these policies and procedures and the services of its third-party proxy voting service. In addition, the Proxy Voting Oversight Group will meet as necessary to vote on referral items and address other business as necessary.

### Amendments

Pioneer may not amend its Proxy Voting Policies And Procedures without the prior approval of the Proxy Voting Oversight Group and its corporate parent, Pioneer Global Asset Management S.p.A

5

### Proxy Voting Policies

Pioneer's sole concern in voting proxies is the economic effect of the proposal on the value of portfolio holdings, considering both the short- and long-term impact. In many instances, Pioneer believes that supporting the company's strategy and voting "for" management's proposals builds portfolio value. In other cases, however, proposals set forth by management may have a negative effect on that value, while some shareholder proposals may hold the best prospects for enhancing it. Pioneer monitors developments in the proxy-voting arena and will revise this policy as needed.

All proxies that are received promptly will be voted in accordance with the specific policies listed below. All shares in a company held by Pioneer-managed accounts will be voted alike, unless a client has given us specific voting instructions on an issue or has not delegated authority to us. Proxy voting issues will be reviewed by Pioneer's Proxy Voting Oversight Group, which consists of the Director of Portfolio Management US, the Director of Investment Operations (the Proxy Coordinator), and the Director of Compliance.

Pioneer has established Proxy Voting Procedures for identifying and reviewing conflicts of interest that may arise in the voting of proxies.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Clients may request, at any time, a report on proxy votes for securities held in their portfolios and Pioneer is happy to discuss our proxy votes with company management. Pioneer retains a proxy voting service to provide research on proxy issues and to process proxy votes.

### Administrative

While administrative items appear infrequently in U.S. issuer proxies, they are quite common in non-U.S. proxies.

We will generally support these and similar management proposals:

- o Corporate name change.
- o A change of corporate headquarters.
- o Stock exchange listing.
- o Establishment of time and place of annual meeting.
- o Adjournment or postponement of annual meeting.
- o Acceptance/approval of financial statements.
- o Approval of dividend payments, dividend reinvestment plans and other dividend-related proposals.
- o Approval of minutes and other formalities.

6

- o Authorization of the transferring of reserves and allocation of income.
- o Amendments to authorized signatories.
- o Approval of accounting method changes or change in fiscal year-end.
- o Acceptance of labor agreements.
- o Appointment of internal auditors.

Pioneer will vote on a case-by-case basis on other routine business; however, Pioneer will oppose any routine business proposal if insufficient information is presented in advance to allow Pioneer to judge the merit of the proposal. Pioneer has also instructed its proxy voting service to inform Pioneer of its analysis of any administrative items inconsistent, in its view, with supporting the value of Pioneer portfolio holdings so that Pioneer may consider and vote on those items on a case-by-case basis.

### Auditors

We normally vote for proposals to:

- o Ratify the auditors. We will consider a vote against if we are concerned about the auditors' independence or their past work for the company. Specifically, we will oppose the ratification of auditors and withhold votes from audit committee members if non-audit fees paid by the company to the auditing firm exceed the sum of audit fees plus audit-related fees plus permissible tax fees according to the disclosure categories proposed by the Securities and Exchange Commission.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

- o Restore shareholder rights to ratify the auditors.

We will normally oppose proposals that require companies to:

- o Seek bids from other auditors.
- o Rotate auditing firms, except where the rotation is statutorily required or where rotation would demonstrably strengthen financial disclosure.
- o Indemnify auditors.
- o Prohibit auditors from engaging in non-audit services for the company.

### Board of Directors

On issues related to the board of directors, Pioneer normally supports management. We will, however, consider a vote against management in instances where corporate performance has been very poor or where the board appears to lack independence.

7

### General Board Issues

Pioneer will vote for:

- o Audit, compensation and nominating committees composed of independent directors exclusively.
- o Indemnification for directors for actions taken in good faith in accordance with the business judgment rule. We will vote against proposals for broader indemnification.
- o Changes in board size that appear to have a legitimate business purpose and are not primarily for anti-takeover reasons.
- o Election of an honorary director.

