

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

PIONEER MUNICIPAL HIGH INCOME TRUST

Form N-2

August 08, 2003

As filed with the Securities and Exchange Commission on August 8, 2003

1933 Act File No. 33-_____

1940 Act File No. 811-21321

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

FORM N-2

(Check appropriate box or boxes)

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Pre-Effective Amendment No.

Post-Effective Amendment No.

and/or

REGISTRATION STATEMENT UNDER THE INVESTMENT COMPANY ACT OF 1940

Amendment No. 4

PIONEER MUNICIPAL HIGH INCOME TRUST
Exact Name of Registrant as Specified in Charter

60 State Street, Boston, Massachusetts 02109
Address of Principal Executive Offices (Number, Street, City, State, ZIP Code)

(617) 742-7825
Registrant's Telephone Number, including Area Code

David C. Phelan, Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109
Name and Address (Number, Street, City, State, ZIP Code) of Agent for Service

Copies to:

Approximate Date of Proposed Public Offering: As soon as practicable after the effective date of this Registration Statement.

If any securities being registered on this form are to be offered on a delayed or continuous basis in reliance on Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), other than securities offered in connection with dividend or interest reinvestment plans, check the following box.

CALCULATION OF REGISTRATION FEE UNDER THE SECURITIES ACT

Title of Securities Being Registered	Amount Being Registered	Proposed Maximum Offering Price Per Unit Price	Proposed Maximum Aggregate Offering	Amount of Registration Fee
Preferred Shares (par				

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

value, \$.0001)	40 shares	\$25,000.00	\$1,000,000.00	\$89.90

- (1) Transmitted prior to the filing date to the designated lockbox of the Securities and Exchange Commission at Mellon Bank in Pittsburgh, Pennsylvania.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment, which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

PIONEER MUNICIPAL HIGH INCOME TRUST CROSS-REFERENCE SHEET

PART A--PREFERRED SHARES PROSPECTUS

ITEMS IN PART A OF FORM N-2	LOCATION IN PROSPECTUS
Item 1. Outside Front Cover	Cover page
Item 2. Cover Pages; Other Offering Information	Cover pages
Item 3. Fee Table and Synopsis	Not applicable
Item 4. Financial Highlights	Financial Highlights (Unaudited)
Item 5. Plan of Distribution	Cover page; Prospectus Summary; The Auction; Underwriting
Item 6. Selling Shareholders	Not applicable
Item 7. Use of Proceeds	Use of Proceeds
Item 8. General Description of the Registrant	Cover page; Prospectus Summary; The Trust; Investment Objectives and Principal Investment Strategies; Risk Factors; Net Asset Value
Item 9. Management	Prospectus Summary; Management of the Trust; Description of Preferred Shares;
Item 10. Capital Stock, Long-Term Debt, and Other Securities	Description of Preferred Shares; U.S. Federal Income Tax Matters
Item 11. Defaults and Arrears on Senior Securities	Not applicable
Item 12. Legal Proceedings	Not applicable

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Item 13. Table of Contents of the Statement of Additional Information	Table of Contents for the Statement of Additional Information
---	---

PART B--STATEMENT OF ADDITIONAL INFORMATION

ITEMS IN PART B OF FORM N-2	LOCATION IN THE STATEMENT OF ADDITIONAL INFORMATION
Item 14. Cover Page	Cover page
Item 15. Table of Contents	Cover page
Item 16. General Information and History	Not applicable
Item 17. Investment Objective and Policies	Use of Proceeds; Investment Objectives and Policies; Investment Restrictions; Appendix A--Description of Ratings
Item 18. Management	Management of the Trust
Item 19. Control Persons and Principal Holders of Securities	Not applicable
Item 20. Investment Advisory and Other Services	Management of the Trust
Item 21. Brokerage Allocation and Other Practices	Portfolio Transactions
Item 22. Tax Status	Federal Income Tax Matters
Item 23. Financial Statements	Experts; Financial Statements and Independent Auditors' Report

PART C--OTHER INFORMATION

Items 24-33 have been answered in Part C of this Registration Statement.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

PRELIMINARY PROSPECTUS Subject to completion , 2003

[] SHARES SERIES []
 [] SHARES SERIES []
 [] SHARES SERIES []

[PIONEER INVESTMENTS (R) LOGO]

PIONEER MUNICIPAL HIGH INCOME TRUST
 PREFERRED SHARES

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Pioneer Municipal High Income Trust (the "Trust") is a recently organized diversified, closed-end management investment company. The Trust is offering [] shares of its Series [] Preferred Shares, [] shares of its Series [] Preferred Shares and [] shares of its Series [] Auction Preferred Shares (collectively, the "Preferred Shares").

INVESTMENT OBJECTIVES. The Trust's primary investment objective is to provide its common shareholders with a high level of current income exempt from regular federal income tax. As a secondary investment objective, the Trust also may seek capital appreciation to the extent consistent with its primary investment objective. Distributions from sources other than interest income from the Trust's portfolio of municipal securities, including capital gain distributions, are not exempt from regular federal income tax. There can be no assurance that the Trust will achieve its investment objectives.

PORTFOLIO CONTENTS. Under normal market conditions, the Trust seeks to achieve its investment objectives by investing substantially all (at least 80%) of its assets (net assets plus borrowings for investment purposes) in debt securities and other obligations issued by or on behalf of states, territories and possessions of the United States and the District of Columbia and their political subdivisions, agencies and instrumentalities, the interest on which is exempt from regular federal income tax ("municipal securities"). Up to 25% of the Trust's total assets may be invested in municipal securities the interest income on which is a preference item for purposes of the alternative minimum tax. 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. At least 50% of the Trust's portfolio of municipal securities will be rated investment grade at the time of acquisition (that is, at least "Baa" by Moody's Investors Service, Inc. ("Moody's") or "BBB" by Standard & Poor's Ratings Group ("S&P")) or, if unrated, determined by the Trust's investment adviser to be of comparable credit quality. No more than 50% of the Trust's portfolio of municipal securities will be rated below investment grade at the time of acquisition (that is, Ba or lower by Moody's or BB or lower by S&P) or, if unrated, determined by the Trust's investment adviser to be of comparable credit quality. Municipal securities of below investment grade quality are regarded as having predominantly speculative characteristics with respect to the issuer's capacity to pay interest and repay principal, and are commonly referred to as "junk bonds" or "high yield securities." Under normal market conditions, the dollar-weighted average credit rating of the Trust's portfolio of municipal securities will be at least investment grade.

INVESTMENT ADVISER. Pioneer Investment Management, Inc. is the Trust's investment adviser (the "Adviser"). As of June 30, 2003, the Adviser had approximately \$28 billion in assets under management. See "Management of the Trust."

Certain capitalized terms used in this Prospectus are defined in the Glossary that appears at the end of this Prospectus.

BEFORE BUYING ANY PREFERRED SHARES, YOU SHOULD READ THE DISCUSSION OF THE MATERIAL RISKS OF INVESTING IN THE TRUST IN "RISK FACTORS" BEGINNING ON PAGE ____ . CERTAIN OF THESE RISKS ARE SUMMARIZED IN "PROSPECTUS SUMMARY--SPECIAL RISK CONSIDERATIONS" BEGINNING ON PAGE __ .

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

	PRICE TO PUBLIC	SALES LOAD	PROCEEDS TO TRUST(1)
Per share	\$	\$	\$
Total	\$	\$	\$

(1) Plus accumulated dividends, if any, from the date the Preferred Shares are issued, but before offering expenses payable by the Trust estimated to be \$[].

The Preferred Shares are being offered by the underwriters subject to certain conditions. The underwriters reserve the right to withdraw, cancel or modify the offering in whole or in part. It is expected that the Preferred Shares will be delivered to the nominee of The Depository Trust Company on or about August , 2003.

Investors in Preferred Shares will be entitled to receive cash dividends at an annual rate that may vary for the successive dividend periods for such shares. The dividend rate on the Series __ Preferred Shares for the initial period from and including the date of issue to, but excluding, _____, 2003 will be % per year. The dividend rate on the Series __ Preferred Shares for the initial period from and including the date of issue to, but excluding, _____, 2003 will be % per year. The dividend rate on the Series Preferred Shares for the initial period from and including the date of issue to, but excluding, _____, 2003 will be % per year. For each subsequent period, the auction agent will determine the dividend rate for a particular period by an auction conducted in accordance with the procedures described in this Prospectus and, in further detail, in Appendix C to the Statement of Additional Information (each, an "Auction").

The Preferred Shares, which have no history of public trading, will not be listed on an exchange or automated quotation system. Broker-Dealers may maintain a secondary trading market in the Preferred Shares outside of Auctions; however, they have no obligation to do so, and there can be no assurance that a secondary market for the Preferred Shares will develop or, if it does develop, that it will provide holders with a liquid trading market (i.e., trading will depend on the presence of willing buyers and sellers and the trading price will be subject to variables to be determined at the time of the trade by such Broker-Dealers). A general increase in the level of interest rates may have an adverse effect on the secondary market price of the Preferred Shares, and a shareholder that sells Preferred Shares between Auctions may receive a price per share of less than \$25,000. The Trust may redeem Preferred Shares as described under "Description of Preferred Shares--Redemption."

The Preferred Shares will be senior in liquidation and distribution rights to the Trust's outstanding common shares. The Trust's common shares are traded on the New York Stock Exchange under the symbol "MHI." This offering is conditioned upon the Preferred Shares receiving a rating of "Aaa" from [Rating Agency 1] and [Rating Agency 2] ("Rating Agencies").

The Preferred Shares do not represent a deposit or obligation of, and are not guaranteed or endorsed by, any bank or other insured depository institution and are not insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board or any other federal, state or municipal government or agency.

You should read this Prospectus, which contains important information about the Trust, before deciding whether to invest in the Preferred Shares, and retain it for future reference. A Statement of Additional Information, dated _____,

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

2003, containing additional information about the Trust, has been filed with the Securities and Exchange Commission and is incorporated by reference in its entirety into this Prospectus. You can review the table of contents of the Statement of Additional Information on page ___ of this Prospectus. You may request a free copy of the Statement of Additional Information by calling (800)-225-6292 or by writing to the Trust, or obtain a copy (and other information regarding the Trust) from the Securities and Exchange Commission's website (<http://www.sec.gov>).

You should rely only on the information contained in this Prospectus. The Trust has not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. The Trust is not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. The information appearing in this Prospectus is given as of the date of this Prospectus. The Trust's business, financial condition, results of operations and prospects may have changed since the date of this Prospectus.

TABLE OF CONTENTS

Prospectus summary	1
Financial highlights (unaudited)	18
The Trust	19
Capitalization (unaudited)	19
Investment objectives and principal investment strategies	20
Risk factors	30
Description of Preferred Shares	39
The Auction	49
Management of the Trust	56
Federal income tax matters	58
Net asset value	63
Certain provisions of the Agreement and Declaration of Trust and By-Laws	63
Underwriting	65
Validity of Preferred Shares	66
Table of contents for the Statement of Additional Information	67
GLOSSARY	68

PROSPECTUS SUMMARY

THIS IS ONLY A SUMMARY. THIS SUMMARY MAY NOT CONTAIN ALL OF THE INFORMATION THAT YOU SHOULD CONSIDER BEFORE INVESTING IN THE TRUST'S PREFERRED SHARES. YOU SHOULD REVIEW THE MORE DETAILED INFORMATION CONTAINED IN THIS PROSPECTUS AND IN THE STATEMENT OF ADDITIONAL INFORMATION. CERTAIN CAPITALIZED TERMS USED IN THIS PROSPECTUS ARE DEFINED IN THE GLOSSARY THAT APPEARS AT THE END OF THIS PROSPECTUS.

THE TRUST

Pioneer Municipal High Income Trust (the "Trust") is a newly organized, diversified, closed-end management investment company. The Trust's Common Shares are traded on the New York Stock Exchange under the symbol "MHI". As of _____, 2003, the Trust had ____ common shares outstanding and had net assets of \$____.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

See "The Trust."

THE OFFERING

The Trust is offering an aggregate of ____ Series __ Preferred Shares, ____ Series __ Preferred Shares, and ____ Series __ Preferred Shares, each at a purchase price of \$25,000 per share plus accumulated dividends, if any, from the date of original issue. The Preferred Shares are being offered through a group of underwriters led by _____ (collectively, the "Underwriters"). See "Underwriting."

The Preferred Shares will entitle their holders to receive cash dividends at an annual rate that may vary for successive Dividend Periods. In general, except as described under "Description of Preferred Shares--Dividends," each Dividend Period will be seven days. The Auction Agent will determine the Applicable Rate for a particular period by an Auction conducted on the Business Day immediately prior to the start of that Dividend Period.

The Preferred Shares are not listed on an exchange. Instead, investors may buy or sell Preferred Shares at an Auction that normally is held weekly, by submitting orders to Broker-Dealers that have entered into an agreement with the Auction Agent and the Trust or to certain other Broker-Dealers. [], the Auction Agent, reviews orders from Broker-Dealers on behalf of Existing Holders that wish to sell, or hold at the auction rate, or hold only at a specified Applicable Rate, and on behalf of Potential Holders that wish to buy, Preferred Shares. The Auction Agent then determines the lowest Applicable Rate that will result in all of the outstanding Preferred Shares continuing to be held. The first Auction Date for Series __ Preferred Shares will be _____, 2003, for Series __ Preferred Shares will be _____, 2003, and for Series __ Preferred Shares will be _____, 2003, each being the Business Day before the Initial Dividend Payment Date for the Initial Dividend Period for the relevant series of Preferred Shares (_____, 2003 for Series __, _____, 2003 for Series __, and _____, 2003 for Series __). The Auction day for Series __ Preferred Shares generally will be _____, for Series __ Preferred Shares generally will be _____, and for Series __ Preferred Shares generally will be _____, unless the then-current Dividend Period is a Special Dividend Period, or the day that normally would be the Auction Date or the first day of the subsequent Dividend Period is not a Business Day.

Generally, investors in the Preferred Shares will not receive certificates representing ownership of their shares. The Securities Depository (The Depository Trust Company or any successor) or its nominee for the account of the investor's Broker-Dealer will maintain record ownership of Preferred Shares in book-entry form. An investor's Broker-Dealer, in turn, will maintain records of that investor's Beneficial Ownership of the Preferred Shares.

INVESTMENT OBJECTIVES AND PRINCIPAL INVESTMENT STRATEGIES INVESTMENT OBJECTIVES

The Trust's primary investment objective is to provide its common shareholders with a high level of current income exempt from regular federal income tax. Distributions of interest income from the Trust's portfolio of municipal securities generally will be exempt from regular federal income tax. As a secondary investment objective, the Trust also may seek capital appreciation to the extent consistent with its primary investment objective. Distributions from sources other than interest income from the Trust's portfolio of

municipal securities, including capital gain distributions, are not exempt from regular federal income tax. There can be no assurance that the Trust will

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

achieve its investment objectives.

PRINCIPAL INVESTMENT STRATEGIES

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. In managing the Trust's portfolio, the Adviser adjusts the portfolio's duration and overall credit quality in light of changing market and economic conditions. In making decisions with respect to specific municipal securities for the Trust's portfolio, the Adviser employs a disciplined approach, driven primarily by proprietary research regarding prevailing interest rates, economic fundamentals at both the national and state level and in-depth credit research conducted by the Adviser's investment staff.

SECURITY SELECTION

The Adviser anticipates that the Trust's investments in revenue bonds will emphasize municipal securities backed by revenue from essential services, such as hospitals and healthcare, power generation, transportation, education and housing. The Adviser considers both broad economic and issuer specific factors in selecting a portfolio designed to achieve the Trust's investment objectives. In assessing the appropriate maturity, rating and sector weightings of the Trust's portfolio, the Adviser considers a variety of factors that are expected to influence economic activity and interest rates. These factors include fundamental economic indicators such as the rates of economic growth and inflation, Federal Reserve monetary policy and the relative value of the U.S. dollar compared to other currencies. Once the Adviser determines the preferable portfolio characteristics, the Adviser selects individual securities based upon the terms of the securities (such as yields compared to U.S. Treasuries or comparable issues), liquidity and rating, sector and issuer diversification.

The Adviser attempts to identify investment grade and below investment grade municipal securities that are trading at attractive valuations relative to the Adviser's evaluation of the issuer's credit worthiness and, with respect to private activity bonds, the profit potential of the corporation from which the revenue supporting the bonds is derived. The Adviser's overall investment approach is both top-down and bottom-up. The Adviser first seeks to identify the sectors or regions of the municipal bond market that present the best relative value opportunities, and then bases the Trust's overall sector and regional weightings on that determination. Once the Adviser establishes the overall regional and sector weightings, the Adviser focuses on selecting those securities within each sector or region that meet its fundamental criteria. In determining sector weightings, the Trust's portfolio management team also maintains frequent contact with the Adviser's investment professionals who follow U.S. equities and those who focus on corporate fixed income investments. In many cases, the Adviser will augment its municipal bond credit research and security selection processes with equity research analysis. The Adviser has a fundamental bias towards long-term security selection, rather than engaging in frequent "market timing" or short-term trading. There can be no assurance that this process will be successful.

DURATION MANAGEMENT

The Adviser will actively manage the duration of the Trust's portfolio of municipal securities based primarily on the Adviser's outlook for interest rates. The Adviser will consider economic trends, Federal Reserve Board actions and capital markets activity, among other factors, in developing its outlook for interest rates. The Adviser believes that maintaining duration at an appropriate level offers the potential for above-average returns while limiting the risks of interest rate volatility. Duration is a measure of the expected life of a debt security that is used to determine the sensitivity of the security's price to changes in interest rates. While the Trust is not limited in the range of its

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

portfolio's average duration, in the current market environment the Adviser expects that, once fully invested, the Trust's initial portfolio will have an average duration of between eight and twelve years (including the effect of anticipated leverage). In the future, the Adviser may modify the average duration of the Trust's portfolio in response to market conditions. The Adviser may employ certain strategies to reduce the Trust's interest rate sensitivity, including investments in interest rate swap or cap transactions. There is no assurance that the Adviser will do so or that such strategies will be successful.

2

CREDIT MANAGEMENT

The Trust may invest in municipal securities with a broad range of credit ratings, including both investment grade and below investment grade municipal securities. At least 50% of the Trust's portfolio of municipal securities will be rated investment grade at the time of acquisition (that is, at least "Baa" by Moody's Investors Service, Inc. ("Moody's") or "BBB" by Standard & Poor's Ratings Group ("S&P")) or, if unrated, determined by the Adviser to be of comparable credit quality. No more than 50% of the Trust's portfolio of municipal securities will be rated below investment grade at the time of acquisition (that is, Ba or lower by Moody's or BB or lower by S&P) or, if unrated, determined by the Adviser to be of comparable credit quality. The Trust anticipates an initial allocation to below investment grade securities of approximately 35%, although the actual allocation of the Trust's investments will be subject to market conditions at the time the Trust commences investment operations. Municipal securities of below investment grade quality are regarded as having predominantly speculative characteristics with respect to the issuer's capacity to pay interest and repay principal, and are commonly referred to as "junk bonds" or "high yield securities." They 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 municipal securities. Municipal securities rated BB or Ba may face significant ongoing uncertainties or exposure to adverse business, financial or economic conditions that could lead to the issuer being unable to meet its financial commitments. The protection of interest and principal payments may be moderate and not well-safeguarded during both good and bad times. Municipal securities rated B generally lack the characteristics of a desirable investment. Assurance of interest and principal payments or of maintenance of other terms of the contract over any long period of time may be low, and such municipal securities are more vulnerable to nonpayment than obligations rated BB. Adverse business, financial or economic conditions will likely impair the issuer's capacity or willingness to meet its financial commitment on municipal securities. Municipal securities rated CCC, CC, C, Caa, Ca or C are generally speculative to a high degree. These municipal securities may be in default or they may present elements of danger with respect to principal or interest. Generally, the issuers are dependent upon favorable business, financial and economic conditions to meet their financial commitment on such municipal securities. The Trust may invest in high yield municipal securities of any rating, including securities that are in default at the time of purchase. Under normal market conditions, the dollar-weighted average credit rating of the Trust's portfolio of municipal securities will be at least investment grade.

The Adviser will determine the allocation of the Trust's assets among securities with different credit ratings depending upon the Adviser's evaluation of factors such as the spread between the yields on municipal securities of different ratings, changes in default rates, general economic conditions and the outlook for fiscal issues facing municipal issuers. Generally, as the spread between the yield on investment grade and non-investment grade securities widens, the Adviser will allocate a greater portion of the Trust's assets to non-investment

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

grade municipal securities. If the spread based on relative credit quality narrows, the Adviser may determine that high yield municipal securities no longer offer a sufficient risk premium and increase the average credit quality of the Trust's portfolio. As the economy strengthens and the default risk lessens, the Adviser may increase the Trust's investment in lower quality, non-investment grade securities. The Adviser also seeks to mitigate the risks of investing in below investment grade securities through a disciplined approach, driven primarily by fundamental research to assess an issuer's credit quality and the relative value of its securities. Moreover, with respect to below investment grade securities that are private activity bonds, the Adviser intends to emphasize securities that are backed by revenue from publicly traded companies. The Adviser believes that this focus offers the potential for an informational advantage due to the substantial reporting requirements of public companies. With respect to investments in below investment grade private activity bonds, the Adviser also seeks to leverage its corporate credit research capabilities by selecting securities for the Trust payable by revenue derived from issuers followed by its staff focusing on below investment grade corporate issuers. The Adviser believes that a prudent blend of investment grade and non-investment grade municipal securities offers investors the opportunity for high current yield without undue credit risk. Covering a broad range of sectors and issuers, below investment grade municipal securities have been trading in 2003 with historically wide spreads and what the Adviser believes to be attractive valuations relative to investment grade municipal securities. High yield municipal

3

securities also have shown low correlation to other asset classes, including corporate bonds and U.S. Treasury securities, providing diversification potential to an investment portfolio.

PORTFOLIO CONTENTS

Under normal market conditions, the Trust will invest substantially all (at least 80%) of its assets (net assets plus borrowings for investment purposes) in debt securities and other obligations issued by or on behalf of states, territories and possessions of the United States and the District of Columbia and their political subdivisions, agencies and instrumentalities, the interest on which is exempt from regular federal income tax ("municipal securities"). Municipal securities are often issued to obtain funds for various public purposes, including the construction of a wide range of public facilities such as bridges, highways, housing, hospitals, mass transportation, schools, streets and water and sewer works. Municipal securities include private activity bonds, pre-refunded municipal securities and auction rate securities. The municipal securities in which the Trust invests may have fixed or variable principal payments on all types of interest payment and reset terms, including fixed rate, adjustable rate, zero coupon, contingent, deferred, payment in kind and auction rate features.

Although distributions of interest income from the Trust's municipal securities generally are exempt from regular federal income tax, distributions from other sources, including capital gain distributions, are not. Up to 25% of the Trust's total assets may be invested in municipal securities the interest income on which is a preference item for purposes of the alternative minimum tax for individuals or entities that are subject to such tax. All interest on municipal securities may result in or increase a corporate shareholder's liability for federal alternative minimum tax. Shareholders should consult a tax adviser about whether an alternative minimum tax applies to them and about state and local taxes on their distributions from the Trust.

MUNICIPAL SECURITIES

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Municipal securities often are issued to obtain funds for various public purposes, including refunding outstanding obligations, funding general operating expenses and lending to other public institutions and facilities. "Private activity bonds" or industrial development bonds are issued by or on behalf of public authorities to provide financing aid to acquire sites or construct or equip facilities within a municipality for privately or publicly owned corporations. Municipal securities include both "general obligations" and "revenue obligations" and may be issued to obtain funds for various purposes. General obligations are secured by the issuer's pledge of its full faith, credit and taxing power. Revenue obligations are payable only from the revenues derived from a particular facility or class of facilities.

MUNICIPAL NOTES

Municipal securities in the form of notes generally are used to provide for short-term capital needs in anticipation of an issuer's receipt of other revenues or financing, and typically have maturities of up to three years. Such instruments may include tax anticipation notes, revenue anticipation notes, bond anticipation notes, tax and revenue anticipation notes and construction loan notes.

MUNICIPAL LEASES, CERTIFICATES OF PARTICIPATION AND "MORAL OBLIGATION" BONDS

The municipal securities in which the Trust may invest include municipal leases, certificates of participation and "moral obligation" bonds. A municipal lease is an obligation issued by a state or local government to acquire equipment or facilities. Certificates of participation represent interests in municipal leases. Moral obligation bonds are supported by a moral commitment of the municipality, but that credit support is not a legal obligation of the federal government or any state or local government.

TENDER OPTION BONDS

Municipal securities may also be in the form of a tender option bond, which is a municipal security (generally held pursuant to a custodial arrangement) having a relatively long maturity and bearing interest at a fixed rate substantially higher than prevailing short-term, tax-exempt rates. The bond is typically issued with the agreement of a third party, such as a bank, broker-dealer or other financial institution, which grants the security holders the option, at periodic intervals, to tender their securities to the institution. After payment of

4

a fee to the financial institution that provides this option, a security holder effectively holds a demand obligation that bears interest at the prevailing short-term, tax-exempt rate. An institution may not be obligated to accept tendered bonds in the event of certain defaults or a significant downgrade in the credit rating assigned to the issuer of the bond. There is a risk that the Trust will not be considered the owner of a tender option bond for federal income tax purposes, and thus will not be entitled to treat such interest as exempt from regular federal income tax. Certain tender option bonds may be illiquid.

ILLIQUID SECURITIES

The Trust may invest up to 20% of its total assets in illiquid securities, which are securities that the Trust cannot dispose of within seven days in the ordinary course of business at approximately the amount at which the Trust values the securities. The Adviser anticipates that its research efforts and

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

investment approach will result in a significant portion of the Trust's assets being invested in thinly traded securities, including both illiquid securities and liquid securities as to which the trading market is less active than comparable issuers.

OTHER SECURITIES

Normally, the Trust invests substantially all of its assets to meet its investment objectives. The Trust may invest the remainder of its assets in cash or cash equivalent short-term obligations, including, but not limited to, short-term municipal securities, certificates of deposit, commercial paper, short-term notes, obligations issued or guaranteed by the U.S. Government, its agencies, authorities or instrumentalities and repurchase agreements. Interest on certain of these short-term obligations may be subject to federal income tax. The Trust may also invest all or any portion of its assets in such instruments for temporary defensive purposes. During such periods, the Trust may not be able to achieve its investment objectives.

HEDGING AND INTEREST RATE TRANSACTIONS

The Trust may, but is not required to, use various hedging and interest rate transactions to earn income, facilitate portfolio management and mitigate risks. The Trust may purchase and sell derivative instruments such as exchange-listed and over-the-counter put and call options on securities, fixed income and interest rate indices and other financial instruments; purchase and sell financial futures contracts and options thereon; and enter into various interest rate transactions such as swaps, caps, floors or collars or credit transactions and credit default swaps. The Trust also may purchase derivative instruments that combine features of these instruments. The Trust generally seeks to use these instruments and transactions as a portfolio management or hedging technique that seeks to protect against possible adverse changes in the market value of securities held in or to be purchased for the Trust's portfolio, facilitate the sale of certain securities for investment purposes, manage the effective interest rate exposure of the Trust, manage the effective maturity or duration of the Trust's portfolio or establish positions in the derivatives markets as a temporary substitute for purchasing or selling particular securities. Income that the Trust derives from these transactions generally will not be tax-exempt.

USE OF LEVERAGE BY THE TRUST

The Trust expects to utilize financial leverage on an ongoing basis for investment purposes. After completion of the offering of Preferred Shares, the Trust anticipates its total leverage from the issuance of Preferred Shares will be approximately 25% of the Trust's total assets. This amount may change, but total leverage will not exceed 50% of the Trust's total assets. [Although the Trust may in the future offer other Preferred Shares, the Trust does not currently intend to offer Preferred Shares other than the Preferred Shares offered hereby.] The Trust may also invest in derivative instruments, each of which may amplify the effects of leverage in the Trust's portfolio.

The Trust generally will not utilize leverage if it anticipates that it would result in a lower return to common shareholders over time. Use of financial leverage creates an opportunity for increased income for common shareholders but, at the same time, creates the possibility for greater loss (including the likelihood of greater volatility of net asset value and market price of the shares and of dividends), and there can be no assurance that a leveraging strategy will be successful during any period in which it is employed. Because

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

the fees paid to Pioneer will be calculated on the basis of the Trust's managed assets, the fees will be higher when leverage (including the Preferred Shares) is utilized, giving Pioneer an incentive to utilize leverage. See "Risk factors--Risks of Investing in Preferred Securities--Leverage Risk."

SPECIAL RISK CONSIDERATIONS

RISKS OF INVESTING IN THE PREFERRED SHARES INCLUDE THE FOLLOWING:

THE PRIMARY RISKS

- If an Auction fails you may not be able to sell some or all of your Preferred Shares and the Trust is not obligated to redeem your Preferred Shares if the Auction fails
- Because of the nature of the market for Preferred Shares, you may receive less than the price you paid for your shares if you sell them outside of the Auction, especially when market interest rates are rising
- A rating agency could downgrade the rating assigned to the Preferred Shares, which could affect liquidity
- The Trust may be forced to redeem Preferred Shares to meet regulatory or rating agency requirements to may voluntarily redeem the Preferred Shares in certain circumstances
- In certain circumstances, the Trust may not earn sufficient income from its investments to pay dividends on the Preferred Shares
- If interest rates rise, the value of the Trust's investment portfolio generally will decline, reducing the asset coverage for the Preferred Shares

LEVERAGE RISK

The Trust's leveraged capital structure creates special risks not associated with unleveraged funds having similar investment objectives and policies. These include the possibility of higher volatility of the net asset value of the Trust and the Preferred Shares' asset coverage.

INTEREST RATE RISK

The Preferred Shares pay dividends based on shorter-term interest rates. The Trust invests the proceeds from the issuance of the Preferred Shares principally in municipal securities, which generally bear intermediate to longer-term interest rates. The yields on municipal securities are typically, although not always, higher than shorter-term interest rates. Shorter-term interest rates may rise so that the amount of dividends to be paid to holders of Preferred Shares exceeds the income from the preferred stocks and other preferred securities and other investments purchased by the Trust with the proceeds from the sale of the Preferred Shares. Because income from the Trust's entire investment portfolio (not just the portion of the portfolio purchased with the proceeds of the Preferred Shares offering) is available to pay dividends on the Preferred Shares, however, dividend rates on the Preferred Shares would need to exceed the rate of return on the Trust's investment portfolio by a wide margin before the Trust's ability to pay dividends on the Preferred Shares would be jeopardized. If intermediate to longer-term interest rates rise, this could negatively impact the value of the Trust's investment portfolio, reducing the amount of assets serving as asset coverage for the Preferred Shares.

AUCTION RISK

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The dividend rate for the Preferred Shares normally is set through an Auction process. In the Auction, Existing Holders of Preferred Shares may indicate the dividend rate at which the Existing Holders would be willing to hold or sell their Preferred Shares or purchase additional Preferred Shares. The Auction also provides liquidity for the sale of Preferred Shares. An Auction fails if there are more Preferred Shares offered for sale than there are buyers. You may not be able to sell your Preferred Shares at an Auction if the Auction fails. Also, if you place Hold Orders (orders to retain shares) at an Auction only at a specified dividend rate and that rate exceeds the rate set at the Auction, you will not retain you Preferred Shares. Additionally, if you buy Preferred Shares or elect to retain Preferred Shares without specifying a dividend rate below which you would not wish to buy or continue to hold those Preferred Shares, you could receive a lower of return on your shares than the market rate. Finally, the Dividend Period for the Preferred Shares

6

may be changed by the Trust, subject to certain conditions with notice to the holders of the Preferred Shares, which could also affect the liquidity of your investment.

SECONDARY MARKET RISK

If you try to sell your Preferred Shares between Auctions, you may not be able to sell any or all of your Preferred Shares, or you may not be able to sell them for \$25,000 per share plus accumulated dividends. If the Trust has designated a Special Dividend Period, changes in interest rates could affect the price you would receive if you sold your Preferred Shares in the secondary market.

RATINGS AND ASSET COVERAGE RISK

While it is expected that Rating Agency will assign a rating of "Aaa" to the Preferred Shares, such rating does not eliminate or necessarily mitigate the risks of investing in Preferred Shares.

RESTRICTIONS ON DIVIDENDS AND OTHER DISTRIBUTIONS

Restrictions imposed on the declaration and payment of dividends or other distributions to the holders of the Trust's Common Shares and the Preferred Shares, both by the Investment Company Act of 1940, as amended (the "1940 Act"), and by requirements imposed by rating agencies, might impair the Trust's ability to satisfy minimum distribution requirements that it must satisfy to maintain its qualification as a regulated investment company for federal income tax purposes.

GENERAL RISKS OF INVESTING IN THE TRUST INCLUDE THE FOLLOWING:

MUNICIPAL SECURITIES MARKET RISK

The yields on and market prices of municipal securities are dependent on a variety of factors, including general conditions of the municipal securities market, the size of a particular offering, the maturity of the obligation and the rating of the issue. The value of outstanding municipal securities will vary as a result of changing evaluations of the ability of their issuers to meet the interest and principal payments. Such values will also change in response to changes in the interest rates payable on new issues of municipal securities. Changes in the value of the municipal securities held in the Trust's portfolio arising from these or other factors will cause changes in the Trust's net asset value per share.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The ability of a municipal issuer to repay obligations on municipal securities (other than private activity bonds) is subject to the risk that the municipal issuer of the securities will not have sufficient revenues from taxes and other sources of income to pay interest and to repay principal on the municipal securities. The level of municipal income may be adversely affected by various factors, including general economic activity, real estate values and changes in governmental expenses. The obligations of the issuer to pay the principal of and interest on a municipal security are subject to the provisions of bankruptcy, insolvency and other laws affecting the rights and remedies of creditors, such as the Federal Bankruptcy Act, and laws, if any, that may be enacted by Congress or state legislatures extending the time for payment of principal or interest or imposing other constraints upon the enforcement of such obligations. There is also the possibility that, as a result of litigation or other conditions, the power or ability of the issuer to pay when due the principal of or interest on a municipal security may be materially affected.

The amount of public information available about the issuance of municipal securities is generally less than that for corporate equities or bonds, and the investment performance of the Trust may therefore be more dependent on the analytical abilities of the Adviser than would be a stock fund or taxable bond fund. The secondary market for municipal securities, particularly the below investment grade municipal securities in which the Trust will invest, also tends to be less well-developed or liquid than many other securities markets, which may adversely affect the Trust's ability to sell its municipal securities at attractive prices.

Municipal securities may be backed by letters of credit or other forms of credit enhancement issued by domestic or foreign banks or by other financial institutions. The credit quality of these banks and financial institutions could, therefore, cause a loss to the Trust. Letters of credit and other obligations of foreign banks and financial institutions may involve risks in addition to those of domestic obligations because of less publicly available financial and other information, less securities regulation, potential imposition of foreign withholding and other taxes, war and expropriation or other adverse governmental actions.

7

Foreign banks and their foreign branches are not regulated by U.S. banking authorities, and generally are not bound by the accounting, auditing and financial reporting standards applicable to U.S. banks.

TAX RISK

The value of the Trust's investments and its net asset value may be adversely affected by changes in tax rates and policies. Because interest income from municipal securities is normally not subject to regular federal income taxation, the attractiveness of municipal securities in relation to other investment alternatives is affected by changes in federal income tax rates or changes in the tax-exempt status of interest income from municipal securities. Any proposed or actual changes in such rates or exempt status, therefore, can significantly affect the demand for and supply, liquidity and marketability of municipal securities. This could in turn affect the Trust's net asset value and ability to acquire and dispose of municipal securities at desirable yield and price levels. Additionally, the Trust is not a suitable investment for IRAs, for other tax-exempt or tax-deferred accounts or for investors who are not sensitive to the federal, state or local income tax consequences of their investments.

CREDIT AND JUNK BOND RISK

Credit risk is the risk that an issuer of a municipal security will become

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

unable to meet its obligation to make interest and principal payments. The two principal classifications of municipal securities are "general obligations" and "revenue obligations." General obligations are secured by the issuer's pledge of its credit and taxing power for the payment of principal and interest. Revenue obligations are payable from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise or other specific revenue source, but not from the general taxing power. Sizable investments in these obligations could involve an increased risk to the Trust should any of the related facilities experience financial difficulties. Private activity bonds are in most cases revenue obligations and do not generally carry the pledge of the credit of the issuing municipality.

The Trust intends to purchase municipal securities that are rated below investment grade (commonly referred to as "junk bonds" or "high yield securities"), that is, rated Ba or below by Moody's or BB or below by S&P, and unrated securities determined by the Adviser to be of comparable credit quality. Investment in municipal securities of below investment grade quality involves substantial risk of loss. "Junk bonds" are considered predominantly speculative with respect to the issuer's ability to pay interest and principal and are susceptible to default or decline in market value due to adverse economic and business developments. The market values for municipal securities of below investment grade quality tend to be volatile, and these securities are less liquid than investment grade debt securities. For these reasons, an investment in the Trust is subject to the following specific risks:

- increased price sensitivity to changing interest rates and to a deteriorating economic environment
- greater risk of loss due to default or declining credit quality
- adverse issuer specific events are more likely to render the issuer unable to make interest and/or principal payments
- if a negative perception of the high yield market develops, the price and liquidity of high yield securities may be depressed, and this negative perception could last for a significant period of time

Adverse changes in economic conditions are more likely to lead to a weakened capacity of a high yield issuer to make principal payments and interest payments than an investment grade issuer. The principal amount of high yield securities outstanding has proliferated in the past decade as an increasing number of issuers have used high yield securities for corporate financing. An economic downturn could severely affect the ability of highly leveraged issuers to service their debt obligations or to repay their obligations upon maturity.

The secondary market for high yield securities may not be as liquid as the secondary market for more highly rated securities, a factor that may have an adverse effect on the Trust's ability to dispose of a particular security. There are fewer dealers in the market for high yield municipal securities than investment grade municipal obligations. The prices quoted by different dealers may vary significantly, and the spread between the bid and ask price is generally much larger than for higher quality instruments.

Under adverse market or economic conditions, the secondary market for high yield municipal securities could contract further, independent of any specific adverse changes in the condition of a particular issuer, and these instruments may become illiquid. As a result, the Trust could find it more difficult to sell these securities or may be able to sell the securities only at prices lower than if such securities were widely traded. Prices realized upon the sale of such

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

lower rated or unrated securities, under these circumstances, may be less than the prices used in calculating the Trust's net asset value.

INTEREST RATE RISK

Interest rate risk is the risk that municipal securities (and the Trust's net assets) will decline in value because of changes in interest rates. Interest rate risk includes the following risks:

- if interest rates go up, the value of municipal securities in the Trust's portfolio generally will decline
- during periods of declining interest rates, the issuer of a security may exercise its option to prepay principal earlier than scheduled, forcing the Trust to reinvest in lower yielding securities. This is known as call or prepayment risk. Municipal securities may have call features that allow the issuer to repurchase the security prior to its stated maturity. An issuer may redeem a high yield obligation if the issuer can refinance the debt at a lower cost due to declining interest rates or an improvement in the credit standing of the issuer
- the Adviser's judgment about the attractiveness, relative value or potential appreciation of a particular sector, security or investment strategy may prove to be incorrect

MATURITY RISK

The Trust may invest in municipal securities of any maturity, although under normal circumstances it is anticipated that the Trust will generally invest in intermediate to long-term investments. Interest rate risk will generally affect the price of a municipal security more if the security has a longer maturity. Municipal securities with longer maturities will therefore be more volatile than other fixed income securities with shorter maturities. Conversely, municipal securities with shorter maturities will be less volatile but generally provide lower returns than municipal securities with longer maturities. The average maturity of the Trust's municipal security investments may affect the volatility of the Trust's share price.

CONCENTRATION RISK

The Trust may invest 25% or more of the value of its total assets in municipal securities of issuers located in the same state or territory or in the same economic sector. The Trust will not invest more than 25% of its total assets in issuers in a single industry, nor will the Trust invest more than 5% of its total assets in the securities of any single issuer. Governmental issuers of municipal securities are not considered part of any "industry," and general obligation bonds of a state are not subject to the 5% limitation set forth above. For purposes of the 5% limitation, the Trust will treat a revenue bond payable from revenues received by the municipal issuer from a single entity (the "underlying obligor") as being issued by the underlying obligor. The issuers of these municipal securities may be related in such a way that an economic, business or political development or change affecting one municipal security would also affect other municipal securities held by the Trust. Under normal market conditions, the Trust intends to limit its investment in tobacco settlement bonds to approximately 10% of the Trust's total assets. The Trust may invest all of its assets in municipal securities the interest on which is paid solely from revenues from the same economic sector. The Adviser anticipates that the Trust's investments in revenue bonds will emphasize municipal securities backed by revenue from essential services, such as hospitals and healthcare, power generation, transportation, education and housing. Subject to the availability of suitable investment opportunities, the Adviser will attempt to diversify the Trust's investments to seek to minimize the portfolio's

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

sensitivity to credit and other risks associated with a particular issuer, industry or sector, or to the impact of a single economic, political or regulatory occurrence. The Trust is not required to diversify its holdings in municipal securities among a fixed number of states and, consequently, the Trust's portfolio may be adversely affected by developments in a single state or region. Concentration of the Trust's investments in one or a limited number of states or economic sectors will subject the Trust, to a greater extent than if such investments were not so concentrated, to the risks of adverse economic, business or political developments

9

affecting the particular state, economic sector or other area of concentration. The Trust has no current intention to invest more than 25% of the value of its total assets in municipal securities of issuers located in a single state but may do so in the future. To the extent that the Trust invests more than 25% of its assets in municipal securities of issuers in a single state, the Trust will be exposed to a greater degree to risks associated with that specific state, including budget and fiscal issues, changes in the degree of financial support from the state to local governments, political disputes that delay appropriations or otherwise adversely affect municipal securities and the general economic activity in such state which may adversely affect tax receipts and other municipal revenue. For example, Moody's and S&P both placed their ratings of California general obligation bonds on credit watch due to increased uncertainty regarding the timing of state budget adoption and the potential negative effect that prolonged delay in budget resolution could have on California's ability to meet its debt obligations. The Trust will not notify shareholders if 25% or more of the Trust's assets are represented by municipal issuers in a single state. However, the Trust's annual and semi-annual financial statements will disclose the percentage of the Trust's assets invested in each state. To the extent that the Trust focuses its assets in the hospital and healthcare sector, the Trust will be subject to risks associated with such sector, including adverse government regulation and reduction in reimbursement rates, as well as government approval of products and services and intense competition. Issuers in the power generation sector can be significantly affected by government regulation, financing difficulties, supply and demand of services or fuel and natural resource conservation. The transportation sector, including airports, airlines, ports and other transportation facilities, can be significantly affected by changes in the economy, fuel prices, labor relations, insurance costs and government regulation.

RISKS OF MUNICIPAL LEASES AND CERTIFICATES OF PARTICIPATION

The Trust may invest in municipal leases and certificates of participation in such leases. Municipal leases and certificates of participation involve special risks not normally associated with general obligations or revenue bonds. Leases and installment purchase or conditional sale contracts (which normally provide for title to the leased asset to pass eventually to the governmental issuer) have evolved as a means for governmental issuers to acquire property and equipment without meeting the constitutional and statutory requirements for the issuance of debt. The debt issuance limitations are deemed to be inapplicable because of the inclusion in many leases or contracts of "non-appropriation" clauses that relieve the governmental issuer of any obligation to make future payments under the lease or contract unless money is appropriated for such purpose by the appropriate legislative body on a yearly or other periodic basis. In addition, such leases or contracts may be subject to the temporary abatement of payments in the event the governmental issuer is prevented from maintaining occupancy of the leased premises or utilizing the leased equipment. Although the obligations may be secured by the leased equipment or facilities, the disposition of the property in the event of non-appropriation or foreclosure might prove difficult, time consuming and costly, and may result in a delay in

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

recovering or the failure to fully recover the Trust's original investment. In the event of non-appropriation, the issuer would be in default and taking ownership of the assets may be a remedy available to the Trust, although the Trust does not anticipate that such a remedy would normally be pursued. To the extent that the Trust invests in unrated municipal leases or participates in such leases, the credit quality rating and risk of cancellation of such unrated leases will be monitored on an ongoing basis. Certificates of participation, which represent interests in unmanaged pools of municipal leases or installment contracts, involve the same risks as the underlying municipal leases. In addition, the Trust may be dependent upon the municipal authority issuing the certificates of participation to exercise remedies with respect to the underlying securities. Certificates of participation also entail a risk of default or bankruptcy, both of the issuer of the municipal lease and also the municipal agency issuing the certificate of participation. Certain municipal lease obligations and certificates of participation may be deemed to be illiquid for the purpose of the Trust's limitation on investments in illiquid securities.

ILLIQUID INVESTMENTS RISK

The Trust may invest up to 20% of its total assets in illiquid securities. Illiquid securities may be difficult to dispose of at a fair price at times when the Trust believes it is desirable to do so. The market price of illiquid securities generally is more volatile than that of more liquid securities, which may adversely affect

10

the price that the Trust pays for or recovers upon the sale of illiquid securities. Illiquid securities are also more difficult to value and the Adviser's judgment may play a greater role in the valuation process. Investment of the Trust's assets in illiquid securities may restrict the Trust's ability to take advantage of market opportunities. The risks associated with illiquid securities may be particularly acute in situations in which the Trust's operations require cash and could result in the Trust borrowing to meet its short-term needs or incurring losses on the sale of illiquid securities.

DERIVATIVES RISK

Even a small investment in derivatives can have a significant impact on the Trust's exposure to interest rates. If changes in a derivative's value do not correspond to changes in the value of the Trust's other investments, the Trust may not fully benefit from or could lose money on the derivative position. In addition, some derivatives involve risk of loss if the person who issued the derivative defaults on its obligation. Certain derivatives may be less liquid and more difficult to value.

INVESTMENT ADVISER

Pioneer Investment Management, Inc. is the Trust's investment adviser. The Adviser is responsible on a day-to-day basis for investment of the Trust's portfolio in accordance with its investment objectives and principal investment strategies. The Adviser makes all investment decisions for the Trust and places purchase and sale orders for the Trust's portfolio securities.

The Adviser or its predecessors have been managing investment companies since 1928. The Adviser is an indirect, wholly-owned subsidiary of UniCredito Italiano S.p.A. ("UniCredito"), one of the leading banking groups in Italy. As of June 30, 2003, assets under management by the Adviser and its affiliates were approximately \$112 billion worldwide, including over \$28 billion in assets under management by the Adviser. As of June 30, 2003, the Adviser managed approximately \$__ million in municipal securities and \$__ billion in high yield

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

securities.

FEDERAL INCOME TAXATION

The Trust intends to take the position that under present law the Preferred Shares will constitute stock of the Trust. Distributions with respect to the Preferred Shares (other than distributions in redemption of the Preferred Shares that are treated as exchanges of stock under Section 302(b) of the Internal Revenue Code of 1986, as amended (the "Code") will constitute dividends to the extent of the Trust's current or accumulated earnings and profits as calculated for U.S. federal income tax purposes. Such dividends generally will be exempt from regular federal income tax to the extent such dividends are paid from tax-exempt income earned on the Trust's investments. To the extent any such dividends are not attributable to tax-exempt income earned on the Trust's investments, the dividends generally will be taxable as ordinary income and are not expected to be eligible for the maximum 15% federal income tax rate on "qualified dividend income." Distributions of net capital gain that are designated by the Trust as capital gain dividends, if any, however, will be treated as long-term capital gains without regard to the length of time the shareholder has held shares of the Trust.

Exempt-interest dividends paid by the Trust from interest earned on certain private activity bonds may increase a shareholder's alternative minimum tax liability, and all exempt-interest dividends may increase a corporate shareholder's alternative minimum tax liability. The extent of any such increase will depend on the shareholder's particular tax situation. The Trust is currently required to allocate net capital gain, other income taxable for federal income tax purposes, if any, and net tax-exempt income between common shares and Preferred Shares, if any, in proportion to the total dividends paid to each class.

TRADING MARKET

The Preferred Shares will not be listed on an exchange. Instead, you may buy or sell Preferred Shares at an Auction that normally is held every seven days by submitting orders to a Broker-Dealer that has entered into an agreement with the Auction Agent or a broker-dealer that has entered into a separate agreement with a Broker-Dealer. In addition to the Auctions, Broker-Dealers and other broker-dealers may maintain a

11

secondary trading market in Preferred Shares outside of Auctions, but may discontinue this activity at any time. There is no assurance that a secondary market will provide shareholders with liquidity. You may transfer Preferred Shares outside of Auctions only to or through a Broker-Dealer or a broker-dealer that has entered into a separate agreement with a Broker-Dealer.

DIVIDENDS AND DIVIDEND PERIODS

The Preferred Shares will entitle their holders to receive cash dividends at a rate per annum that may vary for the successive Dividend Periods for such shares. In general, except as described below, each Dividend Period for each series of Preferred Shares subsequent to the Initial Dividend Period will be seven days in length. The Applicable Rate for a particular Dividend Period will be determined by an Auction conducted on the Business Day immediately preceding the start of such Dividend Period.

The table below shows the initial dividend rate, the Initial Dividend Payment Date and the number of days for the Initial Dividend Period on each series of the Preferred Shares offered in this Prospectus. For Subsequent Dividend

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Periods, the Preferred Shares will pay dividends based on a rate set at Auctions, normally held every seven days. In most instances, dividends are payable on the first Business Day following the end of the Dividend Period. The rate set at Auction will not exceed the Maximum Applicable Rate. See "Description of Preferred Shares--Dividends and Dividend Periods." Dividends on the Preferred Shares will be cumulative from the date the Preferred Shares are first issued and will be paid out of legally available funds.

INITIAL DIVIDEND RATE	ENDING DATE OF INITIAL DIVIDEND PERIOD	INITIAL DIVIDEND PAYMENT DATE	SUBSEQUENT DIVIDEND PAYMENT DATES	NUMBER OF DA INITIAL DIVI PERIOD
-----------------------	--	-------------------------------	-----------------------------------	----------------------------------

Series []
 Series []
 Series []

After the Initial Dividend Period, each Subsequent Dividend Period for each series of Preferred Shares will generally consist of seven days (a "7-Day Dividend Period"); provided, however, that prior to any Auction, the Trust may elect, subject to certain limitations described herein, upon giving notice to holders thereof, a Special Dividend Period for any or all series. A "Special Dividend Period" is a Dividend Period consisting of a specified number of days, evenly divisible by seven and not fewer than 14 nor more than 364 (a "Short-Term Dividend Period") or a Dividend Period consisting of a specified period of one whole year or more but not greater than five years (a "Long-Term Dividend Period"). Dividends on the Preferred Shares offered hereby are cumulative from the Date of Original Issue and are payable when, as and if declared by the Board of Trustees of the Trust out of funds legally available therefor, commencing on the Initial Dividend Payment Date. See "Description of Preferred Shares--Dividends and Dividend Periods--Designation of Special Dividend Periods." In the case of Dividend Periods that are not Special Dividend Periods, dividends will be payable generally on each succeeding _____ for Series _____ Preferred Shares, on each succeeding _____ for Series _____ Preferred Shares, and on each succeeding _____ for Series Preferred Shares, subject to certain exceptions.

Dividends for the Preferred Shares will be paid through the Securities Depository on each Dividend Payment Date. The Securities Depository's normal procedures provide for it to distribute dividends in same-day funds to Agent Members, who are in turn expected to distribute such dividends to the person for whom they are acting as agent in accordance with the instructions of such person. See "Description of Preferred Shares--Dividends and Dividend Periods."

For each Subsequent Dividend Period, the cash dividend rate on each series of Preferred Shares will be the Applicable Rate that the Auction Agent advises the Trust has resulted from an Auction. See "Description of Preferred Shares--Dividends and Dividend Periods." The first Auction for each series of the Preferred Shares is scheduled to be held on the ending date for the Initial Dividend Period as set forth above.

ADVANCE NOTICE OF ALLOCATION OF TAXABLE INCOME; INCLUSION OF TAXABLE INCOME IN DIVIDENDS

Dividends paid by the Trust, to the extent paid from tax-exempt income earned on municipal securities, will be exempt from federal income tax, although a portion

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

of those dividends may be a tax preference item for purposes of the federal alternative minimum tax. In addition, for corporations, interest on all municipal obligations is taken into account in the computation of income subject to the federal alternative minimum tax. The Trust is required to allocate tax-exempt interest, net capital gains and other income subject to federal income tax, if any, proportionately among dividends paid on the common shares and Preferred Shares. Except as noted below and under "Description of Preferred Shares--Auction Procedures," whenever the Trust is aware that it will include any net capital gains or other income that is subject to federal income tax, but not including for this purpose income that is exempt for regular federal income tax purposes but subject to the alternative minimum tax ("Taxable Income"), in any dividend on the Preferred Shares, the Trust will notify the Auction Agent prior to the Auction establishing the Applicable Rate for such dividend. The Auction Agent in turn will notify each Broker-Dealer whenever it receives any such notice from the Trust, and each Broker-Dealer will notify its Beneficial Owners and Potential Beneficial Owners, as provided in its Broker-Dealer Agreement. In the alternative, the Trust also may include such Taxable Income in a dividend on the Preferred Shares without giving advance notice thereof if it increases the dividend by an amount sufficient to offset substantially the tax effect thereof or, in certain circumstances, makes a Gross-up Dividend, as described in the next section. The amount of Taxable Income otherwise allocable to the Preferred Shares will depend upon the amount of such income realized by the Trust and other factors. See "Federal income tax matters" and "Description of Preferred Shares--Auction Procedures."

GROSS-UP DIVIDENDS

The Trust may retroactively allocate any net capital gains or other Taxable Income to dividends paid on the Preferred Shares without giving the advance notice described in the preceding section. If the Trust does so solely by reason of the fact that such allocation is made as a result of the redemption of all or a portion of the outstanding Preferred Shares or the liquidation of the Trust, the Trust will make certain payments to holders of the Preferred Shares to which such allocation was made to offset substantially the tax effect thereof. Otherwise, the Trust does not expect to make payments to holders of the Preferred Shares to offset the tax effect of any reallocation of net capital gains or other taxable income. See "Description of Preferred Shares--Dividends and Dividend Periods--Gross-up Dividends" and "Federal income tax matters."

DETERMINATION OF MAXIMUM APPLICABLE RATES

Except during a Non-Payment Period, the Applicable Rate for any Dividend Period for Preferred Shares will not be more than the Maximum Applicable Rate applicable to such shares. The Maximum Applicable Rate for each series of Preferred Shares will depend on the credit rating assigned to such series and on the duration of the Dividend Period. The Maximum Applicable Rate will be the Applicable Percentage of the Reference Rate. The Reference Rate is (i) with respect to any 7-Day Dividend Period or any Short-Term Dividend Period having 28 or fewer days, the higher of the applicable "AA" Composite Commercial Paper Rate and the Taxable Equivalent of the Short-Term Municipal Obligation Rate, (ii) with respect to any Short-Term Dividend Period having more than 28 but fewer than 183 days, the applicable "AA" Composite Commercial Paper Rate, (iii) with respect to any Short-Term Dividend Period having 183 or more but fewer than 364 days, the applicable U.S. Treasury Bill Rate and (iv) with respect to any Long-Term Dividend Period, the applicable U.S. Treasury Note Rate. The Applicable Percentage will be determined based on (i) the credit rating assigned on such date to the Preferred Shares by [Rating Agency 1] or [Rating Agency 2] (or, if [Rating Agency 1] or [Rating Agency 2] shall not make such rating available, the equivalent of such rating by a Substitute Rating Agency) and (ii) whether the Trust has provided notification to the Auction Agent prior to the Auction establishing the Applicable Rate for any

dividend that net capital gains or other taxable income will be included in such dividend on the Preferred Shares, as follows:

[RATING AGENCY] CREDIT RATINGS ON PREFERRED SHARES	APPLICABLE PERCENTAGE OF REFERENCE RATE--NOTIFICATION	APPLICABLE PERCENTAGE OF REFERENCE RATE--NO NOTIFICATION
Aa3 or higher		
A		
Baa		
Below Baa		

There is no minimum Applicable Rate in respect of any Dividend Period. The Applicable Rate for any Dividend Period commencing during any Non-Payment Period, and the rate used to calculate the late charge described under "Description of Preferred Shares--Dividends and Dividend Periods--Non-Payment Period; Late Charge," initially will be ___% of the Reference Rate (or ___% of such rate if the Trust has provided notification to the Auction Agent prior to the Auction establishing the Applicable Rate for any dividend that net capital gains or other taxable income will be included in such dividend on Preferred Shares).

ASSET MAINTENANCE

Under the Statement of Preferences (the "Statement") which establishes and fixes the rights and preferences of the shares of each series of Preferred Shares, the Trust must maintain:

- Asset coverage (the "Preferred Shares Basic Maintenance Amount") of the Preferred Shares as required by the rating agency or agencies rating the Preferred Shares. The Preferred Shares Basic Maintenance Amount is the sum of (a) the aggregate liquidation preference of the Preferred Shares then outstanding, together with the aggregate liquidation preference on any other series of preferred shares, and (b) certain accrued and projected dividend and other payment obligations of the Trust. Moody's and Fitch have each established separate guidelines for calculating discounted value of the Trust's assets for purposes of this test. To the extent any particular portfolio holding does not satisfy a rating agency's guidelines, all or a portion of the holding's value will not be included in the rating agency's calculation of discounted value. The Moody's and Fitch guidelines also impose certain diversification requirements on the Trust's portfolio.
- Asset coverage of at least 200% with respect to senior securities that are stock, including the Preferred Shares (the "1940 Act Preferred Share Asset Coverage").

In the event that the Trust does not maintain or cure these coverage tests, some or all of the Preferred Shares will be subject to mandatory redemption. See "Description of Preferred Shares--Mandatory Redemption."

Based on the composition of the Trust's portfolio as of _____, 2003, the asset coverage of the Preferred Shares, as measured pursuant to the 1940 Act, would be approximately ___% if the Trust were to issue _____ shares of Preferred Shares.

MANDATORY REDEMPTION

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

If the Preferred Shares Basic Maintenance Amount or the 1940 Act Preferred Shares Asset Coverage is not maintained or restored as specified herein, the Preferred Shares will be subject to mandatory redemption, out of funds legally available therefor, at the Mandatory Redemption Price of \$25,000 per share plus an amount equal to dividends thereon (whether or not earned or declared) accumulated but unpaid to the date fixed for redemption. In addition, holders of Preferred Shares may be entitled to receive Gross-up Dividends in the event of redemption of such Preferred Shares as described herein. See "Description of Preferred Shares--Dividends and Dividend Periods--Gross-up Dividends." Any such redemption will be limited to the minimum number of Preferred Shares necessary to restore the Preferred Shares Basic Maintenance Amount or the 1940 Act Preferred Shares Asset Coverage, as the case may be. The Trust's ability to make such a

14

mandatory redemption may be restricted by the provisions of the 1940 Act. See "Description of Preferred Shares--Redemption--Mandatory Redemption."

OPTIONAL REDEMPTION

The Preferred Shares are redeemable at the option of the Trust, as a whole or in part, on any Dividend Payment Date (except during the Initial Dividend Period or a Non-Call Period) at the Optional Redemption Price of \$25,000 per share, plus an amount equal to dividends thereon (whether or not earned or declared) accumulated but unpaid to the date fixed for redemption plus the premium, if any, resulting from the designation of a Premium Call Period. See "Description of Preferred Shares--Redemption--Optional Redemption." In addition, holders of Preferred Shares may be entitled to receive Gross-up Dividends in the event of redemption of such Preferred Shares as described herein. See "Description of Preferred Shares--Dividends and Dividend Periods--Gross-up Dividends."

LIQUIDATION PREFERENCE

The liquidation preference of the Preferred Shares will be \$25,000 per share, plus an amount equal to accumulated but unpaid dividends (whether or not earned or declared). See "Description of Preferred Shares--Liquidation Rights." In addition, holders of Preferred Shares may be entitled to receive Gross-up Dividends in the event of the liquidation of the Trust as provided herein. See "Description of Preferred Shares--Dividends and Dividend Periods--Gross-up Dividends."

RATING

It is a condition to their issuance that the Preferred Shares be issued with a credit quality rating of "Aaa" from [Rating Agency]. The Trust may at some future time seek to have the Preferred Shares rated by an additional or Substitute Rating Agency. See "Description of Preferred Shares--Rating Agency Guidelines and Asset Coverage."

VOTING RIGHTS

The 1940 Act requires that the holders of Preferred Shares and any other preferred shares, voting as a separate class, have the right to elect at least two Trustees at all times and to elect a majority of the Trustees at any time when two years' dividends on the Preferred Shares or any other preferred shares are unpaid. The holders of Preferred Shares and any other preferred shares will vote as a separate class on certain other matters as required under the Agreement and Declaration of Trust and By-Laws and under the 1940 Act. See "Description of Preferred Shares--Voting Rights," and "Certain Provisions of the Agreement and Declaration of Trust and By-Laws."

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

AUCTION PROCEDURES

Separate Auctions will be conducted for each series of Preferred Shares. Unless otherwise permitted by the Trust, Beneficial Owners and Potential Beneficial Owners of Preferred Shares may only participate in Auctions through their Broker-Dealers. Broker-Dealers will submit the Orders of their respective customers who are Beneficial Owners and Potential Beneficial Owners to the Auction Agent, designating themselves as Existing Holders in respect of shares subject to Orders submitted or deemed submitted to them by Beneficial Owners and as Potential Holders in respect of shares subject to Orders submitted to them by Potential Beneficial Owners. On or prior to each Auction Date for the Preferred Shares (the Business Day next preceding the first day of each Dividend Period), each Beneficial Owner may submit Orders to its Broker-Dealer as follows:

- Hold Order--indicating its desire to hold the Preferred Shares without regard to the Applicable Rate for the next Dividend Period for such shares.
- Bid--indicating its desire to hold the Preferred Shares, provided that the Applicable Rate for the next Dividend Period for such shares is not less than the rate per annum specified in such Bid.
- Sell Order--indicating its desire to sell the Preferred Shares without regard to the Applicable Rate for the next Dividend Period for such shares.

15

A Beneficial Owner may submit different types of Orders to its Broker-Dealer with respect to the Preferred Shares then held by such Beneficial Owner, provided that the total number of Preferred Shares covered by such Orders does not exceed the number of Preferred Shares held by such Beneficial Owner. If, however, a Beneficial Owner offers through its Broker-Dealer to purchase additional Preferred Shares in such Auction, such Beneficial Owner, for purposes of such offer to purchase additional shares, will be treated as a Potential Beneficial Owner as described below. Bids by Beneficial Owners through their Broker-Dealers with rates per annum higher than the Maximum Applicable Rate will be treated as Sell Orders. A Hold Order (in the case of an Auction relating to a Dividend Period of 91 days or less) or a Sell Order (in the case of an Auction relating to a Special Dividend Period of longer than 91 days) shall be deemed to have been submitted on behalf of a Beneficial Owner if an Order with respect to the Preferred Shares then held by such Beneficial Owner is not submitted on behalf of such Beneficial Owner for any reason, including the failure of a Broker-Dealer to submit such Beneficial Owner's Order to the Auction Agent.

Potential Beneficial Owners of Preferred Shares may submit Bids through their Broker-Dealers in which they offer to purchase Preferred Shares, provided that the Applicable Rate for the next Dividend Period for such shares is not less than the rate per annum specified in such Bid. A Bid by a Potential Beneficial Owner with a rate per annum higher than the Maximum Applicable Rate will not be considered. Neither the Trust nor the Auction Agent will be responsible for a Broker-Dealer's failure to act in accordance with the instructions of Beneficial Owners or Potential Beneficial Owners or failure to comply with any of the foregoing.

A Broker-Dealer also may hold Preferred Shares for its own account as a Beneficial Owner. A Broker-Dealer thus may submit Orders to the Auction Agent as a Beneficial Owner or a Potential Beneficial Owner and therefore participate in an Auction as an Existing Holder or Potential Holder on behalf of both itself and its customers. Any Order placed with the Auction Agent by a Broker-Dealer as or on behalf of a Beneficial Owner or a Potential Beneficial Owner will be treated in the same manner as an Order placed with a Broker-Dealer by a

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Beneficial Owner or a Potential Beneficial Owner. Similarly, any failure by a Broker-Dealer to submit to the Auction Agent an Order in respect of any Preferred Shares held by it or its customers who are Beneficial Owners will be treated in the same manner as a Beneficial Owner's failure to submit to its Broker-Dealer an Order in respect of Preferred Shares held by it, as described above. Inasmuch as a Broker-Dealer participates in an Auction as an Existing Holder or a Potential Holder only to represent the interests of a Beneficial Owner or Potential Beneficial Owner, whether it be a customer or itself, all discussion herein relating to the consequences of an Auction for Existing Holders and Potential Holders also applies to the underlying beneficial ownership interests represented thereby. If Sufficient Clearing Bids exist in an Auction for a series of Preferred Shares (that is, in general, the number of Preferred Shares subject to Bids by Potential Holders with rates equal to or lower than the Maximum Applicable Rate is at least equal to the number of Preferred Shares subject to Sell Orders by Existing Holders), the Applicable Rate will be the lowest rate per annum specified in the Submitted Bids which, taking into account such rate per annum and all lower rates per annum bid by Existing Holders and Potential Holders, would result in Existing Holders and Potential Holders owning all of the Preferred Shares available for purchase in the Auction. If Sufficient Clearing Bids do not exist, the Dividend Period next following the Auction automatically will be a 7-Day Dividend Period and the Applicable Rate will be the Maximum Applicable Rate, and in such event, Existing Holders that have submitted Sell Orders will not be able to sell in the Auction all, and may not be able to sell any, Preferred Shares subject to such Sell Orders. Thus, in certain circumstances, Existing Holders and, thus, the Beneficial Owners they represent may not have liquidity of investment. If all Existing Holders submit (or are deemed to have submitted) Hold Orders in an Auction, the Dividend Period next following the Auction automatically shall be the same length as the immediately preceding Dividend Period, and the Applicable Rate will be % of the Reference Rate (as defined under "Determination of Maximum Applicable Rates" above) in effect on the date of the Auction (or % of such rate if the Trust has provided notification to the Auction Agent prior to the Auction establishing the Applicable Rate for any dividend that net capital gains or other taxable income will be included in such dividend on Preferred Shares). The Auction Procedures include a pro rata allocation of shares for purchase and sale, which may result in an Existing Holder selling or

16

holding, or a Potential Holder purchasing, a number of Preferred Shares that is less than the number of Preferred Shares specified in its Order. To the extent the allocation has this result, a Broker-Dealer will be required to make appropriate pro rata allocations among its customers and itself.

A Sell Order by an Existing Holder will constitute an irrevocable offer to sell the Preferred Shares subject thereto, and a Bid placed by an Existing Holder also will constitute an irrevocable offer to sell the Preferred Shares subject thereto if the rate per annum specified in the Bid is higher than the Applicable Rate determined in the Auction, in each case at a price per share equal to \$25,000. A Bid placed by a Potential Holder will constitute an irrevocable offer to purchase the Preferred Shares subject thereto at a price per share equal to \$25,000 if the rate per annum specified in such Bid is less than or equal to the Applicable Rate determined in the Auction. Settlement of purchases and sales will be made on the next Business Day (also a Dividend Payment Date) after the Auction Date through the Securities Depository. Purchasers will make payment through their Agent Members in same-day funds to the Securities Depository against delivery by book-entry to their Agent Members. The Securities Depository will make payment to the sellers' Agent Members in accordance with the Securities Depository's normal procedures, which now provide for payment in same-day funds. See "Description of Preferred Shares--The Auction."

FINANCIAL HIGHLIGHTS (UNAUDITED)

Information contained in the table below shows the unaudited operating performance of the Trust from the commencement of the Trust's investment operations on July , 2003 through [], 2003. Since the Trust was recently organized and commenced investment operations on July , 2003, the table covers approximately one month of operations, during which a substantial portion of the Trust's portfolio was held in temporary investments pending investment in preferred stocks or other preferred securities that meet the Trust's investment objectives and principal investment strategies. Accordingly, the information presented does not provide a meaningful picture of the Trust's future operating performance.

	FOR THE PERIOD JULY , 2003(1) THROUGH [], 2003 (UNAUDITED)

PER COMMON SHARE OPERATING PERFORMANCE:	
Net asset value, beginning of period	\$ [] =====
Increase/(decrease) from investment operations:	
Net investment income	[]
Net realized and unrealized gain/(loss) on investments	[]
Dividends to preferred shareholders	[]
Net increase/(decrease) from investment operations	[]
Offering costs charged to capital	[]
Net asset value, end of period	\$ [] =====
Market value, end of period	\$ [] =====
Total investment return(2)	[]%(3) =====
RATIOS TO AVERAGE NET ASSETS APPLICABLE TO COMMON SHAREHOLDERS:	
Ratio of expenses to average net assets	[]%(4)
Ratio of adjusted expenses to average net assets	[]%(4) (5)
Net investment income before preferred share dividends	[]%(4)
Preferred share dividends	[]%(4)
Net investment income applicable to common shareholders	[]%(4)
Supplemental data:	
Average net assets of common shareholders (000)	\$ []
Portfolio turnover	[]%
Net assets applicable to common shareholders, end of period (000)	\$ []

(1) Commencement of investment operations

(2) 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 period 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 returns of less than a full period are not annualized. Past performance is not a guarantee of future results

(3) Not annualized

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

(4) Annualized

(5) Does not take into consideration expense reductions during period

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

18

THE TRUST

Pioneer Municipal High Income Trust is a recently organized, diversified, closed-end management investment company. The Trust was organized under the laws of the State of Delaware on March 13, 2003, and has registered under the 1940 Act. As a recently organized entity, the Trust has no operating history. The Trust's principal office is located at 60 State Street, Boston, Massachusetts 02109, and its telephone number is (617) 742-7825.

On July 22, 2003, the Trust issued an aggregate of 20,500,000 common shares of beneficial interest, no par value, pursuant to an initial public offering. [On [], 2003, the Trust issued common shares of beneficial interest pursuant to an over-allotment option.] The Trust's common shares are traded on the NYSE under the symbol "MHI."

The following provides information about the Trust's outstanding shares as of [], 2003.

TITLE OF CLASS	AMOUNT AUTHORIZED	AMOUNT HELD BY THE TRUST OR FOR ITS ACCOUNT	AMOUNT OUTSTANDING
Common shares	Unlimited	0	[]
Preferred Shares Series []	Unlimited for each series	0	0
Series []			
Series []			

CAPITALIZATION (UNAUDITED)

The following table sets forth the capitalization of the Trust as of [], 2003, and as adjusted to give effect to the issuance of the Preferred Shares offered hereby (including estimated offering expenses and a sales load of \$250 per Preferred Shares).

	ACTUAL	AS AD
Preferred Shares, no par value per share (no shares issued; [] shares issued, as adjusted at \$25,000 per share liquidation preference)	\$ -- =====	\$ [] =====

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

securities generally will be exempt from regular federal income tax. As a secondary investment objective, the Trust also may seek capital appreciation to the extent consistent with its primary objective. Distributions from sources other than interest income from the Trust's portfolio of municipal securities, including capital gain distributions, are not exempt from regular federal income tax. The Trust's investment objectives and its policy discussed under "--Portfolio contents" with respect to investment in municipal securities are fundamental policies and may not be changed without the approval of a majority of the outstanding voting securities (as defined in the 1940 Act) of the Trust. There can be no assurance that the Trust will achieve its investment objectives.

PRINCIPAL INVESTMENT STRATEGIES

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. In managing the Trust's portfolio, the Adviser adjusts the portfolio's duration and overall credit quality in light of changing market and economic conditions. In making decisions with respect to specific municipal securities for the Trust's portfolio, the Adviser employs a disciplined approach, driven primarily by proprietary research regarding prevailing interest rates, economic fundamentals at both the national and state levels and in-depth credit research conducted by the Adviser's investment staff.

SECURITY SELECTION

The Adviser anticipates that the Trust's investment in revenue bonds will emphasize municipal securities backed by revenue from essential services, such as hospitals and healthcare, power generation, transportation, education

20

and housing. The Adviser considers both broad economic and issuer specific factors in selecting a portfolio designed to achieve the Trust's investment objectives. In assessing the appropriate maturity, rating and sector weightings of the Trust's portfolio, the Adviser considers a variety of factors that are expected to influence economic activity and interest rates. These factors include fundamental economic indicators, such as the rates of economic growth and inflation, Federal Reserve monetary policy and the relative value of the U.S. dollar compared to other currencies. Once the Adviser determines the preferable portfolio characteristics, the Adviser selects individual securities based upon the terms of the securities (such as yields compared to U.S. Treasuries or comparable issues), liquidity and rating, sector and issuer diversification.

The Adviser attempts to identify investment grade and below investment grade municipal securities that are trading at attractive valuations relative to the Adviser's evaluation of the issuer's creditworthiness and, with respect to private activity bonds, the profit potential of the corporation from which the revenue supporting the bonds is derived. The Adviser's overall investment approach is both top-down and bottom-up. The Adviser first seeks to identify the sectors or regions of the municipal securities market that present the best relative value opportunities and then bases the Trust's overall sector and regional weightings on that determination. Once the Adviser establishes the overall regional and sector weightings, the Adviser focuses on selecting those securities within each sector or region that meet its fundamental criteria. In determining sector weightings, the Trust's portfolio management team also maintains frequent contact with the Adviser's investment professionals who follow U.S. equities and those who focus on corporate fixed income investments. In many cases, the Adviser will augment its municipal securities credit research and security selection processes with equity research analysis. The Adviser has a fundamental bias toward long-term security selection rather than engaging in

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

frequent "market timing" or short-term trading. There can be no assurance that this process will be successful.

DURATION MANAGEMENT

The Adviser will actively manage the duration of the Trust's portfolio of municipal securities based primarily on the Adviser's outlook for interest rates. The Adviser will consider economic trends, Federal Reserve Board actions and capital markets activity, among other factors, in developing its outlook for interest rates. The Adviser believes that maintaining duration at an appropriate level offers the potential for above-average returns while limiting the risks of interest rate volatility. Duration is a measure of the expected life of a debt security that is used to determine the sensitivity of the security's price to changes in interest rates. While the Trust is not limited in the range of its portfolio's average duration, in the current market environment the Adviser expects that, once fully invested, the Trust's initial portfolio will have an average duration of between eight and twelve years (including the effect of anticipated leverage). In the future, the Adviser will modify the average duration of the Trust's portfolio in response to economic and market conditions. The Trust may employ certain strategies to reduce the Trust's interest rate sensitivity, including investments in interest rate swap or cap transactions. There is no assurance that the Trust will do so or that such strategies will be successful.

CREDIT MANAGEMENT

The Trust may invest in municipal securities with a broad range of credit ratings, including both investment grade and below investment grade municipal securities. At least 50% of the Trust's portfolio of municipal securities will be rated investment grade at the time of acquisition (that is, at least Baa by Moody's or BBB by S&P) or, if unrated, determined by the Adviser to be of comparable credit quality. No more than 50% of the Trust's portfolio of municipal securities will be rated below investment grade at the time of acquisition (that is, Ba or lower by Moody's or BB or lower by S&P) or, if unrated, determined by the Adviser to be of comparable credit quality. The Trust anticipates an initial allocation to below investment grade securities of approximately 35%, although the actual allocation of the Trust's investments will be subject to market conditions at the time the Trust commences investment operations. Municipal securities of below investment grade quality are regarded as having predominantly speculative characteristics with respect to the issuer's capacity to pay interest and repay principal, and are commonly referred to as "junk bonds" or "high yield securities." They

21

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 municipal securities. Municipal securities rated BB or Ba may face significant ongoing uncertainties or exposure to adverse business, financial or economic conditions that could lead to the issuer being unable to meet its financial commitments. The protection of interest and principal payments may be moderate and not well-safeguarded during both good and bad times. Municipal securities rated B generally lack the characteristics of a desirable investment. Assurance of interest and principal payments or of maintenance of other terms of the contract over any long period of time may be low, and such municipal securities are more vulnerable to nonpayment than obligations rated BB. Adverse business, financial or economic conditions will likely impair the issuer's capacity or willingness to meet its financial commitment on municipal securities. Municipal securities rated CCC, CC, C, Caa, Ca or C are generally speculative to a high degree. These municipal securities may be in default or there may be present elements of danger with respect to principal or interest.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Generally, issuers are dependent upon favorable business, financial and economic conditions to meet their financial commitment on such municipal securities. The Trust may invest in high yield municipal securities of any rating, including securities that are in default at the time of purchase. Under normal market conditions, the dollar-weighted average credit rating of the Trust's portfolio of municipal securities will be at least investment grade.

The Adviser will determine the allocation of the Trust's assets among securities with different credit ratings depending upon the Adviser's evaluation of factors such as the spread between the yields on municipal securities of different ratings, changes in default rates, general economic conditions and the outlook for fiscal issues facing municipal issuers. Generally, as the spread between the yield on investment grade and non-investment grade securities widens, the Adviser will allocate a greater portion of the Trust's assets to non-investment grade municipal securities. If the spread based on relative credit quality narrows, the Adviser may determine that high yield municipal securities no longer offer a sufficient risk premium and increase the average credit quality of the Trust's portfolio. As the economy strengthens and the default risk lessens, the Adviser may increase the Trust's investment in lower quality non-investment grade securities. The Adviser also seeks to mitigate the risks of investing in below investment grade securities through a disciplined approach, driven primarily by fundamental research to assess an issuer's credit quality and the relative value of its securities. Moreover, with respect to below investment grade securities that are private activity bonds, the Adviser intends to emphasize securities that are backed by revenue from publicly traded companies. The Adviser believes that this focus offers the potential for an informational advantage due to the substantial reporting requirements of public companies. With respect to investments in below investment grade private activity bonds, the Adviser also seeks to leverage its corporate credit research capabilities by selecting securities for the Trust payable by revenue derived from issuers followed by its staff focusing on below investment grade corporate issuers. The Adviser believes that a prudent blend of investment grade and non-investment grade municipal securities offers investors the opportunity for high current yield while managing credit risk. Covering a broad range of sectors and issuers, below investment grade municipal securities have been trading in 2003 with historically wide spreads and what the Adviser believes to be attractive valuations relative to investment grade municipal securities. High yield municipal securities have also shown low correlation to other asset classes, including corporate bonds and U.S. Treasury securities, providing potential diversification to an investment portfolio.

PORTFOLIO CONTENTS

Under normal market conditions, the Trust seeks to achieve its investment objectives by investing substantially all (at least 80%) of its assets (net assets plus borrowing for investment purposes) in debt securities and other obligations issued by or on behalf of states, territories and possessions of the United States and the District of Columbia and their political subdivisions, agencies and instrumentalities, the interest on which is exempt from regular federal income tax ("municipal securities"). Municipal securities are often issued to obtain funds for various public purposes, including the construction of a wide range of public facilities such as bridges, highways, housing, hospitals, mass transportation, schools, streets and water and sewer works. Municipal securities include

private activity bonds, pre-refunded municipal securities and auction rate securities. The municipal securities in which the Trust invests may have fixed or variable principal payments and all types of interest payment and reset terms, including fixed rate, adjustable rate, zero coupon, contingent, deferred,

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

payment in kind and auction rate features.

Although distributions of interest income from the Trust's municipal securities are generally exempt from regular federal income tax, distributions from other sources, including capital gain distributions, are not. Up to 25% of the Trust's total assets may be invested in municipal securities the interest income on which is a preference item for purposes of the alternative minimum tax for individuals or entities that are subject to such tax. All interest on municipal securities may result in or increase a corporate shareholder's liability for federal alternative minimum tax. Shareholders should consult a tax adviser about whether an alternative minimum tax applies to them and about state and local taxes on their distributions from the Trust.

Securities rated BBB by S&P are regarded by S&P as having an adequate capacity to pay interest and to repay principal; while such securities normally exhibit adequate protection parameters, adverse economic conditions or changing circumstances are more likely, in the opinion of S&P, to lead to a weakened capacity to pay interest and repay principal for securities in this category than in higher rating categories. Securities rated Baa by Moody's are considered by Moody's as medium to lower medium grade securities; they are neither highly protected nor poorly secured; interest payments and principal security appear to Moody's to be adequate for the present, but certain protective elements may be lacking or may be characteristically unreliable over time; and in the opinion of Moody's, securities in this rating category lack outstanding investment characteristics and in fact have speculative characteristics as well. Municipal securities of below investment grade quality are regarded as having predominantly speculative characteristics with respect to the issuer's capacity to pay interest and to repay principal, and are commonly referred to as "junk bonds" or "high yield securities." They 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 municipal securities.

The descriptions of the investment grade rating categories by Moody's and S&P, including a description of their speculative characteristics, are set forth in the Statement of Additional Information. All references to securities ratings by Moody's and S&P in this Prospectus shall, unless otherwise indicated, include all securities within each such rating category (that is, (1), (2) and (3) in the case of Moody's and (+) and (-) in the case of S&P). All percentage and ratings' limitations on securities in which the Trust may invest and the dollar-weighted average credit rating of the Trust's portfolio shall apply at the time of making an investment and shall not be considered violated if an investment rating is subsequently downgraded to a rating that would have precluded the Trust's initial investment in such security. The Trust is not required to dispose of a security in the event a rating agency downgrades or withdraws its rating of a security. In the event that the Trust disposes of a portfolio security subsequent to its being downgraded, the Trust may experience a greater risk of loss than if such security had been sold prior to such downgrading. When a security is rated by more than one of these rating agencies, the Adviser will use the highest rating in applying its investment policies.

MUNICIPAL SECURITIES

Municipal securities are often issued to obtain funds for various public purposes, including refunding outstanding obligations, funding for general operating expenses and lending to other public institutions and facilities. Municipal securities also include certain "private activity bonds" or industrial development bonds, which are issued by or on behalf of public authorities to provide financing aid to acquire sites or construct or equip facilities within a municipality for privately or publicly owned corporations. The two principal classifications of municipal securities are "general obligations" and "revenue obligations." General obligations are secured by the issuer's pledge of its full

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

faith and credit for the payment of principal and interest, although the characteristics and enforcement of general obligations may vary according to the law applicable to the particular issuer. Revenue obligations, which include, but are not limited to, private activity bonds, certificates of participation and certain municipal notes, are not backed by the credit and taxing authority of the issuer, and are

23

payable solely from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise or other specific revenue source. The obligations of the issuer of a revenue obligation may, in addition, be backed by a letter of credit from a bank, a guarantee from another issuer or insurance. The credit rating assigned to municipal securities may reflect the existence of these guarantees, letters of credit or other credit enhancement features. General obligations and revenue obligations may be issued in a variety of forms, including commercial paper, fixed, variable and floating rate securities, tender option bonds, auction rate bonds, zero coupon bonds, deferred interest bonds and capital appreciation bonds. In addition to general obligations and revenue obligations, there is a variety of hybrid and special types of municipal securities.

One or a small number of institutional investors such as the Trust may purchase an entire issue of municipal securities. Thus, the issue may not be said to be publicly offered. Unlike some securities that are not publicly offered, a secondary market exists for many municipal securities that were not publicly offered initially and such securities may be readily marketable.

Although distributions of interest income from the Trust's municipal securities are generally exempt from regular federal income tax, distributions from other sources, including capital gain distributions, and any gains on the sale of your shares are not. You should consult your tax adviser as to whether the alternative minimum tax applies to you and as to whether you will be subject to state and local taxes on your distributions from the Trust.

From time to time, proposals have been introduced before Congress for the purpose of restricting or eliminating the federal income tax exemption for interest on municipal securities. For example, under the Tax Reform Act of 1986, interest on certain private activity bonds must be included in an investor's federal alternative minimum taxable income, and corporate investors must include all tax-exempt interest in their federal alternative minimum taxable income. The Trust cannot predict what legislation, if any, may be proposed in the future in Congress regarding the federal income tax status of interest on municipal securities. Such proposals, if enacted, might materially and adversely affect the Trust.

MUNICIPAL LEASES AND CERTIFICATES OF PARTICIPATION

The Trust may invest in municipal leases and certificates of participation in such leases. A municipal lease is an obligation in the form of a lease or installment purchase which is issued by a state or local government to acquire equipment and facilities. Income from such obligations is generally exempt from state and local taxes in the state of issuance. Municipal leases frequently involve special risks not normally associated with general obligations or revenue obligations. Leases and installment purchase or conditional sale contracts (which normally provide for title to the leased asset to pass eventually to the governmental issuer) have evolved as a means for governmental issuers to acquire property and equipment without meeting the constitutional and statutory requirements for the issuance of debt. The debt issuance limitations are deemed to be inapplicable because of the inclusion in many leases or contracts of "non-appropriation" clauses that relieve the governmental issuer of

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

any obligation to make future payments under the lease or contract unless money is appropriated for such purpose by the appropriate legislative body on a yearly or other periodic basis. In addition, such leases or contracts may be subject to the temporary abatement of payments in the event the issuer is prevented from maintaining occupancy of the leased premises or utilizing the leased equipment. Although the obligations may be secured by the leased equipment or facilities, the disposition of the property in the event of non-appropriation or foreclosure might prove difficult, time consuming and costly, and result in a delay in recovering or the failure to fully recover the Trust's original investment. To the extent that the Trust invests in unrated municipal leases or participates in such leases, the credit quality rating and risk of cancellation of such unrated leases will be monitored on an ongoing basis.

A certificate of participation represents an undivided interest in an unmanaged pool of municipal leases, an installment purchase agreements or other instruments. The certificates are typically issued by a municipal agency, a trust or other entity which has received an assignment of the payments to be made by the state or political subdivision under such leases or installment purchase agreements. Such certificates provide the Trust with the right to a pro rata undivided interest in the underlying municipal securities. In addition, such participations

24

generally provide the Trust with the right to demand payment, on not more than seven days' notice, of all or any part of the Trust's participation interest in the underlying municipal securities, plus accrued interest.

Certain municipal lease obligations and certificates of participation may be deemed to be illiquid for the purpose of the Trust's limitation on investments in illiquid securities. Other municipal lease obligations and certificates of participation acquired by the Trust may be determined by the Adviser, pursuant to guidelines adopted by the Trustees, to be liquid securities for the purpose of such limitation. In determining the liquidity of municipal lease obligations and certificates of participation, the Adviser will consider a variety of factors, including: (i) the willingness of dealers to bid for the obligation; (ii) the number of dealers willing to purchase or sell the obligation and the number of other potential buyers; (iii) the frequency of trades or quotes for the obligation; and (iv) the nature of the marketplace trades. In addition, the Adviser will consider factors unique to particular lease obligations and certificates of participation affecting the marketability thereof. These include the general creditworthiness of the issuer, the importance to the issuer of the property covered by the lease and the likelihood that the marketability of the obligation will be maintained throughout the time the obligation is held by the Trust.

MUNICIPAL NOTES

Municipal securities in the form of notes generally are used to provide for short-term capital needs, in anticipation of an issuer's receipt of other revenues or financing, and typically have maturities of up to three years. Such instruments may include tax anticipation notes, revenue anticipation notes, bond anticipation notes, tax and revenue anticipation notes and construction loan notes. Tax anticipation notes are issued to finance the working capital needs of governments. Generally, they are issued in anticipation of various tax revenues, such as income, sales, property, use and business taxes, and are payable from these specific future taxes. Revenue anticipation notes are issued in expectation of receipt of other kinds of revenue, such as federal revenues available under federal revenue sharing programs. Bond anticipation notes are issued to provide interim financing until long-term bond financing can be arranged. In most cases, the long-term bonds then provide the funds needed for

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

repayment of the notes. Tax and revenue anticipation notes combine the funding sources of both tax anticipation notes and revenue anticipation notes. Construction loan notes are sold to provide construction financing. Mortgage notes insured by the Federal Housing Authority secure these notes; however, the proceeds from the insurance may be less than the economic equivalent of the payment of principal and interest on the mortgage note if there has been a default. The anticipated revenues from taxes, grants or bond financing generally secure the obligations of an issuer of municipal notes. An investment in such instruments, however, presents a risk that the anticipated revenues will not be received or that such revenues will be insufficient to satisfy the issuer's payment obligations under the notes or that refinancing will be otherwise unavailable.

TAX-EXEMPT COMMERCIAL PAPER

Issues of commercial paper typically represent short-term, unsecured, negotiable promissory notes. These obligations are issued by state and local governments and their agencies to finance the working capital needs of municipalities or to provide interim construction financing and are paid from general revenues of municipalities or are refinanced with long-term debt. In most cases, tax-exempt commercial paper is backed by letters of credit, lending agreements, note repurchase agreements or other credit facility agreements offered by banks or other institutions.

PRE-REFUNDED MUNICIPAL SECURITIES

The principal of and interest on pre-refunded municipal securities are no longer paid from the original revenue source for the securities. Instead, the source of such payments is typically an escrow fund consisting of U.S. government securities. The assets in the escrow fund are derived from the proceeds of refunding bonds issued by the same issuer as the pre-refunded municipal securities. Issuers of municipal securities use this advance refunding technique to obtain more favorable terms with respect to securities that are not yet subject to call or redemption by the issuer. For example, advance refunding enables an issuer to refinance debt at lower market interest rates, restructure debt to improve cash flow or eliminate restrictive covenants in the indenture or other

25

governing instrument for the pre-refunded municipal securities. However, except for a change in the revenue source from which principal and interest payments are made, the pre-refunded municipal securities remain outstanding on their original terms until they mature or are redeemed by the issuer.

PRIVATE ACTIVITY BONDS

Private activity bonds, formerly referred to as industrial development bonds, are issued by or on behalf of public authorities to obtain funds to provide privately operated housing facilities, airport, mass transit or port facilities, sewage disposal, solid waste disposal or hazardous waste treatment or disposal facilities and certain local facilities for water supply, gas or electricity. Other types of private activity bonds, the proceeds of which are used for the construction, equipment, repair or improvement of privately operated industrial or commercial facilities, may constitute municipal securities, although the current federal tax laws place substantial limitations on the size of such issues. The Trust's distributions of its interest income from private activity bonds may subject certain investors to the federal alternative minimum tax.

TENDER OPTION BONDS

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

A tender option bond is a municipal security (generally held pursuant to a custodial arrangement) having a relatively long maturity and bearing interest at a fixed rate substantially higher than prevailing short-term, tax-exempt rates. The bond is typically issued with the agreement of a third party, such as a bank, broker-dealer or other financial institution, which grants the security holders the option, at periodic intervals, to tender their securities to the institution and receive the face value thereof. As consideration for providing the option, the financial institution receives periodic fees equal to the difference between the bond's fixed coupon rate and the rate, as determined by a remarketing or similar agent at or near the commencement of such period, that would cause the securities, coupled with the tender option, to trade at par on the date of such determination. Thus, after payment of this fee, the security holder effectively holds a demand obligation that bears interest at the prevailing short-term, tax-exempt rate. However, an institution will not be obligated to accept tendered bonds in the event of certain defaults or a significant downgrade in the credit rating assigned to the issuer of the bond. The liquidity of a tender option bond is a function of the credit quality of both the bond issuer and the financial institution providing liquidity. Tender option bonds are deemed to be liquid unless, in the opinion of the Adviser, the credit quality of the bond issuer and the financial institution is deemed, in light of the Trust's credit quality requirements, to be inadequate and the bond would not otherwise be readily marketable. The Trust intends to invest in tender option bonds the interest on which will, in the opinion of bond counsel, counsel for the issuer of interests therein or counsel selected by the Adviser, be exempt from regular federal income tax. However, because there can be no assurance that the Internal Revenue Service (the "IRS") will agree with such counsel's opinion in any particular case, there is a risk that the Trust will not be considered the owner of such tender option bonds and thus will not be entitled to treat such interest as exempt from such tax. Additionally, the federal income tax treatment of certain other aspects of these investments, including the proper tax treatment of tender option bonds and the associated fees in relation to various regulated investment company tax provisions, is unclear. The Trust intends to manage its portfolio in a manner designed to eliminate or minimize any adverse impact from the tax rules applicable to these investments.