We will vote against:

- o Minimum stock ownership by directors.
- o Term limits for directors. Companies benefit from experienced directors, and shareholder control is better achieved through annual votes.
- o Requirements for union or special interest representation on the board.
- o Requirements to provide two candidates for each board seat.

We will vote on a case-by case basis on these issues:

- o Separate chairman and CEO positions. We will consider voting with shareholders on these issues in cases of poor corporate performance.

### Elections of Directors

In uncontested elections of directors we will vote against:

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

- o Individual directors with absenteeism above 25% without valid reason. We support proposals that require disclosure of director attendance.
- o Insider directors and affiliated outsiders who sit on the audit, compensation, stock option or nominating committees. For the purposes of our policy, we accept the definition of affiliated directors provided by our proxy voting service.

We will also vote against:

- o Directors who have failed to act on a takeover offer where the majority of shareholders have tendered their shares.
- o Directors who appear to lack independence or are associated with very poor corporate performance.

8

We will vote on a case-by case basis on these issues:

- o Re-election of directors who have implemented or renewed a dead-hand or modified dead-hand poison pill (a "dead-hand poison pill" is a shareholder rights plan that may be altered only by incumbent or "dead " directors. These plans prevent a potential acquirer from disabling a poison pill by obtaining control of the board through a proxy vote).
- o Contested election of directors.
- o Prior to phase-in required by SEC, we would consider supporting election of a majority of independent directors in cases of poor performance.
- o Mandatory retirement policies.
- o Directors who have ignored a shareholder proposal that has been approved by shareholders for two consecutive years.

### Takeover-Related Measures

Pioneer is generally opposed to proposals that may discourage takeover attempts. We believe that the potential for a takeover helps ensure that corporate performance remains high.

Pioneer will vote for:

- o Cumulative voting.
- o Increase ability for shareholders to call special meetings.
- o Increase ability for shareholders to act by written consent.
- o Restrictions on the ability to make greenmail payments.
- o Submitting rights plans to shareholder vote.
- o Rescinding shareholder rights plans ("poison pills").
- o Opting out of the following state takeover statutes:
  - o Control share acquisition statutes, which deny large holders voting

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

rights on holdings over a specified threshold.

- o Control share cash-out provisions, which require large holders to acquire shares from other holders.
- o Freeze-out provisions, which impose a waiting period on large holders before they can attempt to gain control.
- o Stakeholder laws, which permit directors to consider interests of non-shareholder constituencies.

9

- o Disgorgement provisions, which require acquirers to disgorge profits on purchases made before gaining control.
- o Fair price provisions.
- o Authorization of shareholder rights plans.
- o Labor protection provisions.
- o Mandatory classified boards.

We will vote on a case-by-case basis on the following issues:

- o Fair price provisions. We will vote against provisions requiring supermajority votes to approve takeovers. We will also consider voting against proposals that require a supermajority vote to repeal or amend the provision. Finally, we will consider the mechanism used to determine the fair price; we are generally opposed to complicated formulas or requirements to pay a premium.
- o Opting out of state takeover statutes regarding fair price provisions. We will use the criteria used for fair price provisions in general to determine our vote on this issue.
- o Proposals that allow shareholders to nominate directors.

We will vote against:

- o Classified boards, except in the case of closed-end mutual funds.
- o Limiting shareholder ability to remove or appoint directors. We will support proposals to restore shareholder authority in this area. We will review on a case-by-case basis proposals that authorize the board to make interim appointments.
- o Classes of shares with unequal voting rights.
- o Supermajority vote requirements.
- o Severance packages ("golden" and "tin" parachutes). We will support proposals to put these packages to shareholder vote.
- o Reimbursement of dissident proxy solicitation expenses. While we ordinarily support measures that encourage takeover bids, we believe that management should have full control over corporate funds.
- o Extension of advance notice requirements for shareholder proposals.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

- o Granting board authority normally retained by shareholders (e.g., amend charter, set board size).
- o Shareholder rights plans ("poison pills"). These plans generally allow shareholders to buy additional shares at a below-market price in the event of a change in control and may deter some bids.

10

### Capital Structure

Managements need considerable flexibility in determining the company's financial structure, and Pioneer normally supports managements' proposals in this area. We will, however, reject proposals that impose high barriers to potential takeovers.

Pioneer will vote for:

- o Changes in par value.
- o Reverse splits, if accompanied by a reduction in number of shares.
- o Share repurchase programs, if all shareholders may participate on equal terms.
- o Bond issuance.
- o Increases in "ordinary" preferred stock.
- o Proposals to have blank-check common stock placements (other than shares issued in the normal course of business) submitted for shareholder approval.
- o Cancellation of company treasury shares.

We will vote on a case-by-case basis on the following issues:

- o Reverse splits not accompanied by a reduction in number of shares, considering the risk of delisting.
- o Increase in authorized common stock. We will make a determination considering, among other factors:
  - o Number of shares currently available for issuance;
  - o Size of requested increase (we would normally approve increases of up to 100% of current authorization);
  - o Proposed use of the additional shares; and
  - o Potential consequences of a failure to increase the number of shares outstanding (e.g., delisting or bankruptcy).
- o Blank-check preferred. We will normally oppose issuance of a new class of blank-check preferred, but may approve an increase in a class already outstanding if the company has demonstrated that it uses this flexibility appropriately.
- o Proposals to submit private placements to shareholder vote.
- o Other financing plans.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

We will vote against preemptive rights that we believe limit a company's financing flexibility.

11

### Compensation

Pioneer supports compensation plans that link pay to shareholder returns and believes that management has the best understanding of the level of compensation needed to attract and retain qualified people. At the same time, stock-related compensation plans have a significant economic impact and a direct effect on the balance sheet. Therefore, while we do not want to micromanage a company's compensation programs, we will place limits on the potential dilution these plans may impose.

Pioneer will vote for:

- o 401(k) benefit plans.
- o Employee stock ownership plans (ESOPs), as long as shares allocated to ESOPs are less than 5% of outstanding shares. Larger blocks of stock in ESOPs can serve as a takeover defense. We will support proposals to submit ESOPs to shareholder vote.
- o Various issues related to the Omnibus Budget and Reconciliation Act of 1993 (OBRA), including:
  - o Amendments to performance plans to conform with OBRA;
  - o Caps on annual grants or amendments of administrative features;
  - o Adding performance goals; and
  - o Cash or cash-and-stock bonus plans.
    - o Establish a process to link pay, including stock-option grants, to performance, leaving specifics of implementation to the company.
    - o Require that option repricings be submitted to shareholders.
    - o Require the expensing of stock-option awards.
    - o Require reporting of executive retirement benefits (deferred compensation, split-dollar life insurance, SERPs, and pension benefits).
  - o Employee stock purchase plans where the purchase price is equal to at least 85% of the market price, where the offering period is no greater than 27 months and where potential dilution (as defined below) is no greater than 10%.

12

We will vote on a case-by-case basis on the following issues:

- o Executive and director stock-related compensation plans. We will consider the following factors when reviewing these plans:
  - o The program must be of a reasonable size. We will approve plans where the combined employee and director plans together would

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

generate less than 15% dilution. We will reject plans with 15% or more potential dilution.

$$\text{Dilution} = (A + B + C) / (A + B + C + D), \text{ where}$$

A = Shares reserved for plan/amendment,

B = Shares available under continuing plans,

C = Shares granted but unexercised and

D = Shares outstanding.

- o The plan must not:
  - o Explicitly permit unlimited option repricing authority or that have repriced in the past without shareholder approval.
  - o Be a self-replenishing "evergreen" plan, plans that grant discount options and tax offset payments.
- o We are generally in favor of proposals that increase participation beyond executives.
- o We generally support proposals asking companies to adopt rigorous vesting provisions for stock option plans such as those that vest incrementally over, at least, a three- or four-year period with a pro rata portion of the shares becoming exercisable on an annual basis following grant date.
- o We generally support proposals asking companies to disclose their window period policies for stock transactions. Window period policies ensure that employees do not exercise options based on insider information contemporaneous with quarterly earnings releases and other material corporate announcements.
- o We generally support proposals asking companies to adopt stock holding periods for their executives.
  - o All other employee stock purchase plans.
  - o All other compensation-related proposals, including deferred compensation plans, employment agreements, loan guarantee programs and retirement plans.
  - o All other proposals regarding stock compensation plans, including extending the life of a plan, changing vesting restrictions, repricing options, lengthening exercise periods or accelerating distribution of awards and pyramiding and cashless exercise programs.