AUCTION RATE SECURITIES

The Trust may invest in auction rate securities. Auction rate securities include auction rate municipal securities and auction rate preferred securities issued by closed-end investment companies that invest primarily in municipal securities (collectively, "auction rate securities"). Provided that the auction mechanism is successful, auction rate securities usually permit the holder to sell the securities in an auction at par value at specified intervals. The dividend is reset by "Dutch" auction in which bids are made by broker-dealers and other institutions for a certain amount of securities at a specified minimum yield. The dividend rate set by the auction is the lowest interest or dividend rate that covers all securities offered for sale. While this process is designed to permit auction rate securities to be traded at par value, there is some risk that an auction will fail due to insufficient demand for the securities. The Trust will take the time remaining until the next scheduled auction

26

date into account for purpose of determining the securities' duration. The Trust's investments in auction rate securities of closed-end funds are subject to the limitations prescribed by the 1940 Act.

ILLIQUID SECURITIES

The Trust may invest in bonds or other municipal securities that lack a

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

secondary trading market or are otherwise considered illiquid. Liquidity of a security relates to the ability to easily dispose of the security and the price to be obtained upon disposition of the security, which may be less than would be obtained for a comparable, more liquid security. The Trust may invest up to 20% of its total assets in investments that are not readily marketable, and it may also invest in securities that are subject to contractual restrictions on resale. Securities issued pursuant to Rule 144A under the Securities Act of 1933, as amended (the "1933 Act") and certain commercial paper that the Adviser determines to be liquid under procedures approved by the Board of Trustees are not subject to these restrictions. Such investments may affect the Trust's ability to realize its net asset value in the event of a voluntary or involuntary liquidation of its assets. See "Net asset value" for information with respect to the valuation of illiquid securities.

STRUCTURED SECURITIES

The Trust may invest in structured securities. The value of the principal and/or interest on such securities is determined by reference to changes in the value of specific currencies, interest rates, commodities, indices or other financial indicators ("reference") or the relative change in two or more references. The interest rate or the principal amount payable upon maturity or redemption may be increased or decreased depending upon changes in the reference. The terms of the structured securities may provide in certain circumstances that no principal is due at maturity and, therefore, may result in a loss of the Trust's investment. Changes in the interest rate or principal payable at maturity may be a multiple of the changes in the value of the reference. Consequently, structured securities may entail a greater degree of market risk than other types of fixed income securities.

INSURED MUNICIPAL SECURITIES

The Trust may invest in "insured" municipal securities, which are securities for which scheduled payments of interest and principal are guaranteed by a private (non-governmental) insurance company. The insurance only entitles the Trust to receive at maturity the face or par value of the securities held by the Trust. The insurance does not guarantee the market value of the municipal securities or the value of the shares of the Trust. The Trust may utilize new issue or secondary market insurance. A bond issuer who wishes to increase the credit rating of a security purchases a new issue insurance policy. By paying a premium and meeting the insurer's underwriting standards, the bond issuer is able to obtain a high credit rating (usually, Aaa from Moody's or AAA from S&P) for the issued security. Such insurance is likely to increase the purchase price and resale value of the security. New issue insurance policies are non-cancelable and continue in force as long as the bonds are outstanding. A secondary market insurance policy is purchased by an investor subsequent to a bond's original issuance and generally insures a particular bond for the remainder of its term.

STANDBY COMMITMENTS

In order to enhance the liquidity of municipal securities, the Trust may acquire the right to sell a security to another party at a guaranteed price and date. Such a right to resell may be referred to as a "standby commitment" or "liquidity put," depending on its characteristics. The aggregate price which the Trust pays for securities with standby commitments may be higher than the price which otherwise would be paid for the securities. Standby commitments may not be available or may not be available on satisfactory terms. Standby commitments may involve letters of credit issued by domestic or foreign banks supporting the other party's ability to purchase the security. The right to sell may be exercisable on demand or at specified intervals, and may form part of a security or be acquired separately by the Trust.

Because the period prior to the put date is generally less than 365 days, the

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Trust generally values the municipal securities subject to the standby commitments at amortized cost. The Board of Trustees has adopted procedures pursuant to which the Adviser may determine that amortized cost represents the fair value of the securities. The

27

exercise price of the standby commitments is expected to approximate such amortized cost. Consequently, no separate value is assigned to the standby commitments for purposes of determining the Trust's net asset value. The cost of a standby commitment is carried as unrealized depreciation from the time of purchase until it is exercised or expires. Since the value of a standby commitment is dependent on the ability of the standby commitment writer to meet its obligation to repurchase, the Trust's policy is to enter into standby commitment transactions only with banks, brokers or dealers that present a minimal risk of default. However, this policy reduces, but does not eliminate, the risk of default by the standby commitment writer.

ZERO COUPON SECURITIES

The securities in which the Trust invests may include zero coupon securities, which are debt obligations that are issued or purchased at a significant discount from face value. The discount approximates the total amount of interest the security will accrue and compound over the period until maturity or the particular interest payment date at a rate of interest reflecting the market rate of the security at the time of issuance. Zero coupon securities do not require the periodic payment of interest. These investments benefit the issuer by mitigating its need for cash to meet debt service, but generally require a higher rate of return to attract investors who are willing to defer receipt of cash. These investments may experience greater volatility in market value than securities that make regular payments of interest. The Trust accrues income on these investments for tax and accounting purposes, which is distributable to shareholders and which, because no cash is received at the time of accrual, may require the liquidation of other portfolio securities to satisfy the Trust's distribution obligations, in which case the Trust will forgo the purchase of additional income producing assets with these funds.

OTHER INVESTMENT COMPANIES

The Trust may invest in the securities of other investment companies to the extent that such investments are consistent with the Trust's investment objectives and principal investment strategies and permissible under the 1940 Act. Under one provision of the 1940 Act, the Trust may not acquire the securities of other investment companies if, as a result, (i) more than 10% of the Trust's total assets would be invested in securities of other investment companies, (ii) such purchase would result in more than 3% of the total outstanding voting securities of any one investment company being held by the Trust or (iii) more than 5% of the Trust's total assets would be invested in any one investment company. Other provisions of the 1940 Act are less restrictive provided that the Trust is able to meet certain conditions. These limitations do not apply to the acquisition of shares of any investment company in connection with a merger, consolidation, reorganization or acquisition of substantially all the assets of another investment company. However, the Adviser has an exemptive order from the Securities and Exchange Commission that permits the Trust to invest cash balances in money market funds managed by the Adviser.

The Trust, as a holder of the securities of other investment companies, will bear its pro rata portion of the other investment companies' expenses, including advisory fees. These expenses will be in addition to the direct expenses incurred by the Trust. Income generated from the Trust's investment in another investment company may not be tax-exempt.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

DEFENSIVE AND TEMPORARY INVESTMENTS

Normally, the Trust invests substantially all of its assets to meet its investment objectives. The Trust may invest the remainder of its assets in cash or cash equivalent short-term obligations, including, but not limited to, short-term municipal securities, certificates of deposit, commercial paper, short-term notes, obligations issued or guaranteed by the U.S. Government, its agencies, authorities or instrumentalities and repurchase agreements. Interest on certain of these short-term obligations will be subject to federal income tax. The Trust may also invest all or any portion of its assets in such instruments for temporary defensive purposes. During such periods, the Trust may not be able to achieve its investment objectives.

28

STRATEGIC TRANSACTIONS

The Trust may, but is not required to, use various strategic transactions described below to earn income, facilitate portfolio management and mitigate risks. Such strategic transactions are generally accepted under modern portfolio management theory and are regularly used by many mutual funds and other institutional investors. Although the Adviser seeks to use these practices to further the Trust's investment objectives, no assurance can be given that these practices will achieve this result. Income earned from strategic transactions will not be tax-exempt.

The Trust may purchase and sell derivative instruments, such as exchange-listed and over-the-counter put and call options on securities, financial futures, fixed-income and interest rate indices, and other financial instruments; purchase and sell financial futures contracts and options thereon; and enter into various interest rate transactions, such as interest rate swaps, caps, floors or collars, and credit default swaps. The Trust also may purchase derivative instruments that combine features of these instruments. Collectively, all of the above are referred to as "strategic transactions." The Trust generally seeks to use strategic transactions as a portfolio management or hedging technique to seek to protect against possible adverse changes in the market value of securities held in or to be purchased for the Trust's portfolio, protect the value of the Trust's portfolio, facilitate the sale of certain securities for investment purposes, manage the effective interest rate exposure of the Trust, manage the effective maturity or duration of the Trust's portfolio or establish positions in the derivatives markets as a temporary substitute for purchasing or selling particular securities.

Strategic transactions have risks, including the imperfect correlation between the value of such instruments and the underlying assets, the possible default of the other party to the transaction or illiquidity of the derivative instruments. Furthermore, the ability to use strategic transactions successfully depends on the Adviser's ability to predict pertinent market movements, which cannot be assured. Thus, the use of strategic transactions may result in losses greater than if they had not been used, may require the Trust to sell or purchase portfolio securities at inopportune times or for prices other than current market values, may limit the amount of appreciation the Trust can realize on an investment or may cause the Trust to hold a security that it might otherwise sell. Additionally, amounts paid by the Trust as premiums and cash or other assets held in margin accounts with respect to strategic transactions are not otherwise available to the Trust for investment purposes.

REPURCHASE AGREEMENTS

The Trust may enter into repurchase agreements with broker-dealers, member banks

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

of the Federal Reserve System and other financial institutions. Repurchase agreements are arrangements under which the Trust purchases securities and the seller agrees to repurchase the securities within a specific time and at a specific price. The repurchase price is generally higher than the Trust's purchase price, with the difference being income to the Trust. Under the direction of the Board of Trustees, the Adviser reviews and monitors the creditworthiness of any institution that enters into a repurchase agreement with the Trust. The counterparty's obligations under the repurchase agreement are collateralized with U.S. Treasury and/or agency obligations with a market value of not less than 100% of the obligations, valued daily. Collateral is held by the Trust's custodian in a segregated, safekeeping account for the benefit of the Trust. Repurchase agreements afford the Trust an opportunity to earn income on temporarily available cash at low risk. In the event of commencement of bankruptcy or insolvency proceedings with respect to the seller of the security before repurchase of the security under a repurchase agreement, the Trust may encounter delay and incur costs before being able to sell the security. Such a delay may involve loss of interest or a decline in price of the security. If the court characterizes the transaction as a loan and the Trust has not perfected a security interest in the security, the Trust may be required to return the security to the seller's estate and be treated as an unsecured creditor of the seller. As an unsecured creditor, the Trust would be at risk of losing some or all of the principal and interest involved in the transaction. Any income generated by repurchase agreements will not be tax-exempt.

29

LENDING OF PORTFOLIO SECURITIES

The Trust may lend portfolio securities to registered broker-dealers or other institutional investors deemed by the Adviser to be of good standing under agreements which require that the loans be secured continuously by collateral in cash, cash equivalents or U.S. Treasury bills maintained on a current basis at an amount at least equal to the market value of the securities loaned. The Trust continues to receive the equivalent of the interest or dividends paid by the issuer on the securities loaned as well as the benefit of any increase and the detriment of any decrease in the market value of the securities loaned and would also receive compensation based on investment of the collateral. The Trust would not, however, have the right to vote any securities having voting rights during the existence of the loan, but would call the loan in anticipation of an important vote to be taken among holders of the securities or of the giving or withholding of consent on a material matter affecting the investment. Any income generated from securities lending will not be tax-exempt.

As with other extensions of credit, there are risks of delay in recovery or even loss of rights in the collateral should the borrower of the securities fail financially. The Trust will lend portfolio securities only to firms that have been approved in advance by the Board of Trustees, which will monitor the creditworthiness of any such firms. At no time would the value of the securities loaned exceed 331/3% of the value of the Trust's total assets.

PORTFOLIO TURNOVER

It is the policy of the Trust not to engage in trading for short-term profits, although portfolio turnover rate is not considered a limiting factor in the execution of investment decisions for the Trust.

RISK FACTORS

Risk is inherent in all investing. Investing in any investment company security involves risk, including the risk that you may receive little or no return on your investment or even that you may lose part or all of your investment.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Therefore, before purchasing Preferred Shares, you should consider carefully the following risks that you assume when you invest in the Trust.

RISKS OF INVESTMENT IN PREFERRED SHARES

AUCTION RISK

The dividend rate for the Preferred Shares normally is set through an auction process. In the Auction, holders of Preferred Shares may indicate the dividend rate at which they would be willing to hold or sell their Preferred Shares or purchase additional Preferred Shares. The Auction also provides liquidity for the sale of Preferred Shares. You may not be able to sell your Preferred Shares at an Auction if the Auction fails. An Auction fails if there are more Preferred Shares offered for sale than there are buyers. If Sufficient Clearing Bids do not exist in an Auction, the Applicable Rate will be the Maximum Applicable Rate, and in such event, owners of Preferred Shares wishing to sell will not be able to sell all, and may not be able to sell any, of such Preferred Shares in the Auction. As a result, your investment in Preferred Shares may be illiquid. Neither the Broker-Dealers nor the Trust is obligated to purchase Preferred Shares in an Auction or otherwise, nor is the Trust required to redeem Preferred Shares in the event of a failed Auction. Also, if you place Hold Orders (orders to retain Preferred Shares) at an Auction only at a specified rate and that bid rate exceeds the Applicable Rate set at the Auction, you will not retain your Preferred Shares. Additionally, if you buy Preferred Shares or elect to retain Preferred Shares without specifying a dividend rate below which you would not wish to buy or continue to hold those Preferred Shares, you could receive a lower rate of return on your Preferred Shares than the market rate. Finally, the dividend period for the Preferred Shares may be changed by the Trust, subject to certain conditions with notice to the holders of Preferred Shares, which could also effect the liquidation of your investment. See "Description of Preferred Shares--Auction Procedures."

30

RATINGS AND ASSET COVERAGE RISK

While it is expected that [Rating Agency] will assign a rating of "Aaa" to the Preferred Shares, such rating does not eliminate or necessarily mitigate the risks of investing in Preferred Shares. [Rating Agency 1] or [Rating Agency 2] could downgrade its rating of the Preferred Shares or withdraw its rating of the Preferred Shares at any time, which may make your Preferred Shares less liquid at an Auction or in the secondary market. If [Rating Agency 1] or [Rating Agency 2] downgrades the Preferred Shares, the Trust may alter its portfolio or redeem Preferred Shares in an effort to improve the rating, although there is no assurance that it will be able to do so to the extent necessary to restore the prior rating. If the Trust fails to satisfy the asset coverage ratios discussed under "Description of Preferred Shares--Rating Agency Guidelines and Asset Coverage," the Trust will be required to redeem a sufficient number of Preferred Shares in order to return to compliance with the asset coverage ratios. The Trust may be required to redeem Preferred Shares at a time when it is not advantageous for the Trust to make such redemption or to liquidate portfolio securities in order to have available cash for such redemption. The Trust may voluntarily redeem Preferred Shares under certain circumstances in order to meet asset maintenance tests. While a sale of substantially all the assets of the Trust or the merger of the Trust into another entity would require the approval of the holders of the Preferred Shares voting as a separate class as discussed under "Description of Preferred Shares--Voting Rights," a sale of substantially all the assets of the Trust or the merger of the Trust with or into another entity would not be treated as a liquidation of the Trust nor require that the Trust redeem the Preferred Shares, in whole or in part, provided that the Trust continued to comply with the asset coverage ratios discussed under "Description

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

of Preferred Shares--Rating Agency Guidelines and Asset Coverage." See "Description of Preferred Shares--Rating Agency Guidelines and Asset Coverage" for a description of the asset maintenance tests the Trust must meet.

SECONDARY MARKET RISK

If you try to sell your Preferred Shares between Auctions, you may not be able to sell any or all of your Preferred Shares, or you may not be able to sell them for \$25,000 per share or \$25,000 per share plus accumulated dividends. If the Trust has designated a Special Dividend Period (a rate period of more than [seven] days for each series), changes in interest rates could affect the price you would receive if you sold your Preferred Shares in the secondary market. An increase in the level of interest rates likely will have an adverse effect on the secondary market price of the Preferred Shares. You may transfer Preferred Shares outside of Auctions only to or through a Broker-Dealer that has entered into an agreement with the Trust's Auction Agent, [], and the Trust or other person as the Trust permits. The Trust does not anticipate imposing significant restrictions on transfers to other persons. However, unless any such other person has entered into a relationship with a Broker-Dealer that has entered into a Broker-Dealer agreement with the Auction Agent, that person will not be able to submit Bids at Auctions with respect to the Preferred Shares. Broker-Dealers that maintain a secondary trading market for Preferred Shares are not required to maintain this market, and the Trust is not required to redeem Preferred Shares if an Auction or an attempted secondary market sale fails because of a lack of buyers. The Preferred Shares will not be listed on any stock exchange or the Nasdaq National Market. If you sell your Preferred Shares to a Broker-Dealer between Auctions, you may receive less than the price you paid for them, especially if market interest rates have risen since the last Auction.

INTEREST RATE RISK

The Preferred Shares pay dividends based on short-term interest rates. The Trust invests the proceeds from the issuance of the Preferred Shares principally in municipal securities, which bear dividends or interest rates reflecting intermediate and long-term interest rates. The interest or dividend rates on municipal securities are typically, although not always, higher than shorter-term interest rates. Both shorter-term and intermediate to longer-term interest rates may fluctuate. If shorter-term interest rates rise, dividend rates on the Preferred Shares may rise so that the amount of dividends to be paid to holders of Preferred Shares exceeds the income from the preferred stocks, other preferred securities and other investments purchased by the Trust with the proceeds from the sale of Preferred Shares. Because income from the Trust's entire investment portfolio (not just the portion of

31

the portfolio purchased with the proceeds of the Preferred Shares offering) is available to pay dividends on the Preferred Shares, however, dividend rates on the Preferred Shares would need to exceed the rate of return on the Trust's investment portfolio by a wide margin before the Trust's ability to pay dividends on the Preferred Shares would be jeopardized. If intermediate to longer-term interest rates rise, this could negatively impact the value of the Trust's investment portfolio, reducing the amount of assets serving as asset coverage for the Preferred Shares.

LEVERAGE RISK

The Trust expects to use financial leverage on an ongoing basis for investment purposes. Leverage risk includes the risk associated with the issuance of Preferred Shares to leverage the Common Shares. If the dividend rate on the

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Preferred Shares exceeds the net rate of return on the Trust's portfolio, the leverage will result in a lower net asset value than if the Trust were not leveraged, and the Trust's ability to pay dividends and meet its asset coverage requirements on the Preferred Shares would be reduced. Similarly, any decline in the net asset value of the Trust's investments could result in the Trust being in danger of failing to meet its asset coverage requirements or of losing its expected "Aaa" rating on the Preferred Shares or, in an extreme case, the Trust's current investment income might not be sufficient to meet the dividend requirements on the Preferred Shares. To counteract such an event, the Trust might need to liquidate investments in order to fund a redemption of some or all of the Preferred Shares.

It is currently anticipated that, taking into account the Preferred Shares being offered in this Prospectus, the initial amount of leverage will represent approximately ___% of the Trust's total assets.

The Trust's leveraged capital structure creates special risks not associated with unleveraged funds having similar investment objectives and policies. These include the possibility of higher volatility of the net asset value of the Trust and the Preferred Shares' asset coverage.

While the Trust may from time to time consider reducing leverage in response to actual or anticipated changes in interest rates in an effort to mitigate the increased volatility of current income and net asset value associated with leverage, there can be no assurance that the Trust will actually reduce leverage in the future or that any reduction, if undertaken, will be effective. Changes in the future direction of interest rates are very difficult to predict accurately. If the Trust were to reduce leverage based on a prediction about future changes to interest rates and that prediction turned out to be incorrect, the reduction in leverage would likely operate to reduce the Trust's net asset value relative to the circumstance where the Trust had not reduced leverage. The Trust may decide that this risk outweighs the likelihood of achieving the desired reduction to volatility in income and net asset value if the prediction were to turn out to be correct, and determine not to reduce leverage as described above.

Because the fee paid to the Adviser will be calculated on the basis of the Trust's managed assets (which equals the aggregate net asset value of the common shares plus the liquidation preference of the Preferred Shares), the fee will be higher when leverage is utilized, giving the Adviser an incentive to utilize leverage.

RESTRICTIONS ON DIVIDENDS AND OTHER DISTRIBUTIONS

Restrictions imposed on the declaration and payment of dividends or other distributions to the holders of the Trust's Common Shares and Preferred Shares, both by the 1940 Act and by requirements imposed by [Rating Agency 1], [Rating Agency 2] or a Substitute Rating Agency, might impair the Trust's ability to satisfy minimum distribution requirements that it must satisfy to be treated as a regulated investment company for federal income tax purposes. While the Trust intends to redeem Preferred Shares to enable the Trust to distribute its income as required to maintain its qualification as a regulated investment company under the Code, there can be no assurance that such redemptions can be effected in time to meet the requirements of the Code. See "Federal income tax matters."

GENERAL RISKS OF INVESTING IN THE FUND

LIMITED OPERATING HISTORY

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The Trust is a newly organized, diversified, closed-end management investment company and has a limited operating history or history of public trading.

MUNICIPAL SECURITIES MARKET RISK

The yields on and market prices of municipal securities are dependent on a variety of factors, including general conditions of the municipal securities market, the size of a particular offering, the maturity of the obligation and the rating of the issue. The value of outstanding municipal securities will vary as a result of changing evaluations of the ability of their issuers to meet the interest and principal payments. Such values will also change in response to changes in the interest rates payable on new issues of municipal securities. Changes in the value of the municipal securities held in the Trust's portfolio arising from these or other factors will cause changes in the Trust's net asset value per share.

The ability of a municipal issuer to repay obligations on municipal securities, other than private activity bonds, is subject to the risk that the municipal issuer of the securities will not have sufficient revenues from taxes and other sources of income to pay interest and repay principal on the municipal securities. The level of municipal income may be adversely affected by various factors, including general economic activity, real estate values and changes in governmental expenses. The obligations of the issuer to pay the principal of and interest on a municipal security are subject to the provisions of bankruptcy, insolvency and other laws affecting the rights and remedies of creditors, such as the Federal Bankruptcy Act, and laws, if any, that may be enacted by Congress or state legislatures extending the time for payment of principal or interest or imposing other constraints upon the enforcement of such obligations. There is also the possibility that, as a result of litigation or other conditions, the power or ability of the issuer to pay when due the principal of or interest on a municipal security may be materially affected.

The amount of public information available about the issuance of municipal securities is generally less than that for corporate equities or bonds, and the investment performance of the Trust may therefore be more dependent on the analytical abilities of the Trust's investment adviser than would be a stock fund or taxable bond fund. The secondary market for municipal bonds, particularly the below investment grade bonds in which the Trust will invest, also tends to be less well-developed or liquid than many other securities markets, which may adversely affect the Trust's ability to sell its bonds at attractive prices.

Municipal securities may be backed by letters of credit or other forms of credit enhancement issued by domestic or foreign banks or by other financial institutions. The credit quality of these banks and financial institutions could, therefore, cause a loss to the Trust. Letters of credit and other obligations of foreign banks and financial institutions may involve risks in addition to those of domestic obligations because of less publicly available financial and other information, less securities regulation, potential imposition of foreign withholding and other taxes, war and expropriation or other adverse governmental actions. Foreign banks and their foreign branches are not regulated by U.S. banking authorities and are generally not bound by the accounting, auditing and financial reporting standards applicable to U.S. banks.

TAX RISK

The value of the Trust's investments and its net asset value may be adversely impacted by changes in tax rates and policies. Because interest income from municipal securities is normally not subject to regular federal income taxation, the attractiveness of municipal securities in relation to other investment alternatives is affected by changes in federal income tax rates or changes in the tax-exempt status of interest income from municipal securities. Any proposed

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

or actual changes in such rates or exempt status, therefore, can significantly affect the demand for and supply, liquidity and marketability of municipal securities. This could in turn affect the Trust's

33

net asset value and ability to acquire and dispose of municipal securities at desirable yield and price levels. Additionally, the Trust is not a suitable investment for IRAs, other tax-exempt or tax-deferred accounts or for other investors who are not sensitive to the federal, state or local income tax consequences of their investments.

CREDIT AND JUNK BOND RISK

Credit risk is the risk that an issuer of a municipal bond will become unable to meet its obligation to make interest and principal payments. The two principal classifications of municipal securities are "general obligations" and "revenue obligations." General obligations are secured by the issuer's pledge of its faith, credit and taxing power for the payment of principal and interest. Revenue obligations are payable from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise or other specific revenue source, but not from the general taxing power. Sizable investments in these obligations could involve an increased risk to the Trust should any of the related facilities experience financial difficulties. Private activity bonds are in most cases revenue obligations and do not generally carry the pledge of the credit of the issuing municipality.

The Trust intends to purchase debt securities that are rated below investment grade (commonly referred to as "junk bonds" or "high yield securities"), that is, rated Ba or below by Moody's or BB or lower by S&P, or unrated securities determined by the Adviser to be of comparable credit quality. Investment in municipal securities of below investment grade quality involves substantial risk of loss. "Junk bonds" are considered predominantly speculative with respect to the issuer's ability to pay interest and principal and are susceptible to default or decline in market value due to adverse economic and business developments. The market values for high yield municipal securities tend to be very volatile, and these securities are less liquid than investment grade debt securities. For these reasons, an investment in the Trust is subject to the following specific risks:

- increased price sensitivity to changing interest rates and to a deteriorating economic environment
- greater risk of loss due to default or declining credit quality
- adverse issuer specific events are more likely to render the issuer unable to make interest and/or principal payments
- if a negative perception of the high yield market develops, the price and liquidity of high yield securities may be depressed, and this negative perception could last for a significant period of time

Adverse changes in economic conditions are more likely to lead to a weakened capacity of a high yield issuer to make principal payments and interest payments than an investment grade issuer. The principal amount of high yield securities outstanding has proliferated in the past decade as an increasing number of issuers have used high yield securities for corporate financing. An economic downturn could severely affect the ability of highly leveraged issuers to service their debt obligations or to repay their obligations upon maturity. If the national economy enters into a recessionary phase during 2003, potentially decreasing the tax and other revenue of municipal issuers, or interest rates

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

rise sharply, increasing the interest cost on variable rate instruments and negatively impacting economic activity, the number of defaults by high yield municipal issuers is likely to increase. Similarly, down-turns in profitability in specific industries could adversely affect private activity bonds. The market values of lower quality debt securities tend to reflect individual developments of the issuer to a greater extent than do higher quality securities, which react primarily to fluctuations in the general level of interest rates. Factors having an adverse impact on the market value of lower quality securities may have an adverse effect on the Trust's net asset value and the market value of its common shares. In addition, the Trust may incur additional expenses to the extent it is required to seek recovery upon a default in payment of principal or interest on its portfolio holdings. In certain circumstances, the Trust may be required to foreclose on an issuer's assets and take possession of its property or operations. In such circumstances, the Trust would incur additional costs in disposing of such assets and potential liabilities from operating any business acquired.

34

The secondary market for high yield securities may not be as liquid as the secondary market for more highly rated securities, a factor which may have an adverse effect on the Trust's ability to dispose of a particular security. There are fewer dealers in the market for high yield securities than investment grade obligations. The prices quoted by different dealers may vary significantly, and the spread between the bid and asked price is generally much larger than for higher quality instruments. Under adverse market or economic conditions, the secondary market for high yield securities could contract further, independent of any specific adverse changes in the condition of a particular issuer, and these instruments may become illiquid. As a result, the Trust could find it more difficult to sell these securities or may be able to sell the securities only at prices lower than if such securities were widely traded. Prices realized upon the sale of such lower rated or unrated securities, under these circumstances, may be less than the prices used in calculating the Trust's net asset value.

Issuers of such high yield securities often are highly leveraged and may not have available to them more traditional methods of financing. Therefore, the risk associated with acquiring the securities of such issuers generally is greater than is the case with higher rated securities. For example, during an economic downturn or a sustained period of rising interest rates, highly leveraged issuers of high yield securities may experience financial stress. During such periods, such issuers may not have sufficient revenues to meet their interest payment obligations. The issuer's ability to service its debt obligations may also be adversely affected by specific corporate developments, the issuer's inability to meet specific projected business forecasts or the unavailability of additional financing. The risk of loss from default by the issuer is significantly greater for the holders of high yield securities because such securities are generally unsecured and are often subordinated to other creditors of the issuer. Prices and yields of high yield securities will fluctuate over time and, during periods of economic uncertainty, volatility of high yield securities may adversely affect the Trust's net asset value. In addition, investments in high yield zero coupon or pay-in-kind bonds, rather than income-bearing high yield securities, may be more speculative and may be subject to greater fluctuations in value due to changes in interest rates.

INTEREST RATE RISK

Interest rate risk is the risk that municipal securities (and the Trust's net assets) will decline in value because of changes in interest rates. In addition to the risks discussed above, high yield municipal securities are subject to the following interest rate risks:

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

- if interest rates go up, the value of debt securities in the Trust's portfolio generally will decline
- during periods of declining interest rates, the issuer of a security may exercise its option to prepay principal earlier than scheduled, forcing the Trust to reinvest in lower yielding securities. This is known as call or prepayment risk. High yield municipal securities frequently have call features that allow the issuer to repurchase the security prior to its stated maturity. An issuer may redeem a high yield security if the issuer can refinance the debt at a lower cost due to declining interest rates or an improvement in the credit standing of the issuer
- the Adviser's judgment about the attractiveness, relative value or potential appreciation of a particular sector, security or investment strategy may prove to be incorrect

MATURITY RISK

The Trust may invest in municipal securities of any maturity, although the Adviser anticipates that the Trust will generally invest in intermediate to long-term municipal securities. Interest rate risk will generally affect the price of a municipal security more if the security has a longer maturity. Municipal securities with longer maturities will therefore be more volatile than other fixed income securities with shorter maturities. Conversely, municipal securities with shorter maturities will be less volatile but generally provide lower returns than municipal securities with longer maturities. The average maturity of the Trust's municipal security investments may affect the volatility of the Trust's share price.

35

CALL RISK

The issuers of municipal securities held by the Trust may call, or prepay principal due on, their securities, particularly during periods of declining interest rates. The Trust may not be able to reinvest that principal at attractive rates, reducing income to the Trust. The Trust also may lose the premium paid for the securities.

CONCENTRATION RISK

The Trust may invest 25% or more of the value of its total assets in municipal securities of issuers located in the same state or territory or in the same economic sector. The Trust will not invest more than 25% of its total assets in issuers in a single industry, nor will the Trust invest more than 5% of its total assets in the securities of any single issuer. Governmental issuers of municipal securities are not considered part of any "industry," and general obligations of a state are not subject to the 5% limitation set forth above. For purpose of the 5% limitation, the Trust will treat a revenue obligation payable from revenues received by the municipal issuer from a single entity (the "underlying obligor") as being issued by the underlying obligor. The issuers of these municipal securities may be related in such a way that an economic, business or political development or change affecting one municipal security would also affect other municipal securities held by the Trust. The Trust may invest all of its assets in municipal securities the interest on which is paid solely from revenues from the same economic sector, and the Adviser anticipates that the Trust's investments in revenue obligations will emphasize municipal securities backed by revenue from essential services, such as hospitals and healthcare, power generation, transportation, education and housing. Subject to the availability of suitable investment opportunities, the Adviser will attempt to diversify the Trust's investments to seek to minimize the portfolio's

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

sensitivity to credit and other risks associated with a particular issuer, industry or sector, or to the impact of a single economic, political or regulatory occurrence. The Trust is not required to diversify its holdings in municipal securities among a fixed number of states, economic sectors, and, consequently, the Trust's portfolio may be adversely affected by developments in a single state or region. Concentration of the Trust's investments in one or a limited number of states or economic sectors will subject the Trust, to a greater extent than if such investments were not so concentrated, to the risks of adverse economic, business or political developments affecting the particular state, economic sector or other area of concentration. The Trust has no current intention to invest more than 25% of the value of its total assets in municipal securities of issuers located in a single state but may do so in the future. To the extent that the Trust invests more than 25% of its assets in municipal securities of issuers in a single state, the Trust will be exposed to a greater degree to risks associated with that specific state, including budget and fiscal issues, changes in the degree of financial support from the state to local governments, political disputes that delay appropriations or otherwise adversely affect municipal securities and the general economic activity in such state which may adversely affect tax receipts and other municipal revenue. For example, Moody's and S&P both placed their ratings of California general obligations on credit watch due to increased uncertainty regarding the timing of state budget adoption and the potential negative effect that prolonged delay in budget resolution could have on California's ability to meet its debt obligations. The Trust will not notify shareholders if 25% or more of the Trust's assets are represented by municipal issuers in a single state. However, the Trust's annual and semi-annual financial statements will disclose the percentage of the Trust's assets invested in each state. To the extent that the Trust focuses its assets in the hospital and healthcare sector, the Trust will be subject to risks associated with such sector, including adverse government regulation and reduction in reimbursement rates, as well as government approval of products and services and intense competition. Issuers in the power generation sector can be significantly affected by government regulation, financing difficulties, supply and demand of services or fuel and natural resource conservation. The transportation sector, including airports, airlines, ports and other transportation facilities, can be significantly affected by changes in the economy, fuel prices, labor relations, insurance costs and government regulation.

The Trust may invest in municipal securities that are collateralized by the proceeds from class action or other litigation against the tobacco industry. Payment by tobacco industry participants of such proceeds is spread over several years, and the collection and distribution of such proceeds to the issuers of municipal securities is

36

dependent upon the financial health of such tobacco industry participants, which cannot be assured. Additional litigation, government regulation or prohibition on the sales of tobacco products, or the seeking of protection under the bankruptcy laws, could adversely affect the tobacco industry which, in turn, could have an adverse effect on tobacco-related municipal securities. Under normal market conditions, the Trust intends to limit its investment in tobacco settlement bonds to approximately 10% of the Trust's total assets.

RISKS OF MUNICIPAL LEASES AND CERTIFICATES OF PARTICIPATION

The Trust may invest in municipal leases and certificates of participation in such leases. Municipal leases and certificates of participation involve special risks not normally associated with general obligations or revenue obligations. Leases and installment purchase or conditional sale contracts (which normally provide for title to the leased asset to pass eventually to the governmental

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

issuer) have evolved as a means for governmental issuers to acquire property and equipment without meeting the constitutional and statutory requirements for the issuance of debt. The debt issuance limitations are deemed to be inapplicable because of the inclusion in many leases or contracts of "non-appropriation" clauses that relieve the governmental issuer of any obligation to make future payments under the lease or contract unless money is appropriated for such purpose by the appropriate legislative body on a yearly or other periodic basis. In addition, such leases or contracts may be subject to the temporary abatement of payments in the event the issuer is prevented from maintaining occupancy of the leased premises or utilizing the leased equipment. Although the obligations may be secured by the leased equipment or facilities, the disposition of the property in the event of non-appropriation or foreclosure might prove difficult, time consuming and costly, and result in a delay in recovering or the failure to fully recover the Trust's original investment. In the event of non-appropriation, the issuer would be in default and taking ownership of the assets may be a remedy available to the Trust, although the Trust does not anticipate that such a remedy would normally be pursued. To the extent that the Trust invests in unrated municipal leases or participates in such leases, the credit quality rating and risk of cancellation of such unrated leases will be monitored on an ongoing basis. Certificates of participation, which merely represent an interest in municipal leases or installment contracts, involve the same risks as the underlying municipal leases. Certificates of participation also entail a risk of default or bankruptcy, both of the issuer of the municipal lease and also the municipal agency issuing the certificate of participation. Certain municipal lease obligations and certificates of participation may be deemed to be illiquid for the purpose of the Trust's limitation on investments in illiquid securities.

ILLIQUID INVESTMENTS RISK

The Trust may invest up to 20% of its total assets in illiquid securities. Illiquid securities may be difficult to dispose of at a fair price at times when the Trust believes it is desirable to do so. The market price of illiquid securities generally is more volatile than that of more liquid securities, which may adversely affect the price that the Trust pays for or recovers upon the sale of illiquid securities. Illiquid securities are also more difficult to value and the Adviser's judgment may play a greater role in the valuation process. Investment of the Trust's assets in illiquid securities may restrict the Trust's ability to take advantage of market opportunities. The risks associated with illiquid securities may be particularly acute in situations in which the Trust's operations require cash and could result in the Trust borrowing to meet its short-term needs or incurring losses on the sale of illiquid securities. The Adviser anticipates that its research efforts and investment approach will result in a significant portion of the Trust's assets being invested in thinly traded securities, including both illiquid securities and liquid securities as to which the trading market is less active than comparable issuers.

DERIVATIVES RISK

Derivatives have risks, including the imperfect correlation between the value of such instruments and the underlying assets, the possible default of the other party to the transaction or illiquidity of the derivative instruments. Furthermore, the ability to successfully use derivatives depends on the Adviser's ability to predict pertinent market movements, which cannot be assured. Thus, the use of derivatives may result in losses greater than if they had not been used, may require the Trust to sell or purchase portfolio securities at inopportune times or for prices other than current market values, may limit the amount of appreciation the Trust can realize on an

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

investment or may cause the Trust to hold a security that it might otherwise sell. Additionally, amounts paid by the Trust as premiums and cash or other assets held in margin accounts with respect to derivatives are not otherwise available to the Trust for investment purposes.

There are several risks associated with the use of futures contracts and futures options. The purchase or sale of a futures contract may result in losses in excess of the amount invested in the futures contract. While the Trust may enter into futures contracts and options on futures contracts for hedging purposes, the use of futures contracts and options on futures contracts might result in a poorer overall performance for the Trust than if it had not engaged in any such transactions. There may be an imperfect correlation between the Trust's portfolio holdings and futures contracts or options on futures contracts entered into by the Trust, which may prevent the Trust from achieving the intended hedge or expose the Trust to risk of loss. The degree of imperfection of correlation depends on circumstances such as variations in market demand for futures, options on futures and their related securities, including technical influences in futures and futures options trading, and differences between the securities markets and the securities underlying the standard contracts available for trading. Further, the Trust's use of futures contracts and options on futures contracts to reduce risk involves costs and will be subject to the Adviser's ability to predict correctly changes in interest rate relationships or other factors.

Depending on whether the Trust would be entitled to receive net payments from the counterparty on a swap or cap, which in turn would depend on the general state of short-term interest rates at that point in time, a default by a counterparty could negatively impact the performance of the common shares. In addition, at the time an interest rate swap or cap transaction reaches its scheduled termination date, there is a risk that the Trust would not be able to obtain a replacement transaction or that the terms of the replacement would not be as favorable as on the expiring transaction. If this occurs, it could have a negative impact on the performance of the common shares. If the Trust fails to maintain the required 200% asset coverage of the liquidation value of any outstanding preferred shares or if the Trust loses its expected rating on the preferred shares or fails to maintain other covenants, the Trust may be required to redeem some or all of the preferred shares. Similarly, the Trust could be required to prepay the principal amount of any borrowings. Such redemption or prepayment would likely result in the Trust seeking to terminate early all or a portion of any swap or cap transaction. Early termination of a swap could result in a termination payment by or to the Trust. Early termination of a cap could result in a termination payment to the Trust. The Trust intends to maintain, in a segregated account, cash or liquid securities having a value at least equal to the Trust's net payment obligations under any swap transaction, marked to market daily. The Trust will not enter into interest rate swap or cap transactions having a notional amount that exceeds the outstanding amount of the Trust's leverage.

The use of interest rate swaps, collars, caps and credit default swaps is a highly specialized activity that involves investment techniques and risks different from those associated with ordinary portfolio security transactions. Depending on the state of interest rates in general, the Trust's use of interest rate swaps or caps could enhance or harm the overall performance of the common shares. To the extent there is a decline in interest rates, the value of the interest rate swap or cap could decline, and could result in a decline in the net asset value of the common shares. In addition, if short-term interest rates are lower than the Trust's fixed rate of payment on the interest rate swap, the swap will reduce common share net earnings. If, on the other hand, short-term interest rates are higher than the fixed rate of payment on the interest rate swap, the swap will enhance common share net earnings. Buying interest rate caps could enhance the performance of the common shares by providing a maximum leverage expense. Buying interest rate caps could also decrease the net earnings

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

of the common shares in the event that the premium paid by the Trust to the counterparty exceeds the additional amount the Trust would have been required to pay had it not entered into the cap agreement. The Trust has no current intention of selling an interest rate swap or cap.

Interest rate swaps and caps do not involve the delivery of securities or other underlying assets or principal. Accordingly, the risk of loss with respect to interest rate swaps is limited to the net amount of interest payments that the Trust is contractually obligated to make. If the counterparty defaults, the Trust would not be able to use

38

the anticipated net receipts under the swap or cap to offset the dividend payments on the Trust's preferred shares or interest payments on borrowings. Depending on whether the Trust would be entitled to receive net payments from the counterparty on the swap or cap, which in turn would depend on the general state of short-term interest rates at that point in time, such a default could negatively impact the performance of the common shares.

DESCRIPTION OF PREFERRED SHARES

THE FOLLOWING IS A BRIEF DESCRIPTION OF THE MATERIAL TERMS OF THE PREFERRED SHARES. THIS DESCRIPTION DOES NOT PURPORT TO BE COMPLETE AND IS SUBJECT TO, AND QUALIFIED IN ITS ENTIRETY BY REFERENCE TO, THE STATEMENT, INCLUDING THE PROVISIONS THEREOF ESTABLISHING THE PREFERRED SHARES. THE STATEMENT ESTABLISHING THE TERMS OF THE PREFERRED SHARES HAS BEEN FILED AS APPENDIX B TO THE STATEMENT OF ADDITIONAL INFORMATION.

The Preferred Shares are preferred shares that entitle their holders to receive dividends when, as and if declared by the Trust's Board of Trustees, out of funds legally available therefor, at a rate per annum that may vary for successive Dividend Periods for each such series of Preferred Shares. The Applicable Rate for a particular Dividend Period for the Preferred Shares will be determined by an Auction conducted on the Business Day before the start of such Dividend Period. Beneficial Owners and Potential Beneficial Owners of Preferred Shares may participate in Auctions, although, except in the case of Special Dividend Periods of longer than 91 days, Beneficial Owners desiring to continue to hold all of their Preferred Shares regardless of the Applicable Rate resulting from Auctions need not participate in order to continue to hold their Preferred Shares. For an explanation of Auctions and the method of determining the Applicable Rate, see "--Dividends and Dividend Periods" below and "The Auction."

The nominee of the Securities Depository is expected to be the sole holder of record of the Preferred Shares. Accordingly, each purchaser of Preferred Shares must rely on (i) the procedures of the Securities Depository and, if such purchaser is not a member of the Securities Depository, such purchaser's Agent Member, to receive dividends, distributions and notices and to exercise voting rights (if and when applicable) and (ii) the records of the Securities Depository and, if such purchaser is not a member of the Securities Depository, such purchaser's Agent Member, to evidence its beneficial ownership of the Preferred Shares.

The Preferred Shares will rank on parity with each other and any other series of preferred shares of the Trust as to the payment of dividends and the distribution of assets upon liquidation. Each share of Preferred Shares carries one vote on matters on which Preferred Shares can be voted. When issued and sold, the Preferred Shares will have a liquidation preference of \$25,000 per share plus an amount equal to accumulated but unpaid dividends (whether or not declared) and will be fully paid and, except as discussed under "Certain

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

provisions of the Agreement and Declaration of Trust and Statement," non-assessable. See "--Liquidation." The Preferred Shares will not be convertible into common shares or other shares of beneficial interest of the Trust, and the holders thereof will have no preemptive rights. The Preferred Shares will not be subject to any sinking fund but will be subject to redemption at the option of the Trust on any Dividend Payment Date for the Preferred Shares (except during the Initial Dividend Period and during a Non-Call Period) of such series at a redemption price of \$25,000 per share plus accumulated and unpaid dividends. In certain circumstances, the Preferred Shares will be subject to mandatory redemption by the Trust at a redemption price of \$25,000 per share plus accumulated and unpaid dividends. See "--Redemption."

DIVIDENDS AND DIVIDEND PERIODS

The holders of Preferred Shares will be entitled to receive, when, as and if declared by the Board of Trustees, out of funds legally available therefor, cumulative cash dividends on their shares, at the Applicable Rate determined as set forth below under "--Calculation of Dividend Payment," payable on the dates set forth below. Dividends on the Preferred Shares so declared and payable will be paid in preference to and in priority over any dividends so declared and payable on the common shares. Dividends on the Preferred Shares, to the extent that they are

39

derived from municipal securities, generally will be exempt from federal income tax, although a portion of those dividends may be a tax preference item for purposes of the federal alternative minimum tax for individuals or entities subject to such tax ("Preference Item") and all of those dividends may result in or increase a corporate shareholder's liability for federal alternative minimum tax. See "Federal income tax matters." The following is a general description of dividends for the Preferred Shares.

DIVIDEND PERIODS

The Initial Dividend Payment Date for each series of Preferred Shares is set forth below. Any subsequent Dividend Period will generally be [seven (7)] days for each series of the Preferred Shares; provided, however, that prior to any Auction, the Trust may elect, subject to certain limitations described herein and upon giving notice to Existing Holders, a Special Dividend Period. See "--Designation of Special Dividend Periods."

DIVIDEND PAYMENT DATES

Dividends on the Preferred Shares will be payable, when, as and if declared by the Trust's Board of Trustees, out of legally available funds in accordance with the Agreement and Declaration of Trust, the Statement and applicable law. Initial Dividend Payment Dates are scheduled as follows:

INITIAL DIVIDEND PAYMENT DATE

Series []	[], 2003
Series []	[], 2003
Series []	[], 2003

Following the Initial Dividend Payment Date, dividends on each series of Preferred Shares will be payable (i) with respect to any seven day Dividend

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Period or any Short-Term Dividend Period of 35 or fewer days, on the Business Day next succeeding the last day thereof or (ii) with respect to any Short-Term Dividend Period of more than 35 days and with respect to any Long-Term Dividend Period, monthly on the first Business Day of each calendar month during such Short-Term Dividend Period or Long-Term Dividend Period and on the Business Day next succeeding the last day thereof. If dividends are payable on a day that is not a Business Day, then dividends will generally be payable on the next day if that is a Business Day or as otherwise specified in the Statement.

Dividends will be paid through the Securities Depository on each Dividend Payment Date. The Securities Depository, in accordance with its current procedures, is expected to distribute dividends received from the Trust in next-day funds on each Dividend Payment Date to Agent Members. These Agent Members are in turn expected to distribute such dividends to the persons for whom they are acting as agents. However, each of the current Broker-Dealers has indicated to the Trust that dividend payments will be available in same-day funds on each Dividend Payment Date to customers that use such Broker-Dealer or that Broker-Dealer's designee as Agent Member.

CALCULATION OF DIVIDEND PAYMENT

The amount of cash dividends per share of Preferred Shares of each series payable (if declared) on the Initial Dividend Payment Date, the Dividend Payment Date of each seven day Dividend Period and each Dividend Payment Date of each Short-Term Dividend Period will be computed by multiplying the Applicable Rate for such Dividend Period by a fraction, the numerator of which will be the number of days in such Dividend Period or part thereof that such share was outstanding and for which dividends are payable on such Dividend Payment Date and the denominator of which will be 365, multiplying the amount so obtained by \$25,000 and rounding the amount so obtained to the nearest cent. During any Long-Term Dividend Period, the amount of cash dividends per share of Preferred Shares payable (if declared) on any Dividend Payment Date will be computed by multiplying the Applicable Rate for such Dividend Period by a fraction, the numerator of which will be such number of days in such part of such Dividend Period that such share was outstanding and for which dividends are payable on such Dividend Payment Date and the denominator of which will be 360, multiplying the amount so obtained by \$25,000 and rounding the amount so obtained to the nearest cent.

40

Dividends on Preferred Shares will accumulate from the date of their original issue, which is [], 2003. The initial dividend rate is []% for Series [] Preferred Shares. The initial dividend rate is []% for Series [] Preferred Shares. The initial dividend rate is []% for Series [] Preferred Shares. The initial dividend rate is []% for Series [] Preferred Shares. The initial dividend rate is []% for Series [] Preferred Shares. For each Dividend Period after the Initial Dividend Period, the dividend rate will be the dividend rate for a series determined at Auction for such series, except that the dividend rate that results from an Auction will not be greater than the Maximum Applicable Rate described below.

Except during a Non-Payment Period, the Applicable Rate for any Dividend Period for Preferred Shares will not be more than the Maximum Applicable Rate applicable to such shares. The Maximum Applicable Rate for each series of Preferred Shares will depend on the credit rating assigned to such series and on the duration of the Dividend Period. The Maximum Applicable Rate will be the Applicable Percentage of the Reference Rate. The Reference Rate is (i) with respect to any seven day Dividend Period or any Short-Term Dividend Period having 182 or fewer days, the applicable "AA" Financial Composite Commercial Paper Rate, (ii) with respect to any Short-Term Dividend period having 183 or

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

more but fewer than 364 days, the applicable U.S. Treasury Bill Rate and (iii) with respect to any Long-Term Dividend Period, the applicable U.S. Treasury Note Rate. The Applicable Percentage will be determined based on the credit rating assigned on such date to the Preferred Shares by [Rating Agency 1] or [Rating Agency 2] (or, if [Rating Agency 1] or [Rating Agency 2] shall not make such rating available, the equivalent of such rating by a Substitute Rating Agency).

APPLICABLE PERCENTAGE PAYMENT TABLE

[RATING AGENCY] CREDIT RATINGS	APPLICABLE PERCENTAGE
Aa3 or higher	
A3 to A1	
Baa3 to Baa1	
Below Baa3	

Prior to each Dividend Payment Date, the Trust is required to deposit with the Auction Agent sufficient funds for the payment of declared dividends. The failure to make such deposit will not result in the cancellation of any Auction. The Trust does not intend to establish any reserves for the payment of dividends.

RESTRICTIONS ON DIVIDENDS AND OTHER DISTRIBUTIONS

While any of the Preferred Shares are outstanding, the Trust, except as provided below, may not declare, pay or set apart for payment any dividend or other distribution in respect of its Common Shares. In addition, the Trust may not call for redemption or redeem any of its common shares. However, the Trust is not confined by the above restrictions if:

- immediately after such transaction, the Discounted Value of the Trust's portfolio would be equal to or greater than the Preferred Shares Basic Maintenance Amount and the value of the Trust's portfolio would be equal to or greater than the 1940 Act Preferred Shares Asset Coverage (see "--Rating Agency Guidelines and Asset Coverage" below)
- full cumulative dividends on each series of Preferred Shares due on or prior to the date of the transaction have been declared and paid or shall have been declared and sufficient funds for the payment thereof deposited with the Auction Agent
- the Trust has redeemed the full number of Preferred Shares required to be redeemed by any provision for mandatory redemption contained in the Statement

The Trust generally will not declare, pay or set apart for payment any dividend on any class or series of shares of the Trust ranking, as to the payment of dividends, on a parity with Preferred Shares unless the Trust has declared and paid or contemporaneously declares and pays full cumulative dividends on the Preferred Shares through its

most recent dividend payment date. However, when the Trust has not paid dividends in full upon the Preferred Shares through the most recent dividend payment date or upon any other class or series of shares of the Trust ranking, as to the payment of dividends, on a parity with Preferred Shares through their most recent respective dividend payment dates, the amount of dividends declared

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

per share on Preferred Shares and such other class or series of shares will in all cases bear to each other the same ratio that accumulated dividends per share on the Preferred Shares and such other class or series of shares bear to each other.

INCLUSION OF TAXABLE INCOME IN DIVIDENDS

Where the Trust is aware that it will include any net capital gains or other taxable income in any dividend on Preferred Shares, the Trust will notify the Auction Agent of the amount to be so included prior to the Auction Date on which the Applicable Rate for the dividend is to be established. The Trust may also include such income in a dividend on shares of Preferred Shares without giving notice in advance of the Auction Date if it increases the dividend by an additional amount calculated as if such income were the subject of a Retroactive Taxable Allocation and the additional amount were a Gross-up Dividend (as described immediately below) and notifies the Auction Agent of such inclusion at least five days prior to the applicable Dividend Payment Date.

GROSS-UP DIVIDENDS

The Trust may retroactively allocate net capital gains or other Taxable Income to dividends paid on the Preferred Shares without giving the advance notice to the Auction Agent described below under "The Auction Auction Date; Advance Notice of Allocation of Taxable Income; Inclusion of Taxable Income in Dividends." If the Trust does so solely by reason of the fact that such allocation is made as a result of the redemption of all or a portion of the outstanding shares of Preferred Shares or the liquidation of the Trust (a "Retroactive Taxable Allocation"), the Trust, within 90 days (and generally within 60 days) after the end of the Trust's fiscal year for which a Retroactive Taxable Allocation is made, will provide notice thereof to the Auction Agent and to each holder of Preferred Shares (initially Cede & Co. as nominee of the Securities Depository) during such fiscal year at such holder's address as the same appears or last appeared on the share books of the Trust. Within 30 days after such notice is given to the Auction Agent, the Trust will pay to the Auction Agent (who then will distribute to such holders of the Preferred Shares), out of funds legally available therefor, an amount equal to the aggregate Gross-up Dividend (as defined below) with respect to all Retroactive Taxable Allocations made to such holders during the fiscal year in question. The Trust will not otherwise compensate the holders of the Preferred Shares for any tax liability caused by the retroactive allocation of net capital gains or other taxable income to the Preferred Shares. See "Federal income tax matters."

A "Gross-up Dividend" means a payment to a present or former holder of the Preferred Shares of an amount which, when giving effect to the Retroactive Taxable Allocation made to such holder with respect to the fiscal year in question, would cause such holder's after-tax return (taking into account both the Retroactive Taxable Allocation and the Gross-up Dividend) to be equal to the after-tax return the holder would have received if there had been no Retroactive Taxable Allocation. A Gross-up Dividend shall be calculated (i) without consideration being given to the time value of money, (ii) assuming that none of the dividends received from the Trust is a Preference Item and (iii) assuming that each Retroactive Taxable Allocation would be taxable to each holder of Preferred Shares at the maximum marginal federal income tax rate (including any surtax) applicable to the taxable character of the distribution (i.e., ordinary income or net capital gain) in the hands of an individual or a corporation, whichever is greater (disregarding the effect of any state and local taxes and the phase out of, or provision limiting, personal exemptions, itemized deductions or the benefit of lower tax brackets). The Trust generally intends to designate any Gross-up Dividend as an "exempt-interest" dividend to the extent permitted by applicable law. However, a portion or all of any Gross-up Dividend will be taxable to the recipient thereof. See "Federal income tax matters." The Trust will not pay a further Gross-up Dividend with respect to any taxable

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

portion of a Gross-up Dividend. The Trust shall not be required to pay Gross-up Dividends with respect to any net capital gain or other taxable income determined by the IRS to be allocable in a manner different from that allocated by the Trust.

42

DESIGNATION OF SPECIAL DIVIDEND PERIODS

The Trust, at its option and to the extent permitted by law, by telephonic and written notice (a "Request for Special Dividend Period") to the Auction Agent and to each Broker-Dealer, may request that the next succeeding Dividend Period for the Preferred Shares of a series will be a number of days (other than seven days) evenly divisible by seven, and not fewer than fourteen nor more than 364 in the case of a Short-Term Dividend Period or one whole year or more but not greater than five years in the case of a Long-Term Dividend Period, specified in such notice, provided that the Trust may not give a Request for Special Dividend Period (and any such request will be null and void) unless, for any Auction occurring after the initial Auction, Sufficient Clearing Bids were made in the last occurring Auction and unless full cumulative dividends and any amounts due with respect to redemptions have been paid in full and provided further that the Trust may not request a Special Dividend Period that is a Long-Term Dividend Period unless the Trust has received written confirmation from [Rating Agency 1], [Rating Agency 2] (or any Substitute Rating Agency) that the Trust's election of a proposed Long-Term Dividend Period will not impair the ratings then assigned by [Rating Agency 1], [Rating Agency 2] (or any Substitute Rating Agency) of the applicable series of Preferred Shares. Such Request for Special Dividend Period, in the case of a Short-Term Dividend Period, shall be given on or prior to the second Business Day but not more than seven Business Days prior to an Auction date for the Preferred Shares of that series and, in the case of a Long-Term Dividend Period, shall be given on or prior to the second Business Day but not more than 28 days prior to an Auction Date for the Preferred Shares of that series. Upon receiving such Request for Special Dividend Period, the Broker-Dealers jointly shall determine the Optional Redemption Price of the Preferred Shares of that series during such Special Dividend Period and the Specific Redemption Provisions and shall give the Trust and the Auction Agent written notice (a "Response") of such determination by no later than the second Business Day prior to such Auction Date. In making such determination, the Broker-Dealers will consider (i) existing short-term and long-term market rates and indices of such short-term and long-term rates, (ii) existing market supply and demand for short-term and long-term securities, (iii) existing yield curves for short-term and long-term securities comparable to the Preferred Shares, (iv) industry and financial conditions which may affect the Preferred Shares of that series, (v) the investment objectives of the Trust and (vi) the Dividend Periods and dividend rates at which current and potential beneficial holders of the Preferred Shares would remain or become beneficial holders.

After providing the Request for Special Dividend Period to the Auction Agent and each Broker-Dealer as set forth above, the Trust, by no later than the second Business Day prior to such Auction Date, may give a notice (a "Notice of Special Dividend Period") to the Auction Agent, the Securities Depository and each Broker-Dealer, which notice will specify the duration of the Special Dividend Period. The Trust has agreed to provide a copy of such Notice of Special Dividend Period to Rating Agencies. The Trust will not give a Notice of Special Dividend Period and, if such Notice of Special Dividend Period was given already, will give telephonic and written notice of its revocation (a "Notice of Revocation") to the Auction Agent, each Broker-Dealer and the Securities Depository on or prior to the Business Day prior to the relevant Auction Date if (x) either the 1940 Act Preferred Shares Asset Coverage or the Preferred Shares Basic Maintenance Amount is not satisfied on each of the two Business Days immediately preceding the Business Day prior to the relevant Auction Date or (y)

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

sufficient funds for the payment of dividends payable on the immediately succeeding Dividend Payment Date have not been irrevocably deposited with the Auction Agent by the close of business on the third Business Day preceding the Auction Date immediately preceding such Dividend Payment Date. If the Trust is prohibited from giving a Notice of Special Dividend Period as a result of the factors enumerated in clause (x) or (y) above or if the Trust gives a Notice of Revocation with respect to a Notice of Special Dividend Period, the next succeeding Dividend Period for that series will be a seven day Dividend Period. In addition, in the event Sufficient Clearing Bids are not made in an Auction, or if an Auction is not held for any reason, the next succeeding Dividend Period will be a seven day Dividend Period, and the Trust may not again give a Notice of Special Dividend Period (and any such attempted notice will be null and void) until Sufficient Clearing Bids have been made in an Auction with respect to a seven day Dividend Period.

43

NON-PAYMENT PERIOD AND LATE CHARGE

A "Failure to Deposit," with respect to shares of a series of Preferred Shares, means a failure by the Trust to pay to the Auction Agent, not later than 12:00 noon, New York City time, (A) on the Business Day next preceding any Dividend Payment Date for shares of such series, in funds available on such Dividend Payment Date in the City of New York, New York, the full amount of any dividend (whether or not earned or declared) to be paid on such Dividend Payment Date on any share of such series or (B) on the Business Day next preceding any redemption date in funds available on such redemption date for shares of such series in the City of New York, New York, the redemption price to be paid on such redemption date for any share of such series after notice of redemption is mailed; provided, however, that the foregoing clause (B) shall not apply to the Trust's failure to pay the redemption price in respect of Preferred Shares when the related notice of redemption provides that redemption of such shares is subject to one or more conditions precedent and any such condition precedent shall not have been satisfied at the time or times and in the manner specified in such notice of redemption. If a Failure to Deposit occurs with respect to a series of Preferred Shares but, prior to 12:00 noon, New York City time, on the third Business Day next succeeding the date on which such Failure to Deposit occurred, such Failure to Deposit shall have been cured, the Trust shall have paid to the Auction Agent a late charge ("Late Charge") equal to the sum of (1) if such Failure to Deposit consisted of the failure timely to pay to the Auction Agent the full amount of dividends with respect to any Dividend Period of the shares of such series, an amount computed by multiplying (x) 300% of the "AA" Financial Composite Commercial Paper Rate for the period during which such Failure to Deposit occurs on the Dividend Payment Date for such Dividend Period by (y) a fraction, the numerator of which shall be the number of days for which such Failure to Deposit has not been cured (including the day such Failure to Deposit occurs and excluding the day such Failure to Deposit is cured) and the denominator of which shall be 360, and applying the rate obtained against the aggregate liquidation preference of the outstanding shares of such series and (2) if such Failure to Deposit consisted of the failure timely to pay to the Auction Agent the redemption price of the shares, if any, of such series for which notice of redemption has been mailed by the Trust, an amount computed by multiplying (x) 300% of the "AA" Financial Composite Commercial Paper Rate for the Rate Period during which such Failure to Deposit occurs on the redemption date by (y) a fraction, the numerator of which shall be the number of days for which such Failure to Deposit is not cured (including the day such Failure to Deposit occurs and excluding the day such Failure to Deposit is cured) and the denominator of which shall be 360, and applying the rate obtained against the aggregate liquidation preference of the outstanding shares of such series to be redeemed, and no Auction will be held in respect of shares of such series for the subsequent rate period thereof and the dividend rate for shares of such

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

series for such subsequent rate period will be the Maximum Applicable Rate for shares of such series on the Auction Date for such subsequent rate period. If any Failure to Deposit shall have occurred with respect to shares of such series during any Rate Period thereof, and, prior to 12:00 noon, New York City time, on the third Business Day next succeeding the date on which such Failure to Deposit occurred, such Failure to Deposit shall not have been cured or the Trust shall not have paid the applicable Late Charge to the Auction Agent, no Auction will be held in respect of shares of such series for the first subsequent rate period thereafter (or for any Rate Period thereafter to and including the Rate Period during which (1) such Failure to Deposit is cured and (2) the Trust pays the applicable Late Charge to the Auction Agent (the condition set forth in this clause (2) to apply only in the event the Rating Agencies are rating such shares at the time the Trust cures such Failure to Deposit), in each case no later than 12:00 noon, New York City time, on the fourth Business Day prior to the end of such Rate Period) (a "Non-Payment Period") and the dividend rate for shares of such series for each such subsequent rate period shall be a rate per annum (the "Non-Payment Period Rate") equal to 300% of the applicable "AA" Financial Composite Commercial Paper Rate, provided that the Board of Trustees shall have the authority to adjust, modify, alter or change from time to time such rate if the Board of Trustees determines and the Rating Agencies (or any Substitute Rating Agency) advises the Trust in writing that such adjustment, modification, alteration or change will not adversely affect its then current ratings on the Preferred Shares.

44

RATING AGENCY GUIDELINES AND ASSET COVERAGE

The Trust is required under guidelines established by each Rating Agency to maintain assets having in the aggregate a Discounted Value at least equal to the Preferred Shares Basic Maintenance Amount. The Preferred Shares Basic Maintenance Amount is equal to ___% of the sum of (a) the aggregate liquidation preference of the Preferred Shares then outstanding, together with the aggregate liquidation preference on any other series of Preferred Shares and (b) certain accrued and projected dividend and other payment obligations of the Trust. Each Rating Agency has established guidelines for determining Discounted Value which are described in the Statement of Additional Information. The amount of discount from market value varies depending upon functions such as the type of security, the maturity of the instrument and the issuer's credit rating. The Rating Agency guidelines also impose certain diversification requirements on the Trust's portfolio and other limitations on the Trust's investments. To the extent any particular portfolio holding does not satisfy the Rating Agency guidelines, all or a portion of the holding's value will not be included in the calculation of Discounted Value (as defined by Rating Agency). The Rating Agency guidelines do not impose any limitations on the percentage of the Trust's assets that may be invested in holdings not eligible for inclusion in the calculation of the Discounted Value of the Trust's portfolio. The amount of ineligible assets included in the Trust's portfolio at any time may vary depending upon the rating, diversification and other characteristics of the eligible assets included in the portfolio.

The Trust will be required under the Statement to maintain, with respect to the Preferred Shares, as of the last Business Day of each month in which any Preferred Shares are outstanding, asset coverage of at least 200% with respect to senior securities which are shares of beneficial interest in the Trust, including the Preferred Shares (or such other asset coverage as in the future may be specified in or under the 1940 Act as the minimum asset coverage for senior securities which are shares of beneficial interest of a closed-end investment company as a condition of paying dividends on its common stock) ("1940 Act Preferred Shares Asset Coverage"). If the Trust fails to maintain the 1940 Act Preferred Shares Asset Coverage and such failure is not cured as of the

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

last Business Day of the following month (the "1940 Act Cure Date"), the Trust will be required under certain circumstances to redeem certain of the Preferred Shares. See "--Redemption" below.

The 1940 Act Preferred Shares Asset Coverage immediately following the issuance of Preferred Shares offered hereby (after giving effect to the deduction of the sales load and offering expenses for the Preferred Shares), computed using the Trust's net assets as of [], 2003, and assuming the Preferred Shares with an aggregate liquidation preference of \$[] million had been issued as of such date, will be as follows:

Value of Trust assets less liabilities not constituting senior securities	[]	=	[]%

Senior securities representing indebtedness plus liquidation value of the shares of Preferred Shares	[]		

In the event the Trust does not timely cure a failure to maintain (a) a Discounted Value of its portfolio equal to the Preferred Shares Basic Maintenance Amount or (b) the 1940 Act Preferred Shares Asset Coverage, in each case in accordance with the requirements of [Rating Agency 1], [Rating Agency 2] or a Substitute Rating Agency, the Trust will be required by the Statement to redeem shares of Preferred Shares as described under "--Redemption-- Mandatory redemption" below.

The rating agency guidelines restrict the trust's use of some types of investment strategies. For example, the guidelines, among other restrictions, limit the trust's use of futures, options and other derivative transactions and limit the percentage of the trust's assets that may be invested in any one issuer or type or class of issuer.

The Rating Agency guidelines also prohibit the Trust from taking certain types of actions unless it has received written confirmation from Rating Agency that such actions would not impair the ratings then assigned to the

Preferred Shares. These include restrictions on borrowing money, issuing any class or series of shares ranking prior to or on a parity with the Preferred Shares with respect to the payment of dividends or the distribution of assets upon dissolution, liquidation or winding up of the Trust or merging or consolidating into or with any other entity.

The restrictions in the Rating Agency guidelines may limit the Trust's ability to make investments that the Adviser believes would benefit the Trust. The descriptions of the Rating Agency guidelines in this section are summaries only and are not complete. The Rating Agency guidelines are described in greater detail in the Statement of Additional Information and are set forth in their entirety in the Statement, which have attached an Appendix B to the Statement of Additional Information.

The Trust may, but is not required to, adopt any modifications to Rating Agency guidelines that may hereafter be established by [Rating Agency 1] or [Rating Agency 2]. Failure to adopt any such modifications, however, may result in a change in the ratings assigned to the Preferred Shares or a withdrawal of ratings altogether. In addition, any rating agency providing a rating for the Preferred Shares may, at any time, change or withdraw any such rating. The Board of Trustees may, without shareholder approval, amend, alter or repeal any or all of the definitions and related provisions which have been adopted by the Trust pursuant to a Rating Agency's guidelines in the event such Rating Agency is no longer rating the Preferred Shares or the Trust receives written confirmation

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

from the Rating Agency or a Substitute Rating Agency that any such amendment, alteration or repeal would not impair the rating then assigned to the Preferred Shares.

As described by [Rating Agency], a preferred stock rating is an assessment of the capacity and willingness of an issuer to pay preferred stock obligations. The rating on the Preferred Shares is not a recommendation to purchase, hold or sell those shares, inasmuch as the rating does not comment as to market price or suitability for a particular investor. The Rating Agency guidelines described above also do not address the likelihood that an owner of Preferred Shares will be able to sell such shares in an Auction or otherwise. The rating is based on current information furnished to Rating Agency by the Trust and/or the Adviser and information obtained from other sources. The rating may be changed, suspended or withdrawn as a result of changes in, or the unavailability of, such information. The common shares have not been rated by either Rating Agency.

The Rating Agency guidelines will apply to the Preferred Shares only so long as [Rating Agency] is rating Preferred Shares. The Trust will pay certain fees to [Rating Agency 1] and [Rating Agency 2] for rating the Preferred Shares. The Trust may at some future time seek to have the Preferred Shares rated by an additional or Substitute Rating Agency.

REDEMPTION

MANDATORY REDEMPTION

The Trust is required to maintain (a) a Discounted Value of eligible portfolio securities at least equal to the Preferred Shares Basic Maintenance Amount and (b) asset coverage of at least 200% of the value of senior securities of the Trust which are equity shares, including the Preferred Shares (1940 Act Preferred Shares Asset Coverage). Eligible portfolio securities for purposes of the Preferred Shares Basic Maintenance Amount and their Discounted Value will be determined from time to time by the rating agency then rating the Preferred Shares. The guidelines currently in effect are described under "--Rating Agency Guidelines and Asset Coverage" above and in the Statement of Additional Information. If the Trust fails to maintain the 1940 Act Preferred Shares Asset Coverage and eligible portfolio securities with a Discounted Value equal to the Preferred Shares Basic Maintenance Amount and does not timely cure such failure in accordance with the requirements of the rating agency that rates the Preferred Shares, the Trust must redeem all or a portion of the Preferred Shares. This mandatory redemption will take place on a date that the Trust's Board of Trustees specifies out of legally available funds, in accordance with the Agreement and Declaration of Trust, the Statement and applicable law, at the redemption price of \$25,000 per share plus accumulated but unpaid dividends (whether or not earned or

declared) to (but not including) the date fixed for redemption. The mandatory redemption will be limited to the number of Preferred Shares necessary, after giving effect to such redemption, to cause the Discounted Value of the Trust's portfolio to equal or exceed the Preferred Shares Basic Maintenance Amount, and the value of the Trust's portfolio to equal or exceed the 1940 Act Preferred Shares Asset Coverage. In determining the number of Preferred Shares required to be redeemed in accordance with the foregoing, the Trust will allocate the number of Preferred Shares required to be redeemed to satisfy the Preferred Shares Basic Maintenance Amount or the 1940 Act Preferred Shares Asset Coverage, as the case may be, pro rata among the series of Preferred Shares and any other preferred shares of the Trust subject to redemption or retirement. The Trust shall effect such redemption on the date fixed by the Trust, which date shall not be earlier than 20 days nor later than 40 days after the applicable cure

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

date, except if the Trust does not have funds legally available therefor. If fewer than all outstanding series of Preferred Shares are, as a result, to be redeemed, the Trust may redeem such shares by lot or other method that it deems fair and equitable.

OPTIONAL REDEMPTION

To the extent permitted under the 1940 Act and Delaware law, the Trust at its option may, without the consent of the holders of Preferred Shares, redeem Preferred Shares, in whole or in part, on the Business Day after the last day of such Dividend Period upon not less than 15 calendar days' and not more than 40 calendar days' prior notice at the optional redemption price per share; provided that no Preferred Shares may be redeemed at the option of the Trust during (a) the Initial Dividend Period or (b) a Non-Call Period to which such Preferred Shares are subject. The optional redemption price per share will be \$25,000 per share, plus an amount equal to accumulated but unpaid dividends thereon (whether or not declared) to the date fixed for redemption plus any applicable redemption premium attributable to the designation of a Premium Call Period. The Trust will not make any optional redemption unless, after giving effect thereto, (i) the Trust has available certain deposit securities with maturities or tender dates not later than the day preceding the applicable redemption date and having a value not less than the amount (including any applicable premium) due to holders of the Preferred Shares of such series by reason of the redemption of the Preferred Shares on such date fixed for the redemption and (ii) the Trust has eligible assets with an aggregate Discounted Value at least equal to the Preferred Shares Basic Maintenance Amount. Notwithstanding the foregoing, Preferred Shares may not be redeemed at the option of the Trust unless all dividends in arrears on the outstanding preferred shares, including all outstanding Preferred Shares, have been or are being contemporaneously paid or set aside for payment. This would not prevent the lawful purchase or exchange offer for Preferred Shares made on the same terms to holders of all outstanding preferred shares.

LIQUIDATION

If the Trust is liquidated, the holders of any series of outstanding Preferred Shares will receive the liquidation preference on such series, plus all accumulated but unpaid dividends, before any payment is made to the holders of common shares. The holders of Preferred Shares will be entitled to receive these amounts from the assets of the Trust available for distribution to its shareholders. In addition, the rights of holders of Preferred Shares to receive these amounts are subject to the rights of holders of any series or class of shares, including other series of preferred shares, ranking on a parity with the Preferred Shares with respect to the distribution of assets upon liquidation of the Trust. After the payment to the holders of Preferred Shares of the full preferential amounts as described, the holders of Preferred Shares will have no right or claim to any of the remaining assets of the Trust.

For purpose of the foregoing paragraph, a voluntary or involuntary liquidation of the Trust does not include:

- the sale, lease or exchange of all or substantially all the property or assets of the Trust;
- the merger or consolidation of the Trust into or with any other business trust, corporation or other organization; or
- the merger or consolidation of any other business trust or corporation into or with the Trust.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

In addition, none of the foregoing would result in the Trust being required to redeem any Preferred Shares if after such transaction the Trust continued to comply with the rating agency guidelines and asset coverage ratios.

VOTING RIGHTS

Except as otherwise provided in this Prospectus or as otherwise required by law, holders of Preferred Shares will have equal voting rights with holders of common shares and any other preferred shares (one vote per share) and will vote together with holders of common shares and any preferred shares as a single class.

Holders of outstanding preferred shares, including Preferred Shares, voting as a separate class, are entitled to elect two of the Trust's Trustees. The remaining Trustees are elected by holders of common shares. In addition, if at any time dividends (whether or not earned or declared) on outstanding preferred shares, including Preferred Shares, are due and unpaid in an amount equal to two full years of dividends, and sufficient cash or specified securities have not been deposited with the Auction Agent for the payment of such dividends, then, the sole remedy of holders of outstanding preferred shares, including Preferred Shares, is that the number of Trustees constituting the Board will be automatically increased by the smallest number that, when added to the two Trustees elected exclusively by the holders of preferred shares, including Preferred Shares, as described above, would constitute a majority of the Board. The holders of preferred shares, including Preferred Shares, will be entitled to elect that smallest number of additional Trustees at a special meeting of shareholders as soon as possible and at all subsequent meetings at which Trustees are to be elected. The terms of office of the persons who are Trustees at the time of that election will continue. If the Trust thereafter shall pay, or declare and set apart for payment, in full, all dividends payable on all outstanding preferred shares, including Preferred Shares, the special voting rights stated above will cease, and the terms of office of the additional Trustees elected by the holders of preferred shares, including Preferred Shares, will automatically terminate.

As long as any Preferred Shares are outstanding, the Trust will not, without the affirmative vote or consent of the holders of at least a majority of the Preferred Shares outstanding at the time (voting together as a separate class):

(a) authorize, create or issue any class or series of shares ranking prior to or on a parity with the Preferred Shares with respect to payment of dividends or the distribution of assets on dissolution, liquidation or winding up the affairs of the Trust, or authorize, create or issue additional shares of any series of Preferred Shares or any other preferred shares, unless, in the case of preferred shares on a parity with the Preferred Shares, the Trust obtains written confirmation from [Rating Agency 1] and [Rating Agency 2] (if [Rating Agency 1] and [Rating Agency 2] is then rating the Preferred Shares) or any Substitute Rating Agency (if any such Substitute Rating Agency is then rating the Preferred Shares) that the issuance of a class or series would not impair the rating then assigned by such rating agency to the Preferred Shares and the Trust continues to comply with Section 13 of the 1940 Act, the 1940 Act Preferred Shares Asset Coverage requirements and the Preferred Shares Basic Maintenance Amount requirements, in which case the vote or consent of the holders of the Preferred Shares is not required;

(b) amend, alter or repeal the provisions of the Agreement and Declaration of Trust or the Statement, whether by merger, consolidation or otherwise, so as to adversely affect any preference, right or power of the Preferred Shares or holders of Preferred Shares; provided, however, that (i) none of the actions permitted by the exception to (a) above will be deemed to affect such preferences, rights or powers, (ii) a division of Preferred Shares will be

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

deemed to affect such preferences, rights or powers only if the terms of such division adversely affect the holders of Preferred Shares and (iii) the authorization, creation and issuance of classes or series of shares ranking junior to the Preferred Shares with respect to the payment of dividends and the distribution of assets upon dissolution, liquidation or winding up of the affairs of the Trust will be deemed to affect such preferences, rights or powers only if [Rating Agency 1] and [Rating Agency 2] is then rating the Preferred Shares and such issuance would, at the time thereof, cause the Trust not to satisfy the 1940 Act Preferred Shares Asset Coverage or the Preferred Shares Basic Maintenance Amount;

48

(c) authorize the Trust's conversion from a closed-end to an open-end investment company;

(d) amend the provisions of the Agreement and Declaration of Trust which provide for the classification of the Board of Trustees of the Trust into three classes, each with a term of office of three years with only one class of Trustees standing for election in any year; or

(e) approve any reorganization (as such term is used in the 1940 Act) adversely affecting the Preferred Shares.

So long as any shares of the Preferred Shares are outstanding, the Trust shall not, without the affirmative vote or consent of the holders of at least 66 2/3% of the Preferred Shares outstanding at the time, in person or by proxy, either in writing or at a meeting, voting as a separate class, file a voluntary application for relief under federal bankruptcy law or any similar application under state law for so long as the Trust is solvent and does not foresee becoming insolvent.

To the extent permitted under the 1940 Act, the Trust will not approve any of the actions set forth in (a) or (b) above which adversely affects the rights expressly set forth in the Agreement and Declaration of Trust or the Statement of a holder of shares of a series of preferred shares differently than those of a holder of shares of any other series of preferred shares without the affirmative vote or consent of the holders of at least a majority of the shares of each series adversely affected. Unless a higher percentage is provided for under the Agreement and Declaration of Trust or the Statement, the affirmative vote of the holders of a majority of the outstanding Preferred Shares, voting together as a single class, will be required to approve any plan of reorganization (including bankruptcy proceedings) adversely affecting such shares or any action requiring a vote of security holders under Section 13(a) of the 1940 Act.

The foregoing voting provisions will not apply with respect to Preferred Shares if, at or prior to the time when a vote is required, such shares have been (i) redeemed or (ii) called for redemption and sufficient funds have been deposited in trust to effect such redemption.

THE AUCTION

GENERAL

Holders of the Preferred Shares will be entitled to receive cumulative cash dividends on their Preferred Shares when, as and if declared by the Trust's Board of Trustees, out of the funds legally available therefor, on the Initial Dividend Payment Date with respect to the Initial Dividend Period for each series and, thereafter, on each Dividend Payment Date with respect to a Subsequent Dividend Period (generally a period of seven days, subject to certain

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

exceptions set forth under "Description of the Preferred Shares--Dividends and Dividend Periods"), at the rate per annum equal to the Applicable Rate for each such Dividend Period.

The provisions of the Statement establishing the terms of the Preferred Shares offered hereby will provide that the Applicable Rate for each Dividend Period after the Initial Dividend Period for each series will be equal to the rate per annum that the Auction Agent advises has resulted on the Business Day preceding the first day of such Dividend Period due to implementation of the Auction Procedures set forth in the Statement in which persons determine to hold or offer to purchase or sell the Preferred Shares. The Auction Procedures are attached as Appendix D to the Statement of Additional Information. Each periodic operation of such procedures with respect to the Preferred Shares is referred to herein as an "Auction." If, however, the Trust should fail to pay or duly provide for the full amount of any dividend on or the redemption price of the Preferred Shares called for redemption, the Applicable Rate for the Preferred Shares will be determined as set forth under "Description of Preferred Shares--Dividends and Dividend Periods--Non-Payment Period and Late Charge." Except as noted below and under " Dividends Gross-up Dividends," whenever the Trust is aware that it will include any net capital gain or other income subject to federal income tax in any dividend on the Preferred Shares, the Trust will

49

notify the Auction Agent of the amount to be so included at least five Business Days prior to the Auction Date on which the Applicable Rate for such dividend is to be established. Whenever the Auction Agent receives such notice from the Trust, it will in turn notify each Broker-Dealer, who, on or prior to such Auction Date, in accordance with its Broker-Dealer Agreement, will notify its customers who are Beneficial Owners and Potential Beneficial Owners believed to be interested in submitting an Order in the Auction to be held on such Auction Date. The Trust also may include such income in a dividend on the Preferred Shares without giving advance notice thereof if it increases the dividend by an additional amount calculated as if such income were a Retroactive Taxable Allocation and the additional amount were a Gross-up Dividend; provided that the Trust will notify the Auction Agent of the additional amounts to be included in such dividend at least five Business Days prior to the applicable Dividend Payment Date. See " Dividends Gross-up Dividends."

AUCTION AGENCY AGREEMENT

The Trust will enter into the Auction Agency Agreement with the Auction Agent (currently, []) which provides, among other things, that the Auction Agent will follow the Auction Procedures to determine the Applicable Rate for the Preferred Shares. The Trust will pay the Auction Agent compensation for its services under the Auction Agency Agreement.

The Auction Agent will act as agent for the Trust in connection with Auctions. In the absence of bad faith or negligence on its part, the Auction Agent will not be liable for any action taken, suffered or omitted, or for any error of judgment made, by it in the performance of its duties under the Auction Agency Agreement and will not be liable for any error of judgment made in good faith unless the Auction Agent shall have been negligent in ascertaining the pertinent facts. Pursuant to the Auction Agency Agreement, the Trust is required to indemnify the Auction Agent for certain losses and liabilities incurred by the Auction Agent without negligence or bad faith on its part in connection with the performance of its duties under such agreement.

The Auction Agent may terminate the Auction Agency Agreement upon notice to the Trust no earlier than 60 days after delivery of said notice. If the Auction Agent should resign, the Trust will use its best efforts to enter into an

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

agreement with a successor Auction Agent containing substantially the same terms and conditions as the Auction Agency Agreement. The Trust may remove the Auction Agent provided that, prior to removal, the Trust has entered into a replacement agreement with a successor Auction Agent.

BROKER-DEALER AGREEMENTS

Each Auction requires the participation of one or more Broker-Dealers. The Auction Agent will enter into agreements with several Broker-Dealers, or other entities permitted by law to perform the functions required of a Broker-Dealer in the Auction Procedures, selected by the Trust, which provide for the participation of those Broker-Dealers in Auctions for Preferred Shares. The Auction Agent will pay to each Broker-Dealer after each Auction, from funds provided by the Trust, a service charge at the annual rate: (i) for any seven day Dividend Period, 0.25% of the liquidation preference (\$25,000 per share) of the Preferred Shares held by a Broker-Dealer's customer upon settlement in an Auction and (ii) for any Special Dividend Period, as determined by mutual consent of the Trust and any such Broker-Dealer or Broker-Dealers and which shall be based upon a selling concession that would be applicable to an underwriting of fixed or variable rate preferred shares with a similar fixed maturity or variable rate dividend period, respectively, at the commencement of the Dividend Period with respect to such Auction.

The Trust may request that the Auction Agent terminate one or more Broker-Dealer agreements at any time upon five days' notice, provided that at least one Broker-Dealer agreement is in effect after termination of the agreement, provided that neither the Broker-Dealer Agreement with [] nor the Broker-Dealer Agreement with [] may be terminated without the prior written consent of the Trust, which consent may not be unreasonably withheld.

50

SECURITIES DEPOSITORY

The Depository Trust Company initially will act as the Securities Depository for the Agent Members with respect to the Preferred Shares. All of the shares of Preferred Shares initially will be registered in the name of Cede & Co., as nominee of the Securities Depository. Such Preferred Shares will be subject to the provisions restricting transfers of Preferred Shares, and Beneficial Owners will not be entitled to receive certificates representing their ownership interest in such Preferred Shares. See Appendix ___ (Auction Procedures) to the Statement of Additional Information. The Securities Depository will maintain lists of its participants and will maintain the positions (ownership interests) of the Preferred Shares held by each Agent Member, whether as the Beneficial Owner thereof for its own account or as nominee for the Beneficial Owner thereof. Payments made by the Trust to holders of Preferred Shares will be duly made by making payments to the nominee of the Securities Depository.

AUCTION PROCEDURES

The following is a brief summary of the procedures to be used in conducting Auctions. This summary is qualified by reference to the Auction Procedures set forth in Appendix ___ to the Statement of Additional Information. The Settlement Procedures to be used with respect to Auctions are set forth in Appendix ___ to the Statement of Additional Information.

ORDERS BY BENEFICIAL OWNERS, POTENTIAL BENEFICIAL OWNERS, EXISTING HOLDERS AND POTENTIAL HOLDERS

Prior to the submission deadline on each Auction Date for the Preferred Shares, each customer of a Broker-Dealer who is listed on the records of that

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Broker-Dealer (or, if applicable, the Auction Agent) as a Beneficial Owner of Preferred Shares may submit the following types of orders with respect to that Broker-Dealer:

1. Hold Order--indicating its desire to hold Preferred Shares without regard to the Applicable Rate for the next Dividend Period
2. Bid--indicating its desire to sell Preferred Shares at \$25,000 per share if the Applicable Rate for the next Dividend Period is less than the rate or spread specified in the bid
3. Sell Order--indicating its desire to sell Preferred Shares at \$25,000 per share without regard to the Applicable Rate for the next Dividend Period

A Beneficial Owner may submit different types of orders to its Broker-Dealer with respect to different shares of Preferred Shares then held by the Beneficial Owner. A Beneficial Owner that submits its bid to its Broker-Dealer having a rate higher than the Maximum Applicable Rate on the Auction Date will be treated as having submitted a Sell Order to its Broker-Dealer. A Beneficial Owner that fails to submit an order to its Broker-Dealer will ordinarily be deemed to have submitted a Hold Order to its Broker-Dealer. However, if a Beneficial Owner fails to submit an order to its Broker-Dealer for an Auction relating to a Dividend Period of more than 91 days such Beneficial Owner will be deemed to have submitted a Sell Order to its Broker-Dealer. A Sell Order constitutes an irrevocable offer to sell the Preferred Shares subject to the Sell Order. A Beneficial Owner that offers to become the Beneficial Owner of additional Preferred Shares is, for purposes of such offer, a Potential Holder as discussed below.

A Potential Holder is either a customer of a Broker-Dealer that is not a Beneficial Owner of a series of Preferred Shares but that wishes to purchase Preferred Shares or that is a Beneficial Owner that wishes to purchase additional Preferred Shares. A Potential Holder may submit Bids to its Broker-Dealer in which it offers to purchase Preferred Shares at \$25,000 per share if the Applicable Rate for Preferred Shares for the next Dividend Period is not less than the specified rate in such Bid. A Bid placed by a Potential Holder of Preferred Shares specifying a rate higher than the Maximum Applicable Rate for Preferred Shares on the Auction Date will not be accepted.

51

The Broker-Dealers in turn will submit the orders of their respective customers who are Beneficial Owners and Potential Holders to the Auction Agent. They will designate themselves (unless otherwise permitted by the Trust) as Existing Holders of Preferred Shares subject to orders submitted or deemed submitted to them by Beneficial Owners. They will designate themselves as Potential Holders of Preferred Shares subject to orders submitted to them by Potential Holders. However, neither the Trust nor the Auction Agent will be responsible for a Broker-Dealer's failure to comply with these procedures. Any order placed with the Auction Agent by a Broker-Dealer as or on behalf of an Existing Holder or a Potential Holder will be treated the same way as an order placed with a Broker-Dealer by a Beneficial Owner or Potential Holder. Similarly, any failure by a Broker-Dealer to submit to the Auction Agent an order for any Preferred Shares held by it or customers who are Beneficial Owners will be treated as a Beneficial Owner's failure to submit to its Broker-Dealer an order in respect of Preferred Shares held by it. A Broker-Dealer may also submit orders to the Auction Agent for its own account as an Existing Holder or Potential Holder, provided it is not an affiliate of the Trust.

There are Sufficient Clearing Bids in an Auction if the number of Preferred Shares subject to Bids submitted or deemed submitted to the Auction Agent by

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Broker-Dealers for Potential Holders with rates or spreads equal to or lower than the Maximum Applicable Rate is at least equal to or exceeds the sum of the number of Preferred Shares subject to Sell Orders and the number of shares subject to Bids specifying rates or spreads higher than the Maximum Applicable Rate submitted or deemed submitted to the Auction Agent by Broker-Dealers for Existing Holders. If there are Sufficient Clearing Bids, the Applicable Rate for the next succeeding Dividend Period thereof will be the lowest rate specified in the submitted Bids which, taking into account such rate and all lower rates bid by Broker-Dealers as or on behalf of Existing Holders and Potential Holders, would result in Existing Holders and Potential Holders owning the Preferred Shares available for purchase in the Auction.

If there are not Sufficient Clearing Bids, the Applicable Rate for the next Dividend Period will be the Maximum Applicable Rate on the Auction Date. However, if the Trust has declared a Special Dividend Period and there are not Sufficient Clearing Bids, the election of a Special Dividend Period will not be effective and the Applicable Rate for the next Dividend Period will be the Applicable Rate determined on the previous Auction Date same as during the Dividend Period. If there are not Sufficient Clearing Bids, Beneficial Owners of Preferred Shares that have submitted or are deemed to have submitted Sell Orders may not be able to sell in the Auction all Preferred Shares subject to such Sell Orders. If all of the applicable outstanding Preferred Shares are the subject of submitted Hold Orders (or Hold Orders deemed to have been submitted), then the Dividend Period will be a seven day Dividend Period and the Applicable Rate for the next Dividend Period will be the "AA" Financial Composite Commercial Paper Rate for a seven day Dividend Period.

The Auction Procedures include a pro rata allocation of shares for purchase and sale which may result in an Existing Holder continuing to hold or selling, or a Potential Holder purchasing, a number of Preferred Shares that is different than the number specified in its order. To the extent the allocation procedures have that result, Broker-Dealers that have designated themselves as Existing Holders or Potential Holders in respect of customer orders will be required to make appropriate pro rata allocations among their respective customers.

If an Auction Date is not a Business Day because the New York Stock Exchange is closed for business due to an act of God, natural disaster, act of war, civil or military disturbance, act of terrorism, sabotage, riots or a loss or malfunction of utilities or communications services, or the Auction Agent is not able to conduct an Auction in accordance with the Auction Procedures for any such reason, then the Applicable Rate for the next Dividend Period will be the Applicable Rate determined on the previous Auction Date.