13

We will vote against:

- o Pensions for non-employee directors. We believe these retirement plans reduce director objectivity.
- o Elimination of stock option plans.

We will vote on a case-by case basis on these issues:



## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

- o Limits on executive and director pay.
- o Stock in lieu of cash compensation for directors.

### Corporate Governance

Pioneer will vote for:

- o Confidential Voting.
- o Equal access provisions, which allow shareholders to contribute their opinion to proxy materials.
- o Proposals requiring directors to disclose their ownership of shares in the company.

We will vote on a case-by-case basis on the following issues:

- o Change in the state of incorporation. We will support reincorporations supported by valid business reasons. We will oppose those that appear to be solely for the purpose of strengthening takeover defenses.
- o Bundled proposals. We will evaluate the overall impact of the proposal.
- o Adopting or amending the charter, bylaws or articles of association.
- o Shareholder appraisal rights, which allow shareholders to demand judicial review of an acquisition price.

We will vote against:

- o Shareholder advisory committees. While management should solicit shareholder input, we prefer to leave the method of doing so to management's discretion.
- o Limitations on stock ownership or voting rights.
- o Reduction in share ownership disclosure guidelines.

14

### Mergers and Restructurings

Pioneer will vote on the following and similar issues on a case-by-case basis:

- o Mergers and acquisitions.
- o Corporate restructurings, including spin-offs, liquidations, asset sales, joint ventures, conversions to holding company and conversions to self-managed REIT structure.
- o Debt restructurings.
- o Conversion of securities.
- o Issuance of shares to facilitate a merger.
- o Private placements, warrants, convertible debentures.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

- o Proposals requiring management to inform shareholders of merger opportunities.

We will normally vote against shareholder proposals requiring that the company be put up for sale.

### Mutual Funds

Many of our portfolios may invest in shares of closed-end mutual funds or exchange-traded funds. The non-corporate structure of these investments raises several unique proxy voting issues.

Pioneer will vote for:

- o Establishment of new classes or series of shares.
- o Establishment of a master-feeder structure.

Pioneer will vote on a case-by-case on:

- o Changes in investment policy. We will normally support changes that do not affect the investment objective or overall risk level of the fund. We will examine more fundamental changes on a case-by-case basis.
- o Approval of new or amended advisory contracts.
- o Changes from closed-end to open-end format.
- o Authorization for, or increase in, preferred shares.
- o Disposition of assets, termination, liquidation, or mergers.
- o Classified boards of closed-end mutual funds, but will typically support such proposals.

15

### Social Issues

Pioneer will abstain on stockholder proposals calling for greater disclosure of corporate activities with regard to social issues. "Social Issues" may generally be described as shareholder proposals for a company to:

- o Conduct studies regarding certain issues of public concern and interest;
- o Study the feasibility of the company taking certain actions with regard to such issues; or
- o Take specific action, including ceasing certain behavior and adopting company standards and principles, in relation to issues of public concern and interest.

We believe these issues are important and should receive management attention.

Pioneer will vote against proposals calling for substantial changes in the company's business or activities. We will also normally vote against proposals with regard to contributions, believing that management should control the routine disbursement of funds.

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

### Item 8. Portfolio Managers of Closed-End Management Investment Companies.

(a) If the registrant is a closed-end management investment company that is filing an annual report on this Form N-CSR, provide the following information:

(1) State the name, title, and length of service of the person or persons employed by or associated with the registrant or an investment adviser of the registrant who are primarily responsible for the day-to-day management of the registrants portfolio (Portfolio Manager). Also state each Portfolio Managers business experience during the past 5 years.