If a Dividend Payment Date is not a Business Day because the New York Stock Exchange is closed for business due to an act of God, natural disaster, act of war, civil or military disturbance, act of terrorism, sabotage, riots or

52

a loss or malfunction of utilities or communications services, or the dividend payable on such date can not be paid for any such reason, then:

- the Dividend Payment Date for the affected Dividend Period will be the next Business Day on which the Trust and its paying agent, if any, are able to cause the dividend to be paid using their reasonable best efforts
- the affected Dividend Period will end on the day it otherwise would have ended
- the next Dividend Period will begin and end on the dates on which it otherwise would have begun and ended

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The following is a simplified example of how a typical Auction works. Assume that the Trust has 1,000 outstanding Preferred Shares and three Existing Holders. The three Existing Holders and three Potential Holders submit orders through Broker-Dealers at the Auction:

Existing Holder A	Owns 500 shares, wants to sell all 500 shares if Applicable Rate is less than 2.1%	Bid of 2.1% rate for all 500 shares
Existing Holder B	Owns 300 shares, wants to hold	Hold Order--will take the Applicable Rate
Existing Holder C	Owns 200 shares, wants to sell all 200 shares if Applicable Rate is less than 1.9%	Bid of 1.9% rate for all 200 shares
Potential Holder D	Wants to buy 200 shares	Place order to buy at or above 2.0%
Potential Holder E	Wants to buy 300 shares	Place order to buy at or above 1.9%
Potential Holder F	Wants to buy 200 shares	Place order to buy at or above 2.1%

The lowest dividend rate that will result in all 1,000 Preferred Shares continuing to be held is 2.0% (the offer by D). For the purposes of the example, the lowest dividend rate is 2.0% at which there is Sufficient Clearing Bids and, therefore, the dividend rate will be 2.0%. Existing Holders B and C will continue to own their shares. Existing Holder A will sell its shares because A's bid was higher than the Applicable Rate. Potential Holder D will buy 200 shares and Potential Holder E will buy 300 shares because their bid rates were at or below the Applicable Rate. Potential Holder F will not buy any shares because its bid rate was above the dividend rate.

ADVANCED NOTICE OF ALLOCATION OF TAXABLE INCOME; INCLUSION OF TAXABLE INCOME IN DIVIDENDS

Except as noted below and under "--Dividends and Dividend Periods--Gross-up Dividends," whenever the Trust is aware that it will include any net capital gain or other income subject to federal income tax in any dividend on the Preferred Shares, the Trust will notify the Auction Agent of the amount to be so included at least five Business Days prior to the Auction Date on which the Applicable Rate for such dividend is to be established. Whenever the Auction Agent receives such notice from the Trust, it will in turn notify each Broker-Dealer, who, on or prior to such Auction Date, in accordance with its Broker-Dealer Agreement, will notify its customers who are Beneficial Owners and Potential Beneficial Owners believed to be interested in submitting an Order in the Auction to be held on such Auction Date. The Fund also may include such income in a dividend on the Preferred Shares without giving advance notice thereof if it increases the dividend by an additional amount calculated as if such income were a Retroactive Taxable Allocation and the additional amount were a Gross-up Dividend; provided that the Trust will notify the Auction Agent of the additional amounts to be included in such dividend

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

at least five Business Days prior to the applicable Dividend Payment Date. See "--Dividends--Gross-up Dividends."

SUBMISSION OF ORDERS BY BROKER-DEALERS TO AUCTION AGENT

Prior to 1:30 p.m., New York City time, on each Auction Date, or such other time on the Auction Date as may be specified by the Auction Agent (the "Submission Deadline"), each Broker-Dealer will submit to the Auction Agent in writing or through the Auction Agent's auction processing system all Orders obtained by it for the Auction for a series of Preferred Shares to be conducted on such Auction Date, designating itself (unless otherwise permitted by the Trust) as the Existing Holder or Potential Holder in respect of the Preferred Shares subject to such Orders. Any Order submitted by a Beneficial Owner or a Potential Beneficial Owner to its Broker-Dealer, or by a Broker-Dealer to the Auction Agent, prior to the Submission Deadline for any Auction Date, shall be irrevocable.

If the rate per annum specified in any Bid contains more than three figures to the right of the decimal point, the Auction Agent will round such rate per annum up to the next highest one-thousandth (.001) of one-percent. If one or more Orders of an Existing Holder are submitted to the Auction Agent and such Orders cover in the aggregate more than the number of outstanding shares of Preferred Shares held by such Existing Holder, such Orders will be considered valid in the following order of priority:

- (i) any Hold Order will be considered valid up to and including the number of outstanding Preferred Shares held by such Existing Holder, provided that if more than one Hold Order is submitted by such Existing Holder and the number of Preferred Shares subject to such Hold Orders exceeds the number of outstanding Preferred Shares held by such Existing Holder, the number of Preferred Shares subject to each of such Hold Orders will be reduced pro rata so that such Hold Orders, in the aggregate, will cover exactly the number of outstanding Preferred Shares held by such Existing Holder;
- (ii) any Bids will be considered valid, in the ascending order of their respective rates per annum if more than one Bid is submitted by such Existing Holder, up to and including the excess of the number of outstanding Preferred Shares held by such Existing Holder over the number of outstanding Preferred Shares subject to any Hold Order referred to in clause (i) above (and if more than one Bid submitted by such Existing Holder specifies the same rate per annum and together they cover more than the remaining number of shares that can be the subject of valid Bids after application of clause (i) above and of the foregoing portion of this clause (ii) to any Bid or Bids specifying a lower rate or rates per annum, the number of shares subject to each of such Bids will be reduced pro rata so that such Bids, in the aggregate, cover exactly such remaining number of outstanding shares); and the number of outstanding shares, if any, subject to Bids not valid under this clause (ii) shall be treated as the subject of a Bid by a Potential Holder; and
- (iii) any Sell Order will be considered valid up to and including the excess of the number of outstanding Preferred Shares held by such Existing Holder over the sum of the number of Preferred Shares subject to Hold Orders referred to in clause (i) above and the number of Preferred Shares subject to valid Bids by such Existing Holder referred to in clause (ii) above; provided that, if more than one Sell Order is submitted by any Existing Holder and the number of Preferred Shares subject to such Sell Orders is greater than such excess, the number of Preferred Shares subject to each of such Sell Orders will be reduced pro rata so that such Sell Orders, in the aggregate, will cover exactly the number of Preferred Shares equal to such excess

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

If more than one Bid of any Potential Holder is submitted in any Auction, each Bid submitted in such Auction will be considered a separate Bid with the rate per annum and number of Preferred Shares therein specified.

NOTIFICATION OF RESULTS AND SETTLEMENT

The Auction Agent will advise each Broker-Dealer who submitted a Bid or Sell Order in an Auction whether such Bid or Sell Order was accepted or rejected in whole or in part and of the Applicable Rate for the next Dividend Period for the related Preferred Shares by telephone or through the Auction Agent's auction processing system at approximately 3:00 p.m., New York City time, on the Auction Date for such Auction. Each such

54

Broker-Dealer that submitted an Order for the account of a customer then will advise such customer whether such Bid or Sell Order was accepted or rejected, will confirm purchases and sales with each customer purchasing or selling Preferred Shares as a result of the Auction and will advise each customer purchasing or selling Preferred Shares to give instructions to its Agent Member of the Securities Depository to pay the purchase price against delivery of such shares or to deliver such shares against payment therefor as appropriate. If a customer selling Preferred Shares as a result of an Auction fails to instruct its Agent Member to deliver such shares, the Broker-Dealer that submitted such customer's Bid or Sell Order will instruct such Agent Member to deliver such shares against payment therefor. Each Broker-Dealer that submitted a Hold Order in an Auction on behalf of a customer also will advise such customer of the Applicable Rate for the next Dividend Period for the Preferred Shares. The Auction Agent will record each transfer of Preferred Shares on the record book of Existing Holders to be maintained by the Auction Agent.

In accordance with the Securities Depository's normal procedures, on the day after each Auction Date, the transactions described above will be executed through the Securities Depository, and the accounts of the respective Agent Members at the Securities Depository will be debited and credited as necessary to effect the purchases and sales of Preferred Shares as determined in such Auction. Purchasers will make payment through their Agent Members in same-day funds to the Securities Depository against delivery through their Agent Members; the Securities Depository will make payment in accordance with its normal procedures, which now provide for payment in same-day funds. If the procedures of the Securities Depository applicable to Preferred Shares shall be changed to provide for payment in next-day funds, then purchasers may be required to make payment in next-day funds. If the certificates for the Preferred Shares are not held by the Securities Depository or its nominee, payment will be made in same-day funds to the Auction Agent against delivery of such certificates.

If any Existing Holder selling Preferred Shares in an Auction fails to deliver such Preferred Shares, the Broker-Dealer of any person that was to have purchased Preferred Shares in such Auction may deliver to such person a number of whole Preferred Shares that is less than the number of Preferred Shares that otherwise was to be purchased by such person. In such event, the number of Preferred Shares to be so delivered will be determined by such Broker-Dealer. Delivery of such lesser number of Preferred Shares will constitute good delivery. Each Broker-Dealer Agreement also will provide that neither the Trust nor the Auction Agent will have responsibility or liability with respect to the failure of a Beneficial Owner, Potential Beneficial Owner or their respective Agent Members to deliver Preferred Shares or to pay for Preferred Shares purchased or sold pursuant to an Auction or otherwise.

BROKER-DEALERS

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The Auction Agent after each Auction will pay a service charge from funds provided by the Trust to each Broker-Dealer on the basis of the purchase price of Preferred Shares placed by such Broker-Dealer at such Auction. The service charge (i) for any seven day Dividend Period shall be payable at the annual rate of [0.25%] of the purchase price of the Preferred Shares placed by such Broker-Dealer in any such Auction and (ii) for any Special Dividend Period shall be determined by mutual consent of the Trust and any such Broker-Dealer or Broker-Dealers and shall be based upon a selling concession that would be applicable to an underwriting of fixed or variable rate preferred shares with a similar final maturity or variable rate dividend period, respectively, at the commencement of the Dividend Period with respect to such Auction. For the purposes of the preceding sentence, the Preferred Shares will be placed by a Broker-Dealer if such shares were (i) the subject of Hold Orders deemed to have been made by Beneficial Owners that were acquired by such Beneficial Owners through such Broker-Dealer or (ii) the subject of the following Orders submitted by such Broker-Dealer: (A) a submitted Bid of a Beneficial Owner that resulted in such Beneficial Owner continuing to hold such Preferred Shares as a result of the Auction, (B) a Submitted Bid of a Potential Beneficial Owner that resulted in such Potential Beneficial Owner purchasing such Preferred Shares as a result of the Auction or (C) a Submitted Hold Order.

55

The Broker-Dealer Agreements provide that a Broker-Dealer may submit Orders in Auctions for its own account, unless the Trust notifies all Broker-Dealers that they no longer may do so; provided that Broker-Dealers may continue to submit Hold Orders and Sell Orders. If a Broker-Dealer submits an Order for its own account in any Auction of Preferred Shares, it may have knowledge of Orders placed through it in that Auction and therefore have an advantage over other Bidders, but such Broker-Dealer would not have knowledge of Orders submitted by other Broker-Dealers in that Auction.

SECONDARY MARKET TRADING AND TRANSFERS OF PREFERRED SHARES

The Broker-Dealers are expected to maintain a secondary trading market in Preferred Shares outside of Auctions, but are not obligated to do so, and may discontinue such activity at any time. There can be no assurance that any secondary trading market in Preferred Shares will provide owners with liquidity of investment. The Preferred Shares will not be registered on any stock exchange or on the Nasdaq National Market.

Investors who purchase Preferred Shares in an Auction (particularly if the Trust has declared a Special Dividend Period) should note that because the dividend rate on such shares will be fixed for the length of that Dividend Period, the value of such shares may fluctuate in response to the changes in interest rates, and may be more or less than their original cost if sold on the open market in advance of the next Auction thereof, depending on market conditions.

A Beneficial Owner or an Existing Holder may sell, transfer or otherwise dispose of Preferred Shares only in whole shares and only:

- pursuant to a Bid or Sell Order placed with the Auction Agent in accordance with the Auction Procedures
- to a Broker-Dealer
- to such other persons as may be permitted by the Trust; provided, however, that a sale, transfer or other disposition of Preferred Shares from a customer of a Broker-Dealer who is listed on the records of that Broker-Dealer as the holder of such shares to that Broker-Dealer or another customer of that Broker-Dealer shall not be deemed to be a sale, transfer or other disposition if

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

such Broker-Dealer remains the Existing Holder of the shares; and in the case of all transfers other than pursuant to Auctions, the Broker-Dealer (or other person, if permitted by the Trust) to whom such transfer is made will advise the Auction Agent of such transfer

MANAGEMENT OF THE TRUST

TRUSTEES AND OFFICERS

The Trust's Board of Trustees provides broad supervision over the affairs of the Trust. The officers of the Trust are responsible for the Trust's operations. The Trustees and officers of the Trust, together with their principal occupations during the past five years, are listed in the Statement of Additional Information. Each of the Trustees also serves as a Trustee of each of the 50 U.S. registered investment portfolios for which the Adviser serves as investment adviser.

INVESTMENT ADVISER

The Trust has contracted with the Adviser to act as its investment adviser. The Adviser is an indirect subsidiary of UniCredito. The Adviser is part of the global asset management group providing investment management and financial services to mutual funds and other clients. As of June 30, 2003, assets under management by the Adviser and its affiliates were approximately \$_ billion worldwide, including over \$28 billion in assets under management by the Adviser. As of June 30, 2003, the Adviser managed approximately \$_ million in municipal securities and \$_ billion in high yield securities. Certain Trustees or officers of the Trust are also directors and/or officers of certain of UniCredito's subsidiaries, including the Adviser.

56

The Adviser provides the Trust with investment research, advice and supervision and furnishes the Trust with an investment program consistent with the Trust's investment objectives and principal investment strategies, subject to the supervision of the Trust's Board of Trustees. The Adviser determines what portfolio securities will be purchased or sold, arranges for the placing of orders for the purchase or sale of portfolio securities, selects brokers or dealers to place those orders, maintains books and records with respect to the Trust's securities transactions and reports to the Board of Trustees on the Trust's investments and performance.

ADVISORY AGREEMENT

Under the terms of the advisory agreement (the "Advisory Agreement"), the Trust will pay to the Adviser monthly, as compensation for the services rendered and expenses paid by it, a fee equal on an annual basis to 0.60% of the Trust's average daily managed assets. "Managed assets" means the total assets of the Trust (including any assets attributable to leverage that may be outstanding) minus the sum of the accrued liabilities (other than liabilities representing financial leverage). The liquidation preference on any preferred shares is not a liability. Because the fee paid to the Adviser is determined on the basis of the Trust's managed assets, the Adviser's interest in determining whether to leverage the Trust may differ from the interests of the Trust. The Trust's average daily managed assets are determined for the purpose of calculating the management fee by taking the average of all of the daily determinations of total assets during a given calendar month. The fees are payable for each calendar month as soon as practicable after the end of that month.

Under the terms of the Advisory Agreement, the Adviser pays all of the operating

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

expenses, including executive salaries and the rental of office space, relating to its services for the Trust, with the exception of the following, which are to be paid by the Trust: (a) charges and expenses for fund accounting, pricing and appraisal services and related overhead, including, to the extent such services are performed by personnel of the Adviser or its affiliates, office space and facilities and personnel compensation, training and benefits; (b) the charges and expenses of auditors; (c) the charges and expenses of any administrator, custodian, transfer agent, plan agent, dividend disbursing agent and registrar appointed by the Trust; (d) issue and transfer taxes chargeable to the Trust in connection with securities transactions to which the Trust is a party; (e) insurance premiums, interest charges, expenses in connection with any preferred shares, dues and fees for membership in trade associations and all taxes and corporate fees payable by the Trust to federal, state or other governmental agencies; (f) fees and expenses involved in registering and maintaining registrations of the Trust and/or its shares with federal regulatory agencies, state or blue sky securities agencies and foreign jurisdictions, including the preparation of prospectuses and statements of additional information for filing with such regulatory authorities; (g) all expenses of shareholders' and Trustees' meetings and of preparing, printing and distributing prospectuses, notices, proxy statements and all reports to shareholders and to governmental agencies; (h) charges and expenses of legal counsel to the Trust and the Board of Trustees; (i) compensation of those Trustees of the Trust who are not affiliated with or interested persons of the Adviser or the Trust (other than as Trustees); (j) the cost of preparing and printing share certificates; (k) interest on borrowed money, if any; (l) the fees and other expenses of listing the Trust's shares on the New York Stock Exchange or any other national stock exchange; and (m) any other expense that the Trust, the Adviser or any other agent of the Trust may incur (I) as a result of a change in the law or regulations, (II) as a result of a mandate from the Board of Trustees with associated costs of a character generally assumed by similarly structured investment companies or (III) that is similar to the expenses listed above, and that is approved by the Board of Trustees (including a majority of the Trustees who are not affiliates of the Adviser) as being an appropriate expense of the Trust. In addition, the Trust will pay all brokers' and underwriting commissions chargeable to the Trust in connection with securities transactions to which the Trust is a party.

The Adviser 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 expenses, 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 expense or taxes incurred due to the failure of the Trust

57

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. The Adviser may subsequently recover reimbursed expenses (within three years of being incurred) from the Trust if the Trust's total expenses are less than 0.80% of average daily managed assets.

The Trust has also entered into an administration agreement with Princeton Administrators, L.P., an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated (one of the underwriters of this offering), and the Adviser, pursuant to which Princeton Administrators, L.P. provides certain administrative and accounting services to the Trust and the Adviser provides certain administrative services to the Trust. The Trust pays Princeton Administrators, L.P. a monthly fee equal to the greater of \$10,000 per month or 0.07% of the Trust's average weekly managed assets. The Adviser does not receive any

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

compensation under the administration agreement. Pursuant to a separate agreement, the Trust may compensate the Adviser for providing certain legal and accounting services.

PORTFOLIO MANAGER

Day-to-day management of the Trust's portfolio is the responsibility of a team of fixed income portfolio managers led by Kenneth J. Taubes. The team, which also includes David Eurkus and Timothy Pynchon, manages other Pioneer mutual funds investing primarily in fixed income securities. Mr. Taubes is responsible for overseeing the Adviser's fixed income team. He joined the Adviser as a senior vice president in September 1998 and has been an investment professional since 1982. Prior to joining the Adviser, Mr. Taubes had served since 1991 as a senior vice president and senior portfolio manager for several institutional accounts and mutual funds at another investment adviser. Mr. Eurkus joined the Adviser 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. Mr. Pynchon is a senior credit analyst and joined the Adviser as a vice president in 2002. He has been an investment professional since 1988. Prior to joining the Adviser, Mr. Pynchon was a managing director with Commerce Capital Markets, where he was responsible for structuring high yield municipal transactions.

FEDERAL INCOME TAX MATTERS

The following is a summary discussion of the material U.S. federal income tax consequences of acquiring, holding and disposing of Preferred Shares that may be relevant to a shareholder. This discussion only addresses U.S. federal income tax consequences to U.S. shareholders who hold their shares as capital assets and does not address all of the U.S. federal income tax consequences that may be relevant to particular shareholders in light of their individual circumstances. This discussion also does not address the tax consequences to shareholders who are subject to special rules, including, without limitation, financial institutions, insurance companies, dealers in securities or foreign currencies, foreign shareholders, shareholders who hold their shares as or in a hedge against currency risk, a constructive sale, or a conversion transaction, shareholders who are subject to the alternative minimum tax, or tax-exempt or tax-deferred plans, accounts, or entities. In addition, the discussion does not address any state, local, or foreign tax consequences, and it does not address any U.S. federal tax consequences other than U.S. federal income tax consequences. The discussion reflects applicable tax laws of the United States as of the date of this Prospectus, which tax laws may be changed or subject to new interpretations by the courts or the Internal Revenue Service ("IRS") retroactively or prospectively. No attempt is made to present a detailed explanation of all U.S. federal income tax concerns affecting the Fund and its shareholders, and the discussion set forth herein does not constitute tax advice. Investors are urged to consult their own tax advisers to determine the specific tax consequences to them of investing in the Fund, including the applicable federal, state, local and foreign tax consequences to them and the effect of possible changes in tax laws.

The Trust intends to elect to be treated and to qualify each year as a "regulated investment company" under Subchapter M of the Code, so that it generally will not pay U.S. federal income tax on income and capital gains distributed to shareholders. In order to qualify as a regulated investment company, which qualification the following discussion assumes, the Trust must

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

satisfy certain tests regarding the sources of its income and the diversification of its assets. If the Trust qualifies as a regulated investment company and, for each taxable year, it distributes to its shareholders an amount equal to or exceeding the sum of (i) 90% of its "investment company taxable income" as that term is defined in the Code (which includes, among other things, dividends, taxable interest, and the excess of any net short-term capital gains over net long-term capital losses, as reduced by certain deductible expenses) and (ii) 90% of the excess of its gross tax-exempt interest over certain disallowed deductions, the Trust generally will not be subject to U.S. federal income tax on any income of the Trust, including long-term capital gains, distributed to shareholders. However, if the Trust retains any investment company taxable income or "net capital gain" (the excess of net long-term capital gain over net short-term capital loss), it generally will be subject to U.S. federal income tax at regular corporate tax rates on the amount retained. The Trust intends to distribute at least annually all or substantially all of its investment company taxable income, net tax-exempt interest, and net capital gain. If for any taxable year the Trust did not qualify as a regulated investment company, it would be treated as a corporation subject to U.S. federal income tax thereby materially adversely affecting the Trust and its shareholders.

Under the Code, the Trust will be subject to a nondeductible 4% federal excise tax on a portion of its undistributed ordinary income and capital gains if it fails to meet certain distribution requirements with respect to each calendar year. The Trust intends to make distributions in a timely manner and accordingly does not expect to be subject to the excise tax, but there can be no assurance that the Trust's distributions will be sufficient to avoid this tax entirely.

Based in part on the lack of any present intention on the part of the Trust to redeem or purchase the Preferred Shares at any time in the future, the Trust intends to take the position that under present law the Preferred Shares will constitute stock of the Trust and distributions with respect to the Preferred Shares (other than distributions in redemption of the Preferred Shares that are treated as exchanges under Section 302(b) of the Code) will constitute dividends to the extent of the Trust's current or accumulated earnings and profits as calculated for U.S. federal income tax purposes. This view relies in part on a published ruling of the IRS stating that certain preferred stock similar in many material respects to the Preferred Shares represents equity. It is possible, however, that the IRS might take a contrary position asserting, for example that the Preferred Shares constitute debt of the Trust. If this position were upheld, the discussion of the treatment of distributions below would not apply. Instead distributions by the Trust to holders of Preferred Shares would constitute interest, whether or not such distributions exceeded the earnings and profits of the Trust, would be included in full in the income of the recipient and would be taxed as ordinary income.

The Trust intends to invest a significant portion of its assets in municipal securities so that it will be permitted to pay "exempt-interest dividends" as defined under applicable federal income tax law. The Code permits tax-exempt interest received by the Trust to flow through as tax-exempt exempt-interest dividends to the Trust's shareholders, provided that the Trust qualifies as a regulated investment company and at least 50% of the value of the Trust's total assets at the close of each quarter of its taxable year consists of tax-exempt obligations, that is, obligations described in Section 103(a) of the Code. That part of the Trust's net investment income which is attributable to interest from tax-exempt obligations and which is distributed to shareholders will be designated by the Trust as an "exempt-interest dividend" under the Code. Exempt-interest dividends are excluded from a shareholder's gross income under the Code but are nevertheless required to be reported on the shareholder's U.S. federal income tax return. The percentage of income designated as tax-exempt is applied uniformly to all distributions made during each taxable year and may differ from the actual tax-exempt percentage earned by the Trust during any

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

particular month. That portion of the Trust's dividends and distributions not designated as tax-exempt will be taxable as described below.

59

Exempt-interest dividends derived from interest on certain "private activity bonds" will be items of tax preference that are subject to U.S. federal alternative minimum tax for individuals or entities that are subject to such tax, and all exempt-interest dividends may result in or increase a corporate shareholder's liability for the U.S. federal alternative minimum tax. The Trust may not be an appropriate investment for persons who are "substantial users" of facilities financed by industrial revenue or private activity bonds or persons related to substantial users.

Interest on indebtedness incurred (directly or indirectly) by a shareholder to purchase or carry shares of the Trust will not be deductible for U.S. federal income tax purposes to the extent it is deemed under the Code and applicable regulations to relate to exempt-interest dividends received from the Trust. Shareholders receiving social security or certain railroad retirement benefits may be subject to U.S. federal income tax on a portion of such benefits as a result of receiving investment income, including exempt-interest dividends and other distributions paid by the Trust.

In accordance with its investment objectives, the Trust invests its assets in a manner which will provide as large a portion of tax-exempt income as is consistent with the protection of shareholders' capital. The Trust may from time to time invest a portion of its portfolio in short-term taxable obligations and may engage in transactions generating gain or income which is not tax-exempt. For example, the Trust may purchase non-municipal securities, sell or lend portfolio securities, enter into repurchase agreements, dispose of rights to when-issued securities prior to issuance, acquire any debt obligation at a market discount, acquire certain stripped tax-exempt obligations or their coupons or enter into swaps, options and futures transactions. The Trust's distributions from such gain or income will not be "exempt-interest dividends," as described above, and accordingly will be taxable.

For U.S. federal income tax purposes, all dividends, other than exempt-interest dividends, are taxable as described below. In general, assuming that the Trust has sufficient earnings and profits, dividends from investment company taxable income are taxable as ordinary income and dividends from net capital gain, if any, that are designated as capital gain dividends are taxable as long-term capital gains for U.S. federal income tax purposes without regard to the length of time the shareholder has held shares of the Trust. Distributions by the Trust in excess of the Trust's current and accumulated earnings and profits will be treated as a return of capital to the extent of (and in reduction of) the shareholder's basis in its shares and any such amount in excess of that basis will be treated as gain from the sale of shares, as discussed below.

As described under the heading "Description of Preferred Shares" above, the Trust may be required to pay Gross-up Dividends to holders of Preferred Shares. The federal income tax consequences of Gross-up Dividends under existing law are uncertain. For example, it is unclear how Gross-up Dividends will be treated under the rules in Subchapter M of the Code applicable to dividends paid following the close of a taxable year in respect of a prior year's income. The Trust intends to treat such Gross-up Dividends as paid during such prior taxable year for purposes of the rules governing the Trust's treatment of such dividends, and to treat a holder as receiving a dividend distribution in the amount of any Gross-up Dividend only as and when such Gross-up Dividend is paid. Gross-up Dividends are intended to put holders generally in substantially the same federal income tax position they would have been in had all of the dividends paid to them consisted of exempt-interest dividends. However, Gross-up

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Dividends will not compensate for any foreign, state or local taxes on distributions paid by the Trust, including foreign, state or local taxes on the Gross-up Dividends themselves.

The Trust does not expect to receive any "qualified dividend income" as that term is defined in Section 1(h)(11) of the Code from its investments, and thus dividends distributed to individual shareholders attributable to the investment company taxable income of the Trust (if any) will not qualify for the maximum 15% tax rate on qualified dividend income. Capital gain dividends distributed by the Fund to individual shareholders, if any, generally will qualify for the maximum 15% tax rate on long-term capital gains. Absent further legislation, the maximum 15% tax rate on qualified dividend income and long-term capital gains will cease to apply to taxable

60

years beginning after December 31, 2008. The U.S. federal income tax status of all distributions will be reported to shareholders annually.

If the Trust retains any net capital gain for a taxable year, the Trust may designate the retained amount as undistributed capital gains in a notice to shareholders who, if subject to U.S. federal income tax, (i) will be required to include in income for U.S. federal income tax purposes, as long-term capital gain, their proportionate shares of such undistributed amount, and (ii) will be entitled to credit their proportionate shares of the tax paid by the Trust on the undistributed amount against their U.S. federal income tax liabilities, if any, and to claim refunds to the extent the credit exceeds such liabilities.

The IRS has taken the position that if a regulated investment company has two classes of shares, it must designate distributions made to each class in any year as consisting of no more than such class's proportionate share of particular types of income, including tax-exempt interest, net capital gain, and other income subject to federal income tax. A class's proportionate share of a particular type of income is determined according to the percentage of total dividends paid by the regulated investment company to such class. Consequently, if both common shares and preferred shares are outstanding, the Trust intends to designate distributions made to the classes of particular types of income in accordance with each such class's proportionate share of such income. The Trust will designate dividends qualifying as exempt-interest dividends, capital gain dividends and other taxable dividends in a manner that allocates such income between the holders of common shares and preferred shares in proportion to the total dividends paid to each class during the taxable year, or otherwise as required by applicable law.

Existing authorities do not specifically address whether dividends (including possible Gross-up Dividends) that are paid following the close of a taxable year, but that are treated for tax purposes as derived from the income of such prior taxable year, are treated as dividends paid during such prior taxable year for purposes of determining each class's proportionate share of a particular type of income. The Trust currently intends to treat such dividends as having been paid in the prior taxable year for purposes of determining each class's proportionate share of a particular type of income with respect to such prior taxable year. Existing authorities also do not specifically address the allocation of taxable income among the dividends paid to holders of a class of shares during or with respect to a taxable year. It is possible that the IRS could disagree with the Trust's position concerning the treatment of dividends paid after the close of a taxable year or with the Trust's method of allocation, in which case the IRS could attempt to recharacterize a portion of the dividends paid to the holders of Preferred Shares and designated by the Trust as exempt interest dividends as consisting instead of capital gains or other taxable income. If the IRS were to prevail with respect to any such attempted

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

recharacterization, holders of Preferred Shares could be subject to tax on amounts so recharacterized and the Trust could be subject to federal income and excise tax. In such event, no additional amounts (including Gross-up Dividends) would be paid by the Trust with respect to dividends so recharacterized to compensate for any additional tax owed by holders of Preferred Shares.

The Trust may invest to a significant extent in debt obligations that are in the lowest rating categories or are unrated, including debt obligations of issuers not currently paying interest or who are in default. Investments in debt obligations that are at risk of or in default present special tax issues for the Trust. Tax rules are not entirely clear about issues such as when the Trust may cease to accrue interest, original issue discount or market discount, when and to what extent deductions may be taken for bad debts or worthless securities, how payments received on obligations in default should be allocated between principal and income and whether exchanges of debt obligations in a workout context are taxable. These and other issues will be addressed by the Trust, in the event it invests in such securities, in order to seek to ensure that it distributes sufficient income to preserve its status as a regulated investment company and does not become subject to U.S. federal income or excise tax.

Sales, redemptions, and other dispositions of Preferred Shares generally are taxable events for shareholders that are subject to tax. Shareholders should consult their own tax advisers with reference to their individual circumstances to determine whether any particular transaction in the Fund's shares (including a redemption of

61

Preferred Shares) is properly treated as a sale or exchange for tax purposes, as the following discussion assumes, and the tax treatment of any gains or losses recognized in such transactions. In general, if Preferred Shares are sold, the shareholder will recognize gain or loss equal to the difference between the amount realized on the sale and the shareholder's adjusted basis in the shares sold. Such gain or loss generally will be treated as long-term gain or loss if the shares were held for more than one year and otherwise generally will be treated as short-term gain or loss. Even if a redemption of Preferred Shares is treated as a sale or exchange, any declared but unpaid dividends distributed to shareholders in connection with the redeemed shares will be taxable to shareholders as dividends as described above.

If, in connection with the selection of a Long-Term Dividend Period, (i) the Fund provides that a Premium Call Period will follow a Non-Call Period, (ii) based on all the facts and circumstances at the time of the designation of the Long-Term Dividend Period the Fund is more likely than not to redeem the Preferred Shares during the Premium Call Period, and (iii) the premium to be paid upon redemption during the Premium Call Period exceeds a reasonable penalty for early redemption, it is possible that the holders of Preferred Shares will be required to accrue such premium as a dividend (to the extent of the Fund's earnings and profits) over the term of the Non-Call Period.

Any loss recognized by a shareholder upon the sale or other disposition of shares with a tax holding period of six months or less generally will be disallowed to the extent of any exempt-interest dividends paid with respect to the shares, and any portion of such loss that exceeds the amount disallowed will be treated as a long-term capital loss to the extent of any amounts treated as distributions of long-term capital gain with respect to such shares. Losses on sales or other dispositions of shares may be disallowed under "wash sale" rules in the event a shareholder acquires other shares in the Fund (including those acquired pursuant to reinvestment of dividends and/or capital gains distributions) within a period of 61 days beginning 30 days before and ending 30 days after a sale or other disposition of shares.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The Trust's dividends and distributions will generally not qualify to any material extent for any dividends received deduction that might otherwise be available for certain dividends received by shareholders that are corporations. In addition, no portion of the Trust's distributions from net capital gain will qualify for this deduction.

The exclusion from gross income of exempt-interest dividends for U.S. federal income tax purposes does not necessarily result in exclusion under the tax laws of any state or local taxing authority, which laws vary with respect to the taxation of such income. Many states will exempt from tax that portion of an exempt-interest dividend which represents interest received by the Trust on that state's securities, subject in some cases to compliance with concentration and/or reporting requirements which the Trust makes no commitment to seek to satisfy. However, the Trust will report annually to its shareholders the percentage of interest income received by the Trust during the preceding year on federally tax-exempt obligations indicating, on a state-by-state basis only, the source of such income. Each shareholder is advised to consult his own tax adviser regarding the exclusion from gross income, if any, of exempt-interest dividends under the state and local tax laws applicable to the shareholder.

The Trust is required in certain circumstances to backup withhold on reportable payments, including dividends (other than exempt-interest dividends), capital gains distributions, and proceeds of sales or other dispositions of the Trust's shares made to certain holders of the Trust's shares who do not furnish the Trust with their correct social security number or other taxpayer identification number and certain other certifications or who are otherwise subject to backup withholding. Backup withholding is not an additional tax. Any amounts withheld from payments made to a shareholder may be refunded or credited against such shareholder's federal income tax liability, if any, provided that the required information is furnished to the IRS. Backup withholding may be inapplicable for any year in which the Trust reasonably estimates that at least 95% of its dividends paid with respect to such year are exempt-interest dividends.

The foregoing is a general and abbreviated summary of the provisions of the Code and the Treasury regulations in effect as they generally affect the taxation of the Trust and its shareholders. As noted above, these provisions

62

are subject to change by legislative, judicial or administrative action, and any such change may be retroactive. A further discussion of the U.S. federal income tax rules applicable to the Trust can be found in the Statement of Additional Information which is incorporated by reference into this Prospectus. Shareholders are urged to consult their tax advisers regarding specific questions as to U.S. federal, foreign, state, and local income or other taxes.

NET ASSET VALUE

The Trust calculates a net asset value for its common shares every day the New York Stock Exchange is open when regular trading closes (normally 4:00 p.m. Eastern time). For purposes of determining the net asset value of a common share, the value of the securities held by the Trust plus any cash or other assets (including interest accrued but not yet received) minus all liabilities (including accrued expenses and indebtedness) and the aggregate liquidation value of any outstanding preferred shares is divided by the total number of common shares outstanding at such time. Expenses, including the fees payable to the Adviser, are accrued daily. Currently, the net asset values of shares of publicly traded closed-end investment companies investing in municipal securities are published in Barron's, the Monday edition of The Wall Street Journal and the Monday and Saturday editions of The New York Times.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The Trust generally values its portfolio securities using readily available market quotations, a pricing service or a pricing matrix. When prices from these sources are not available or are considered by the Adviser to be unreliable, the Trust may use a security's fair value. Fair value is the valuation of a security determined on the basis of factors other than market value in accordance with procedures approved by the Trust's Board of Trustees. The Trust also may use the fair value of a security when the Adviser determines that market price determined using these methods no longer accurately reflects the value of the security due to factors affecting one or more relevant securities markets or the specific issuer. The use of fair value pricing by the Trust may cause the net asset value of its common shares to differ from the net asset value that would be calculated using closing market prices. Debt securities with remaining maturities of 60 days or less are valued at amortized cost, which is a method of estimating market value and is a fair value methodology approved by the Board of Trustees. The value of interest rate swaps, caps and floors is determined in accordance with a formula and then confirmed periodically by obtaining a bank quotation, which is a method, approved by the Board of Trustees, of determining such instruments' fair value. Positions in options are valued at the last sale price on the market where any such option is principally traded. Positions in futures contracts are valued at closing prices for such contracts established by the exchange on which they are traded. Repurchase agreements are valued at cost plus accrued interest. This is a method, approved by the Board of Trustees, of determining such repurchase agreement's fair value.

CERTAIN PROVISIONS OF THE AGREEMENT AND DECLARATION OF TRUST AND BY-LAWS

The Trust's Agreement and Declaration of Trust (the "Declaration of Trust") includes provisions that could have the effect of limiting the ability of other entities or persons to acquire control of the Trust or to change the composition of its Board of Trustees and could have the effect of depriving shareholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging a third party from seeking to obtain control of the Trust.

63

The Board of Trustees is divided into three classes of approximately equal size. The terms of the Trustees of the different classes are staggered so that approximately one-third of the Board of Trustees is elected by shareholders each year.

A Trustee may be removed from office with or without cause by a vote of at least a majority of the Trustees if such removal is approved by a vote of the holders of at least 75% of the shares entitled to be voted on the matter.

The Declaration of Trust requires the favorable vote of the holders of at least 75% of the Trust's shares to approve, adopt or authorize the following:

- a merger or consolidation or statutory share exchange of the Trust with any other corporations
- a sale of all or substantially all of the Trust's assets (other than in the regular course of the Trust's investment activities)
- a liquidation or dissolution of the Trust

unless such action has been approved, adopted or authorized by the affirmative vote of at least 75% of the total number of Trustees fixed in accordance with the By-Laws, in which case the affirmative vote of a majority of the Trust's shares is required. Following any issuance of preferred shares by the Trust, it

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

is anticipated that the approval, adoption or authorization of the foregoing also would require the favorable vote of a majority of the Trust's preferred shares then entitled to be voted, voting as a separate class.

Conversion of the Trust to an open-end investment company would require an amendment to the Trust's Declaration of Trust. The amendment would have to be declared advisable by the Board of Trustees prior to its submission to shareholders. Such an amendment would require the favorable vote of the holders of at least 75% of the Trust's outstanding shares (including any preferred shares) entitled to vote on the matter, voting as a single class (or a majority of such shares if the amendment was previously approved, adopted or authorized by 75% of the total number of Trustees fixed in accordance with the By-Laws), and, assuming preferred shares are issued, the affirmative vote of a majority of outstanding preferred shares, voting as a separate class. Such a vote also would satisfy a separate requirement in the 1940 Act that the change be approved by the shareholders. Shareholders of an open-end investment company may require the company to redeem their shares of common stock at any time (except in certain circumstances as authorized by or under the 1940 Act) at their net asset value, or net asset value per share less such redemption charge, if any, as might be in effect at the time of a redemption. All redemptions will be made in cash. If the Trust is converted to an open-end investment company, it could be required to liquidate portfolio securities to meet requests for redemption, and the common shares would no longer be listed on the New York Stock Exchange.

Conversion to an open-end investment company would also require changes in certain of the Trust's investment policies and restrictions, such as those relating to the leverage and the purchase of illiquid securities.

The Declaration of Trust requires the favorable vote of a majority of the Trustees followed by the favorable vote of the holders of at least 75% of the outstanding shares of each affected class or series of the Trust, voting separately as a class or series, to approve, adopt or authorize certain transactions with 5% or greater holders of a class or series of shares and their associates, unless the transaction has been approved by at least 75% of the Trustees, in which case "a majority of the outstanding voting securities" (as defined in the 1940 Act) of the Trust shall be required. For purposes of these provisions, a 5% or greater holder of a class or series of shares (a "Principal Shareholder") refers to any person who, whether directly or indirectly and whether alone or together with its affiliates and associates, beneficially owns 5% or more of the outstanding shares of any class or series of

64

shares of beneficial interest of the Trust. The 5% holder transactions subject to these special approval requirements are:

- the merger or consolidation of the Trust or any subsidiary of the Trust with or into any Principal Shareholder
- the issuance of any securities of the Trust to any Principal Shareholder for cash, other than pursuant to any automatic dividend reinvestment plan
- the sale, lease or exchange of all or any substantial part of the assets of the Trust to any Principal Shareholder, except assets having an aggregate fair market value of less than \$1,000,000, aggregating for the purpose of such computation all assets sold, leased or exchanged in any series of similar transactions within a 12-month period
- the sale, lease or exchange to the Trust or any subsidiary of the Trust, in exchange for securities of the Trust, of any assets of any Principal Shareholder, except assets having an aggregate fair market value of less

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

than \$1,000,000, aggregating for purposes of such computation all assets sold, leased or exchanged in any series of similar transactions within a 12-month period

The Declaration of Trust and By-Laws provide that the Board of Trustees has the power, to the exclusion of shareholders, to make, alter or repeal any of the By-Laws (except for any By-Law specified not to be amended or repealed by the Board), subject to the requirements of the 1940 Act. Neither this provision of the Declaration of Trust, nor any of the foregoing provisions thereof requiring the affirmative vote of 75% of outstanding shares of the Trust, can be amended or repealed except by the vote of such required number of shares.

The Trust's By-Laws generally require that advance notice be given to the Trust in the event a shareholder desires to nominate a person for election to the Board of Trustees or to transact any other business at an annual meeting of shareholders. With respect to an annual meeting following the first annual meeting of shareholders, notice of any such nomination or business must be delivered to or received at the principal executive offices of the Trust not less than 90 calendar days nor more than 120 calendar days prior to the anniversary date of the prior year's annual meeting (subject to certain exceptions). In the case of the first annual meeting of shareholders, the notice must be given no later than the tenth calendar day following public disclosure of the date of the meeting, as specified in the By-Laws. Any notice by a shareholder must be accompanied by certain information as provided in the By-Laws.

UNDERWRITING

The underwriters named below (the "Underwriters"), acting through [] and [], as lead managers, and [] as their representative (together with the lead managers, the "Representatives"), have severally agreed, subject to the terms and conditions of the Underwriting Agreement with the Trust and the Adviser, to purchase from the Trust the number of Preferred Shares set forth opposite their respective names. The Underwriters are committed to purchase and pay for all of such Preferred Shares if any are purchased.

UNDERWRITER	NUMBER OF PREFERRED SHARES

[]	[]
[]	[]
[]	[]
Total	----- [] =====

The Underwriters have advised the Trust that they propose initially to offer the Preferred Shares directly to the public at the public offering price set forth on the cover page of this Prospectus, and to certain dealers at such price less a concession not in excess of \$ per share. The Underwriters may allow, and such dealers may reallow, a concession not in excess of \$ per share to other dealers. After the initial public offering, the public offering price, concession and discount may be changed. Investors must pay for any Preferred Shares purchased in the initial public offering on or before , 2003.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The Underwriters will act in Auctions as Broker-Dealers and receive fees as set forth under "The Auction" and in the Statement of Additional Information. The Underwriters also may provide information to be used in determining the Reference Rate.

The Trust anticipates that the Representatives may from time to time act as brokers and dealers in connection with the execution of the Trust's portfolio transactions after they have ceased to be principal underwriters of the Trust under the 1940 Act and, subject to certain conditions, may act as such brokers and dealers while they are principal underwriters.

In connection with this offering, certain of the Underwriters or selected dealers may distribute prospectuses electronically.

The Trust and the Adviser have agreed to indemnify the Underwriters against certain liabilities including liabilities under the Securities Act.

As described under "Management of the Trust," _____ will provide shareholder services to the Trust pursuant to a shareholder servicing agreement with the Adviser.

VALIDITY OF PREFERRED SHARES

Certain legal matters in connection with the shares offered hereby have been passed upon for the Trust by Hale and Dorr LLP, Boston, Massachusetts. Certain matters have been passed upon for the Underwriters by [].

66

TABLE OF CONTENTS FOR THE STATEMENT OF ADDITIONAL INFORMATION

PAGE

Use of proceeds	
Investment objectives and policies	
Investment restrictions	
Management of the Trust	
Additional information concerning the auctions for the Preferred Shares	
Rating agency guidelines	
Portfolio transactions	
Repurchase of common shares	
Federal income tax matters	
Performance-related, comparative and other information	
Experts	
Additional information	
Financial statements and independent auditors' report	
Appendix A--Description of ratings	
Appendix B--Proxy voting guidelines and procedures	
Appendix C--Auction procedures	
Appendix D--Settlement procedures	

PRIVACY PRINCIPLES OF THE TRUST

The Trust is committed to maintaining the privacy of its shareholders and to safeguarding their non-public personal information. The following information is

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

provided to help you understand what personal information the Trust collects, how the Trust protects that information and why, in certain cases, the Trust may share information with select other parties.

Generally, the Trust does not receive any non-public personal information relating to its shareholders, although certain non-public personal information of its shareholders may become available to the Trust. The Trust does not disclose any non-public personal information about its shareholders or former shareholders to anyone, except as permitted by law or as is necessary in order to service shareholder accounts (for example, to a transfer agent or third-party administrator).

The Trust restricts access to non-public personal information about its shareholders to employees of the Trust's investment adviser and its affiliates with a legitimate business need for the information. The Trust maintains physical, electronic and procedural safeguards designed to protect the non-public personal information of its shareholders. For more information about the Trust's privacy policies, please visit www.pioneerfunds.com.

67

GLOSSARY

"AA Composite Commercial Paper Rate" on any Valuation Date, means (i) the Interest Equivalent of the rate on commercial paper placed on behalf of issuers whose corporate bonds are rated "AA" by S&P or "Aa" by [Rating Agency] or the equivalent of such rating by another nationally recognized statistical rating organization, as such rate is made available on a discount basis or otherwise by the Federal Reserve Bank of New York for the Business Day immediately preceding such date, or (ii) in the event that the Federal Reserve Bank of New York does not make available such a rate, then the arithmetic average of the Interest Equivalent of the rate on commercial paper placed on behalf of such issuers, as quoted on a discount basis or otherwise by _____ or its successors that are Commercial Paper Dealers, to the Auction Agent for the close of business on the Business Day immediately preceding such date. If one of the Commercial Paper Dealers does not quote a rate required to determine the "AA" Composite Commercial Paper Rate, the "AA" Composite Commercial Paper Rate will be determined on the basis of the quotation or quotations furnished by any Substitute Commercial Paper Dealer or Substitute Commercial Paper Dealers selected by the Trust to provide such rate or rates not being supplied by the Commercial Paper Dealer. If the number of Dividend Period days shall be (i) 7 or more but fewer than 49 days, such rate shall be the Interest Equivalent of the 30-day rate on such commercial paper; (ii) 49 or more but fewer than 70 days, such rate shall be the Interest Equivalent of the 60-day rate on such commercial paper; (iii) 70 or more days but fewer than 85 days, such rate shall be the arithmetic average of the Interest Equivalent of the 60-day and 90-day rates on such commercial paper; (iv) 85 or more days but fewer than 99 days, such rate shall be the Interest Equivalent of the 90-day rate on such commercial paper; (v) 99 or more days but fewer than 120 days, such rate shall be the arithmetic average of the Interest Equivalent of the 90-day and 120-day rates on such commercial paper; (vi) 120 or more days but fewer than 141 days, such rate shall be the Interest Equivalent of the 120-day rate on such commercial paper; (vii) 141 or more days but fewer than 162 days, such rate shall be the arithmetic average of the Interest Equivalent of the 120-day and 180-day rates on such commercial paper; and (viii) 162 or more days but fewer than 183 days, such rate shall be the Interest Equivalent of the 180-day rate on such commercial paper.

"Agent Member" means a member of the Securities Depository that will act on behalf of a Beneficial Owner of one or more Preferred Shares or on behalf of a Potential Beneficial Owner.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

"Applicable Rate" means the rate per annum at which cash dividends are payable on Preferred Shares for any Dividend Period.

"Auction" means a periodic operation of the Auction Procedures.

"Auction Agency Agreement" means the agreement entered into between the Trust and the Auction Agent which provides, among other things, that the Auction Agent will follow the Auction Procedures for the purpose of determining the Applicable Rate.

"Auction Agent" means [] unless and until another commercial bank, trust company or other financial institution appointed by a resolution of the Board of Trustees of the Trust or a duly authorized committee thereof enters into an agreement with the Trust to follow the Auction Procedures for the purpose of determining the Applicable Rate and to act as transfer agent, registrar, dividend disbursing agent and redemption agent for the Preferred Shares.

"Auction Date" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Auction Date; Advance Notice of Allocation of Taxable Income; Inclusion of Taxable Income in Dividends" in this Prospectus.

"Auction Procedures" means the procedures for conducting Auctions set forth in Appendix C to the Statement of Additional Information.

68

"Available Preferred Shares" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Determination of Sufficient Clearing Bids, Winning Bid Rate and Applicable Rate" in this Prospectus.

"Beneficial Owner" means a customer of a Broker-Dealer who is listed on the records of that Broker-Dealer (or if applicable, the Auction Agent) as a holder of Preferred Shares or a Broker-Dealer that holds Preferred Shares for its own account.

"Bid" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Orders by Beneficial Owners, Potential Beneficial Owners, Existing Holders and Potential Holders" in this Prospectus.

"Bidder" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Orders by Beneficial Owners, Potential Beneficial Owners, Existing Holders and Potential Holders" in this Prospectus.

"Broker-Dealer" has the meaning specified under "Description of Preferred Shares--The Auction--Broker-Dealer Agreements" in this Prospectus.

"Broker-Dealer Agreement" has the meaning specified under "Description of Preferred Shares--The Auction--Broker-Dealer Agreements" in this Prospectus.

"Business Day" means a day on which the New York Stock Exchange is open for trading and which is not a Saturday, Sunday or other day on which banks in New York City are authorized or obligated by law to close.

"Commercial Paper Dealers" means _____ and such other commercial paper dealer or dealers as the Trust from time to time may appoint or, in lieu thereof, their respective affiliates and successors.

"Cure Date" has the meaning specified under "Description of Preferred Shares--Redemption--Mandatory Redemption" in this Prospectus.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

"Date of Original Issue" means, with respect to any share of Preferred Shares, the date on which such share first is issued by the Trust.

"Deposit Securities" means cash and Municipal Obligations rated at least A2 (having a remaining maturity of 12 months or less), P-1, VMIG-1 or MIG-1 by [Rating Agency] or A (having a remaining maturity of 12 months or less), A-1+ or SP-1+ by S&P.

"Dividend Payment Date" has the meaning specified under "Description of Preferred Shares--Dividends--General" in this Prospectus.

"Dividend Period" has the meaning specified under "Description of Preferred Shares--Dividends--General" in this Prospectus.

"Existing Holder" means a Broker-Dealer or any such other person as may be permitted by the Trust that is listed as the holder of record of Preferred Shares in the records of the Auction Agent.

"Trust" means Pioneer Municipal High Income Trust, a Delaware statutory trust that is the issuer of the Preferred Shares.

"Gross-up Dividend" has the meaning specified under "Description of Preferred Shares--Dividends--Gross-up Dividends" in this Prospectus.

"Hold Order" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Orders By Beneficial Owners, Potential Beneficial Owners, Existing Holders and Potential Holders" in this Prospectus.

69

"Initial Dividend Payment Date" means, with respect to a series of Preferred Shares, the Initial Dividend Payment Date as determined by the Board of Trustees or pursuant to their delegated authority with respect to such series.

"Initial Dividend Period" means, for each series of Preferred Shares, the period from and including the Date of Original Issue but excluding the Initial Dividend Payment Date.

"Interest Equivalent" means a yield on a 360-day basis of a discount basis security which is equal to the yield on an equivalent interest-bearing security.

"Long-Term Dividend Period" has the meaning specified under "Prospectus summary--Dividends on Preferred Shares" in this Prospectus.

"Mandatory Redemption Price" has the meaning specified under "Description of Preferred Shares -- Redemption--Mandatory Redemption" in this Prospectus.

"Marginal Tax Rate" means the maximum marginal federal individual income tax rate applicable to an individual's or a corporation's ordinary income, whichever is greater.

"Maximum Applicable Rate" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Orders by Beneficial Owners, Potential Beneficial Owners, Existing Holders and Potential Holders" in this Prospectus.

"[Rating Agency]" means [Rating Agency] or its successors.

"1940 Act" means the Investment Company Act of 1940, and the regulations thereunder, each as amended from time to time.

"1940 Act Preferred Shares Asset Coverage" has the meaning specified under

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

"Rating agency guidelines" in this Prospectus.

"1940 Act Cure Date" has the meaning specified under "Description of Preferred Shares--Asset Maintenance--1940 Act Preferred Shares Asset Coverage" in this Prospectus.

"Non-Call Period" has the meaning set forth in the definition of "Specific Redemption Provisions" below.

"Non-Payment Period" has the meaning specified under "Description of Preferred Shares--Dividends--Non-Payment Period; Late Charge" in this Prospectus.

"Non-Payment Period Rate" has the meaning specified under "Description of Preferred Shares--Dividends--Non-Payment Period; Late Charge" in this Prospectus.

"Normal Dividend Payment Date" has the meaning specified under "Description of Preferred Shares--Dividends--General" in this Prospectus.

"Notice of Revocation" has the meaning specified under "Description of Preferred Shares--Dividends--Notification of Dividend Period" in this Prospectus.

"Notice of Special Dividend Period" has the meaning, specified under "Description of Preferred Shares--Dividends--Notification of Dividend Period" in this Prospectus.

"Optional Redemption Price" has the meaning specified under "Description of Preferred Shares--Redemption--Optional Redemption" in this Prospectus.

"Order" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Orders by Beneficial Owners, Potential Beneficial Owners, Existing Holders and Potential Holders" in this Prospectus.

70

"Other Securities" has the meaning set forth in the definition of "[Rating Agency] Eligible Asset" above.

"Potential Beneficial Owner" means a customer of a Broker-Dealer or a Broker-Dealer that is not a Beneficial Owner of Preferred Shares but that wishes to purchase such shares, or that is a Beneficial Owner that wishes to purchase additional Preferred Shares.

"Potential Holder" means any Broker-Dealer or any such other person as may be permitted by the Trust, including any Existing Holder, who may be interested in acquiring Preferred Shares (or, in the case of an Existing Holder, additional Preferred Shares). "Preference Item" has the meaning specified under "Description of Preferred Shares--Dividends--General" in this Prospectus.

"Preferred Shares" means the Preferred Shares with par value \$0.00001 per share and a liquidation preference of \$25,000 per share plus an amount equal to accumulated but unpaid dividends thereon (whether or not earned or declared) of the Trust.

"Preferred Shares Basic Maintenance Amount" has the meaning specified under "Description of Preferred Shares--Asset Maintenance--Preferred Shares Basic Maintenance Amount" in this Prospectus.

"Premium Call Period" has the meaning set forth in the definition of "Specific Redemption Provisions" below.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

"Rating Agency" means a nationally recognized statistical rating organization.

"Reference Rate" means: (i) with respect to any 7-Day Dividend Period or any Short-Term Dividend Period having 28 or fewer days, the higher of the applicable "AA" Composite Commercial Paper Rate and the Taxable Equivalent of the Short-Term Municipal Obligation Rate, (ii) with respect to any Short-Term Dividend Period having more than 28 but fewer than 183 days, the applicable "AA" Composite Commercial Paper Rate, (iii) with respect to any Short-Term Dividend Period having 183 or more but fewer than 364 days, the applicable U.S. Treasury Bill Rate and (iv) with respect to any Long-Term Dividend Period, the applicable U.S. Treasury Note Rate.

"Request for Special Dividend Period" has the meaning specified under "Description of Preferred Shares--Dividends--Notification of Dividend Period" in this Prospectus.

"Response" has the meaning specified under "Description of Preferred Shares--Dividends--Notification of Dividend Period" in this Prospectus.

"Retroactive Taxable Allocation" has the meaning specified under "Description of Preferred Shares--Dividends--Gross-up Dividends" in this Prospectus.

"Securities Depository" means The Depository Trust Company and its successors and assigns or any successor securities depository selected by the Trust that agrees to follow the procedures required to be followed by such securities depository in connection with the Preferred Shares.

"Sell Order" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Orders by Beneficial Owners, Potential Beneficial Owners, Existing Holders and Potential Holders" in this Prospectus.

"7-Day Dividend Period" has the meaning specified under "Prospectus summary--Dividends on Preferred Shares" in this Prospectus.

"Short-Term Dividend Period" has the meaning specified under "Prospectus summary--Dividends on Preferred Shares" in this Prospectus.

"Special Dividend Period" has the meaning specified under "Prospectus summary--Dividends on Preferred Shares" in this Prospectus.

71

"Specific Redemption Provisions" means, with respect to a Special Dividend Period, either, or both of, (i) a period (a "Non-Call Period") determined by the Board of Trustees of the Trust, after consultation with the Auction Agent and the Broker-Dealers, during which the Preferred Shares subject to such Dividend Period shall not be subject to redemption at the option of the Trust and (ii) a period (a "Premium Call Period"), consisting of a number of whole years and determined by the Board of Trustees of the Trust, after consultation with the Auction Agent and the Broker-Dealers, during each year of which the Preferred Shares subject to such Dividend Period shall be redeemable at the Trust's option at a price per share equal to \$25,000 plus accumulated but unpaid dividends plus a premium expressed as a percentage of \$25,000, as determined by the Board of Trustees of the Trust after consultation with the Auction Agent and the Broker-Dealers.

"Submission Deadline" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Submission of Orders by Broker-Dealers to Auction Agent" in this Prospectus.

"Submitted Bid" has the meaning specified under "Description of Preferred

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Shares--Auction Procedures--Determination of Sufficient Clearing Bids, Winning Bid Rate and Applicable Rate" in this Prospectus.

"Submitted Hold Order" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Determination of Sufficient Clearing Bids, Winning Bid Rate and Applicable Rate" in this Prospectus.

"Submitted Order" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Determination of Sufficient Clearing Bids, Winning Bid Rate and Applicable Rate" in this Prospectus.

"Submitted Sell Order" has the meaning specified under "Description of Preferred Shares--Auction Procedures--Determination of Sufficient Clearing Bids, Winning Bid Rate and Applicable Rate" in this Prospectus.

"Subsequent Dividend Period" means each Dividend Period after the Initial Dividend Period.

"Substitute Rating Agency" shall mean a nationally recognized statistical rating organization by the Trust to act as a substitute rating agency to determine the credit ratings of the Preferred Shares.

"Sufficient Clearing Bids" has the meaning specified in Subsection 11.4(i) of the Auction Procedures.

"Taxable Equivalent of the Short-Term Municipal Obligations Rate" on any date means 90% of the quotient of (A) the per annum rate expressed on an interest equivalent basis equal to the Kenny S&P 30 day High Grade Index or any successor index (the "Kenny Index") made available for the Business Day immediately preceding such date but in any event not later than 8:30 a.m., New York City time, on such date by Kenny Information Systems Inc. or any successor thereto, based upon 30-day yield evaluations at par of short term bonds the interest on which is excludable for federal income tax purposes under the Code of "high grade" component issuers selected by Kenny Information Systems Inc. or any such successor from time to time in its discretion, which component issuers shall include, without limitation, issuers of general obligation bonds but shall exclude any bonds the interest on which constitutes a Preference Item, divided by (B) 1.00 minus the Marginal Tax Rate (expressed as a decimal); provided, however, that if the Kenny Index is not made so available by 8:30 a.m., New York City time, on such date by Kenny Information Systems Inc. or any successor, the Taxable Equivalent of the Short-Term Municipal Obligations Rate shall mean the quotient of (A) the per annum rate expressed on an interest equivalent basis equal to the most recent Kenny Index so made available for any preceding Business Day, divided by (B) 1.00 minus the Marginal Tax Rate noted above (expressed as a decimal). The Trust may not utilize a successor index to the Kenny Index unless [Rating Agency] provides the Trust with written confirmation that the use of such successor index will not adversely affect the then-current [Rating Agency] rating of the Preferred Shares.

"Taxable Income" has the meaning specified under "Prospectus summary--Advance Notice of Allocation of Taxable Income; Inclusion of Taxable Income in Dividends" in this Prospectus.

"Treasury Bonds" means United States Treasury Bonds or Notes. "Underwriters" has the meaning specified under "Prospectus summary--The Offering" in this Prospectus.

"U.S. Treasury Bill Rate" on any date means (i) the Interest Equivalent of the rate on the actively traded Treasury Bill with a maturity most nearly comparable

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

to the length of the related Dividend Period, as such rate is made available on a discount basis or otherwise by the Federal Reserve Bank of New York in its Composite 3:30 p.m. Quotations for U.S. Government Securities report for such Business Day, or (ii) if such yield as so calculated is not available, the Alternate Treasury Bill Rate on such date. "Alternate Treasury Bill Rate" on any date means the Interest Equivalent of the yield as calculated by reference to the arithmetic average of the bid price quotations of the actively traded Treasury Bill with a maturity most nearly comparable to the length of the related Dividend Period, as determined by bid price quotations as of any time on the Business Day immediately preceding such date, obtained from at least three recognized primary U.S. Government securities dealers selected by the Auction Agent.

"U.S. Treasury Note Rate" on any date means (i) the yield as calculated by reference to the bid price quotation of the actively traded, current coupon Treasury Note with a maturity most nearly comparable to the length of the related Dividend Period, as such bid price quotation is published on the Business Day immediately preceding such date by the Federal Reserve Bank of New York in its Composite 3:30 p.m. Quotations for U.S. Government Securities report for such Business Day, or (ii) if such yield as so calculated is not available, the Alternate Treasury Note Rate on such date. "Alternate Treasury Note Rate" on any date means the yield as calculated by reference to the arithmetic average of the bid price quotations of the actively traded, current coupon Treasury Note with a maturity most nearly comparable to the length of the related Dividend Period, as determined by the bid price quotations as of any time on the Business Day immediately preceding such date, obtained from at least three recognized primary U.S. Government securities dealers selected by the Auction Agent.

73

[This page intentionally left blank]

[PIONEER INVESTMENTS (R) LOGO]

THE INFORMATION IN THIS STATEMENT OF ADDITIONAL INFORMATION IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS STATEMENT OF ADDITIONAL INFORMATION IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED AUGUST __, 2003

PIONEER MUNICIPAL HIGH INCOME TRUST

STATEMENT OF ADDITIONAL INFORMATION

Pioneer Municipal High Income Trust (the "trust") is a recently organized, diversified, closed-end management investment company. This statement of additional information relating to preferred shares does not constitute a prospectus, but should be read in conjunction with the prospectus relating

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

thereto dated _____, 2003. This statement of additional information does not include all information that a prospective investor should consider before purchasing the trust's Series ___ auction preferred shares, Series ___ auction preferred shares, Series ___ auction preferred shares, Series ___ auction preferred shares or Series ___ auction preferred shares (collectively, the "Preferred Shares" or "APS"), and investors should obtain and read the prospectus prior to purchasing such shares. A copy of the prospectus may be obtained without charge by calling 1-800-225-6292. You may also obtain a copy of the prospectus on the Securities and Exchange Commission's web site (<http://www.sec.gov>).

TABLE OF CONTENTS

Use of Proceeds.....	
Investment Objectives and Policies.....	
Investment Restrictions.....	
Management of the Trust.....	
Additional Information Concerning the Auctions for the Preferred Shares.....	
Rating Agency Guidelines.....	
Portfolio Transactions.....	
Federal Income Tax Matters.....	
Performance-Related, Comparative and Other Information.....	
Experts.....	
Additional Information.....	
Financial Statements and Independent Auditors' Report.....	
Appendix A--Description of Ratings.....	A-1
Appendix B--Proxy Voting Guidelines and Procedures.....	B-1
Appendix C--Auction Procedures.....	C-1
Appendix D--Settlement Procedures.....	D-1

This statement of additional information is dated _____, 2003.

INVESTMENT OBJECTIVES AND POLICIES

The prospectus presents the investment objectives and the principal investment strategies and risks of the trust. This section supplements the disclosure in the trust's prospectus and provides additional information on the trust's investment policies or restrictions. Restrictions or policies stated as a maximum percentage of the trust's assets are only applied immediately after a portfolio investment to which the policy or restriction is applicable (other than the limitations on borrowing). Accordingly, any later increase or decrease resulting from a change in values, net assets or other circumstances will not be considered in determining whether the investment complies with the trust's restrictions and policies.

PRIMARY INVESTMENTS

Under normal circumstances, the trust invests substantially all (at least 80%) of its assets (net assets plus borrowing for investment purposes) in debt securities and other obligations issued by or on behalf of states, territories and possessions of the United States and the District of Columbia and their political subdivisions, agencies and instrumentalities, the interest on which is exempt from regular federal income tax ("municipal securities"). This policy is fundamental and may not be changed without shareholder approval.

MUNICIPAL OBLIGATIONS

MUNICIPAL NOTES. Municipal securities in the form of notes generally are used to provide for short-term capital needs, in anticipation of an issuer's receipt of other revenues or financing, and typically have maturities of up to three years. Such instruments may include tax anticipation notes, revenue anticipation notes,

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

bond anticipation notes, tax and revenue anticipation notes, construction loan notes, bank notes and commercial paper.

o Tax Anticipation Notes ("TANs") are issued to finance the working capital needs of governments. Generally, they are issued in anticipation of various tax revenues, such as income, sales, property, use and business taxes, and are payable from these specific future taxes. A weakness in an issuer's capacity to raise taxes due to, among other things, a decline in its tax base or a rise in delinquencies, could adversely affect the issuer's ability to meet its obligations on outstanding TANs.

o Revenue Anticipation Notes ("RANs") are issued in expectation of receipt of other kinds of revenue, such as federal revenues available under federal revenue sharing programs. In general, they also constitute general obligations of the issuer. A decline in the receipt of projected revenues, such as anticipated revenues from another level of government, could adversely affect an issuer's ability to meet its obligations on outstanding RANs. In addition, the possibility that the revenues would, when received, be used to meet other obligations could affect the ability of the issuer to pay the principal and interest on RANs.

o Bond Anticipation Notes ("BANs") are issued to provide interim financing until long-term bond financing can be arranged. In most cases, the long-term bonds then provide the funds needed for repayment of the notes. The ability of an issuer to meet its obligations on its BANs is primarily dependent on the issuer's access to the long-term municipal bond market and the likelihood that the proceeds of such bond sales will be used to pay the principal and interest on the BANs.

o Tax and Revenue Anticipation Notes combine the funding sources of both tax anticipation notes and revenue anticipation notes.

o Construction Loan Notes are sold to provide construction financing. Mortgage notes insured by the Federal Housing Authority secure these notes; however, the proceeds from the insurance may be less than the economic equivalent of the payment of principal and interest on the mortgage note if there has been a default.

o Bank Notes are notes issued by local government bodies and agencies, such as those described above to commercial banks as evidence of borrowings. The purposes for which the notes are issued are varied but they are frequently issued to meet short-term working capital or capital project needs. These notes have risks similar to the risks associated with TANs and RANs.

o Tax-Exempt Commercial Paper typically represent short-term, unsecured, negotiable promissory notes. These obligations are issued by state and local governments and their agencies to finance working capital needs of municipalities or to provide interim construction financing and are paid from general revenues of municipalities or are refinanced with long-term debt. In most cases, tax-exempt commercial paper is backed by letters of credit, lending agreements, note repurchase agreements or other credit facility agreements offered by banks or other institutions. Payment of principal and interest on issues of tax-exempt commercial paper may be made from various sources, to the extent the funds are available therefrom. Maturities of tax-exempt commercial paper generally will be shorter than the maturities of TANs, BANs or RANs. There is a limited secondary market for issues of tax-exempt commercial paper.

Certain municipal bonds carry variable or floating rates of interest whereby the rate of interest is not fixed but varies with changes in specified market rates or indices, such as a bank prime rate or a tax-exempt market index. While the various types of notes described above as a group currently represent the major portion of the tax-exempt note market, other types of notes are or may become

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

available in the marketplace and the trust may invest in such other types of notes to the extent permitted under its investment objectives, policies and limitations. Such notes may be issued for different purposes and may be secured differently from those mentioned above.

AUCTION RATE SECURITIES. The trust may invest in auction rate securities. Auction rate securities include auction rate municipal securities and auction rate preferred securities issued by closed-end investment companies that invest primarily in municipal securities (collectively, "auction rate securities"). Provided that the auction mechanism is successful, auction rate securities usually permit the holder to sell the securities in an auction at par value at specified intervals. The dividend is reset by "Dutch" auction in which bids are made by broker-dealers and other institutions for a certain amount of securities at a specified minimum yield. The dividend rate set by the auction is the lowest interest or dividend rate that covers all securities offered for sale. While this process is designed to permit auction rate securities to be traded at par value, there is some risk that an auction will fail due to insufficient demand for the securities. The trust will take the time remaining until the next scheduled auction date into account for purpose of determining the securities' duration. The trust's investments in auction rate securities of closed-end funds are subject to the limitations prescribed by the Investment Company Act of 1940, as amended (the "1940 Act").

Certain issuers of structured products, such as hybrid instruments, may be deemed to be investment companies as defined in the 1940 Act. As a result, the trust's investments in these products may be subject to limits applicable to investments in investment companies and may be subject to restrictions contained in the 1940 Act.

MUNICIPAL BONDS WITH CREDIT ENHANCEMENTS. The trust may invest in municipal bonds with credit enhancements such as letters of credit, municipal bond insurance and Standby Bond Purchase Agreements ("SBPAs"). Letters of credit are issued by a third party, usually a bank, to enhance liquidity and ensure repayment of principal and any accrued interest if the underlying municipal bond should default. Municipal bond insurance, which is usually purchased by the bond issuer from a private, non-governmental insurance company, provides an unconditional and irrevocable guarantee that the insured bond's principal and interest will be paid when due. The insurance only entitles the trust to receive the face or par value of the securities held by the trust. The insurance does not guarantee the market value of the municipal securities or the value of the shares of the trust. The trust may utilize new issue or secondary market insurance. A bond issuer who wishes to increase the credit rating of a security purchases a new issue insurance policy. By paying a premium and meeting the insurer's underwriting standards, the bond issuer is able to obtain a high credit rating (usually, Aaa from Moody's or AAA from Standard & Poor's) for the issued security. Such insurance is likely to increase the purchase price and resale value of the security. New issue insurance policies are non-cancelable and continue in force as long as the bonds are outstanding. A secondary market insurance policy is purchased by an investor subsequent to a bond's original issuance and generally insures a particular bond for the remainder of its term. An SBPA is a liquidity facility provided to pay the purchase price of bonds that cannot be re-marketed. The obligation of the liquidity provider (usually a bank) is only to advance funds to purchase tendered bonds that cannot be re-marketed and does not cover principal or interest under any other circumstances. The liquidity provider's obligations under the SBPA are usually subject to numerous conditions, including the continued creditworthiness of the underlying borrower.

ZERO-COUPON BONDS AND STEP-UPS. Zero-coupon securities are debt obligations that do not entitle the holder to any periodic payments of interest either for the entire life of the obligation or for an initial period after the issuance of the obligations. Like zero-coupon bonds, "step-up" bonds pay no interest initially but eventually begin to pay a coupon rate prior to maturity, which rate may

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

increase at stated intervals during the life of the security. Each of these instruments is typically issued and traded at a deep discount from its face amount. The amount of the discount varies depending on such factors as the time remaining until maturity of the securities, prevailing interest rates, the liquidity of the security and the perceived credit quality of the issuer. The market prices of zero-coupon bonds and step-ups generally are more volatile than the market prices of debt instruments that pay interest currently and in cash and are likely to respond to changes in interest rates to a greater degree than do other types of securities having similar maturities and credit quality. In order to satisfy a requirement for qualification as a "regulated investment company" under the Internal Revenue Code of 1986, as amended (the "Code"), an investment company, such as the trust, must distribute each year at least 90% of its net investment income, including the original issue discount accrued on zero-coupon bonds and step-ups. Because the trust will not on a current basis receive cash payments from the issuer of these securities in respect of any accrued original issue discount, in some years the trust may have to distribute cash obtained from selling other portfolio holdings of the trust. In some circumstances, such sales might be necessary in order to satisfy cash distribution requirements even though investment considerations might otherwise make it undesirable for the trust to sell securities at such time. Under many market conditions, investments in zero-coupon bonds and step-ups may be illiquid, making it difficult for the trust to dispose of them or determine their current value.

STRUCTURED NOTES AND HYBRID INSTRUMENTS. The trust may invest in "structured" notes, which are debt obligations the principal and/or interest on which is determined by reference to the performance of a benchmark asset, market or interest rate, such as selected securities, an index of securities or specified interest rates, or the differential performance of two assets or markets, such as indexes reflecting taxable and tax-exempt bonds. Depending on the terms of the note, the trust may forgo all or part of the interest and principal that would be payable on a comparable conventional note. The rate of return on structured notes may be determined by applying a multiplier to the performance or differential performance of the referenced index(es) or other asset(s). Application of a multiplier involves leverage that will serve to magnify the potential for gain and the risk of loss. The trust currently intends that any use of structured notes will be for the purpose of reducing the interest rate sensitivity of the trust's portfolio (and, thereby, decreasing the trust's exposure to interest rate risk) and, in any event, that the interest income on the notes will normally be exempt from federal income tax. Like other sophisticated strategies, the trust's use of the structured notes may not work as intended; for example, the change in the value of structured notes may not match very closely the change in the value of the bonds that the structured notes were purchased to hedge.

The trust may invest in other types of "hybrid" instruments that combine the characteristics of securities, futures, and options. For example, the principal amount or interest of a hybrid could be tied (positively or negatively) to the price of some securities index or another interest rate (each a "benchmark"). The interest rate or (unlike many debt obligations) the principal amount payable at maturity of a hybrid security may be increased or decreased, depending on changes in the value of the benchmark. Hybrids can be used as an efficient means of pursuing a variety of investment goals, including duration management and increased total return. Hybrids may not bear interest or pay dividends. The value of a hybrid or its interest rate may be a multiple of a benchmark and, as a result, may be leveraged and move (up or down) more steeply and rapidly than the benchmark. These benchmarks may be sensitive to economic and political events that cannot be readily foreseen by the purchaser of a hybrid. Under certain conditions, the redemption value of a hybrid could be zero. Thus, an investment in a hybrid may entail significant market risks that are not associated with a similar investment in a traditional, U.S. dollar-denominated bond that has a fixed principal amount and pays a fixed rate or floating rate of

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

interest. The purchase of hybrids also exposes the trust to the credit risk of the issuer of the hybrids. These risks may cause significant fluctuations in the net asset value of the trust.

U.S. GOVERNMENT SECURITIES

U.S. government securities in which the trust may invest include debt obligations of varying maturities issued by the U.S. Treasury or issued or guaranteed by an agency or instrumentality of the U.S. government, including the Federal Housing Administration, Federal Financing Bank, Farmers Home Administration, Export-Import Bank of the U.S., Small Business Administration, Government National Mortgage Association, General Services Administration, Central Bank for Cooperatives, Federal Farm Credit Banks, Federal Home Loan Banks, Federal Home Loan Mortgage Corporation, Federal National Mortgage Association ("FNMA"), Maritime Administration, Tennessee Valley Authority, District of Columbia Armory Board, Student Loan Marketing Association, Resolution Trust Corporation and various institutions that previously were or currently are part of the Farm Credit System (which has been undergoing reorganization since 1987). Some U.S. government securities, such as U.S. Treasury bills, Treasury notes and Treasury bonds, which differ only in their interest rates, maturities and times of issuance, are supported by the full faith and credit of the United States. Others are supported by: (i) the right of the issuer to borrow from the U.S. Treasury, such as securities of the Federal Home Loan Banks; (ii) the discretionary authority of the U.S. government to purchase the agency's obligations, such as securities of the FNMA; or (iii) only the credit of the issuer. No assurance can be given that the U.S. government will provide financial support in the future to U.S. government agencies, authorities or instrumentalities that are not supported by the full faith and credit of the United States. Securities guaranteed as to principal and interest by the U.S. government, its agencies, authorities or instrumentalities include: (i) securities for which the payment of principal and interest is backed by an irrevocable letter of credit issued by the U.S. government or any of its agencies, authorities or instrumentalities; and (ii) participations in loans made to non-U.S. governments or other entities that are so guaranteed. The secondary market for certain of these participations is limited and, therefore, may be regarded as illiquid.

U.S. government securities may include zero coupon securities that may be purchased when yields are attractive and/or to enhance portfolio liquidity. Zero coupon U.S. government securities are debt obligations that are issued or purchased at a significant discount from face value. The discount approximates the total amount of interest the security will accrue and compound over the period until maturity or the particular interest payment date at a rate of interest reflecting the market rate of the security at the time of issuance. Zero coupon U.S. government securities do not require the periodic payment of interest. These investments benefit the issuer by mitigating its need for cash to meet debt service, but generally require a higher rate of return to attract investors who are willing to defer receipt of cash. These investments may experience greater volatility in market value than U.S. government securities that make regular payments of interest. The trust accrues income on these investments for tax and accounting purposes, which is distributable to shareholders and which, because no cash is received at the time of accrual, may require the liquidation of other portfolio securities to satisfy the fund's distribution obligations, in which case the trust will forgo the purchase of additional income producing assets with these funds. Zero coupon U.S. government securities include STRIPS and CUBES, which are issued by the U.S. Treasury as component parts of U.S. Treasury bonds and represent scheduled interest and principal payments on the bonds.

WHEN-ISSUED, DELAYED DELIVERY AND FORWARD COMMITMENT TRANSACTIONS

The trust may purchase and sell securities, including U.S. government

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

securities, on a when-issued, delayed delivery or forward commitment basis. Typically, no income accrues on securities the trust has committed to purchase prior to the time delivery of the securities is made, although the trust may earn income on securities it has segregated. See "Asset Segregation."

When purchasing a security on a when-issued, delayed delivery, or forward commitment basis, the trust assumes the rights and risks of ownership of the security, including the risk of price fluctuations, and takes such fluctuations into account when determining its net asset value. Because the trust is not required to pay for the security until the delivery date, these risks are in addition to the risks associated with the trust's other investments. If the trust remains substantially fully invested at a time when when-issued, delayed delivery, or forward commitment purchases are outstanding, the purchases may result in a form of leverage.

When the trust has sold a security on a when-issued, delayed delivery, or forward commitment basis, the trust does not participate in future gains or losses with respect to the security. If the other party to a transaction fails to deliver or pay for the securities, the trust could miss a favorable price or yield opportunity or could suffer a loss. The trust may dispose of or renegotiate a transaction after it is entered into, and may sell when-issued, delayed delivery or forward commitment securities before they are delivered, which may result in a capital gain or loss. There is no percentage limitation on the extent to which the trust may purchase or sell securities on a when-issued, delayed delivery, or forward commitment basis.

The trust, as a holder of the securities of other investment companies, will bear its pro rata portion of the other investment companies' expenses, including advisory fees. These expenses are in addition to the direct expenses of the trust's own operations.

ASSET SEGREGATION

The 1940 Act requires that the trust segregate assets in connection with certain types of transactions that may have the effect of leveraging the trust's portfolio. If the trust enters into a transaction requiring segregation, such as a forward commitment, the custodian or Pioneer Investment Management, Inc., the trust's investment adviser ("Pioneer"), will segregate liquid assets in an amount required to comply with the 1940 Act. Such segregated assets will be valued at market daily. If the aggregate value of such segregated assets declines below the aggregate value required to satisfy the 1940 Act, additional liquid assets will be segregated.

INTEREST RATE TRANSACTIONS

INTEREST RATE SWAPS, COLLARS, CAPS AND FLOORS. In order to hedge the value of the trust's portfolio against interest rate fluctuations or to enhance the trust's income, the trust may, but is not required to, enter into various interest rate transactions such as interest rate swaps and the purchase or sale of interest rate caps and floors. To the extent that the trust enters into these transactions, the trust expects to do so primarily to preserve a return or spread on a particular investment or portion of its portfolio or to protect against any increase in the price of securities the trust anticipates purchasing at a later date. The trust intends to use these transactions primarily as a hedge and not as a speculative investment. However, the trust also may invest in interest rate swaps to enhance income or to increase the trust's yield, for example, during periods of steep interest rate yield curves (i.e., wide differences between short-term and long-term interest rates). The trust is not required to hedge its portfolio and may choose not to do so. The trust cannot guarantee that any hedging strategies it uses will work.

In an interest rate swap, the trust exchanges with another party their respective commitments to pay or receive interest (e.g., an exchange of fixed

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

rate payments for floating rate payments). For example, if the trust holds a debt instrument with an interest rate that is reset only once each year, it may swap the right to receive interest at this fixed rate for the right to receive interest at a rate that is reset every week. This would enable the trust to offset a decline in the value of the debt instrument due to rising interest rates but would also limit its ability to benefit from falling interest rates. Conversely, if the trust holds a debt instrument with an interest rate that is reset every week and it would like to lock in what it believes to be a high interest rate for one year, it may swap the right to receive interest at this variable weekly rate for the right to receive interest at a rate that is fixed for one year. Such a swap would protect the trust from a reduction in yield due to falling interest rates and may permit the trust to enhance its income through the positive differential between one week and one year interest rates, but would preclude it from taking full advantage of rising interest rates.

The trust usually will enter into interest rate swaps on a net basis (i.e., the two payment streams are netted out with the trust receiving or paying, as the case may be, only the net amount of the two payments). The net amount of the excess, if any, of the trust's obligations over its entitlements with respect to each interest rate swap will be accrued on a daily basis, and an amount of cash or liquid instruments having an aggregate net asset value at least equal to the accrued excess will be maintained in a segregated account by the trust's custodian. If the interest rate swap transaction is entered into on other than a net basis, the full amount of the trust's obligations will be accrued on a daily basis, and the full amount of the trust's obligations will be maintained in a segregated account by the trust's custodian.

The trust also may engage in interest rate transactions in the form of purchasing or selling interest rate caps or floors. The trust will not sell interest rate caps or floors that it does not own. The purchase of an interest rate cap entitles the purchaser, to the extent that a specified index exceeds a predetermined interest rate, to receive payments of interest equal to the difference of the index and the predetermined rate on a notional principal amount (i.e., the reference amount with respect to which interest obligations are determined although no actual exchange of principal occurs) from the party selling such interest rate cap. The purchase of an interest rate floor entitles the purchaser, to the extent that a specified index falls below a predetermined interest rate, to receive payments of interest at the difference of the index and the predetermined rate on a notional principal amount from the party selling such interest rate floor. The trust will not enter into caps or floors if, on a net basis, the aggregate notional principal amount with respect to such agreements exceeds the net assets of the trust.

Typically, the parties with which the trust will enter into interest rate transactions will be broker-dealers and other financial institutions. The trust will not enter into any interest rate swap, cap or floor transaction unless the unsecured senior debt or the claims-paying ability of the other party thereto is rated investment grade quality by at least one nationally recognized statistical rating organization at the time of entering into such transaction or whose creditworthiness is believed by Pioneer to be equivalent to such rating. If there is a default by the other party to such a transaction, the trust will have contractual remedies pursuant to the agreements related to the transaction. The swap market has grown substantially in recent years with a large number of banks and investment banking firms acting both as principals and as agents utilizing standardized swap documentation. As a result, the swap market has become relatively liquid in comparison with other similar instruments traded in the interbank market. Caps and floors, however, are less liquid than swaps. Certain federal income tax requirements may limit the trust's ability to engage in interest rate swaps.

CREDIT DEFAULT SWAP AGREEMENTS. The trust may enter into credit default swap agreements. The "buyer" in a credit default contract is obligated to pay the

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

"seller" a periodic stream of payments over the term of the contract provided that no event of default on an underlying reference obligation has occurred. If an event of default occurs, the seller must pay the buyer the "par value" (full notional value) of the reference obligation in exchange for the reference obligation. The trust may be either the buyer or seller in the transaction. If the trust is a buyer and no event of default occurs, the trust loses its investment and recovers nothing. However, if an event of default occurs, the buyer receives full notional value for a reference obligation that may have little or no value. As a seller, the trust receives a fixed rate of income throughout the term of the contract, which typically is between six months and three years, provided that there is no default event. If an event of default occurs, the seller must pay the buyer the full notional value of the reference obligation.

Credit default swaps involve greater risks than if the trust had invested in the reference obligation directly. In addition to general market risks, credit default swaps are subject to illiquidity risk, counterparty risk and credit risks. The trust will enter into swap agreements only with counterparties who are rated investment grade quality by at least one nationally recognized statistical rating organization at the time of entering into such transaction or whose creditworthiness is believed by Pioneer to be equivalent to such rating. A buyer also will lose its investment and recover nothing should no event of default occur. If an event of default were to occur, the value of the reference obligation received by the seller, coupled with the periodic payments previously received, may be less than the full notional value it pays to the buyer, resulting in a loss of value to the trust. When the trust acts as a seller of a credit default swap agreement it is exposed to many of the same risks of leverage described under "Risk factors--Leverage" and "Leverage" in the prospectus since if an event of default occurs the seller must pay the buyer the full notional value of the reference obligation.

The trust may in the future employ new or additional investment strategies and hedging instruments if those strategies and instruments are consistent with the trust's investment objectives and are permissible under applicable regulations governing the trust.

FUTURES CONTRACTS AND OPTIONS ON FUTURES CONTRACTS. To hedge against changes in interest rates or securities prices or to seek to increase total return, the trust may purchase and sell various kinds of futures contracts, and purchase and write (sell) call and put options on any of such futures contracts. The trust may also enter into closing purchase and sale transactions with respect to any of such contracts and options. The futures contracts may be based on various securities (such as U.S. government securities), securities indices and other financial instruments and indices. The trust will engage in futures and related options transactions for bona fide hedging and non-hedging purposes as described below. All futures contracts entered into by the trust are traded on U.S. exchanges or boards of trade that are licensed and regulated by the Commodity Futures Trading Commission (the "CFTC").

FUTURES CONTRACTS. A futures contract may generally be described as an agreement between two parties to buy and sell particular financial instruments for an agreed price during a designated month (or to deliver the final cash settlement price, in the case of a contract relating to an index or otherwise not calling for physical delivery at the end of trading in the contract).

When interest rates are rising or securities prices are falling, the trust can seek to offset a decline in the value of its current portfolio securities through the sale of futures contracts. When interest rates are falling or securities prices are rising, the trust, through the purchase of futures contracts, can attempt to secure better rates or prices than might later be available in the market when it effects anticipated purchases.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Positions taken in the futures markets are not normally held to maturity but are instead liquidated through offsetting transactions which may result in a profit or a loss. While futures contracts on securities will usually be liquidated in this manner, the trust may instead make, or take, delivery of the underlying securities whenever it appears economically advantageous to do so. A clearing corporation associated with the exchange on which futures on securities are traded guarantees that, if still open, the sale or purchase will be performed on the settlement date.

HEDGING STRATEGIES. Hedging, by use of futures contracts, seeks to establish with more certainty the effective price, rate of return on portfolio securities and securities that the trust owns or proposes to acquire. The trust may, for example, take a "short" position in the futures market by selling futures contracts in order to hedge against an anticipated rise in interest rates that would adversely affect the value of the trust's portfolio securities. Such futures contracts may include contracts for the future delivery of securities held by the trust or securities with characteristics similar to those of the trust's portfolio securities. If, in the opinion of Pioneer, there is a sufficient degree of correlation between price trends for the trust's portfolio securities and futures contracts based on other financial instruments, securities indices or other indices, the trust may also enter into such futures contracts as part of its hedging strategies. Although under some circumstances prices of securities in the trust's portfolio may be more or less volatile than prices of such futures contracts, Pioneer will attempt to estimate the extent of this volatility difference based on historical patterns and compensate for any such differential by having the trust enter into a greater or lesser number of futures contracts or by attempting to achieve only a partial hedge against price changes affecting the trust's portfolio securities. When hedging of this character is successful, any depreciation in the value of portfolio securities will be substantially offset by appreciation in the value of the futures position. On the other hand, any unanticipated appreciation in the value of the trust's portfolio securities would be substantially offset by a decline in the value of the futures position.

On other occasions, the trust may take a "long" position by purchasing futures contracts. This may be done, for example, when the trust anticipates the subsequent purchase of particular securities when it has the necessary cash, but expects the prices then available in the market to be less favorable than prices that are currently available.

OPTIONS ON FUTURES CONTRACTS. The acquisition of put and call options on futures contracts will give the trust the right (but not the obligation) for a specified price to sell or to purchase, respectively, the underlying futures contract at any time during the option period. As the purchaser of an option on a futures contract, the trust obtains the benefit of the futures position if prices move in a favorable direction but limits its risk of loss in the event of an unfavorable price movement to the loss of the premium and transaction costs.

The writing of a call option on a futures contract generates a premium which may partially offset a decline in the value of the trust's assets. By writing a call option, the trust becomes obligated, in exchange for the premium, to sell a futures contract (if the option is exercised), which may have a value higher than the exercise price. Conversely, the writing of a put option on a futures contract generates a premium which may partially offset an increase in the price of securities that the trust intends to purchase. However, the trust becomes obligated to purchase a futures contract (if the option is exercised) which may have a value lower than the exercise price. Thus, the loss incurred by the trust in writing options on futures is potentially unlimited and may exceed the amount of the premium received. The trust will incur transaction costs in connection with the writing of options on futures.

The holder or writer of an option on a futures contract may terminate its

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

position by selling or purchasing an offsetting option on the same series. There is no guarantee that such closing transactions can be effected. The trust's ability to establish and close out positions on such options will be subject to the development and maintenance of a liquid market.

OTHER CONSIDERATIONS. The trust will engage in futures and related options transactions only for bona fide hedging or non-hedging purposes in accordance with CFTC regulations which permit principals of an investment company registered under the 1940 Act to engage in such transactions without registering as commodity pool operators. The trust will determine that the price fluctuations in the futures contracts and options on futures used for hedging purposes are substantially related to price fluctuations in securities held by the trust or which the trust expects to purchase. Except as stated below, the trust's futures transactions will be entered into for traditional hedging purposes--i.e., futures contracts will be sold to protect against a decline in the price of that the trust owns, or futures contracts will be purchased to protect the trust against an increase in the price of securities it intends to purchase. As evidence of this hedging intent, the trust expects that on 75% or more of the occasions on which it takes a long futures or option position (involving the purchase of futures contracts), the trust will have purchased, or will be in the process of purchasing, equivalent amounts of related securities in the cash market at the time when the futures or option position is closed out. However, in particular cases, when it is economically advantageous for the trust to do so, a long futures position may be terminated or an option may expire without the corresponding purchase of securities or other assets.

As an alternative to literal compliance with the bona fide hedging definition, a CFTC regulation permits the trust to elect to comply with a different test, under which the sum of the amounts of initial margin deposits on the trust's existing non-hedging futures contracts and premiums paid for options on futures entered into for non-hedging purposes (net of the amount the positions are "in the money") would not exceed 5% of the market value of the trust's total assets. The trust will engage in transactions in futures contracts and related options only to the extent such transactions are consistent with the requirements of the Code for maintaining its qualification as a regulated investment company for federal income tax purposes.

Futures contracts and related options involve brokerage costs, require margin deposits and, in the case of contracts and options obligating the trust to purchase securities, require the trust to segregate assets to cover such contracts and options.

While transactions in futures contracts and options on futures may reduce certain risks, such transactions themselves entail certain other risks. Thus, while the trust may benefit from the use of futures and options on futures, unanticipated changes in interest rates or securities prices may result in a poorer overall performance for the trust than if it had not entered into any futures contracts or options transactions. In the event of an imperfect correlation between a futures position and a portfolio position which is intended to be protected, the desired protection may not be obtained and the trust may be exposed to risk of loss.

OPTIONS ON SECURITIES AND SECURITIES INDICES

The trust may purchase put and call options on any security in which it may invest or options on any securities index based on securities in which it may invest. The trust would also be able to enter into closing sale transactions in order to realize gains or minimize losses on options it has purchased.