(a) (1)

As of the date of this report, day-to-day management of the fund's portfolio is the responsibility of David Eurkus. Mr. Eurkus is supported by the fixed income team. Members of this team manage other Pioneer funds investing primarily in fixed income securities. The portfolio manager and the team also may draw upon the research and investment management expertise of Pioneer's affiliate, Pioneer Investment Management Limited. Mr. Eurkus joined Pioneer as a senior vice president in January 2000 and has been an investment professional since 1969. From 1998 to 2000, Mr. Eurkus was a senior vice president of fixed income investing for the Private Client Group at Brown Brothers Harriman. Prior to that he was a senior vice president at Putnam Investments.

(a) (2)

Other Accounts Managed by the Portfolio Manager. The table below indicates, for the portfolio manager of the fund, information about the accounts other than the fund over which the portfolio manager has day-to-day investment responsibility. All information on the number of accounts and total assets in the table is as of April 30, 2006. For purposes of the table, "Other Pooled Investment Vehicles" may include investment partnerships, undertakings for collective investments in transferable securities ("UCITS") and other non-U.S. investment funds and group trusts, and "Other Accounts" may include separate accounts for institutions or individuals, insurance company general or separate accounts, pension funds and other similar institutional accounts but generally do not include the portfolio manager's personal investment accounts or those which the manager may be deemed to own beneficially under the code of ethics. Certain funds and other accounts managed by the portfolio manager may have substantially similar investment strategies.

Name of Portfolio Manager	Type of Account	Number of Accounts Managed	Total Assets Managed	Number of Accounts Managed for which Advisory Fee is Performance-Based
David Eurkus	Other Registered Investment Companies	5	\$1,951,522,000	N/A
	Other Pooled Investment Vehicles	0	\$0	N/A
	Other Accounts	0	\$0	N/A

Potential Conflicts of Interest. When a portfolio manager is responsible for the management of more than one account, the potential arises for the portfolio manager to favor one account over another. The principal types of potential conflicts of interest that may arise are discussed below. For the reasons outlined below, Pioneer does not believe that any material conflicts are likely to arise out of a portfolio manager's responsibility for the management of the fund as well as one or more other accounts. Although Pioneer has adopted procedures that it believes are reasonably designed to detect and prevent violations of the federal securities laws and to mitigate the potential for conflicts of interest to affect its portfolio management decisions, there can be no assurance that all conflicts will be identified or that all procedures will be effective in mitigating the potential for such risks. Generally, the risks of such conflicts of interests are increased to the extent that a portfolio manager has a financial incentive to favor one account over another. Pioneer has structured its compensation arrangements in a manner that is intended to limit such potential for conflicts of interests. See "Compensation of Portfolio Managers" below.

- o A portfolio manager could favor one account over another in allocating new investment opportunities that have limited supply, such as initial public offerings and private placements. If, for example, an initial public offering that was expected to appreciate in value significantly shortly after the offering was allocated to a single account, that account may be expected to have better investment performance than other accounts that did not receive an allocation of the initial public offering. Generally, investments for which there is limited availability are allocated based upon a range of factors including available cash and consistency with the accounts' investment objectives and policies. This allocation methodology necessarily involves some subjective elements but is intended over time to treat each client in an equitable and fair manner. Generally, the investment opportunity is allocated among participating accounts on a pro rata basis. Although Pioneer believes that its practices are reasonably designed to treat each client in an equitable and fair manner, there may be instances where a fund may not participate, or may participate to a lesser degree than other clients, in the allocation of an investment opportunity.
  
- o A portfolio manager could favor one account over another in the order in which trades for the accounts are placed. If a portfolio manager determines to purchase a security for more than one account in an aggregate amount that may influence the market price of the security, accounts that purchased or sold the security first may receive a more favorable price than accounts that made subsequent transactions. The less liquid the market for the security or the greater the percentage that the proposed aggregate purchases or sales represent of average daily trading volume, the greater the potential for accounts that make subsequent purchases or sales to receive a less favorable price. When a portfolio manager intends to trade the same security on the same day for more than one account, the trades typically are "bunched," which means that the trades for the individual accounts are aggregated and each account receives the same price. There are some types of accounts as to which bunching may not be possible for contractual reasons (such as directed brokerage arrangements). Circumstances may also arise where the trader believes that bunching the orders may not result in the best possible price. Where those accounts or circumstances are involved, Pioneer will place the order in a manner intended to result

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

in as favorable a price as possible for such client.