WRITING CALL AND PUT OPTIONS ON SECURITIES. A call option written by the trust obligates the trust to sell specified securities to the holder of the option at a specified price if the option is exercised at any time before the expiration

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

date. All call options written by the trust are covered, which means that the trust will own the securities subject to the options as long as the options are outstanding, or the trust will use the other methods described below. The trust's purpose in writing covered call options is to realize greater income than would be realized on portfolio securities transactions alone. However, the trust may forgo the opportunity to profit from an increase in the market price of the underlying security.

A put option written by the trust would obligate the trust to purchase specified securities from the option holder at a specified price if the option is exercised at any time before the expiration date. All put options written by the trust would be covered, which means that the trust would have segregated assets with a value at least equal to the exercise price of the put option. The purpose of writing such options is to generate additional income for the trust. However, in return for the option premium, the trust accepts the risk that it may be required to purchase the underlying security at a price in excess of its market value at the time of purchase.

Call and put options written by the trust will also be considered to be covered to the extent that the trust's liabilities under such options are wholly or partially offset by its rights under call and put options purchased by the trust. In addition, a written call option or put may be covered by entering into an offsetting forward contract and/or by purchasing an offsetting option or any other option which, by virtue of its exercise price or otherwise, reduces the trust's net exposure on its written option position.

WRITING CALL AND PUT OPTIONS ON SECURITIES INDICES. The trust may also write (sell) covered call and put options on any securities index composed of securities in which it may invest. Options on securities indices are similar to options on securities, except that the exercise of securities index options requires cash payments and does not involve the actual purchase or sale of securities. In addition, securities index options are designed to reflect price fluctuations in a group of securities or segments of the securities market rather than price fluctuations in a single security.

The trust may cover call options on a securities index by owning securities whose price changes are expected to be similar to those of the underlying index, or by having an absolute and immediate right to acquire such securities without additional cash consideration (or for additional consideration if cash in such amount is segregated) upon conversion or exchange of other securities in its portfolio. The trust may cover call and put options on a securities index by segregating assets with a value equal to the exercise price.

PURCHASING CALL AND PUT OPTIONS. The trust would normally purchase call options in anticipation of an increase in the market value of securities of the type in which it may invest. The purchase of a call option would entitle the trust, in return for the premium paid, to purchase specified securities at a specified price during the option period. The trust would ordinarily realize a gain if, during the option period, the value of such securities exceeded the sum of the exercise price, the premium paid and transaction costs; otherwise the trust would realize either no gain or a loss on the purchase of the call option.

The trust would normally purchase put options in anticipation of a decline in the market value of securities in its portfolio ("protective puts") or in securities in which it may invest. The purchase of a put option would entitle the trust, in exchange for the premium paid, to sell specified securities at a specified price during the option period. The purchase of protective puts is designed to offset or hedge against a decline in the market value of the trust's holdings. Put options may also be purchased by the trust for the purpose of affirmatively benefiting from a decline in the price of securities which it does not own. The trust would ordinarily realize a gain if, during the option period, the value of the underlying securities decreased below the exercise price

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

sufficiently to more than cover the premium and transaction costs; otherwise the trust would realize either no gain or a loss on the purchase of the put option. Gains and losses on the purchase of protective put options would tend to be offset by countervailing changes in the value of the underlying portfolio securities.

The trust may terminate its obligations under an exchange-traded call or put option by purchasing an option identical to the one it has written. Obligations under over-the-counter options may be terminated only by entering into an offsetting transaction with the counterparty to such option. Such purchases are referred to as "closing purchase transactions."

RISKS OF TRADING OPTIONS. There is no assurance that a liquid secondary market on an options exchange will exist for any particular exchange-traded option, or at any particular time. If the trust is unable to effect a closing purchase transaction with respect to covered options it has written, the trust will not be able to sell the underlying securities or dispose of its segregated assets until the options expire or are exercised. Similarly, if the trust is unable to effect a closing sale transaction with respect to options it has purchased, it will have to exercise the options in order to realize any profit and will incur transaction costs upon the purchase or sale of underlying securities.

Reasons for the absence of a liquid secondary market on an exchange include the following: (i) there may be insufficient trading interest in certain options; (ii) restrictions may be imposed by an exchange on opening or closing transactions or both; (iii) trading halts, suspensions or other restrictions may be imposed with respect to particular classes or series of options; (iv) unusual or unforeseen circumstances may interrupt normal operations on an exchange; (v) the facilities of an exchange or the Options Clearing Corporation (the "OCC") may not at all times be adequate to handle current trading volume; or (vi) one or more exchanges could, for economic or other reasons, decide or be compelled at some future date to discontinue the trading of options (or a particular class or series of options), in which event the secondary market on that exchange (or in that class or series of options) would cease to exist, although outstanding options on that exchange, if any, that had been issued by the OCC as a result of trades on that exchange would continue to be exercisable in accordance with their terms.

The trust may purchase and sell options that are traded on U.S. exchanges and options traded over the counter with broker-dealers who make markets in these options. The ability to terminate over-the-counter options is more limited than with exchange-traded options and may involve the risk that broker-dealers participating in such transactions will not fulfill their obligations.

Transactions by the trust in options on securities and indices will be subject to limitations established by each of the exchanges, boards of trade or other trading facilities governing the maximum number of options in each class which may be written or purchased by a single investor or group of investors acting in concert. Thus, the number of options which the trust may write or purchase may be affected by options written or purchased by other investment advisory clients of Pioneer. An exchange, board of trade or other trading facility may order the liquidations of positions found to be in excess of these limits, and it may impose certain other sanctions.

The writing and purchase of options is a highly specialized activity which involves investment techniques and risks different from those associated with ordinary portfolio securities transactions. The successful use of protective puts for hedging purposes depends in part on Pioneer's ability to predict future price fluctuations and the degree of correlation between the options and securities markets.

The hours of trading for options may not conform to the hours during which the

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

underlying securities are traded. To the extent that the options markets close before the markets for the underlying securities, significant price movements can take place in the underlying markets that cannot be reflected in the options markets.

In addition to the risks of imperfect correlation between the trust's portfolio and the index underlying the option, the purchase of securities index options involves the risk that the premium and transaction costs paid by the trust in purchasing an option will be lost. This could occur as a result of unanticipated movements in the price of the securities comprising the securities index on which the option is based.

ILLIQUID SECURITIES

The trust may invest up to 20% of its total assets in securities which are illiquid at the time of investment. The term "illiquid securities" for this purpose means securities that cannot be disposed of within seven days in the ordinary course of business at approximately the amount at which the trust has valued the securities. Illiquid securities are considered to include, among other things, written over-the-counter options, securities or other liquid assets being used as cover for such options, repurchase agreements with maturities in excess of seven days, certain loan participation interests, fixed time deposits which are not subject to prepayment or provide for withdrawal penalties upon prepayment (other than overnight deposits), and other securities whose disposition is restricted under the federal securities laws (other than securities issued pursuant to Rule 144A under the Securities Act of 1933, as amended (the "1933 Act") and certain commercial paper that Pioneer has determined to be liquid under procedures approved by the Board of Trustees).

Illiquid securities may include privately placed securities, which are sold directly to a small number of investors, usually institutions. Unlike public offerings, such securities are not registered under the federal securities laws. Although certain of these securities may be readily sold, others may be illiquid, and their sale may involve substantial delays and additional costs.

INVESTMENT RESTRICTIONS

The following are the trust's fundamental investment restrictions. These restrictions may not be changed without the approval of the holders of a majority of the trust's outstanding voting securities, which, as used in the Prospectus and this Statement of Additional Information, means the approval of the common and preferred shares, voting together as a class, and the approval of a majority of the outstanding preferred shares, voting separately by class. Statements in italics are not part of the restriction.

The trust may not:

(1) Issue senior securities, except as permitted by applicable law, as amended and interpreted or modified from time to time by any regulatory authority jurisdiction. SENIOR SECURITIES THAT THE TRUST MAY ISSUE IN ACCORDANCE WITH THE 1940 ACT INCLUDE PREFERRED SHARES, BORROWING, FUTURES, WHEN-ISSUED AND DELAYED DELIVERY SECURITIES AND FORWARD FOREIGN CURRENCY EXCHANGE TRANSACTIONS.

(2) Borrow money, except as permitted by applicable law, as amended and interpreted or modified from time to time by any regulatory authority jurisdiction.

(3) Invest in real estate, except the trust may invest in securities of issuers that invest in real estate or interests therein, securities that are secured by real estate or interests therein, securities of real estate investment trusts, mortgage-backed securities and other securities that represent a similar indirect interest in real estate, and the trust may acquire real estate or

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

interests therein through exercising rights or remedies with regard to an instrument.

(4) Make loans, except that the trust may (i) lend portfolio securities in accordance with the trust's investment policies, (ii) enter into repurchase agreements, (iii) purchase all or a portion of an issue of publicly distributed debt securities, bank loan participation interests, bank certificates of deposit, acceptances, debentures or other securities, whether or not the purchase is made upon the original issuance of the securities, (iv) participate in a credit facility whereby the trust may directly lend to and borrow money from other affiliated funds to the extent permitted under the 1940 Act or an exemption therefrom, and (v) make loans in any other manner consistent with applicable law, as amended and interpreted or modified from time to time by any regulatory authority having jurisdiction.

(5) Invest in commodities or commodity contracts, except that the trust may invest in currency instruments and contracts and financial instruments and contracts that might be deemed to be commodities and commodity contracts. A FUTURES CONTRACT, FOR EXAMPLE, MAY BE DEEMED TO BE A COMMODITY CONTRACT.

(6) Act as an underwriter, except insofar as the trust technically may be deemed to be an underwriter in connection with the purchase or sale of its portfolio securities.

(7) Make any investment inconsistent with its classification as a diversified closed-end investment company (or series thereof) under the 1940 Act. THIS MEANS THAT WITH RESPECT TO 75% OF THE ITS TOTAL ASSETS, THE TRUST MAY NOT PURCHASE SECURITIES OF AN ISSUER (OTHER THAN THE U.S. GOVERNMENT, ITS AGENCIES OR INSTRUMENTALITIES), IF SUCH PURCHASE WOULD CAUSE MORE THAN 5% OF THE TRUST'S TOTAL ASSETS, TAKEN AT MARKET VALUE, TO BE INVESTED IN THE SECURITIES OF A SINGLE ISSUER, OR IF SUCH PURCHASE WOULD AT THE SAME TIME RESULT IN MORE THAN 10% OF THE OUTSTANDING VOTING SECURITIES OF SUCH ISSUER BEING HELD BY THE TRUST.

(8) Invest 25% or more of the value of its total assets in any one industry, provided that this limitation does not apply to municipal securities other than those municipal securities backed only by assets and revenues of non-governmental issuers.

For purposes of applying the limitation set forth in restriction (8) above, securities of the U.S. government, its agencies, or instrumentalities, and securities backed by the credit of a governmental entity are not considered to represent industries. However, obligations backed only by the assets and revenues of non-governmental issuers may for this purpose be deemed to be issued by such non-governmental issuers. Thus, the 25% limitation would apply to such obligations. It is nonetheless possible that the trust may invest more than 25% of its total assets in a broader economic sector of the market for municipal obligations, such as revenue obligations of hospitals and other health care facilities or electrical utility revenue obligations. In addition, for the purpose of applying the limitation set forth in restriction (8), a non-governmental issuer shall be deemed the sole issuer of a security when its assets and revenues are separate from other governmental entities and its securities are backed only by its assets and revenues. Similarly, in the case of a non-governmental issuer, such as an industrial corporation or a privately owned or operated hospital, if the security is backed only by the assets and revenues of the non-governmental issuer, then such non-governmental issuer would be deemed to be the sole issuer. Where a security is also backed by the enforceable obligation of a superior or unrelated governmental or other entity (other than a bond insurer), it shall also be included in the computation of securities owned that are issued by such governmental or other entity. Where a security is guaranteed by a governmental entity or some other facility, such as a bank guarantee or letter of credit, such a guarantee or letter of credit would be considered a separate security and would be treated as an issue of such

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

government, other entity or bank. When a municipal bond is insured by bond insurance, it shall not be considered a security that is issued or guaranteed by the insurer; instead, the issuer of such municipal bond will be determined in accordance with the principles set forth above. The foregoing restrictions do not limit the percentage of the trust's assets that may be invested in municipal bonds insured by any given insurer.

In addition to the limitation under (7) above, as a non-fundamental policy, the trust will not invest more than 5% of its total assets in the securities of any single issuer. Governmental issuers of municipal securities are not considered part of any "industry" and general obligation bonds of a state are not subject to the 5% limitation set forth above. For purpose of the 5% limitation, the Trust will treat a revenue bond payable from revenues received by the municipal issuer from a single entity (the "underlying obligor") as being issued by the underlying obligor.

All other investment policies (other than the policy under "Investment Objectives and Policies - Primary Investments") of the trust are considered non-fundamental and may be changed by the Board of Trustees without prior approval of the trust's outstanding voting shares.

The trust has not adopted a fundamental policy prohibiting or limiting the trust's use of short sales, purchases on margin and the writing of put and call options. The trust is subject, however, to the limitations on its use of these investments under the 1940 Act and the rules and interpretive positions of the SEC under the 1940 Act. Certain other non-fundamental investment policies are included in the prospectus under "Investment objectives and principal investment strategies" and this statement of additional information under "Investment Objectives and Policies."

Under one provision of the 1940 Act, the trust may invest up to 10% of its total assets in the aggregate in shares of other investment companies and up to 5% of its total assets in any one investment company, provided the investment does not represent more than 3% of the voting stock of the acquired investment company at the time such shares are purchased. Other provisions of the 1940 Act may allow the trust to invest a greater percentage of its assets in other investment companies subject to certain conditions. As a shareholder in any investment company, the trust will bear its ratable share of that investment company's expenses, and would remain subject to payment of the trust's advisory fees and other expenses with respect to assets so invested. Holders of common shares would therefore be subject to duplicative expenses to the extent the trust invests in other investment companies. In addition, the securities of other investment companies may also be leveraged and will therefore be subject to the same leverage risks described herein and in the prospectus. As described in the prospectus in the section entitled "Risks," the net asset value and market value of leveraged shares will be more volatile and the yield to shareholders will tend to fluctuate more than the yield generated by unleveraged shares.

In addition, to comply with federal tax requirements for qualification as a "regulated investment company," the trust's investments will be limited in a manner such that at the close of each quarter of each tax year, (a) no more than 25% of the value of the trust's total assets are invested in the securities (other than United States government securities or securities of other regulated investment companies) of a single issuer or two or more issuers controlled by the trust and engaged in the same, similar or related trades or businesses and (b) with regard to at least 50% of the trust's total assets, no more than 5% of its total assets are invested in the securities (other than United States government securities or securities of other regulated investment companies) of a single issuer. These tax-related limitations may be changed by the Trustees to the extent appropriate in light of changes to applicable tax requirements.

The trust intends to apply for ratings for the preferred shares from one or more national statistical rating organizations. In order to obtain and maintain the

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

required ratings, the trust will be required to comply with investment quality, diversification and other guidelines established by such rating agency or agencies. Such guidelines will likely be more restrictive than the restrictions set forth above. The trust does not anticipate that such guidelines would have a material adverse effect on the trust's holders of common shares or its ability to achieve its investment objectives. The trust presently anticipates that any preferred shares that it intends to issue would be initially given the highest ratings by such rating agency or agencies, but no assurance can be given that such ratings will be obtained. No minimum rating is required for the issuance of preferred shares by the trust.

The trust does not currently intend to acquire insurance coverage on municipal securities held in the trust's portfolio ("Trust Insured Bonds"), if, after any such acquisition 10% or more of the trust's total assets are represented by Trust Insured Bonds insured by the same insurance company or a related group of insurance companies. If Trust Insured Bonds insured by a single insurance company or related group of insurance companies represents more than 10% but less than 25% of the trust's total assets, the trust undertakes that it will amend its Registration Statement under the 1940 Act to include summary financial information with respect to such insurance company or group of insurance companies. If Trust Insured Bonds insured by a single insurance company or related group of insurance companies represents 25% or more of the trust's total assets, the trust undertakes that it will amend its Registration Statement under the 1940 Act to include audited financial statements and an auditors' consent of such insurance company or group of insurance companies. The forgoing limitation and undertakings to not apply to insurance on any municipal securities at the time of the issuance of such municipal security or any secondary market insurance that was acquired by a prior holder of any municipal security in the trust's portfolio.

MANAGEMENT OF THE TRUST

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. Asterisks indicate those Trustees who are interested persons of the trust within the meaning of the 1940 Act, and they 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 serves as a trustee of each of the 50 U.S. registered investment portfolios for which Pioneer serves as investment adviser (the "Pioneer Funds"). The address for all Interested Trustees and all officers of the trust is 60 State Street, Boston, Massachusetts 02109.

NAME, AGE AND ADDRESS	POSITIONS HELD WITH THE TRUST	TERM OF OFFICE AND LENGTH OF SERVICE	PRINCIPAL OCCUPATION DURING PAST FIVE YEARS	OTHER THIS
INTERESTED TRUSTEES:				
John F. Cogan, Jr.* (76)	Chairman of the Board, Trustee and President	Since May, 2003. Term expires in 2004.	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	Direc Compa

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

and a Director of Pioneer and the various Momentum Funds; Director, Pioneer Alternative Investments; Director and Chairman of the Supervisory Board of Pioneer Czech Investment Company, a.s.; President of all of the Pioneer Funds; and Of Counsel (since 2000, partner prior to 2000), Hale and Dorr LLP (counsel to PIM-USA and the Pioneer Funds)

Osbert M. Hood* (50)	Trustee and Executive Vice President	Trustee since June, 2003. Term expires in 2006.	President and Chief Executive Officer, PIM-USA since May, 2003 (Director since January, 2001); President and Director of Pioneer Investment Management, Inc. since May, 2003; Chairman and Director of Pioneer Investment Management Shareholder Services, Inc. ("PIMSS") since May, 2003; Executive Vice President of all of the Pioneer Funds since June 3, 2003; Executive Vice President and Chief Operating Officer of PIM-USA, November 2000-May 2003; Executive Vice President, Chief Financial Officer and Treasurer, John Hancock Advisers, L.L.C., Boston, MA, November 1999-November 2000; Senior Vice President and Chief Financial Officer, John Hancock Advisers, L.L.C., April 1997-November 1999.	None.
----------------------	--------------------------------------	---	---	-------

INDEPENDENT TRUSTEES:

Mary K. Bush (55) 3509 Woodbine Street, Chevy Chase, MD 20815	Trustee	Since May, 2003. Term expires in 2006.	President, Bush International (international financial advisory firm)	Director of Brady (international financial advisory firm) and s mater manuf Guara Corpo Tobac (toba
--	---------	--	---	---

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

				Market (second study)
Richard H. Egdahl, M.D. (76) Boston University Healthcare Entrepreneurship Program, 53 Bay State Road, Boston, MA 02215	Trustee	Since May, 2003. Term expires in 2004.	Alexander Graham Bell Professor of Health Care Entrepreneurship, Boston University; Professor of Management, Boston University School of Management; Professor of Public Health, Boston University School of Public Health; Professor of Surgery, Boston University School of Medicine; and University Professor, Boston University	None
Margaret B.W. Graham (55) 1001 Sherbrooke Street West, Montreal, Quebec, Canada H3A 1G5	Trustee	Since May, 2003. Term expires in 2005.	Founding Director, The Winthrop Group, Inc. (consulting firm); Professor of Management, Faculty of Management, McGill University	None
Marguerite A. Piret (54) One Boston Place, 26th Floor, Boston, MA 02108	Trustee	Since May, 2003. Term expires in 2006.	President and Chief Executive Officer, Newbury, Piret & Company, Inc. (investment banking firm)	None
Stephen K. West** (74) 125 Broad Street, New York, NY 10004	Trustee	Since May, 2003. Term expires in 2004.	Senior Counsel, Sullivan & Cromwell (law firm)	Direct Helve (clos compa (inve
John Winthrop (66) One North Adgers Wharf, Charleston, SC 29401	Trustee	Since May, 2003. Term expires in 2005.	President, John Winthrop & Co., Inc. (private investment firm)	None
TRUST OFFICERS:				
Dorothy E. Bourassa (55)	Assistant Secretary	Since May, 2003. Serves at the discretion of the Board.	Secretary of PIM-USA; Senior Vice President-Legal of Pioneer; and Secretary/Clerk of most of PIM-USA's subsidiaries since October 2000; Assistant Secretary of all of the Pioneer Funds since November 2000; Senior Counsel, Assistant Vice President and Director of Compliance of PIM-USA from April 1998 through October 2000	None
Vincent Nave (57)	Treasurer	Since May, 2003. Serves at the discretion	Vice President-Fund Accounting, Administration and Custody Services of Pioneer (Manager from	None

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

		of the Board.	September 1996 to February 1999); and Treasurer of all of the Pioneer Funds (Assistant Treasurer from June 1999 to November 2000)	
Luis I. Presutti (38)	Assistant Treasurer	Since May, 2003. Serves at the discretion of the Board.	Assistant Vice President- Fund Accounting, Administration and Custody Services of Pioneer (Fund Accounting Manager from 1994 to 1999); and Assistant Treasurer of all of the Pioneer Funds since November 2000	None
Gary Sullivan (45)	Assistant Treasurer	Since May, 2003. Serves at the discretion of the Board.	Fund Accounting Manager - Fund Accounting, Administration and Custody Services of Pioneer; and Assistant Treasurer of all of the Pioneer Funds since May 2002	None
Alan Janson (32)	Assistant Treasurer	Since May, 2003. Serves at the discretion of the Board.	Manager, Valuation Risk and Information Technology - Fund Accounting, Administration and Custody Services of Pioneer since March 2002; and Assistant Treasurer of all of the Pioneer Funds since July 2002. Manager, Valuation Risk and Performance Reporting of Pioneer from June 2000 to February 2002; Member of Pioneer Pricing Group from 1996 to 2000 (promoted to Manager in 1998)	None

* Mr. Cogan and Mr. Hood are Interested Trustees because each is an officer or director of the trust's investment adviser and certain of its affiliates. ** Mr. West may be deemed to be an interested person of the trust and its principal underwriter because Sullivan & Cromwell, with respect to which Mr. West is Senior Counsel, acts as legal counsel to UBS Securities LLC.

The outstanding capital stock of the investment adviser is indirectly majority owned by UniCredito Italiano S.p.A. ("UniCredito"), one of the largest banking groups in Italy.

The trust's Board of Trustees currently consists of 8 members. The term of one class expires each year commencing with the first annual meeting following the initial public offering of the trust's common shares, which occurred on July 22, 2003, and no term shall continue for more than three years after the applicable election. The terms of Mr. Cogan, Dr. Egdahl and Mr. West expire at the first annual meeting following the initial public offering of the trust's common shares, the terms of Ms. Graham and Winthrop expire at the second annual meeting, and the terms of Ms. Bush, Mr. Hood and Ms. Piret expire at the third annual meeting. Subsequently, each class of Trustees will stand for election at the conclusion of its respective term. Such classification may prevent replacement of a majority of the Trustees for up to a two-year period.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

BOARD COMMITTEES

The Board of Trustees has an Audit Committee, which is comprised of Marguerite A. Piret (chair), Stephen K. West and John Winthrop; a Nominating Committee, which is comprised of Mary K. Bush, Richard H. Egdahl (chair) and Marguerite A. Piret; a Valuation Committee, which is comprised of Marguerite A. Piret, Stephen K. West and John Winthrop; a Policy Administration Committee, which is comprised of Mary K. Bush (chair), Richard H. Egdahl and Margaret B.W. Graham; and an Independent Trustees Committee, which is comprised of all the trust's Independent Trustees. Margaret B.W. Graham is the chair of the Independent Trustees Committee.

The Board of Trustees has adopted a charter for the Audit Committee. In accordance with its charter, the purposes of the Audit Committee are:

- |X| act as a liaison between the trust's independent auditors and the full Board of Trustees of the trust;
- |X| discuss with the trust's independent auditors their judgments about the quality of the trust's accounting principles and underlying estimates as applied in the trust's financial reporting;
- |X| together with the Independent Trustees Committee, review and assess the renewal materials of all related party contracts and agreements, including investment advisory agreements, underwriting contracts, administration agreements, and transfer agency contracts, among any other instruments and agreements that may be appropriate from time to time; and
- |X| ensure that the independent auditors submit on a periodic basis to the Audit Committee a formal written statement delineating all relationships between the auditors and the trust or Pioneer; to actively engage in a dialogue with the independent auditors with respect to any disclosed relationships or services that may impact the objectivity and independence of the independent auditors; and to recommend that the Trustees take appropriate action in response to the independent auditors' report to satisfy itself of the independent auditors' independence.

The Nominating Committee reviews the qualifications of any candidate recommended by the Independent Trustees to serve as an Independent Trustee and makes a recommendation regarding that person's qualifications. The Committee does not accept nominations from shareholders.

The Valuation Committee reviews the valuation assigned to certain securities by Pioneer in accordance with the trust's valuation procedures.

The Policy Administration Committee reviews the implementation of certain of the trust's administration policies and procedures.

The Independent Trustees Committee reviews the trust's investment advisory agreement and other related party contracts annually and is also responsible for any other action required to be taken, under the 1940 Act, by the Independent Trustees acting alone.

The trust's Declaration of Trust provides that the trust will indemnify the Trustees and officers against liabilities and expenses incurred in connection with any litigation in which they may be involved because of their offices with the trust, unless it is determined in the manner specified in the Declaration of Trust that they have not acted in good faith in the reasonable belief that their actions were in the best interests of the trust or that such indemnification would relieve any officer or Trustee of any liability to the trust or its shareholders by reason of willful misfeasance, bad faith, gross negligence or reckless disregard of his or her duties.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

COMPENSATION OF OFFICERS AND TRUSTEES

The trust pays no salaries or compensation to any of its officers. The Pioneer Funds, including the trust, compensate their trustees as follows:

- |X| If the Pioneer fund has assets greater than \$250 million, the Pioneer fund pays each Independent Trustee an annual base fee calculated on the basis of the Pioneer fund's net assets.
- |X| If the Pioneer fund has assets less than \$250 million, the Pioneer fund pays each Independent Trustee an annual fee of \$1,000.
- |X| If the Pioneer fund has assets greater than \$50 million, the Pioneer fund pays each Interested Trustee an annual fee of \$500, and if the Pioneer fund has assets less than \$50 million, the Pioneer fund pays each Interested Trustee and annual fee of \$200 (Pioneer reimburses the fund for these fees).
- |X| Each Pioneer fund with assets greater than \$250 million pays each Independent Trustee who serves on a board committee an annual committee fee based the Pioneer fund's net assets (with additional compensation for chairpersons of such committees).

The following table sets forth certain information with respect to the compensation paid to each Trustee by the trust and the Pioneer Funds as a group. Compensation from the trust is for the current calendar year and is estimated. Total compensation from the Pioneer Funds as a group is for the calendar year ended December 31, 2002.

NAME OF TRUSTEE	AGGREGATE COMPENSATION FROM TRUST*	PENSION OR RETIREMENT BENEFITS ACCRUED AS PART OF TRUST EXPENSES	ESTIMATED ANNUAL BENEFIT UPON RETIREMENT
INTERESTED TRUSTEES:			
John F. Cogan, Jr. ***	\$250.00	\$0.00	\$0.00
Osbert M. Hood *** ****	250.00	0.00	0.00
INDEPENDENT TRUSTEES:			
Mary K. Bush	3,500.00	0.00	0.00
Richard H. Egdahl, M.D.	3,500.00	0.00	0.00
Margaret B.W. Graham	3,500.00	0.00	0.00
Marguerite A. Piret	3,500.00	0.00	0.00
Stephen K. West	3,500.00	0.00	0.00
John Winthrop	3,500.00	0.00	0.00
	-----	----	---
	\$21,500.00	\$0.00	\$0.00

- * Estimated for the calendar year ending December 31, 2003.
- ** For the calendar year ended December 31, 2002. There are 50 U.S. registered investment portfolios in the Pioneer Family of Funds.
- *** Under the investment advisory agreement, Pioneer reimburses the trust for any Trustee fees paid by the trust.
- **** Mr. Hood became a trustee of the other Pioneer Funds during the current calendar year.

OWNERSHIP OF SHARES OF THE TRUST AND OTHER PIONEER FUNDS

The following table indicates the value of shares that each Trustee beneficially owns in the trust and the Pioneer Funds in the aggregate. The value of shares of the trust and any other closed-end fund are determined based on closing market

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

price on December 31, 2002. The value of shares of any Pioneer fund that is an open-end investment company is determined on the basis of the net asset value of the class of shares held as of December 31, 2002. The value of the shares held are stated in ranges in accordance with the requirements of the SEC. The table reflects the Trustee's beneficial ownership of shares of the Pioneer Funds. Beneficial ownership is determined in accordance with the rules of the SEC.

NAME OF TRUSTEE	DOLLAR RANGE OF EQUITY SECURITIES IN THE TRUST	AGGREGATE DOLLAR RANGE OF EQUITY SECURITIES IN ALL REGISTERED IN COMPANIES IN THE PIONEER FUNDS
INTERESTED TRUSTEES:		
Mr. Cogan	none	Over \$100,000
Mr. Hood	none	\$50,001 - \$100,000
INDEPENDENT TRUSTEES:		
Ms. Bush	none	\$10,001 - \$50,000
Dr. Egdahl.	none	\$50,001 - \$100,000
Ms. Graham	none	\$10,001 - \$50,000
Ms. Piret	none	\$50,001 - \$100,000
Mr. West	none	\$50,001 - \$100,000
Mr. Winthrop	none	Over \$100,000

MATERIAL RELATIONSHIPS OF THE INDEPENDENT TRUSTEES. For purposes of the statements below:

the IMMEDIATE FAMILY MEMBERS of any person includes their spouse, children in the person's household (including step and adoptive children) and any dependent of the person.

an entity in a CONTROL RELATIONSHIP means any person who controls, is controlled by or is under common control with the named person. For example, UniCredito is an entity that is in a control relationship with Pioneer.

a RELATED FUND is a registered investment company or an entity exempt from the definition of an investment company pursuant to Sections 3(c)(1) or 3(c)(7) of the 1940 Act, for which Pioneer or any of its affiliates act as investment adviser or for which Pioneer or Pioneer Funds Distributor, Inc. ("PFD") or any of its affiliates act as principal underwriter. For example, the trust's related funds include all of the Pioneer Funds and any non-U.S. funds managed by Pioneer or its affiliates.

As of December 31, 2002, none of the Independent Trustees, nor any of their immediate family members, beneficially own any securities issued by Pioneer, UniCredito or any other entity in a control relationship to PFD.

During the calendar years 2001 and 2002, none of the Independent Trustees, nor

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

any of their immediately family members, had any direct or indirect interest (the value of which exceeded \$60,000), whether by contract, arrangement or otherwise, in Pioneer, UniCredito, or any other entity in a control relationship to Pioneer or PFD.

During the calendar years 2001 and 2002, none of the Independent Trustees, nor any of their immediately family members, had an interest in a transaction or a series of transactions, or in any currently proposed transaction, or series of similar transactions, in which the aggregate amount involved exceeded \$60,000 and to which any of the following were a party (each a "fund related party"):

- the trust
- an officer of the trust
- a related fund
- an officer of any related fund
- Pioneer or PFD
- an officer of Pioneer or PFD
- any affiliate of Pioneer or PFD
- an officer of any such affiliate

During the calendar years 2001 and 2002, none of the Independent Trustees, nor any of their immediate family members, had any relationship (the value of which exceeded \$60,000) with any fund related party, including, but not limited to, relationships arising out of (i) the payments for property and services, (ii) the provision of legal services, (iii) the provision of investment banking services (other than as a member of the underwriting syndicate) or (iv) the provision of consulting services, except that Mr. West, an Independent Trustee, is Senior Counsel to Sullivan & Cromwell and acts as counsel to the Independent Trustees and the Independent Trustees of the other Pioneer Funds. The aggregate compensation paid to Sullivan & Cromwell by the trust and the other Pioneer Funds was approximately \$60,000 in 2001 and 2002, respectively.

During the calendar years 2001 and 2002, none of the Independent Trustees, nor any of their immediate family members, served as a member of a board of directors on which an officer of any of the following entities also serves as a director:

- Pioneer
- PFD
- UniCredito
- any other entity in a control relationship with Pioneer or PFD

None of the trust's Trustees or officers has any arrangement with any other person pursuant to which that Trustee or officer serves on the Board of Trustees. During the calendar years 2001 and 2002, none of the Independent Trustees, nor any of their immediate family members, had any position, including as an officer, employee, director or partner, with any of the following:

- the trust
- any related fund
- Pioneer
- PFD
- any affiliated person of the trust, Pioneer or PFD
- UniCredito
- any other entity in a control relationship to the trust, Pioneer or PFD

FACTORS CONSIDERED BY THE INDEPENDENT TRUSTEES IN APPROVING THE INVESTMENT ADVISORY AGREEMENT.

The 1940 Act requires that the trust's Investment Advisory Agreement be approved annually by both the Board of Trustees and a majority of the Independent

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Trustees voting separately. The Independent Trustees have determined that the terms of the trust's Investment Advisory Agreement are fair and reasonable and that the contract is in the trust's best interest. The Independent Trustees believe that the Investment Advisory Agreement will enable the trust to enjoy high quality investment advisory services at a cost they deem appropriate, reasonable and in the best interests of the trust and its shareholders. In making such determinations, the Independent Trustees met independently from the Interested Trustees of the trust and any officers of Pioneer or its affiliates. The Independent Trustees also relied upon the assistance of counsel to the Independent Trustees and counsel to the trust.

In evaluating the Investment Advisory Agreement, the Independent Trustees reviewed materials furnished by Pioneer, including information regarding Pioneer, its affiliates and their personnel, operations and financial condition. The Independent Trustees discussed with representatives of Pioneer the trust's proposed operations and Pioneer's ability to provide advisory and other services to the trust. The Independent Trustees also reviewed:

- |X| the experience of Pioneer in managing other portfolios with significant investments in below investment grade securities and the performance of such portfolios, as well as Pioneer's experience in managing municipal securities;
- |X| the experience of the investment advisory and other personnel who would be providing services to the trust and the historical quality of the services provided by Pioneer;
- |X| the fee charged by Pioneer for investment advisory services;
- |X| the trust's projected total operating expenses, and the Pioneer's agreement to limit the trust's expenses for three years; and
- |X| the investment performance, fees and total expenses of investment companies with similar objectives and strategies managed by other investment advisers.

The Independent Trustees considered the following as relevant to their recommendations: (1) the favorable history, reputation, qualification and background of Pioneer and UniCredito Italiano, as well as the qualifications of their personnel; (2) that the fee and expense ratios of the trust are reasonable given the quality of services expected to be provided and are comparable to or lower than the fees and expense ratios of similar investment companies, particularly other leverage investment companies investing in high yield municipal securities; and (3) the relative performance of other funds advised by Pioneer that invest a significant portion of their assets in below investment grade securities compared to other investment companies with similar objectives and unmanaged indices. The Independent Trustees deemed each of these factors to be relevant to their consideration of the trust's management contract.

CODE OF ETHICS

The trust and Pioneer have adopted a code of ethics under Rule 17j-1 of the 1940 Act which is applicable to officers, directors/trustees and designated employees of Pioneer and Pioneer Investment Management Limited ("PIML"). The code permits such persons to engage in personal securities transactions for their own accounts, including securities that may be purchased or held by the trust, and is designed to prescribe means reasonably necessary to prevent conflicts of interest from arising in connection with personal securities transactions. The code is on public file with and available from the SEC.

INVESTMENT ADVISER

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The trust has contracted with Pioneer to act as its investment adviser. Pioneer is an indirect, majority owned subsidiary of UniCredito. Pioneer is part of the global asset management group providing investment management and financial services to mutual funds, institutional and other clients. As of March 31, 2003, assets under management were approximately \$112 billion worldwide, including over \$23 billion in assets under management by Pioneer. Certain Trustees or officers of the trust are also directors and/or officers of certain of UniCredito's subsidiaries. Pioneer has entered into an agreement with its affiliate, PIML, pursuant to which PIML provides certain services and personnel to Pioneer.

As the trust's investment adviser, Pioneer provides the trust with investment research, advice and supervision and furnishes the trust with an investment program consistent with the trust's investment objectives and policies, subject to the supervision of the trust's Trustees. Pioneer determines what portfolio securities will be purchased or sold, arranges for the placing of orders for the purchase or sale of portfolio securities, selects brokers or dealers to place those orders, maintains books and records with respect to the trust's securities transactions, and reports to the Trustees on the trust's investments and performance.

Under the investment advisory agreement, Pioneer is not liable to the trust except by willful malfeasance, bad faith, gross negligence or reckless disregard of its duties and obligations. In providing its services to the trust, Pioneer may draw upon the research and investment management expertise of Pioneer's affiliate, PIML.

The trust has retained Princeton Administrators, LP to act as administrator of the trust. Pursuant to an administration agreement, the trust pays Princeton Administrator LP a fee at a monthly rate equal to the greater of \$10,000 or 0.07% of the trust's average daily managed assets.

COMPENSATION AND EXPENSES

Under the investment advisory agreement, the trust will pay to Pioneer monthly, as compensation for the services rendered and expenses paid by it, a fee equal on an annual basis to 0.60% of the trust's average daily managed assets. Because the fees paid to Pioneer are determined on the basis of the trust's managed assets, Pioneer's interest in determining whether to leverage the trust may differ from the interests of the trust. The advisory fee payable by the trust to Pioneer is higher than the fees paid by most U.S. investment companies.

The trust's average weekly managed assets are determined for the purpose of calculating the advisory fee by taking the average of all the weekly determinations of total assets during a given calendar month. The fee is payable for each calendar month as soon as practicable after the end of that month.

Under the terms of its investment advisory agreement with the trust, Pioneer pays all the operating expenses, including executive salaries and the rental of office space, relating to its services for the trust, with the exception of the following, which are to be paid by the trust: (a) charges and expenses for fund accounting, pricing and appraisal services and related overhead, including, to the extent such services are performed by personnel of Pioneer or its affiliates, office space and facilities and personnel compensation, training and benefits; (b) the charges and expenses of auditors; (c) the charges and expenses of any administrator, custodian, transfer agent, plan agent, dividend disbursing agent and registrar appointed by the trust; (d) issue and transfer taxes chargeable to the trust in connection with securities transactions to which the trust is a party; (e) insurance premiums, interest charges, expenses in connection with any preferred shares, dues and fees for membership in trade associations and all taxes and corporate fees payable by the trust to federal, state or other governmental agencies; (f) fees and expenses involved in

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

registering and maintaining registrations of the trust and/or its shares with federal regulatory agencies, state or blue sky securities agencies and foreign jurisdictions, including the preparation of prospectuses and statements of additional information for filing with such regulatory authorities; (g) all expenses of shareholders' and Trustees' meetings and of preparing, printing and distributing prospectuses, notices, proxy statements and all reports to shareholders and to governmental agencies; (h) charges and expenses of legal counsel to the trust and the Trustees; (i) compensation of those Trustees of the trust who are not affiliated with or interested persons of Pioneer or the trust (other than as Trustees); (j) the cost of preparing and printing share certificates; (k) interest on borrowed money, if any; (l) the fees and other expenses of listing the trust's shares on the New York Stock Exchange or any other national stock exchange; and (m) any other expense that the trust, Pioneer or any other agent of the trust may incur (I) as a result of a change in the law or regulations, (II) as a result of a mandate from the Board of Trustees with associated costs of a character generally assumed by similarly structured investment companies or (III) that is similar to the expenses listed above, and that is approved by the Board of Trustees (including a majority of the Trustees who are not affiliates of Pioneer) as being an appropriate expense of the trust. In addition, the trust will pay all brokers' and underwriting commissions chargeable to the trust in connection with securities transactions to which the trust is a party.

[PROXY VOTING]

The trust's Trustees have delegated to Pioneer the authority to vote proxies on behalf of the trust. The Trustees have approved the proxy voting guidelines of Pioneer and will review the guidelines and suggest changes they deem advisable. A summary of Pioneer's proxy voting guidelines and proxy voting procedures are attached to this Statement of Additional Information as Appendix B.]

DURATION AND TERMINATIONS; NONEXCLUSIVE SERVICES

The economic terms of the investment advisory agreement were approved by the trust's Board of Trustees at a meeting of the Board of Trustees held on July 8, 2003, including a majority of the Trustees who are not parties to the agreement or interested persons of any such party (as such term is defined in the 1940 Act). The 1940 Act requires that the investment advisory agreement be approved by a majority of the trust's Board of Trustees, including a majority of the Trustees who are not interested persons as that term is defined in the 1940 Act, at an in person meeting of the Board of Trustees.

The investment advisory agreement was approved by the sole common shareholder of the trust as of July 14, 2003.

Unless earlier terminated as described below, the investment advisory agreement will remain in effect for two years from the date of its execution and from year to year thereafter if approved annually (i) by a majority of the Independent Trustees of the trust and (ii) by the Board of Trustees or by a majority of the outstanding voting securities of the trust. The investment advisory agreement may be terminated without penalty on 60 days' written notice by either party thereto or by a vote of a majority of the outstanding voting securities of the trust and will terminate in the event it is assigned (as defined in the 1940 Act). The services of Pioneer are not deemed to be exclusive, and nothing in the relevant agreement will prevent Pioneer or its affiliates from providing similar services to other investment companies and other clients (whether or not their investment objectives and policies are similar to those of the trust) or from engaging in other activities.

POTENTIAL CONFLICTS OF INTEREST

The trust is managed by Pioneer which also serves as investment adviser to other

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Pioneer funds and other accounts with investment objectives identical or similar to those of the trust. Securities frequently meet the investment objectives of the trust, the other Pioneer funds and such other accounts. In such cases, the decision to recommend a purchase to one fund or account rather than another is based on a number of factors. The determining factors in most cases are the amount of securities of the issuer then outstanding, the value of those securities and the market for them. Other factors considered in the investment recommendations include other investments which each fund or account presently has in a particular industry and the availability of investment funds in each fund or account.

It is possible that at times identical securities will be held by more than one fund and/or account. However, positions in the same issue may vary and the length of time that any fund or account may choose to hold its investment in the same issue may likewise vary. To the extent that more than one of the Pioneer funds or a private account managed by Pioneer seeks to acquire the same security at about the same time, the trust may not be able to acquire as large a position in such security as it desires or it may have to pay a higher price for the security. Similarly, the trust may not be able to obtain as large an execution of an order to sell or as high a price for any particular portfolio security if Pioneer decides to sell on behalf of another account the same portfolio security at the same time. On the other hand, if the same securities are bought or sold at the same time by more than one fund or account, the resulting participation in volume transactions could produce better executions for the trust. In the event more than one account purchases or sells the same security on a given date, the purchases and sales will normally be made as nearly as practicable on a pro rata basis in proportion to the amounts desired to be purchased or sold by each account. Although the other Pioneer funds may have the same or similar investment objectives and policies as the trust, their portfolios do not generally consist of the same investments as the trust or each other, and their performance results are likely to differ from those of the trust.

ADDITIONAL INFORMATION CONCERNING THE AUCTIONS FOR THE PREFERRED SHARES

RATING AGENCY GUIDELINES

[To be completed by amendment.]

PORTFOLIO TRANSACTIONS

All orders for the purchase or sale of portfolio securities are placed on behalf of the trust by Pioneer pursuant to authority contained in the trust's investment advisory agreement. Securities purchased and sold on behalf of the trust normally will be traded in the over-the-counter market on a net basis (i.e., without commission) through dealers acting for their own account and not as brokers or otherwise through transactions directly with the issuer of the instrument. The cost of securities purchased from underwriters includes an underwriter's commission or concession, and the prices at which securities are purchased and sold from and to dealers include a dealer's markup or markdown. Pioneer normally seeks to deal directly with the primary market makers unless, in its opinion, better prices are available elsewhere. Some securities are purchased and sold on an exchange or in over-the-counter transactions conducted on an agency basis involving a commission. Pioneer seeks to obtain the best execution on portfolio trades. The price of securities and any commission rate paid are always factors, but frequently not the only factors, in judging best execution. In selecting brokers or dealers, Pioneer considers various relevant factors, including, but not limited to, the size and type of the transaction; the nature and character of the markets for the security to be purchased or sold; the execution efficiency, settlement capability and financial condition of the dealer; the dealer's execution services rendered on a continuing basis; and the reasonableness of any dealer spreads.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Pioneer may select broker-dealers that provide brokerage and/or research services to the trust and/or other investment companies or other accounts managed by Pioneer. In addition, consistent with Section 28(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), if Pioneer determines in good faith that the amount of commissions charged by a broker-dealer is reasonable in relation to the value of the brokerage and research services provided by such broker, the trust may pay commissions to such broker-dealer in an amount greater than the amount another firm may charge. Such services may include advice concerning the value of securities; the advisability of investing in, purchasing or selling securities; the availability of securities or the purchasers or sellers of securities; providing stock quotation services, credit rating service information and comparative fund statistics; furnishing analyses, electronic information services, manuals and reports concerning issuers, industries, securities, economic factors and trends, portfolio strategy, and performance of accounts and particular investment decisions; and effecting securities transactions and performing functions incidental thereto (such as clearance and settlement). Pioneer maintains a listing of broker-dealers who provide such services on regular basis. However, because many transactions on behalf of the trust and other investment companies or accounts managed by Pioneer are placed with broker-dealers (including broker-dealers on the listing) without regard to the furnishing of such services, it is not possible to estimate the proportion of such transactions directed to such dealers solely because such services were provided. Pioneer believes that no exact dollar value can be calculated for such services.

The research received from broker-dealers may be useful to Pioneer in rendering investment management services to the trust as well as other investment companies or other accounts managed by Pioneer, although not all such research may be useful to the trust. Conversely, such information provided by brokers or dealers who have executed transaction orders on behalf of such other accounts may be useful to Pioneer in carrying out its obligations to the trust. The receipt of such research has not reduced Pioneer's normal independent research activities; however, it enables Pioneer to avoid the additional expenses which might otherwise be incurred if it were to attempt to develop comparable information through its own staff.

In circumstances where two or more broker-dealers offer comparable prices and executions, preference may be given to a broker-dealer which has sold shares of the trust as well as shares of other investment companies managed by Pioneer. This policy does not imply a commitment to execute all portfolio transactions through all broker-dealers that sell shares of the trust. The Pioneer funds have entered into third-party brokerage and/or expense offset arrangements to reduce the funds' total operating expenses. Pursuant to third-party brokerage arrangements, certain of the funds that invest primarily in U.S. equity securities may incur lower custody fees by directing brokerage to third-party broker-dealers. Pursuant to expense offset arrangements, the funds incur lower transfer agency expenses by maintaining their cash balances with the custodian.

The Board of Trustees periodically reviews Pioneer's performance of its responsibilities in connection with the placement of portfolio transactions on behalf of the trust.

FEDERAL INCOME TAX MATTERS

The following is a summary discussion of certain U.S. federal income tax consequences that may be relevant to a shareholder acquiring, holding and disposing of preferred shares of the trust. This discussion addresses only U.S. federal income tax consequences to U.S. shareholders who hold their shares as capital assets and does not address all of the U.S. federal income tax consequences that may be relevant to particular shareholders in light of their individual circumstances. This discussion also does not address the tax consequences to shareholders who are subject to special rules, including,

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

without limitation, financial institutions, insurance companies, dealers in securities, foreign shareholders, tax-exempt or tax-deferred plans, accounts, or entities, or investors who engage in constructive sale or conversion transactions. In addition, the discussion does not address state, local or foreign tax consequences, and it does not address any tax consequences other than U.S. federal income tax consequences. The discussion reflects applicable tax laws of the United States as of the date of this statement of additional information, which tax laws may be changed or subject to new interpretations by the courts, Treasury or the Internal Revenue Services ("IRS") retroactively or prospectively. No attempt is made to present a detailed explanation of all U.S. federal income tax concerns affecting the trust or its shareholders, and the discussion set forth herein does not constitute tax advice. Investors are urged to consult their own tax advisers to determine the specific tax consequences to them of investing in the trust, including the applicable federal, state, local and foreign tax consequences to them and the effect of possible changes in tax laws.

The trust intends to elect to be treated and to qualify each year as a "regulated investment company" under Subchapter M of the Code so that it generally will not pay U.S. federal income tax on income and capital gains distributed to shareholders. In order to qualify as a regulated investment company under Subchapter M of the Code, which qualification this discussion assumes, the trust must, among other things, derive at least 90% of its gross income for each taxable year from dividends, interest, payments with respect to securities loans, gains from the sale or other disposition of stock, securities or foreign currencies, or other income (including gains from options, futures and forward contracts) derived with respect to its business of investing in such stock, securities or currencies (the 90% income test") and satisfy certain quarterly asset diversification requirements. For purposes of the 90% income test, the character of income earned by certain entities in which the trust invests that are not treated as corporations for U.S. federal income tax purposes (e.g., partnerships or trusts) will generally pass through to the trust. Consequently, the trust may be required to limit its equity investments in such entities that earn fee income, rental income or other nonqualifying income.

If the trust qualifies as a regulated investment company and, for each taxable year, it distributes to its shareholders an amount equal to or exceeding the sum of (i) 90% of its "investment company taxable income" as that term is defined in the Code (which includes, among other things, dividends, taxable interest, and the excess of any net short-term capital gains over net long-term capital losses, as reduced by certain deductible expenses) and (ii) 90% of the excess of its gross tax-exempt interest, if any, over certain disallowed deductions, the trust generally will not be subject to U.S. federal income tax on any income of the trust, including long-term capital gains, distributed to shareholders. However, if the trust retains any investment company taxable income or "net capital gain" (the excess of net long-term capital gain over net short-term capital loss), it generally will be subject to U.S. federal income tax at regular corporate rates on the amount retained. The trust intends to distribute at least annually all or substantially all of its investment company taxable income, net tax-exempt interest, and net capital gain. If for any taxable year, the trust did not qualify as a regulated investment company, it would be treated as a corporation subject to U.S. federal income tax and all distributions out of earnings and profits would be taxed to shareholders as ordinary income. In addition, the trust could be required to recognize unrealized gains, pay taxes and make distributions (which could be subject to interest charges) before requalifying as a regulated investment company.

Under the Code, the trust will be subject to a nondeductible 4% U.S. federal excise tax on a portion of its undistributed taxable ordinary income and capital gains if it fails to meet certain distribution requirements with respect to each calendar year. The trust intends to make distributions in a timely manner and

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

accordingly does not expect to be subject to the excise tax.

Commencing within approximately 90 days from the date of the filing of the prospectus, the trust intends to declare a dividend from all or a portion of its net investment income monthly. The trust intends to distribute any net short- and long-term capital gains at least annually. Dividends from income and/or capital gains may also be paid at such other times as may be necessary for the trust to avoid U.S. federal income or excise tax.

In accordance with its investment objectives, the trust invests its assets in a manner which will provide as large a portion of tax-exempt income as is consistent with the protection of shareholders' capital. The trust may from time to time invest a portion of its portfolio in short-term taxable obligations and may engage in transactions generating gain or income which is not tax-exempt, e.g., purchase non-municipal securities, sell or lend portfolio securities, enter into repurchase agreements, dispose of rights to when-issued securities prior to issuance, acquire any debt obligation at a market discount, acquire certain stripped tax-exempt obligations or their coupons or enter into swaps, options and futures transactions. The trust's distributions from such gain or income will not be "exempt-interest dividends", as described below, and accordingly will be taxable.

The Code permits tax-exempt interest received by the trust to flow through as tax-exempt "exempt-interest dividends" to the trust's shareholders, provided that the trust qualifies as a regulated investment company and at least 50% of the value of the trust's total assets at the close of each quarter of its taxable year consists of tax-exempt obligations, i.e., obligations described in Section 103(a) of the Code. That part of the trust's net investment income, which is attributable to interest from tax-exempt obligations and which is distributed to shareholders will be designated by the trust as an "exempt-interest dividend" under the Code. Exempt-interest dividends are excluded from a shareholder's gross income under the Code but are nevertheless required to be reported on the shareholder's U.S. federal income tax return. The percentage of income designated as tax-exempt is applied uniformly to all distributions made during each taxable year and may differ from the actual tax-exempt percentage earned by the trust during any particular month. That portion of the trust's dividends and distributions not designated as tax-exempt will be taxable as described below.

Exempt-interest dividends derived from interest on certain "private activity bonds" will be items of tax preference that are subject to U.S. federal alternative minimum tax for individuals or entities that are subject to such tax, and all exempt-interest dividends may result in or increase a corporate shareholder's liability for the U.S. federal alternative minimum tax. The trust may not be an appropriate investment for persons who are "substantial users" of facilities financed by industrial revenue or private activity bonds or persons related to substantial users.

Interest on indebtedness incurred (directly or indirectly) by a shareholder to purchase or carry shares of the trust will not be deductible for U.S. federal income tax purposes to the extent it is deemed under the Code and applicable regulations to relate to exempt-interest dividends received from the trust. Shareholders receiving social security or certain railroad retirement benefits may be subject to U.S. federal income tax on a portion of such benefits as a result of receiving investment income, including exempt-interest dividends and other distributions paid by the trust.

Unless a shareholder is ineligible to participate or elects otherwise, all distributions from the trust will be automatically reinvested in additional full and fractional shares of the trust. For U.S. federal income tax purposes, all dividends, other than exempt-interest dividends, generally are taxed as described below whether a shareholder takes them in cash or reinvests them in

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

additional shares of the trust. In general, assuming that the trust has sufficient earning and profits, dividends from investment company taxable income, are taxable as ordinary income and dividends from net capital gain, if any, that are designated as capital gain dividends are taxable as long-term capital gains for U.S. federal income tax purposes without regard to the length of time the shareholder has held shares of the trust. Distributions by the trust in excess of the trust's current and accumulated earnings and profits will be treated as a return of capital to the extent of (and in reduction of) the shareholder's tax basis in its shares and any such amount in excess of that basis will be treated as gain from the sale of shares, as discussed below. The U.S. federal income tax status of all distributions will be reported to shareholders annually.

The trust does not expect to receive any "qualified dividend income" as that term is defined in Section 1(h)(11) of the Code from its investments, and thus dividends distributed to shareholders attributable to the investment company taxable income of the trust (if any) will not qualify for the maximum 15% tax rate on dividends under the Jobs and Growth Tax Relief Reconciliation Act of 2003 enacted on May 28, 2003. Capital gain dividends distributed by the trust to individual shareholders generally will qualify for the maximum 15% tax rate on long-term capital gains under such Act. Absent further legislation, the maximum 15% tax rate on long-term capital gains will cease to apply to taxable years beginning after December 31, 2008.

Distributions to shareholders in the form of additional trust shares may be tax-exempt or taxable as described above. In the case of newly issued shares of the trust (i.e. when there is a market premium), the amount of the distribution and the basis for federal income tax purposes of the shares to the shareholders will be equal to the fair market value of the shares on the distribution date. In the case of shares acquired through open market purchases (i.e. when there is a market discount), the amount of the distribution and the basis to shareholders will be equal to the cash they would have received had they elected to receive cash.

If the trust retains any net capital gain for a taxable year, the trust may designate the retained amount as undistributed capital gains in a notice to shareholders who, if subject to U.S. federal income tax on long-term capital gains, (i) will be required to include in income for U.S. federal income tax purposes, as long-term capital gain, their proportionate shares of such undistributed amount, and (ii) will be entitled to credit their proportionate shares of the tax paid by the trust on the undistributed amount against their U.S. federal income tax liabilities, if any, and to claim refunds to the extent the credit exceeds such liabilities.

Although dividends generally will be treated as distributed when paid, any dividend declared by the trust as of a record date in October, November or December and paid during the following January will be treated for U.S. federal income tax purposes as received by shareholders on December 31 of the calendar year in which it is declared. In addition, certain other distributions made after the close of a taxable year of the trust may be "spilled back" and treated as paid by the trust (except for purposes of the 4% excise tax) during such taxable year. In such case, shareholders generally will be treated as having received such dividends in the taxable year in which the distributions were actually made. The trust's dividends and distributions will generally not qualify to any material extent for any dividends-received deduction that might otherwise be available for certain dividends received by shareholders that are corporations. In addition, no portion of the trust's distributions from net capital gain will qualify for this deduction.

If the trust invests in certain pay-in-kind securities, zero coupon securities, deferred interest securities or, in general, any other securities with original issue discount (or with market discount if the trust elects to include market

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

discount in income currently), the trust generally must accrue income on such investments for each taxable year, which generally will be prior to the receipt of the corresponding cash payments. However, the trust must distribute, at least annually, all or substantially all of its investment company taxable income and net tax-exempt interest, including such accrued income, to shareholders to qualify as a regulated investment company under the Code and avoid U.S. federal income and excise taxes. Therefore, the trust may have to dispose of its portfolio securities under disadvantageous circumstances to generate cash, or may have to borrow the cash, to satisfy distribution requirements.

The trust may invest to a significant extent in debt obligations that are in the lowest rating categories or are unrated, including debt obligations of issuers not currently paying interest or who are in default. Investments in debt obligations that are at risk of or in default present special tax issues for the trust. Tax rules are not entirely clear about issues such as when the trust may cease to accrue interest, original issue discount or market discount, when and to what extent deductions may be taken for bad debts or worthless securities, how payments received on obligations in default should be allocated between principal and income and whether exchanges of debt obligations in a workout context are taxable. These and other issues will be addressed by the trust, in the event it invests in such securities, in order to seek to ensure that it distributes sufficient income to preserve its status as a regulated investment company and does not become subject to U.S. federal income or excise tax.

If the trust utilizes leverage through borrowing or issuing preferred shares, a failure by the trust to meet the asset coverage requirements imposed by the 1940 Act or by any rating organization that has rated such leverage, or additional restrictions that may be imposed by certain lenders on the payment of dividends or distributions potentially could limit or suspend the trust's ability to make distributions on its common shares. Such a limitation or suspension or limitation could prevent the trust from distributing at least 90% of its investment company taxable income and net tax-exempt interest as is required under the Code and therefore might jeopardize the trust's qualification for taxation as a regulated investment company under the Code and/or might subject the trust to the 4% excise tax discussed above. Upon any failure to meet such asset coverage requirements, the trust may, in its sole discretion, purchase or redeem shares of preferred stock in order to maintain or restore the requisite asset coverage and avoid the adverse consequences to the trust and its shareholders of failing to satisfy the distribution requirement. There can be no assurance, however, that any such action would achieve these objectives. The trust will endeavor to avoid restrictions on its ability to distribute dividends.

For U.S. federal income tax purposes, the trust is permitted to carry forward an unused net capital loss for any year to offset its capital gains, if any, for up to eight years following the year of the loss. To the extent subsequent capital gains are offset by such losses, they would not result in U.S. federal income tax liability to the trust and are not expected to be distributed as such to shareholders.

At the time of an investor's purchase of trust shares, a portion of the purchase price may be attributable to realized or unrealized appreciation in the trust's portfolio or undistributed taxable income of the trust. Consequently, subsequent distributions by the trust with respect to these shares from such appreciation or income may be taxable to such investor even if the trading value of the investor's shares is, as a result of the distributions, reduced below the investor's cost for such shares and the distributions economically represent a return of a portion of the investment.

Sales and other dispositions of trust shares are taxable events for shareholders that are subject to tax. Shareholders should consult their own tax advisers with reference to their individual circumstances to determine whether any particular

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

transaction in trust shares is properly treated as a sale for tax purposes, as the following discussion assumes, and the tax treatment of any gains or losses recognized in such transactions. In general, if trust shares are sold, the shareholder will recognize gain or loss equal to the difference between the amount realized on the sale and the shareholder's adjusted basis in the shares sold. Such gain or loss generally will be treated as long-term capital gain or loss if the shares sold were held for more than one year and otherwise generally will be treated as short-term capital gain or loss. Any loss realized by a shareholder upon the sale or other disposition of shares with a tax holding period of six months or less will be disallowed to the extent of any exempt-interest dividends paid with respect to such shares, and any portion of such loss that exceeds the amount disallowed will be treated as a long-term capital loss to the extent of any amounts treated as distributions of long-term capital gain with respect to such shares. Losses on sales or other dispositions of shares may be disallowed under "wash sale" rules in the event the selling shareholder makes other investments in the trust (including those made pursuant to reinvestment of dividends and/or capital gain distributions) within a period of 61 days beginning 30 days before and ending 30 days after a redemption or other disposition of shares. In such a case, the disallowed portion of any loss generally would be included in the U.S. federal tax basis of the shares acquired in the other investments. If shares are sold after tax-exempt income is accrued but before it is paid as a dividend, the sales price generally will reflect the accrued income, which will increase the taxable gain (or reduce the loss) on the sale, even though the income would have been exempt from tax if distributed as a dividend prior to the sale.

Under recently promulgated Treasury regulations, if a shareholder recognizes a loss with respect to shares of \$2 million or more for an individual shareholder, or \$10 million or more for a corporate shareholder, in any single taxable year (or a greater amount over a combination of years), the shareholder must file with the IRS a disclosure statement on Form 8886. Direct shareholders of portfolio securities are in many cases excepted from this reporting requirement but, under current guidance, shareholders of regulated investment companies are not excepted. The fact that a loss is reportable under these regulations does not affect the legal determination of whether or nor the taxpayer's treatment of the loss is proper. Shareholders should consult with their tax advisers to determine the applicability of these regulations in light of their individual circumstances.

Options written or purchased and futures contracts entered into by the trust on certain securities or indices may cause the trust to recognize gains or losses from marking-to-market even though such options may not have lapsed, been closed out, or exercised, or such futures contracts may not have been performed or closed out. The tax rules applicable to these contracts may affect the characterization of some capital gains and losses realized by the trust as long-term or short-term. Additionally, the trust may be required to recognize gain if an option, futures contract, short sale or other transaction that is not subject to the mark-to-market rules is treated as a "constructive sale" of an "appreciated financial position" held by the trust under Section 1259 of the Code. Any net mark-to-market gains and/or gains from constructive sales may also have to be distributed to satisfy the distribution requirements referred to above even though the trust may receive no corresponding cash amounts, possibly requiring the disposition of portfolio securities or borrowing to obtain the necessary cash. Losses on certain options or futures contracts and/or offsetting positions (portfolio securities or other positions with respect to which the trust's risk of loss is substantially diminished by one or more options or futures contracts) may also be deferred under the tax straddle rules of the Code, which may also affect the characterization of capital gains or losses from straddle positions and certain successor positions as long-term or short-term. Certain tax elections may be available that would enable the trust to ameliorate some adverse effects of the tax rules described in this paragraph. The tax rules applicable to options, futures and straddles may affect the amount, timing and

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

character of the trust's income and gains or losses and hence of its distributions to shareholders.

The exclusion from gross income of exempt-interest dividends for U.S. federal income tax purposes does not necessarily result in exclusion under the tax laws of any state or local taxing authority, which vary with respect to the taxation of such income. Many states will exempt from tax that portion of an exempt-interest dividend which represents interest received by the trust on that state's securities, subject in some cases to compliance with concentration and/or reporting requirements, which the trust makes no commitment to seek to satisfy. However, the trust will report annually to its shareholders the percentage of interest income received by the trust during the preceding year on federally tax-exempt obligations indicating, on a state-by-state basis only, the source of such income. Each shareholder is advised to consult his own tax adviser regarding the exclusion from gross income, if any, of exempt-interest dividends under the state and local tax laws applicable to the shareholder.

The federal income tax treatment of the trust's investment in transactions involving swaps, caps, floors, and collars is uncertain and may be subject to recharacterization by the IRS. To the extent the tax treatment of such securities or transactions differs from the tax treatment expected by the trust, the timing or character of income recognized by the trust could be affected, requiring the trust to purchase or sell securities, or otherwise change its portfolio, in order to comply with the tax rules applicable to regulated investment companies under the Code.

The IRS has taken the position that if a regulated investment company has two classes or more of shares, it must designate distributions made to each class in any year as consisting of no more than such class's proportionate share of particular types of income, including tax-exempt interest, net capital gains, and other income subject to federal income tax. A class's proportionate share of a particular type of income is determined according to the percentage of total dividends paid by the regulated investment company to such class. Consequently, if both common shares and preferred shares are outstanding, the trust intends to designate distributions made to the classes of particular types of income in accordance with the classes' proportionate shares of such income. Thus, the trust will designate exempt-interest dividends, capital gain dividends, and other taxable dividends in a manner that allocates such income between the holders of common shares and preferred shares in proportion to the total dividends paid to each class during the taxable year, or otherwise as required by applicable law.

Federal law requires that the trust withhold (as "backup withholding") 28% of reportable payments, including dividends (other than exempt-interest dividends), capital gain distributions and the proceeds of redemptions and exchanges or repurchases of trust shares, paid to shareholders who have not complied with IRS regulations. In order to avoid this withholding requirement, shareholders must certify on their Account Applications, or on separate IRS Forms W-9, that the Social Security Number or other Taxpayer Identification Number they provide is their correct number and that they are not currently subject to backup withholding, or that they are exempt from backup withholding. The trust may nevertheless be required to withhold if it receives notice from the IRS or a broker that the number provided is incorrect or backup withholding is applicable as a result of previous underreporting of interest or dividend income. Backup withholding may be inapplicable for any year in which the trust reasonably estimates that at least 95% of its dividends paid with respect to such year are exempt-interest dividends.

The description of certain U.S. federal tax provisions above relates only to U.S. federal income tax consequences for shareholders who are U.S. persons, i.e., U.S. citizens or residents or U.S. corporations, partnerships, trusts or estates, and who are subject to U.S. federal income tax. This description does

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

not address the special tax rules that may be applicable to particular types of investors, such as financial institutions, insurance companies, securities dealers, or tax-exempt or tax-deferred plans, accounts or entities. Investors other than U.S. persons may be subject to different U.S. tax treatment, including a non-resident alien U.S. withholding tax at the rate of 30% or at a lower treaty rate on amounts treated as ordinary dividends from the trust and, unless an effective IRS Form W-8BEN or other authorized withholding certificate is on file, to backup withholding at the rate of 28% on certain other payments from the trust. Shareholders should consult their own tax advisers on these matters and on state, local and other applicable tax laws.

PERFORMANCE-RELATED, COMPARATIVE AND OTHER INFORMATION

PERFORMANCE-RELATED INFORMATION. From time to time, in advertisements, in sales literature or in reports to shareholders, the past performance of the trust may be illustrated and/or compared with that of other investment companies with similar investment objectives and to municipal securities or other relevant indices. For example, yield or total return of the trust's shares may be compared to averages or rankings prepared by Lipper, Inc., a widely recognized independent service which monitors mutual fund performance; the Lehman Brothers Municipal Bond Index; or other comparable indices or investment vehicles. In addition, the performance of the trust's shares may be compared to alternative investment or savings vehicles and/or to indices or indicators of economic activity, e.g., inflation or interest rates. The trust may also include securities industry or comparative performance information generally and in advertising or materials marketing the trust's shares. Performance rankings and listings reported in newspapers or national business and financial publications, such as Barron's, Business Week, Consumers Digest, Consumer Reports, Financial World, Forbes, Fortune, Investors Business Daily, Kiplinger's Personal Finance Magazine, Money Magazine, New York Times, Smart Money, USA Today, U.S. News and World Report, The Wall Street Journal and Worth, may also be cited (if the trust is listed in any such publication) or used for comparison, as well as performance listings and rankings from various other sources including Bloomberg Financial Markets, CDA/Wiesenberger, Donoghue's Mutual Fund Almanac, Ibbotson Associates, Investment Company Data, Inc., Johnson's Charts, Kanon Bloch Carre and Co., Lipper, Inc., Micropal, Inc., Morningstar, Inc., Schabacker Investment Management and Towers Data Systems, Inc. In addition, from time to time quotations from articles from financial publications such as those listed above may be used in advertisements, in sales literature or in reports to shareholders of the trust.

The trust may also present, from time to time, historical information depicting the value of a hypothetical account in one or more classes of the trust since inception.

Past performance is not indicative of future results. At the time common shareholders sell their shares, they may be worth more or less than their original investment. At any time in the future, yields and total return may be higher or lower than past yields and total return, and there can be no assurance that any historical results will continue.

PIONEER. From time to time, Pioneer or the trust may use, in advertisements or information furnished to present or prospective shareholders, information regarding Pioneer including, without limitation, information regarding Pioneer's investment style, countries of operation, organization, professional staff, clients (including other registered investment companies), assets under management and performance record. These materials may refer to opinions or rankings of Pioneer's overall investment management performance contained in third-party reports or publications. Pioneer's U.S. mutual fund investment history includes creating in 1928 one of the first mutual funds. Pioneer has traditionally served a mutual fund and an institutional clientele.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Advertisements for the trust may make reference to certain other open- or closed-end investment companies managed by Pioneer.

As of 5/31/03, 10-year investment-grade municipal bonds were yielding approximately 92% of the taxable yield of 10-year U.S. Treasury securities, vs. the average since 1996 of 79% of the taxable yield of the 10-year U.S. Treasury securities. High yield municipal bonds are also currently trading with historically wide spreads and attractive valuations relative to investment grade municipals. High yield municipals have also shown low correlations to other asset classes, including corporate bonds, U.S. Treasury bonds and equity securities, potentially making them attractive portfolio diversifiers.¹

1 10-year U.S. Treasuries represented by Merrill Lynch Treasuries 10-yr. Index. Corporate bonds offer a fixed principal value and a fixed rate of return if held to maturity. Equity investments offer a higher rate of return, but may be more volatile and riskier than fixed income investments.

SPREAD BETWEEN HIGH YIELD MUNICIPAL SECURITIES AND INVESTMENT GRADE MUNICIPAL SECURITIES
10/31/95 - 5/31/03

As of May 31, 2003, spreads between high yield and investment grade municipal bonds were approximately twice their historical (1995-2003) average (see chart below).

[Table appears here indicating the spread between investment and below investment grade municipal securities from 10/31/95 through 5/31/03]

PAST PERFORMANCE DOES NOT GUARANTEE FUTURE RESULTS. Source: Pioneer research. Municipal bonds represented by Lehman High Yield Municipal Bond Index and U.S. Municipal Bond Index and U.S. Municipal Bond Index, respectively. Both are unmanaged, measuring the performance of their respective sectors. It is not possible to invest directly in an index. Below-investment grade securities grade securities may be more volatile and riskier than investment grade securities. Chart prepared by Pioneer.

AFTER TAX YIELD AND DEFAULT RATES
1970 - 2000

As the chart (below) shows, high yield municipals have offered greater after-tax income with significantly lower default rates than high yield corporate bonds. Average default rates on municipal bonds have historically been extremely low relative to corporate securities. In fact, of the 375,818 municipal issuers between 1970 and 2000, only 18 defaulted. Essential service revenue bonds, in particular, have offered safe havens, with no defaults recorded for Moody's-rated issuers during the same 30-year period.

[Table appears here showing the after tax yield and default rates on (i) investment grade municipal securities, (ii) investment grade corporate bonds, (iii) high yield municipal securities and (iv) high yield corporate bonds.]

PAST PERFORMANCE DOES NOT GUARANTEE FUTURE RESULTS. Source: Moody's Municipal Bond Default Study - November, 2002. 1-year average default rates for the period 1970 to 2000 (most recent data available). After-tax yield assumes maximum 35% federal tax bracket. Sectors represented by the Lehman High Yield Municipal Bond Index, Merrill Lynch High Yield Master II Index, Lehman U.S. Municipal Bond Index and Citigroup Corporate Bond Index, unmanaged measures of high yield municipal, high yield corporate, investment grade municipal and investment grade corporate bonds, respectively. It is not possible to invest directly in an index. Below-investment grade securities may be more volatile and riskier than investment grade securities. Chart prepared by Pioneer.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

The income from a municipal bond fund is generally exempt from regular federal income taxes, which can result in a higher after-tax return than a similar taxable investment. On a tax-equivalent basis, municipals have provided favorable yields to U.S. Treasuries. High yield municipal bond offered greater tax-equivalent yields than those of their taxable counterparts including high yield corporate bonds, as of May 31, 2003.

[Table here showing the after tax yield on on (i) investment grade municipal securities, (ii) investment grade corporate bonds, (iii) high yield municipal securities, (iv) high yield corporate bonds and 10 year U.S. Treasuries.]

PAST PERFORMANCE DOES NOT GUARANTEE FUTURE RESULTS. Source: Pioneer research. Assumes maximum 35% federal tax bracket. Sectors represented by the Lehman High Yield Municipal Bond, Merrill Lynch High Yield Master II, Lehman U.S. Municipal Bond, Citigroup Corporate Bond and Merrill Lynch Treasuries, 10-yr. Indices, unmanaged measures of high yield municipal, high yield corporate, investment grade municipal and investment grade corporate and 10-year U.S. Treasury bonds, respectively. It is not possible to invest directly in an index. Below-investment securities may be more volatile and riskier than investment grade securities. Treasury securities are guaranteed as to the timely payment of interest and principal; other asset classes shown are not. Corporate bonds offer a fixed principal value and a fixed rate of return if held to maturity. Chart prepared by Pioneer.

EXPERTS

The independent auditors of the trust, _____, located at _____, _____, _____, provide accounting, auditing and tax preparation services to the trust.

ADDITIONAL INFORMATION

A Registration Statement on Form N-2, including amendments thereto, relating to the shares offered hereby, has been filed by the trust with the SEC, Washington, D.C. The prospectus and this statement of additional information do not contain all of the information set forth in the Registration Statement, including any exhibits and schedules thereto. For further information with respect to the trust and the shares offered hereby, reference is made to the Registration Statement. Statements contained in the prospectus and this statement of additional information as to the contents of any contract or other document referred to are not necessarily complete and in each instance reference is made to the copy of such contract or other document filed as an exhibit to the Registration Statement, each such statement being qualified in all respects by such reference. A copy of the Registration Statement may be inspected without charge at the SEC's principal office in Washington, D.C., and copies of all or any part thereof may be obtained from the SEC upon the payment of certain fees prescribed by the SEC.

FINANCIAL STATEMENTS AND INDEPENDENT AUDITORS' REPORT

PIONEER MUNICIPAL HIGH INCOME TRUST STATEMENT OF ASSETS AND LIABILITIES

REPORT OF INDEPENDENT AUDITORS

APPENDIX A - DESCRIPTION OF RATINGS²

MOODY'S PRIME RATING SYSTEM

Moody's short-term ratings are opinions of the ability of issuers to honor senior financial obligations and contracts. Such obligations generally have an

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

original maturity not exceeding one year, unless explicitly noted.

Moody's employs the following designations, all judged to be investment grade, to indicate the relative repayment ability of rated issuers.

Prime-1: Issuers rated Prime-1 (or supporting institutions) have a superior ability for repayment of senior short-term debt obligations. Prime-1 repayment ability will often be evidenced by many of the following characteristics:

Leading market positions in well-established industries. High rates of return on funds employed.

Conservative capitalization structure with moderate reliance on debt and ample asset protection.

Broad margins in earnings coverage of fixed financial charges and high internal cash generation.

Well-established access to a range of financial markets and assured sources of alternate liquidity.

Prime-2: Issuers (or supporting institutions) rated Prime-2 have a strong ability to repay senior short-term debt obligations. This will normally be evidenced by many of the characteristics cited above, but to a lesser degree. Earnings trends and coverage ratios, while sound, may be more subject to variation than is the case for Prime-2 securities. Capitalization characteristics, while still appropriate, may be more affected by external conditions. Ample alternate liquidity is maintained.

Prime-3: Issuers (or supporting institutions) rated Prime-3 have an acceptable ability for repayment of senior short-term obligations. The effect of industry characteristics and market compositions may be more pronounced. Variability in earnings and profitability may result in changes in the level of debt-protection measurements and may require relatively high financial leverage. Adequate alternate liquidity is maintained.

Not Prime: Issuers rated Not Prime do not fall within any of the Prime rating categories.

In addition, in certain countries the prime rating may be modified by the issuer's or guarantor's senior unsecured long-term debt rating.

MOODY'S DEBT RATINGS

Aaa: Bonds and preferred stock, which are rated Aaa are judged to be of the best quality. They carry the smallest degree of investment risk and are generally referred to as "gilt edged." Interest payments are protected by a large or by an exceptionally stable margin and principal is secure. While the various protective elements are likely to change, such changes as can be visualized are most unlikely to impair the fundamentally strong position of such issues.

Aa: Bonds and preferred stock which are rated Aa are judged to be of high quality by all standards. Together with the Aaa group they comprise what are generally known as high-grade bonds. They are rated lower than the best bonds because margins of protection may not be as large as in Aaa securities or fluctuation of protective elements may be of greater amplitude or there may be other elements present which make the long-term risk appear somewhat larger than the Aaa securities.

A: Bonds and preferred stock which are rated A possess many favorable investment attributes and are to be considered as upper-medium-grade obligations. Factors giving security to principal and interest are considered adequate, but elements may be present which suggest a susceptibility to impairment some time in the future.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Baa: Bonds and preferred stock which are rated Baa are considered as medium-grade obligations (i.e., they are neither highly protected nor poorly secured). Interest payments and principal security appear adequate for the present but certain protective elements may be lacking or may be characteristically unreliable over any great length of time. Such bonds lack outstanding investment characteristics and in fact have speculative characteristics as well.

Ba: Bonds and preferred stock which are rated Ba are judged to have speculative elements; their future cannot be considered as well-assured. Often the protection of interest and principal payments may be very moderate, and thereby not well safeguarded during both good and bad times over the future. Uncertainty of position characterizes bonds in this class.

2The ratings indicated herein are believed to be the most recent ratings available at the date of this statement of additional information for the securities listed. Ratings are generally given to securities at the time of issuance. While the rating agencies may from time to time revise such ratings, they undertake no obligation to do so, and the ratings indicated do not necessarily represent ratings which will be given to these securities on the date of the trust's fiscal year-end.

B: Bonds and preferred stock which are rated B generally lack characteristics of the desirable investment. Assurance of interest and principal payments or of maintenance of other terms of the contract over any long period of time may be small.

Caa: Bonds and preferred stock which are rated Caa are of poor standing. Such issues may be in default or there may be present elements of danger with respect to principal or interest.

Ca: Bonds and preferred stock which are rated Ca represent obligations which are speculative in a high degree. Such issues are often in default or have other marked shortcomings.

C: Bonds and preferred stock which are rated C are the lowest rated class of bonds, and issues so rated can be regarded as having extremely poor prospects of ever attaining any real investment standing.

Moody's assigns ratings to individual debt securities issued from medium-term note ("MTN") programs, in addition to indicating ratings to MTN programs themselves. Notes issued under MTN programs with such indicated ratings are rated at issuance at the rating applicable to all pari passu notes issued under the same program, at the program's relevant indicated rating, provided such notes do not exhibit any of the characteristics listed below. For notes with any of the following characteristics, the rating of the individual note may differ from the indicated rating of the program:

- 1) Notes containing features which link the cash flow and/or market value to the credit performance of any third party or parties.
- 2) Notes allowing for negative coupons, or negative principal.
- 3) Notes containing any provision which could obligate the investor to make any additional payments.

Market participants must determine whether any particular note is rated, and if so, at what rating level.

Note: Moody's applies numerical modifiers 1, 2, and 3 in each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

that generic rating category.

STANDARD & POOR'S SHORT-TERM ISSUE CREDIT RATINGS

A-1: A short-term obligation rated A-1 is rated in the highest category by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitment on these obligations is extremely strong.

A-2: A short-term obligation rated A-2 is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor's capacity to meet its financial commitment on the obligation is satisfactory.

A-3: A short-term obligation rated A-3 exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

B: A short-term obligation rated B is regarded as having significant speculative characteristics. The obligor currently has the capacity to meet its financial commitment on the obligation; however, it faces major ongoing uncertainties which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.

C: A short-term obligation rated C is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation.

D: A short-term obligation rated D is in payment default. The D rating category is used when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless Standard & Poor's believes that such payments will be made during such grace period. The D rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action if payments on an obligation are jeopardized.

STANDARD & POOR'S LONG-TERM ISSUE CREDIT RATINGS

Issue credit ratings are based, in varying degrees, on the following considerations:

- o Likelihood of payment-capacity and willingness of the obligor to meet its financial commitment on an obligation in accordance with the terms of the obligation;
- o Nature of and provisions of the obligation;
- o Protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

The issue rating definitions are expressed in terms of default risk. As such, they pertain to senior obligations of an entity. Junior obligations are typically rated lower than senior obligations, to reflect the lower priority in bankruptcy, as noted above. (Such differentiation applies when an entity has both senior and subordinated obligations, secured and unsecured obligations, or operating company and holding company obligations.) Accordingly, in the case of junior debt, the rating may not conform exactly with the category definition.

AAA: An obligation rated AAA has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

AA: An obligation rated AA differs from the highest rated obligations only in small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.

A: An obligation rated A is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.

BBB: An obligation rated BBB exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

Obligations rated BB, B, CCC, CC, and C are regarded as having significant speculative characteristics. BB indicates the least degree of speculation and C the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.

BB: An obligation rated BB is less vulnerable to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.

B: An obligation rated B is more vulnerable to nonpayment than obligations rated BB, but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.

CCC: An obligation rated CCC is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.

CC: An obligation rated CC is currently highly vulnerable to nonpayment.

C: A subordinated debt or preferred stock obligation rated C is CURRENTLY HIGHLY VULNERABLE to nonpayment. The C rating may be used to cover a situation where a bankruptcy petition has been filed or similar action taken, but payments on this obligation are being continued. A C also will be assigned to a preferred stock issue in arrears on dividends or sinking fund payments, but that is currently paying.

D: An obligation rated D is in payment default. The D rating category is used when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless Standard & Poor's believes that such payments will be made during such grace period. The D rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action if payments on an obligation are jeopardized.

Plus (+) or minus (-): The ratings from AA to CCC may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.

r: This symbol is attached to the ratings of instruments with significant noncredit risks. It highlights risks to principal or volatility of expected returns which are not addressed in the credit rating.

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

N.R.: This indicates that no rating has been requested, that there is insufficient information on which to base a rating, or that Standard & Poor's does not rate a particular obligation as a matter of policy.

LOCAL CURRENCY AND FOREIGN CURRENCY RISKS

Country risk considerations are a standard part of Standard & Poor's analysis for credit ratings on any issuer or issue. Currency of repayment is a key factor in this analysis. An obligor's capacity to repay foreign currency obligations may be lower than its capacity to repay obligations in its local currency due to the sovereign government's own relatively lower capacity to repay external versus domestic debt. These sovereign risk considerations are incorporated in the debt ratings assigned to specific issues. Foreign currency issuer ratings are also distinguished from local currency issuer ratings to identify those instances where sovereign risks make them different for the same issuer.

APPENDIX B - PROXY VOTING GUIDELINES AND PROCEDURES

APPENDIX C--AUCTION PROCEDURES

APPENDIX D--SETTLEMENT PROCEDURES

PART C - OTHER INFORMATION

ITEM 24. FINANCIAL STATEMENTS AND EXHIBITS

1. Financial statements.

[To be filed by amendment.]

2. Exhibits:

- a.1. Agreement and Declaration of Trust.(1)
- a.2. Certificate of Trust.(1)
- a.3. Statement of Preferences of Auction Market Preferred Shares.(5)
- b. By-Laws.(1)
- c. None.
- d. Specimen Share Certificate(s).(5)
- e. Automatic Dividend Reinvestment Plan.(3)
- f. None.
- g. Investment Advisory Agreement with Pioneer Investment Management, Inc.(4)
- h. Underwriting Agreement among the Registrant, Pioneer Investment Management, Inc. and Underwriters.(5)
- i. None.
- j. Custodian Agreement.(3)
- k.1. Administration Agreement with Pioneer Investment Management, Inc. (formerly Pioneering Management Corporation).(4)
- k.2. Expense Limit and Reimbursement Agreement.(4)
- k.3. Investment Company Service Agreement.(4)
- k.4. Additional Compensation Agreement.(4)
- k.5. Shareholder Servicing Agreement between the Registrant and UBS Securities.(4)
- k.6. Sub-Transfer Agent Services Agreement.(4)
- k.7. Administration Agreement among the Registrant, Pioneer Investment Management, Inc. and Princeton Administrators L.P.(4)
- k.8. Auction Agency Agreement.(5)

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

- l. Opinion of Counsel.(5)
- m. None.
- n. Consent of Independent Auditors.(5)
- o. None.
- p. None.
- q. None.
- r. Code of Ethics.(2)
- s. Powers of Attorney.(2)

- (1) Incorporated herein by reference from the exhibits filed in the Registrant's Registration Statement on Form N-2 (File No. 333-103836) as filed with the Securities and Exchange Commission (the "SEC") on March 14, 2003 (Accession No. 0001223026-03-000007).
- (2) Incorporated herein by reference from the exhibits filed in Pre-Effective Amendment No. 2 to the Registrant's Registration Statement on Form N-2 (File No. 333-103836) as filed with the SEC on July 2, 2003 (Accession No. 0001016964-03-000160).
- (3) Incorporated herein by reference from the exhibits filed in Pre-Effective Amendment No. 3 to the Registrant's Registration Statement on Form N-2 (File No. 333-103836) as filed with the SEC on July 17, 2003 (Accession No. 0001223026-03-000026).
- (4) Filed herewith.
- (5) To be filed by amendment.

ITEM 25. MARKETING ARRANGEMENTS

[To be completed]

C-1

ITEM 26. OTHER EXPENSES AND DISTRIBUTION

The following table sets forth the estimated expenses to be incurred in connection with the offering described in this Registration Statement:

Registration fees	\$
Printing (other than certificates)	
Engraving and printing certificates	
Accounting fees and expenses	
Legal fees and expenses	
NASD fee	
Miscellaneous	
Total	\$

ITEM 27. PERSONS CONTROLLED BY OR UNDER COMMON CONTROL

None.

ITEM 28. NUMBER OF HOLDERS OF SECURITIES

As of August 8, 2003, the number or record holders of each class of securities of the Registrant was

(1) TITLE OF CLASS	(2) NUMBER OF RECORD HOLDERS
Common Shares (no par value)	6
Preferred Shares (par value, \$.0001)	0

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

ITEM 29. INDEMNIFICATION

The Registrant's Agreement and Declaration of Trust (the "Declaration"), dated March 13, 2003, provides that every person who is, or has been, a Trustee or an officer, employee or agent of the Registrant (including any individual who serves at its request as director, officer, partner, trustee or the like of another organization in which it has any interest as a shareholder, creditor or otherwise) ("Covered Person") shall be indemnified by the Registrant or the appropriate series of the Registrant to the fullest extent permitted by law against liability and against all expenses reasonably incurred or paid by him in connection with any claim, action, suit or proceeding in which he becomes involved as a party or otherwise by virtue of his being or having been a Covered Person and against amounts paid or incurred by him in the settlement thereof; provided that no indemnification shall be provided to a Covered Person (i) who shall have been adjudicated by a court or body before which the proceeding was brought (A) to be liable to the Registrant or its shareholders by reason of willful misfeasance, bad faith, gross negligence or reckless disregard of the duties involved in the conduct of his office, or (B) not to have acted in good faith in the reasonable belief that his action was in the best interest of the Registrant; or (ii) in the event of a settlement, unless there has been a determination that such Covered Person did not engage in willful misfeasance, bad faith, gross negligence or reckless disregard of the duties involved in the conduct of his office.

The Declaration also provides that if any shareholder or former shareholder of any series of the Registrant shall be held personally liable solely by reason of his being or having been a shareholder and not because of his acts or omissions or for some other reason, the shareholder or former shareholder (or his heirs, executors, administrators or other legal representatives or in the case of any entity, its general successor) shall be entitled out of the assets belonging to the applicable series of the Registrant to be held harmless from and indemnified against all loss and expense arising from such liability. The Registrant, on behalf of its affected series, shall, upon request by such shareholder, assume the defense of any claim made against such shareholder for any act or obligation of the series and satisfy any judgment thereon from the assets of the series.

C-2

Insofar as indemnification for liability arising under the Securities Act of 1933, as amended (the "1933 Act"), may be available to Trustees, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the 1933 Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant's expenses incurred or paid by a Trustee, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such Trustee, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the 1933 Act and will be governed by the final adjudication of such issue.

ITEM 30. BUSINESS AND OTHER CONNECTIONS OF INVESTMENT ADVISER

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Pioneer Investment Management, Inc. ("Pioneer Investments") is a registered investment adviser under the Investment Advisers Act of 1940, as amended, and is an indirect, wholly owned subsidiary of UniCredito Italiano S.p.A ("UniCredito"). Pioneer Investments manages investment companies, pension and profit sharing plans, trusts, estates or charitable organizations and other corporations or business entities.

To the knowledge of the Registrant, none of Pioneer Investments' directors or executive officers is or has been during their employment with Pioneer Investments engaged in any other business, profession, vocation or employment of a substantial nature for the past two fiscal years, except as noted below. Certain directors and officers, however, may hold or may have held various positions with, and engage or have engaged in business for, the investment companies that Pioneer Investments manages and/or other UniCredito subsidiaries.

NAME OF TRUSTEE/OFFICER	OTHER BUSINESS, PROFESSION, VOCATION OR EMPLOYMENT OF SUBSTANTIAL NATURE WITHIN LAST TWO FISCAL YEARS
John F. Cogan, Jr.	Of Counsel to Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

ITEM 31. LOCATION OF ACCOUNTS AND RECORDS

The accounts and records are maintained at the Registrant's office at 60 State Street, Boston, Massachusetts 02109; contact the Treasurer.

ITEM 32. MANAGEMENT SERVICES

Not applicable.

ITEM 33. UNDERTAKINGS

1. Not applicable.
2. Not applicable.
3. Not applicable.
4. Not applicable.
5. (a) For the purposes of determining any liability under the 1933 Act, the information omitted from the form of prospectus

C-3

filed as part of a registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant under Rule 497(h) under the 1933 Act shall be deemed to be part of the Registration Statement as of the time it was declared effective.

(b) For the purpose of determining any liability under the 1933 Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of the securities at that time shall be deemed to be

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

the initial bona fide offering thereof.

- 6. The Registrant undertakes to send by first class mail or other means designed to ensure equally prominent delivery within two business days of receipt of a written or oral request the Registrant's statement of additional information.

C-4

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933 and/or Investment Company Act of 1940, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Boston and Commonwealth of Massachusetts, on the 8th day of August, 2003.

PIONEER MUNICIPAL HIGH INCOME TRUST

By /s/ Osbert M. Hood
Osbert M. Hood
Executive Vice President and Trustee

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the date indicated:

Signature	Title)
John F. Cogan, Jr.*	Chairman of the Board)
John F. Cogan, Jr.	and President)
	(Principal Executive)
	Officer))
)
Vincent Nave*	Chief Financial Officer)
Vincent Nave	and Treasurer (Principal)
	Financial and Accounting)
	Officer))
)
Trustees:)
)
)
Mary K. Bush*)
Mary K. Bush)
)
)
John F. Cogan, Jr.*)
John F. Cogan, Jr.)
)
)
)
Richard H. Egdahl*)
Richard H. Egdahl)
)

Edgar Filing: PIONEER MUNICIPAL HIGH INCOME TRUST - Form N-2

Margaret B. W. Graham*)
Margaret B. W. Graham)
Marguerite A. Piret*)
Marguerite A. Piret)
/s/ Osbert M. Hood)
Osbert M. Hood)
Stephen K. West*)
Stephen K. West)
John Winthrop*)
John Winthrop)
*By: /s/ Osbert M. Hood) Dated: August 8, 2003)
Osbert M. Hood)
Attorney-in-fact)