- o A portfolio manager could favor an account if the portfolio manager's compensation is tied to the performance of that account to a greater degree than other accounts managed by the portfolio manager. If, for example, the portfolio manager receives a bonus based upon the performance of certain accounts relative to a benchmark while other accounts are disregarded for this purpose, the portfolio manager will have a financial incentive to seek to have the accounts that determine the portfolio manager's bonus achieve the best possible performance to the possible detriment of other accounts. Similarly, if Pioneer receives a performance-based advisory fee, the portfolio manager may favor that account, whether or not the performance of that account directly determines the portfolio manager's compensation.
- o A portfolio manager could favor an account if the portfolio manager has a beneficial interest in the account, in order to benefit a large client or to compensate a client that had poor returns. For example, if the portfolio manager held an interest in an investment partnership that was one of the accounts managed by the portfolio manager, the portfolio manager would have an economic incentive to favor the account in which the portfolio manager held an interest.
- o If the different accounts have materially and potentially conflicting investment objectives or strategies, a conflict of interest could arise. For example, if a portfolio manager purchases a security for one account and sells the same security for another account, such trading pattern may disadvantage either the account that is long or short. In making portfolio manager assignments, Pioneer seeks to avoid such potentially conflicting situations. However, where a portfolio manager is responsible for accounts with differing investment objectives and policies, it is possible that the portfolio manager will conclude that it is in the best interest of one account to sell a portfolio security while another account continues to hold or increase the holding in such security.

(a) (3)

Compensation of Portfolio Managers. Pioneer has adopted a system of compensation for portfolio managers and seeks to align the financial interests of the portfolio managers with both those of shareholders of the accounts the portfolio managers manage, through incentive payments based in part on the relative investment performance of those funds, and also Pioneer through incentive payments based in part on Pioneer's financial performance. Pioneer's compensation arrangements with its portfolio managers are determined on the basis of the portfolio manager's overall services to Pioneer and its affiliates and not on the basis of specific funds or accounts managed by the portfolio manager. The compensation program for all Pioneer portfolio managers includes a base salary (determined by the rank and tenure of the employee) and an annual bonus program, as well as customary benefits that are offered generally to all full-time employees. Base compensation is fixed and normally reevaluated on an annual basis. Pioneer seeks to set base compensation at market rates, taking into account the experience and responsibilities of the portfolio manager. The bonus plan is intended to provide a competitive level of annual bonus compensation that is tied to the portfolio manager achieving superior investment performance and aligns the financial incentives of Pioneer and the investment professional. Any bonus under the plan is completely discretionary, with a maximum annual bonus that may be in excess of base salary. The annual bonus is based upon a combination of the following factors:

- o Quantitative Investment Performance. The quantitative investment performance calculation is based on pre-tax performance of all of

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

the accounts managed by the portfolio manager (which includes the fund and any other accounts managed by the portfolio manager) over a one-year period (20% weighting) and four-year period (80% weighting), measured for periods ending on December 31. The accounts, which include the fund, are ranked against a group of mutual funds with similar investment objectives and investment focus (60%) and a broad-based securities market index measuring the performance of the same type of securities in which the accounts invest (40%), which, in the case of the fund are the Lehman Brothers Municipal Bond Index and the Lehman Brothers Non-Investment Grade Municipal Bond Index. As a result of these benchmarks, the performance of the portfolio manager for compensation purposes is measured against criteria that are relevant to the portfolio manager's competitive universe.

- o Qualitative Performance. The qualitative performance component with respect to all of the accounts managed by the portfolio manager includes objectives, such as effectiveness in the areas of teamwork, leadership, communications and marketing, that are mutually established and evaluated by each portfolio manager and management.
- o Pioneer Results and Business Line Results. Pioneer's financial performance, as well as the investment performance of its investment management group, affect a portfolio manager's actual bonus by a leverage factor of plus or minus (+/-) a predetermined percentage.

Certain portfolio managers participate in an incentive plan whereby senior executives or other key employees are granted options in stock of Pioneer Global Asset Management S.p.A., an affiliate of Pioneer, at the then fair value of the underlying stock. These options are generally exercisable within three years.

(a) (4)

Share Ownership by Portfolio Manager. The following table indicates as of April 31, 2006 the value, within the indicated range, of shares beneficially owned by the portfolio manager of the fund.

Name of Portfolio Manager	Beneficial Ownership of the Fund*
David Eurkus	A

\*Key to Dollar Ranges

- A. None
- B. \$1 - \$10,000
- C. \$10,001 - \$50,000
- D. \$50,001 - \$100,000
- E. \$100,001 - \$500,000
- F. \$500,001 - \$1,000,000
- G. Over \$1,000,000

Item 9. Purchases of Equity Securities by Closed-End Management

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

Investment Company and Affiliated Purchasers.

(a) If the registrant is a closed-end management investment company, in the following tabular format, provide the information specified in paragraph (b) of this Item with respect to any purchase made by or on behalf of the registrant or any affiliated purchaser, as defined in Rule 10b-18(a)(3) under the Exchange Act (17 CFR 240.10b-18(a)(3)), of shares or other units of any class of the registrants equity securities that is registered by the registrant pursuant to Section 12 of the Exchange Act (15 U.S.C. 781). Instruction to paragraph (a). Disclose all purchases covered by this Item, including purchases that do not satisfy the conditions of the safe harbor of Rule 10b-18 under the Exchange Act (17 CFR 240.10b-18), made in the period covered by the report. Provide disclosures covering repurchases made on a monthly basis. For example, if the reporting period began on January 16 and ended on July 15, the chart would show repurchases for the months from January 16 through February 15, February 16 through March 15, March 16 through April 15, April 16 through May 15, May 16 through June 15, and June 16 through July 15.

During the period covered by this report, there were no purchases made by or on behalf of the registrant or any affiliated purchaser as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934 (the Exchange Act), of shares of the registrants equity securities that are registered by the registrant pursuant to Section 12 of the Exchange Act.

Item 10. Submission of Matters to a Vote of Security Holders.

Describe any material changes to the procedures by which shareholders may recommend nominees to the registrants board of directors, where those changes were implemented after the registrant last provided disclosure in response to the requirements of Item 7(d)(2)(ii)(G) of Schedule 14A (17 CFR 240.14a-101), or this Item.

There have been no material changes to the procedures by which the shareholders may recommend nominees to the registrants board of directors since the registrant last provided disclosure in response to the requirements of Item 7(d)(2)(ii)(G) of Schedule 14(A) in its definitive proxy statement, or this Item.

ITEM 11. CONTROLS AND PROCEDURES.

(a) Disclose the conclusions of the registrant's principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, about the effectiveness of the registrant's disclosure controls and procedures (as defined in Rule 30a-2(c) under the Act (17 CFR 270.30a-2(c))) based on their evaluation of these controls and procedures as of a date within 90 days of the filing date of the report that includes the disclosure required by this paragraph.

The registrant's principal executive officer and principal financial officer have concluded, that the registrant's disclosure controls and procedures are effective based on their evaluation of these controls and procedures as of a date within 90 days of the filing date of this report.

(b) Disclose whether or not there were significant changes in the registrant's

## Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

There were no significant changes in the registrant's internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

### ITEM 12. EXHIBITS.

File the exhibits listed below as part of this Form. Letter or number the exhibits in the sequence indicated.

(a) Any code of ethics, or amendment thereto, that is the subject of the disclosure required by Item 2, to the extent that the registrant intends to satisfy the Item 2 requirements through filing of an exhibit.

(b) A separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2 under the Act (17 CFR 270.30a-2).

Filed herewith.

### SIGNATURES

[See General Instruction F]

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) Pioneer Municipal High Income Trust

By (Signature and Title)\* /s/ John F. Cogan, Jr.  
John F. Cogan, Jr, President

Date June 30, 2006

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By (Signature and Title)\* /s/ John F. Cogan, Jr.  
John F. Cogan, Jr., President

Date June 30, 2006



Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-CSR

By (Signature and Title)\* /s/ Vincent Nave  
Vincent Nave, Treasurer

Date June 30, 2006

\* Print the name and title of each signing officer under his or her signature.